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EDUCATION IN THE 21ST CENTURY

THEORY AND PRACTICE

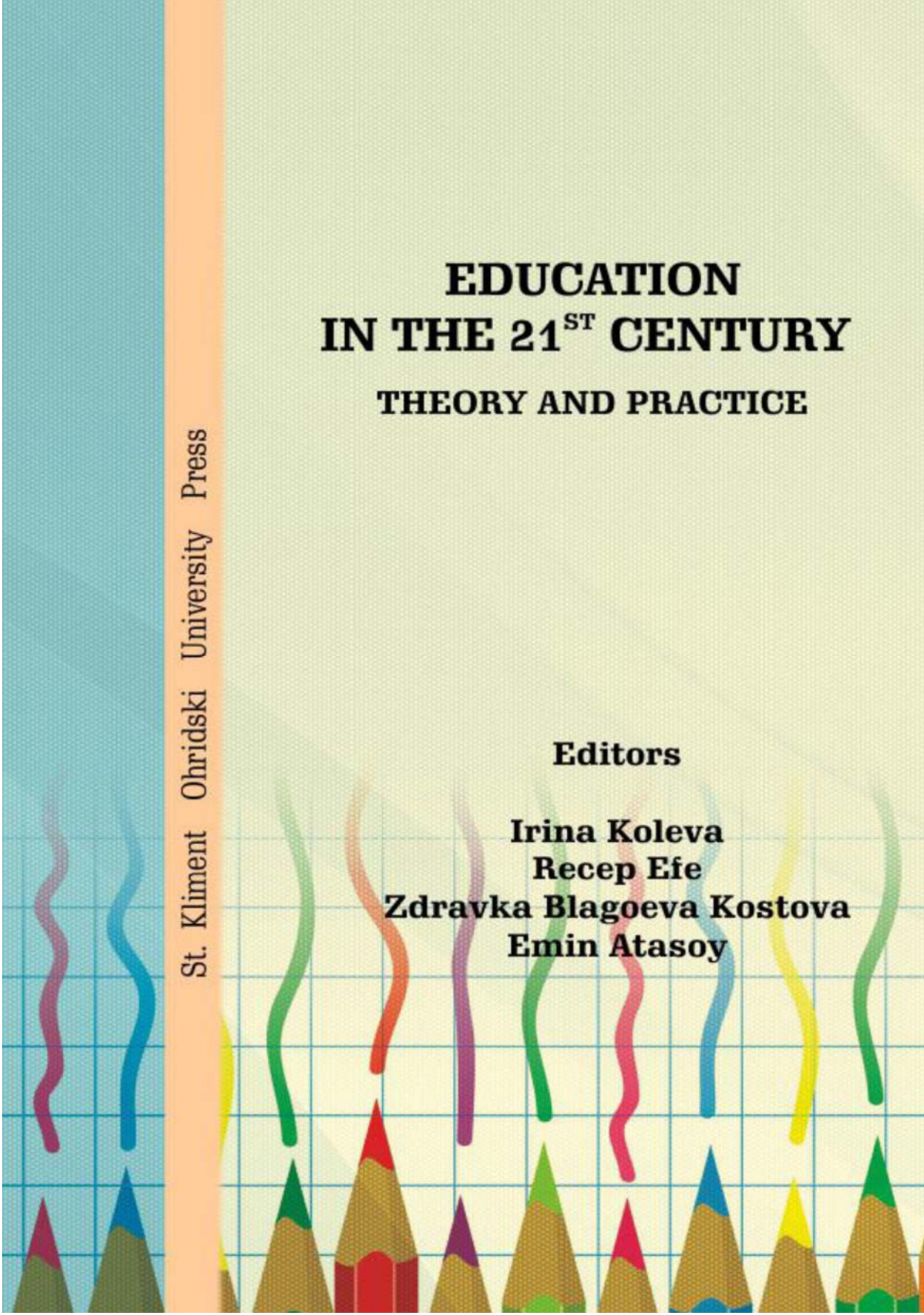
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Education in the 21st Century: Theory and Practice

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Preface

Just as goods, services, products, and daily news gradually become widespread going beyond borders due to mass media, and global free movement, so do scientific publications, books, and academic work. As a result of the mind-blowing developments in publishing industry and communication, a piece of information, comments, or inventions belonging to a nation, country, university, or an academic can reach the furthest country immediately and be shared with other societies and scientists.

An important consequence of intensification of economic, political, and cultural relations among countries is that scientific and educational cooperation has increased. Only 30-40 years ago, there was only a handful of books and articles published abroad by Turkish scientists, yet today, hundreds of articles are published in magazines, and many books are printed by foreign publishing houses, which gives various nations information on science, arts, sports, politics, education, and inventions in Turkey.

The main purpose of this book is to make the voice of Turkish scientists heard by EU, the Balkans, and eventually, the world. It also aims to ensure better scientific interaction and academic cooperation between Bulgaria, a neighbor country. Another goal is to give young scientists who have been unable to publish their work abroad a chance to make their articles known, boosting their self-confidence and offering scientific satisfaction. The book brings together a number of academics from different cities, universities, and areas who may not even know each other, enhancing scientific cooperation among them. In other words, psychologists, educationists, social scientists, historians, and mathematicians come together in the book. This humble compilation composed of 57 chapters is an interdisciplinary educational work and reflects various academics' scientific level in terms of education.

Many thanks go to every academic and researcher who contributed to the book with their work. We would also like to extend our thanks to the scientists who edited this book for their time, efforts, and the nice work they produced.

The Editors

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Chapter 1

Evaluation the Levels of Eight Grade Primary School Students' Critical Thinking Dispositions and Creativity*

Hasan Güner BERKANT & Nuray AKILLI

INTRODUCTION

The aim of education is regarded as to adapt individuals to the community in which they live. In this respect, education affects the environment and also it is affected from environment. During this interactive relation, individuals need some characteristics. Twenty-first century education requires citizens capable of flexibility, self-learning, looking at the events from a wider perspective, critical thinking and creative problem solving (Kepenekçi, 2000).

Requirements of the modern world have become a necessity to have the thinking skills of individuals. Individuals who only have rote learning in a changing world via developing technology will have difficulty about adaptation to the modern world. Today, being active during getting knowledge is more important than how much knowledge you have. In addition, in the face of the impossibility of increasing the transfer of knowledge by education, individuals have to solve their own problems and get information by themselves by using higher-order thinking skills (Demirel, 1993). In this context, in the information age training of individuals having abilities of critical and creative thinking skills, producing knowledge, questioning have become necessity. This situation has led to the emergence of new expectations in education. Today, the most important goal of education is to educate individuals capable of adapting to different conditions and considering different, flexible, and original. The global changes all over the world affect education systems and training programs have been developed to meet the requirements of revised age (Akbıyık and Şerefoğlu, 2006). In this context, the concepts creative and critical thinking become important.

Critical Thinking and Critical Thinking Dispositions

The meaning of criticism is widely understood with negative meaning and used with aspects of a thing is not good. However, critical thinking is not only the disadvantages of revealing or denigration. There are different understandings of critical thinking. Normally, if you ask a person to criticize anything, he/she generally talks about its negative aspects. Yet the criticism does not only mean focusing on the negative aspects, but also contains showing the positive aspects of the product, the work of the situation or the person (Akar, 2007).

Among the most types of thinking, the critical thinking requires more definitions than others. In the related literature, it is seen that the writers have attributed different meaning to critical thinking. Critical thinking has an important place in today's curriculum and it is a topic studied in Turkey since 1980s (Demir, 2006). Integration

*This study is derived from Akıllı's (2012) master's thesis prepared in Kahramanmaraş Sütçü İmam University.

of critical thinking skills in students' education takes parts in new teaching programs. In today's increasingly important teaching programs are conducted in a wide variety of definitions of this concept. On the basis of different definitions of critical thinking will be included here.

By the definition of APA's (1990) critical thinking skill includes reviewing, analyzing, making inference, and evaluating of evidence to explain the conceptual, methodological, or contextual cognitive thinking skills. According to another definition of APA (1990), critical thinking is evaluating what to do or believe in a reflective way (Facione, 1990). Cüceloğlu (1999) defined the critical thinking as active and organized mental processes in such a way that being aware of their own thinking processes, keeping in mind the thinking processes of others, applying what we have learned for ourselves and our environment aiming at understanding the events. The critical thinking is a form of thinking based on rationality, in other words it is practical rationality (Finn, 2011).

According to Cottrell (2005), critical thinking contains mental processes, such as the choice of care includes the following features:

- Determining other people's status and ideas,
- Understanding of disagreement and providing evidence in a fair manner,
- Identifying the correct or incorrect assumptions,
- Being able to reflect on situations in a systematic manner,
- Bringing the evidence on the basis of the results.

It is seen from the items above that, although the existence of different definitions for critical thinking, almost all definitions emphasize that critical thinking consists of obtaining the information efficiently, using the evaluation and comparison abilities (Aybek, 2006). Also, all definitions commonly use keywords for critical thinking such as "making activity, focusing on in-depth thinking, intentionality, interpreting, judging, observing, questioning, mining, using knowledge, realizing the difference in the pattern of judgments, analysing, evaluating, reasoning, problem solving and developing empathy" (Akar, 2007). In general, critical thinking means analyzing ideas, putting the evidences about search and being able to explain the evidences about the idea and evaluating ideas in an objective and logical framework (Facione, 1990; Finn, 2011; Vural ve Kutlu, 2004; Wood, 2002).

Among the studies on the critical thinking skills, the first and most comprehensive study can be said to belong to Robert Ennis. Fisher (1995) stated that Robert Ennis summarized the substance of critical thinking on twelve items. Fisher (1995) added questions next to each item for better understanding. These twelve items and their questions are as given below:

1. To understand the meaning of an expression (expression make sense?)
2. Judging whether there is any uncertainty in understanding (expression is clear?)
3. Judge whether it is contradictory expressions (expression consistent?)
4. Always judging whether get a conclusion or not (expression is logical?)
5. Judging whether an expression is sufficiently precise (exact phrase?)
6. Judging whether an expression uses any policy (expression is followed by a rule?)
7. Judging whether an expression based on the reliable observation (expression

exactly?)

8. Judging whether a result guarantee inductive result or not (expression justifiable?)

9. Judging whether a problem is identified or not (expression related?)

10. Judging whether an expression based on premise or not (expression could be considered correct?)

11. Judging whether expression is a sufficient definition or not (expression defined enough?)

12. Judging whether expression is accepted by the authorities or not (expression correct?)

According to Kurnaz (2007) critical thinking based on a well structured underlines four features of the behavior:

- As well as to identify and formulate problems, it is the ability to produce ways of evaluating and propositions to solve them.

- It is the ability to detect false reasoning, inductive reasoning and deductive reasoning relations awareness and the ability of using the methods.

- It is the ability to get conclusion from information obtained from various sources in a reasonable way and to defend conclusion in a logical way.

- It is the ability to distinguish between facts and ideas.

Experts, in general, reported that critical thinking concerns cognitive skills of interpreting, analyzing, evaluating, making inference, explaining and self-regulating. Each of these six skills is on the center of critical thinking. Facione (1990) described these six skills as:

- Interpretation: To grasp and express the meaning or significance of a wide range of experience, status, data, event, judiciary, customs, beliefs, rules, procedures or criteria.

- Analysis: To detect belief, judgment, experience, reason, knowledge or expressions intended to indicate the opinions, questions, concepts, descriptions, or other types of explanation between the intended and actual inferential.

- Evaluation: To evaluate expressions, or a person's perception, experience, location, judgment, belief or opinion, or disclosure describing the reliability of other representations and to evaluate the logical relationships between the inferential power of current or planned statements, descriptions, questions or other types of presentation.

- Inference: To identify and to obtain the elements necessary to achieve logical conclusions; to edit assumptions and hypotheses.

- Explanation: To specify the results of the reasoning of a person; to justify the criteria building on the results of a person's explicit, conceptual, methodological, and situational considerations to the terms of logical reasoning and to provide convincing arguments in the style of a person's judgment.

- Self-Regulation: To show the results obtained from applying a person's cognitive activities, the elements used in these activities, and inquiry, verification, validation, or a person's judgment or the results of one's own inferential judgments with a view towards improving the skills of analysis and evaluation, especially knowing him/herself.

As with many thinking the literature work in critical thinking ability is inherent

in individuals was observed some common features. Association of American Philosophers describe the individual characteristics of critical thinking as constantly researching, looking for reasons, open-minded, unprejudiced, honest, humble, topics rational human beings who have a clear point of view (Facione and Facione, 1996).

In other words, Wood (2002) describes an ideal critical thinker as anyone open-minded, willing to explain all points of view and ideas are defined silly, or even does not correspond to their ideas. Different ideas, critical thinkers try to bring truth all the time because they are not threatened. In addition, critical thinkers, constantly ask questions and where you stored on the actual use all the tools to remove it from there. Based on this summary, we can say that all of the statements, open-minded individuals who can think critically, the original open-minded, curious, constantly questioning the accuracy of the information, ideas and opinions of others, respect for conclusive evidence received, and above all, they have critical thinking dispositions. A person having critical thinking dispositions reflects this trend in the behavior.

The concept of critical thinking dispositions is a concept that is as important as the other concept critical thinking. In 1990, Delphi Project to be carried out by the American Philosophical Society, scientists agreed on the need of theoretical critical thinking in two dimensions. The first of these dimensions is the interpretation of information, analysis, evaluation, inference, disclosure and self-assessment of the dimensions of critical thinking skills. The second dimension is to be a volunteer to use critical thinking skills defined as dispositions toward critical thinking. The primary benefit of having dispositions toward critical thinking is to develop and use critical thinking skills (Stupnisky *et al.*, 2008).

Yang and Chou (2008) considered dispositions toward critical thinking and critical thinking as two different terms and critical thinking skills and critical thinking dispositions in humans refers different things. Having dispositions toward critical thinking does not mean having critical thinking skills and also having critical thinking skills does not mean having dispositions toward critical thinking. Unlike this approach, Akbıyık and Şerefoğlu (2006) commented thinking and critical thinking dispositions as nested concepts and defined critical thinking as deciding what to do and what to believe focusing on reasonable and reflective thinking and defined critical thinking as a concept containing skills and dispositions.

Today, the most important goal of education is to enable individuals adapting to different conditions, flexible thinking conditions and questioning skills. It occurs in individuals, it is possible to allow discovery of the concepts related to the basic thinking in these skills. Therefore, it is required training programs in which people can question, think critically, and reason (Aybek, 2006). However, in general, the students of the middle school are able to improve skills in basic courses, but they have difficulty in causal reasoning and critical thinking. In this case, as TIMSS international studies senior Turkish students thinking skills require to establish the cause-effect relationship also exhibit low performance reveals this situation (Coşkun, 2009).

Creative Thinking and Creativity

Among the studies on creative thinking, the study by Wallas in 1926 is gained a general acceptance by educators and theorists. Detailed description of the stages of creative thinking of Wallas can be reached in the work of Armbrusster. These four

stages of the mental processes are given below:

1. In the preparation phase, the problem definition, data collection, analysis, hypothesis, interrogation, the solution structure of the model and to reveal the processes take place. At this stage, recognizing and learning the important aspects of a problem for creative activities are beginning. In particular, Information about this particular problem, the problem revitalizing the relationships between the various hypotheses and theorems are examined.

2. In the incubation stage, developing ideas, regardless of the stage of incubation almost problem-solver, ideas logically work on the problem. According to Wallas and some researchers, this step is the most important phase in the development of creative thinking. This step is very similar to the unconscious repetition of the first phase, a variety of problems at the individual, albeit unconsciously, is a synthesis of ideas.

3. Settlement is reached during the enlightenment. In this phase, the solution suddenly wakes on stage. This is the moment of coming inspiration and the idea of solving problem. Immediate indication of the success of the first two phases had reached in this stage.

4. In the proof stage solutions should be evaluated. Hypotheses should be tested, the painter step back and re-study work on evaluative work. At this stage, critical thinking and logical thinking should be dominant.

In general, the basic mental processes such as logic, memory and abstract thinking should be dominated by the first and the last stage. Other mental processes should be dominant at second and third stages. The second and the third stages are important, especially for creative problem-solving and creative artistic expressions (Russ, 1993). Yenilmez and Yolcu (2007) described creative thinking as a thinking way that is innovative, seeking new solutions to old problems and revealing original ideas.

In recent years the concept of creativity is often considered one of the important issues and interesting. It is defending that rote education in schools prevents creativity; schools are expected to develop the creativity and inventiveness to the foreground. An important role in the development of society and the creativity of humanity, which can be found in every individual and in every period of human life, is a talent which includes all areas of the whole process, attitudes, and behavior (Bacak, 2008).

San and Güleriyüz (2004), reveals the pre-admission related to concept of creativity;

1. Creativity is an innate skill. Creativity is unique to humans. Every person has the opportunity to be creative.

2. Being genius is not necessary for being creative.

Creativity is a way of thinking and there is a very close relationship with the imagination. Creativity is found in all the emotional and mental activities, and all kinds of work and occupation. It could be anywhere of daily environments and human endeavor. Traditionally, art, dance, theater, literature, interior design, town planning and architecture are linked with creativity. In reality, science, business, law, medicine, engineering, leadership and even your parentage need creativity (Kara, 2007).

In summary it can be said that the definitions of creativity that expresses the nature of human behavior, usually the process of producing creative thinking, creative

individual characteristics, environmental impact of creativity and innovative product highlights one or more factors. Although many of these definitions are different from each other in each of the common definition of creativity is an emphasis on the idea of "useful to put forward new ideas or products" (Harris, 1998).

Creativity and creative thinking are known to be a systematic and organised process. Creative thinking process consists of four stages of preparation phase, the incubation phase, enlightenment phase and validation phase (Demirci, 2007).

- **The Preparation Phase:** In this phase, problem definition, data collection, analysis, hypothesis, interrogation, the solution structure of the model and revealing the processes take place. At this stage, the important aspects of a problem for creative activities begin to be learned. In particular, information about the problem, the problem revitalizing the relationships between the various hypotheses and theorems are examined in this stage (Uysal, 2009).

- **The Incubation Phase:** In this stage, leaving from problem it is gone to back. The problem gives its place to consideration of the mind and investigation. As the preparatory phase, this phase may take several minutes, several weeks or years. Meanwhile, contemplative thinking, deep thinking, subconscious processes, visualization and sensory perception abilities work in this stage. In the incubation phase individual does not think about the problem consciously. At this stage, the individual begins to combine different thoughts and ideas, solves problems and produces solutions (Demirci, 2007).

- **The Enlightenment Phase:** In this phase, ideas, feelings, and thoughts suddenly emerge as a clear solution to fit into each other. This step is also known as "enlightenment" or "grip" in which the solution of necessary for thought is emerged. In this stage, the brain constantly busy with problems and prepares the birth of a sudden idea. This stage does not appear suddenly. Until the emergence of thought, the stage takes a long process. However, inventions are instant (Demirci, 2007).

- **The Validation Phase:** In terms of the practicality of the solution, the validity of the solution is checked at this stage. This stage is also known as "validation" or "verification". Weaknesses of the thoughts are determined and required changes for the solutions are made in some cases (Demirci, 2007).

The ongoing motivation is necessary during the process of creativity. Creative students are able to motivate themselves and to determine and control their own internal targets specifically. Students may motivate how to test the hypothesis formed by the mind (Çetingöz, 2002). It is worth mentioning the features of creative individuals who are capable of performing these steps carefully. Due to the positive developments in the areas of society and a prerequisite for all occupations, the creativity is a skill that can be found in every period of human life. Every individual has an innate creativity, but the continuity, development, and the emergence of creativity may vary from individual to individual. Within the education system the personality traits of creative individuals in any field can be distinguished by a careful observation. The investigator should be the task of the educator. In addition, in order to make creative individuals it acquires this type of inventive features. According to the findings obtained from a variety of investigations in the fields of science and profession, personality factors which are specific to creative people can be listed as follows (Dündar, 2003):

- His/her success is not based on dreams, rather based on reality.
- Judgments and values are shifting to aesthetics.
- Turned on feelings and emotions.
- Independent and autonomous.
- Leader and has the personal initiatives.
- Versatile and interests are varied.
- Sensitive to the social aspect as much as introverted, but does not allow these values to affect him.
- Critics and aware of his/her own creativity.
- Open to facts occurring until that moment is an important condition of constructive creativity.
- Create for his/himself.

According to Saban (2000), certain personality traits of creative individuals are given below:

- Creative people are brave, their self-confidence is high, and do not hesitate to take risks. Creative individuals love to deal with many different aspects of events around them not in a one-way. Therefore, the creative people do not afraid of making mistakes, losing the match or thinking from other people.

- Creative individuals have a high energy structure. Creative people have high physical and emotional energy. In other words, these people are in perpetual motion. Because, creative individuals always have a structure of ambitious, motivated by success and hard working. Creative individuals concentrate their energies entirely on their work. For this reason, these people work without rest until a mission is concluded.

- Creative people are willing and idealistic. Creative individuals are very sensitive and susceptible to the purposes of life. Therefore, these people think there is lot of things to be done in life. Constantly they complain the lack of the time needed to achieve what they want to do. Because creative people are those who sought to constantly look ahead. For this reason, they look upon the path of progress of each event or problem as the opportunity not to be missed.

- Creative individuals have a curious, playfully and happy structure. Creative individuals are like a child. They are extremely curious about everything around them. Therefore, these individuals prefer to analyze the event as a game that occurs around them, playing with ideas, and with the understanding of causal relationships between events.

- Creative people have adventurous nature. Therefore these people are eager to travel, navigation, and to see new places. Because creative individuals are in understanding, exploring and are in a continuous effort to control of their own inner and outer world.

- Creative individuals are independent and prefer to remain in their own rights. Creative people are needed to think, to solve problems, or to produce something they grope on the events by alone. Therefore, they prefer to work on their own and to become independent. For this reason, creative individuals have more sophisticated capabilities such as standing on their own legs, criticizing ideas and opinions of others and remaining alone in any struggle for achievement.

In addition, the five properties owned by creative people can be considered as their practical intelligence, creative, restricted point of view, to be free of prejudice, problem-solving ability, and unbounded dreams. One of the most salient features of creative people is that they are not afraid of making a mistake and they try to do everything in the light of their mind (Açıkgöz, 2003).

Creativity is essential in today's world. Children should practice their creative skills in schools to use innovative sources of creativity in the economic sphere in the future. The education system aims to improve the structure of thought, using variety formats of mind and to create new people who have the ability to make new things. So the creativity in the education system is necessary. Independent and critical thinking are the requirements for creativity, and therefore the concept of modern education (Yenilmez and Yolcu, 2007).

One of the main objectives of the education is having self-discipline about the events and relationship between events. The individual must be able to evaluate the connection between the phenomena and daily life facts. In addition, in order to be self-sufficient and successful, especially in creativity, higher-order thinking, the individual must have the motivation and ability to conduct research. In particular, the children of the future, should be aware of education they in, that is, they are educated about where they can use the information. Implementing such an education system, this system must be used in all stages of the evaluation to train qualified creative and critical thinking individuals (Koray, Yaman and Altunçekiç, 2004). According to Sönmez (1993), teaching and learning environments require the regulation to develop students' creative and critical thinking skills.

At this point, a question comes to mind: What are the conditions that individuals should possess to adapt the conditions of today's world in the medium and long-term? As a result of many studies some of the most important skills that must be owned by individuals are the creativity and critical thinking, and dispositions toward critical thinking. A critical thinker can bring logical solutions to the problem and can think analytically. Creative individuals are not the ordinary to obey taboos, traditional movements, thoughts and do not feel obliged, be careful enough to see around the shortcomings, problems, smart enough to be able to find the source of solutions to the problems of knowledge and experience that can have up to (Açıkgöz, 2003).

In the twenty-first century, thinking, questioning, generating alternatives, and briefly critically thinking individuals who approach things from a different angle are important for each country as well as for Turkey. Primary school is very important period in the development of the child's personality adapting to society. So, growing primary school students as critical thinkers in early years is an issue to be examined necessarily. In Turkey, in order to give students the properties to gain the individual requirements of today has been made changes in curricula in the beginning of 2004-2005 academic years. The renewed curricula have put emphasis on critical thinking dispositions, creative thinking skills, and learning how to learn skills to build relationships between concepts (Çoban, 1999; Demir, 2006).

In this context, the problem of the study can be stated as "What are the primary education eighth grade students' critical thinking dispositions and creativities in terms of different variables?"

The Purpose of Study

The overall purpose of this study is to evaluate primary education eighth grade students' critical thinking dispositions and creativities in terms of different variables. In this purpose, the following questions are answered:

1. What is the level of students' critical thinking dispositions?
2. Is there a significant difference between students' critical thinking dispositions according to;
 - a. their gender,
 - b. educational level of the father,
 - c. educational level of the mother,
 - d. family income.
3. What is the level of students' creativity?
4. Is there a significant difference between students' creativities according to;
 - a. their gender,
 - b. educational level of the father,
 - c. educational level of the mother,
 - d. family income.
5. Is there a significant relationship between students' creativity and critical thinking dispositions?

MATERIALS AND METHODS

This research was carried out to evaluate the levels of eighth grade primary school students' critical thinking dispositions and creativity. The research is descriptive and survey model. Descriptive statistics define the statistical operations about collection, description and presentation of numerical values of a variable collection (Büyüköztürk, 2002). Considering the environment carried out of the research, the research is correlation type of survey. In the study, dependent variables are creativities and critical thinking dispositions of eighth grade students'. Independent variables in the study are students' fathers' and mothers' education level and family income level. These independent variables were used in this study because they are considered to affect students' creativities and critical thinking dispositions directly or indirectly.

Population and Sample

The population of this study consists of eighth grade students of primary schools in the city center of Kahramanmaraş in 2010-2011 academic years. The sample of the study is 265 eighth grade students selected randomly from the population.

Data Collection Tools

In the study, "How Creative Are You?" and "California Critical Thinking Dispositions Inventory (CCTDI)" are used as data collection tools.

"How Creative Are You?" is developed by Raudsepp in 1977 and adapted to Turkish by Çoban (1999) consists of 50 items. This scale measures the creativity level. In the scale choices are strongly agree (-2), agree (-1), undecided (0), disagree (1) and strongly disagree (2). Creativity scores of students' were obtained from total scores. The scores between 100 and 80 mean "high level creativity"; between 79 and 60 mean "above average"; between 59 and 40 points mean "average"; between 39 and 20 mean "below average/low"; between -19 and -100 mean "not creative". The

Cronbach alpha reliability coefficient of the scale was 0.95 (Çoban, 1999).

Kökdemir (2003) has adapted California Critical Thinking Dispositions Inventory (CCTDI) to Turkish in his thesis and he made the final modifications of the scale. The Turkish version of the mentioned inventory was used by permission of Kökdemir. Differently from its precedents, (such as Watson–Glaser Critical Thinking Skills Inventory) CCTDI is not used for evaluation of a skill. It is used for evaluation of critical thinking dispositions of an individual, in a wide meaning, critical thinking level (Kökdemir, 2003). The CCTDI is a 6-point likert type scale. Choices of each item range from ‘Strongly Agree’ to ‘Strongly Disagree’. The inventory consists of six subscales and 51 items. These subscales are analyticity, open-mindedness, inquisitiveness, self-confidence, truth-seeking and systematicity. Total point between 51 and 306 can be obtained from scale (Coşkun, 2009). People who have the overall critical thinking disposition score of less than 240 are accepted at low level, while those who score more than 300 of these trends are accepted at high level. Coşkun (2009) determined the Cronbach's alpha value of scale as .88. This value was recalculated with the data of this study and determined as .82.

Data Analysis and Interpretation

In data analysis, investigation of eight grade students' critical thinking dispositions and creativity with their gender, father education level, mother education level and family income were taken into account by the analysis. In addition whether there is a significant relationship between the level of eight grade students' critical thinking dispositions and creativity was investigated. The collected data was analyzed via SPSS 15.0. The data was analyzed by using independent samples t-test, ANOVA, LSD, and correlation analyses.

RESULTS

In this section, the results of analyses that are done according to the purpose of the study are given.

Results for Students' Level of Critical Thinking Dispositions

The descriptive statistics of level of the students' critical thinking dispositions are shown in Table 1.

As shown in Table 1, from the sample of 265 eighth grade students participated in the survey, 93.6% of the students have low-level of critical thinking dispositions, 6.4% of students have average-level of critical thinking dispositions and no student has high-level of critical thinking dispositions. So, most of the students' critical thinking dispositions appear as low.

Table 1: The Descriptive Statistics of Students According to Levels of Critical Thinking Dispositions

Levels of Critical Thinking Dispositions	f	%
Low	248	93.6
Average	17	6.4
High	0	0.0
Total	265	100.0

T-Test Results for Students' Critical Thinking Dispositions Based on Gender

Whether the students' critical thinking dispositions differ by their gender is analyzed by t-test. The results are shown in Table 2.

Table 2: T-Test Results for Students' Critical Thinking Dispositions Based on Gender

Gender	N	\bar{X}	S	df	t	p
Female	152	206.96	28.02	263	4.74	.000*
Male	113	191.78	22.31			

*p< .001

As presented in Table 2, there is meaningful difference between the students' critical thinking dispositions based on their gender, $t(263)=4.74$, $p< .001$. This finding can be interpreted as there is a significant relationship between critical thinking dispositions and gender variable. Accordingly, the female students' critical thinking dispositions ($\bar{X} = 206.96$) was significantly higher than male students' critical thinking dispositions ($\bar{X} = 191.78$).

ANOVA Results for Students' Critical Thinking Dispositions Based on Father Education Level

Whether there is significant difference between students' critical thinking dispositions based on their fathers' education level is analyzed by ANOVA. The results are shown in Table 3.

As shown in Table 3, education level of students' fathers significantly affects critical thinking dispositions of students, $F(3, 261)= 4.06$, $p< .01$. According to the results of the LSD test which is done to determine the source of the difference, the mean of the students whose father graduated from primary school ($\bar{X}=205.55$) is higher than both mean of the students whose father graduated from secondary school ($\bar{X} = 191.68$), and the mean of students whose father graduated from high school ($\bar{X}=196.62$). Another finding of LSD test is that the mean of students whose father graduated from undergraduate-master- doctorate ($\bar{X}=203.38$) is higher than the mean of students whose father graduated from elementary school ($\bar{X}=191.68$). According these results the level of critical thinking dispositions of students whose father graduated from primary school is higher than students whose fathers graduated from elementary and high school. Similarly, the level of critical thinking dispositions of students whose fathers graduated from undergraduate-master-doctorate is higher than students whose fathers graduated from elementary school.

ANOVA Results for Students' Critical Thinking Dispositions Based on Mother Education Level

Whether there is significant difference between students' critical thinking dispositions based on their mother' education level is analyzed by ANOVA. The results are shown in Table 4.

As shown in Table 4, students' critical thinking dispositions do not vary significantly according to the their mothers' education level, $F(3, 261)= 1.89$, $p> .05$.

Table 3: ANOVA Results for Students' Critical Thinking Dispositions Based on Father Education Level

Father Education Level	N	\bar{X}	SS	Source of Variance	Sum of Squares	df	Mean of Squares	F	p	Sig. Dif.
(1)Illiterate	-	-	-	Between Groups	8451.6	3	2817.2	4.06	.008*	2-3
(2)Primary School	113	205.55	24.0	Within Groups	180872.5	261	692.9			2-4
(3)Elementary School	57	191.68	26.2	Total	189324.2	264				3-5
(4)High School	51	196.62	30.4							
(5)Undergraduate-Master-Doctorate	44	203.38	26.9							
Total	265	200.49	26.7							

Table 4: ANOVA Results for Students' Critical Thinking Dispositions Based on Mother Education Level

Mother Education Level	N	\bar{X}	SS	Source of Variance	Sum of Squares	df	Mean of Squares	F	p
(1)Illiterate	32	201.28	20.4	Between Groups	4040.4	3	1346.80	1.89	.130
(2)Primary School	145	203.51	24.7	Within Groups	185283.8	261	709.900		
(3)Elementary School	39	197.20	32.0	Total	189324.2	264			
(4)High school-undergraduate-master-doctorate	49	193.67	30.6						
Total	265	198.91	26.7						

ANOVA Results for Students' Critical Thinking Dispositions Based on Family Income

Whether there is significant difference between students' critical thinking dispositions based on their family income is analyzed by ANOVA. The results are shown in Table 5.

As shown in Table 5, students' critical thinking dispositions do not vary significantly according to family income, $F(4, 260) = 1.466$, $p > .05$.

Results for Students' Level of Creativity

The descriptive statistics of level of the students' creativity are shown in Table 6.

Table 5: ANOVA Results for Students' Critical Thinking Dispositions Based on Family Income

Family Income (Turkish Liras per month)	N	\bar{X}	SS	Source of Variance	Sum of Squares	df	Mean of Squares	F	p
(1)0-500	53	202.22	25.3	Between Groups	4177.005	4	1044.251	1.466	.213
(2)501-1000	84	202.64	26.7	Within Groups	185147.2	260	712.105		
(3)1001-1500	56	195.62	23.7	Total	189324.2	264			
(4)1501-2000	35	206.31	30.8						
(5)2001 and above	37	195.0	28.1						
Total	265	200.49	26.7						

Table 6: The Distribution of Students According to Levels of Creativity

Level of Creativity	f	%
High	0	0.0
Above average	0	0.0
Average	0	0.0
Below average/Low	23	8.7
Not Creative	242	91.3
Total	265	100.0

As shown in Table 6, from the sample of 265 eighth grade students 8.7% of them have below average/low creativity, 91.3% of are not creative and there is not any student who has average, above average, or high creativity. Accordingly, the vast majority of the sample is not creative enough.

T-Test Results for Students' Creativity Based on Gender

Whether the students' critical thinking dispositions differ by their gender is analyzed by t-test. The findings are shown in Table 7.

Table 7: T-Test Results for Students' Creativity Based on Gender

Gender	N	\bar{X}	S	df	t	p
Female	152	6.38	10.87	263	4.04	.000*
Male	113	1.33	8.84			

*p< .001

As presented in Table 7, there is meaningful difference between the creativity of students based on their gender, $t(263)=4.04$, $p< .001$. This finding can be interpreted

as there is a significant relationship between creativity and the gender. Accordingly, the female students' creativity ($\bar{X} = 6.38$) was significantly higher than male students' creativity ($\bar{X} = 1.33$).

ANOVA Results for Students' Creativity Based on Father Education Level

Whether the students' critical thinking dispositions differ by their fathers' education level is analyzed by ANOVA. The findings are shown in Table 8.

As shown in Table 8, eighth grade students' creativity do not vary significantly according to father education level, $F(3, 261) = 2.568$, $p > .05$.

Table 8: ANOVA Results for Students' Creativity Based on Father Education Level

Father Education Level	N	\bar{X}	SS	Source of Variance	Sum of Squares	df	Mean of Squares	F	p
(1)Illiterate	-	-	-	Between Groups	811.060	3	270.35	2.568	.06
(2)Primary School	113	3.70	10.4	Within Groups	27475.355	261	105.27		
(3)Elementary School	57	2.84	10.4						
(4)High School	51	7.74	10.2	Total	28286.415	264			
(5) Undergraduate -Master- Doctorate	44	3.27	9.4						
Total	265	4.22	10.3						

ANOVA Results for Students' Creativity Based on Mother Education Level

Whether the students' critical thinking dispositions differ by their mothers' education level is analyzed by ANOVA. The findings are shown in Table 9.

According to the results in Table 9, eighth grade students' creativity does not vary significantly according to the mother education level, $F(3,261) = 2.009$, $p > .05$.

ANOVA Results for Students' Critical Thinking Dispositions Based on Family Income

Whether the students' critical thinking dispositions differ by their family income is analyzed by ANOVA. The findings are shown in Table 10.

As shown in Table 10, students' creativity do not vary significantly according to family income, $F(4, 260) = .739$, $p > .05$.

The Correlation Results Related to Relationship between Students' Creativity and Critical Thinking Dispositions

The findings for correlation analysis related to relationship between students' creativity and critical thinking dispositions are shown in Table 11.

According to Table 11, there is significant, positive and average relation between

students' creativity and critical thinking dispositions, $r=0.325$, $p<.001$. Accordingly, creativity and critical thinking dispositions of students can be considered to increase and decrease together in the same direction.

Table 9: ANOVA Results for Students' Critical Thinking Dispositions Based on Mother Education Level

Mother Education Level	N	\bar{X}	SS	Source of Variance	Sum of Squares	df	Mean of Squares	F	p
(1)Illiterate	32	.87	8.9	Between Groups	638.44	3	212.815	2.009	.113
(2)Primary School	145	5.26	11.0	Within Groups	27647.96	261	105.931		
(3)Elementary School	39	4.94	10.3	Total	28286.41	264			
(4)High School-undergraduate-Master-Doctorate	49	2.77	8.5						
Total	265	4.22	10.3						

Table 10: ANOVA Results for Students' Critical Thinking Dispositions Based on Family Income

Family Income (Turkish Liras per month)	N	\bar{X}	SS	Source of Variance	Sum of Square	df	Mean of Square	F	p
(1)0-500	53	5.05	9.9	Between Groups	318.04	4	79.51	.739	.566
(2)501-1000	84	3.65	10.1	Within Groups	27968.36	260	107.57		
(3)1001-1500	56	2.91	10.2	Total	28286.41	264			
(4)1501-2000	35	6.34	10.2						
(5)2001-and above	37	4.32	11.6						
Total	265	4.22	10.3						

DISCUSSION AND CONCLUSION

According to results of the study, the majority eight grade students have the low level of critical thinking dispositions. The reasons of this result can be considered as, although Ministry of National Education adapted constructivist approach to

education in Turkey, teachers insist on the traditional concept of education by using rote learning. It is determined from the literature that Beşoluk and Önder (2010), Bulut, Ertem and Sevil (2009), Cohen (2010), Eşer, Demir and Khorshid (2007), Ip *et al.*, (2000), Şengül and Üstündağ (2009), Tümkiye (2011), Türnüklü and Yeşildere (2005), Yenice (2011) determined similar conclusions as low level of critical thinking dispositions of their sample. In contrast to the result of the research, Wangenstein *et al.* (2010) and Fernandez (2010) concluded that the sample reached a high level of critical thinking dispositions scores. Korkmaz (2009) and Lewis (2012) concluded in their studies that the sample has medium levels of critical thinking dispositions.

Table 11: The Correlation Results Related to Relationship between Students' Creativity and Critical Thinking Dispositions

		Creativity	Critical Thinking Dispositions
Creativity	Pearson Correlation	1	.325
	Sig. (2-tailed)		.000*
	N	265	265
Critical Thinking Dispositions	Pearson Correlation	.325	1
	Sig. (2-tailed)	.000*	
	N	265	265

*p< .001

According to another result of the study, the eighth grade students' critical thinking disposition levels vary according to their gender. Female students have higher levels of critical thinking dispositions than male students. Similar to the result of the research, Beşoluk and Önder (2010), Godzky (2008), and Tümkiye (2011) found significant difference between the critical thinking dispositions scores in favor of girls. In contrast to the study, Chain, Ron and Zoller (2000), Ekinci and Aybek (2010), Gök and Erdoğan (2011), Korkmaz (2009), and Yenice (2011) determined that critical thinking dispositions scores were not differed according to gender.

In this study, it is determined that the students' critical thinking dispositions were affected by education level of the father. According to these results, the level of critical thinking dispositions of students whose father graduated from primary school is higher than students whose fathers graduated from elementary and high school. Similarly, the level of critical thinking dispositions of students whose fathers graduated from undergraduate-master-doctorate is higher than students whose fathers graduated from elementary school. According to the results of the study, mother education level and family income do not affect the level of students' critical thinking dispositions. Similarly Bulut, Ertem and Sevil (2009), Ekinci and Aybek (2010), and Gök and Erdoğan (2011) found that there is no significant difference between sample's critical thinking dispositions scores in terms of parental education level. Eşer, Demir and Khorshid (2007) found in their study that nurses' parental education level and family income does not affect the level of nurses' critical thinking dispositions. In contrast to the results of the study, Tümkiye and Aybek (2008) concluded that there were significant differences between the students' critical thinking dispositions based on their mothers' education level.

Another result of the study is that from the sample of 265 eighth grade students participated in the survey, 8.7% of them have low level of creativity, 91.3% of are not creative and there is not any student who has average, above average, or high creativity. Accordingly, the vast majority of the sample of eighth grade students is not creative. Through this result it may be considered that creativities of students are not supported in classes and creative activities are not conducted enough in classes. Similarly, Gülel (2006) concluded in his study that sample have low levels of creativity. In contrast to the study Yıldız *et al.* (2011) have reached the conclusion that teacher candidates' creativity level are close to high level.

In this study, it is concluded that students' genders affect the levels of the students' creativity. As in critical thinking dispositions results, female students have higher levels of creativity than male students. Similar to research result, Gök and Erdoğan (2011), Gülel (2006) and Trivedi and Bhargava (2010) have found that female students have higher levels of creativity than male students in their studies. Yıldırım (2006) found that girls have higher scores than boys' scores obtained from dimension of fluency and enrichment. In contrast to the study Biber (2006) and Yıldız *et al.*, (2011) concluded that gender does not affect the creativity scores significantly.

According to another result of the study, eighth grade students' parental education level and family income level do not affect the level of creativity of the students. Similar to this result Yıldız *et al.* (2006) found that teacher candidates' parental education level and family income level does not affect the level of students' creativity. In his research, Biber (2006) found that students' family income level does not affect the students' creativity level. Ulukök *et al.* (2012) found significant differences between teacher candidates' creativity based on their education level. However, he concluded that no significant difference is found between the teacher candidates' creativity level in terms of their father education level and family income.

It is determined in this research that, there is positive, moderate and meaningful relationship among the students' creativity and critical thinking. This may be considered as an increase in critical thinking dispositions may cause an increase in students' creativity. On the contrary an increase in creativity may cause to increase of critical thinkin. Because of the fact that creativity and critical thinking are two cognitive activities requiring and supporting each other, this result is an expected situation. Similar to this result, Gök and Erdoğan (2011) found positive, moderate and meaningful relationship between the students' creativity and critical thinking. In a similar study, Yıldız *et al.* (2011) examined teachers' creativity levels and the relationship between perception and problem-solving skills, and determined a moderate positive relationship. McGrath (2003), Rickets (2003), Shin *et al.* (2006), and Yang and Chou (2008) have found a positive relationship between students' critical thinking skills and critical thinking dispositions. Colucciello (1999) conducted a study on students and found that there is a relationship between the levels of students' critical thinking dispositions and learning models.

In the light of results indicated above, some proposals may be put forward: This research was conducted in the province of Kahramanmaraş. The results of other researches which will be done in future on different samples can be compared with the results of this study. This research was conducted with eight grade students. The student attending to different grades can be investigated. With the help of the

questionnaire the students' critical thinking dispositions and creativity levels were measured descriptively. In another study, an experimental study with a curriculum that includes activities of critical thinking and creativity can be conducted. In this study, students' critical thinking dispositions and creativity levels were investigated in terms of independent variables such as gender, parental education level and family income level. Within the scope of other researches, different variables such as "level of cognitive development", "learning styles", "science process skills" can be used as independent variables.

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Chapter 2

Factors Affecting Teachers' Organizational Commitment and Consequences of Teachers' High Level of Organizational Commitment

Bahadır GÜLBAHAR

INTRODUCTION

Labor force is the primary resource to ensure that organizations to accomplish their purposes and to maintain their existence. Organizations, pursuing to fulfill their targets and to continue their existence, are required to utilize labor force effectively and productively; in other words, employees' performances are required to be increased. Superior performance of employees and their maximum productivity are subject to their sincere and heartfelt commitment to their organizations. Therefore, it is necessary for organizations to determine and employ factors effective on their organizational commitment.

Organizational commitment is the concept describing the strength of the bond between employees and their organizations. That is, organizational commitment is loyalty and self-sacrifice expressed by employees felt toward their organizations for future institutional success. Lexical meaning of commitment is that "feeling and expressing love, respect and intimacy toward someone, loyalty" (TDK Dictionary, 2015). Commitment, additionally, means loyalty felt by an individual toward a person, a thought, an organization or something attached more importance than oneself; and it means an obligation that needs to be fulfilled as well (Çöl, 2004).

Organizational commitment is a tool that establishes relationship between personal needs and organizational purpose and values (Buchanan, 1972). Organizational commitment represents psychological commitment of an individual in general, which includes participation into work, loyalty and having faith in organizational values (Ölçüm Çetin, 2004); moreover, it stands for level of identification and coalescence felt by a person in regard to his organization (Ari Sağlam, 2003). In another definition, organizational commitment is explained as whole of internalized normative pressures that arise to take an action to the end that the organization may acquire its targets and interests (Wiener, 1982). Whereas Luthans (1992) is defining organizational commitment as a process in which employers exhibit their interest in continuous success and welfare of their organizations, Bateman & Strasser (1984) describes organizational commitment as function of harmony perceived between individuals and their organization. Morrow (1983) describes organizational commitment as a strong faith exhibited to remain as a member of an organization, and as a desire to spend high level of effort for the sake of organization or adoption and having firm belief in organization's purpose and values.

Descriptions concerning organizational commitment demonstrate that organizational commitment of employers relies on attitudinal or behavioral reasons; thus, this situation suggests that there are two types of organizational commitment as

attitudinal and behavioral (Bayram, 2005).

Attitudinal commitment commences with identification of an employee with his/her organization; and represents coalescence of individual and organizational targets (Sheldon, 1971). Gul (2002) states that attitudinal commitment is realized when employees assimilate its own values and targets with their organizations' target and purposes and having desire to maintain membership with this organization in order to accomplish their purposes. On the other hand, behavioral commitment is establishing bonding with certain activities that they commit rather than the organization itself since these individuals are members of the organization for a long time (Meyer, Allen and Gellatly, 1990). Employees pursue a certain behavior under influence of some variables; and after a while, they are attached to this behavior. Over the time, they develop an attitude appropriate to this behavior which justifies this behavior. Thus, the likelihood of repetition of this behavior increases (Boylu, Pelit & Gücer, 2007).

Employees' loyalty to their organizations is essentially important for their organizations. Some research are oriented on the prediction for the 21st century that the most significant issue will be creating commitment among employees within various work teams and environments (Suliman & Iles, 2000). Hence, organizations aim to reduce their cost and enhance performance of their employees, process and products, and to increase quality and productivity (Ince & Gul, 2005). Organizational commitment of employees would ensure organizations to reach their targets more conveniently.

Organizational commitment of employees influences efficiency and productivity of organizations positively; and prevent negative behaviors of employees in regard to their organizations (leave of employment, boycott, delays in attending job, and negligence etc.). Therefore, employees' commitment to their organizations has been an essential issue for organizations from past to our contemporary age (Allen & Grisaffe, 2001); and research on organizational commitment has gained prominence. Özmen *et al.* (1997) suggest following points as a primary reasons for prominence of these researches:

- the relationship between organization commitment and desired behavior at work
- revealing that organizational commitment is more important compared to job satisfaction level as a reason for quitting job
- the fact that employees with higher organizational commitment exhibits higher performance compared to the one with low level
- organizational commitment is a beneficent indicator of institutional effectiveness
- organizational commitment draws attention as an expression of organization citizenship behaviors like self-sacrifice and honesty.

In some researches on organizational commitment (Meyer *et al.*, 1989; Mathieu & Zajac, 1990; Huselid, 1991; Irving, Coleman and Cooper, 1997; Özdevecioğlu, 2003; Marchiori & Henkin, 2004; Gautam, Dick & Wagner, 2004), it was revealed that employees with high organizational commitment have higher contribution to the organization and higher productivity. Organizational commitment does not only increase productivity of employees, also ensures their continuity. It was observed that

employees with organizational commitment tend to exhibit desire for longer perpetuity at their organizations. Perpetuity of employees enables organizations to make planning for longer horizon and to establish stability in their organization.

Sense of mission and responsibility of employees feeling committed to their organizations strengthen; thus, their productivity and achievements increase. Organizational commitment also directs employees to take initiative on behaviors that should be taken voluntarily for highest level of success of the organization (Katz & Kahn, 1977). In this regard, organizational commitment of employees is significantly important to ensure survival of organizations under harsh competition environment successfully and to maintain their existence.

According to Çekmecelioğlu (2006), organizational commitment originates from interest and loyalty felt toward job, and strong faith in organizational values. Organizational commitment fed by these resources has three indicators:

1. Individuals' adoption of organizational targets and having faith toward them
2. Being disposed to spend effort for organization
3. Having certain desire to remain in the organization (Eisenberg *et al.*, 1987).

Organizational commitment is one and ultimate targets of the survival efforts of organizations because individuals committed to their organizations are more satisfied, more productive, more loyal and have higher responsibility; and they cost less to their organizations (Balci, 2003). Individuals who are committed to their organizations feels desire to perform their tasks with highest possible productivity level. They spend more effort, and focus on producing more. Since an organization member who focuses on being more productive at his/her work would perform more amount of and more quality work without expecting additional material benefit, cost would be reduced for their organization.

Employees committed to their organizations adopt organizational targets, values and purposes; they spend effort along with general purposes of their organization and describe themselves as member of the organization (Camp, 1992). Therefore, organizational commitment is considered as organization-member integration; and as a result of this relationship, both organizational and individual performance increase (Dilek, 2005). Individuals committed to their organization are internally motivated as well. Their internal reward comes from original activity and its successful consequences rather than conditions audited by others (Balay, 2000b).

It is observed that organizational commitment of employees appears at different dimensions. These dimensions are given as affective commitment, continuance commitment and normative commitment (Allen & Meyer, 1990).

Affective Commitment: It is possible to say that affective commitment refers the love felt by employees toward their organization and institution. Affective commitment includes identification and integration of employees with their organizations. Affective commitment, which was also known as attitudinal commitment, is closely related with affective reactions concerning their environment, and especially with adopting the job it includes more establishing close ties with the position, colleagues, work place and profession (Balay, 2000a). Employees attached to their organizations with strong affective commitment continue to stay with their organization because they want this themselves rather than they need this (Meyer & Allen, 1991).

Continuance Commitment: The basic reason for employees to feel committed to their organizations and to continue having position at their organizations is that they need to stay at their organization. Continuance commitment concerns with consequences of leaving their organization (Meyer & Allen, 1991). Hence, continuance commitment is result of a thought that employees might waste the labor produced, the time and the effort spent, the status and the wealth gained during their employment at their organization (Yalçın & İplik, 2005).

Normative Commitment: Normative (rule-based) commitment reflects liability feelings of employees concerning remaining at the organization. Employees, with high level of normative commitment feeling, need to stay at the organization (Meyer & Allen, 1991). This commitment feeling assures them to exhibit certain behavioral actions since they believe in that their actions were right and moral (Balay, 2000a). Normative commitment can be affected by normative pressure felt regarding staying at the organization as result of their experiences obtained before (family and cultural socialization) and during the time spent in their organizations (organizational socialization) (Allen & Meyer, 1990). In the normative commitment, unlike the continuance commitment, the factors determining personal desire to continue to work at the current organization is not material, instead, it is factors related with working psychology such as ethic, responsibility, and sense of mission.

As it was suggested by Allen & Meyer (1990), the common ground among affective, continuance and normative commitment is the bond between employee and organization, which reduce probability of leaving organization. Regardless of the type of commitment felt by employees, they continue to remain with their organization. However, in affective commitment, the motivation to stay with the organization relies on desire; in continuance commitment, it relies on the need; and in normative commitment, it relies on liability (Obeng & Ugboro, 2003). It is the most preferable situation that employees in an organization must possess high affective commitment at the first place; then, normative commitment and finally continuance commitment (Yalçın & İplik, 2005). Yet, affective commitment arise based on individuals' own desires; normative commitment arise based on moral rationales, and continuance commitment arise based on personal interests (Wasti, 2002).

Besides affective commitment, continuance commitment and normative commitment dimensions suggested by Allen and Meyer (1990), organizational commitment has taken into consideration by number of researchers from different angles. Whereas Etzioni (1961) considered organizational commitment as alienative, calculative and moral commitment; Kanter (1968) considers as continuance, cohesion and control commitment; Katz & Kahn (1977) considers as depictive and instrumental circuit; Mowday *et al.* (1982) considers as behavioral and attitudinal; Yalçın & İplik (2005) considers it as dimensions of identification and organizational participation.

Organizational commitment includes both devotion of employees to organizational objectives on which general consensus are reached, and attitudinal attachment of employees as a result of identification with their organizations. From this point of view, it is possible to state that organizational commitment cannot be reached by force against the human factor (İnce & Gül, 2005). In other words, organizational commitment can take place sincerely and heartfelt. Hence, it is necessary to establish the conditions in organizations capable of establishing heartfelt

commitment. To that end, it is necessary to know factors related with organizational commitment. Following factors are closely related with organizational commitment (Balay, 2000a):

1. Leaving job, absenteeism, regression, and job search activities
2. Attitudinal, affective, and cognitive structures such as job satisfaction, embracing job, moral and performance
3. Characteristics regarding employees' job and role such as autonomy, responsibility, participation and sense of task
4. Personal characteristics of employees such as age, gender, seniority period, and education
5. Knowing personal organizational commitment estimators (Balay, 2000a).

Arı (2003) classified factors affecting organizational commitment and conglomerated these factors under three groups:

1. Personal characteristics: *Various demographical and personal characteristics of individuals such as age, education, gender, supervising point, motivation for success.*
2. Job-related characteristics: *Autonomy at workplace, significance and meaning of job position, job satisfaction level, feed-back, and social-interaction opportunities.*
3. Organizational factors: *Factors such as organization structure, size, compensation system, work conditions, career opportunities, organization culture, management style, and senior-subordinate coworker relationships.*

Ölçüm Çetin (2004) classifies factors affecting organizational commitment as follows:

1. Personal characteristics
2. Role and work characteristics
3. Work experience / structural characteristics.

These factors have impacts on organizational commitment at different levels. In regard to this issue, Oliver (1990) emphasizes that influence of demographic factors on organizational commitment can be considered as moderate in comparison to the organizational rewards and work-related values.

Besides the factors effective on organizational commitment, it is also important for organizations to know the consequences of organizational commitment. Consequences of organizational commitment are under influence of commitment level. According to strength of organizational commitment level, there could be different consequences for both organization and employees.

Strong organizational commitment level of employees enhances belonging feeling of organization members, develops sense of thrust, and members start to feel that they can be beneficent for their organization and help them to develop a purpose both inside and outside of the organization (Güçlü, 2006).

Strong (high) level of commitment would ensure high level of productivity among employees (Aydınlı, 2005). Performance of individuals committed to their organization would accordingly be high. Their absenteeism would decrease, their lateness and job leave of employment would eventually reduce (Mathieu & Zajac, 1990). Organization members, committed to their organizations, (Feldman & Moore, 1982);

1. **Feel** less monitoring and discipline. Their performance is higher compared to the ones with less organizational commitment.

2. **Consider** internal options regarding their organization as a tool with highest potential to contribute their organization.

3. **Exhibit** distinctive reliability and sincerity in their behaviors usually during crisis environment.

High level of organizational commitment might also present adverse results. When organizational objectives are not acceptable, high organizational commitment level of members might accelerate fall of organization (Balay, 2000b). A strong faith and acceptable organizational objectives, values include voluntary employment at the organization and establishing strong relationships (Raghunathan, Raghunathan & Tu, 1998). However, if employees consider that objectives are not realistic, they start to think that it will be unnecessary to spend effort to increase performance for these targets; and this attitude ultimately affects organizational commitment adversely.

Employees with low level of organizational commitment object this reformation process compelled by the system; and thus, they strive to protect their identities as individual members. Employees presenting organizational commitment at such level would be able to recognize some organizational values instead of all of them; while they meet expectations of their organization, they maintain integration with their organization, and continue to protect their personal values in the meantime. Since low level of organizational commitment results in denials and complaints, it defames the name of the organization, destructs the environment of trust, prevents adaptation to the possible new conditions; and thus, it causes income losses (Bayram, 2009). Low level of organizational commitment causes high rate of circulation in the labor force, and results in adverse consequences such as absenteeism and tardiness. Employees exhibiting such level organizational commitment do not view themselves as part of the organization; the possibility to leave their organization is always higher in comparison to other colleagues (Yavuz & Tokmak, 2009). Leave of employees and high rate of circulation affect consistency in organizations adversely as well. Even employees do not leave the organization, the continuous desire for leaving the organization reduce their performance and again the organization is damaged from this result.

Organizational commitment is seen as variable which affects productivity, performance, and stability in educational institutions. Organizational commitment of teachers is important in terms of accomplishing objectives of schools. Organizational commitment of teachers can be described as a sentimental connection between themselves and their school (Coladarci, 1992).

Crosswell (2006) considers commitment as one of the basic occupational characteristics that affect teachers' success. Teachers exhibiting high level organizational commitment are highly motivated; spend more effort for accomplishments of their institution; and cooperate with their coworkers. High level of organizational commitment among teachers will indeed result in an education system with superior quality and operated more conveniently as well.

The most significant factor that provides basis for teachers to work as creative and innovative individuals is again organizational commitment. A teacher with high level commitment to his/her school would spare more time to develop opinions for success and accomplishments of his/her school. A productive teacher would establish foundations for projects which would elevate success, productivity and efficiency

level of their schools. Thus, for successful and effective education institution, it is possible to conclude that teachers with high level commitment to their schools are needed.

In various studies on effective school, several indicators regarding (high level of) organizational commitment of teachers and principals to their institution are enumerated as below:

1. Teachers exchange views concerning teaching practices frequently and continuously.
2. Principals and teachers observe each other's teaching activities continuously; and evaluate their own teaching practices through these observations.
3. Principals and teachers implement a series of integrated activities such as planning educational materials, researching, evaluation and preparation.
4. Principals and teachers assist each other to develop each other's teaching practices (Balay, 2000b).

It can be concluded that being aware of factors effective on organizational commitment levels of teachers and the consequences of high level of organizational commitment on them are significant in terms of achieving objectives, increasing productivity and developing quality in education for schools. Since there is limited scientific study on this issue in both Turkey and the world, it is thought that the present study investigating factors affecting teachers' organizational commitment and consequences of teachers' high level of organizational commitment would be important for this study domain.

The purpose of the present study is to reveal factors affecting teachers' organizational commitment and consequences of teachers' high level of organizational commitment.

METHOD

In this section, research pattern and study group were described; and data collection and their analysis were emphasized.

a. Research Pattern

The present research is a qualitative study. These sort of studies are used for systematic analyze of meanings that arise as a result of experiences of participants included in a study (Ekiz, 2003). Sensitivity to natural environment, participative role of researcher, determining perceptions, flexibility in research pattern, and inductive analysis can be considered as characteristics of qualitative researches (Yıldırım & Şimşek, 2011). Primary end of qualitative researches is to assess and explain the answers given for questions such as "Why?" and "How?", which cannot be represented by quantitative values; and thus, to make participant behaviors, social phenomena and incidents more comprehensible and explicable (Demirbaş, 2014).

Research data was collected through "interview" method, one of the qualitative data collection methods. Interview is kind of communication process among minimum two parties concerning a certain subject (Aktaş, 2014). Interviews conducted in this study can be characterized as "semi-structured interviews". "Semi-structured interview" is neither stiff as much as fully-structured interview nor flexible as unstructured interview. This is a technique remaining between these two ends and provides necessary flexibility and convenience to researchers (Karasar, 1999).

b. Study Group

The research was conducted over 102 teachers with at least 3 years seniority at their profession from 7 primary schools, 7 secondary schools, and 5 high schools during 2014-2015 academic year in central county of Kırşehir city. The study group was determined by means of convenience sampling method of purposeful sampling utilized in qualitative research. Therefore, voluntary participants with minimum three years of teaching experience and who could be reached easily were interviewed.

Sample selection process in qualitative researches is quite flexible. Sampling selection develops and evolves in parallel to the progress gained during course of study. Sampling is replenished on continuous base in order to strengthen and support the major subject according to gained progress on the subject or theory (Kuzel, 1992). Thus, interviews were continued with the voluntary participants between November 2014 and May 2015 until sufficient data was gathered and to acquire sufficiently qualitative data set required by the study. All interview sessions were conducted by researchers.

Demographical information of participants was given on Table 1.

Table 1: Demographical Information of Participants

Variables	Categories	n	%
Gender	Female	45	44.1%
	Male	57	55.9%
Type of School	Primary School	42	41.1%
	Secondary School	33	32.3%
	High School	27	26.6%
Occupational Seniority	3-9 years	38	37.3%
	10-16 years	50	49.0%
	17 years and more	14	13.7%

c. Data Collection and Analysis

In preparation of necessary questions that will be employed during data collection, 10-15-minute face-to-face interviews were conducted with randomly selected 10 teachers in order to determine factors affecting teachers' organizational commitment and consequences of teachers' high level of organizational commitment. Reviewing the relevant literature, ultimate form of questions that would be included in the interview sessions were tried to be determined. Following the interview process with teachers, based on the literature review, semi-structured interview form consisted of 3 open-ended and 1 close-ended question was developed. The draft interview form was consulted to the specialists from assessment-evaluation, Turkish teaching and educational sciences to ensure internal validity. Then, questions were put in an order and preliminary application was implemented with 12 teachers. In the preliminary application, it was determined whether the interview questions were comprehensible to answer, and whether they did not violated its designated scope, or not. Hence, data collection tool was assessed through a trial. Yet, the assessment of the data collection tool is directly correlated with validity and reliability of the research (Yıldırım &

Şimşek, 2011).

Data utilized in the study was obtained from the answers of teachers given in regard to the questions asked during the interviews. Interviews were conducted individually for each participant on a determined date and place by the respondents. While interviews lasted for twelve minutes on average in single session, they were recorded by means of a voice recorder. In addition to the questions in the interview form, participants were asked following questions to determine their opinions accurately: “*What is the rationale behind your thought?*”, “*Why do you think in this way?*”, “*Could you explain your opinion?*”, “*What would you mean by your words?*”.

The questions asked to participants were presented below:

1. In your opinion, what does commitment of teachers to their employer school mean?

2. In your opinion, which factors are effective on organizational commitment of teachers toward their employer schools?

3. In your opinion, what are the consequences of high level of organizational commitment of teachers toward their employer schools?

4. What do you think about your commitment level to your school? Is its level either high or low? Please indicate the rationale of your thought by completing the following sentence: My commitment level toward my school is high / My commitment level toward my school is low because...

Firstly, recorded interviews into the voice recorder were analyzed and transferred to the paper form. During this transfer process, it was paid attention to transfer answers of participants to the relevant question to the paper form without allowing any alteration. Then, transferred data on the paper form was checked once more with the voice records so that all collected data was captured in the paper form.

Collected data was analyzed through content analysis. During the content analysis process, raw data obtained from interview sessions were transformed into codes; then, categories were formed through codes. Categories were presented under themes revealed earlier by the research questions (McMillan & Schumacher, 2010).

In qualitative studies, data can be transformed into quantitative form. The basic motives behind conversion of qualitative data into quantitative form are increasing reliability, reducing bias, and making comparison among categories (Yıldırım & Şimşek, 2011). Similarly, in the present study, qualitative data was converted into quantitative form; and frequencies of findings captured from teachers' opinions were determined, and they were exhibited in the frequency charts.

In the results section, opinions of teachers were directly quoted so as to ensure “*validity*” (Patton, 1987). In direct quotation, due to scientific ethics, participant teachers' names were disguised; each of them was assigned a reference starting from T-1 to T-102; and the teacher, whose respective opinion was directly expressed, was indicated with this reference.

RESULTS

Findings obtained as a result of the present study were presented according to the three theme pillars of the study as follows.

a. Organizational Commitment Descriptions for Teachers

The first question prepared along the objective of the study is “*In your opinion,*

what does commitment of teachers to their employer school mean?” Descriptions given by participant teachers regarding organizational commitment and their frequencies were presented on Table 2.

Table 2: Description Given by Participant Teachers Regarding the Organizational Commitment

Description	Frequency
It is the love felt by teachers for their employer school.	18
It is integration of teachers with their employer school.	16
It is commitment felt by teachers toward their employer schools due to their commitment to coworkers.	13
It is commitment felt by teachers toward rules of their employer school.	11
It is commitment felt by teachers toward objectives of their employer school.	8
It is commitment felt by teachers toward material opportunities provided by their employer school.	8
It is commitment felt by teachers toward principles and values of their employer school.	6
It is commitment felt by teachers toward their employer school due to their satisfaction in terms of workplace environment and conditions.	6
It is willingness of teachers to carry out their duties and responsibilities against their employer school.	5
It is commitment felt by teachers toward their employer school due to their admiration toward their profession.	4
It is willingness of teachers to make sacrifice for their employer school.	1
It is commitment felt by teachers toward their employer school due to the commitment felt toward their country.	1

Of 102 participant teachers, 3 did not answer the first question at all. Answers given by another 3 teachers were not taken into consideration since they were not valid in terms of the scope of the questions. Thus, organizational commitment descriptions were compiled by answers given by 96 teachers to the first question. Every teacher who was able to answer the first question made only one description regarding organizational commitment.

According to Table 2, it can be observed that the first three descriptions regarding organizational commitment indicated by teachers were “*the love felt by teachers for their employer school, integration of teachers with their employer school, commitment felt by teachers toward their employer schools due to their commitment to coworkers*”.

Below, descriptions in Table 2 and opinions of teachers emphasized by these descriptions were presented (*for each description, a teacher’s opinion was displayed*).

T-69, The Love Felt by Teachers for Their School: “Briefly, it can be considered that teachers are committed to their schools if they love it unconditionally.”

T-78, Integration of Teachers with Their School: “I cannot see myself as part of the school. Therefore, I think I am not committed to my school. Therefore, I think, organizational commitment means being part of an organization and establishing

integration with it.”

T-23, Commitment Felt by Teachers toward Their Employer Schools due to Their Commitment to Coworkers: “If teachers are committed to their institutions, this can be ensured by their coworkers. Only human factor establish bond between you and a place. I think good relations among coworkers, trust and loyalty among them constitute organizational commitment.”

T-5, Commitment Felt by Teachers toward Rules of Their School: “Organizations constitute system; and there is an order within them. There are rules effective to maintain and operate this order. Organizational commitment means following these rules.”

T-96, Commitment Felt by Teachers toward Objectives of Their Employer School: “The most important factor which establish bond between a person and an organization is objective of this organization. If there are rational objectives, I would recognize them; through rational and adopted objectives, employers work for their organization with self-sacrifice.”

T-24, Commitment Felt by Teachers toward Material Opportunities Provided by Their Employer School: “Some activities conducted at school, for instance, tutoring classes at school or project works provide us side income. To be honest, as these opportunities increase, they would be most important reason for my commitment to the school.”

T-92, Commitment Felt by Teachers toward Principles and Values of Their Employer School: “In my opinion, organizational commitment is internalizing principles and values of schools. It is sharing the same senses with school.”

T-7, Commitment Felt by Teachers toward Their Employer School due to Their Satisfaction in Terms of Workplace Environment and Conditions: “If I appreciate workplace conditions at school, this means that I am committed to my school, my institution.”

T-54, Willingness of Teachers to Carry out Their Duties and Responsibilities against Their Employer School: “If teachers do not hesitate to carry out duties expected from themselves, this indicates they are committed to their schools.”

T-61, Commitment Felt by Teachers toward Their Employer School due to Their Admiration toward Their Profession: “Feeling committed to school means loving your job. If a teacher loves his/her profession, he/she is committed to his/her school as well.”

T-23, Willingness of Teachers to Make Sacrifice for Their Employer School: “Self-sacrifice is the most significant marker of loyalty. If I am not hesitating to sacrifice from my time and labor, this is about the commitment that I feel for my institution.”

T-45, Commitment Felt by Teachers toward Their Employer School due To The Commitment Felt toward Their Country: “We are working at school for our living. The government provides us job. Thus, all government employees must perform their duties by remaining loyal to this country. I think organizational commitment is result of loyalty to the county. A civil servant who feels that he/she is not committed to the country, does not feel this commitment to the institution where he/she works. Commitment to the institution means commitment to the country.”

According to the descriptions set forth by the participant teachers of the present

research, it can be said that “*love felt by teachers for their employer school*”, “*integration of teachers with their employer school*”, “*commitment felt by teachers toward their employer schools due to their commitment to coworkers*” and “*commitment felt by teachers toward their employer school due to their admiration toward their profession*” descriptions are affective commitment; “*commitment felt by teachers toward material opportunities provided by their employer school*” and “*commitment felt by teachers toward their employer school due to their satisfaction in terms of workplace environment and conditions*” descriptions are continuance commitment; and “*commitment felt by teachers toward rules of their employer school*”, “*commitment felt by teachers toward objectives of their employer school*”, “*commitment felt by teachers toward principles and values of their employer school*”, “*willingness of teachers to make sacrifice for their employer school*” and “*commitment felt by teachers toward their employer school due to the commitment felt toward their country*” descriptions are normative commitment. When frequencies of descriptions given under scopes of affective, continuance and normative commitment groups are considered, each group’s total frequencies can be found as 40, 9 and 24, respectively. It can be concluded that majority of teacher who are able to answer the first question perceived organizational commitment as affective commitment.

b.Factors Affecting Teachers’ Commitment to Their Current Employer School

The second question of this research is “*In your opinion, which factors are effective on organizational commitment of teachers toward their employer schools?*” It is possible to suggest that the factors referred by participant teachers while they are answering the second question can be grouped under four groups. These factors are “*personal factors*”, “*factors regarding workplace conditions*”, “*factors regarding their job*” and “*organizational factors*”. These factors emphasized by respondent teachers were summarized in Table 3.

Of 102 participant teachers, 2 teachers did not answer the second question at all. Therefore, factors affecting teachers’ commitment to their school were obtained based on analysis of answers of 100 teachers to the second question. Some of teachers attributed number of factors in their answers.

According to Table 3, concerning the factors affecting teachers’ commitment to their school, the first three factors were determined as “*management style*”, “*behavior and characteristics of administrators*” and “*general success level at the school*”.

Personal factors affecting teachers’ organizational commitment were determined as “*responsibility / sense of mission*”, “*occupational commitment*”, “*service period at the current school*”, “*education level*”, “*gender*”, “*private life*” and “*personality*”. Opinions of teachers, which emphasized these factors, were presented below (*for each factor, a teacher’s opinion was displayed*).

T-13, Responsibility / Sense of Mission: “*If a teacher is not capable of performing his/her duty and responsibilities, if they are not aware that their existence at school is subject to their duties and responsibilities, they cannot be expected to be committed to their schools.*”

Table 3: Opinions of Participant Teachers Regarding Factors Affecting Commitment to Their Employer School

Personal Factors	Frequency
Responsibility / Sense of Mission	9
Occupational Commitment	6
Service Period at the Current School	3
Age	2
Education Level	2
Gender	1
Private Life	1
Personality	1
Factors Regarding Workplace Conditions	
Adequacy of School in Terms of Tools and Equipment	8
Availability of Tools and Equipment Found at School	3
Security Status at School	3
Physical Status of Classrooms and Laboratories	2
Available Transportation Means for School	1
Geographical Conditions of The County where The School is Located	1
Factors Regarding Their Job	
Stress of Work	7
Salary	4
Job Satisfaction	3
Role Conflict	1
Organizational Factors	
Management Style	25
Behavior and Characteristics of Administrators	22
General Success Level at The School	21
Atmosphere at The School	12
Existence of System Evaluating Performance of Teachers	8
Well-Functioning School System (Systematical Operation)	7
Supervising Teachers In a Functional Manner	3
Rewarding	3
Opportunity For Side Income	2
Opportunity For Progress / Development	2
Attainable Objectives	1
School Culture	1

T-42, Occupational Commitment: “I do not believe that all of teachers do this job just because they admire this profession. Some of them do this job just because to afford their livelihood. Even, in my opinion, majority of them think in this way. I think commitment of a teacher to his/her school can only be possible as long as they admire teaching profession.”

T-25, Seniority at the Current School: “In my opinion, there is direct relationship between service period and level of commitment to school. For teachers, who served to their school for a longer period, everything at school becomes usual; and school as well loses its value in the eyes of teachers.”

T-48, Age: “As teachers get older, they become distant from educational

activities and school.”

T-94, Education Level: “It is possible to say that teachers with a graduate degree have higher commitment level due to their desire to transform the graduate education that they received into benefit to their school.”

T-76, Gender: “Female teachers have lower commitment level to their school because they are also committed to their homes due to their motherhood and wifeness roles at home.”

T-9, Private Life: “Difficulties that we experience in our private life affect our school life adversely. Sometimes, we come to school even we are not aware of where we are going to.”

T-61, Personality: “Commitment to school depends on persons. While some teachers are hard worker, accordingly their desire for work has positive influence on their commitment to their school, some teachers are selfish, and consequently they experience difficulties in their personal relationships at school. For example, a teacher, who is not capable of enjoying his/her life, cannot be committed to their school.”

The factors indicated by participant teachers regarding the workplace conditions in their answers for the second question were “adequacy of school in terms of tools and equipment”, “availability of tools and equipment found at school”, “security status at school”, “physical status of classrooms and laboratories”, “available transportation means for school” and “geographical conditions of the county where the school is located”. Some of the expressions of teachers in which these factors were emphasized were presented below (for each factor, a teacher’s opinion was displayed).

T-23, Adequacy of School in Terms of Tools and Equipment: “We may not able to find tools and equipment that we need during planning process of courses. Hence, the value attached to the school erodes in my point of view. It becomes banal; and I start thinking that it is not a special place. If a person works at a place with no quality, the trust and commitment felt toward that place are influenced negatively.”

T-18, Availability of Tools and Equipment Found at School: “Although there is delineascope, it is broken. There is wall map but it is torn. Then, how could I be helpful? How could I be useful for my school? How could I offer more benefit to my students? Malfunctioning, broken tools and equipment affect our opinion regarding the school adversely.”

T-78, Security Status at School: “Now, it is possible to encounter news about teachers killed at schools. They might be incurred assaults of either students or their parents. At once, I did not want to stay at a school where violence incidents can be encountered frequently. They attacked a teacher before us. It is not possible to talk about commitment to such school.”

T-25, Physical Status of Classrooms and Laboratories: “Our classrooms are maintenance-free. Walls are falling apart. I am losing all of my motivation in such a classroom. Even, I do not want to enter such a classroom. I am running away from the classroom at the end of courses. This situation affects my commitment to the school.”

T-1, Available Transportation Means for School: “I wake up early to go to my school. Since I work in a village, there is only one bus in the morning. I need to catch up with this bus. Otherwise, there is another one on the noon time. Again, right after

my class, I need to catch this bus. That is, there is no chance to stay longer at the school, or to do something extra in there. There is such monotony. We make all of our planning according to the teachers' bus. Our relationship with school is also influenced by this fact."

T-1, Geographical Conditions of the County where the School is Located: *"We are reaching our school by climbing hills and mountains. This makes our way to school more dangerous. We are trying to search ways to escape such school location."*

Factors indicated by participant teachers regarding their job while they are answering the second question are "stress at work", "salary", "job satisfaction" and "role conflict". Some of expressions in which these factors were emphasized by teachers were presented below (for each factor, a teacher's opinion was displayed).

T-88, Stress at Work: *"We are experiencing such a diverse student profiles that they might cause great problems. It is really compelling to deal with problem students or unskilled students. Of course, there are other difficulties that we experience. I think the difficulties experienced at school cause unhappiness. How could you expect organizational commitment from a saddened teacher?"*

T-61, Salary: *"Teachers weight their all efforts and work in proportion to the salary they receive... Since their salary is low; have difficulty to fulfill their needs; and are not paid desired salary even though they believe that they deserve high salary, they would not be committed to their school. So to speak, they just occupy space at school."*

T-59, Job Satisfaction: *"As teachers are fully beneficent for their students, they are satisfied from their profession more. As their satisfaction increases, they are committed to their school as well because teachers live this feeling at the school. Teachers satisfied with their job would think that they are beneficent for their students; they would not prefer to leave their school where they find job satisfaction."*

T-64, Role Conflict: *"Sometimes I do not understand whether we are teachers or just a regular civil servant. Sometimes we just deal with unnecessary works. We become teacher, clerk, and janitor at the same time. This fact, in my opinion, tarnishes reputation of the teaching profession; it harms self-esteem of teachers. Teachers should only remain as teachers so that they would spend more effort to be beneficent to their schools."*

The organizational factors indicated by participant teachers in their answers for the second question were "management style", "behavior and characteristics of administrators", "general success level at the school", "atmosphere at the school", "existence of system evaluating performance of teachers", "well-functioning school system (systematical operation)", "supervising teachers in a functional manner", "rewarding", "opportunity for side income", "opportunity for progress / development", "attainable objectives" and "school culture". Some of the expressions of teachers in which these factors were emphasized were presented below (for each factor, a teacher's opinion was displayed).

T-36, Management Style: *"I think unfair administration is the biggest obstacle before commitment to school."*

T-97, Behavior and Characteristics of Administrators: *"If school principal approaches to teacher like a 'little tin God', if they are so greedy and selfish that they*

exclude teachers from decision making process, even avoiding information sharing regarding administrative decisions, how could you establish bond between teachers and their school?"

T-4, General Success Level at the School: "Teachers would like to continue working at a school where their students are known as successful individuals."

T-5, Atmosphere at the School: "Intimate relations at school are the most significant factor affecting our commitment to school. Especially, relationship among teachers, between teachers and students, are determinants of a good school environment."

T-71, Existence of a System Evaluating Performance of Teachers: "We have chemistry teacher at our school. He is into his branch and teaching profession. He is doing everything that he can to be beneficent to his students at maximum possible level; and he does this every day. On the other hand, there is another teacher who requests frequently from his students in his classes that 'Open your books; read and summarize pages indicated.' He is always late for his classes and leaves the classroom early. Both teachers are paid the same salary. The salary received by the second teacher is not deserved. Nevertheless, he receives because nobody assesses performance of this teacher; and says 'Put yourself together or else, your salary will be decreased.' The lack performance evaluation system for teachers discourages majority of teachers and tarnishes their commitment to their school."

T-1, Well-Functioning School System (Systematical Operation): "Until now, the most impressive factor at schools, which contributed my commitment to this school where I work, was well-regulated operations which work like a clockwork. My performance was increased in this school as well."

T-102, Supervising Teachers in a Functional Manner: "School principals must carry out supervising along the guidance purpose. They must avoid discrimination or 'reciprocal relationships' in supervising process because these approaches are the most significant damages to trust on school administration. Therefore, commitment to the school decreases."

T-97, Rewarding: "Even sometimes it is considered that saying just 'thank you' to the teachers who spend utmost effort is too much. In order to encourage successful teachers, a rewarding mechanism must be employed. Schools are required to establish their unique rewarding system and teacher who really deserve must be rewarded. This certainly elevates commitment of teachers to their school."

T-76, Opportunity for Side Income: "Through a vulgar expression, if school contributes in pockets of teachers, then they would be committed to their schools."

T-85, Opportunity for Progress / Development: "I have been teacher for twelve years. I have not seen at all that administration spend effort to develop teachers' skills and to support learning activities of teachers. Providing development opportunity to teachers would affect their commitment to the school."

T-12, Attainable Objectives: "I see some expressions at schools referred as 'our vision, our mission'. Our school also has one of them. When I read them, I personally know that our school would never accomplish determined things under vision and mission mottos. In one sense, this is a lie said by school. Indeed, nobody believes in this. School administration must determine appropriate objectives for school according to the conditions of the school."

T-71, School Culture: “What are the foundation values of the education given at school? Can ethical values find sufficient place in the education? Are personal differences shown tolerance? Are human rights and freedom protected? Which behaviors are praised? Commitment felt toward the schools in which these points are taken into consideration increases.”

It was observed that “role conflict”, “management style”, “job satisfaction”, “occupational commitment”, “age”, “service period at the current school”, “behavior and characteristics of administrators”, “salary” and “supervising teachers in a functional manner” factors determined in answers given for the second question were reported in some other studies as well. Deconick & Dean (1996) found that the conflict between role at work and role at home (family) reduces organizational commitment; and existence of high level of opportunity for promotion provides high level of commitment. In the same study, it was also determined that fair distribution of justice as part of a management style contributes into high level of commitment among employees. In the study reported by Igbaria & Guimaraes (1993), significance of job satisfaction in estimation of organizational commitment was reported. Vandenberg & Scarpello (1994) indicated effect of occupational commitment on organizational commitment, which cannot be underestimated. In the study of Allen & Meyer (1993), it was observed that affective and normative commitment increase significantly with respect to age of the employee; on the other hand increase in the continuance commitment relies mostly on increase in service period at organization and position. Tsui & Cheng (1999) indicated that school principals’ support and open communication with teachers are important in terms of organizational commitment of teacher; and reported that attitude and behavior of school principals is a factor affecting organizational commitment. In the study reported by Malik, Nawab, Naeem & Danish (2010), satisfactory salary and qualified supervising are of the factors effective on organizational commitment of lecturers at state universities. Sharma (2010) reported positive and significant correlation between job satisfaction and organizational commitment. Nagar (2012) reached the conclusion that high level of job satisfaction affects level of organizational commitment.

Participant teachers emphasized thirty factors affecting their commitment to school while they were answering the second question. It can be observed from Table 3 that, while the most frequently emphasized factor was under the organizational factors group; based on the frequency of statement of opinions, the group with highest total frequency, that is the group with highest number of relevant opinion, was organizational factor group. This finding suggests that participant teacher’s commitment to school is mostly affected by organizational factors.

Of the organizational factors, “management style” and “behavior and characteristics of administrators” factors’ total frequencies was 47; total frequency of all factors indicated in the second question was 165. That is, “school management and administrators” were emphasized in 28.5% of all opinions stated. This finding suggests that “school management and administrators” is the most essential factor which affects organizational commitment for participant teachers.

c. Consequences of High Levels of Commitment Felt by Teachers toward Their Employer School

The third question analyzed in the present study is “In your opinion, what are the

consequences of high level of organizational commitment of teachers toward their employer schools?” Based on the answers given by participants, it was determined that organizational commitment felt by teachers toward their school would have individual consequences on “teachers’ themselves”, “school and its administration”, “students” and “parents”.

Table 4: Opinions of Participant Teachers Regarding Consequences of High Level of Commitment Felt Toward School

Consequences	Frequency
Consequences on Teachers’ Themselves	
High Performance	35
Job Satisfaction	16
High Motivation	13
Higher Confidence in School Administration	9
Closer Relationship with Coworkers	9
More Interest Paid to Students	7
Commitment to the Profession	6
Enhanced Creativity / Productivity	4
Inclining to Occupational and Personal Development	3
Enhanced Sense of Duty / Responsibility	2
Enhanced Working Discipline	2
Consequences on School and Its Administration	
High Productivity	9
Positive School Atmosphere	7
Order in Operations (Systematic operations)	6
Efficiency at School Administration	3
Intimate Relationships between School and Its Social Environment	1
Decreasing Number of Problems at School	1
Consequences on Students	
Increasing Success at School	8
Better Learning	4
Service Satisfaction	3
Enhancing Relationship with Teachers	3
Commitment to School	1
Developing Positive Behaviors	1
Consequences on Parents	
Enhancing Confidence toward School	2
Enhancing Confidence in Teachers	2
Service Satisfaction	1

Of 102 participant teachers, two teachers did not answer the third question. Therefore, consequences of high level of commitments of teachers were obtained as a result of analysis of answers of 100 teachers to the third question. Some of teachers referred more than one consequence while they are answering questions.

According to Table 4, in the first three ranks regarding aforesaid consequences, there are “high performance”, job satisfaction” and “high motivation” classified under “consequences on teachers’ themselves”.

Consequences of teachers' high level of commitment to their school on their own were presented as "high performance", "job satisfaction", "high motivation", "higher confidence in school administration", "closer relationship with coworkers", "more interest paid to students", "commitment to the profession", "enhanced creativity / productivity", "inclining to occupational and personal development", "enhanced sense of duty / responsibility", "enhanced working discipline". Opinions of teachers, in which these consequences were emphasized, were presented below (for each consequence, a teacher's opinion was displayed).

T-65, High Performance: "Teachers who are committed to their schools spend more effort for their job. More effort has positive reflection on students."

T-4, Job Satisfaction: "Commitment motivates teachers to spend more effort. A hard worker teacher increases his/her efficiency. An efficient and qualified teacher would gain more happiness at the end of the teaching process."

T-13, High Motivation: "If there is intimate relation between my school and me, my desire to move on with my profession is higher because I love my school and this love has positive effect on my motivation for work. Nobody would willingly work at a school where they are not happy."

T-61, Higher Confidence in School Administration: "There is direct relationship between commitment to school and trust in school administration. The most important factor in establishing commitment felt by teachers toward their school is school administration. Administration attaches teachers to their school; this commitment ultimately results in increasing confidence in school administration."

T-23, Closer Relationship with Coworkers: "If teachers are attached to their institution, this feeling is result of attitudes of their coworkers. Only human factor attaches us to somewhere. I think intimate relationship between coworkers and confidence and loyalty among coworkers constitute organizational commitment. Organizational commitment allows better relationships among coworkers."

T-65, More Interest Paid to Students: "Teachers who are committed to their schools spend more effort for their job. More effort has positive consequences on students. Students receive more attention from their teachers."

T-45, Commitment to the Profession: "Commitment to school ensures commitment to teaching profession."

T-65, Enhanced Creativity / Productivity: "A teacher who is committed to his / her school would try to be more beneficent for his / her school. This would motivate them to think, develop opinions, and establish projects."

T-14, Inclining to Occupational and Personal Development: "There are teachers who do not want to develop themselves in any field. We observe that these teachers are of the ones who are not committed to their schools. In general, teachers who want to be beneficent to their school are inclined to self-development."

T-44, Enhanced Sense of Duty / Responsibility: "I am a teacher who is committed to my school. In every work I do, I look out for interest of my school; my duties toward my school are always in my mind. On the foundation of my thought of doing my job in the best possible way, there is thought of being beneficent to my school as much as possible."

T-44, Enhanced Working Discipline: "On the foundation of my thought of doing my job in the best possible way, there is thought of being beneficent to my school as

much as possible. The purpose of doing best for my school brings more attentive and organized work with it."

Consequences of teachers' high level of commitment to their school on school and school administration, which were presented while participant teachers were answering the third question, were "*high productivity*", "*positive school atmosphere*", "*order in operations (systematic operations)*", "*efficiency at school administration*", "*intimate relationships between school and its social environment*" and "*decreasing number of problems at school*". Opinions of teachers, in which these consequences were emphasized, were presented below (*for each consequence, a teacher's opinion was displayed*).

T-8, High Productivity: "*In a school in which its teachers are highly committed to this institution, the productivity would necessarily be high. In terms of amount and quality, more work is produced by teachers. In parallel with the energy spent, the consequent performance would increase as well; and pre-determined objectives are accomplished.*"

T-23, Positive School Atmosphere: "*Organizational commitment ensures intimate relationships among coworkers. Especially good relationships among teachers would have positive reflections on school environment; and a positive environment obtained at school.*"

T-1, Operations in Order (Systematic Operations): "*Until now, the most impressive factor at schools, which contributed my commitment to this school where I work, was well-regulated operations which work like a clockwork. My performance was increased in this school as well. It was not only me; all of my coworkers were committed to our institution. Indeed, the reason for such a well-regulated operation system was again commitment felt by teachers toward this school; and their self-sacrifice for their school.*"

T-63, Efficiency at School Administration: "*The most important assistants of school administration are teachers. Teachers who are committed to their schools facilitate and accelerate job of the school administration; and allows them to accomplish their objectives.*"

T-90, Intimate Relationship between School and Its Social Environment: "*A school owes its reputation to its teachers. As teachers protect their schools, they ensure that their school enhances reputation in their environment. Teachers who are committed to their school highly develop the relationship with its periphery. That is, indeed such teachers perform role of promotion personnel of the school.*"

T-90, Decreasing Number of Problems at School: "*Teachers, who protect their schools, are the most effective mean to eliminate problems experienced at school because teachers are the persons who are aware of every incident occurs at school. Teachers would like to resolve problems face in the place where they are happy.*"

Consequences of teachers' high level of commitment to their school on students, which were presented while participant teachers were answering the third question, were "*increasing success at school*", "*better learning*", "*service satisfaction*", "*intimate relationships with teachers*", "*commitment to school*" and "*developing positive behaviors*". Opinions of teachers, in which these consequences were emphasized, were presented below (*for each consequence, a teacher's opinion was displayed*).

T-11, Increasing Success at School: “Please notice that schools with higher success level among its students are the ones embracing its teachers and the ones employing committed teachers. Teachers committed to their school provide more qualified and more amount of service and thus, contribute into students’ success.”

T-11, Better Learning: “Teachers committed to their school provide more qualified and more amount of service and thus, contribute into students’ success. Parallel to higher student success, better learning experienced by students is another consequence relevant with teachers’ commitment to their schools. Teachers committed to their schools spend more effort for better learning result of students.”

T-37, Service Satisfaction: “In order to take care of students more, I need to feel commitment to my school. If I feel this commitment and spare more time for my students, then, they would be satisfied with my effort and believe that they receive a good service.”

T-34, Intimate Relationships with Teachers: “I get along very well with my students; I take care of them regarding the issues outside of the school as well. Spending extra time with my students have influence on them to percept me as their role model; and I try to become a good model regarding number of subject. I would say that such relationship between my students and me is consequence of the fact that I really love my school.”

T-52, Bonding to School: “It is possible to conclude that as students receives more care and attention from their teachers committed to their schools could love their school more than ever.”

T-34, Developing Positive Behaviors: “I get along very well with my students; I take care of them regarding the issues outside of the school as well. Spending extra time with my students have influence on them to percept me as their role model; and I try to become a good model regarding number of subject. I would say that such relationship between my students and me is consequence of the fact that I really love my school.”

Consequences of teachers’ high level of commitment to their school on parents, which were presented while participant teachers were answering the third question, were “Enhancing Confidence Toward School”, “Enhancing Confidence in Teachers”, and “Service Satisfaction”. Opinions of teachers, in which these consequences were emphasized, were presented below (a teacher’s opinion for each consequence).

T-74, Enhancing Confidence in School: “Teachers who are highly committed to their schools enhances quality of education and parents of students would have deeper confidence in both school and in teachers.”

T-74, Enhancing Confidence in Teachers: “Teachers who are highly committed to their schools enhances quality of education and parents of students would have deeper confidence in both school and in teachers.”

T-37, Service Satisfaction: “In order to pay more attention to my students, I need to feel commitment toward my school. If I feel this and spare more time for my students, then their satisfaction regarding my service would increase, and they would believe that they have better education. As long as students are satisfied with performance and care of their teachers, their parents would be satisfied as well. Hence, the measure taken into consideration by parents is satisfaction level of their children.”

Participant teachers referred possible twenty six consequences of high level of commitment to school while they were answering the third question. According to the Table 4, it was found that the most frequently referred consequence classification was under the “*consequences on teachers’ themselves*” group; and that when frequency of referral of opinions were considered, the group with highest total frequency was the consequence group of “*consequence on teachers’ themselves*”, that is, the group that has the highest number of relevant opinion was “*consequence on teachers’ themselves*”. This finding suggests that participant teachers think that high level of commitment of teachers to their school would likely to have consequences on themselves.

Based on the thought that having positive job attitudes would yield positive outcomes at work, it can be concluded that organizational commitment is determinant of “*high performance*” (Sıgri, 2007). The most frequently referred consequence by the participant teachers in regard to consequences of high commitment level to their school on teachers’ themselves was “*high performance*”.

High commitment level of employee to its employer is a positive factor in general for both organization and for employee. High level of organizational commitment exhibits significant positive correlation with respect to “*job satisfaction*” (Sıgri, 2007). “*Job satisfaction*” was the second most frequently referred consequences by the participant teachers in regard to the consequences of high level of commitment to school on teachers as well.

d. Teachers’ Considerations Regarding Organizational Commitment Levels

The fourth question of the present study was “*What do you think about your commitment level to your school? Is this level either high or low? Please indicate the rationale of your thought by completing the following sentence: **My commitment level toward my school is high / My commitment level toward my school is low because...***” This question is to determine both teachers’ opinions regarding their commitment levels and to determine rationales of their opinions.

Table 5 summarizes findings obtained as result of evaluation of organizational commitment levels of teachers.

According to Table 5, while 62 of the participant teachers (60.8%) feel committed to their school at low level; 30 of them (29.4%) feel highly committed to their school. On the other hand 7 teachers (6.9%) declared that they do not feel any commitment toward their schools. Three teachers (2.9%) have no opinion regarding the level of their commitment to school.

The fourth question of the study aimed to determine and evaluate commitment levels of teachers and to determine rationales of their opinions. To that end, participant teachers were asked to expose their opinions by completing following sentence: “*I feel that I am highly committed toward my school / I feel that I have low level of commitment toward my school because...*” Rationales of teachers who think that they are highly committed to their school were exhibited in Table 6.

Table 5: Opinions of Participant Teachers Regarding Their Organizational Commitment Levels

Opinion	Frequency	Percentage (%)
I feel high level of commitment toward my school.	30	29.4
I feel low level of commitment toward my school.	62	60.8
I do not feel any commitment toward my school.	7	6.9
No idea.	3	2.9

Table 6: Rationales Presented by Teachers who think that They Have High Level of Commitment toward Their School

Rationale	Frequency
Commitment to the Profession	8
Intimate Relationship With Coworkers	5
Students' success	4
Superior Physical Conditions at School	3
Good Social Environment Around School	3
Positive Management Style at School	2
Positive Characteristics of School Administrators	2
Convenient Transportation to School	1
High Salary	1
Love of Children	1

Table 7: Rationales Presented by Teachers who think that They Have Low Level of Commitment toward Their School

Rationale	Frequency
Negative Administration Style at School	23
Bad Relationship with Coworkers	7
Disadvantaged Physical Conditions at School	4
Lack of Opportunity for Progression and Development at School	4
Negative Characteristics of School Administrators	3
Low Motivation	3
Lack of Significant Targets of School	3
Low Salary	3
Poor Success Level at School	3
Large Number of Unqualified Students	2
Negligence of Parents	2
Bad Social Environment at School	2
Lack of Admiration to Teaching Profession	1
Problems in Private Life	1
Perception for Professional Inadequacy	1

According to Table 6, the first three rationales presented by teachers who think that they are highly committed to their schools were “*commitment to the profession*”, “*intimate relationship with coworkers*” and “*students' success*”. Eight of the 30 teachers who think that they are highly committed toward their schools (about 27%)

considered that “*commitment to the profession*” was the rationale of their opinion.

Rationales of teachers who think that they have low level of commitment toward their school were exhibited in Table 7.

According to Table 7, the first three rationales presented by teachers who think that they have low level of commitment toward their schools were “*negative administration style at school*”, “*bad relationship with coworkers*” and “*disadvantaged physical conditions at school*”. Twenty three of the 62 teachers who think that their commitment level toward their school was low (about 37%) indicated “*negative administration style at school*” as rationale of their opinion. The most frequently referred characteristics of “*negative administration style at school*” during answering the fourth question were “*unfair treatment*”, “*preventing participation into management*”, “*disrespecting human rights and freedoms*”, and “*neglecting ethical values*”.

DISCUSSION AND CONCLUSIONS

In the present study, opinion of teachers regarding factors affecting organizational commitment and consequence of high level of commitment of teachers toward their organizations were investigated.

Of the 102 participant teachers, 62 (60.8%) indicated that they feel low level of commitment to their school. Oberholster & Taylor (1999) revealed that teachers feeling low level of commitment to their schools exhibit low level of loyalty to their schools. It is possible to say that low level of loyalty to an organization means wider distance between employees and organizations. It will not be wrong to conclude that an employee with low level of loyalty would experience difficulty in identification himself with his organization; avoid self-sacrifice for his organization; and there would be low level of trust felt by him toward his organization. Decreasing productivity and motivation would be expected results from teachers feeling low level of commitment toward their schools. It is possible suggest that growing number of teachers with low commitment level toward their school within the education system is an obstacle before schools to reach their targets; and is a factor eroding quality of the education system.

It is remarkable that twenty-three (about 37%) of the 62 teachers, who think that they have low commitment level toward their school, indicated “*negative administration style at school*” as the rationale of their opinion. “*Administration style*” relates with administration’s way of communication with employees and way of their guidance and motivation that they apply in the organization. Therefore, it is inevitable that administration style affects commitment levels of employees. In the present research, our finding that “*negative administration style at school*” is the most frequently referred reason for low commitment level to school is remarkable. There could be different reasons for the contradictive result found about the “*administration style*” that functions in opposite way while it was expected to be the most important factor that increases commitment level of teachers toward their school. Unfair, nonparticipant, disrespectful toward human rights and freedoms, ignorant toward cooperation, non-accountable, non-transparent, and unethical, that is, anti-democratic administration style has negative affect on commitment levels of teachers toward their schools. Thus, it is required to be ensured that schools are administered by relying on democratic values.

According to the participant teachers, “*high performance*” was the most frequently referred consequence of high level of commitment felt by teachers toward their schools on themselves. However, in some corresponding researchers it was reported that there is no significant correlation between “*organizational commitment*” and “*performance*” on the contrary to the expected result (Aryee & Heng, 1990). Similarly, Mathieu & Zajac (1990) suggested in their study investigating the relationship between commitment and performance that this relationship was quite insignificant. While great material expectations such as high salary, social opportunities, rewards and bonus influence the correlation between organizational commitment and performance negatively; humble material expectations would influence this correlation in a positive way. If employees have higher material expectations, their commitment level to organizations will eventually be lower. Employees feeling higher commitment to their organizations will have moderate material expectations. In other words, there is inverse relationship between organizational commitment and material expectations. Performance can be affected by both organizational commitment and material expectations. However, as it was reported by Aryee & Heng (1990) and Mathieu & Zajac (1990), the relationship between performance and organizational commitment is insignificant. The essential factor increasing performance is to satisfy material expectations.

Major findings of the present study titled “**Factors Affecting Teachers' Organizational Commitment and Consequences of Teachers' High Level of Organizational Commitment**” were enumerated below:

- Participant teachers mostly draw definitions that can be considered within the scope of affective commitment.
- According to the participant teachers, factors effective on teachers' commitment to their school can be classified within four different titles as “*personal factors*”, “*factors regarding workplace conditions*”, “*factors regarding their job*” and “*organizational factors*”. It was determined that the highest number of factor types was under organizational factors; and that the group including the highest number of opinion was organizational factors according to the frequency of opinions referred.
- According to the participant teachers, the first three major factors affecting teachers' commitment feeling toward their schools were “*management style*”, “*behavior and characteristics of administrators*” and “*general success level at the school*”.
- Participant teachers indicated that high level of commitment toward school might have consequences on “*teachers' themselves*”, “*school and its administration*”, “*students*” and “*parents*”. It was determined that the highest number of consequence types was residing under the consequence group of *teachers' themselves*; and that this was again the consequence group including the highest number of opinion according to the frequency of opinions.
- According to the participant teachers, among the consequences of high commitment levels of teachers, the first three ranks were “*high performance*”, “*job satisfaction*” and “*high motivation*” classifies under which were in the group of “*consequences teachers' themselves*”.
- While sixty-two (60.8%) of participant teachers indicated that they feel low

level of commitment toward their school; thirty of remaining group (29.4%) indicated that they feel high level of commitment toward their school.

- Regarding rationales of opinions reflected by teachers who think that they are highly committed to their school, the first three ranks (based on frequency) were “*commitment to the profession*”, “*intimate relationship with coworkers*” and “*students’ success*”; on the other hand, regarding the rationales of opinions reflected by teachers who think that they feel low level of commitment toward their school, the first three ranks (based on frequency) were “*negative administration style at school*”, “*bad relationship with coworkers*” and “*disadvantaged physical conditions at school*”.

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Chapter 3

School Climate Perceptions of University Students

Ali Rıza TERZİ

INTRODUCTION

Appearance of the studies devoted to starting conceptually the usage of organization climate and measuring come across in 1960s (Yılmaz & Altinkurt, 2013). The organization climate is defined from different perspectives such as total of the items that affect perceptions of the workers, the sense that physical that physical environment has created and the product of the relations between persons and groups (Bursalıoğlu, 2012; Erdem, 1996, Schein, 2004). Although it has a half century background, the interest to subject of school climate has still continued.

The school climate is expressed as a general frame in understanding nature of the schools, the emotions that are perceived by the environment, the relations between students and school workers and parents and the opinions whether the school is a good learning environment or not (Hoy & Miskel, 2012; Howard, Howell, & Brainard, 1987). As well as school climate may make a positive effect on learning, it may be barrier in front of the learning. Although researchers assert that school climate will create difference on learning environment and student success, there is no any definition that has been compromised in the literature for school climate concept (Bektaş & Nalçacı, 2013; Freiberg, 1998). This difference is also seen in the scales that are developed for measuring the school climate (Acarbay, 2006; Arastaman & Balcı, 2013; Çalık & Kurt, 2010). Another junction in this subject occurs when the question of from whom eyes the school climate? is asked. In this research, the approach of determining the school climate through eyes of students by acting with the premise of “the schools for the students” has been adopted.

It is understood from the literature review that the researches done as relevant to school climate (Özdemir, Sezgin, Şirin, Karip, & Erkan, 2010; Bektaş, Nalçacı & Karadağ, 2014) are done according to high school students (Doğan, 2012; Göcen & Kaya, 2014) and teacher perceptions (Ayık & Savaş & Çelikel, 2014; Sezgin & Kılınç, 2011).

There is no any study that mentions school climate research based on perceptions of university students in the literature. Detecting the school climate in the universities according to student perceptions in terms of giving career education may be used as a variable in defining efficiency of the higher education institution. Object of this research is to detect how university student perceives the school climate in their schools.

Organizational culture – Organizational climate

While culture covers the beliefs and values that make organization identity and behavior standards gain and the assumptions, the climate covers perceptions of the employees that they share concerning to their working units and organizations. The

culture covers the climate but climate does not include all aspects of the culture (Schneider, Brief, & Guzzo, 1996; Stolp & Smith, 1997).

Rather than the culture, the climate concept had entered organizational literature for long years ago and it is a concept based on perceptions of the workers concerning to atmosphere of the internal environment.

Before half a century ago, according to research results of Kurt Lewin and his followers; when workers work under a democratic management, they were working more coherently. These studies started the climate concept in the industry (Schneider *et. al.*, 1996; Terzi, 2000). The climate is based on worker perceptions based on organization. According to Mullins (2010), organizational climate is a concept that is hard to be defined. The geographical regions that are formed from combination of environmental powers may be likened climate or air definitions. Hence, Silver (1983) explained the organizational climate with the air metaphor surrounding our environment by using a definition similar to that and stated that organization affects the whole. When this frame is adapted to the organization, the climate may be explained as the common atmosphere surrounding the organization, moral level, bona fides and good relations between the organization members and power of belonging emotion (Terzi, 2000).

The climate is related to defining the organizational atmosphere or showing emotional reaction to it. Although there is a climate including whole of the organization, the climate may be different in special study groups. While a positive and powerful climate forms when workers adopt the dominant culture values; in the cases that culture values are not adopted widely, the climate shows a negative and weak characteristic. While the climate has a temporary characteristic, the culture generally carries a long termed, strategic and very hard to change characteristic (Schwartz & Davis, 1981; Lussier, 2012).

School climate

The school climate is explained with the concepts mainly used at the organizational climate definitions such as personal perceptions and environmental effects. Hence National School Climate Center (2015) expressed that school climate is based on “experiences of the students, parents and school workers”; and reflects norms, targets, values, interpersonal relations, teaching and learning applications and organizational structures and bring forward that there is no reconciliation on its components.

It is seen that the studies done in the literature is mainly concentrated on primary school and high school climates. In these researches, the school climate was reviewed within the frame of different variables and dimensions. Özdemir *et. al.*, (2010) reached results in terms of that the variables mentioned on their researches that they examined school climate perceptions of primary school students with support, confidence and success variables positively affect school climate of the students. It was proved with various studies that school climate is effective on emotional and cognitive health of the students and also there is relation between school climate and self-esteem (Way, Reddy, & Rhodes, 2007). When the studies in the literature were reviewed, it was seen that school climate is related to abstinence (Sommer, 1985; Purkey & Smith, 1983; Usta, Şimşek, & Uğurlu, 2014), positive school climate decreases the offensiveness and violence (Brookmeyer, Fanti & Henrich, 2006; Çalık,

Kurt & Çalık, 2011) and it is related to academic success (Bahçetepe, 2013; Ma & Klinger, 2000).

The studies devoted to university students, especially students of education faculties that are the schools bringing up teachers, were not available in the literature. The object of this research is to determine how faculty of science and arts (FSA) and school of physical education and sports and education faculty (EF) students perceive the school climates in their schools. With this aim, responses were searched for the below mentioned questions.

1-What are the levels of school climate perceptions of the university students?

2-Do school climate perceptions of university students differentiate according to the gender?

3-Do school climate perceptions of university students differentiate according to their schools?

MATERIALS AND METHODS

In this research that was carried out devoted to descriptively detecting the school climates available in the schools of university students. The relational screening model is the research model that aims detecting existence and/or degree of the change between two or more variable (Karasar, 2004).

Study Group

Faculty of Science and Arts, Faculty of Physical Education and Sports students who were receiving pedagogic formation education in Balıkesir University Necatibey Education Faculty and the senior class students of Secondary Science and Mathematics Departments formed the study group that was formed with the aim of measuring school climate perceptions of university students. Data was collected from 320 students who were educated in Faculty of Science and Arts and 240 students who were educated in Faculty of Physical Education and Sports and Necatibey Faculty of Education through the data collection tool that was applied to mentioned groups. After painting and nursery department students who filled missing the data collection tool and from whom enough data was not collected were excluded from the study group, the research was carried out with the data that was collected from 460 university students.

Data Collection Tool

In this research, a scale titled *School Climate Scale for University Students* was developed and administered by the author. First, a explicative factor analysis was computed. KMO values of the scale was found to be .92, whereas its Barlett value was .00. The scale consisted of three dimensions including 17 items. Of the items, five were related to school commitment (sample statement: I see myself as a part of the school), whereas six items were related to communication (sample statement: The academic members behave voluntarily when they listen to me.). To add six items focused on learning environment (sample statement: As long as I want to learn, I find an opportunity at my school). Total variance that the scale explains is 56%. The factor loads of the scale for three dimensions vary between .46 and .76 and item-total correlations vary between .34 and .60. Cronbach Alpha was applied to the scale by the researcher as the reliability analysis. A = .75 was detected for school commitment that

was 1st dimension of the scale, $\alpha=86$ was detected for the communication that was the 2nd dimension, $\alpha = 81$ was detected for the learning environment that was the 3rd dimension. The reliability was calculated as $\alpha = .90$ for general of the scale.

The scale was a 5-point Likert type scale that was increasingly scored as 1- Never, 2-Rarely, 3-Sometimes, 4-Mostly and 5- Always. The points up to 1.00 - 2.60 that were taken from the scale indicates that the school climate was a negative (closed) climate and the points between 2.61 and 3.40 indicates existence of a medium level climate and the points between 3.41 and 5.00 indicates existence of a positive (open) climate.

Analysis of the data

At the data analysis of the research, arithmetic average, t-test for detecting the gender differences and one-way analysis of variance (ANOVA) for detecting the difference between the schools were used. The statistical significance of the data was reviewed at .01 and .05 levels.

RESULTS

When table-1 that includes the data belonging to the school climates gained through application of the scale to the university students was reviewed at the dimension of school commitment among sub-dimensions of school climate, it was seen that Faculty of Science and Arts students ($\bar{X}=2.87$; $sd= .96$) and physical education students ($\bar{X}=3.29$; $sd= .94$) “sometimes” felt themselves dependent to the school; Education Faculty students ($\bar{X}=3.72$; $sd= .84$) “mostly” felt themselves dependent to the school. In terms of communication sub-dimension, it was seen that the perceptions of Faculty of Science and Arts ($\bar{X}=2.88$; $SD= .88$), Education Faculty ($\bar{X}=3.37$; $sd= .69$) and Physical Education students ($\bar{X}=3.22$; $sd= .90$) concerning to the communication in their schools accumulated at the option of “sometimes” for three schools. According to these results, it is possible to mention about a “medium level” school climate in each three schools according to student perceptions.

Table 1: Descriptive statistics belonging to school climate

Schools	School commitment			Communication		Learning Environment	
	N	\bar{X}	sd	\bar{X}	sd	\bar{X}	sd
Faculty of Science and Arts	217	2.87	.96	2.88	.83	2.88	.80
Education Faculty	176	3.72	.84	3.37	.69	3.25	.69
Physical Education	67	3.29	.94	3.22	.90	3.03	.89

When table-2 concerning to whether perception levels of the students who participated to the research relevant to the school climates in their school

differentiated according to gender or not was reviewed, it was seen that there was a difference between school commitment and communication sub-dimensions.

Table 2: t-test for the difference between dimensions in terms of gender

Dimensions	Gender	N	\bar{X}	sd	t	p
School commitment	Female	300	3,36	.98	3.194	.001**
	Male	160	3,05	.99		
Communication	Female	300	3,18	.80	2.277	.024*
	Male	160	2,99	.91		
Learning environment	Female	300	3,09	.76	1.927	.055
	Male	160	2,94	.82		

**p<.01 *p<.05

This difference was in favor of the female students in terms of school commitment (\bar{X} =3.36; sd=.98; p=.001; p<.01) and communication sub-dimension (\bar{X} =3.18; sd=.80; p=.024; p<.05). According to these results, the female students were more dependent to the school and they thought that there was better communication in their schools.

Table 3: ANOVA for difference according to the schools

Dimensions	School type	N	\bar{X}	sd	df	F	p	Scheffe
School Commitment	1) FSA	217	2.87	.96	457	41.994	.00**	1-2, 1-3
	2)EF	176	3.72	.84				
	3) Physical Education	67	3.29	.94				2-3
Communication	1) FSA	217	2.88	.88	457	19.714	.00**	1-2, 1-3
	2)EF	176	3.37	.69				
	3) Physical Education	67	3.22	.90				
Learning environment	1) FSA	217	2.88	.80	457	10.812	.00**	1-2
	2)EF	176	3.25	.69				
	3)Physical Education	67	3.03	.89				

The table-3 that shows whether the school climates perceived by the students who participated to the research differentiated according to the schools or not was reviewed, it was seen that there was a significant difference (p<.01) between opinions of the students in each three schools who participated to the research in terms of dependence to the school. When arithmetic average was reviewed, this difference was EF>physical education> FSA for school commitment dimension, respectively. It was seen that this was EF>FSA and physical education >FSA for communication dimension and EF>FSA for learning environment. According to these results, it is possible to say that the most positive school climate was in the Education Faculty.

DISCUSSION AND CONCLUSIONS

In this research that is the first research devoted to university students in Turkey based school climate literature, it was detected that school climates of their schools that the students educated in education faculty, faculty of arts and sciences and school of physical education and sports perceive were a school climate at medium level. This

finding of the research shows parallelism of research of Doğan (2012) that he made on secondary education students. Also he (Bucak, 2002) came to similar conclusions in the research that he measured organization climate perceptions of academic members. The results of research do not support results of the research that Ayık *et al.*, (2014) done relevant to school climate perceptions of secondary school teachers.

School climate quality of a school determines whether this school is succesful or unsuccesful (Bozdoğan & Sağnak, 2011). Especially student perceptions devoted to learning environment is an indicator of whether there was a structure that was promoting learning and highlighting the success in the schools that were examined or not. When viewed from this respect, it may be interpreted as learning quality at the medium level that the school climate in the schools within the scope of research was perceived at “medium” level. A medium level learning environment quality in the higher education schools that train qualified labor force for the country is thought provoking.

While significant differences in favor of females at school commitment and communication dimensions among their organization climate perceptions in terms of gender of the university students in the research were detected, a significant difference was not detected among the genders at learning environment dimension. Even if at different learning stages, there are researches in the literature that put similar results with results of this research (Aka, 2014; Akman, 2010; Aydın, 2010; Karaman, 2011; Özdemir *et al.*, 2010). While the research results do not support the research results that Sezgin & Kılınç (2011) carried out devoted to teachers of primary school, it partially support the researches of (Göcen & Kaya 2014; Mansuroğlu, 2012). The difference at the school climate perceptions in the mentioned researches are in favor of male teachers. Significant differences were detected between school climate perceptions of university students who participated to the research. The Education Faculty students significantly differentiated from students in other schools who participated to the research in terms of communication and dependence to the school.

According to the results gained from the schools within the scope of the research, there was a school climate in the schools that were perceived in “medium” level. Based on this, development of the activities that will make especially university students positively perceive the learning environment may be deemed necessary. In this research, the communication dimension was designed a communication-based with more academic members. It may be recommended that academic members will develop a more supportive communication style devoted to the students. Increasing the social activities in the school, arrangements that will provide the school contact with the alumni may increase the dependence to the school. For development of the dependence to the school, students who are educated in a school environment that is free of violence may be achieved through social activities. This research was carried out in the screening model devoted to university students and on a limited study group. Making qualitative researches with wider sampling groups may be thought.

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Chapter 4

Active Learning in Early Childhood

Münevver CAN YAŞAR & Adalet KANDIR

1. INTRODUCTION

Active learning is the construction of new understandings by interacting with other people, objects and events (Schunk, 2011). It is children's acquisition of new knowledge from their own experiences. This process, which starts with birth of a newborn at family settings, continues at school settings in a more planned way of instruction. Children will learn the facts related to the current era, the society they live in and the position, which they will possess in the future with the help of education. Thus, early childhood education is the crucial step above all which must be handled seriously, scientifically and systematically with intensive care whilst not permitting any coincidence.

In knowledge era, the main purpose of educational system is to give children the necessary skills to reach information rather than transmitting them the current information. This can only be possible through high-level mental skills such as acquiring knowledge, problem solving at novel situations and following scientific process instead of learning by heart. For this reason, developed and developing countries all question their educational systems. This questioning is the result of inefficiency of current educational policies which produce molded mental schemas and the need for individuals who question, create and solve problems. Thus, it is important to provide children with an educational setting in which they discuss, enhance their problem solving skills, question the current knowledge and produce knowledge rather than sitting silent and listening the transmitted current knowledge. It is the most efficient educational strategy in which children are active in learning, learn by doing, associate current knowledge with their social environment (Bonwell & Eison, 1991; Dufresne *et al.*, 1996; Prince, 2004; Levin & Munsch, 2013).

1.1 . Active Learning and Its Philosophical Bases

Active learning requires a deep consideration of what is being done and highly motivated participation for meaningful learning activities (Prince, 2004). According to Hohmann and Weikart (2002), active learning refers to active participation to the process; independent study and carries out research while children do not only watch and listen. Bonwell and Eison (1991) also points out that active learning is all about "doing" rather than "listening". Children should read, write, discuss and be busy with the solution of the problem. What is more important is that they should always keep in mind that they bear the mission of making analysis, synthesis and evaluation. Açıkgöz (2012) states that active learning is a process in which the learner bears the responsibility of learning process with the opportunity of decision making and making self-arrangements throughout various aspects of learning while being forced to use mental skills. Drew and Mackie (2011) claim that active learning is based upon child-centeredness and active learning. Similarly, Weltman (2007) thinks that active

learning is a child-centered learning process. Therefore, at the lower end of the spectrum limited participation is expected from the children rather than being a passive listener. At the upper end, children are expected to participate actively to the learning process, discover concepts and experience on their own. Active learning is also defined as the use of open-ended activities that can be shaped by the children as they participate actively in the learning experience to a certain extent they control and manage the flow of the instructional plan (Kyriacou, 1992). All in all, active learning is a type of learning method during which children participate actively and experience knowledge while the outcome of active learning varies according to this level of participation. In addition, this idea is parallel to the approach in which the process is emphasized more than the product.

There are three dimensions of active learning (Drew & Mackie, 2011):

- *Behavioral*: The use and creation of materials designed to motivate pupils,
- *Cognitive*: Sense making through exposure to novel experiences and active thinking on these experiences,
- *Social*: Interaction with others on collaborative activities.

In active learning, children both create and use the materials actively. Moreover, they think and decide in an active manner, which constitutes the cognitive dimension of active learning. Because experiencing alone is not enough for learning. Thinking about their experiences and the evaluation of the experience, thus deriving a meaning based on experiments are crucial for the cognitive dimension of active learning. Philips and Soltis (2005) emphasizes the social dimension of active learning by stating that “the learner should not be described as a researcher on his own; instead the learner should be seen in a social network in active learning”.

Active learning theory is fostering children’s critical thinking and responsibility of the learning process together with attracting their attention with open ended activities for a learning environment in which the children lead the process by having the least passive roles in transmission of knowledge (Kane, 2004). The answer to “What makes the learning active?” is central to active learning approach. If the learning is active, children carry out the most of the tasks on their own by using their brains, thinking, solving problems and implementing what they learn. Active learning is fun, supportive and engaging (Demirci, 2003).

In active learning, the child:

- is responsible for the process of learning.
- should be forced to use his/her cognitive abilities .
- carries out learning on his /her own.
- is active, independent, controlling, investigating, discovering, questioning and engaged in learning.
- interprets what he/she learns and saves the knowledge in memory by using necessary cognitive processes.
- makes use of metacognitive skills such as analysis, synthesis and evaluation.
- associates the new knowledge with the previous experiences and puts these knowledge into practice in his/her daily life (Bonwell & Eison, 1991; Lubbers & Gorcyca, 1997).

In an active learning process, children are provided with the opportunity to make decisions, taking responsibility and especially learn to learn. Memorization, which is

the basic principle in traditional education, is replaced with curiosity, questioning, learning by doing, making experiments and implementation. Thanks to active learning, children learn teamwork, cooperation, sharing tasks and discussing in order to reach a common sense (Demirel, 2012).

The main point in modern educational approaches is making the child more active and directly involved in the process. In the child centered approaches, the child is not the student to be influenced by the teacher, instead he / she is always active by searching, questioning, discussing and doing. In active learning the learner and the teacher together collect the knowledge and make use of it. The main principle of active learning is to collect the new knowledge and associate it with the previous ones (Schunk, 2011).

Active learning, which derives its roots from John Dewey's child centered educational philosophy, became a popular research topic again after 80's (Demirci, 2003). Existentialism and progressivism lies beneath the philosophical bases of active learning. In existentialism, children construct knowledge without any pressure of an adult, only by considering, discussing and deciding. In progressivism, on the other hand, problem solving carries out learning. Learning by doing and experiential learning are crucial for permanent learning. During this process, the important role of the environment cannot be denied (Kalem, 2002).

Reconstructionism was born after progressivism. The underlying philosophy was pragmatism put forward by John Dewey, Isaac Bergson and T. Brameld. This philosophy aims to reconstruct the society so as to constitute real democracy. According to them, education should attempt for a new social order. Schools are responsible for such a change so they should make most of behavioral sciences (Kocabaş, 2008).

A theoretical base of active learning derives its roots from constructivism and "cognitive approach" which is its educational dimension. Constructivism, which was born as a philosophical movement is a theory of knowledge and learning. According to constructivist, knowledge is unique and emerges out of an interaction with the society, constructed by the individual with the help of senses and produced actively (Watkins *et al.*, 2007). Piaget, Vygotsky, Bruner and Ausebel who contributed a lot to the theory emphasized the importance of active learning by asserting that children should take active role and responsibility in learning and permanent learning is possible only when the individuals make more attempts on their own (Arslan, 2007). A much stronger base to active learning model was provided by Howard Gardner who put forward the theory of multiple intelligence in 1983 (Şahin, 2004).

Active learning concept, which is based upon these philosophical foundations, underpins the modern educational approach. In order to enhance active learning, to attribute new meanings to it, to collect empirical evidence for the proof of efficacy and finally to put these outcomes into practice, educators should initially understand the basic concept of active learning accurately. Thus, it is important to be aware of the main principles.

1.2 . Principles of Active Learning

Active learning has become more popular in this century providing more integrity among meta-cognition, learning to learn and active learning. It is not meaningful to provide children with independent learning and active study

environment while they lack the necessary cognitive, meta-cognitive and affective skills (Simons, 1997).

The basic principles of active learning can be listed as follows:

- ***Children participate the learning process actively.***

During learning, children process knowledge by organizing, classifying, forming hypothesis and testing and commenting. Every child has a unique learning process and codes the knowledge in a unique way. Activity starts at where the child is, not where the teacher is. Children actively participates the activity rather than listening. Turkish, science, math, early literacy, play, movement, art, music and drama activities are planned for children. Children use their own sources of knowledge. They struggle to find, collect and organize knowledge. Children are active not only at following strategies but also associating new knowledge with the previous ones. They construct new knowledge by using the old schemas. Children are also active in interrelating the new and old knowledge (McMorrow, 2006; Welsh, 2012). Children are both the actors of their learning and constructors of what they learn. Somebody else cannot learn in behalf of them. Learning is possible with only the media, which the children organize (Harmin & Toth, 2006; Giordan, 2008).

- ***It is aimed to enhance children's learning skills.***

In active learning approach, enhancing children's learning skills is emphasized more than transmitting knowledge. Educators strive for developing high level thinking skills such as analysis, synthesis and evaluation. Rather than rote learning and repetitions, implementation and understanding is important. Children are asked to organize knowledge and present it. They express what they learn through oral presentation, pictures, illustrations, etc. Meaningful learning is facilitated when children present the knowledge they collect to their peers or teacher. Children learn to talk interdisciplinary language. Talking and writing help the educators find out what children did or could not understand (Prince, 2004; Michael, 2006; Yung-chung Liu, 2009; Woolfolk, 2013). Also it is aimed to gain skills such as making generalizations and drawing conclusions. Shortly, children are expected to become self-administered individuals who adopt the idea of life-long learning.

- ***Individual differences are taken into account.***

Every child is unique and has a different learning style. Some prefer a constructed system and activities while some may prefer searching, trying out different problem solving strategies and using various sources of knowledge. For this reason, learning environment is organized as allowing children to study at their own pace of learning through the desired plan. Any activity is presented more than one method and technique. Children's level of readiness is important. During this process, new knowledge should be constructed on the previous ones. Creativity is also fostered in this learning process (Stowe *et al.*, 2012).

- ***The child is free and also responsible.***

Learning is the source of freedom. Learning brings freedom and freedom brings responsibility (Duman, 2008). Children should be free; they can share their ideas, solve problems and always interact with others. In a sense, the child is the main character in learning (Kalem & Fer, 2003).

- ***Meaningful knowledge is important in learning; not memorized knowledge.***

Instead of learning by heart a deep understanding by assigning meaning to new knowledge is the base for active learning. The crucial step is child's intuitions regarding how and when new knowledge will be used (Açıkgöz, 2012). The association of newly learned knowledge with the previous ones without memorization is the criterion for active learning.

- ***Teamwork and interaction is important.***

Learning is a social process. It is only efficient when the teacher and the children interact each other to reach a common understanding. In active learning approach, children bear both individual and group responsibility. Every child studies different but interrelated topic all that are combined to form a group project. Children learn better when they are with their peers compared to being all alone. In this way, they share knowledge, interact with others and collaborate for the production of knowledge (Moyer, 2001; Levin & Munsch, 2013).

- ***Children's learning skills can be developed.***

According to active learning concept, the ability of learning is not static but changeable. Through education, children's learning capacities can be increased. For this reason, it is a false action to classify children according to their abilities since the ability is constant and is not subject to change. In contrast, children may very well learn to learn while they are concentrated on learning a specific topic. The main difference between a self-sufficient learner and learner with scaffolding needs is the variations in pre-learning and the use of cognitive strategies. The important issue is to provide children with these opportunities (Yun-chung Liu, 2009).

- ***Children are expected to gain affective attainments.***

In active learning approach, children's attitude and values are handled with care. The class atmosphere is warm, friendly, supportive and natural. Everybody knows the name, history, current mood, interests and goals of others and respect them. In active learning, children's ability to express themselves, communicating with others and self-esteem are intended to develop. It is observed that children's level of anxiety decreases as their level of participation increases (Bonwell & Eison, 1991; Harmin & Toth, 2006).

- ***Use of newly learned things in daily life constitutes the basis of active learning through which children find sources of knowledge on their own while they learn the ways to reach knowledge from various sources.***

Active learning activities reflect the complexity of real life. The assigned tasks are very similar to those they experience in daily life. Traditional teaching methods do not give the opportunity to use what they learn at daily settings. Children use the knowledge only at exams and forget when they feel that it is no longer necessary to remember. In contrast, an active learner always associates newly learned item with the real life, use it and tries to produce new knowledge based on it (Açıkgöz, 2012).

- ***It is necessary to associate new knowledge with the previous ones.***

In active learning, new knowledge is associated with the previous ones and thereby re-organized, constructed and a new meaning is mentally formed (Duman, 2008). All the cognitive productions of the child are either derived from the environment or they are the outcomes of interaction with the environment. The

essentials for learning are the bonds between the learners' mental construction and the coincidental knowledge they can acquire. These inter relations are never direct and natural. They are mostly indirect. Someone met by chance, facilitates the individual to produce meaning by interacting with the individual's thoughts or accompanying him/her (Giordan, 2008). If newly learned knowledge cannot be associated with any previous knowledge, it is therefore not easy to learn it. Since learning is forming bonds between the past and present knowledge, educators should provide children with opportunities to compare, interrelate and elaborate associations between the past and current knowledge (Scott, 2011; Raghallaigh & Cunliffe, 2013). Children, who are processing the knowledge deeply, transform the knowledge in a unique way. In active learning no special effort is needed to use the knowledge. The techniques used already involve the necessary process to use the knowledge (Scott, 2011).

- ***Learning is a very complex issue regarding children's interests, needs, and sociocultural and even economical situations.***

In active learning, learners are provided with opportunities to use their social, intellectual, cultural, individual and physical capacity (Giordan, 2008).

- ***Learning is facilitated with challenging activities.***

The optimum level for learning is at the level when the brain is challenged properly. Threats have a diminishing effect on learning capacity. Teachers should struggle to salved wakefulness in children (Duman, 2008).

- ***In active learning, teacher guides the process.***

In active learning approach, much more emphasis should be placed on teacher training. It will be difficult to develop children's skills before developing the teachers' skills. The teacher should be innovator, creative and a researcher. In active learning environment, the teacher acts as an organized, creative, punctual person with various learning plans (Olgun, 2009; Zapataro *et al.*, 2012).

In active learning approach, the teacher arranges the learning environment beforehand and plans the procedure. The teacher also provides the learning materials.

Slavin (2003) and Martyn (2007) listed the important points in planning activities and implementing them in an active learning environment:

- Arranging the physical setting together with the children so as to facilitate the active learning activity intended,
- Arising will to learn and participate by eliminating children's anxiety and fears,
- Planning activities according to individual differences,
- Being a role model by making use of guessing, questioning, describing, summarizing and thinking aloud,
- Providing opportunities for children to solve daily life problems by using the knowledge they acquired,
- Allowing the children to evaluate their own work and others' works,
- Benefitting most from technology.

The teacher, who is active in planning and preparations, moves on to a passive role in class. However, this does not mean that the role and responsibility of the teacher finish. It is a completely false understanding that teacher does whatever the children ask for or the teacher is all passive in the learning process. Teacher has a unique role in class that he/she must scaffold when necessary, guide and advice when needed and make children evaluate the topics with their own points of view (Könings

et al., 2005).

The teacher starts the activity by making a brief explanation. Then the teacher provides children with the related materials and leaves them all face to face with the problem (Pekin, 2000). One of the main characteristics of early childhood education is learning by discovering. Discovering requires curiosity and questioning. The curious child questions and investigates. Then he/she reaches a sort of knowledge and uses it. Thus this knowledge is permanent since the child discovered it. On the other hand, it is the responsibility of the teacher to arise curiosity towards a topic and encourage children to discover. The teacher also guides the children to overcome the obstacles in problem solving.

According to Klein (1991), in an active learning process teachers should;

- Ask children interesting questions to make them careful observers,
- Provide time for children to express experience in oral or written form,
- Suggest books improving their level of general culture,
- Organize settings for scientific inquiry and investigation,
- Share his/her questions regarding the earth,
- Educate children in a way that they will be independent researchers and learners.

1.3. Arranging the Setting for Active Learning

Arranging the active learning setting requires designing in-class activities, arranging class conditions and creating a happy and creative atmosphere within the classroom. In an active learning environment unwanted behaviors are prevented by taking necessary precautions beforehand (Olgun, 2009; Zapatero *et al.*, 2012).

An active learning classroom should have an inspiring creative atmosphere. Classroom management is mostly related to effective use of time, creating a creative atmosphere, supporting children's intelligence and fantasies rather than concentrating on unwanted behavior. A learning setting without any problems does not imply efficient learning (Slavin, 2003; Woolfolk, 2013).

Five main characteristics are visible in an active learning environment. These are trust, energy, self-management, ownership and awareness (Harmin & Toth, 2006).

Trust: Children who trust themselves and are ready to learn also have self-respect. They do not have fear of failure and they concentrate on their work without any expectation of an award.

Energy: Children are always busy with something. They are participative. They like working on their own interests. It is not easy to find a child who is bored, wasting his/her time idle without doing anything. Children pass on another activity smoothly without any need of a break time.

Self-management: Children are responsible for their own learning. They manage and motivates themselves. They choose what they want to do, start and finish the activity and organize their work. Children control their own pace of learning and manage their work.

Ownership: Children form positive relationship with the staff, the teacher and their peers. They like working in community. They listen to each other. They accept and they are accepted. They do not feel refusal or estranging.

Awareness: Children are thoughtful and alert. They know what is going on in the classroom. They are careful, curious, creative and diligent. They are sensitive to other

individuals' emotions and thoughts.

In active learning, in addition to the arrangement of the learning environment another important element is the active learning models. The main models are brain based learning, project based learning, problem based learning, collaborative learning and built-in learning (Popkess, 2010). In this study, some methods and techniques such as presentation, ask and answer, discussion, play, problem solving, field trips and observation, demonstration, projects, event sampling, music and drama are emphasized.

1.4. Active Learning Methods and Techniques Used in Early Childhood Education

Active learning activities both make active learning possible and help to give children a sense of using the learned skills at various settings. That is, the primary purpose of active learning is to transform these skills into attitude. If the interactions based on active learning approach are ignored or the interactions are one-way, then children will have no opportunity to gain or internalize specific skills (Koç, 2007).

Appropriate teaching strategies must be followed in order to facilitate active learning, implementing the thoughts and providing children with real active learning opportunities (Kandır *et al.*, 2010). Active learning techniques allow children's use of instructional materials, discussion of problem solving strategies, preparing hand-made materials, working in small groups to develop and shape their own concepts. Thus, this child centered activities lead to canalization of children's energy into learning (Polat, 2013). There are many instructional methods and techniques that a teacher can use in the learning process. Instructional methods and techniques are the building stones of instructional strategies. In early childhood, numerous strategies developed for active learning can be used under the heading of methods and techniques such as presentation, ask and answer, discussion, play, problem solving, field trips and observation, demonstration, projects, event sampling, music and drama.

Presentation: It is the technique, which allows many listeners benefit from the speaker (Bilen, 1999). Presentation method involves the transmission of knowledge to children. Here the emphasis is on the teacher telling children the needed knowledge in an oral form (Bedwell *et al.*, 1990). This method is used especially during or after the field trips, observations, and experiments, projects while warming up or summarizing or answering a question. It is more efficient in teaching information level behaviors (Demirel, 2008). Teachers can transmit every kind of his/her knowledge, observation, research and reviews to children by using the presentation method. This method also provides children with the habit of active listening while it also facilitates the making sense of the knowledge through the previously organized knowledge. If used more often or in an incorrect manner, it can become easily monotonous, awkward and boring. What is more dangerous is that inappropriate presentation can lead to saving false knowledge on children's memories (Bedwell *et al.*, 1990).

In presentation method communication strategies must be used actively. The teacher should take the children's age levels, developmental characteristics, needs and interests while planning the presentation. The content to be presented must be logically ordered and the headlines must be clear to the children. The presentation must be supported with other methods and techniques such as ask and answer, discussion, experiments together with the use of visuals such as realia, illustrations,

shapes, graphics, movies and maps in order to refrain from monotonous and boring talk. During the presentation, the teacher should keep children's all senses active while listening and also he/she should create opportunities for children to express their opinions (Aydoğan *et al.*, 2014).

Another process in which presentation method also fits in is that of evaluation process. In the evaluation process children are asked to tell about their emotions and thoughts. Therefore, presentation method does not require any setting arrangement in that it is a very convenient and frequent way of instruction in early childhood education.

Ask – answer: It is based on oral interaction and it can be commonly used in any activity. In general this method is used to make the presentations lively without any boredom and to facilitate active learning. This method can solely be used or used to support other methods (Uyanık Balat, 2013). In ask – answer method various types of questions and questioning techniques can be used. These are open – closed ended, high level –low level, guiding and no expected answer questions. Open-ended questions are the ones, which cannot be replied by only “yes”, or “no”, thus requiring a description and comment while closed ended questions can be responded by either “yes” or “no” or a single word answer. Low-level questions are based on knowledge to be memorized whereas high-level questions require cognitive process such as analysis, synthesis and evaluation. Questions starting discussions are guiding questions. No expected answer questions are the ones to attract children's attention, motivate them and provide reinforcement (Aydoğan *et al.*, 2014).

In early childhood, ask – answer method can be used by the teacher to arise interest, attract children's attention, increase their motivation and reinforce the newly learned topics (Uyanık Balat, 2013). Thanks to these questions children can be provided with novel ideas and different perspectives.

Discussion: Discussion is the goal oriented group talk on common issues in an order and under the management of someone. Discussion method enhances children's abilities to evaluate their understandings, comprehending and critical thinking (Büyükkaragöz, 1997).

In-group discussions, all the children discuss an issue under the guidance of the teacher. In such activities, in order to focus on the issue, to improve participation and to make sure that the children listen to the speaker, the teacher should support children when necessary. In addition, the key questions must be prepared beforehand in order not to deviate from the selected discussion point (Uyanık Balat, 2013).

Group discussion is the discussion of a selected topic by the whole class or in small groups under the guidance of the teacher. The discussion topic may be selected by the teacher by providing a problematic situation or can spontaneously be emerged during the activities. During this process, children focus on the problem, catch up with their peers' point of views, look from a different point of view, produce different solutions and may most benefit from developing emphatic skills (Eliason & Jenkins, 2012).

Play: Play is an instructional way in which the child participates with all senses and learns best since play fosters all developmental domains (Kandır *et al.*, 2010). Play, which is a part of daily life, is also a natural tool for familiarizing with the environment and people. Play is the voluntarily participated activity during which

children express their opinions and emotions, make research and observation to satisfy their curiosity, discover new things, interact with objects and people (Jackman, 2011; Mayesky, 2011). Children learn the necessary knowledge, behavior and skills for daily life on their own. Play provides children with the ability to manage the things they know and they do, self-management and accept their peers' requests while also the skills for making their peers accept their requests easily in a collaborative manner. Children learn best through the conflicts they face during play. Play enhances children's thoughts, teaches them how to express their opinions and share their emotions in an acceptable manner as it also enriches their fantasy world (Nourot & Tepperman, 2007; Samuelson & Carlsson, 2008; Goldstein, 2012).

The type of play children prefer and the behaviors they display depend on their age level and developmental characteristics. For this reason, children must be provided various play opportunities according to their age level and developmental needs. Children can play individually or in groups, with materials or without materials, indoors or outdoors. Play activity is a kind of activity that is constructed by the teacher or the children with basic rules. Children do not only use instructional materials in their play but also they make use of anything that is healthy and safe (Nourot & Tepperman, 2007).

According to active learning concept, children construct knowledge by searching, discovering, interpreting and interacting with the environment. During play, children learn also most about themselves, their environment and the world through the play setting, materials, friends and the content. Children from the foundations for their future knowledge, skills and habits through play in an efficient way (Tuğrul, 2013).

Problem solving: Problem solving can be defined as a cognitive and behavioral process during which the individual follows successive logical steps to solve the problem (Zembar, 2013). Problem solving method is composed of phases as determining and understanding the problem, forming hypothesis, collecting knowledge with reference to the problem, testing hypothesis, selecting the appropriate hypothesis and drawing out conclusions after implementation (Aydoğan *et al.*, 2014).

Problem solving method is a child-centered method. In this method, the child is active and the teacher guides the process. This method is appropriate for individual, small or large group activities. Problem solving method teaches children the scientific process while it also provides permanent learning, sense of responsibility, cognitive and affective learning together with development of research skills.

In early childhood, bearing the characteristics of their age, children are very curious. They make most of every chance to observe, investigate and discover their environment. According to Stephen, Ellis and Martlew (2010), learning is the result of a process during which children initially try to solve the problem with their own point of view and make sense of their experiences. Therefore, learning is not reaching the predefined outcomes so in early childhood settings children must face various problematic situations and produce different solutions. The experiences acquired during childhood will facilitate children's active involvement in learning process, carrying out research, suggesting novel ways to overcome the problems, discussing these ways with others, implementing the plans they prepare and collaborating with others (Zembar, 2013). It is crucial to develop children's problem solving skills in

early childhood for a better adjustment to real life.

Field trips – Observation: Observation is looking through an event or entity based on a prepared plan with instructional purposes. Observation is a purposeful and planned activity, which allows children to have information about objects, events or entities from the first hand while it also gives the basic skills for scientific process (Büyükkaragöz, 1997).

Field trips are all about planned visits outside the classroom in order to look through natural entities, phenomena and events directly or with the help of a visual tool (Uyanık Balat, 2013). Field trips allow for various methods such as ask and answer, problem solving, demonstration, brainstorming and discussion, all which lead to the stimulation of various senses and thus resulting in permanent learning. During field trips, children are provided with the opportunity of active learning. Field trips help children achieve developmentally appropriate knowledge and skills and it also make it possible for children to remember their previous knowledge (Uyanık Balat & Önkol, 2010; Kandır *et al.*, 2012).

Demonstration: Demonstration is the process involving the teacher as he/she describes and shows a movement or how something is done in front of children at classroom, workshop or lab settings for a better learning. Demonstration method is both a teacher and child-centered method. It is a convenient and efficient method, which makes teaching children practical things possible. Children learn related skills by doing themselves after the demonstration of teacher (Demirel, 2008).

In using demonstration method, children will benefit more if they are supplied with pre-knowledge. This method addresses auditory and visual processing so it makes the learning more permanent. In this method, the purpose should be explained beforehand and necessary materials should be supplied. Verbal lectures should be supported by illustrations, shapes and questions (Uyanık Balat, 2013).

Project: A project is defined as an in-depth investigation of a real world topic worthy of children's attention and effort. Project approach, on the other hand, requires interdisciplinary work individually or in collaboration in order to carry out study on real life problems based on their interests and abilities. Teachers take a strong guidance role in the process while children take the directive role and study topics with purpose and flexibility resulting in presentations with realistic conclusions (Gürkan, 2013).

Project work presents many opportunities for young children's ideas to be valued, their creativity to be encouraged, their interests to be nurtured, and for their learning needs to be met. In the evaluation of a project work, the important thing is evaluation of not only the product but also the process itself (Demirel, 2012).

The educators who put forward the idea of project work do not suggest a whole project work evaluation for a specific course. They assert that in early childhood it should be seen as a complementary part of informal side of the curriculum. In addition, at early childhood settings, more teacher guidance is needed (Gürkan, 2013).

Event Sampling: Event sampling method is usually a series of short observations to confirm a child's behavior pattern in order to provide suitable strategies to manage the child's behavior effectively. The purpose of event sampling is to provide the child with and experience involving decision making, selection and drawing conclusions (Bilen, 1999). Moreover, it gives the necessary skills for children

with different beliefs and values to talk and overcome the problems in their friendship (Açıkgöz, 2012).

Event sampling method provides children with opportunities to think about very well planned and asked questions. Instead of repetition of memorized knowledge, it makes the child think with the help of open-ended questions. In this regard, the child remembers previous knowledge, implements, makes analysis, synthesis and evaluation. Event sampling method fosters critical thinking in both children and the teacher when self-reflection questions at low levels or high levels are addressed (Woolfolk, 2013).

Pictures: Asking children to draw are a technique reflecting children's knowledge level of outer world. Picture technique, which materializes children's mental concepts help children to gain the ability of in-depth thinking (Kandır *et al.*, 2010).

Drawing pictures assist children in finding out artistic elements (line, color, volume, mass, design, composition, pattern, space, equilibrium and texture), developing fine motor skills and hand-eye coordination, sensitivity towards the environment, their fantasy world, their creativity, their adjustment ability to new settings, their tastes, awareness of their likes and dislikes, ability to express themselves, forming a flexible personality and their self-esteem (Seefeldt, 2005).

The important issue in using picture technique is that the children should not be limited to boundaries. Again the process is important than the product. For this reason, children must be provided sufficient time, large space and developmentally appropriate tools meanwhile in order to foster creativity too. Children should be set free in using materials. The teacher should supply various coloring tools to break the chains of traditional drawing. Only by following these principles, they can express themselves in a creative manner (Kandır *et al.*, 2010).

Music: Music activities are crucial at early childhood in that it allows children to express themselves, to judge and make evaluations and to have aesthetic pleasures while at the same time fostering creativity. Music is an active way facilitating learning and perception. Music activities both support cognitive, language, motor, social, emotional development and foster children's musical development process. Music gives the feeling of success and self-confidence while providing an atmosphere for the children to express their emotions and opinions through the use of songs, rhythms, movement, dance, simple percussion instruments (Jackman, 2011).

Thanks to musical activities, children find out the difference between contrast concepts such as high and low pitch, low and high sounds, fast and slow rhythms. The rhythm in music also makes it easy to remember tangible information. Children learn the ability to move according to the characteristics and rhythm of the music by combining several movements. In addition children gain the skill of using both hands at the same time and improve their hand-eye coordination by playing simple percussion instruments (Gustafson, 2009; Iverson & James, 2011).

Drama: Drama can be defined as a type of play where children accept and assign roles, and then act them out using materials. Drama is a learning tool improving children's artistic sensitivity, awareness of self and others and their fantasy (Pinciotti, 1993). Central to the drama, there lies the process approach that is drama is organized primarily for the participants rather than the audience. In other words, drama is for the

“role-players' to role-play” (McCaslin, 2006). Voluntarily participated children transform their real life knowledge into a fantasy world and learn about the situations, events and relationships in the drama by exploration as they act out (Hendy & Toon, 2001).

Drama activities, which are intended to break the boundaries of learning, create an evocative environment for the expression of emotions and opinions and make this expression more clear and strong. Children create an alternative for themselves, their lives and worlds. In such a way they change their daily experiences and enrich them by adding something creative. Drama provides an in-class environment permitting the understanding of outer world. Children can achieve this by talking about the problems emerged out and making decisions throughout drama sessions. Thus knowledge is constructed by the children on their own based on their previous knowledge and experiences. Since association of newly learned concepts with the real life is essential for permanent learning, drama, itself, seems to serve as the most effective way to achieve this (McCaslin, 2006; Burke, 2014; Can Yaşar, 2014).

2. CONCLUSION

Active learning is both related to the process and the product. With the help of active learning methods, children are provided with appropriate unique learning profiles. Because active learning involves many activities such as writing, classifying, drawing, movement by using senses, expressing oneself uses social skills. The quality of an educational program is evaluated to the extent how much it educates people to reach, produce and use knowledge together with how much they lead the society, science and technology from the early years on. For the children to make the most of teaching and learning environment, children should be placed into educational settings, which fit their “individual learning profiles” and use “active learning methods”. Because children succeed at activities at different levels appropriate to their individual differences. High level of attention and motivation at active learning settings is completely related with the variety of the activities. This variety is observable only at active learning methods.

Active learning, which is defined as children’s constructing and processing knowledge on their own, is the source of all the educational models implemented in the world. Active learning process is crucial in early childhood education, which is a critical phase in human life. Active learning approach is a child-centered concept permitting in-depth and permanent learning. As active learning emphasizes the active role of the learner, it does not alienate the learner from the current setting. Active learning approach, which is comprised of many theories imply that the child is not alone in the learning process and the adults are also effectual in the process. From this perspective, the role of the teacher who organizes and implements all the methods and techniques in all active learning models cannot be denied. For this reason, careful understanding and implementation of active learning will reflect the success of education.

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Chapter 5

Vocabulary Teaching Through Language Games

Polat ERDOĞAN

INTRODUCTION

Language is used to express ideas and emotions, make sense of complex and abstract thought, communicate with others, express wants and needs and set rules and form culture. Currently, English is the lingua franca in education, science, information technology, business, aviation, entertainment, and diplomacy. About 80 percent of the English speakers are nonnative speakers (Braine, 2006 as cited in Jerkins, 2007). Therefore, most of the countries in the world attach great importance to teaching and learning English as a second or foreign language and form their educational policies accordingly.

In Turkey, English is learned as a foreign language to provide communication with other countries for a variety of purposes such as scientific, military, economic and social development. English is learned by different age groups, especially starting from 2nd grades in state-run primary education. Ministry of Education specifies the objectives of learning English in state-run primary schools as: Students will demonstrate the knowledge of reading and writing in the target language, use language for communication and understand what they hear and read (MEB, 2006). To be able to achieve these objectives, it is important to know young learners more closely and put emphasis on their characteristics of language learning. Each learner is unique in learning. In other words, they may have different learning styles in learning vocabulary. Learning vocabulary is a part of language learning. It is an integral part of any kind of language learning since a good knowledge of vocabulary allows for a good communication.

Young learners can learn a huge amount of vocabulary through games. All types of games may be used in an educational environment. Educational games are designed to assist young learners to learn about certain topics, enlarge perceptions, strengthen language development, understand a historical event or culture, or assist them in learning a skill as they play. As teachers, governments and parents, we should realize the psychological needs of children for games. Game is an interactive play that teaches young learners goals, rules, adaptation, problem solving, interaction abilities etc... They provide young learners the essential needs of vocabulary learning by providing enjoyment, passionate involvement, organization, motivation, imagination, inspiration, social communication and collaboration and feelings. Moreover, students learn without knowing it (Schultz & Fisher, 1988).

In general, language games are the activities which are used in the classroom as a facilitator to boost foreign language acquisition. According to Hadfield, (1990, as cited in Deesri, 2002) “game is an activity which has certain rules, a goal and an element of fun”. Games designers define the term ‘game’ as an organization in which players take part in an artificial conflict (Salen & Zimmerman, 2003). The game is

controlled by some rules as well. At the end of the game, possible outcomes, such as the winner of the game, are expected. Another scholar, Caillois (2001) also makes a definition of game in his book. He displays in his work that a game needs to have the following characteristics: Fun, separate, uncertain, non-productive, governed by rules and fictitious. That is to say, game is an element that links and includes certain variables as mentioned above. Game designers make discrimination between the language learning activities and the language games. “What differentiates language games from other activities in the EFL classroom is the presence of a visible set of rules which guide the children’s action, and an element of strategy children must successfully apply their language (and other) skills” (Lewis & Bodson, 1999).

It is often hard to classify games into categories because of various aspects. However, Hadfield (1999) describes two types of games: linguistic games and communicative games. Linguistic games put emphasis on the correct language usage. On the other hand, communicative games focus on the exchange of information and ideas. Toth (1995) makes another distinction of language games and states that there are two kinds of games: Competitive games, in which players or teams race to be the first to reach the goal, and co-operative games, in which players or teams work together towards a common goal. The emphasis in the games is on successful communication rather than on correctness of language. Another classification of games suggests the following guidelines: Guessing games, memory games, putting things in order, comparing pictures – finding differences, comparing notes with other learners, information gap games, filling in diary/calendar, collaborating to complete a task word games, simulations, ice-breakers (Langran & Purcell, 1994).

The selection of language games can play important roles in vocabulary teaching. While focusing on how to choose games, it is important to take into account several factors such as young learners’ language level, students’ characteristics, the time for the games, the skills to practice and appropriate material selection. Tyson (2000) states that an effective language game should be fun, involve friendly competition, keep all of the students involved and interested require students to use language that is challenging, encourage young learners to concentrate on the use of language rather than the language itself. Generally, games are used as a warm-up activity or as ice-breakers in the beginning of a lesson. It is not wrong to say that teachers or trainers can use language games with the purpose of warm-up activity but games are more than that. Games can also serve as a tool to review and cover previous knowledge of language (Uberman, 1998). Games can also be used to discover and internalize new language content (Dalton, 2005). Learning new vocabulary requires lots of practice in order to recall and use them in a correct way. If you use wide range of training activities then you and your students can take the advantage of the diversity (Baker & Westrup, 2000).

Games have advantages and effectiveness in language learning in various ways. To begin with, games provide stress free atmosphere and enjoyment for the students, thus young learners learn and retain new vocabulary easily. In that way, young language learners use the target language without fear in front of their classmates (Horwitz *et al.*, 1986). Not only games will reduce fear, frustration and confusion, they will also keep shy learners engaged in various activities (Richard-Amato, 1988). Moreover, games provide motivation for the young learners who participate actively

in learning activities. Games introduce an element of competition into language-building activities. This offers valuable motivation to a purposeful use of language (Prasad, 2003). In other words, these activities provide a meaningful context for language use. This meaningful communication provides the basis for comprehensible input (Krashen, 1985). The comprehensible input happens when students start meaningful communication while trying to understand what their roles are and how to play the game. The competitive atmosphere also makes learners focus and think critically during the learning process, which boosts unconscious acquisition of input. That is why students find the activities and exercises more interesting through games (Thiagarajan *et al.*, 1999). Many students who have involved in game-oriented activities have positive attitudes towards them (Uberman, 1998). Language games take real world into the classroom, and increase students' use of English in a flexible, communicative way (Huyen & Nga, 2003). Hadfield (1990) confirms that games provide powerful practice of language both inside and outside the classroom. Well-organized games allow learners to exercise and internalize the vocabulary, grammar, and structures broadly (Sarıçoban & Metin, 2000). Chen (2005) also states that language games promote communicative competence and provide a meaningful context for language use. They also give young learners a chance to use the language outside of the classroom (Ellis, 2005). Therefore, the starring role of games in teaching and learning vocabulary cannot be underestimated.

This study investigates the effectiveness of language games in vocabulary teaching. Therefore, this question forms the problem statement of the study: "Are language games useful in the process of vocabulary teaching to young learners?" The purpose of this study is to examine the effects of language games on the improvement of vocabulary knowledge of young learners. On that note, this study seeks to find answers to the following questions:

1. Are language games useful in the process of vocabulary teaching to young learners?
2. Do young learners prefer to play linguistic or communicative games?
3. What kinds of games are better for young learners, competitive or co-operative games?
4. Does gender affect young learners' achievement in vocabulary learning through games?
5. What are the attitudes of young language learners towards language games?

It is clear that there have been enough studies in the literature under different titles and about different types of games used in education. However, it has been considered that studies which examine vocabulary teaching through games are rather rare, and that such studies are needed; especially in educational institutions, and that such studies will make important contributions to the field and practitioners. Thereby, this research aims to show the effectiveness of the games and young learners' positive attitudes towards games.

MATERIALS AND METHOD

Research Design: In this study, the pretest-posttest Control Group Design was used in that true experimental designs have the highest level of control among experimental designs because the subjects within the groups were randomly assigned

for each group. Since subjects were randomly assigned, there was a higher control of the internal validity and external validity. Furthermore, there was a control group to compare the results of the subjects in the experiment with other subjects of similar status that had not been exposed to the treatment. Subjects were randomly selected and placed into two groups. The data was interpreted with Statistical Package for Social Sciences (SPSS v.22). Moreover, the semi-structured interview was assigned to participants to elicit their attitudes toward language games. This research was a mixed type research since it gathered both quantitative and qualitative data.

Population and Sampling

The state run primary schools in Turkey formed the universe for the study. The population of the study consisted of only the 5th graders in state run primary schools in Turkey. The sampling unit in this study was any student who was taking English classes in a state run primary school in İstanbul. Therefore, the sample size of the study stood at 100. The study was conducted with 100 young learners 50% of them belonged to experimental group and 50% of them belonged to the control group. The sampling unit of the study was randomly assigned. The sample selected for this study was limited to students enrolled in a state run primary school in İstanbul in Turkey for the 2013-2014 academic year. The sample was similar in nature to the population that took English classes in other state run primary schools in Turkey and could thus be generalized.

Data Collection Instrument

The aim of this study is to explore the effects of language games on the improvement of the vocabulary knowledge of young learners. That is why; this study is exploratory in nature. Therefore, it employed a vocabulary test and a semi-structured interview to collect data. The vocabulary test consisted of 30 questions. The parallel vocabulary tests were applied to control and experimental groups to measure the change in the vocabulary knowledge of young learners. The alpha coefficient for the thirty items was .801, suggesting that the items had relatively high internal consistency (A reliability coefficient of .70 or higher is considered “acceptable” in most social science research situations). To elicit the ideas of young learners about the effectiveness of games and to reveal the attitudes of young learners towards educational games, the semi-structured interview, which included five interrelated questions, was also applied.

Procedures

Before the experiment, a pre-test was administered to both control and experimental groups. 40 minutes were allowed for students to complete the 30-item test. Then the treatment was applied to the experimental group. All conditions in both experimental and control groups were the same except for the fact that the control group received no treatment. The control group was plainly taught by the course books which were recommended and supplied by the Ministry of Education. Language games were put into practice in two separate sessions each week. (Each session was around five to thirty minutes.) In the course of two months, various language games were used in the experimental group. At the end of the two month training program, a post-test was administered to both experimental and control groups to measure their vocabulary development. After the posttests, the semi-

structured interview was also administered to the experimental group to reveal their attitudes towards language games.

Data Analysis

This study is a mixed type research in which quantitative and qualitative methods and techniques are mixed in one overall study. The quantitative data is used for one phase of the study and the qualitative data is used for another phase of the study. First, the experiment (quantitative) was conducted with the participants. This stage of the experimental study yielded the quantitative data. Then, the quantitative data was collected and entered into computer. The data was interpreted with the Statistical Package for Social Sciences (SPSS v.22). The Kolmogorov Smirnov Test was used to show that parametric tests could be used in this study. Paired samples t-tests were used to present the pre-test and post-test scores of each group in term of mean, standard deviation and standard error mean. Independent Samples t-tests were also used in this study to show mean scores of groups in terms of types of games, distinction among games and gender. For this reason, the experiment is also replicable for researchers to validate the results. In the second phase of the study, an interview was made with participants in the experimental group to see how they view the language games. To elicit their ideas and attitudes towards language games, five interrelated interview questions were asked and responses were interpreted by grouping answers for each question.

RESULTS

Presentation, Analysis and Interpretation of the Quantitative Data

Table 1 presents the sampling distribution and the test of normality. According to the data, both the control group and the experimental group consisted of 50 participants in a state run primary school. In total, 100 participants took part in the study. The groups had a fixed number of parameters. In that way, The Kolmogorov Smirnov Test demonstrated that parametric tests could be used in this study. Parametric methods make more assumption than non-parametric methods do. Therefore, this study has more statistical power and can produce more accurate and precise estimates.

Table 1: One-Sample Kolmogorov-Smirnov Test

		Control Pretest Scores	Experimental Pretest Scores	Control Posttest Scores	Experimental Posttest Scores
N		50	50	50	50
Normal Parameters ^{a,b}	Mean	4,8400	5,6000	8,0000	19,7600
	Std. Deviation	2,58220	1,95876	2,04041	3,21070
MostExtreme Differences	Absolute	,125	,141	,152	,230
	Positive	,122	,099	,152	,230
	Negative	-,125	-,141	-,112	-,092
Kolmogorov-Smirnov Z		,882	,996	1,075	1,628
Asymp. Sig. (2-tailed)		,418	,274	,198	,010

Research Question 1: *Are language games useful in the process of vocabulary teaching to young learners?*

Table 2: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Control Pretest Scores	4,8400	50	2,58220	,36518
	Experimental Pretest Scores	5,6000	50	1,95876	,27701
Pair 2	Control Posttest Scores	8,0000	50	2,04041	,28856
	Experimental Posttest Scores	19,7600	50	3,21070	,45406

Table 2 introduces the t-test results in terms of mean. According to the table 2, the data contains samples under two conditions. When the pre-test is applied for both control and experimental group, the mean of the former is 4,8400 and the latter is 5,6000. When the post-test is applied, the mean of the control group is 8,0000 and the experimental group is 19,7600. The mean difference between in each of the two post-test scores is 11,76. There is a significant difference between the scores in the two samples. From this fact, we can conclude that participants in the experimental group got better test scores than participants in the control group.

Table 3: Paired Samples Test

Paired Differences		Mean	Std. Deviation	Std. Error Mean	Confidence Int.		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Cont. and Exp. Pretest scores	-,760	3,23602	,45764	-1,67967	,15967	1,661	49	,103
Pair 2	Cont. and Exp. Posttest Scores	-11,760	3,45561	,48870	-12,74207	-10,77793	-24,064	49	,000

Table 3 presents the pre-test and post-test scores of each group in term of mean, standard deviation and standard error mean. The Mean difference between post-test scores is -11,760. The Standard Deviation of both post-test scores is 3,45561. The Standard Error of Mean for both groups is 0,48840. The Sig. (2-Tailed) value in our study is 0.000. This value is less than .05. Because of this, we can conclude that there is a statistically significant difference between the mean scores of control group and experimental group. Since our Paired Samples Statistics box revealed that the Mean scores of experimental group was greater than the Mean for the control group, we can conclude that the participants in the experimental group were able to get significantly better scores than participants in the control group.

Table 4: Group Statistics

	Types of Games	N	Mean	Std. Deviation	Std. Error Mean
Experimental Group	Linguistic	17	17,2941	1,35852	,32949
	Communicative	33	21,0303	3,15718	,54959

Table 4 presents the group statistics in terms of types of games. The experimental group consisted of 50 participants. 34% of whom preferred to play linguistic games and 66% of whom preferred to play communicative games.

Research Question 2: Do young learners prefer to play linguistic or communicative games?

Table 5: Types of Games

		Frequency	Percent	Valid	Percent	Cumulative Percent
Valid	Linguistic	17	34,0	34,0		34,0
	Communicative	33	66,0	66,0		100,0
	Total	50	100,0	100,0		

Table 5 introduces the types of games in terms of mean scores. According to the group statistics box, the mean score of the participants who preferred to play linguistic games is 17,2941. The mean score of the participants who preferred to play communicative games is 21,0303. The mean score difference between the linguistic game players and the communicative game players is 3,7362. The results indicate that communicative game players were able to get better mean scores than linguistic game players.

Table 6: Independent Samples Test

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Experimental Group	Equal variance assumed	6,705	,003	-4,645	48	,000	-3,73619	,80442	-5,35358	-2,11879
	Equal variance not assumed			-5,831	46	,000	-3,73619	,64080	5,02530	2,44707

Table 6 shows the Independent Samples Statistics in terms of types of games. The results indicate that there is a statistically significant difference ($p = .000$). In other words, there is a statistically significant difference between the mean scores of linguistic game players and communicative game players. The decision rule is given by: If $p \leq \alpha$. 000, is less than .05, so it implies that we observed a difference between the mean scores of participants.

Research Question 3: What kinds of games are better for young learners, competitive or co-operative games?

Table 7 introduces group statistics in terms of distinction among games. The experimental group consisted of 50 participants. 38% of whom preferred to play cooperative games and 62% of whom preferred to play competitive games.

Table 7: Distinction among Games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cooperative	19	38,0	38,0	38,0
	Competitive	31	62,0	62,0	100,0
	Total	50	100,0	100,0	

Table 8: Group Statistics

Distinction Among Games		N	Mean	Std. Deviation	Std. Error Mean
Experimental Group	Cooperative	19	19,6842	3,16320	,72569
	Competitive	31	19,8065	3,29059	,59101

Table 8 displays the distinction among games in terms of mean scores. According to the group statistics box, the mean score of the participants who preferred to play cooperative games is 19,6842. The mean score of the participants who preferred to play competitive games is 19,8065. The mean score difference between the cooperative game players and the competitive game players is 0,1223. The results indicate that cooperative game players were not able to get better mean scores than competitive game players.

Table 9: Independent Samples Test

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Int.	
									Lower	Upper
Experimental Group	Equal variances assumed	,056	,814	,129	48	,898	,12224	,94499	2,02228	1,77779
	Equal variances not assumed			,131	39,397	,897	-,12224	,93590	2,01467	1,77019

Table 9 shows the Independent Samples Statistics in terms of distinction among games. The results indicate that there is not a statistically significant difference ($p = .898$). In other words, there is not a statistically significant difference between the mean scores of cooperative game players and competitive game players. The decision rule is given by: If $p \leq \alpha$. $.898$, is greater than $.05$, so it implies that we failed to observe a difference between the mean scores of participants.

Research Question 4: *Does gender affect young learners' achievement in vocabulary learning through games?*

Table 10 displays the group statistics in terms of gender. All participants were fifth graders from a state-run primary school. The study was conducted with 100 participants, 46% of whom were male, and 54% of whom were female.

Table10: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	female	54	54,0	54,0	54,0
	male	46	46,0	46,0	100,0
	Total	100	100,0	100,0	

Table 11 presents the group statistics in terms of gender in experimental group. The experimental group consists of 50 participants, 27 of whom were female and 23 of whom were male. The Mean score of females is 20,3333 and the Mean score of males is 19,0870.

Table 11: Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Experimental Group	female	27	20,3333	3,50823	,67516
	male	23	19,0870	2,74546	,57247

Table 12: Independent Samples Test

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
								Lower	Upper	
Experimental Group	Equal variances assumed	,967	,330	1,381	48	,174	1,24638	,90273	,56869	3,06144
	Equal variances not assumed			1,408	47,69	,166	1,24638	,88519	,53371	3,02647

Table 12 shows the Independent Samples Statistics in terms of gender. The results indicate that there is no statistically significant difference ($p = .174$). In other words, there is not a statistically significant difference between the mean scores for males and females. The decision rule is given by: If $p \leq \alpha$. 174 is not less than or equal to .05, so it implies that we failed to observe a difference in the number of gender among participants.

Presentation, Analysis and Interpretation of the Qualitative Data

Semi-Structured Interview Questions

In this part, the interview, made with young learners on language games, is presented and interpreted. The interview has five interrelated questions. The interview questions seek to gather detailed information on the effectiveness of language games. The interview questions were administered to 30 young learners in the experimental group. The semi-structured interview questions reveal the attitudes of young learners towards language games. The interview questions are as follows;

1. How well do you think language games meet the needs of Young Learners?
2. Are language games useful in the process of vocabulary learning?
3. Do you feel safe while playing language games? If not, please tell us why.
4. Can you tell us the things that you like most about language games?
5. What important achievements have you accomplished since you played language games?

1. How well do you think language games meet the needs of Young Learners?

Young learners stated that “we get to know each other better while playing language games”. They took place in the same group during the language activities and worked together. This helps them get socialized in the community. They learn how to act, treat and share. This has a significant effect on how the child deals with learning vocabulary. Moreover, language games provide an atmosphere of belonging and motivation where all young learners feel encouraged and can learn from their classmates.

Young learners mentioned that *“we get bored of monotonous lessons”*. When teachers bring authentic materials such as small cards, pictures, songs, charts and some other visuals into the classroom, these materials catch their attention and build knowledge of vocabulary in a playful way. When new vocabulary is introduced and practiced with games or game like activities, young learners appreciate it and this reinforces learning new vocabulary in a meaningful way. Quinn (2005) states that we need experiences that offer interesting objectives set in a meaningful context where learners explore and act to solve problems that are pitched at the right level. Fun materials also encourage reluctant young learners get involved in language games and overcome the challenges of learning a new language. As teachers, we need to be aware that language games provide various learning opportunities for young learners. They give children a chance to learn words and language that they may not be able to learn in a traditional classroom.

2. Are language games useful in the process of vocabulary learning

Young learners think that they have a lucky break when language games are used in the classroom. They believe that language games change the routine of the language class. Therefore, they find language games motivating and encouraging. They find them challenging as well since language games require a great deal of critical thinking abilities. Additionally, young learners supported the idea that *“we learn and practice in various skills such as reading, writing, listening and speaking”*. Games help students learn in a holistic way. In that way, young learners use the target language actively by differentiated language games. These language games deal with different and interesting language activities that are appropriate for their language levels. They are useful and effective in language learning process and set a meaningful context for vocabulary input. Young learners also draw attention to the usefulness of language games. They stated that *“the use of language games has generated much interest in the classroom”*. As an educational aid, it can be said that language games attract young learners’ attention. On top of all these, thanks to the feedback from the environment, classmates and the instructor, young learners became more aware of their own learning which was very useful as well. These findings aim to help instructors make a more informed decision for young learners’ learning process.

Playing different language games from lesson to lesson changes the routine of the syllabus. Young learners stated that *“we always wonder which game to play”*. They preferred to play the games they know well. However, when the game was overused, it was hard to motivate students. For this reason, when teachers change the order of the language games, students appreciate it. The other point students reported was achievement. Language games gave young learners a sense of achievement. They won the prize at the end of the game, beat other group members, got positive feedback from teachers and classmates or saw the winners’ name on the board. Students can also make or prepare their own game materials. This is also motivating for young learners. They use their imagination and creativeness to prepare cards, draw pictures, and bring authentic materials to the class. They have a chance to choose their game materials. Sometimes, they can even change or modify the rules of the games. The democracy in the classroom also gives students a sense of achievement.

3. Do you feel safe while playing language games? If not, please tell us why.

Young learners stated that *“language games provide a friendly atmosphere in the classroom”*. These games developed an atmosphere where all students felt like a part of the whole. Pair work and group work activities provided a chance to be recognized by the classmates and reduced the negative effects of teacher centered classroom environment. In that way, young learners felt safe and more comfortable in learning process. Feeling of confidence is a great factor in learning process. This lowers the anxiety levels of young learners and provides ambition for learning. It also helps students reduce speaking anxiety. The role of language games through learning process has a great effect on students' academic performance.

Young learners stated that *“we feel safe in group work or pair work activities since we don't get criticized directly”*. They benefited from the use of group works. Group and pair work activities allowed students also to work together and share their ideas. Working in groups was a common part of the classroom environment and could be a good approach for students to take certain tasks, responsibilities or special projects. While it was challenging for different personality types to work together on a language game, it had its advantages, both for the teachers and the students involved. The advantages of group work were more than just working together. They set a peaceful classroom atmosphere where students worked in the actual classroom setting. Young learners also thought that positive feedbacks and reinforcement by teachers played an important role in the sense of belonging to the class. Pointing out the students' achievement in the right place at the right time is very important. They gain self-confidence and self-esteem. This gives a chance to feel a sense of accomplishment.

4. Can you tell us the things that you like most about language games?

Language games make learning fun. Young learners have fun with the language games because of the various language activities, authentic materials, colorful small cards and posters etc... All the students confirmed that *“we enjoy language games and share lots of things in common”*. Language games allowed young learners to play together and practice language. Games which involved more than one player encouraged students to work cooperatively to achieve language objectives. This also fostered friendships among young learners. Language games that involve cooperative study give motivation to focus on language activities and make difficult grammar structures easy as well.

Young learners felt so happy when they heard that they were going to play language games. Young learners stated that *“we feel relaxed and safe when we participate in a game”*. Young learners were observed that language games gave positive energy and motivation for them. Moreover, the prize they would win at the end of the game also encouraged them. They dealt with different challenges while trying to win the game. They pulled together in spite of the difficulties of the language games. The sense of winning the game made young learners happy. This had a huge impact on the learning process. Kim (1995) notes that there is a common idea that learning a language should be serious, and if one is having fun, or there is hilarity and laughter in the learning atmosphere, then it is not a real learning. This is a misconception. Therefore, language games take young learners' feelings into account

and provide better opportunities for effective vocabulary learning.

5. What important achievements have you accomplished since you played language games?

Young learners in language classes surely made progress in vocabulary and the games helped them learn new words that uttered in the language games. Young learners stated that “*language games help us remember our existing vocabulary at the same time*”. Furthermore, our students stated that the games were useful for them to develop their vocabulary knowledge because they played together, cooperated and consequently, they learned from their classmates. Regarding the effectiveness of language games, interviewed students reported that they learned new vocabulary more quickly and recalled it better. They also got better scores from standard language tests. Having high academic achievement and being appreciated by teachers, family members and the community they live in also make students happy.

Keeping the students interested in learning process is one step forward of conducting a language activity. Young learners expressed their deepest interest and feelings while taking part in language games. It is essential to know that learning process meets the needs of young learners. Otherwise, they will rebel against the activities, be discouraged and have negative attitudes towards subject matters. Therefore, language games generate much interest for young learners. Creating positive attitudes towards language among other stakeholders in learning process is the biggest achievement of young learners.

DISCUSSION AND CONCLUSION

The purpose of the study was to show that language games were a wonderful resource to build vocabulary for young language learners. Language games helped young learners to develop strong vocabulary skills and, in turn, their English skills also grew. In addition, they learned more quickly and retained vocabulary in their reservoir better and for a long time. It should be noted that they made a huge progress in a limited time thanks to language games. In general, the roles of educational games cannot be ignored in teaching and learning vocabulary. This research displayed the effectiveness of the language games in language learning process. The perception and attitudes of young learners revealed that they reacted to this kind of method in vocabulary learning in a positive way. They expressed their fulfillment and had pleasant feelings towards games. In the light of this study, it is expected that language games will be used by more teachers for young learners’ language development. Furthermore, it is anticipated that language games will be analyzed, integrated and utilized in educational programs made by Ministry of Education and the course books will provide more efficient language games for young learners to develop their language skills.

The pedagogical value of language games has been well known. Apart from their contribution to the learning process, language games provided a context for meaningful learning where students found much interest in language activities. They loved to have fun and played popular games. They played again and again, got used to the routine of the games but never got bored. Young learners were aware of that the level of excitement and the output of language games were always different and authentic. That is why, they took language games and in turn learning process

seriously. This process provides rich enjoyment and serious commitment. Needless to say, language games demonstrate the quality and originality in education.

Children discover the world through games. All the activities and tasks need to be fun in primary schools. This plays a vital role in growing up and learning. Young learners learned and enlarged their language knowledge thanks to games. Even the reluctant children could take part in the language activities and changed their negative attitudes towards class since language games could energize the class. The language games can make a mystic flow in the air of the classroom. Even students can take a vacation in their dream. For this reason, the qualities mentioned above distinguish language games from other communicative or task based approaches. The language game is a tool for young learners to achieve their objectives directly or indirectly related language.

Language games were multifunctional. Teachers could employ their language games in various situations. They could introduce new language items, practice, check and revise certain themes, relax or energize a class. They could use language games for different purposes. Teachers could motivate unmotivated students or manage the classroom better and easier. As known, children have short attention span. As instructors, we should also consider this factor. Language games help students keep them in language activities all the time. However, a game needs to be more than merely fun. It should take the children one step forward each day. To achieve this, the theme of the game should be appropriate for students level, have clearly noticeable objectives and instructions. In this way, teachers can take advantage of language games in many ways.

Lastly, the present study examined relevant variables such as the attitudes of young learners towards language games yet there are certain additional variables that were excluded due to reasons like measurements issues. For instance, there may be some unwilling students towards language games. Thus, the reasons behind their behaviors could be examined in future researches. The present study was limited in nature since it took two months. Longitudinal studies should be conducted in future to test the effectiveness of language games on the improvement of vocabulary knowledge among the study variables. The effectiveness of language games have been researched more often in developed countries and this research was focused on a developing country. Thus, there is a need for cross-country comparison studies to identify common and disparate factors related to language games and vocabulary teaching. Though the instrument shows scientific reliability and validity, yet there are not many studies conducted in the field of vocabulary teaching through games in Turkey. More studies are required before this study is established as an acceptable tool for measuring young learners' behaviors towards language games. The relations within different variables were tested through several models such as One Sample Kolmogorov-Smirnov Test, Paired T-Test, Gender Statistics, Group Statistics, and Independent Sample T-Tests etc... Therefore, future researches should also aim at taking into account various evaluation procedures and models in a holistic view.

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Chapter 6

Educational Diagnosis and Evaluation in Early Childhood Period

Zülfıye Gül ERCAN

INTRODUCTION

Early childhood is a period that development is quite fast. Offering child-appropriate stimuli, satisfying their needs for love, attention, curiosity and learning are important in growth and development. Therefore; health, feeding, care and educational services given to children impact their growth and development positively or negatively.

Modern living conditions, advancing technology and changing ecological environment influence development to various extent and different periods. Thus, development is a phenomenon that must be studied by experts from multiple disciplines. Monitoring children's development after birth, detecting and supporting different characteristics at early period and identifying factors that negatively impact development will create opportunities for early intervention. Consequently, this will make it possible to identify retardations, eliminating disability status and minimizing its effects.

DEFINITION AND IMPORTANCE OF EARLY CHILDHOOD PERIOD

"Early childhood development" includes physical, mental and social development of children at early periods of life (0-8 years) and all interventions required for their feeding, health, mental development and social interaction (Özmert, 2005). This period is important as it has the fastest rate of brain development and establishment of synaptic connections.

According to researchers, brain development of babies and toddlers advances at various speeds at various periods. Number of synapses reaches that of an adult at the age of two and it more than doubles it at the age of three. This figure stays stable for the first ten years of life, followed by a significant decrease in its intensity. Half of the synapses vanish at the end of puberty and the other half stay stable for the rest of the life cycle (Karaaslan, 2002).

Throughout life, brain chooses active synapses and eliminates inactive ones. Production is more than elimination for the first two or three years while production and elimination are balanced for the next seven years. Thus, amplitude of synaptic connections during the child's growth enables a complex and strong system through neural paths. Synapses that are reinforced through repeated experiences become permanent and unused synapses are eliminated (Karaaslan, 2002). From a different point of view, alertness and awareness of children increase and they learn more easily and quickly as enriching learning opportunities multiply synaptic connections. Reinforcement of what is learnt makes this knowledge and skills permanent. Thus, children's positive or negative experiences at earlier years of life influence how their

brains will be in the future.

Development may be negatively affected by several factors met at pre-natal, birth, post-natal periods and during life. These are;

- Prenatal factors; which are genetic diseases from the family and chromosome disorders, maternal factors (age, feeding, metabolic diseases of mother), smoking, drinking habits and drug intake at pregnancy, exposure to chemicals or radiation, accidents, traumas, psychological problems, contagious diseases at pregnancy etc.
- Birth factors; earlier or later delivery than expected, delivery under inappropriate conditions by non-professionals, inappropriate methods for mother and child at birth, difficult delivery, umbilical cord tangled around the neck, asphyxiating birth, meconium aspiration, child trauma at birth etc.
- Post-natal and life-long factors; which are need for life or medical support depending on premature birth, chronic and serious diseases after birth and treatment process (hospitalizm), malnutrition due to poor socio-economic status of the family, neglect and abuse of the child due to failure of parents to adopt parenting roles, lack of stimuli (disadvantaged environment), deprivation of parents, physical or psychological traumas, meningitis, convulsion, epilepsy etc. (Aral & Gürsoy, 2007; Ceylan, 2009).

According to literature review, genetic and chromosome disorders cause health problems, poor organ development, shape disorders, developmental delay, physical or mental disability and influence development negatively (Symington & Pinelli, 2003; Percy, 2007; Tekin-İftar, 2009). Premature births are in high risk group in medical and developmental terms. It has been reported that this group frequently develops cerebral palsy, mental retardation, sensorineural hearing loss, visual impairment, hydrocephalia etc. or chronic diseases that influence immune or respiratory system negatively as well as perceptual deficits, motor coordination problems, learning disorders, attention deficit disorders, hyperactivity, speech disorder, behavior problems at school (Allen & Capute, 1989; Lane, Attanosis & Huselid, 1994).

Expenditure of anemia, asthma, feeding disorders in premature babies is closely related to socioeconomic level (Rosenblum, 1994; Brown & Pollitt, 1996; Ergöçmen & Coşkun 2003; Tezcan 2004). It has been found that children from these families have more behavioral and cognitive problems due to lack of proper care and educational possibilities (Dodge, Pettit & Bates, 1994; Bolger, Patterson & Thompson, 1995). Parents' obligation to work due to poverty, lack of stimuli at home, neglectful parent attitudes and exposure to chronic violence are closely related to families' socio-economic status and prevent cognitive and emotional development of children (Aber, Jones & Cohen, 2000). Parents' failure to adopt parenting roles, life under low socio-economic conditions and being a member of low social class are all factors that disrupt attachment and give rise to neglectful, aggressive behavior against the baby (Pianta & Egeland, 1990; Şener & Karacan, 1999).

Studies in our country suggest that anomaly is more frequently seen in babies who are born from a mother below 20 or over 35 ages (Tunçbilek *et al.*, 1996; Biri, *et al.*, 2005). Poor and unbalanced diet of mother during pregnancy causes anomalies such as low birth weight, neural tube defect, hydrocephalia, encephalitis, meningocele etc. Moreover, drug use particularly in the first three months of pregnancy and exposure to chemicals or radiation during pregnancy cause severe development

retardations, organ anomalies. As smoking, alcohol, metabolic diseases such as diabetes, hypothyroidis influence mother's health negatively, they cause stillbirth, premature birth, low birth weight, sensorial losses such as audio visual impairment, motor disorders (Blasco, 2001; Msall& Tremont, 2002; Percy, 2007).

Definition of "early childhood" concept includes different years in various countries; however it is usually used as synonymous with preschool concept in Turkey. In other words, the period that includes development and education of children between 0 and 72 months is considered as "early childhood period" or "preschool period". Early childhood/preschool education is defined as an educational process that is compliant with development level and individual attributes of 0-72 month old children, offer rich environmental stimuli, support children's physical, emotional and social development, guide them according to cultural values of the society and prepare them for primary school education (Güven & Efe-Azkeskin, 2010; MEB 2012).

This education is named "early childhood special education" for babies and toddler who have developmental risks or special needs. This education involves "early intervention" works that cover comprehensive services including educational goals, health and social services, family counseling etc. designed for babies and toddlers in the first three years of life and their parents (Ertem, 2005; Sakız, 2012). While education between the ages of 3 and 6 includes systematic education programs of various forms designed to prepare children for an upper educational program and support their development, minimize influences of physical, cognitive, emotional limitations and lack of resources (Birkan, 2002; Blackman, 2002; Erdil, 2010).

Main goals of early intervention programs are correcting or preventing developmental risks, increasing risky children's current skills in order to equalize their capacity with non-risked peers, reduce expenses on health, rehabilitation and education programs and strengthen family relations by providing psycho-social support to families (Erdil, 2010; Sakız, 2012).

Depending on goal and type, there are different models in early childhood education. These models differ according to the needs of children and families. Some of these models are institution-centered, some are home-centered while some are both. Some models aim the child while others aim the child's environment. Program models that directly aim the child are usually institution-centered. A team of experts including pediatricist, psychiatrist, clinic psychologist, development expert, physiotherapist, speech therapist, occupational therapist, social worker, special teacher, nurse work on issues such as health, nutrition, care and education of the child (Karaaslan, 2002).

The program model that aims to support the child's environment is a model that gives primary caregivers (parents, caretaker or grandparents) information and skills about child care, development and education. Development and education experts prepare these people to adopt the "teaching role" on child care and education at home. This model includes organizing home environment and materials for babies and toddlers, using and promoting instances or opportunities that they are ready to learn. This model is useful in cases where health, developmental status of the baby or toddler is not appropriate and family cannot go to the institution regularly due to socioeconomic problems of the family (Karaaslan, 2002).

The model that is both institution and home-centered aims to support the child

and family by bringing them together with experts from various fields and giving them opportunities that they would not be able to find at home environment. In order to enable effectiveness and continuity of the program, home visits, seminars, group meetings, workshops are held and educational, counseling, informative services are given (Kobal, 2001; Birkan, 2002; Sucuoğlu, Büyüköztürk & Bakkaloğlu, 2004).

Models that have been used in our country since 1980s aim to support child, family and child's caregivers. "Mother-Child Education Program, Small Steps Early Education Project, Early Childhood Education Program, Father-Child Education Program are examples to these models (Kıcaali-İftar, 2000; Karaaslan, 2002; Pinar, 2006; Ercan, 2009).

EVALUATION METHODS AND TOOLS IN EARLY CHILDHOOD PERIOD

Evaluation has several definitions depending on the field it is used including "an act of judging consciously a product, service or task with regards to criteria set for certain objectives (Karaağaçlı, 2002), "gathering data on developmental features of a student such as academic, behavioral or physical attributes and deciding what this information means for the student according to previously determined criteria" (Avcıoğlu, 2011), "data collection process designed for giving a decision about the child" (Kargın, 2013) and "a process that includes information that has been obtained at various times from different sources, recorded, compiled and interpreted by experts" (Sakız, 2012).

Development and growth are fast in early childhood period. In relation to this speed, child rapidly matures in various development fields such as cognitive, social, linguistic and motor. However, several risk factors or diseases that cause disability may influence development temporarily or permanently. Long diagnosis and treatment process in this period prevents children from being diagnosed. Some children who have not been noticed by family or physicians or who are thought to improve in the future are noticed when they have a problem in adapting to school and friends, realization of school tasks or have difficulty in linguistic, motor or self-care fields. However, as the most valuable period of life has been missed, they have to live with disability and limitations all through their lives. Therefore, evaluation and correct diagnosis of children with developmental risk are important.

Preschool education supports children's development and prepares them for primary school regardless of their disability status. Being with normal peers from early ages on increases likelihood of little children with special needs to resort to inclusion programs in following years. Preschool teachers are responsible for evaluating development of children with special need, making arrangements for them to use the program, assessing with appropriate tools and methods and guiding them occasionally to institutions for educational placement. These assessment steps are:

1. Screening /initial identification: The child who is thought to carry developmental risk or have special needs is observed generally and assessed at the beginning of school year or when he is seen in order to specify his developmental aspects and needs. General observation for preschool teachers is done according to "developmental checklist designed by the Ministry of National Education or development inventories developed by universities for children between 0-72 months (MEB 2012; Odluyurt 2012; Kargın 2013).

2. Pre-delivery process: Data is gathered about the child from his family/caregivers, medical or educational records (child's family, developmental, medical and academic history, classroom problems etc.). An intervention program is designed for developmental and educational needs. This intervention program involves adaptations in program goals, teaching processes (materials, teaching methods), classroom management, classroom setting and assessment methods for the child to catch up with his peers. Intervention program is implemented and the child is assessed in this process (Avcioğlu, 2011; Çolak, 2012; Kargin, 2013).

3. Delivery process: This step is realized when intervention program has no effect on the child. Teacher files a report of his observations about the child. A discussion is made about the child among his family, teachers and authorities; a decision is made to deliver the student to relevant institutions for more advanced and comprehensive assessment (Avcioğlu, 2011; Çolak, 2012; Kargin, 2013).

4. Detailed assessment process (evaluating): It involves medical and educational diagnosis of the child. As a result of this diagnosis, the child gains the right for special education and rehabilitation services (Batu & Çolak, 2012; Kargin, 2013).

Medical screening may be added according to neurological, psychological findings that physicians detect while monitoring health and development of babies and toddlers. And sometimes families realize retardation or differences in their children's development and apply to experts from various branches to find solution. Medical and psychometric measurements are done by the hospital. The focus is on whether the child has deficits, factors that cause deficiency, location and severity of deficiency, classification and predictions. Development or deficiency is assessed for diagnosis, classification and prediction. The child is assessed by a team of physicians (pediatric neurologist, rhinolaryngologist, ophthalmologist, orthopedics specialist and traumatologist, physical therapy and rehabilitation specialist, child psychiatrist), a medical report is filed based on findings, and the child is diagnosed. Medical diagnosis is a disease model (Karaaslan, 2002; Ertem, 2005).

Educational diagnosis is defined as assessment of the child's attributes in all development and disciplinary fields. Educational diagnosis and replacement in our country is under the responsibility of Guidance Research Center (GRC) affiliated to the Ministry of National Education. Experts working at the institution (psychological counselor, special education teacher, child development expert, classroom teacher etc.) and family assess the child in order to make correct decision. Educational diagnosis model gives the child's family, teachers and relevant people information about where education will start, how performance in development and disciplinary fields will be revealed, how and where educational setting will be designed, which materials will be used, what type of education program the child needs, how the least restrictive environment could be designed for the child, what educational measures will be taken and institutions that the child may be placed (Avcioğlu 2011; Kargin, 2013).

5. Deciding upon suitability of the child for special educational services: Guidance Research Center (GRC) assessment paves the path for a decision that children with special needs or developmental risks must benefit from individualized special education, group special education or inclusion. Pursuant to this decision, the child begins to receive special education and rehabilitation (physiotherapy, speech

therapy, occupational therapy etc.).

6. Preparation of the child's individualized education program: Guidance Research Center (GRC) prepares individualized education program for the child with special needs. This program involves information about the child's performance, short and long term educational goals, teaching methods and materials, time spared for realization of goals, assessment methods and criteria and additional special services that will be provided to the child (McLoughlin & Lewis, 1997; Avcioğlu, 2011; Kargin, 2013).

7. Assessment: Individualized education program is designed for one year. Assessment is done at the end of the academic process. Assessment gives information about achievement of goals, any developmental improvement of the child and malfunctioning aspect of the program that needs changing or correcting. The child and program are assessed through formal and informal assessment methods and tools. These assessment methods and tools are;

Formal assessment is the one where children's achievements at various educational fields are compared to other students of the same age group. Formal assessment is performed through standardized tests (Avcioğlu, 2011). Standardized tests have previously determined implementer, content, implementation setting and style, scoring and interpretation. There are many tests designed for various purposes including classification, diagnosis and treatment planning, competence detection, selection and elimination, program assessment and research. Some standardized tests have prerequisites (for example whether the test requires any implementer competence, special materials or setting, scoring style, interpretation etc). According to field experts, what matters is which test to choose under different circumstances, how to interpret the results and its contributions to the child. (McLoughlin & Lewis, 1997; Karaaslan, 2002; Sakız 2012; Kargin 2013).

Standardized development tests are more common and preferred in assessing growth and development of babies and toddler who carry development risks at early childhood period (Apak, 1989). The reason is that actions of a newborn baby are unplanned, uncoordinated and less controllable than actions of an older child (e.g., reflexes, reactions to auditory and visual stimuli, a number of skills based on observation and imitation). However, babies' behaviors change and turn into older children's behaviors in a short time. These behaviors of babies and children are universal. These are signs of change and development, milestones of development and constitute the basis of development, linguistic, motor, social or academic development tests. After years of systematic baby and child observation, researchers detect how growth and development process of babies and children is shaped, what turning points of this process are and at what months they are passed. This makes it easier to compare babies and children to their peers and understand how they will progress in their own course of development (Brazelton, 1983; Anlar & Yalaz, 1995; Başaran 1996; Karaaslan 2002; Atay, 2007).

Development tests are an effective screening tool and detect developmental retardations/deficiencies of babies and toddlers. If the child displays age-appropriate skills in his own development areas, it is possible to say that his development is in a normal and natural progress (Brazelton 1983; Apak 1989; Atay 2007). On the other hand, if he fails to display skills required by his age, he is behind his peers and a

detailed assessment is required. Moreover, a routine monitoring is required in order to understand whether “retardation” is temporary or permanent and the child’s development must be assessed every month for the first year, once in three months for the second and third years and once a year between the ages of four and six. Development tests pave the way for medical and educational intervention that babies and toddlers with developmental risks (Karaaslan, 2002; Ertem, 2005). Some of the tests used in our country are Denver Development Screening Test-II, Bayley Development Assessment Scale for Babies, Ankara Development Screening Inventory, Gazi Early Childhood Assessment Tool.

Informal assessment is the one that includes any measurement tool except for standardized tests, development inventories and achievement tests. It is a method preferred by educators for educational purposes and used to monitor children’s inner progress rather than compare to others, reveal any behavioral problems and assess performance under different settings or circumstances. Therefore, its preparation, implementation and assessment are individual (McLoughlin & Lewis, 1997). Informal assessment involves “curriculum-based assessment” that measures requirements and progress within the educational program that the child is involved, product-based “performance assessment” that children display their skills or create as a result of learning and “original assessment” that assesses children’s learning-based behaviors where they display practical and cognitive effort related to their real experiences in daily life, classroom, home, game setting etc. (Sakız, 2012).

Curriculum-based assessment comprises “formative assessment” that measures the child’s current performance in order to form, shape or strengthen the teaching program, “summarizer assessment” measures and documents how much the child has learnt and how effective the program is after it is implemented (Sakız, 2012).

Ministry of National Education requires preschool teachers to observe cognitive, social, linguistic, motor and self-care skill development and fill the “development observation form” according to “development attributes list” designed for 36-72 month old children (MEB, 2012). Indeed, it reveals a detailed assessment of skills that the child needs and in which fields to teach. Thus, the program is shaped according to the subjects, concepts children will be taught, skills they will acquire, activities, methods and materials that will be used and how assessment will be done. The goal of formative assessment is to determine how learning experiences will be organized. It involves interviewing with parents or caregivers in order to gather information about the family, child’s developmental history, academic history and social life and using this information to increase effectiveness of educational content. This strengthens the program (Avcıoğlu 2011; MEB 2012; Sakız 2012; Kargın, 2013).

Preschool teachers carry out curriculum-based assessment in order to assess their teaching content. Depending on teaching content, curriculum-based assessment usually includes worksheets, assignments, question-answer assessments and age-appropriate development or achievement tests. These assessments get more diverse and intense in the course of education according to teaching content and complexity of the concept/skill to be taught. For example, it may be applied intensely in a very short time in order to measure how much children know before teaching a subject or concept and measure how much children have learned after the lesson. On the other hand, assessment may be extended to a longer time period through reinforcement of a

skill once or several times a day. By asking questions about the subject and assigning homework, teacher may detect, correct and complete any false or missing learning (McLoughlin & Lewis 1997; Sakız, 2012).

Summarizer assessment is usually “assessment of learning” that documents whether children have progressed in the time given and whether the program has achieved expected goals and prepared children for the next upper education program. Preschool teachers document their assessments with “development reports” that they issue at the end of the 1st and 2nd semesters.

Performance-based assessment is an obligation as self-expressive skills of preschool children are limited. Performance-based assessment tools include observation, work sample analysis, task analysis etc. For example, while a teacher is assessing whether the child has acquired a certain goal and skill, subject or concept of an activity, she may observe the child’s behavior to find out his interests and needs. The child may be asked to do a task or display target skill in an individual or group work in order to understand at what stage he has a problem and how it can be corrected. The child’s own products at the end of learning are good assessment tools in terms of thinking, planning and organization.

Performance-based assessment is not limited to classroom but may be applied at home, school, workplace, life areas and among friends. The reason is that school/classroom setting is a laboratory that makes the child acquire basic skills necessary to adapt to social rules and keep an independent life. The child has to transfer what he has learned here to his own life and solve problems that he encounters. Original assessment begins here. Child’s interaction with parents, peers or other adults, ability to acquire skills and behaviors necessary at home, school, game setting etc. and display appropriate behaviors are all assessed with information received from observations, checklists or information sources.

Information sources comprise adults, peers who know the child as well as school and hospital records. As preschool children cannot express themselves, interviews with adults who know the child, sociometry, biographies, surveys, scales etc. are important sources of information (McLoughlin & Lewis, 1997).

Portfolio of a teacher is the document that includes works indicative of the child’s efforts, progress and achievement and materials that children reflect themselves. Indeed, it summarizes a training-teaching process (Aral, Kandır & Yaşar, 2000; Tuğrul, 2003).

CONCLUSION AND SUGGESTIONS

Growth-development is fast and multi-faceted at early childhood period. Child is ready to learn many skills with the introduction of appropriate developmental and educational stimuli. However, factors affecting development may have temporary or permanent impacts of the child’s development. In order to reduce or remove the impacts of these factors, children’s must be detected at early ages and included in early intervention programs.

Preschool education supports development of children with normal development and special needs and prepares them for an upper educational step. Therefore, preschool teachers have to know and apply formal and informal assessment methods for children with developmental risk or special needs to benefit from the teaching

program. Applying these assessment methods together will contribute to better assessment of the child and improvement of the individualized education programs.

Thus, candidate teachers must be informed during undergraduate education about special education, inclusion, educational diagnosis and assessment methods. They must be encouraged to gain experience by putting their teaching knowledge into practice.

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Chapter 7

Evaluating Students' Views on E-Book Reading

Fatma SUSAR KIRMIZI

INTRODUCTION

The boost of information within the last century has brought the development in technology and changed the lifestyle of people. Particularly computers and the Internet have become an important part of life at offices and homes. Computers facilitating people's daily tasks in every area has made them part of the education system from elementary education to university, and even courses have been included to teach the use of these devices in educational curricula. The existence of computers has led to reading on a screen and affected habits of reading books differently.

In recent years, there has been an increasing interest on screen reading, which affected individuals' habits of reading to a large extent. In the last ten years, the use of digital media for reading and the emergence of new technological tools have had a significant effect on this situation. Especially students interact with these digital environments to meet their academic needs and can use e-books that are equipped with educational content (Huang & Liang, 2014). E-books have become an increasingly important part of research studies and academic libraries. Although e-books are in an early stage, they have many advantages such as accessibility, usability and low cost. In recent years, readers combine their habits of reading and experiences of knowledge acquisition on these e-books (Springer, 2008).

In a period in which information is produced and spread out depending on the development of technology, individuals' effectiveness of communicating and using language has been subject to change. The language teaching process that starts with pen and paper used to be recorded in printed materials like books, information and qualities towards language skills to be copied and evaluations to be done in this respect. Yet, today, these processes are conducted on electronic screens more rapidly and easily. These developments have brought many changes, and caused a transition from traditional text types to electronic text types. The change in the way how a reading text is presented has caused changes in particularly literacy and consequently established understanding of reading, and brought a new type of reading called screen reading in which a screen replaced paper. Individuals reading screen-based texts as their primary reading environment in the information age have become more important than reading printed texts (Dağtaş, 2013; Başbuğ & Keskin, 2012; Maden, 2012; İleri Aydemir, Öztürk, Horzum, 2013). However, it should not be forgotten that electronic literacy or reading and writing activities are not an alternative but complementary to traditional reading and writing.

According to Cambridge dictionary, e-book is defined as a book that is not written on paper, but published electronically on for example a disc or the Internet (Daradkeh, Selimi & Gouveia, 2012, cited in Öztürk & Can, 2013, 139). An e-book is a computer file type that is specially designed to be read on any kind of computers.

The e-books that are presented to individuals in an electronic environment include a set of additional features. Signs, symbols and visuals towards comprehension are included in printed texts, whereas e-books also include sound, animated visuals, video or interactive links. E-books can be argued to have very different characteristics in many ways.

Screen reading is now a necessity due to rapidly developing information technologies. This is because texts are being transferred to computer pages and published by means of computers. Readers need to read on screens to access new information. In this way, a new type of reading named "screen reading" and new types of readers called "screen readers" have arisen. This type of reading that is spreading in every area has differences compared to reading on paper (Güneş, 2013). In screen reading or reading electronic texts, only a small part of a page, not the whole page, can be seen at a time. Readers see the other parts as they move on and combine the parts. During screen reading, while readers conduct processes of seeing, perceiving and structuring in mind, the brain works harder as it perceives the reading material being seen. Since texts are seen in parts in screen reading, the workload of the brain even gets heavier. This develops cognitive skills, but the work tempo of the mind hardens and mental and physical tiredness increases (Maden, 2012: 3).

Screen reading triggers certain areas of the brain, and develops high order skills such as paying attention, decision-making and controlling complex ideas. Besides, it also contributes to the development of a new type of thinking called "thinking based on screen". This type of thinking is very flexible, dynamic, linear and temporary. Studies show that, at early ages, screen reading affect students' comprehension, reading process and skills in a negative way. To develop reading, comprehension, recall and organising information in mind in students, reading on printed materials should be firstly emphasized. After reading on paper has developed sufficiently, then they should progressively move on to screen reading. To continue this process effectively, screen texts and the reading environment should be carefully selected. Screen readers of the future should be trained by teaching students screen reading techniques and skills (Güneş, 2010). Yet, despite all these recommendations, there are also studies in the literature that focus on the use of e-books in basal reading and writing process in pre-school institutions. Korat and Shamir (2007) conducted electronic storybook reading activities with 64 students aged 5-6. After the basal reading and writing education by using e-books, the study revealed a significant increase in the students' reading comprehension and vocabulary acquisition levels. It is highly probable that such studies will increase in the future.

E-books, when compared to printed books, have certain advantages and disadvantages. E-books can be easily downloaded from the Internet and shared with others via e-mail; besides, they can be stored in a disk and CD-ROM. E-books have many advantages such as being easily updates, mobility, not occupying a place, no efforts or cost for printing, and having audio, video and interaction. Furthermore, it has many superiorities such as taking notes while reading, highlighting, moving between notes, continuing reading where the reader left and looking up unknown words. Yet, despite these conveniences, copyright comes to fore as a problem for e-books that should be solved. The most important minus can be that individuals who are not into technology may not be comfortable in front of a screen and not be able to

focus on the book. Printed books occupy a physical place, whereas e-book devices can store a number of books inside. However, as of today, there is no sufficient research providing an answer on which type of books more fluent and effective reading can be done.

E-books that are produced for children include different multimedia features such as oral reading, sound effects, music and animation. In oral readings, the narrator is accompanied by highlighted lines in the text. In this way, the child who is the e-book reader both listens to the text and carefully follows lines. Moreover, in some e-books, information explaining the text or unknown words is also presented. According to the views of many educators and authors, these eye-catching features and practicality of e-books support children's language and literacy development (Korat & Shamir, 2007; Lefever-Davis & Pearman 2005).

One of the issues that have been discussed in recent years is how people will give up paper. Many individuals claim that paper has a different kind of feature and comfort, and someone cannot read hundreds of pages in front of a screen. However, due to reasons such as thousands of books being able to be stored in tiny devices and not occupying any space, foresights for e-books being an important part of our lives in the future are very common. Yet, it should not be forgotten that the generation that met with television in their 20's will not easily accept screens of computers and e-book devices. On the other hand, the existence of such a group among most readers can be a problem for e-books being accepted and spread in daily life. However, in the near future, whereas there are developments such as education and working at homes, the new generation will not be that dependent on paper. Besides, projects on light and bendable screens (like paper, but not paper) are still in progress (ABB, 2011). Although the use of e-books and the Internet is criticized in popular articles, their use is rapidly spreading. Printed materials may not completely disappear, but the masses who have a reading habit may go through a transition to reading on digital screens. Furthermore, by means of the use of e-books and the Internet, the reading habit of the society can be improved (Cull, 2011).

In the electronic text industry, no international standard has been set yet. In this case, individuals can encounter texts written in new formats every other day, have difficulty in reading and comprehending these texts, or they have to spend extra time to learn reading these texts. Due to not having international standards, individuals even encounter text formats that are not supported by their devices and cannot open these texts at all. Another difficulty that readers experience is that electronic texts can only be used in an electronic environment like computers. Accessing these devices can sometimes be really difficult. There are sometimes hardware and software breakdowns, and in those cases, the quality and speed of the service can be way below the expectation of users. Another issue is that users and teachers do not have the skills that allow them to effectively use electronic books. Without these skills, teachers and students cannot be expected to be effective (Başaran, 2014).

Computers, tablets, iPads, desktop, laptop or palm computers and special e-book reading devices can be used to read e-books. While some of these tools need constant electric energy, some provide users mobility with rechargeable batteries (Işık, 2013). In this way, users can continue reading while they are on the go. They can read e-books by using desktop, laptop or palm computers and special e-book reading devices.

Apart from these, there are tiny computers that are called "e-book device" developed only for reading in the market. Books that are known as e-books are usually in PDF format, but they are converted to a format with a smaller size to be read in mobile phones or similar devices. Although there are e-book file formats in various standards, there are only two formats that are widely accepted. One of these is the "lit" format that is read via the "Microsoft Reader" program developed by Microsoft, and the other is the "pdf" format developed by Adobe and known by those in desktop publishing (ABB, 2011).

Today, the literacy education in classrooms has changed to a large extent due to the new technologies requiring new literacy skills. E-books have great potential in the emergence of new teaching and learning opportunities and combining traditional and new literacy skills. International Reading Association (IRA) also emphasizes the importance of communication technologies and information integration being included in literacy programs. As the first step, alternative text resources such as digital texts and e-books should be re-defined and the new literacy should be combined with the existing reading programs. Traditionally, text was seen as "a passage of print or a slice of speech, or an image". Thus, texts were perceived as written-down messages and symbols in the forms of books, magazines, and newspapers. Today, texts are perceived as much more than written words or images (Larson, 2010). Based on all these issues, the following questions arise: How will the reading comprehension skill and vocabulary development of e-book reader be supported? What will the teachers' position be in this regard? Which students will benefit from e-book reading?

Evaluating the process related to students' reading e-books in electronic environments and conducting a comparative examination with reference to reading printed books can provide effective solutions for the problems experienced in this area. In this study, an examination was conducted on the habit of reading books in only the computer environment in free reading times. Therefore, "e-book reading" was accepted as a phrase for this study. The cases such as doing homework, surfing on the Internet and sharing posts that are done on computers were excluded from the study, and only reading books from an electronic device was examined.

The aim of the study is to identify tenth and eleventh grade students' views and thoughts about e-book reading, and comparatively reveal the differences with the process of reading printed books. The following research questions were addressed based on the aim of the study:

1. What are tenth and eleventh grade students' views and thoughts on reading and using e-books?
2. What are tenth and eleventh grade students' views and thoughts on reading and using printed books?
3. Do tenth and eleventh grade students' views and thoughts about e-book reading significantly differ based on their state of preferring e-books or printed books?
4. Do tenth and eleventh grade students' views and thoughts about e-book reading significantly differ based on grade levels?

METHOD

In this study, mixed method by using quantitative and qualitative research together and correspondingly triangulation design (composite design) was adopted. In

this design, the aim is to complete the weaknesses of a method with the strengths of the other method by combining quantitative and qualitative methods. In studies conducted with this approach, quantitative and qualitative methods have the same emphasis (Yıldırım & Şimşek, 2013, 355). In this way, it would be possible to confirm the findings revealed.

Table 1: Profiles of High School Students Participated in the Study

Questions	Answer choices	Number of students	Total number of students
Distribution of students based on cities	Ankara	322	786
	İzmir	255	
	Denizli	97	
	Kayseri	112	
Distribution of students based on school types	Anatolian High School	398	786
	Social Sciences High School	97	
	Anatolian Teacher Training High School	101	
	Anatolian Religious High School	190	
Do you have any other computer apart from the device provided by the Ministry?	Yes	715	786
	No	71	
Have you ever read a book on a computer before the tablet computer project?	Yes	312	786
	No	474	
How many e-books do you read a month apart from coursebooks (in your free reading time)?	I don't read e-books.	28	786
	I read one e-book.	445	
	I read two e-books	283	
	I read three e-books	14	
	I read four e-books	10	
	I read five e-books	6	
How many printed books do you read a month apart from coursebooks (in your free reading time)?	I don't read books at all.	21	786
	I read one printed book.	243	
	I read two printed books.	223	
	I read three printed books.	148	
	I read four printed books.	80	
	I read five printed books.	38	
	I read six printed books.	13	
	I read seven printed books.	5	
	I read eight printed books.	6	
	I read nine printed books.	2	
	I read ten printed books.	6	
	I read twelve printed books.	1	

Population and Sample

In the study, simple random sampling method that is used in quantitative studies was employed. The cities were randomly selected among those in which the tablet computer project of the ministry is implemented (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2012, 85).

The data were gathered from tenth and eleventh grade students studying at high schools randomly selected from Ankara (4 high schools), İzmir (3 high schools), Denizli (1 high school) and Kayseri (2 high schools). Questionnaires were administered in two or three classes of each high school. The questionnaires to identify the students' views and thoughts related to e-book reading were administered to a total of 786 participants, 436 female (55,47%) and 350 male (44,52%). The student profile information obtained from the personal information form administered to the students beside the questionnaire is presented in Table 1.

For the qualitative dimension of the study, 7-8 voluntary students from each class were administered an open-ended question survey (n=221). 143 of these students were female (64,70%), and 78 were male (35,29%).

Data Gathering Tools

In the study, the "Views and Thoughts on E-Book Reading Questionnaire (VTEBRQ)" and an open-ended question survey were used.

Views and Thoughts on E-Book Reading Questionnaire (VTEBRQ)

For the questionnaire developed by the researcher, items were formed based on a literature review and findings revealed from experts' views. The views of four experts in computer education and four faculty members in the area of Turkish language teaching were consulted on the items. The statements were re-organised based on the experts' suggestions and a piloting was conducted. The piloting for the reliability study was conducted in tenth (134 students) and eleventh (114 students) grades of six different schools in which there was the tablet computer project of the ministry and which were located in the cities of Ankara and İzmir. The evaluation was done on 248 (female=120, male=128) individuals. 121 of these students were studying in İzmir, and 127 in Ankara. According to the results of the initial analysis of VTEBRQ, the KMO value was found as 0,90. Barlett's sphericity test applied to the data revealed a value of Approx. Chi-Square=4080,167. The Bartlett's test was significant at the level of 0,05 ($p=0,000$). Rotated factor analysis was applied on the data, and the items were found to gather under two sub-dimensions. Six items that appeared in more than one factor and were under 0,45 were excluded from the questionnaire. In the questionnaire consisting of a total of 35 items, 24 items in the first factor was placed at the top, and 11 items were placed right below. The factor loadings of the items ranged between .045 and .076. 24 of the items in the questionnaire were positive, and 11 were negative. The first of the two sub-dimensions obtained in the factor analysis was named "easiness" and the second "difficulty". Regarding the 24 items in the first sub-dimension, the lowest factor loading was 0,45 and the highest was 0,76 (Cronbach's Alpha 0,94). For the 11 items in the second sub-dimension, the lowest factor loading was 0,46 and the highest was 0,75 (Cronbach's Alpha 0,92). In the pilot study, the Cronbach's Alpha reliability coefficient for the whole questionnaire was 0,97. In the actual study, the Cronbach's Alpha reliability coefficient was found to be 0,90.

Open-Ended Question Survey

For the open-ended question survey, the literature was firstly reviewed and a form of 10 questions was developed. The feedback of four faculty members as experts in their field and four Turkish language and literature teachers was received. The final form of the survey consisted of 10 open-ended questions. Data triangulation was performed in this study by combining two different data gathering methods and its validity and reliability were tried to be ensured (Yıldırım & Şimşek, 2013, 301).

Data Gathering and Analysis

The data gathered from the Likert type questionnaire was analysed in SPSS 15 package program. As a result of the Kolmogorov-Smirnov normality test (Otrar, 2015) applied to the data, it was found that the data were normally distributed ($p>0.05$). For this reason, apart from descriptive statistics, t-test was also used in the analysis of the data.

The qualitative data were carefully transcribed, content analysis was performed for the analysis and open coding was adopted (Yıldırım & Şimşek, 2013). The codes identified while reading the data were combined into themes (i.e. categories). For the reliability of the codes revealed by the researcher, another faculty members' help was received, and thus, the reliability coefficient of the codes identified in two different times was calculated to enhance the reliability of the study. In the calculation done for each question, the formula "Reliability=Agreement/Disagreement+Agreement x 100" was used, and the agreement percentages of all questions was found to be over 75 per cent. To explain the codes within the themes, tables were formed by combining similar statements and interpretations were made in this respect.

FINDINGS

In this section, the tables related to the codes and themes revealed based on tenth and eleventh graders' views and thoughts on using e-books and printed books are presented and interpreted.

Findings and Interpretations of the First Research Question

Tenth and eleventh grade students' views and thoughts about e-book reading were examined and the codes "easiness of e-books, difficulties of e-books and reasons for liking e-books" were revealed. The theme "views on using and reading e-books" was formed by combining these codes. The student views obtained on the code of easiness of e-books are presented in Table 2.

As is seen in Table 2, the participants stated that e-book reading facilitates accessing information ($n=116/52,48\%$) and finding pages ($n=106/47,96\%$). This is probably because e-books make information portable and accessing information is easier compared to the past. In addition, e-books have find-search functions that make finding information or pages very easy. E-books being scrolled since they are digital devices and texts being easily adjusted in size can be argued to be the reason why 99 of the students ($47,79\%$) thought turning and scrolling pages are easy, and 96 ($43,43\%$) thought they could read the text in a clear size since the screen could be resized as desired. Sixty-two students ($28,05\%$) said that they could instantly search the points they do not understand since e-books have Internet, and 59 ($26,69\%$) students stated that they learn more words while reading e-books.

Table 2: Student Views on the Code of Easiness of E-Books

Student views	f	%
I can find the information I look for easily in an e-book.	116	52,48
I can find the page I look for easily in an e-book.	106	47,96
Turning pages is easier in e-books.	99	44,79
Visuals/images of e-books are clearer.	96	43,43
I can resize the screen of an e-book however I like. In this way, I can read the text more easily/comfortably.	74	34,48
Easy to carry.	67	30,31
Occupy less space.	65	29,41
I can instantly search the points that I don't understand.	62	28,05
I can see the words better.	61	27,60
I can read longer in an e-book.	61	27,60
I learn more words while reading e-books. -The reason is that I can look up the meaning of words.-	59	26,69
-Thanks to the screen backlight- you can read in the dark.	56	25,33
I remember what I read in an e-book more easily.	48	21,71
I can adjust the screen brightness. -So, the screen light doesn't bother me.-	45	20,36
I can comprehend better when I read an e-book.	44	19,96
I can read faster in an e-book.	41	18,55
I think more on what I read in an e-book.	38	17,19
It has more books inside than we can carry in print.	35	15,83
I focus more easily when I read an e-book.	35	15,83
E-books have no difficulty.	31	14,02
Reading e-books can prevent cutting trees.	15	6,78

Fifty-six (25,33%) students asserted that e-books are convenient since they have screen backlight, and at the same time, 45 (20,36%) said their eyes are not disturbed because the screen brightness can be adjusted. To sum up, a majority of the students thought e-books provide easiness in many aspects in a period in which information spreads and is produced depending on technological development. As is also seen in Table 2, the number of the students who said "visuals/images of e-books are clearer" was 96 (43,43%). Some of these students tried to explain the reason for the clarity of visuals. The reasons that the students listed for perceiving the visuals in e-books as clearer are as follows: We can resize images (n=18/3,61%). Images of e-books are colourful (n=16/7,23%). Images are vivid (n=13/5,88%). The image quality gets better if the resolution is high (n=9/4,07%). It is important that images are HD (n=2/0,90%).

Forty-eight (21,71%) students stated that they remembered better when they read an e-book. The reasons of the students in this respect are as follows: The clarity of visuals facilitates my remembering (n=12/5,42%). I can highlight wherever I want by using the marking tools of e-books (n=8/3,6%). I can record the important parts (n=8/3,61%). The physical actions that I perform during reading (e.g. scrolling down via touch screen, holding the tablet, etc.) help me remember (n=1/0,45%). Below are some of the interesting comments regarding the easiness of e-book reading: "E-books are easier. Because they are a technological masterpiece" (50, Male, Tenth Grade). "My eyes get tired while reading books. I feel sleepy. But, tablets are at least

colourful. I mean you can underline with colourful pens" (60, Female, Tenth Grade). "Why would the screen light tire my eyes? Because I can adjust the brightness" (50, Male, Tenth Grade). The students views and thoughts with respect to the code of difficulties of e-books are presented in Table 3.

Table 3: Student Views on the Code of Difficulties of E-Books

Student views	f	%
E-books emit radiation.	81	36,65
E-books tire your eyes.	61	27,60
The backlight of the screen disturbs my eyes.	59	26,69
Pages can slip since it is a touch screen. It can jump to the wrong place.	59	26,69
While reading e-books, you battery can die unexpectedly.	58	26,24
Reading e-books is difficult when you have video games and the Internet on computers.	42	19,00
E-books gets broken down frequently.	40	18,09
They can be harmful for your eyes.	36	28,50
It is impossible to find an e-book version of every book.	35	15,83
I get distracted more often while reading e-books.	30	13,57
I cannot focus while reading e-books.	33	14,93
Sometimes it changes pages by itself and shuts down.	27	12,21
I sometimes have difficulty in understanding what I read in an e-book.	25	11,31
I can not write on it and take notes.	16	7,23
I cannot underline the parts I like.	14	6,33
It is difficult to manage tablets while reading e-books.	13	5,88
It is difficult to turn/scroll pages of an e-book.	9	4,07
E-books can be suddenly deleted.	8	3,61
There is the risk of being stolen.	4	1,80
There is the possibility of dropping it.	3	1,35
E-books are a virtual environment, not sincere.	1	0,45
My fingers get tired.	1	0,45

As is seen in Table 3, the students stated views with regard to the negative aspects of e-books. In today's information age, all the tools that we use to obtain information or reach someone are products of technology. The radiation emitted by these tools cannot be denied. E-books being among these products caused 81 students (36,65%) to state views regarding the radiation emitted by e-books. Sixty-one students (27,60%) and 59 students (26,69%) mentioned backlight of the e-book screens tiring and disturbing eyes. Because e-books are technological devices and tablets have touch screens, 59 students (29,69%) thought it is possible that pages slip and move to the wrong place. Since portable technological devices work with exhaustible energy, 58 students (26,24%) said its battery could die while reading. Forty students (18,09%) mentioned e-books getting broken down frequently, 27 students (12,21%) noted changing pages by itself and shutting down, and 8 students mentioned the difficulty of an e-book being deleted suddenly. Thirty-three of the participants (14,93%) and 30 of them (13,57%) stated that paying attention and focusing was difficult and needed effort while reading e-books. E-books not having the quality of a printed book caused 16 students (7,23%) to mention not being able to take notes on an e-book and 14 students (6,33%) not to be able to underline the parts they liked.

Some of the interesting comments made by the tenth grade students on the difficulties of e-book reading are as follows: "You cannot read it whenever you want because its battery dies, and it is ridiculous to train a generation as computer slaves!" (5, Female, Tenth Grade). "We have difficulty when drawing on it, it doesn't perceive it fully" (45, Female, Tenth Grade). "I sometimes leave the tablet and read printed books" (55, Female, Tenth Grade). The students' views obtained related to the code "reasons for liking e-books" are presented in Table 4.

Table 4: Student Views on the Code of Reasons for Liking E-Books

Student views	f	%
Reading e-books is very enjoyable.	49	22,17
Reading e-books is very entertaining.	37	16,74
Reading e-books is very marginal/extraordinary.	21	5,50
When I am bored with reading, I can play games on the computer.	13	5,88
When you read an e-book. you attract the attention of others.	8	3,61
Reading e-books is more technological.	4	1,80
I experience the privilege of using technology.	4	1.80

In overall, the students stated views on the differences brought by the multi-dimensionality of tablets. Forty-nine (22,17%) students thought that e-books made reading enjoyable and 37 students (16,74%) said it was more entertaining. Based on these views, it can be argued that visual dimension of e-books is better and of good quality. In today's technology age, e-books having an influence of being accepted by others caused e-books to be interpreted as marginal/extraordinary by 21 individuals (5,50%) and this situation being interesting by 8 individuals (3,61%). Besides, four students (1,80%) stated that e-book reading was more technological and experienced the privilege of using technology.

Some of the different comments made by the students on the code of liking e-books are as follows: "I like reading e-books. After all, we need to keep the pace with technology" (50, Male, Tenth Grade). "I don't like it because it is not like a book" (53, Male, Tenth Grade). "I like it because it doesn't tire my eyes like printed books and attracts my interest. E-books are interesting even for those who don't read any books" (60, Female, Tenth Grade). "Tablet is always one step ahead" (122, Male, Eleventh Grade).

Findings and Interpretations of the Second Research Question

Tenth and eleventh grade students' views on reading printed books were examined and the codes "easiness of printed books, difficulties of printed books and reasons for liking printed books" were revealed. The theme "views on using and reading printed books" was formed by combining these codes. The student views obtained on the code of easiness of printed books are presented in Table 5.

As is seen in Table 5, 66 students (29,86%) stated that remembering was easier when reading printed books. The factors that facilitated remembering were listed as follows: I can underline (n=12/5,42%). I can keep the page layout/lines in my mind (n=11/4,97%). Touching pages facilitates my remembering (n=4/1,80%). The visual of the book enables me to remember (n=5/2,26%). Seeing the cover of the book is effective.

The appearance of the book is a remindful factor ($n=4/1,80\%$). I can visualise while reading ($5/2,26\%$).

I can store thing in my mind better ($n=1/0,45\%$). I can use colourful pencils while marking ($n=1/0,45\%$). I can visualise the texts I see and the notes I take when I close my eyes ($n=1/50,45\%$). Sixty-five students ($29,41\%$) stated that they read longer in a printed book, 60 students ($27,14\%$) asserted that they comprehended better, and 36 students ($16,28\%$) said they found the information they were looking for easily. Reading comprehension was mostly emphasised in the students' statements on the easiness of printed books. Some of the interesting comments made by the students on the code of easiness of printed books are as follows: "I can use my Turkish better while reading printed books" (16, Female, Tenth Grade). "In printed books, there are not different buttons or functionalities. It is simpler. Take it and read it" (40, Male, Tenth Grade). "I read printed books faster. I can even finish one whole book in a day.

Table 5: Student Views on the Code of Easiness of Printed Books

Student views	f	%
I remember what I read in a printed book more easily.	66	29,86
I can read longer in a printed book.	65	29,41
I can comprehend better what I read in a printed book.	60	27,14
I can find the information I look for more easily.	36	16,28
I can read faster in a printed book.	35	15,83
It is easier to turn pages of a printed book.	33	14,93
I learn more words while reading printed books.	32	14,47
I can find the page I look for more easily.	30	13,57
I think more on what I read in a printed book.	31	14,02
I focus more easily when I read a printed book.	29	13,12
Printed books don't tire your eyes.	28	12,66
I can take notes on a printed book.	25	11,31
I can underline in a printed book.	25	11,31
I can visualise more easily when I read a printed book.	13	5,88
I can close a printed book more easily.	3	1,35

Table 6: Student Views on the Code of Difficulties of Printed Books

Student views	f	%
I can barely read if the text is too small.	12	5,42
You can resize the texts in a printed book.	16	7,23
I experience more comprehension problems when reading printed books than in e-books.	7	3,16
My eyes get tired if the text is small.	6	2,71
My eyes hurt when I seem too many words at a time.	1	0,45
I feel sleepy when I read a printed book.	4	1,80
Printed books are too heavy.	1	0,45

But I cannot read on a tablet. I can bear it for one hour at most" (45, Female, Tenth Grade). "Reading printed books opens up one's horizon and does not distract readers. Reading is more fluent in a printed book and I become wholly absorbed in it" (51, Female, Tenth Grade). The student views obtained from the examination of the code of difficulties of printed books under the theme "views on using and reading

printed books" are presented in Table 6.

As is seen in Table 6, the students mostly stated views related to their eye health and seeing the text. Twelve of these students (5,42%) mentioned the text being small in printed books, 16 students (7,23%) the text not being able to be resized, six students (2,71%) eyes getting tired because of small text and one student (0,45%) eyes hurting due to seeing too many words at a time.

Some of the interesting views stated by the students on the code of difficulties of printed books are as follows: "My eyes get tired more in paper. It is like the letters are torturing me" (50, Male, Tenth Grade). "We don't want to read printed books since they are too heavy. It is easier in tablets." (66, Male, Tenth Grade). "Printed books are sometimes boring" (66, Male, Tenth Grade). The student views obtained related to the code of reasons for liking printed books under the theme "views on using and reading printed books" are presented in Table 7.

Table 7: Student Views on the Code of Reasons for Liking Printed Books

Student views	f	%
Reading printed books is more enjoyable.	49	22,17
Touching pages/feeling the paper feels better.	47	21,26
Reading is more entertaining in printed books.	43	19,45
-Without giving any reasons- reading printed books is more comfortable.	39	17,64
I can visualise what I read while reading books.	18	8,14
I like reading by turning the pages of the books.	17	7,69
I enjoy the smell of books.	16	7,23
I experience events more vividly when I read a book.	12	5,42
-Without giving any reasons- I can learn better in reading printed books.	5	2,26
I like using special/fancy bookmarks.	5	2,26
Not virtual./Realistic.	4	1,80
I am used to reading printed books since my childhood.	2	0,90
I can feel that I am reading a book.	2	0,90
What you call a book is that of paper.	2	0,90
I can compile a library from the books I read.	2	0,90
Paper books sound nostalgic.	1	0,45

Table 7 shows that the students thought printed books addressed more sense organs than e-books did. Forty-seven of the students (21,26%) said printed books addressed the sense of touch and 16 students (7,23%) the sense of smell, and they thought these made them more willing to reading. Forty-seven students (21,26%) and 43 students (19,45%) stated that reading printed books had entertaining and enjoyable aspects. Eighteen of the participants (8,14%) and 12 students (5,42%) asserted that what is read in printed books could be visualised vividly and more easily in mind. Four students (1,80%) mentioned the printed books being more realistic, two students (0,90%) paper is the element that makes a book, and one students (0,45%) books having a nostalgic sense. The traditional characteristics of printed books attract students' interest to the reading material and also enhance their willingness to read. The numbers of students who said they liked e-books and those who liked printed books being close to each other is a remarkable finding.

Some of the interesting comments made by the students on the code of liking printed books are as follows: "Let's keep reading printed books. I don't want printing

houses to bankrupt” (20, Female, Tenth Grade). “I like reading printed books because books are natural masterpieces and everything is better in its natural way” (51, Female, Tenth Grade). “Reading printed books appeals more to me” (55, Female, Tenth Grade). “I like the sound of turning pages” (168, Female, Eleventh Grade). “The taste of hot tea is better with printed books. Nothing can replace paper books” (152, Female, Eleventh Grade). “They tire eyes less since they include natural text. Books are paper, not glass as in tablets. So, it is more sincere for people” (182, Female, Eleventh Grade). “Printed books are more valuable. Even its smell feels like effort” (106, Male, Eleventh Grade).

Findings and Interpretations of the Third Research Question

The tenth and eleventh grade students were asked whether they preferred reading e-books or printed books in their free reading times. T-test analysis was performed to evaluate whether their states of these preferences caused a significant difference in their views on reading e-books. The t-test results of the views and thoughts on reading e-books questionnaire scores based on states of preferences are presented in Table 8.

Table 8: T-test results of the views and thoughts on reading e-books questionnaire based on the preference variable

Preference	n	\bar{X}	SD	sd	t	p
E-Books	409	117,30	26,39	783	2,34	,020*
Printed Books	376	112,91	26,03			p<0,05 Significant Difference

Table 8 shows a significant different in favour of those who prefer reading e-books in tenth and eleventh grade students' views and thoughts about e-book reading based on their preferences in their free reading times [$t(783)=2,34$, $p<0,05$]. Average scores of the students who preferred e-book reading ($\bar{X} = 117,30$) were higher than the scores of those who preferred printed books ($\bar{X} = 112,91$). Based on these findings, it can be argued that tenth and eleventh grade students had a positive perspective towards reading and using e-books. On the other hand, it should not be disregarded that the students were exposed to education conducted through tablet computer applications and frequently encountered e-books in either their courses or outside classes. This situation might have affected the students' developing a positive attitude towards e-book reading.

Findings and Interpretations of the Fourth Research Question

The tenth and eleventh grade students' views and thoughts about e-book reading were evaluated based on grade level variable and t-test analysis was performed on the data obtained from the questionnaire. The t-test results of the views and thoughts on reading e-books questionnaire scores based on the grade level variable are presented in Table 9.

Table 9: T-test results of the views and thoughts on reading e-books questionnaire based on the grade level variable

Grade	n	\bar{X}	SD	sd	t	p
Tenth Grade	381	110,24	24,72	783	5,21	,000*
Eleventh Grade	404	119,88	26,91			p<0,05 Significant Difference

As is seen in Table 9, tenth and eleventh graders' views and thoughts on reading e-books showed a significant difference based on the grade level variable, $t(783)=5,21$, $p>0,05$. The average scores of the eleventh grade students regarding e-book reading ($\bar{X}=110,24$) were higher than the average scores of the tenth grade students ($\bar{X}=119,88$). Eleventh grade students can be argued to have a positive perspective towards reading e-books. Considering that these students encountered tablet computer applications since ninth grade and used these devices for a long time, it can be regarded as normal that they were more into reading e-books. Obviously, these students living in big cities such as Ankara, İzmir, Kayseri and Denizli might have made it easier for them to meet different technologies other than tablets. Having access to technology can lead to more willingness to read e-books.

DISCUSSION AND CONCLUSION

The qualitative data of the study showed that majority of the tenth and eleventh grade students who participated in the study found reading e-books easier compared to reading printed books. In fact, 31 students stated that e-books did not have any difficulties without showing a reason. Particularly, the technological features of e-books provided great easiness to the students in their reading process. For example, the information easy to find, easiness of turning/scrolling pages, clarity of visuals or being easy to carry were evaluated among the advantages of reading and using e-books. This finding is consisted with previous research. Maden (2012) conducted a qualitative study with Turkish language teacher candidates ($n=100$) and aimed to reveal their views and thoughts on screen reading. Most of the teacher candidates stated positive aspects of screen reading and revealed the easiness of accessing and searching for information while reading. Besides, computers' size and weight being economical was mentioned by most of the students. In a study that used pretest-posttest model and qualitative research method with eighth graders, Yaman and Dağtaş (2013) found that screen reading enhanced the motivation to read. The factors that affected students' motivations were listed as the texts on the screen being more colourful and vivid, and the feature of resizing the texts. Springer (2008) aimed to identify the levels of e-book usage at libraries in five different countries including Netherlands, United States, Germany, Finland and India. The study found that between 52 per cent and 84 per cent of respondents at each institution were aware of the availability of e-books through their libraries. Moreover, between 58 per cent and 80 per cent of respondents at each institution had used e-books at least once, whether through their library or other sources.

According to the study, e-books also had difficulties that disturbed the students. However, the student views on the easiness were in the majority. On the other hand, the number of views on the difficulties of e-books was more than those of the difficulties of printed books. In particular, the students emphasized the following points while listing the difficulties of e-books: E-books emitting radiation, tiring eyes, going to wrong places due to having a touch screen, running out of battery unexpectedly, and video games and the Internet on computers being a distracting factor. Dağtaş (2013) aimed to reveal different subject area teachers' preferences of printed pages and screen reading, and their views on the use of electronic texts in education. He obtained the views of 16 teachers through a semi-structured interview

form. According to the results of the study, a majority of the teachers preferred reading on printed materials rather than on a screen. Besides, the teachers had both positive and negative views on the use of electronic texts in education.

The students who participated in this study liked e-books and printed books equally. "Reading e-books is very enjoyable (n=49). Reading printed books is more enjoyable (n=49). Years of habits regarding reading books are not denied in the acceptance of a set of technological advantages.

Among the tenth and eleventh grade students who participated in the study, the number of those who found printed books easier was in the majority. Some of the reasons for the easiness of printed books include the following: I remember what I read in a printed book more easily. I can read longer in a printed book. I can comprehend better what I read in a printed book. These reasons are mostly related to reading comprehension. However, the students mostly emphasized the technological features of e-books. According to the findings, the students did not find it difficult to read and use printed books. Only the texts being small in printed books made the reading process difficult for the students. The complexity and functionality of e-books were more difficult for the students. Printed books being merely paper but e-books consisting of many technological parts and features might have affected the emergence of this case. The students who participated in this study liked e-books and printed books equally.

The quantitative findings supported the qualitative findings in this study. When the tenth and eleventh grade students were evaluated based on their state of preferring e-books or printed books, a significant difference in favour of those preferring e-books was found. Average scores of the students who preferred e-book reading ($\bar{X} = 117,30$) were higher than the scores of those who preferred printed books ($\bar{X} = 112,91$) to reveal a significant difference. This study was conducted with students who used e-books within their high school education process. Considering that the students used e-books in their courses, it can be regarded as normal that they kept this habit outside their classes. Using e-books in the educational process also creates a tendency for other areas of life. This finding is consistent with the study of Gömleksiz, Kan and Fidan (2013) on teacher candidates. Their study aimed to identify screen reading self-efficacy of 695 teacher candidates from different departments. The results revealed that both male and female teacher candidates had high levels of self-efficacy in the comprehension dimension. Both gender groups stated that they did not have difficulty in screen reading. Yet, the male teacher candidates said they benefited more from the female teacher candidates in screen reading. In the sub-dimensions of comprehension and benefit, a statistically significant difference was found in terms of the department variable.

The students' views and thoughts on reading and using e-books were evaluated based on the grade level variable, and a significant difference was found in favor of the eleventh graders. With respect to using e-books, the average scores of the eleventh grade students ($\bar{X} = 110,24$) were higher than the average scores of the tenth grade students ($\bar{X} = 119,88$) to cause a significant difference. The students who participated in the study used e-books since ninth grade, and this situation continued till tenth and eleventh grade. Eleventh grade students starting to read and use e-books earlier and having more experience in this respect might have affected this difference. In reviews

of the literature, no studies have been encountered which focused on high school students' views and thoughts on e-book reading.

The following suggestions can be offered based on the results of the study:

1. Since e-books are widely accepted in educational institutions where they are applied, their easiness should be utilized.
2. More functional programs (e.g. underlining, highlighting important parts) should be installed to students' computers
3. E-book application -due to its easiness- should be extended to general public, not be only limited to students.
4. The number of books that can be read as an e-book should be increased. While doing this, cautions should be taken to protect copyrights.
5. How effective e-books can be in developing and spreading reading habits in our country where such habits are low should be examined with a scientific perspective.
6. While spreading e-book applications, the easiness of printed books should not be disregarded and their advantages, especially in terms of reading comprehension, should be considered.
7. It should be investigated whether reading comprehension is better in e-books or printed books.
8. This study was carried out with high school students using tablet computers. Yet, the effects of e-book reading should be investigated with groups of different ages, and those using and not using computers, and in terms of different variables.

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Chapter 8

Relationship between the Individual Innovativeness Levels and the Techno-Pedagogical Training Competencies of Teachers' from the Schools Subjected to Fatih Project

Tuğba KONAKLI & İlkay SOLMAZ

INTRODUCTION

Technological and scientific advancements in financial, social, and political fields have an impact on societies. Moreover, these advancements force the societies to change. Schools need to develop an innovative vision in order to meet the demands of the globalized world. They have to follow the changes around them. Teachers, who are the direct implementers of the change in education, should be open to innovations.

Positive beliefs, attitudes, and purposes of employees in relation to adopting changes and implementing them play an important role in achieving what is required by the process of change (Susanto, 2008; Fullan and Pomfret, 1977). Success in working life requires individuals to be open to innovations. Similarly, one of the most important factors influential the success of changes that are intended to be carried out at schools is teachers' openness to change and innovations (Sabherwal, Hirschheim and Goles, 2001; Demirtaş, 2012). Therefore, one of the most important elements of change at schools is teachers' individual openness to learning. Integrating technology into learning and teaching processes has become an indispensable for effective teaching (Pierson, 1999).

The use of technology improves student skills such as scientific research and reasoning and enables students to establish a link between the knowledge and practice (McFarlane and Sakellariou, 2002). Moreover, it contributes to the improvement of teachers' attitudes, confidence, and instructional practices (Sorensen, Twidle, Childs, and Godwin, 2007). Therefore, teachers need to improve their technological knowledge regarding the subject area knowledge as well as their capability of using technology for the education (Demir & Bozkurt, 2011).

Technological pedagogical content knowledge (TPCK) model

Technological Pedagogical Content Knowledge (TPCK) is a theoretical structure developed by Mishra and Koehler in order to characterize the integration of teachers' communication and information tools into learning and teaching activities (Mishra and Koehler, 2006). Pedagogical Content Knowledge (PCK) proposed by Shulman is based on TPCK (Shulman, 1986). This model is based on the interaction of three areas which are pedagogy, technology, and content knowledge (Yurdakul, 2011). By arguing that teachers are experienced in combining content knowledge and pedagogical knowledge, Shulman named this experience as pedagogical content knowledge (Shulman, 1986). Mishra and Koehler extended the view of Shulman regarding content knowledge and pedagogical knowledge combination by adding technology (Mishra and Koehler, 2006). Therefore, Technological Pedagogical

Content Knowledge, in a sense, supports using technology in pedagogical terms (Koehler, Mishra and Yahya, 2007, p. 741).

Rapid changes in today's technology make it compulsory for teachers to use technology effectively and to the purpose in the learning and teaching processes. Technological Pedagogical Content Knowledge is a model which suggests that materials, methods, and techniques employed by teachers in educational environments should be compatible with and supported by technology (Harris, Mishra and Koehler, 2009; Koehler and Mishra, 2008; Koh and Sing, 2011).

Previous research shows that teacher candidates, teachers, and faculty members encounter various problems regarding technology integration (Russel, Bebell, O'Dwyer and O'Connor, 2003). Some of the primary (external) problems encountered in technology integration process are lack of software and hardware, inadequacy of the training given to teacher candidates, teachers, and faculty members, the fact that managers do not support technology use, inadequacy of physical conditions of classes and schools, crowded classes, lack of experts to give technical support, lack of financial sources, and lack of time to prepare a lecture in which technology is integrated. Secondary (internal) reasons are the fact that teacher candidates, teachers, and faculty members have inadequate knowledge of technology integration, low self-efficacy levels, having negative attitudes, and lack of motivation (Ertmer, Addison, Lane, Ross and Woods, 1999).

Innovation starts when an individual or groups in an organization who are to adopt the change consider(s) an idea or a practice new (Rogers, 2003). Individual innovativeness refers to developing, adopting, or implementing an innovation (Yuan and Woodman, 2010). Individual innovativeness can be regarded as a characteristic that involves social and psychological feelings of individuals. Most of the previous studies on innovation analyze innovation within the framework of technological developments (Hsu, Lu and Hsu, 2007). Individual innovativeness is treated as a period of adopting innovation (Martinez and Polo, 1998). Nowadays, this period decreases to a considerable extent owing to rapid technological advancements. When individual innovativeness is taken as a personal characteristic, it can be said that those people who can adapt to new practices may be more successful in carrying out their tasks. In addition to the eagerness for change, innovativeness is also considered one of the most crucial characteristics of entrepreneurial individuals (Herron, 1992). Innovative teachers can improve themselves professionally, increase the number of activities in which students can attend in accordance with the curriculum, experience new methods and techniques to present the knowledge, use diverse methods in order to raise student attendance, and put new skills into practice by changing their habits (Ritchhart, 2004).

A project named "The Basic Education Project" with two phases (The Basic Education Project and II) was carried out by the Republic of Turkey Ministry of National Education (MoNE) over a decade ago to eliminate the obstacles encountered in technology integration, to meet the needs, and to raise the quality of education. However, as every each school, teacher, and student had the opportunity to enjoy the information and communication technologies, the integration of these technologies came to a halt. Therefore, the Ministry of National Education and the Ministry of Transport, Maritime Affairs, and Communication adopted a protocol to put into

practice the FATİH Project “Movement of Enhancing Opportunities and Improving Technology” to improve technology for education in schools and ensure an effective use of technological devices in lessons. The project aims at providing 40,000 schools and 570,000 classes with LCD panel interactive boards and the Internet network substructure. In this sense, the FATİH Project contains five elements which are “Providing Equipment and Software Substructure”, “Providing Educational e-content and Management of e-content”, “Effective Usage of the ICT in Teaching Programs”, “In-service Training of the Teachers”, and “Conscious, Reliable, Manageable and Measurable ICT Usage” (MoNE, 2014).

The FATİH Project aims at equipping not only teachers but also principals, assistant principals, education directors, and educational inspectors with adequate skills and knowledge to use information technology tools and educational content effectively. To this end, Technology and Leadership Forum courses were organized. 3,000 managers and provincial directors from 3,662 schools attended these seminars. Moreover, face-to-face training has been given to 312,193 teachers in total so far in other courses and seminars held within the scope of the FATİH Project (MoNE, 2014).

Fatih Project in-service training courses that have been opened so far can be listed as follows:

- Fatih Project-Preparatory Training (25 hours of local training)

- Fatih Project introductory and informative seminar (8 hours of local training)

- Technology and Leadership Forum

- FATİH Project – Seminar on Conscious and Secure Use of Information Technologies (24 hours of central training / 10 hours of local training)

- Fatih Project Course on Use of Pardus (25 hours of central training)

- FATİH Project – Course on use of technology in education (30 hours of local/central training)

- FATİH Project – Interactive Classroom Management Educator Training Course (30 hours of central education)

- FATİH Project – Network Substructure Seminar (24 hours of central training)

The stakeholders of this project are the Scientific and Technological Research Council of Turkey, the Ministry of Science, Industry and Technology, the Ministry of Development, the Ministry of Economy, the Ministry of Finance, The Republic of Turkey Prime Ministry Investment Support and Promotion Agency, and The Republic of Turkey Prime Ministry Undersecretariat of Treasury. As to the endeavors of this project, a considerable amount of budget and effort have been allocated for the effective use of technology in education. The mere presence of technology does not count anything. Teachers are the ones who will put the curricula into practice by employing educational technologies. In this sense, analyzing the elements that motivate teachers for innovativeness is of importance. Previous studies on TPCK cover the studies developing scales in order to reveal TPCK levels of teachers and teacher candidates, studies focusing on theories in order to conceptualize TPCK, and qualitative studies in which the improvement of teachers and teacher candidates in TPCK are assessed (Yurdakul *et al.*, 2012; Angeli and Valanides, 2008; Angeli and Valanides, 2009; Cox, 2008; Graham, 2011; Kaya, Özdemir, Emre and Kaya, 2011).

This study makes an attempt to reveal the techno-pedagogical training

competency levels and the individual innovativeness levels of the teachers who attended in-service training. Moreover, this study aims at revealing the impact of techno-pedagogical training competency of these teachers on their individual innovativeness levels. To this end, an attempt was made to answer the below-mentioned questions:

What are the individual innovativeness levels of the teachers working in secondary school institutions where Fatih Project was implemented?

What are the techno-pedagogical levels of the teachers working at high schools where Fatih Project was implemented?

Do individual innovativeness levels differ significantly by the teachers' attendance to Fatih Project courses?

Do techno-pedagogical training competency levels differ significantly by the teachers' attendance to Fatih Project courses?

Do the techno-pedagogical training competency levels of the teachers working in secondary education institutions where Fatih Project was implemented have a significant impact on their individual innovativeness characteristics?

MATERIALS AND METHODS

Survey model was used in this study. Survey model is a research approach revealing basic characteristics of research sample and depicting a situation as it is (Frankel and Wallen, 2006; Karasar, 1999). This study is an attempt to detect the techno-pedagogical training competency and individual innovativeness levels of the teachers working in secondary education institutions where the Fatih Project was implemented. Moreover, this study aims at analyzing the relationship between the techno-pedagogical training competency levels of these teachers and their individual innovativeness levels.

Population and Sample

The research population consists of 700 teachers working in 20 secondary education institutions where Fatih Project was implemented in the 2013-2014 academic year in İzmit, Kocaeli. The research sample contains 348 teachers selected through simple random sampling. As to the demographical characteristics of the teachers participating in the research, 164 of the examinees are female (47.1%) while 184 are male (52.9%). The data regarding the branches of the teachers show that 56 of the examinees (%16.1) are Turkish language and literature teachers; 50 (14%) are science teachers; 47 (13.7%) are foreign language teachers; 44 (12.6%) are mathematics teachers; 38 (11%) are social sciences teachers; 31 (9%) are general ability group teachers; and 8 (2%) are information technology teachers. 19% of the examinees are from other branches. The teachers whose ages are from 34 to 44 constitute 65% of the examinees while the teachers whose ages are from 45 and 55 make up 22%. 19% of the teachers are in 22 to 33 age group while 5% are more than 56 years old, and 1% are younger than 22.

Data Collection Tools

In order to collect research data, "Individual Innovativeness Scale" and "Techno-pedagogical Training Competency Scale" were used.

The Individual Innovativeness Scale was developed by Hurt, Joseph and Cook

(1977) in order to analyze innovative characteristics of individuals. Turkish validity and reliability studies of the scale were carried out by Kılıçer and Odabaşı (2010). The scale consisting of 20 items has 4 dimensions which are resistance to change, opinion leading, openness to experience, and risks-taking. In this study, the Cronbach's alpha coefficient for the entire scale was found to be 0.78.

The Techno-Pedagogical Training Competency Scale was developed in order to detect the techno-pedagogical training competencies of the teachers. It contains four dimensions which are design, practice, ethics, and specialization. The "Techno-pedagogical Training Competency Scale" consisting of 33 items was employed in this study. The scale was developed by Yurdakul *et al.* (2012). Scale items are 5-point Likert-type, and they are rated as follows: "I can easily do it"; "I can do it"; "I can partially do it"; "I cannot do it"; and "I definitely cannot do it". In this study, general internal consistency coefficient (Cronbach's alpha) was found to be .93.

Data Analysis

SPSS 20 was used to analyze the collected data. Independent samples t-test was used to detect whether or not there was a significant difference between the examinees in terms of individual innovativeness and techno-pedagogical training competency by attendance to the Fatih Project courses. In order to analyze the relationships between variables, correlation and multiple regression analyses were used.

RESULTS

The arithmetic average and standard deviation values were analyzed in order to reveal the individual innovativeness levels and the techno-pedagogical training competency levels of the teachers. The findings obtained from the analyses are shown in Table 1.

Table 1: Findings concerning the individual innovativeness characteristics and the techno-pedagogical training competencies of the teachers

Factor No	Factors regarding individual innovativeness characteristics	n	\bar{x}	<u>sd</u>
1	Resistance to change	348	2.43	5.22
2	Opinion leading		3.54	3.04
3	Openness to experience		3.94	2.93
4	Risk-taking		3.40	1.57
Factor No	Factors regarding techno-pedagogical training competencies	n	\bar{x}	<u>sd</u>
1	Design	348	3.53	6.56
2	Practice		3.64	7.05
3	Ethics		3.92	3.93
4	Specialization		3.29	3.72

Table 1 shows that teachers' scores of "openness to experience" factor ($\bar{x}=3.94$) are higher than other factor values. This factor is followed by "opinion leading" ($\bar{x}=3.54$) and "risks-taking" ($\bar{x}=3.40$) respectively. The teachers' levels of "resistance to change" ($\bar{x}=2.43$) are low. To sum up, it is possible to say that the examinees generally have individual innovativeness characteristics, are eager to look for and try innovations, and have high levels of agreement with the ideas on this subject. As to techno-pedagogical training competency, the teachers have high competency in "ethics" ($\bar{x}=3.92$) and have medium competency in practice ($\bar{x}=3.64$), design ($\bar{x}=3.53$), and specialization ($\bar{x}=3.29$).

Independent samples t-test was conducted in order to reveal whether or not the techno-pedagogical training competency sub-factors of the teachers working in the high schools where the Fatih Project was implemented vary by attendance to the Fatih Project courses. Table 2 shows the analysis results.

Table 2: T-test results concerning techno-pedagogical training competency sub-factors by attendance to the Fatih Project courses

Techno-Pedagogical Training Competency Sub-Factors	Attendance to the Fatih Project Courses	N	\bar{x}	S	sd	t	p
Design	Yes	234	35.80	5.75	346	3.93	0.039
	No	114	35.09	8.02			
Practice	Yes	234	43.81	6.97	346	0.11	0.66
	No	114	43.72	7.27			
Ethics	Yes	234	23.41	3.96	346	1.07	0.56
	No	114	23.90	3.88			
Specialization	Yes	234	16.56	3.51	346	0.89	0.99
	No	114	16.18	4.17			

Table 2 above shows that scores in the design sub-factor significantly vary among the teachers by attendance to the Fatih Project courses $t(346)=3.93$, $p<0.05$. The score average in the design sub-factor of the teachers who attended the courses is ($\bar{x}=35.80$) while the average for the teachers who did not attend the courses is ($\bar{x}=35.09$). Therefore, it is possible to assert that the teachers who attended the Fatih Project Technology Use courses are better than the teachers who did not at combining pedagogical content knowledge with techno-pedagogical content knowledge, integrating technological tools into learning and teaching processes, and creating an effective instructional design.

Independent samples t-test was conducted in order to reveal whether or not the individual innovativeness levels of the teachers working in the high schools where the Fatih Project was implemented vary by attendance to the Fatih Project courses. Table 3 shows the analysis results.

Table 3 above shows that the scores in the opinion leading sub-factor significantly vary among the teachers by attendance to the Fatih Project courses $t(346)=2.217$, $p<0.05$. The score average of the teachers who attended the courses regarding the opinion leading sub-factor is ($\bar{x}=3.65$) while the average of the teachers who did not attend the courses is ($\bar{x}=3.49$). Therefore, it is possible to argue that the teachers who attended the Fatih Project Technology Use courses stand out in their working groups with their opinions. It is also possible for these teachers to differ from

the others in terms of technology use.

Table 3: T-Test Results Concerning the Individual Innovativeness Levels of the Teachers by Attendance to the Fatih Project Courses

	Attendance to the Fatih Project Courses	N	\bar{x}	S	<u>sd</u>	t	p
Resistance to change	Yes	234	2.44	.649	346	.429	.668
	No	114	2.41	.671			
Opinion leading	Yes	234	3.65	.608	346	2.217	.027
	No	114	3.49	.599			
Openness to experience	Yes	234	3.53	.476	346	1.103	.262
	No	114	3.59	.450			
Risk-taking	Yes	234	3.00	.522	346	.062	.950
	No	114	3.00	.719			

The Relationship between Techno-Pedagogical Training Competency and Individual Innovativeness Characteristics

Correlation analysis was conducted in order to reveal the relationship between teachers' individual innovativeness levels and techno-pedagogical training competencies. Table 4 shows the relevant results.

The analysis results show that there is a significant, medium, positive relationship between the individual innovativeness levels and design ($r=.389$; $p<.01$). The results indicate that the relationship between the individual innovativeness levels and practice is medium and positive ($r=.314$; $p=.01$), and the relationship between the individual innovativeness levels and specialization is significant medium and positive ($r=.325$; $p=.01$). However, the relationship between ethics and individual innovativeness levels is low and positive ($r=.281$; $p=.01$). Evaluating the general relationship between individual innovativeness levels and techno-pedagogical training competency levels of the teachers ($r=.529$; $p=.01$), it is seen that there is a medium, positive relationship.

Table 4: Correlation Analysis Results Regarding the Relationship between the Individual Innovativeness Levels and Techno-Pedagogical Training Competencies

	Techno-pedagogical training competencies	Design	Practice	Ethics	Specialization
Individual innovativeness levels	.529**	.389**	.314**	.281**	.325**

The impact of techno-pedagogical training competency on the individual innovativeness level

Multiple linear regression analysis was made in order to predict the individual innovativeness levels of the teachers based on techno-pedagogical training competency sub-factors, which are design, practice, ethics and specialization. Table 5 shows the analysis results.

The Analysis results show that there is a significant relationship between design, practices, ethic, specialization factors and individual innovativeness scores ($R= 0.543$, $R^2 = 0.295$, $p<0, 01$). All four factors explain 29% of the total variance. It is seen that

there is a medium positive relationship between design and individual innovativeness level ($r=0.42$). However, when other variables are checked, the correlation between the two variables is $r=0.14$. There is a medium positive relationship between practice and individual innovativeness level ($r=0.50$). While other variables are checked, the correlation between the two variables is $r=0.24$. There is a medium positive relationship between ethics and individual innovativeness level ($r=0.41$). When other variables are checked, the correlation between the two variables is $r=0.17$. There is a low negative relationship between specialization and individual innovativeness level ($r=0.25$). However, when other variables are controlled, the correlation between the two variables is $r=-0.13$.

Table 5: Multiple Linear Regression Analysis Results Regarding the Impact of Individual Innovativeness on Techno-Pedagogical Training Competency

Variables	B	Standard Error	β	T	p	Double r	Partial r
Constant	32.315	3.041	-	10.625	.000	-	-
Design	.255	0.97	.179	2.636	.009	.418	.141
Practice	.469	.105	.352	4.485	.000	.504	.236
Ethics	.451	.134	.189	3.366	.001	.407	.179
Specialization	.351	.150	.140	2.344	.020	.249	.126
R=0.543		R ² =0.295					
F (4,342)= 35.701		p=000					

As per the standardized regression coefficient (β), the relative order of importance of the predictive variables for individual innovativeness levels is practice, ethics, design, and specialization. The analysis results regarding the significance of regression coefficients show that design, practice, specialization, and ethics variables are significant predictors of individual innovativeness.

DISCUSSION AND CONCLUSIONS

This study deals with the analysis of individual innovativeness levels and techno-pedagogical training competencies of the teachers working in schools where the Fatih Project was implemented. The purpose of this study is to analyze the effect of techno-pedagogical training competency on individual innovativeness level. The research findings show that the teachers have higher average score in “openness to experience” which is one of the individual innovativeness characteristics in comparison to other dimensions. Accordingly, it is possible to say that teachers like trying innovations, developing new methods to overcome the problems, and looking for new methods. In other words, the teachers are excited about authenticity in opinions and behaviors. They have an attitude open to innovations. This result of the present study is consistent with the results of previous studies (Kösterelioğlu and Demir, 2014; Öztürk and Sumak, 2014).

The research findings demonstrate that the techno-pedagogical training competency levels of teachers are above the medium level. Previous studies report similar results, too (İşigüzel, 2014). Moreover, it is clear from the findings of the present study that the average score obtained in “ethics” dimension, which is one of the techno-pedagogical training competencies, is higher than the scores obtained in other dimensions. This result is supported by the results of previous studies (Çuhadar, Cem, Bülbül and Ilgaz, 2013). In this sense, it is clear that the teachers comply with ethical principles in obtaining the information which they use in subject area teaching

through technology, in technology-based learning environment, in directing students to digital sources, and in all phases of the process in the technology-based learning environment.

Based on the research results, it is possible to argue that in Turkey, information technology teachers should play more active roles and should be encouraged to guide other branch teachers in the Fatih Project which has been being implemented since the 2011-2012 academic year. Thus, information technology teachers can be more helpful as “agents of change” to convey this technology and education integration to the schools successfully and accelerate this process.

The research findings indicate that there is a positive relationship between the dimensions of the techno-pedagogical training competency scale and those of the individual innovativeness scale. Therefore, there is a relationship between the inclinations of the teachers to carry out new things pertaining to their branches and their competency of reflecting these new practices on teaching activities by use of technology. Moreover, the result that techno-pedagogical training competency dimensions predict individual innovativeness may imply that promoting the techno-pedagogical training competencies of teachers may raise their individual innovativeness levels. Finally, from the perspective of educational organizations which have the primary responsibility to support and carry out the change, promoting the techno-pedagogical training competency of teachers may raise their individual innovativeness levels.

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Chapter 9

Perceptions about the Nature of the 4th Grade Elementary School Students in Social Studies Education

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INTRODUCTION

People called and perceived the nature sometimes "the mother of natural resources" or "essence of life", sometimes the place of economic activity "wide and endless consumption stage", sometimes "enemy" to be reduced to submission, sometimes "supreme protector" that we take refuge under the wings, sometimes "punitive killer" with a string of natural disasters, sometimes "untouched and clean," or "terrifying and untamed". The Turkish Language Association described it as "Nature is constantly evolving in accordance with its rules and all the biotic and abiotic, assets" (Yardımcı, 2009: 3).

Nature is generally considered as a place to live at peace and to relax for living things. Nature is a place to talk to living beings. Nature comprises largely untouched areas by the civilization, parks and untouched areas. People as a part of the natural world, are considered as an environmental thinking of human being (Burgess and Mayer-Smith, 2011: 29).

Our relationship with nature is formed by our perceptions of the role of human in nature. People's perception of nature is related with thoughts, beliefs, how to perceive the environment and how to define the relationship between human and nature (Kutru and Soran, 2012: 1).

Today, technological developments and industrialization suppressed the earth. Humankind who thinks earth belongs to themselves started to consume the nature. . All the impacts in the ecological cycle of the world affect human life. Pollution of the water, the air and food reveals irreversible damages. However; one of the humanity value is to protect the nature and benefit properly from it (Özhancı and Yılmaz, 2015: 40). As a result of threats to the nature education of nature will create important opportunities in terms of recognizing, protecting and creating awareness. It will be the right step to begin the education of nature from the children (Köşker, 2013: 342).

Education of nature and environment out of school will help students to establish a contact with the natural environment directly and perceive the different dimensions of the natural environment. Besides; education of nature at out of school provides detailed information for cause-effect, and living and non-living relationship in natural environment (Erdoğan, 2011: 2224). Nature is a quite large system which includes living and non-living elements. Accordingly, the education of nature has multidisciplinary character as suitable for this structure. Even though there are no courses in the name of education of nature or education of environment in the elementary schools, but the subjects about nature and environment are distributed in several courses (Birinci, 2013: 15).

Education of nature for children must cover the order of events, harmony, diversity, ecological cycles, food chain and biodiversity in nature. Thus, child can understand that he/she is the part of nature.

The key factor in this education is the teacher. The teachers who are sensitive to environment, have positive attitudes and, conscious, are effective to improve this process (Keleş, Uzun & Varnacı, 2010: 386).

The Aim of the Research

The basic aim of this research is to examine the perceptions of 4th Grade Elementary School Students about the nature. In the direction of this basic aim, both views and metaphors for the nature of 4th Grade Elementary School Students were analyzed. In the direction of these aims the below questions were answered:

What are the metaphors that 4th Grade Elementary School Students have about nature?

How can these metaphors be summarized under the conceptual categories in terms of common characteristics?

Does the conceptual category of students vary in terms of gender?

What are the views of 4th Grade Elementary School Students about nature, education of nature and for natural area?

What are the views of 4th Grade Elementary School Students about protecting the nature?

What are the views of 4th Grade Elementary School Students about the living creatures in nature and the usage of the nature?

What are the living and non-living things that 4th Grade Elementary School Students used in the pictures of nature?

METHOD

In this section, detailed information is given on research design, studied group, data collecting tools, gathering of data and analyze of data.

The Design of Research

In this study, *"the design of phenomenology"* which is suitable for the nature of research from qualitative research designs is used. The design of phenomenology focuses on phenomenons which we aware of but we have no detailed understanding. Phenomenons can confront to us in various forms just like events, experiences, perceptions, tendencies, notions and situations. But this acquaintance does not mean we completely understand the phenomenons. The phenomenology creates a ground for research for the studies which aimed at search the phenomenon are not completely strange to us at the same time we cannot comprehend (Yıldırım and Şimşek, 2013: 78). In this study the perceptions about nature of 4th Grade Elementary School Students are examined.

The Study Group

Criterion sampling which is one of the intentional sampling is used to determine the participants. In this criterion sampling the main thing is to study the situations which provide some predetermined measures. Measures can be created by researcher; or a measure which is prepared earlier can be used in this

sampling method (Yıldırım and Şimşek, 2006). The measure in this study is to determine 4th Grade Elementary Schools Students who continue their education in 2014-2015 academic year. 33 4th Grade students in Artvin and 32 students in Eskişehir attending the school in 2014-2015 academic year make up study group of research. The distribution of students according to gender and school factors is shown in Table 1.

Table 1: Findings about the study group

Practice School	Gender	<i>n</i>	%
Elementary School	Female	20	30.7
	Male	13	20.0
Secondary School	Female	20	30.7
	Male	12	18.6
Total		65	100

Collecting of Data

All students were asked to complete the sentences "*Nature is like..., because...*" in order to reveal the metaphors about notion of nature.

In the direction of this aim a blank plain paper with this inscription is written on the top of the page was given to each student and asked for them to put into words their thoughts using this inscription and focusing only one metaphor and to draw picture and cartoon. The half established form interview was arranged with students in order to examine the views of students about notion of nature in the study group. Student statements were recorded by taking notes and recording during the interview. The interview was supported with follow-up questions except the basic questions at the end. The data which obtained was divided into categories and codes by decoding. Besides; giving plain paper to students were asked for them to draw nature pictures in their imagination.

Data Collection Tools

The interview is one of the major data collection tools in the research of phenomenology (Fraenkel and Wallen, 2008; Yıldırım and Şimşek, 2006). The half-established interview form which was improved by author was used in the research. The questions in the form of the interview were prepared carefully. In this context, as creating interview form that should be careful to ask understandable questions and avoid the person to direct the topic and not asking open ended questions (Kurt, 2013). Advice and opinions of expert and teacher were taken in the process of creating questions of the interview form. Some new questions were added on the interview form according to direction of the interview. The personal information like gender and income as well as the basic questions were asked for the students who attend the research. Data Collection Form was used on the purpose of determine related metaphors on the notion of nature in the education program of the 4th Grade Social Studies Students' opinions in the way of metaphors.

The Analyzing of Data

Descriptive analysis and Metaphor analysis which are one of the methods of Qualitative research which appropriate the design of phenomenology were used to analyze the data. The data obtained from the descriptive analysis were interpreted according to predetermined themes. The descriptive analysis consists of the four stages such as, descriptive analysis, handling to data according to thematic outline, defining the findings and interpreting the findings (Yıldırım and Şimşek, 2006). The suitable codes were created and tabulated by dividing data to the categories in the three stages. The categories which were created according to the obtained data were determined in the way that the nature, the education of nature, the protecting the nature, the livings in nature, the usage aims of the nature, the nature events, the reasons of damaging the nature.

The data obtained in the way of metaphors in the research were solved like the analysis of metaphor. In this stage, every metaphor is separated to pieces by using the techniques of "*analysis of metaphor*" and "*analysis of content*" (Yıldırım and Şimşek, 2013) and is analyzed in terms of the common features or the similarities with the other metaphors. For this purpose the metaphors which were written by students were analyzed as reviewing one by one in terms of the every metaphor image (1) the topic of metaphor, (2) the source of metaphor and (3) the relationship between the topic and the source of metaphor.

The analyzing and interpreting of the metaphors which improved by the students were analyzed into four stages. These are: 1. The Stage of Naming, 2. The Stage of Classification, 3. The Stage of Improving Category, 4. The Stage of Providing Reliability and Validity.

The Stage of Naming

In this stage, the Table of metaphor which created by students was created. In this stage metaphors were determined by examining the answers of students. Metaphors (for example; world, home etc.) written on the forms by students were coded.

The Stage of Classification

In this stage, every metaphor is separated by using the techniques of "analyze of metaphor and analyzing of content" (Yıldırım and Şimşek, 2013) and every metaphor was analyzed in terms of proximity and common features comparing with other metaphors. Total 25 Metaphors obtained from 33 Forms which accepted valid in our research, these metaphors were ranked according to frequency.

The Stage of Category Improving

In this stage, the common features about notion of nature which created by students were analyzed. The six different notional categories were generated by associating every metaphor with a particular theme.

4. The Stage of Providing Reliability and Validity

In this study, the obtained research data and the results reached with these data were stated and the metaphors which categorized in the stage of providing reliability were examined by applying expert opinions.

FINDINGS AND COMMENTS

The generated metaphors as a result of data obtained from the research and the Tables consisted of the six notional categories which consisted of these metaphors and the Tables including categories and codes which generated from as a result of the data obtained from the interview and the findings about the nature pictures those students drawn.

Table 2: The metaphors produced by students about notion of nature

Metaphor	Frequency	Percentage
1. World	5	0.13
2. House	5	0.13
3. Life	3	0.08
4. Live	2	0.05
5. Home	2	0.05
6. Everything	1	0.02
7. Water	1	0.02
8. Chain	1	0.02
9. Hand	1	0.02
10. Jupiter	1	0.02
11. Life Source	1	0.02
12. Human	1	0.02
13. Friend	1	0.02
14. Animal	1	0.02
15. Community	1	0.02
16. Our Body	1	0.02
17. Family	1	0.02
18. Parents	1	0.02
19. A Nice Picture	1	0.02
20. Happiness	1	0.02
21. Twitters	1	0.02
22. Livingness	1	0.02
23. Long Seas	1	0.02
24. Green Color	1	0.02
25. Diversity	1	0.02
Total	36	100

The Findings About the Metaphors Produced by Students

The metaphors improved by 4th grade elementary students about notion of nature in study group and the six different notional categories which improved in the way of these metaphors and the features of every category were introduced supporting the example metaphors produced by participants.

The participant 33 students produced total 25 metaphors about notion of nature. The constantly expressed metaphor is the world (f 5) metaphor repeated by 5 students. The metaphors improved by participant students about notion of nature were given consisted of six different notional categories under the titles below with the tables and were analyzed and interpreted:

1. The Nature as wider scope 2. The Nature as Our Living space 3. The Human and nature as a part of Human 4. The Nature as Host 5. The Nature

Created by What We Have Done. 6. The Nature as Beauty

The Notional Categories

The Nature as wider scope

This category consisted of the student statements which perceive about notion of nature extensively. The nature category as wider scope consists of the most metaphor compared with the other categories. In this category total 6 metaphors which given details in the Table 3 were analyzed. The definitions in this category are given below.

"Nature is like the world because the nature consists of all the beauties inside; us, trees, flowers, animals..." (S-15).

"Nature is like the world because the world involved in the nature is the most beautiful and the biggest part of nature (S-18).

Table 3: The nature as wider scope

Metaphor	Frequency (f)	Percentage (%)
World	5	0.5
Everything	1	0.1
Water	1	0.1
Chain	1	0.1
Hand	1	0.1
Jupiter	1	0.1

2. The Nature as Our Living Space

This category consisted of the student statements which perceive the nature as living area. There are 4 metaphors produced by 7 students in this category given details in the Table 4.

Table 4: The nature as our living area

Metaphor	Frequency (f)	Percentage (%)
Life	3	0.4
Live	2	0.2
Life Source	1	0.1
Variety	1	0.1

The most recurrent metaphor (f3) is the life metaphors which stated by 3 participants one by one. Some statements in this category were given in table 4.

"Nature is like the life because the nature is in life. There is greenery, forest, tree, winter and human in this life" (S-5).

3. The Human and Nature as a Part of Human

This category has consisted of the student statements which the notion of nature as an integral part of human. There are 5 metaphors produced by 5 students in this category given details in the Table 5. The metaphors were determined equally by the participants. The statements in this category are given below.

"Nature is like the human, because the living and non-living creatures are like the human in the nature" (S-32).

Table 5: Nature as a part of human and human

Metaphor	Frequency	Percentage
Human	1	0.2
Friend	1	0.2
Animal	1	0.2
Community	1	0.2
Our Body	1	0.2

4. The Nature as Host

This category has consisted of the student statements, which perceive the notion of nature hosting to people as a setting. There are 9 metaphors produced by 9 students in this category given details in the Table 6. The most recurrent metaphor is (f 5) the home metaphor which stated by 15 participants. Some statements in this category were given below.

"Nature is like home. Because it hosts us. For example; it gives fruit and oxygen to us" (S-29).

"Nature is like home. Because all trees, plants, animals take shelter here and consider it as home." (S-2).

Table 6: The nature as host

Metaphor	Frequency (f)	Percentage (%)
House	5	0.5
Home	2	0.2
Family	1	0.1
Parents	1	0.1

5. The Nature Created By What We Have Done

This category consisted of student statements which perceive the notion of nature and our actions good and bad toward the nature. Details of 4 metaphors produced by 4 students in this category are given in Table 7. The metaphors were expressed equally by the participants in this category. Some statements in this category can be seen in the table 7 below.

Table 7: The nature created by what we have done

Metaphor	Frequency (f)	Percentage (%)
A Nice Picture	1	0.25
Happiness	1	0.25
Twitters	1	0.25
Liveliness	1	0.25

The Nature as Beauty

This category consisted of student statements which perceive the notion of nature and our actions good and bad toward the nature. There are 2 metaphors produced by 2 students in this category and details given in Table 8. The metaphors were expressed equally by the participants in this category. Some statements in this category are given below.

"Nature is like long seas. Because how so far you go, you cannot stop. It is endless. You will be free" (S-16).

Table 8: The nature as beauty

Metaphor	Frequency (f)	Percentage (%)
Long Seas	1	0.5
Green Color	1	0.5

2.2. The Findings about Student Opinions

The data obtained from the result of research is shown in the tables below. Tables contain the categories, student opinions, the codes and the findings about nature pictures drawn by the students. The abbreviation and the numbers given in the end of the student statements represent the students. Student statements about the definition of nature notion are shown in the Table 9.

Table 9: The findings about the definition of nature notion

Category	Codes	<i>n</i>
Nature	A place many creatures live	11
	A place is formed by itself	6
	Green area	5
	Life area	4
	A nice place	3
	The place non living creatures live	1
	Nature	1
Total		31

The students in study group described notion of nature as the place where many creatures live ($n=11$), a place is formed by itself ($n=6$), green area ($n=5$), life area ($n=4$) and a nice place ($n=3$) (Table 9). Some examples about nature notions of students are given below.

"Nature is a place that many livings live like very green beauties, tree, flower, horse and etc." (S-2).

"Nature is aplace which found many animals and trees. Nature is life for human. Nature is not just animals and trees. Nature is environment fully covered a lot of trees" (S-9).

"Nature exists itself. Many things are living in the nature. Nature is the place composed of by living things (S-10).

"Nature is the life area which has trees, flowers, herbs, animals, plants" (S-12)

"Nature is the place that many things are living on and consists of bugs, flowers, trees and herbs. Nature means nature" (S-17).

"These are green areas which provide human life" (S-27).

The students in the study group described the notion of nature as the living place of plants, animals and humans. It has also untouched, generally green areas.

Student opinions about the definition of nature education are shown in the Table 10. The students in the study group perceive the education of nature as the education of nature protecting ($n=8$), make human conscious about the nature ($n=4$), the education of healthy life ($n=3$), endear nature ($n=2$) and teach how to survive ($n=2$).

Table 10: The findings about the notion nature

Category	Codes	n
Nature Education	Nature protecting education	8
	Make human conscious	4
	Healthy Life	3
	Endear the nature	2
	Teaching how to survive	2
Total		19

"The nature education is the educations given in the aim of popularize the nature and protecting it" (S-21).

"The nature education is used to teach what is going on in the nature and which creatures are living in the nature" (S-10).

"The nature education is to prevent the pollution of the natural environment. It is not to think that nature is a dump" (S-9).

According to student perceptions the education of nature is an education in the aim of popularizes the nature, prevent the pollution of nature, healthy living, protect the nature, make live the nature.

Findings about the precautions of polluting the natural environment are shown in the Table 11. The most of students in the study group have the idea of nature can be protected by not throwing garbage (n=16) to the environment, not damaging the plants (n=14). Students in the study group think that taking precaution such as increasing the flora (n=9), creating recycle system (n=4), making people conscious (n=3) are important. Some student statements in the study group are shown in table 11 below.

Table 11: The findings about the necessities for protecting nature

Category	Codes	n
Protecting the Nature	Not to throw garbage to the environment	16
	Not to harm the plants	14
	Enrich the flora	9
	Creating the recycle system	4
	Make people conscious	3
	Not to use chemical product	2
	Endear the nature	2
Total		50

"Picking up the garbage which thrown to the ground, warning people who throw garbage around, not to throw garbage around and throw garbage to the garbage bin" (S-2).

"Paying attention to the recycle and stopping use coal, gas etc. fuels solar and wind energy system must be used" (S25).

"Joining various non-governmental organizations like TEMA we have to plant tree and sapling" (S-26).

When the precautions should be taken for protecting the nature are examined we can see that the students in the study group have the most important opinion that duty is on the human.

Table 12: The findings about living and non-living creatures in nature

Category	Theme	Codes	<i>n</i>
The Creatures in Nature	Living Creatures	Animal	17
		Plant	13
		Human	9
	Non-Living Creatures	Soil	9
		River	7
		Stone	6
		Air	6
		The Sun	3
		Water	3
		Stuff	2
		Home	2
Total			81

Findings about living and non-living creatures in the nature can be seen in Table 12. The students in the study group give examples to animals (n=17) living in nature like bird, bug, cat, dog, snake, bear, rabbit, fish, frog; about the plants (n=13) tree, flower and grass. Also they give non-living examples such as rock (n=6), river (n=7), home (n=2), air (n=6), soil (n=9), the sun (n=3), water (n=3).

Findings obtained from student opinions about usage purpose of the nature are shown in the Table 13. When the Table 13 is examined the students in the group use the nature for the purpose of having fun (n=9), taking fresh air (n=8), having rest (n=7), having a picnic (n=7), make various wares (n=6), travelling (n=5), farming (n=4) and finding peace (n=3). Student statements in the study group about the intended use of nature are given in the Table 13 below.

Table 13: The findings about usage aims of the nature

Category	Codes	n
Usage Aims of the Nature	Having Fun	9
	Taking fresh air	8
	Resting	7
	Have a picnic	7
	Make a ware	6
	Travelling	5
	Farming	4
	Finding peace	3
Total		49

"The nature can be used in the aim of having a picnic, farming and eating" (S-2)
"The stuffs like paper, pencil and desk are made of trees in the nature" (S-11).

"The nature is used for taking oxygen, having fun and having rest" (S-28).

The reasons of damaging the nature are shown in the Table 14. When the Table 14 is examined the students in the study group have opinions about the reasons of damaging the nature like destroying the flora (n=16), chemical wastes (n=9), polluting the environment (n=8), unconscious actions of people (n=6), killing animals (n=5), population growth (n=4), harmful gases (n=3) and urbanization (n=3).

Table 14: The findings about the reasons of damaging the nature

Category	Codes	n
The Reasons of Damaging the Nature	Destroying the flora	16
	Chemical wastes	9
	Polluting the environment	8
	Unconscious actions of people	6
	Killing animals	5
	Population Growth	4
	Harmful Gases	3
	Urbanization	3
Total		54

"The population growth causes the reduction of the living places, cutting down the trees and polluting the nature" (S-27).

"Unnecessary cutting down trees causes damaging the nature" (S-26).

"Pesticides, batteries and wastes cause damaging the nature" (S-21).

"Thrown garbage's by people to the nature instead of garbage bin cause pollution of environment" (S-19).

"Harmful gases from cars and chimneys cause pollution of the nature" (S-11).

When the student opinions are examined we can see that the most important reasons of pollution of the nature are human, pesticides and factories.

Findings obtained from the student opinions about the natural events occurred on earth is shown in the Table 15.

Table 15: The findings about the nature events happened on earth

Category	Codes	n
Natural Events	Earthquake	14
	Flood	12
	Avalanche	10
	Landslide	7
	Erosion	6
	Forest fires	5
	Tornado	3
	Volcanic Eruption	3
	Drought	2
	The development of plants and animals	1
Total		53

Most cited examples of natural phenomena are: earthquake (n=14), flood (n=12), avalanche (n=10). Some statements about natural events happened on earth are listed below:

"There are natural events like flood, earthquake, landslide and avalanche among the natural events happened on earth" (S-11).

"Spontaneously happened events like earthquake and avalanche are natural events" (S-20).

"Sprouting and blooming of plants and chicks come from the eggs are natural events" (S-25).

Table 16: The related findings living and non-living elements used for nature pictures

Category	Theme	Codes	<i>n</i>
Nature Pictures	Living Creatures	Tree	17
		Flower	16
		Grass	12
		Bird	7
		Rabbit	5
		Human	4
		Fish	4
		Butterfly	4
		Cat	2
		Snake	2
		Giraffe	2
	Non-Living Creatures	The Sun	13
		The Sky	11
		Cloud	9
		River	7
		House	2
		Bridge	2
Total			119



Figure 1, 2: Nature pictures made by students

Findings related the objects used in nature pictures are shown in the Table 16. The students in study group used many living and non-living objects in the nature pictures they made. The most used living objects are tree ($n=17$), flower ($n=16$), grass ($n=12$) the non-living objects are the sun ($n=13$), the sky ($n=11$), cloud ($n=9$) in nature pictures of the students (Fig. 1, 2, 3 and 4).

Tree, bird, river, the sun, the sky and grass are common objects used in the nature pictures 1 and 2. The living objects used in the nature picture 3 are tree,

flower and grass, the non - living objects are the sun, river and cloud. The home object was used only in picture 4.

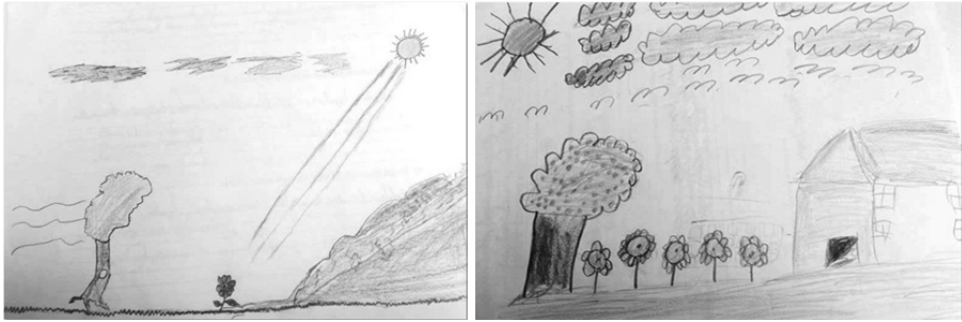


Figure 3, 4: Nature pictures made by students

4. DISCUSSION AND CONCLUSION

This study aimed to find out perceptions of elementary school 4th grade students about notion of nature which is important in social sciences.

This research reveals that the students have different metaphors and opinions about notion of nature. Notional categories determined with the help of metaphors. Some results are important and noteworthy. The students used 25 different metaphors while they stated their nature perceptions. The students pointed out that it is hard to indicate the various metaphors about nature with only one metaphor. When the metaphors produced by the students according to the findings during the research were examined. The most applied metaphors are: world (f: 5) and home (f: 5). When the all metaphors are examined it can be said that the 4th grade students have a basic conscious about nature.

Köşker (2013) stated that the elementary students have defined the nature as the green places, plants and animals live. Dervişoğlu and Kılıç (2013) state that college students used water and flora notions as a part of the nature in the research they performed with college students.

According to the findings as a result of interviews the students indicated the nature as beautiful, green, living and non-living things exist and a place consisted of untouched by human. They also indicated that the education of nature helps to love and protect it.

The majority of examples given by students about natural disasters are earthquake, landslide and avalanche. It can be interpreted the students give earthquake and avalanche as natural disasters because these occur in Turkey.

The students demonstrated the reason of damaging the nature is people oriented activities such as chemical wastes, garbage, killing animals, population growth, and urbanization. This is an important finding. Özdemir (2010) have reached the result that secondary school students have tendency of responsible behavior to environment. According to the findings obtained from as a result of the interview the elementary students have sensitive opinions toward nature. The 4th grade elementary school students in the study group have improved different solutions and suggestions for the problems in nature. The students generated solution suggestions in the direction of protecting nature such as to make people conscious, like the nature, creating recycle

system and not to contaminate the environment.

Kutru and Soran (2012) reached the result that the students generally use the perceptions of nature for having fun and having rest at most. The 4th grade students in the study group used the nature spiritually in the aim of having fun, resting, taking fresh air, finding prosperity and materially in the aim of making ware, and farming. The students have used plant and animal objects more than human object in the nature pictures they made.

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Chapter 10

A Multifaceted Approach to Social Development in the Preschool Years

Pınar AKSOY & Gülen BARAN

INTRODUCTION

Social development means individuals' acquisition of behavioral patterns compliant with universal values and principles while learning values and systems of a certain social culture (Aydın, 2007). In other words, it means an individual's development of sensitivity towards pressures and difficulties of group life, his capability to communicate with persons in his group or culture and to display behavior that can be accepted by the society (Aral *et. al.*, 2001a). Social development explains a phase starting with the birth of the individual in a broad sense, and daily behavioral development in a narrow sense (Yapıcı & Yapıcı, 2005). During the process of social development, the individual learns the rules, social roles and expectations of the society, of which he is a member, and he progresses to become an active member of it (Türküm, 2000). Socially developed people establish more positive relationships with the persons in their environment, and they become more successful. Furthermore, these individuals are less likely to use drugs and receive disciplinary punishment (Hawkins *et. al.*, 1992). Besides, individuals who have a healthier social development adapt to the society more easily and attempt to develop and enrich their social environment. Similarly, they can establish a balance between their own needs and desires and those of the society (Gülay-Ogelman, 2012). Therefore, it is successful social development that enables the individual to turn the necessity of living with others into a source of shared happiness and trust (Aydın, 2007). An examination of social development process shows that the preschool period, which covers the 0-6 age group, is particularly important for social development. In the preschool years, the child goes through experiences of socialization firstly in the family and then in the school, and he structures his social development. The experiences of this period form the basis for the social relations in the following periods and help the child perceive the human relations and learn how to behave in society (Ekinci-Vural, 2006). Therefore, the basic knowledge, skills and habits that can be acquired in the preschool years are powerful enough to shape the social and emotional life of the child as well as his educational life. Preschool education, which should be provided with a serious, scientific and systematic approach without leaving it to chance, is considered as the most vital step of the system of education (Ari, 2005). In this context, it is considered important to know the social development characteristics of preschool children and to review the factors that affect social development.

SOCIAL DEVELOPMENT IN PRESCHOOL YEARS

Cultural characteristics of the child's family and social environment and the educational-social opportunities offered to the child have an impact on his social

development. On the other hand, there are also social development characteristics and skills which are universal in terms of development principles and development periods (Aksoy, 2014). Knowledge about social developmental stages is important in detecting the insufficiencies and eliminating the deficiencies. Children's social developmental characteristics and skills by age can be explained in general terms as follows:

Social Development in 0-2 Years

In the first two years of his life, the child discovers the world through his motor movements and senses and starts to understand his environment and recognize the culture through communication with his caretaker. Until his first age, he is dependent on other people and especially on his mother. The new born child makes his first social contact with his mother and starts his first social relationship through his need for mother in order to continue his existence. In around the second months, he starts to smile at his mother or father. In this period, he smiles when he gets pleasure and cries when he feels pain (Smith, 1998; Yavuzer, 2005; Aydın, 2007; Smith *et. al.*, 2012). Two months babies start to pay attention to the differences between faces and the differences in facial expressions. While they cry in order to show their physical needs at around the fourth months, they may cry at the sixth months when they throw their toys away from their reach and they start to use the behavior of crying as an emotional reaction (San-Bayhan & Artan, 2007; Kostelnik *et. al.*, 2012).

Besides, children between one and six months old look at the faces of the people near them, watch others' movements and communicates with other by making sounds. Similarly, they recognize the difference between humans and objects at around the third months and start to give various reactions and to socialize. In order to continue his intimacy with the person who cares for him during the three months following his birth, the child starts to follow him/her, smile at him/her and want to go into his/her arms. After the third months, the child can distinguish between different faces while he starts to distinguish facial expressions reflecting different emotions at fifth-sixth months (Sharman *et. al.*, 1995; Yavuzer, 2005; San-Bayhan & Artan, 2007; Newman & Newman, 2012). Between the third and sixth months, they start to show more interest in the familiar people than the unfamiliar people, and they start to desire physical closeness and develop attachment to objects between the sixth and ninth months. Furthermore, when they are four and a half or five months old, they start to recognize other babies, to smile at them, to be interested in them when they are crying, and to give different reactions to smiling and scolding. Similarly, they can distinguish familiar faces and sounds when they are six months old. While they give positive reactions to the familiar people, they cry in presence of unfamiliar people and they give reactions in compliance with the happy or unhappy expressions on the face of their mother. Moreover, the six months old child thinks that his mother is still there even if she disappears from his sight. At around one year of age, the concept of object continuity develops, and the child starts to search for the objects wherever they disappear (Smith, 1998; Oktay, 2000; Yavuzer, 2005; Newman & Newman, 2012).

When the child is seven-eight months old, he can distinguish the differences between the family members and the strangers and feels embarrassment and discomfort when a stranger approaches. Similarly, when they are left alone in an unfamiliar place or with an unfamiliar person, they show a strong resistance

(Sheridan, 2005; Smith *et. al.*, 2012). While they try to imitate others' sounds, simple behaviors and gestures between eighth and ninth months, they play with their own image on the mirror and react to it as if it was another person. Similarly, they cry with gestures and mimics when they are between nine and fifteen months of age (Yavuzer, 2005; Kostelnik *et. al.*, 2012; Newman & Newman, 2012). During and after the twelfth months, he exhibits various behaviors that affect his attachment to objects in order to meet his need for intimacy and safety. Between the ninth and eighteenth months, his fears of strangers increase, he has more attachment to the objects he finds safe, and he starts to give objects to the people he finds intimate. Between the fourteenth and eighteenth months, his anxiety of separating from mother-father reaches its highest point and it slowly diminishes after this period. At around the fifteenth months, he feels a stronger need for establishing relations with objects and making others feel his existence (Sharman *et. al.*, 1995; Sheridan, 2005; Newman & Newman, 2012; Smith *et. al.*, 2012).

Between one and a half years and three years of age, the child has disagreements with adults about dressing and nutrition, he frequently says 'no', and his dependency on his mother increases when he is sad or tired. He prefers to play alone in the presence of a familiar adult and tries being independent. The very active two-years-old children cannot focus their attention continuously, cannot be independent in choosing toys and playing with them and fails to play on his own. At around two years of age and in the following period, they cry when their wishes are not fulfilled or when they are inhibited, and they use the behavior of crying for expressing their emotions. Two-years-old children start to push the limits with their increasing freedom, become stubborn, oppose to everything and have unusual wishes (Sharman *et. al.*, 1995; Oktay, 2000; Durmuşoğlu-Saltalı, 2009; Gülay-Ogelman, 2012). Being sensitive towards the interests and needs of the children and meeting their needs on time during this period is important for enabling positive social development.

Social Development in 3-4 Years

At the two and a half years of age, which is called "rebellious phase", the child exhibits unstable, indecisive, negative and rebellious behavior. While the child accepts being supported in his efforts and attempts without creating any problems in the previous periods, he starts to insist on behaving on his own and exhibiting his competences at two and a half years of age. On the other hand, children at three years of age exhibit insistent and impatient behaviors, and they like being together and interacting with adults. Similarly, three-year-old children are observed to exhibit more stable and positive behaviors (Yavuzer, 2003; Yavuzer, 2005; Orçan, 2011).

While children tend to play alone until two years of age, they start to play in groups, to talk with each other while playing and to choose their playmates within the group at the ages of three and four. Children at two-three years of age are observed to use their language skills to convey their ideas, share their interests and communicate with their peers. Children at three years of age start imitating their peers and adults and enjoy repeating what they say and how they behave. Similarly, they start communicating with the people in their environment thanks to their enlarging vocabulary and enjoy playing creative and imaginative plays. Following three years of age, they tend to have increased emotional reactions towards events and situations and to reflect their emotions to their environment. After three years of age, the child

proceeds to the phase of cooperative plays and desires to enjoy the feeling of sharing and of succeeding something together. Strong commitment between two children also takes place at three-four years of age. The very strong commitment at this period affects the social relationship that is expected to be established with other children. The social-emotional interaction with parents and other members of the family during the first years starts to change before three years of age, and it gets focused on meeting the need to come together with peers and take part in playing groups. At three years of age, imitation-based plays are replaced by imaginative plays, and children have increased skills of complex thoughts (Aral *et. al.*, 2001a; Çağdaş, 2002; Poyraz, 2003; Yavuzer, 2005; Mayes & Cohen, 2006, Durmuşoğlu-Saltalı, 2009; Jackman, 2011; Lindon, 2011).

At three-four years of age, children start playing in groups, talking with each other during play and choosing with whom they want to play within the group. While some children exhibit negative behaviors at three years of age such as quarreling, attacking and objecting, some children exhibit positive social attitudes such as giving things to their friends, acting together, showing affection, etc. Following this period, children at four-five years of age shift their need for interest, approval and acceptance from their parents to their peers. In addition, four-years-old children may change their friends frequently, fight with their peers due to emotional fluctuations and have difficulty in choosing their new friends. In line with this, competition becomes more explicit in children at four years of age. Similarly, disagreements are also observed in the communication of four-years-old children. In spite of this, children at four years of age can spend more time with their friends, make more friends, develop special friendships and take part in group plays with other children. The interests of four-years-old children are also diversified and differentiated (Aral *et. al.*, 2001a; Çağdaş, 2002; Yavuzer, 2005; Keenan & Evans, 2009; Jackman, 2011; Orçan, 2011; Gülay-Ogelman, 2012). Therefore, it is necessary to create environments that will allow children in this age group to be included in various social activities and to spend time with their groups of friends.

Social Development in 5-6 Years

While four years old children are not very careful about finishing what they have started, five years old children like finishing it. Similarly, children at four-five years of age explain their feelings about what happened and when it happened, while they enjoy playing with one or two children at three-five years of age and they play sometimes with a special friend and sometimes in a group. Distinctive behaviors of children's social development at five years of age include attentive approach to younger children, playing developed plays with peers, starting to assume responsibility and becoming more controlled and sensitive (Sharman *et. al.*, 1995; Yavuzer, 2005; Durualp & Aral, 2011; Lindon, 2011).

Five-years-old children want to get the most out of their talents, enjoy getting the responsibility and reward they deserve, can comply with the cultural environment they live in, and can successfully control themselves. Besides, they aspire to please adults with their confident and friendly behaviors. They can practice to acquire this skill, successfully control their emotions, follow adults' behaviors and try to animate them in their plays. While children seem to have socialized at five years of age, they become unbalanced, oppose to rules, and have a rebellious attitude and behavior at six

years of age. In this period, the child experiences once again the decision making difficulties that he experienced at two and half years of age, and he alternates between the positive and negative aspects of the things. Besides, six-years-old children start to be interested in everything in their environment and want to gain new experiences. While they have reduced attachment to their family at this age, they attach more importance to their teachers and friends. They take part in enlarged playing groups, they can set the play rules by themselves, and the roles of female and male children and the materials they use may start differentiating. In this period, the child not only gets the pleasure of having playmates, but he also learns how to cope with difficult feelings such as being rejected or being angry. He also acquires the habit of complying with the society's rules through the play, and he starts to develop a behavior of accepting defeat and not getting angry due to defeats. Children at five-six years of age can create plays by themselves, take part in playing groups with rules, share their friends' feelings and assume the role of leadership (Pehlivan, 2005; Yavuzer, 2005; Mayes & Cohen, 2006; Bakırcıoğlu, 2007; Durmuşoğlu-Saltalı, 2009).

Five years of age, which is called "golden age" for the family and the child, constitute the vital point of the childhood phase. At five years of age, the child seems to be competent and balanced, can adapt to his environment and exhibits behaviors of socialization. The compliant and balanced appearance at five years of age is replaced by incomppliance at six years of age as well as negative behaviors that are also observed at two and a half and four years of age. Six years old children behave in an impatient and hasty way, and they like boasting about their success. However, the six-years-old children are extrovert and they can easily express themselves, observe the rules within the family and carefully examine them. Six years old children spend distinctively more time with their peers, and the adult control is reduced. Children of this age group maintain their friendship relations in order to share their interests and they exhibit cooperate in their plays (Yavuzer, 2003; Yavuzer, 2005; Keenan & Evans, 2009; Gülay-Ogelman, 2012). Considering their skills and behaviors at this point, six years old children seem to have achieved very important progresses in terms of social development.

FACTORS AFFECTING THE SOCIAL DEVELOPMENT OF PRESCHOOL CHILDREN

As social development has an impact on many developmental areas and as the preschool period is important in terms of social development, another point to focus on is which factors have an impact on the social development of preschool children. Social development of children is affected by many factors. The effects of these factors on the children may vary from one child to another. Addressing this situation within the framework of the basic structure of the social development area reveals some factors whose effects cannot be denied:

Family

Among the factors affecting socialization, family plays a special and important role. Family has various effects on the child through mother-father-child relations and sibling relations. Healthy development requires interaction processes that are based on love, trust and acceptance (Gülay & Akman, 2009). It is suggested that the personal

development of children is supported if the parents create a democratic and affectionate environment (Demiriz, 1997). The type of attachment between the child and the parents is considered to be very important in the social development of the child. Children with a secure attachment with their parents cope with difficulties, show empathy and have high self-respect (Papalia *et al.*, 2007). On the other hand, children that are insecurely attached avoid establishing relationships with unfamiliar people and have difficulty in sharing their feelings and ideas (Simpson & Rholes, 2000). Furthermore, family is also an important factor in children's coping with peer pressure. If the parents give responsibility to their children and show interest in them, the children become less likely to exhibit antisocial behaviors such as drug and alcohol use due to peer pressure (Collins *et al.*, 2000).

The child rearing style of the family may also have positive or negative effects on the social development of the child. If the family has an uninterested-indifferent or extremely authoritarian attitude, this causes the child to experience emotional disturbance and shapes his sense of self in a negative way. In addition to this, he becomes deprived of appropriate environment for learning social skills and behaviors. Similarly, if the family is extremely protective, the child cannot be an independent and self-sufficient individual, he has serious problems in starting social relationships and solving social problems, and has difficulty in situations that require responsibility. If the family is too tolerant, then the child may perceive the world only within the framework of the things that are related to him, and he may have difficulty in establishing social relationships and developing a sensitive approach towards others. In line with this, the children of perfectionist parents tend to be strict and stubborn towards others in their social relationships and to be intolerant of mistakes. On the other hand, authoritarian parents tend to respect the child's individuality and to support the child with an attentive, affectionate and respectful attitude, and in this situation, the child is much more likely to develop skills and behaviors such as showing empathy, expressing his feelings and listening (Gülay & Akman, 2009). Therefore, the behavioral problems observed in the preschool children are expected to be related to parents' attitudes within the family (Paulussen-Hoogbeem *et al.*, 2008; Gülay & Önder, 2011; Taner-Derman & Asûde-Başal, 2013).

Moreover, the family has a function of forming the basis for the child to communicate with his peers in a healthy way. If the parents can establish an affectionate, accepting and respectful relationship with their child, it will be possible for the child to reflect this type of attitude to all of his relationships as well as his friendships. This will help the child have the necessary self-confidence to meet others and participate in new environments. Besides, if the family becomes a good model, it will be easier for the child to acquire various social skills. In this way, the child learns how to talk with others, how to express his affection and how to cooperate with others. Furthermore, he learns how to become a patient, respectful and understanding person. For children structure their own behaviors by observing how their families communicate with themselves and others (Ferrer & Fugate, 2002). Kochanska *et al.*, (1997) has discovered how much effect the parenting styles have on the behavioral patterns of children. The family has the primary importance on the social development of children through its attitude, manner and behavior, and it also seems to be important for supporting the education in preschool institutions in reaching its goal.

There is no doubt that parallelism between the education in the family and the education in preschool institutions will enable the child to see examples of realistic and consistent behaviors and thereby support his social development. For these reasons, it is quite important to ensure the participation of families and include family education in educational practices that are targeted at social development.

Peer Relationships

Peer relationships are explained as the whole interactions based on reciprocity and continuity among persons who are at the same age or the same developmental level and share similar backgrounds, values, lifestyles and social contexts (Gülay, 2009a). Peer relationships, in which children have equal positions and powers, do not resemble their relationships with adults, and children are more intimate and comfortable in their relationships with peers. Therefore, effective communication with peers has an important role in the acquisition of social competence. Positive peer models and play interactions with peers contribute to the child's learning of social skills and behaviors (Gülay & Akman, 2009). Preschool years are an important period in which behaviors of making friends are intensive and friend relationships gain importance. Peer relationships in the preschool period shape the social relationships and experiences of this period and affect social-emotional adaptation of the individual in the following years. Children who establish healthy relationships with their peers progress in their social development in short or long term (Ladd, 1990; Gülay, 2009b). The child can develop his communication skills by coming together with his peers with different characteristics and qualities and compare himself with others through the roles he assumes in these groups. The child, who experiments competition, contest, solidarity, helping each other and sharing in such an environment, receives stimulants from different areas of his development. Therefore, it is recommended that the child takes part in friend groups in order to develop socially, because he learns assuming responsibility, protecting his rights, respecting others' rights and freedoms, observing the etiquette and being a leader and member in consequence of his interactions with his friends in group games, and he thereby adopts the methods and rules of social life (Türküm, 2000; Aral *et al.*, 2001a).

Social position of the child among his peers, i.e. his acceptance or rejection by his peers, plays a particularly important role in social development. Friendships in the preschool period enable the child to have positive feelings towards the school and to voluntarily take part in school activities. On the other hand, rejection of the child by his peers in this period causes him to face social and academic difficulties (Ladd *et al.*, 1999). It has been discovered that children who are preferred more by their peers tend to have higher social competence (Öneren-Şendil, 2010) while those who are preferred less by their peers tend to have aggressive and disruptive behaviors (Beyazkürk *et al.*, 2007). In this respect, it is suggested that rejection by peers causes the child to be less fond of the school, to refrain more from the school, to participate and cooperate less in activities and to have lower self-management skills. On the other hand, the support and affection of peers will support the child to establish effective peer relationships. A classroom atmosphere made up of harmonious peer relationships will help children like the school and adapt to it. However, children that have problems with their peers and that do not have the opportunity to play with them can get bored. Therefore, it becomes inevitable for such children to feel lonely and

excluded and to exhibit timid and aggressive behaviors (Gülay & Erten, 2011). For this reason, the effect of the peer factor on social development is quite important both in terms of the effect of peer interactions on the child and in terms of the results of acceptance and rejection by peers.

Mass Media

Since social behaviors are learnt by observing and taking as a model, mass media such as television and computer, which enable children to see, hear and examine behaviors, have a significant role in the acquisition of social behaviors. According to Elkin (1995), children become interested in what they see and hear on mass media and thereby shape their lifestyle. The rules and situations that are introduced into the child's life in this way have an effect on his socialization through direct or indirect ways. In addition to its function to inform individuals and to provide news from the life, mass media also have a function to entertain and provide an opportunity to spend leisure time. Therefore, mass media not only reflect views, but also contribute to the creation of attitudes (İlgaz-Büyükbaykal, 2005). The effect of mass media on social development may vary by the type and duration of its use.

In this respect, Kaya & Tuna (2008) emphasize that television can have a positive contribution to the socialization process of children, but it can also cause addiction and behavioral problems and negatively affect the child's social development when not used within certain limits. Similarly, it is suggested that television is a source of positive stimulation while it also has negative effects on the child's social development because it may minimize the interaction within and outside the family. For the children reflect the characteristics of the television heroes, which they choose as models for themselves, in their daily lives and plays, starting from the early childhood period (Pehlivan, 2005). Therefore, it is possible to observe behaviors of hyperactivity and aggressiveness if the television program that the child watches has inappropriate contents (Connors-Burrow *et al.*, 2011). Besides, it is inevitable for the child to exhibit less social behaviors if the time he spends watching television is too long (Gizir & Baran, 2003). In this respect, there is a relation between the child's exposure to television and the problem behaviors (Mistry *et al.*, 2007). It is possible to support the child's social development through television programs whose contents are compliant with the developmental level of the child and which exemplify positive behavioral characteristics. For example, the television series "Sesame Street", which was presented to children within the scope of a longitudinal study, was found to have a positive impact on children's social behaviors such as fulfilling responsibilities, cooperating, helping, etc. (Kibria & Jain, 2009). On the contrary, the child's creativity and his habit of reading books can be inhibited if he spends too much time by watching television. Therefore, the educative aspect of television should be benefited while the child should be protected from its harmful aspects. In this respect, it is recommended that younger children should not watch television for more than one hour per day (Ormanlıoğlu-Uluğ, 1999).

Computer is particularly important for the social development of preschool children. Provided that the necessary measures are taken, the use of computer in this period contributes to the development of short-term memory, to conceptual development and to problem-solving skills (Bütün-Ayhan & Aral, 2003). Similarly, computer-aided education has positive impacts on children's thinking skills

(Clements, 2002). Well-designed computer software develops the analytic thinking skills of preschool children (Klein & Gal, 1992). However, it has been found that preschool children are prevented from socialization if they focus on the computer more than needed and use the computer continuously (Çankaya, 2012). Spending too much time on computer causes children to be indifferent to their environment and harms their social relationships (Oktay, 2000). Besides, it causes children to have attention problems, avoid tasks and responsibilities within daily life and develop addiction to computer. Therefore, Demir & Kabadayı (2008) emphasize that computer is not educative by itself and it can be useful only if it is used as a platform for learning skills such as sharing, being patient and cooperating. Similarly, the content of the programs and plays that children use on the computer is another issue to be focused on. As Akçay & Özcebe (2012) suggests, children may take as a model the violent heroes in the computer programs or plays and they may try to copy these heroes. In such situations, they may be harmed physically and socially. Younger children easily lose their attention, and the mass media cause children to have this problem for a long time. On the contrary, it is deemed important that the child use all his senses and interact with the objects in his environment while he is on the computer. Therefore, a careful planning should be made in order to contribute to the early years of development before confronting the child with electronic stimulants (İnan, 2005). In this respect, a conscious adult guidance is needed for the use of tools such as computer and television for activities with content that support the child in educational and social terms and for controlling the time of use.

Play

Play, which is one of the key elements in the development of preschool children, provides many opportunities for children to recognize, practice and learn the social skills. The numerous opportunities of plays contribute to children's development of peer relationships and support their social development (Gülay & Akman, 2009). During a play, the child is not limited to what he sees in his environment, but he adds to the play his own ideas and gives it some form, motion and liveliness. He merges in the plays what he sees in his parents and his environment, and he shapes the plays with the specific rules of the play environment (Özer *et al.*, 2006). During the play, the child sees, experiences and learns the concepts such as right and wrong, fair and unfair, good and bad, etc. He learns during the play the social rules, waiting his turn, defending his rights, respecting others' rights, listening to others, cooperating and expressing himself. Within the play, the child imitates the adult life and prepares for his role in the future. Especially in imaginative and dramatized plays, the child acquires experiences that will take place in his own life while he is imitating the adult life (Öztürk, 2001; Çakmak & Elibol, 2011). Plays provide the opportunity for the child to repeat the negative events and situations of life in a symbolic structure and teach him the problem solving strategies. In addition to this, playing with his friends helps the child act in cooperation, learn the necessary rules for communal life, socialize, and distinguish between the concepts of "I" and the "other" (Yavuzer, 2005; Tahmores, 2011). The child's putting himself in someone else's shoes or his acquisition of the skill to see himself from someone else's perspective is the most difficult stage of social development. This development requires imitation skills, changing the correspondent of the reality in the imaginary world, and developing

skills such as establishing relationships. This makes the social plays even more important. Considering from a different perspective, the child finds a natural environment in the play for winning and losing, expressing his desires or postponing, making friends, cooperating, etc. (Özdoğan, 2009; Tuğrul, 2013). In this respect, the play discipline makes the child gain the habit of observing the social rules by observing the play rules, and he develops the behavior of accepting defeats (Pehlivan, 2005).

The play environment is a free environment for the child and he has the opportunity to experience many types of behavior. Once the child enters the play group, he needs to learn many forms of relationship in order to adapt to the social environment. Besides, the friends in the play assume the role of being models and help the acquisition or change of a behavior. Therefore, the child finds the opportunity to discuss and organize his own views and ideas and compare them with other children in the group. Similarly, in role plays, the child sees his environment from the perspective of the role he assumes, recognizes the expectations, feelings and reactions of these people in the daily life and thus reviews his own behaviors (Özdoğan, 2009). For these reasons, it is recommended that the children with insufficient social skills or socialization problems should be intervened through plays (Gagnon & Nagle, 2004). On the other hand, the child learns compromising with his own environment and adapting to the social life during the plays. Furthermore, the child can express his problems and reveal his hidden feelings thank to the plays. In a sense, the child is able to open his inner world unconsciously to the people in his environment during the play (Aral *et al.*, 2001b). In this respect, learning environments provided by plays have significant importance both for supporting the social development of the child and for protecting his mental health.

Preschool Institutions

Quality education in preschool period guides the child towards independence, encourages him to be at peace with himself and have smooth relations with people around him, is sensitive to individual differences, makes the child acquire knowledge, skills and habits that are suitable for his development, and supports the child's multifaceted development. In this respect, there is a need for preschool education institutions that both contribute to the empowerment and productivity of the mother in the society and preventing any damage to the child under insufficient conditions, by taking the responsibility of the working mothers for certain hours of the day. Preschool institutions enable the socio-economically disadvantaged children to make progress, and they provide opportunities for the children to internalize the cultural values of the society (Ari, 2005; Burger, 2010). Besides, the curiosity and the desire of questioning, which are predominant parts of children's nature in preschool years, now go beyond the level that the family could cope with. Because of this, the child needs to be in an environment other than the family, where he can interact with his peers and which is more satisfactory in educational terms. It is not possible for the family by itself to provide for the child such a comprehensive physical environment, suitable materials and the opportunity to socialize with peers. In this context, there is no doubt that preschool institutions will help the development of children by making them gain experiences that are suitable for their age and level (Yeşilyurt, 2011). Families also expect the preschool institutions to contribute to the socialization of

their children and provide opportunities for them to socialize with other children (Foot *et al.*, 2000). In this respect, preschool education institutions are particularly effective factors on the social development of children in terms of teachers' qualities, environment's qualities and program structure, too.

Furthermore, preschool institutions also have an important function in meeting the children's need for plays and friends. Children spend more time with their peers and interact with the group in preschool institutions. In this way, they learn behaviors such as respecting others' rights, sharing, helping, leading, cooperating, etc. (Uluyurt, 2012). In consequence of a related study (Özbek, 2003), it was concluded that children who received preschool education had better social development than those that did not receive preschool education. In line with this, another study found that children who received preschool education for longer time had higher social development than those who received for shorter time (Dinç, 2002). Similarly, it has been discovered that children who take full-time preschool education are socially and emotionally more developed than children who take part-time preschool education. In this respect, it has been concluded that preschool education contributes to children's development in communicating with peers, reacting in accordance with social conditions, delaying personal satisfaction, complying with the necessities of social life, approaching positively to social environment and reacting appropriately to negative social conditions (Özgülük, 2006). These results show that preschool education institutions positively contribute to the social development of children and that it is necessary to increase the possibility of the children to benefit from preschool education institutions.

Individual Characteristics

In addition to such factors as family and environment, the specific characteristics of the individual such as age, gender and level of development also affect social development. In this respect, it is emphasized that gender of the child structures children's behaviors in the social structure to a significant extent. It is suggested that in social terms, male children tend to be more aggressive and dominant while female children tend to be more social and have stronger friendships (Ormanlıoğlu-Uluğ, 1999). Besides, it has been found that female children make friends more easily compared to male children. In this respect, it is argued that female children play both with females and males while male children prefer to be friends only with males (Palut, 2005). In support of these arguments, it has been suggested that female children have better social competences and social development than the male children (Dinç, 2002; Aksoy & Baran, 2015). Similarly, many studies (Maccoby & Jacklin, 1980; Fagot & Leve, 1998; Winsler & Wallace, 2002; Kanlıkılıçer, 2005; Özbey & Alisinanoğlu, 2009) found that male children have more problem behaviors and are more aggressive than females. In a sense, it has been revealed that male children exhibit higher levels of anti-social behavior (Kılıç, 2012). In this respect, there are findings that female children tend to exhibit more introverted behaviors (Erkan & Kargı, 2006; Aksoy & Baran, 2015). Another situation that reveals the effect of gender on social development is that male children have higher levels of exposure to peer violence (Gülay, 2011). While these results show that behavioral patterns and social development of children vary by gender, they also point out the differences in the developmental features of female and male children.

Age is also an important variable on the social development of children. Therefore, some differences appear in the social development of children from different age groups in preschool period. For example, Dinç (2002) found that five years old children have higher levels of social development than the four years old children do. A related longitudinal study (Erten-Sarıkaya & Gülay-Ogelman, 2013) found that six years old children had less asocial behaviors, were less fearful and anxious, had lower levels of exposure to peer violence and had more positive social behaviors when compared to five years old children. In this respect, it was concluded that six years old children could establish more positive peer relationships in comparison with five years old children. In addition to this, Koçak & Tepeli (2006) found that five-year-old children had better cooperation skills and social relationship behaviors than four-year-old children had. Similarly, a study on primary school students (Sucuoğlu & Özokçu, 2005) found that students in higher grades have better cooperation and social skills, which emphasize that increases in the age contribute positively to social development. According to Gülay & Akman (2009), children have broader social circles as they grow up, and these results in increased interaction, experience and knowledge. Besides, physiological maturity also facilitates learning new skills and behaviors.

Furthermore, any disability the child may have causes him to have slower social development or be insufficient in terms of social behaviors. According to Aykır (2010), children with mental deficiencies in preschool period have lower social skills and more problem behaviors when compared to children with normal development. Preschool children with mental deficiencies have difficulty in resolving disagreements and experience problems in socialization (Leffert, *et al.*, 2000). In this respect, it is a remarkable fact in terms of social development that autistic children usually refrain from making eye contact and react to the people around them only to a limited extent (Kwon, 1990). Besides, the fact that children without a normal development process have insufficiency in symbolic plays (Blanc *et al.*, 2005) creates a risk for their social development. Similarly, it is suggested that disabled children do not have necessary skills to participate in peer interactions and they can interact with their peers to a lesser extent (Avcıoğlu, 2009). For these reasons, disabled children are more frequently rejected by their peers while the type of such rejection depends on the type of disability (Ledenberg, 1993; Bagwell *et al.*, 2001; Causton-Theoharis & Malmgren, 2005). Therefore, children with any kind of disability inevitably face serious problems in learning social skills and experience social deficiencies. For these reasons, skills and behaviors of the child can be shaped directly or indirectly depending on whether the child has the characteristics expected for his age in mental, physical or social terms or whether his development has a normal course. So, individual characteristics should be reviewed in evaluating children's social development, and the expectations from the children should be in line with their possibilities.

RECOMMENDATIONS FOR SUPPORTING THE SOCIAL DEVELOPMENT OF PRESCHOOL CHILDREN

While it is quite necessary to support the social development of preschool children, it is also needed to focus on how social development can be supported. For this purpose, the factors that affect social development should be controlled, and

parents and teachers should fulfill their responsibilities. In this respect, some recommendations are made for parents and teachers regarding the social life and school life of children.

Recommendations for Parents

Parents should be correct models for their children in order to enable them to develop the desired skills and behaviors. Parents can support their children's social development by trying to display appropriate exemplary behaviors in their relationships with their children and with the people around them, such as thanking, expressing their affection, apologizing, requesting, etc.

Parents should develop themselves in such matters as parent-child relationships, effective communication skills, positive parent attitudes, etc. Within this framework, families need to be educated under a certain program, and informative meetings should be held by the experts of this area. Families are recommended to take part voluntarily in educational activities organized by various educational centers, universities or nongovernmental organizations in their area of residence.

Parents should praise and, if necessary, reward their children when they exhibit positive behaviors and social skills in home environment or in social life. In this way, families should play a reinforcing role in their children's social development.

Parents should be encouraging for their children to make friends and be included in friend groups. For this purpose, families are recommended to allow their children to invite their friends to their home, to create spaces where they can play with their friends, and to be guiding in the activities they may carry out together.

Children need to play games in areas where they are physically secure and peaceful. In this respect, parents need to create special playing areas equipped with materials that will help the children enjoy and learn.

Parents bear important responsibilities regarding the effect of mass media on the social development of their children. Families should carefully control the TV programs their children watch and the computer games they play, and they should never neglect controlling. In this respect, they should ensure that their children are occupied with activities that have educative contents.

In order to prevent children's possible addiction to mass media, parents should control the time their children spend in front of tools such as television and computer. Families may set a limit of one hour for the time to be spent in front of television or computer. In this respect, it is particularly important for the parents to avoid any prohibitive or punishing approach and to develop their children's internal control through efficient guidance.

In addition, parents are recommended to provide such activities as painting, listening to music and looking into books and to provide such materials as blocks, clay and puzzle in order to ensure that the children spend educational and enjoyable time when they are not interacting with tools such as television and computer.

Parents should be very conscious about how they can support their children's social skills and behavior. For this purpose, they should follow visual and printed media and read resources written by the experts of the field in order to learn what are the development levels and behavioral characteristics expected for the age of their children. Similarly, all parents are recommended to pay attention to exhibiting attitudes and behaviors that support the contemporary concept of education rather than

the traditional approach.

Recommendations for Teachers

Teachers should adopt an approach that encourages the active participation of children in the social groups and activities within the classroom environment, allows children to comfortably express their feelings and ideas and supports them in taking initiatives in various circumstances. In this respect, they should pay attention to asking and listening to children's ideas rather than being dominant and authoritarian.

Teachers should frequently observe children in their circles of friends and detect any children who have difficulty in communicating with their friends or are rejected by their friends. In such cases, teachers should provide such classroom environments and activities that will provide opportunities for the children to communicate with their peers, resolve disagreements and organize their feelings, etc. In this respect, they should make sure that necessary intervention is made on time and qualitatively and quantitatively rich interactive environments are provided.

In this process, teachers should tell children which behaviors are right and which ones are wrong through various methods and techniques, and they should appreciate the right skills and behaviors they observe in children. In this respect, teachers should not adopt a punishing approach towards children that exhibit wrong skills and behaviors, but they should rather ask those children to evaluate and think about the results of their behaviors. For this purpose, teachers are recommended to explain children how they should behave by having conversations with them about what may happen if they continue to behave like that and how they would feel if they were treated in that way.

Teachers should consider that family is an important factor in the social development of children. By organizing educational activities for families within the scope of the preschool educational program, they can inform the families about how they can support the social development of their children and they can ensure that the social development activities organized in the classroom are also supported at home.

Within the scope of the learning process, teachers should use computers as tools that encourage learning and enable efficient learning. In this respect, teachers should be aware of the contents, time of use and purpose of use of the computer games and programs.

Teachers should definitely include plays in the daily classroom activities and support the social development of children through plays with enriched contents. In addition, they can benefit from diversified activities such as stories, drama, painting, etc. in order to support different social behaviors of the children.

Teachers should create various opportunities for children to come together with their peers in school environment. In addition to the activities that include the whole class, they should also organize activities that are carried out in bigger and smaller groups. This should support children in socializing with each other, getting rid of their prejudiced behaviors and developing their friendships.

Teachers and families should adopt a common approach in serving correct examples for social behaviors and reinforcing appropriate behaviors. Teachers and families should attach importance and pay enough attention to school-family cooperation.

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Chapter 11

Role of Universities in Science Education

Ece ÖZDOĞAN ÖZBAL & Neriman ARAL

INTRODUCTION

Science can be rephrased as the endeavor of observing, what is happening, in the world and conceiving and explaining the meaning of world events. Science has an active place in life; it is a significant sphere for mental and practical activity of humans, and information introduced by science play a very important role in the lives of the next generations (Harlen & Qualter, 2014). Science asks fundamental questions as to how the world operates, how it came into being, how it was in the past, and how it will be in the future. Answers to the said questions may resolve many questions that people encounter during their daily lives. Ortaş (2002) defines science as the entirety of endeavors, which have been found by the application of the tools and equipment of the daily life and the created technology, that facilitate things and provide opportunities to better understand the environment and become more healthy and long-lived.

Evident significance of science underscores the need for science and scientific studies. In the light of the said perspective, the fact that science is not produced for and detached from the society, and perception of scientist as someone with skills beyond reach, affect the perception of people in the society as to science and the scientist (Smith, 1996). Odell and Hewett (1993), the perception of students as regards scientist and the image of the scientist they created in their minds were effective in deciding their careers. It is especially important to develop perception of science as from early ages for raising future scientists and people choose a scientific career in the future. Here it is required that institutions that produce information and raise scientists conduct work to remove the negative perception and canalize people to science education activities. In that respect, universities lead such institutions.

A more systematic development of knowledge is realized by such institutions as the university. Universities are based on scientific knowledge. One of the main objectives of the university is to popularize science in the society and raise scientists in addition to production of science. Research, presentation (via courses etc.), and distribution of knowledge are considered the most fundamental function of higher education institutions. Universities also substantially prevent spread of wrong knowledge, which lead to information pollution, by popularizing scientific knowledge. Universities have also many indirect effects in the regions, where they have been established, beyond the anticipated direct effects (Yıldız and Talih, 2011). Interest in science and will to work in a science-related field develop thanks to the universities located in the surroundings of the people. Here universities are especially important for popularizing science and providing science education via right channels.

Therefore it is required to improve science education by realizing the gross effect of universities on science education and raising scientists. Accordingly, the present

study aimed to find the role of universities in science education by discussing the importance of science and science education.

Science Education and its Importance

Many activities that have an impact on human life have been hitherto realized through science. Among thousands of such activities, a few can be exemplified as follows: finding cure for many diseases, fast transportation to long distances, production of technological tools, and weather forecasts. Future generations are required to continue science production processes in order for such activities that directly influence human life can be maintained. In order for science can positively influence a society, above all, scientific thinking mode must be popularized in masses and become a part of common ground (Doğan Bora, 2005). However, findings of a study by Jarvis and Pell (2002) emphasized that both the interest in science, and the interest in have a career in the field of science were diminished. Science education from early ages is very important for the said level of interest can be increased.

Beginning from early ages, children strive for perceiving nature and what is happening in their surroundings. Sustaining the children's sense of wonder is the basic mainstay for developing their scientific thinking skills in the future, increasing their interest in scientific branches, and heading them towards scientific research. Therefore, it is important that science education should be organized so as to help them with answering questions in children's minds and making analyses as to events they are to encounter daily. A review of the literature as regards the nature and education of science provides that it is indispensable to teach science by explicitly emphasizing the nature of science and providing learners with the opportunity to reflect upon it (Köseoğlu *et al.*, 2008).

Importance of science education and efforts to teach science from early ages increase day by day. Relevant studies revealed the importance of science education from early ages as regards different aspects, including the learning environments, teaching methods, adequacy of teachers, misconceptions, linguistic skills, scientific thinking skills, association with society, participation, and daily life relations (Gilbert *et al.*, 1982; Wellington & Osborne, 2001; Roth & Lee, 2004; Mercer *et al.*, 2004; Friedl & Koontz, 2004; Aikenhead, 2006; Gilbert & Boulter, 2012; Andersson & Gullberg, 2014). Negative perspective towards science and scientists as adopted especially beginning from the early ages may lead to controversies including not becoming a scientist, not choosing the profession. Güler and Akman (2006) enrolled in their study 330 children of 6-year age group from Ankara city. Children expected to answer such questions as "What is science," "Who is a scientist," and "What does a scientist do?" Upon assessment it was seen that children frequently replied those questions as "lab coat," "glasses," "books," and "messy hair." It was concluded that children developed biased views towards scientists also in the preschool period. It was found in a study by Muşlu and Akgül (2006) on randomly selected 26 students attending to the 8th grade of a primary education school in Istanbul, that students' views as to science and scientist were closer to the traditional understanding of science (with lab coat, beard, and glasses). Many studies confirmed that science perception in early ages was closer to the traditional understanding of science, and that children considered those, who have picked science as a profession, generally boring and lonely, and continued their profession by working only (Kaya *et al.*, 2008;

Korkmaz and Kavak, 2010). Science education should be provided beginning from early ages and work should be conducted to remove the bias against science and scientist and foster a positive perception of science.

The aforementioned significance of science education as from the early ages forms the basis of the debate on the ways to follow in science education. One of the important conditions in science education is the developed education content. Hurd (1998) while criticizing most of the science curricula for being presented mostly via laws and theory, defined the long-term curriculum as the one by which students could use, what they learned, and were aware of their development. Furthermore, he emphasized that collaboration with such social science-related fields as humanities, ethics, legislation, and politics should be implemented for a long-lived curriculum. A learning program on science and scientist was developed in a study by Altun and Yıldız Demirtaş (2013) and applied to 17 preschool children. As a result of the study, it was found that thanks to the program tailored to the needs of the children, children started to understand science as a method to “understand and discover the world we live in, and be beneficial to humanity.” Application of the program by university researchers in the scope of the study also underscored the importance of practitioners in science education.

In order for science education can be started at early ages, the educators have comprehensive knowledge of the subject. However, today it is seen that the educators do not possess adequate knowledge in the subject and they need education. A study by Irez and Çakır (2010) on 113 biology teachers showed that the teachers involved in the study did not adopt modern understanding of science and most were akin to the traditional understanding of science. As a result of the study, it was seen that participants were aware that scientific knowledge was subject to change yet they possessed such eclectic views about the partiality of scientific knowledge that were incompliant with the new curriculum. Oğuz (2007) found in a study, which involved 48 students from attending the last class of Faculty of Education and 65 students attending to the 5th grade, that the scientist imagination of the university students was more stereotypical (in lab coat, with beard, male scientist) compared to the primary school students. In order for science education can effectively be provided beginning from the early ages, first, children need to receive science education from educators, who do not have any bias against science, beginning from the early ages and even meet real scientists and be familiar with them. Smith (1996) studied the changes in children’s behaviors towards science as a result of their interaction with scientists. As a result of the study, it was found based on the comparison of pretest and posttest scores that children’s interaction with a real scientist contributed in developing a positive attitude towards science upon a six-week duration. It can be concluded that universities, which hold a very important place in science education and raise scientists, has significant effect and importance during the science education process from early ages to fostering a scientist..

Role of Universities in Science Education

University is an important element for raising the qualified human power required by a country, producing information, and serving the society. At the same time, it is one of the most important institutions that influence both the development of the country and the socio-economic development of its region (Yılmaz and Kaynak,

2011). It no longer makes sense, when universities produce information as detached from relevant societies, which is also contrary to the sociological facts of the day. A university with a dynamic and flexible structure, which recognizes the fact that it should be a part of the society and that it has missions such as a more quality life and adaptation to novelties, is a requirement of the era (Kuyumcu & Erdoğan, 2008). Accordingly, it is important that universities share the information they have produced with the society, and also spread science in the society, encouraging people on the way to become scientists.

Postgraduate education is an important step in the process of raising scientists. Postgraduate education is considered one of the most important factors in raising scientists and conducting national science policy (Karaman and Bakırcı, 2010). Therefore, who wants to become scientists, should meet the required conditions to receive this education, and receive this education. Nevertheless, the role of universities in raising scientists is not only limited to providing postgraduate education. Universities should create in the society a positive perception toward science and encourage people, who want to conduct scientific studies at university. Promoting science beginning from the early ages prior to the postgraduate level is among the social responsibilities of university.

Universities may adopt different approaches in order to support science education. Given that science education starts at early ages, supporting school programs with experts persons, opening university spaces to the use of persons at early ages, encouraging children to work in the field of science by the help of the scientists, who are to meet them beginning from early ages, and raising persons, who are to teach children science are among a few of the said approaches.

A review of the curriculums developed for different branches of science at school, provides that said programs require support as regards scientific content. Ensuring the support of scientists in enrichment of the program content minimizes the risk of including wrong information. It seems indisputable that science is not only limited to the educational programs at school, that it can be applied in daily life, and that in order for science can be popularized in the society, children should meet scientists (Barman, 1999). The attitude of teachers, who provide children with science education courses, toward science and scientists is also important. This is because of the fact that teachers' attitude directly affect children (Türkmen, 2008). If teachers develop a negative attitude toward science and scientists or lack adequate accumulation of knowledge, children's perception of science and scientist will be adversely affected. As a matter of fact, if children are allowed to participate in education directly with scientists thanks to university resources, it would be possible to minimize the negative convictions of children as regards science and scientists and to allow them meeting science beginning from early ages. Furthermore, out-of-school educators from different branches of science need to provide children with learning opportunities to increase their interest in science and determine which branch of science they are interested in (Baram *et al.*, 2006). Effective acquisition of scientific process skills and also the nature of science and characteristic traits of scientists can be ensured by effective teaching methods/techniques (Hançer *et al.*, 2003). Creating learning environments in which science education will be provided is also important along with the curriculum and effective teaching methods.

Alternative learning environments for science education have started to be introduced and in the last 20 years the number of science education centers, including science museums, interactive science centers, and branch study centers, have remarkably increased. It is seen that especially the science centers and science museums played an important role in science education (Lederman, 1998; Shamos, 1995; Wellington, 1990), and that science centers have close relations with universities, research centers, and science-related institutions (Martin & Toon, 2005). It is important for science education that universities make their infrastructure available for use during applications. Relevant studies underscored the importance of visits to science centers, museums, and zoos, and emphasized that cognitive outputs were very effective as regards developing positive attitudes toward science and improving their views about scientific values (Kılıç, 2010). Especially at universities, children are able to investigate the environment, where science is practiced, and have the opportunity to meet directly with the scientists.

A review of relevant studies suggested that universities had the required infrastructure for science education (Martin and Toon, 2005). Apart from the adequate infrastructure for science education, universities also greatly contribute in science education thanks to the scientists in their organization. Odell & Hewett (1993) found that children's perception of scientist and the image thereof in their minds were effective in their career choice. This situations show that scientists should be perceived beginning from the early ages. That is why it is important for universities provide opportunities by which scientists can meet the society.

As it is seen, universities have an active role in science and science education in terms of both space and human power. Therefore, taking into consideration that universities hold an important role in science education, universities should be more involved in science education and conduct science education activities beginning from early ages.

CONCLUSION AND RECOMMENDATIONS

Universities are the best institutions for science education with adequate physical infrastructure and scientists. As institutions, which raise scientists, universities are very important for popularizing science education in the society and meeting the need of science education. Therefore universities need to play an active role in activities related to science education. Below recommendations can be made to university administrators, scientists, researchers, teachers, and parents for realization of an effective science education:

Science education programs may be prepared and implemented in all educational stages beginning from the preschool period,

Scientists from universities may be involvement in the development phase of science education programs intended for all educational stages,

Visits to such venues as university laboratories, science centers, and science museums and activities to be held there may be involved in the content of the science education programs aimed to promote science education to the children

Scientists may be allowed to share their knowledge and studies with children and teachers,

University may be supported to spread their science promotion activities towards

children and teachers,

Universities may include science education in teaching programs and foster teacher candidates towards a more adequate level regarding the subject.

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Chapter 12

The Effect of Educational Game Based Learning in Primary School First Stage Foreign Language (English) Lessons on Students' Academic Achievements and Retention*

Hasan Güner BERKANT & Meryem Deniz ARSLAN AVŞAR

INTRODUCTION

Language is the most natural tool that provides communication between people. The world is changing, developing and becoming a global village, so communication between states and people in social, cultural and political field is provided by language. People need to learn the common languages that are spoken in international area to set up all kinds of relationship in many areas of life. In the determination of these languages, superiority in the technology, science, and military field plays an important role. If a nation request to learn a foreign language, it means that language is seen as a superior science and culture language. Nowadays in Turkey, English, German and French languages are commonly learned as foreign languages, but English is the most learned foreign language in Turkey (Özdemir, 2006). English is a global language. You hear it on television spoken by politicians from all over the world. Wherever you travel, you see English signs and advertisements. Whenever you enter a hotel or a restaurant in a foreign city, they will understand English, and there will be an English menu (Crystal, 2003).

Foreign language provides students to get into contact with people, students learn to show understanding to the nation's culture and lifestyle that they learn its language, and get the opportunity to compare their own culture with other cultures. Efficient foreign language learning is an important factor in increasing person's mental development, cognitive flexibility and native language ability (Hisar, 2006). Foreign language teaching can not be limited with teaching the grammar and rules of a foreign country. Students' understanding of a foreign world, foreign culture and foreign people must be provided. Therefore, the process of school life and foreign language knowledge and skills learned in early ages for such purposes, may contribute to the realization of these possibilities (Genç, 1999).

Foreign language teaching in Turkey is an indispensable requirement of the modernization. Bringing the Turk's idea, science, art and creativity to level of contemporary civilization is possible only via following the latest products of the world languages. With the rapid development of communication and transportation, world events' international characters and ability of reading and speaking a foreign language come into prominence as well (Çil, 2008).

In today's world multilingualism is encouraged. Because, to bring the nations' international relations in social, political and economical fields further, people who

*This study is derived from the Arslan-Avşar's (2012) master's project prepared in Kahramanmaraş Sütçü İmam University.

have the ability of writing and speaking foreign languages are needed. The aim of teaching foreign language in Turkey is not to provide communication between people that have the same mother tongue, but to provide communication between Turk citizens and other nations' citizens. By this way, Turkey can get away further on political, scientific, military, economic and social areas (MEB, 2006).

Nearly for two centuries, Turkey has dealt with foreign language teaching. From time to time with the impact of different education policies, different ways of teaching a foreign language were observed. However students from secondary education to the higher education can not know the target language adequately (Çelebi, 2006). In Turkey, in a formal training period, each student takes totally 700-800 hours foreign language lesson but the desired condition is lower than provided (Tarcan, 2004).

Foreign language teaching age in Turkey starts from kindergarden level in private schools and fourth grade in primary education in public schools. But while teaching English in these ages, it is important to know how to teach the language. Teaching-learning methods and techniques of adults and children can't be the same. Children's needs, requirements, moods, psychological situations are very different from adults. Students of fourth and fifth grades in primary education are involved in the age of playing games. So they like singing songs and playing games in lessons while teaching the lesson with traditional methods, students' concentration may scatter; their attention will go away to different things from the lesson. But if the lessons become different and enjoyable, they may get more willing and the learned knowledge may not be forgotten easily.

Game environments can efficiently support immersive learning experiences. According to Chan and Ahern, "When people are intrinsically motivated to learn, they not only learn more, they also have a more positive experience." Games meet both these tests for effective learning environments: They are active experiences, and they have the capacity to provide intrinsic motivation (Paras & Bizzocchi, 2005). According to Lee (1979) most language games make learners use the language instead of thinking about learning the correct forms. Games are fun but particularly in foreign language teaching, their pedagogical value mustn't be overlooking. There are many advantages of using games; games can lower anxiety, thus making the acquisition of input more likely (Richard-Amato, 1988).

Wierus-Wierus (1994) says "In the easy, relaxed atmosphere which is created by using games, students remember things faster and better". Zdybiewska believes that games to be a good way of practising language, for they provide a model of what learners will use the language for in real life in the future (Uberman, 1998). According to Hansen (1994), games are highly motivating and entertaining, and they can give shy students more opportunity to express their opinions and feelings. Games are highly motivating since they are amusing, interesting and at the same time challenging. The activities in a game get all the students to move around, activate their mental capacities and stimulate neural networks, thus motivating learners in learning and retention. At that time, students who are shy also attend the activities with fun, forgetting their shyness and feeling of fear (Tuan & Doan, 2010).

Game takes place in a child's life constantly. Children want to have fun in every situation. They can give their attention to the lesson maximum 8-10 minutes. While

lessons become monotonous, children get bored and their attentions to the lesson get disperse. But if the lessons supported by the activities like playing games, singing songs and competitions, lessons become more interesting, and the knowledge become permanent. By the games, children's physical, mental and emotional characteristics are developed (Firat, 2007).

Silvers (1982) says many teachers are enthusiastic about using games as "a teaching device," yet they often perceive games as mere time-fillers, "a break from the monotony of drilling" or frivolous activities. He also claims that many teachers often overlook the fact that in a relaxed atmosphere, real learning takes place, and students use the language they have been exposed to and have practised earlier. Rixon (1981) says that games can be used at all stages of the lesson, provided that they are suitable and carefully chosen. Games may be used in any teaching situation and with any skill area: Reading, writing, speaking, listening and provide immediate feedback to the teacher (McCallum, 1980). Through games children experiment, discover, and interact with their environment. Games add variation to a lesson and increase motivation by providing an incentive to use the target language (Lewis and Bedson, 1999).

Concentration and attention span of young learners is very short and therefore it is necessary to change activities, places organisation or e.g. voice. Games can serve as a good activity here. "It is not just because they are fun. It is partly because the fun element creates the desire to communicate and partly because games can create unpredictability." (Halliwell, 1993). Avedon and Sutton-Smith (1979) state that "The main reason why games are considered effective learning aids is that they spur motivation and students get very absorbed in the competitive aspects of the games; moreover, they try harder at games than in other courses."

In this research the effect of educational game based teaching on foreign language education was observed. According to Macedonia (2005) and Sigurdardottir (2010) educational game based teaching on foreign language teaching is an effective teaching technique on foreign language teaching. Also (Dervişoğulları, 2008; Dursun, 2007; Pribilova, 2006; Rankin, Gold, & Gooch, 2006; Townsend, 2009) proved that game based teaching on vocabulary teaching is an effective factor on increasing achievement. Al-Nafisah (2012) showed that English teachers using games in lessons increases students' motivation, participation and achievement. Uberman (1998) said in his article about language teaching that game based learning is an effective technique on foreign language teaching, especially on vocabulary teaching it both entertains and motivates students, also with this technique vocabulary can be learned easily and stored in long term memory longer. Firat (2007), Kimhachandra (2010) and Öztürk (2004) identified on their master of thesis that using games on foreign language teaching facilitate the students' learning foreign language, knowledge becomes more permanent, students get enjoy with this technique and they participate lessons lovingly and willingly. Some studies previously conducted in this area (İnan, 2006; Kaya, 2007; Özbal, 2010; Susaeta *et al.*, 2010; Susüzer, 2006) showed that educational game based learning is an effective technique on foreign language teaching; but some of these researches only used post test, they didn't use retention test and in none of these studies used an interview technique on students to get the students' opinions on getting the effect of the programme on everyday lives behaviour. In this research both retention test was done after fifteen days from the end of the programme and

interviews were done with students who participated the programme to get the students' feelings and thoughts towards the programme. In this context, the problem of this research can be defined as "What is the effect of educational game based teaching on fourth grade students' English lesson academic achievements and retention?"

The Objective of Research

The overall objective of this research is to investigate the effect of educational game based learning in primary school first stage foreign language lessons on students' academic achievement and retention. Within the scope of this overall objective, the following questions are answered:

Is there a significant difference in favour of the experimental group between the experimental group students' English lesson academic achievement post-test scores who took educational game based learning and control group who took the traditional teaching when their English lesson academic achievement pre-test scores are got under control?

Is there a significant difference in favour of the experimental group between the experimental group students' English lesson academic achievement retention scores who took educational game based learning and control group who took the traditional teaching when their English lesson academic achievement post-test scores are got under control?

Is there a significant difference between the experimental group's pre-test, post-test and retention scores?

In addition to these questions, for the qualitative data "What are the students' opinions about educational game based learning?" question is answered.

MATERIALS AND METHODS

In this section, the model of study, study group, the experimental procedure, data collection instruments, data collection and analysis are included.

The Model of Study

The research was design according to pretest-posttest experimental model with control group. Experimental studies with the aim of identifying cause and effect relationships and directly under the control of the researcher are the research models that produce data which are desired to observe (Karasar, 2009).

Study Group

In this study two groups were determined by randomly assigning. Each group has 35 students. One of these groups was taken as an experimental group and the other one was taken as a control group. The existence of pre-tests on the model helps to know the similarities of the groups before the experimental study and it helps to interpret the post-test scores accordingly (Karasar, 2009).

The Experimental Procedure

Lessons in the experimental group were lasted for eight weeks, three lessons per week, total twenty four lessons, on the scope of three units (Unit 7: Pets, Unit 8: My Weekly Schedule, Unit 9: Timetables) of Turkish Ministry of National Education's primary school fourth grade English lesson book with educational games that were

prepared and used by one of the researchers. First of all, experimental group was informed about the procedure of the lesson which will be taught by enjoyable games, songs, puzzles and etc. For example in the first lesson that was about pets, students were asked 'what kind of animals they like', after their opinions' were taken, they prepared flash cards about animals. And a kind of memory game was played like, one of the students stands up and says 'I like fish', the other student says 'Ali likes fish, but I like giraffe', the other student says 'Ali likes fish, Ayşe likes giraffe, but I like monkey'. Animal masks were prepared, students did role plays, they told the physical appearance of an animal and asked to the class fiends which animal was it. Students were aimed to join the lessons as a volunteer. They didn't force to join the games or answer the questions asked. The lessons were aimed to teach the foreign language to students in a stress free atmosphere, with an interactive way. Students walked in the classroom freely on playing games, they danced on listening songs, they talked freely, did jokes, laughed, briefly they learned the lessons in an enjoyable way. The lessons were processed by the activities of curriculum prepared by the researchers. Also at breaks, students' thoughts were taken; they were informed about they were not only playing games, that was a kind of a learning method. In some parts, researcher stopped the games and asked questions to understand whether the students learned the aims of the lesson or not, if there was a problem expression method or mother tongue was used. After the lessons, students were aimed to do homeworks on the goal of the lessons learned, or they were given homeworks as a preparation of the next lesson.

In the control group, the same units were processed with traditional teaching technique (such as didactic teaching, question-answer etc.) by one of the researchers in the same duration by using only lesson book.

Data Collection Instruments

As data collection tool English lesson academic achievement test and interview form were used. While developing English lesson academic achievement test, it was paid attention to cover the related units equally, and opinions of the experts on educational sciences and English field were taken. According to the possibility of the elimination of some of the questions, pilot achievement test including multiple choices with fifty items was prepared. This test was applied to 250 students attending to primary school fifth grade in Kahramanmaraş city center during 2010-2011 education years. Item and test analysis were done on the data collected from the pilot study and every items' difficulty and discrimination indexes were determined. The items which had .25 and below discrimination index (r_{jx}) and the items which had .80 and above item difficulty index (p_j) were eliminated. Also, the items, which show no significant difference between the 27% top and bottom of the students, were eliminated. As a result of this analysis, after the elimination of 22 items, English lesson academic achievement test (ELAAT) including 28 items was obtained. The reliability of the ELAAT was calculated by Kuder Richardson-20 (KR-20) value to be .91 and it shows that the test is reliable. It is found that, average difficulty of the test is 0.60, mode is 21, median is 19, mean is 17.

Also a semi-structured interview form consisting of eight open-ended questions was prepared for the qualitative data. This form was applied to 10 girls and 10 boys from the experimental group to determine the students' ideas on the programme after the experimental study had finished. Interviews were made in accordance with

qualitative research models and the responses given to the semi-structured questions were recorded to the sound recording device.

Data Collection and Analysis

ELAAT was applied as a pre-test by taking official permission in two groups of primary school's fourth grade students during 2010-2011 education years spring semester in Kahramanmaraş city center. According to t-test analysis of pre-test scores, there is no significant difference between the experimental and control groups ($p > .05$). After eight weeks of experimental study, ELAAT was applied as post-test and post-test results were analysed by ANCOVA. ELAAT retention data was collected after fifteen days of the programme was completed and data was analysed by ANOVA for mixed measures. Also, repeated measures for ANOVA was used to determine the meaningful differences between the experimental group's pre-test, post-test and retention scores. In addition, students' interview answers were recorded to the audio recorder with the permission of the students. Interview data was transferred to the computer environment and analysed by qualitative research methods by determining codes and themes.

RESULTS

In this section, the results of the analyses are given.

The Results for the Experimental and Control Groups English Lesson Academic Achievement Post-Test Results

Primarily premises of ANCOVA were tested, and they were met according to the analysis results. Students' academic achievement post test mean and their correct mean points to the pre-test mean were given in Table 1.

Table 1: Descriptive Statistics of the Academic Achievement Post-Test and Corrected Post-Test Mean of the Groups

Group	N	Mean	Corrected Mean
Experimental	35	22.06	22.32
Control	35	15.5	15.25

As seen in Table 1, academic achievement post-test mean point for experimental group is 22.06, and it is 15.50 for control group. When the groups' academic achievement pre-test points get under control, changes are seen in the post-test points. Academic achievement post test corrected mean point for experimental group was calculated 22.32, and it was calculated 15.25 for control group.

The results of ANCOVA for whether there is a significant difference between the groups' academic achievement post-test corrected mean points are given in Table 2.

As seen in Table 2, when academic achievement pre-test points of the experimental and control groups are got under control, significant difference between the post-test results in favour of the experimental group, $F(1-67)=36.778$, $p < .05$. According to this result, academic achievement post-test points of the experimental group, that was taken educational game based foreign language lessons, were significantly higher than the control group's that was taken traditional foreign language lessons.

Table 2: Academic Achievement Post-Test Results of the ANCOVA

Source of Variance	Sum of Squares	df	Mean Square	F	p
Pre-test	196.772	1	196.772	8.474	.005
Group	854.039	1	854.039	36.778	.000*
Error	1555.856	67	23.222		
Total	2606.667	69			

*p< .001

The Results for the Experimental and Control Groups English Lesson Academic Achievement Retention Test Results

Primarily premises of ANCOVA were tested. According to the analysis, the premises of ANCOVA weren't met. So ANOVA for mixed measures technique was used.

According to the results of ANOVA for mixed measures, descriptive statistics of English lesson academic achievement post-test and retention test scores were given in Table 3.

Table 3: Descriptive Statistics of English Lesson Academic Achievement Post-Test and Retention Test Scores

Group	N	Post-Test		N	Retention Test	
		\bar{X}	S		\bar{X}	S
Experimental Group	35	22.06	5.45	35	24.14	3.79
Control Group	35	15.51	4.67	35	14.86	4.72

As it is seen in Table 3, English lesson academic achievement post-test mean points of the experimental group after the experimental study is 22.06, English lesson academic achievement post-test mean points of the control group is 15.51. After fifteen days from the post-test, retention test was done. Retention test points of the experimental group increased by 24.14, and retention test points of the control group decreased by 14.86.

Table 4: English Lesson Academic Achievement Post-Test and Retention Test Points' Results of ANOVA

Source of Variance	Sum of Squares	df	Mean Square	F	p
Between Groups	4359.143	69	2192.257	68.796	.000
Group(Experimental/Control)	2192.257	1	31.866	1.462	.231
Error	2166.886	68	17.857	5.391	.023*
Within Groups	914.000	70	65.829		
Measure(Post-test-Retention)	17.857	1	12.211		
Group*Measure	65.829	1			
Error	830.314	68			
Total	5273.143	139			

*p< .05

The results of ANOVA for mixed measures for whether there is a significant difference between the groups' academic achievement retention test points are given in Table 4.

There is a significant difference between the groups' English lesson academic achievement retention test points and post-test points, $F(1, 68) = 5.391, p < .05$. This result shows that educational game based learning and traditional learning on English lessons has a different effect on the students' English lesson academic achievement retention points. According to the test results, it is understood that educational game based learning has a more positive effect on retention of English knowledge than traditional learning.

The Results for Experimental Group English Lesson Academic Achievement Pre-Test, Post-Test and Retention Test Results

Descriptive statistiscs for English lesson academic achievement pre-test, post-test and retention test points of the experimental group is given in Table 5.

Table 5: Descriptive Statistics for English Lesson Academic Achievement Pre-Test, Post-Test and Retention Test Points of the Experimental Group

Measurement	N	\bar{X}	S
Pre-test	35	12.06	4.04
Post-test	35	22.06	5.45
Retention test	35	24.14	3.79

As seen in Table 5, experimental group students' English lesson academic achievement test mean scores gradually increased as 12.06, 22.06, and 24.14.

The results of repeated measures for ANOVA whether there is a significant difference between the experimental groups' English lesson academic achievement pre-test, post-test and retention test points are given in Table 6.

Table 6: Experimental Groups' English Lesson Academic Achievement Pre-test, Post-Test and Retention Test Points' Results of ANOVA

Source of Variance	Sum of Squares	df	Mean of Squares	F	p	Significant difference
Between Groups	1244.229	34	36.595	122.35	.000*	Pre-test&Post-test; Pre-test&Retention
Measure	2921.505	2	1460.753			test;
Error	811.289	68	11.939			Post-test&Retention
Total	4977.023	104				test

* $p < .001$

As it is seen in Table 6, there is a significant difference between experimental group's English lesson academic achievement pre-test, post test and retention test points, $F(2-68) = 122.35, p < .001$. Post test mean point ($\bar{X} = 22.06$) and retention test mean point ($\bar{X} = 24.14$) are higher than pre-test mean point ($\bar{X} = 12.06$). According to this, experimental group students' English lesson academic achievements increased significantly pre-test, post test and retention test points got higher significantly.

The Results for the Students' Views on Educational Game Based Learning

20 students of experimental students declared their views on educational game

based English lessons. The questions, answers and the frequencies of the answers are given in Table 7.

Table 7: Students' Views on Educational Game Based Learning

Questions	Answers	Frequency
1a. Is there a positive effect of educational game based learning on learning English lessons topics easily?	Yes, there is	20
	No, there isn't.	0
1b. How?	I'm learning lessons easily with games.	20
	We both enjoyed and learned in lessons.	17
	I started to love English lessons thanks to games.	15
	In the exam, I remembered the games and I answered questions easily.	7
	I repeat the subjects easily with games at home.	4
2.Which English lessons do you prefer? Are the lessons done by books or done with educational games? In which situation, are you more motivated in learning?	I enjoy English lessons only done by book.	0
	I enjoy English lessons that are done with educational games.	19
	I enjoy in both situation.	1
3.How did you feel while the lessons were processed with educational games?	We were fun, we laughed.	20
	I felt the sense of competition and race.	16
	I was excited.	15
	Lessons were more enjoyable.	14
	Pleasure, happiness.	11
	I was proud of myself.	2
	The fear of losing.	1
4. Is there a positive effect on keeping the learned topics in mind longer while the lessons were processed with educational games?	Yes, there is.	20
	No, there isn't.	0
5a. Are educational games effective on transferring the learned knowledge to your everyday lives?	Yes, there are.	20
	No, there aren't.	0

Table 7: Continued

Questions	Answers	Frequency
5b. Could you give examples?	We played the games we learned in our spare lessons and breaks with our classmates.	20
	We played the games with my sister, brother and mother at home.	18
	I taught this game to my other friends and we played together.	14
	I sing the songs that I learned in the lessons.	9
	I taught the subjects that I learned while I'm lying in my bed before sleep.	6
	I taught the subjects that I learned to my brother or sister.	2
6a. Did you have a difficulty while you were having lessons with games?	Yes.	11
	No.	9
6b. In which points did you have a difficulty?	Setting sentence.	7
	Using unknown words.	4
	Sometimes stumble in playing games	1
	Singing English song is difficult for me.	1
7. Which game did you like most?	Clock game.	20
	Train game.	18
	Caterpillar game.	15
	Which animal?	14
	Goal game.	13
	Animal imitation.	11
	Songs.	8
	Hanging Man.	7
8. What are your recommendations for more efficient English course?	We should play games in the next lessons.	20
	There should be games in our text books.	13
	We should always speak English in English lessons.	7
	I advice other classes to play educational games.	6

As shown in Table 7, all the students said that game based learning has a positive effect on learning English lessons' topics easily. They told that they both enjoyed and learned. Also most of the students' thought is that they are more motivated on learning. They emphasized that they started to love English lessons because of the games, and in the exams games helped them to remember the learned topics.

But some of the students sometimes got difficulty in lessons, because students used to learn lessons in a didactic way, it was easier for them to listen to the teacher by sitting, but in this research they were in the centre of the lessons, they were the actors of the lesson. But after a time passed, they got accustomed to this procedure, and they got involved in lessons positively. Also they said that they played the learned games

after school or at breaks. This shows that game based learning has a positive effect on both learning and retention.

This research could enlighten foreign language learners; their taboo about the difficulty of learning foreign language could be broken. They advised other classes to use games in lessons. They shared their experiences with them.

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This research could enlighten foreign language learners; their taboo about the difficulty of learning foreign language could be broken. They advised other classes to use games in lessons. They shared their experiences with them.

DISCUSSION AND CONCLUSIONS

In this research, results of the ANCOVA show that there is a significant difference in favour of the experimental group in terms of post-test scores. So it can be claimed that educational game based learning is more effective technique than traditional learning on students' English lesson academic achievements. This result shows similarities with the studies (Atay, 2007; Cimcim, 2008; Firat, 2007; Figen, 2004; Hisar, 2006; Kalaycıoğlu, 2011; Kaya, 2007; Öztürk, 2004; Susüzer, 2006). Susüzer (2006), in her thesis named "French Teaching Through Games", taught lessons with games in experimental group for four weeks, and taught lessons on text books with traditional teaching in control group. After four weeks study, French lesson academic achievement post-test results show that experimental group was more successful than the control group. Likewise Hisar (2006), processed a study on primary school fourth and fifth grade students, and the post-test scores showed that experimental group based on educational game in foreign language lessons was more successful than the control group who was taken traditional learning on foreign language lessons. Kaya (2007), in his thesis "The Effect of Game Technique on Academic Achievement in Primary School First Stage English Lessons", taught English lessons with games in fifth grade experimental group and with traditional teaching in control group. At the end of the study, the result of the academic achievement post-test showed that educational game based learning was more effective technique on academic achievement than the traditional learning on foreign language teaching. Cimcim (2008), in her thesis "Teaching English to Primary School Students via Games", chose one of the primary school classroom of fifth grade students as an experimental group and one of the primary school fifth grade students as a control group. According to the academic achievement post-test results,

significant difference in favour of the experimental group was found.

In this study, according to retention test points it is determined that educational game based learning is more effective technique than traditional learning on retention of English knowledge. This result is compatible with some research findings in literature (Ataöver, 2005; Çiftçi, 2010; İnan, 2006; Özbal, 2010; Taşlı, 2003). Ataöver (2005), in his thesis “Teaching English Grammar through Games to Adolescents”, he did an experimental study on ninth grade students. He taught grammar lessons in experimental group with game based learning and taught grammar lessons in control group with traditional learning. Experimental group students became more successful than control group on academic achievement post-test and retention test. İnan (2006), in her thesis “The Effect of Enjoyable Activities Like Game, Drama, Music on Teaching Vocabulary to Children”, studied on primary school sixth grade students. In her research, for four weeks she taught fifty vocabularies to experimental group with games and to control group by memorization. After the study, experimental group became more successful on academic achievement post-test and retention test results. Özbal (2010), in his thesis “Educational Games’ Importance in Primary Schools”, he chose two groups including sixth grade primary school students for an experimental study. He taught German lessons with educational games to experimental group for eight lessons and taught the same lessons with traditional learning to control group. After the study, according to academic achievement post-test and retention test results, educational game based learning on foreign language teaching is more effective technique than traditional learning.

McGraw-Yoshimoto-Seneff (2009), compared the effectiveness of computer games and flash cards on vocabulary teaching on foreign language learning, and found that in second language learning computer games are more effective on the storage of the vocabularies in long term memory. Duong (2008), Luong (2009), Nguyen (2005), Nguyen (2008), Nguyen & Khuat (2003), Stojkovic & Jerotijevic (2011) proved that on foreign language teaching game based learning is an effective technique, and with this technique knowledge could be learned in a comfortable and stress-free atmosphere. By this way, knowledge could be learned both easier and it becomes more permanent on students’ mind.

In this research, all interviewed experimental group students said that educational game based learning had a positive effect on learning English easily. Macedonia (2005), according to the observations, stated that students learn the topics unawares with games, teaching takes place in an enjoyable environment, reviewing the topics with games doesn’t become boring for students. Brewster and Ellis (2002) expressed that activities like playing games, singing songs, telling stories in primary school foreign language lessons increase students’ motivation and achievement. Sorensen and Meyer (2007), in their article “Serious Games in Language Learning and Teaching” insist that game is a facilitative technique on foreign language teaching.

In this study it is determined that, most of the students enjoyed English lessons based on games. Al-Nafisah (2012), Nguyen & Khuat (2003), Uberman (1998), Wang *et al.* (2011) according to their studies on foreign language teaching, stated that students enjoy game based learning on foreign language teaching. Ataöver (2005), in his study about teaching English through games, requested students to write their thoughts on a paper. Students stated they loved English lessons by games very much,

they enjoyed speaking English while playing the games, they learned new words unawares by this way, and they played these games after the lessons between each other. Stojkovic & Jerotijevic (2011) used a questionnaire on investigating the effectiveness of games on foreign language teaching. Most of the students (133/178) declared that English with games are more enjoyable. Besides they said that in such courses participation to the lesson increases, and this kind of activities support the feeling of competition and by this way they learn the lessons easily.

Also in this research, all the students declared that via the games they keep the learned knowledge in their minds longer, they play these games after the school with their friends and they recommend using educational games in the next English lessons. Luong (2009), Nguyen (2005), Nguyen (2008), and Tuan & Doan's (2010) researches support these findings.

In the light of the above findings, the following suggestions could be made: This study took place on primary school first stage fourth grade students for eight weeks on "Pets, My Weekly Schedule and Timetables" units, similar studies on English lesson's other units could be made to test the effectiveness of the educational game based learning, also similar studies could be made on other primary school grades.

Experimental model was used in this study. Similar studies could be made to gather qualitative data by interviews with teachers to determine the effect of using games on foreign language lessons. This research was carried out with one experimental group and one control group and academic achievement pre-test, post-test and retention tests were done. In similar studies follow up tests could be made and the number of the groups could be increased as two experimental groups and two control groups.

In this research, educational game based learning technique on foreign language teaching was used. Other techniques such as drama, role play, brain storming, computer assisted learning may be used in foreign language teaching.

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Chapter 13

Preschool Integrative Education in Turkey

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INTRODUCTION

Preschool period refers to a critical time between the ages of 0-6 when development is at its fastest and children acquire basic attitudes and behaviors. Child development and maturation during this period is a rather personal process influenced by many factors such as culture or opportunities. Individuals in a society should not be prevented from fulfilling life functions, attending general education classrooms and benefiting from education adequately, because of their specialities or unique characteristics.

Preschool period is the first and most important stage of education as it directly influences children's future life. It is therefore essential that young children receive high quality education in proper conditions during this stage (Dağlioğlu, 2014; Kandır, 2001; Kaygusuz, 2007; MEB, 2013a). Preschool classrooms are also one of the earliest contexts where children experience social rules outside their homes. All of these make preschool period conditions and environments critical for humans (Akduman, 2013; Oktay, 1999).

It is not uncommon for preschool education settings to include children whose development deviate significantly from regular development criteria, and who display insufficient cognitive or communicative skills or socio-emotional features. These children that we call children with special needs (CSNs) should receive education together with their normally developing peers starting from a very early age, share the same social environments, and become a member of the society as an individual with special needs. Providing these children with integrative education where they learn side by side with their normally developing peers is particularly important for their integration into the society (Batu & Yükselen, 2014). This chapter aims to reveal the state of preschool integrative education in Turkey.

INTEGRATIVE EDUCATION

Integrative education is based on the idea that CSNs should be educated in a natural environment by modeling their normally developing peers and others around them. Children in integrative education have the opportunity to interact with their normally developing peers everyday so that they can observe and model their behavior (Acarlar, 2013; Bowe, 2005).

As skills acquired in the preschool period skills are the basis of future life, the quality of school education during this stage of life is crucial. However, there is yet no full agreement on the ideal qualities of educational environments for CSNs. The limited consensus is that they should be in the "least limiting" environment possible. This means that CSNs should receive integrative education in the same classroom as their normally developing peers. Integrative education is based not only on the principle of having CSNs together with their peers, but also on providing them with an

education that meets their needs in this environment (Allen & Cowdery, 2005; Dikici Sığirtmaç & Deretarla Gül, 2010; MEB, 2013b).

PRESCHOOL INTEGRATIVE EDUCATION

Educating CSNs and normally developing children together in the same classroom is a relatively new approach (Allen & Cowdery, 2005). Item 28 of the Convention on the Rights of the Child states that all individuals need education in order to live in harmony with their society; all children have the right to education; and education should be based on equal opportunity (UNICEF, 1995). The principle of equal opportunity in education suggests that CSNs ought to be educated with normally developing individuals. Integrative education aims to bring all children together with their unique characteristics. Even though the needs of children may differ, all of these needs should be met (Acarlar, 2013). The main goal should be to determine the special needs accurately and start supporting them as soon as possible. Only in this way can special needs stop being an obstacle for CSNs. Early curricula are therefore very important for these children (Acarlar, 2013; Chandler, 1994; Senemoğlu, 2011).

What needs to be remembered here is that helping CSNs is not the sole aim of integrative education. Benefiting normally developing children, meeting their needs, and offering them learning opportunities are equally important (Duman Sever, 2007). Likewise, preschool integrative education does not aim to turn a CSN into a normally developing child. The goal is to unveil and improve the child's unique interests and talents, and ensure his adaptation to the society (MEB, 2010).

Including CSNs into integrative education gives them the same social status as normally developing children and grows awareness of the public. In this way, the society becomes accustomed to living with individuals with special needs. Integrative education therefore means a step toward better social acceptance of CSNs. If these children constantly play with children like themselves, their social skills do not develop (Allen & Cowdery, 2005). Not only social skills, but also motor, linguistic and cognitive skills develop through observation as CSNs interact with normally developing peers who are ahead of them. As a result, CSNs in integrative education develop their academic skills as much as — if not more than — their peers at special education schools (Acarlar, 2013).

Integrative education requires a lot of preparation to begin with. If these preparations are not sufficiently made, integrative education may harm both CSNs and normally developing children. At the same time, the classroom teacher may also face serious difficulties (Metin, 2012).

Sufficiently preparing all elements of integrative education prior to startup is at least as important as the support services to be given throughout. This is a prerequisite for integrative education (Batu, 2000). These preparations include teaching CSNs classroom rules, briefing normally developing children about personal differences, getting to know families more closely, and informing them on school-family cooperation. Prior to inclusive education, it is essential that teachers are introduced to the school and the classroom, and determine the instructional methods and techniques of special education that they will use. In addition, cooperation should be established with families, teacher's aides and other educators. Informing school

principals about inclusive education as well as the qualities and needs of CSNs at their school is another important preparatory step (Batu *et al.*, 2013; Kennedy & Horn, 2004; Sucuoğlu & Kargin, 2010; Tagay, 2014; Tanrıverdi Kış, 2011).

FACTORS THAT BRING SUCCESS TO INTEGRATIVE EDUCATION

Integrative education is a whole with all its elements. The factors that make it successful include:

The Teacher: What a child can do is limited by the talents and imaginations of the people who educate him. As positive views on integrative education and acceptance of CSNs will bring positive results, teachers are among the factors needed for successful integrative education (Atkın, 2013; Kennedy & Horn, 2004).

Teachers are key to effective preparatory work. They are at the same time mediators in the classroom. Planning children's education in line with their developmental states, meeting their needs, and organizing the classroom accordingly are among the duties of teachers. They also determine the effectiveness of instruction by organizing interaction between CSNs and their normally developing peers, and by assessing CSNs. Teachers should therefore be equipped with developmental information and skills, and learn how to cooperate with families. Without the key role that teachers play, even the acceptance of CSNs in a classroom may be problematic (Batu *et al.*, 2013; MEB, 2010; Wall, 2006).

Families: The current family-centered approach adopted in integrative education worldwide gives parents a pivotal role in planning, implementing and assessing the instructional process (Wilson, 2003). Families should be informed about what integrative education is, what should be expected from it, the qualities of environments where CSNs can be educated, the support services offered, and assessments to be made. Families also need to know about their legal rights and responsibilities (Batu *et al.*, 2013; Wall, 2006). Such an approach aims to equip families with the long-term skills needed to meet CSNs needs without having to constantly consult professionals (Wilson, 2003).

School Principals: Integrative education requires the readiness of school principals at any level of education. Their positive attitudes affect all the units in a given school (Batu *et al.*, 2013). With their status in schools and their level of influence on teachers, they have a key role in the effective implementation of integrative education. They are the ones who support teachers as they cope with problems and equip their classrooms with the necessary materials and climate. A positive attitude on principals' part also helps teachers develop a similar attitude (Atkın, 2013; Metin, 2012).

Normally Developing Children: Classroom learning happens as a result of interaction, which does not only take place between teachers and children. Children also interact among themselves. These two types of interaction modes — between students and teachers, and among students themselves — establish the classroom climate. Therefore, interaction between normally developing children and CSNs is vital (Batu *et al.*, 2013).

Friendship needs to be developed between normally developing children and CSNs. Certain efforts may be made to ensure this. For more social acceptance,

children's common interests may be found. This may help develop a link between normally developing children and CSNs. Those children, who improve their friendship skills, treat CSNs positively, and also help them may then be rewarded (Sucuoğlu, 2006).

Physical Conditions: The classroom environment should be as attractive and conducive to participation as possible for children to take ownership of their learning and develop positive attitudes (Atkın, 2013). The classroom should be arranged not just for instruction but physically as well. Any risk factors that may cause accidents must be eliminated. Physical arrangements also facilitate instructional arrangements. Classroom arrangements can affect the quality of education either positively or negatively. Particularly for CSNs, the physical environment is vital for the acquisition of nonacademic skills. Therefore, arrangement of physical conditions is a noteworthy issue in inclusive education (Batu & Kırcaali İftar, 2010; Tanrıverdi Kış, 2011).

Individualized Education Program (IEP): One of the most salient features of integrative education is the need for implementing Individualized Education Program (IEP) (Güzel Özmen, 2003). An IEP is developed by regional education institutions or units in order to meet children's special needs. These needs determine their performance, their short- and long-term goals, the type and duration of special education to be offered to each child, and children's participation levels (Fiscus & Mandell, 2002).

An IEP is the answer when there is a special need that is stopping children from participating in education with their peers, when these special needs are adversely affecting their performance and there is a need for tailor-made educational support (MEB, 2004). By making the monitoring of individual children easier, the IEP identifies what children can and cannot do. It facilitates the monitoring of participation and development. It also facilitates the identification and elimination of flaws in the regular curriculum (Yıldırım Doğru, 2011).

Article (f) of Item 4 in the Turkish Ministry of Education's Legislative Decree on Special Education (MEB, 1997) states that "*Individualized Education Programs are to be designed and implemented for individuals in need of special education*". Therefore, a IEP is a legal requirement. According to Article (d) of Paragraph 1 in Item 23 of the Special Education Services Regulation (SESR), integrative education institutions require a IEP development unit. According to Item 5 in the SESR, this unit prepares, evaluates and renews the IEP when necessary. Each year, curricula become evaluated and revised (MEB, 2012).

Assessment: The effectiveness of education also needs to be assessed at every stage. The teacher should assess her own performance, the effectiveness of the education, and the children at every step (MEB, 2013a). Many instruments are present for the assessment of preschool children, such as observations, portfolios, or anecdote records.

For as long as CSNs attend integrative education, their development should be continuously assessed (Metin, 2012). Effective observation is essential in the assessment process. It is the teacher's duty and responsibility to observe each child's development, and make this knowledge available to families and experts. Teachers should therefore take charge for observing and assessing children. If the observation

shows that children face certain problems, proper intervention should take place (Wall, 2006).

In special education, child assessment equals performance identification. In other words, the main goal of assessment is to identify children's performance in academic and skills areas. Assessment may be divided into two: "overall assessment" and "detailed assessment". In the former, teachers design a form by considering pre-requisite skills, goals and objectives, or adapt an existing assessment tool for their own CSNs. This kind of assessment yields information about CSNs' performance levels. The skills that children cannot actualize are used to make a "prioritized needs list". Detailed assessment, on the other hand, requires a close-up assessment of the skills on this list. This type of assessment helps the systematic design of a IEP (Tanrıverdi Kış, 2011).

INTEGRATIVE EDUCATION SUPPORT SYSTEMS

For successful integrative education, the instructional environment needs to be right and integration support systems need to be formed. These support systems may be divided into two: inside and outside classroom systems (Sucuoğlu & Kargin, 2006). The former comprises support activities that special needs students engage in inside the classroom, while the latter includes activities that they engage in outside.

In counselor-supported integrative classrooms, the special education counselor helps the classroom teacher in various areas, while special education teacher-supported integrative classrooms require the cooperation of special education and classroom teachers. Similar to this, in teacher's aide-supported integrative classrooms, the special education teacher and classroom teachers are both responsible for the education of the students in the classroom (Lewis & Doorlag, 1999; Sucuoğlu & Kargin, 2006).

Of outside support systems, a source room is a place other than the integration classroom where CSNs receive one-to-one help from the special education teacher. A mobile special education teacher is one that visits schools with CSNs to offer special education services. Similar to the practice of the source room, CSNs are separated from the classroom to receive special education support (MEB, 2012; Sucuoğlu & Kargin, 2006).

PLACEMENT OF CSNs IN INTEGRATIVE EDUCATION IN TURKEY

In Turkey, CSNs can only be placed in integrative education after following certain stages of assessment. These stages cover a certain time period and are carried out by a team of professionals. The first stage is for the teacher to identify possible CSNs or at-risk children. The second stage is for her to make adaptations to encourage the participation of the child in regular classroom activities. This happens prior to referring the child to a Guidance Research Center (GRC) or Pediatric Mental Health Center (PMHC) for diagnosis. If no development occurs in the child over this time, he gets referred to a GRC or PMHC for detailed assessment. A child can only be diagnosed as disabled by a state or university hospital. A detailed examination at a GRC reveals whether the child is entitled to special education services. If this is the case, an educational institution is selected and the child is admitted. Following this, an IEP is designed for the child. It is continuously evaluated and renewed (Kargin, 2013).

INTEGRATIVE EDUCATION OPERATIONS IN TURKEY AND THEIR LEGAL BASES

The educational facilities offered to CSNs in Turkey have improved significantly. The earliest example of CSN education in Turkey was the *Enderun* School. Gifted children were admitted to these schools. With the birth of the Turkish Republic, the importance attached to education increased; however, no significant improvement occurred in CSN education. Until the 1950s, CSNs were believed not to be fit for education and therefore only given care (Sucuoğlu & Kargın, 2010).

Seen from a chronological point of view, special education services in Turkey were transferred from the Ministry of Health and Social Support to the Ministry of Education in the 1950s. This marked the beginning of an educational approach rather than mere caretaking. Special education services were run by the General Directorate of Primary Education between 1950 and 1980. In 1980, the General Directorate of Special Education was established for this purpose and, in 1982, a separate unit known as the Department of Special Education and Counseling was established. A decade later, in 1992, this unit was restructured into the General Directorate of Special Education - Counseling and Consultation Services to meet the increased need for special education and counseling. In addition, the Department of Disability was established under the Prime Minister's Office in 1997 to coordinate state services for the disabled. After this date, special education became an increasingly more emphasized topic (Aral & Gürsoy, 2009; Sucuoğlu & Kargın, 2010). However, the Department of Disability was taken over in 2011 by the General Directorate of Disability and Elderly Services functioning under the Ministry of Family and Social Policies. Unfortunately, this unit seems to focus more on offering services to disabled individuals rather than integrative education.

Since the restructuring of the Ministry of Education in 2011, integrative education efforts have been run by the Department of Special Education and Integration, which functions under the General Directorate of Special Education and Counseling Services. The Department of Special Education and Integration is responsible for determining the principles of special and integrative education, conducting studies about the services, establishing and shutting down special education institutions, running the affairs of CSNs, supporting relevant projects, and increasing access to and elevating the quality of special and inclusive education services (MEB, 2011; Department of Special Education and Integration, Özel Eğitim ve Kaynaştırma Daire Başkanlığı, 2014).

Another noteworthy inclusive education effort by the Ministry of Education was the addition of integrative education as a strategic goal in the 2010-2014 Strategic Plan developed by the Department of Strategic Development: *"Increasing the number of up-to-standard educational support rooms and special education classrooms for integrative education by 50% by the end of 2014"* (MEB, 2009).

Considering legal bases, the first development regarding integrative education has been the addition of item 42 in the Turkish Constitution: *"The Constitution takes the measures needed to integrate special education children into the society"* (Ataman, 2011). The first legal mention of integrative education was the Law on Children Needing Special Education dated 1983 and numbered 2916 (Batu & Kırcaali İftar, 2010). However, these developments did not clearly specify the principles of

integration. The first significant step towards this was the legislative decree numbered 573, which was prepared in 1986 and passed on 6/6/1997 (Sucuoğlu, 2006). This was the first document in which the details of inclusive education practices were mentioned. Item 16 of the decree stated, “*Individuals in need of special education will be educated with their peers by using IEP with the appropriate techniques in each level of schools and institutions*”. Support services were also mentioned for the first time in this document. However, no practical developments took place in reality. Item 7 of the same legislative decree was titled “Preschool Education” and stated that CSNs were entitled to extended preschool education when necessary (Batu & Kırcaali İftar, 2010; MEB, 2010).

The Special Education Services Regulation (SESR) was passed in 2000 and revised in 2006. By this revision, the operation of private special education institutions was transferred from the Social Services and Child Protection Agency to the Ministry of Education (Akçamete, 2009). The SESR dated 2012 clearly states the principles of integrative education and special education. The proposed Special Education and Counseling Services Regulation was published in 2014. Additionally, Circular 2008/60 stated the principles for Integrative Education Practices.

The SESR written by considering all legal arrangements includes explanations on and principles of preschool education services. The regulation also sheds light on how to undertake integrative education student placement, open special education classrooms and take necessary precautions. Provincial/Town Special Education Boards were given responsibility for these (MEB, 2010).

THE OVERALL PICTURE IN TURKEY REGARDING PRESCHOOL INTEGRATIVE EDUCATION

In our day, integrative education is becoming increasingly more important. Parallel to this, the number of CSNs in integrative education is increasing each year, too (Sucuoğlu & Kargın, 2010). According to data from the Ministry of Education, approximately 80,000 CSNs in the 2009-2010 school year and 93,000 in the 2010-2011 school year attended general classrooms. In the 2012-2013 school year, the numbers of CSNs in special education schools and special education classrooms were 33,877 and 25,477, respectively. In inclusive education, on the other hand, there were 161,295 CSNs. In the 2013-2014 school year, the number of CSNs attending integrative education went as high as 173,117. The number of those attending special education and rehabilitation centers in 2014 was 286,587 (ASPB, 2014).

The number of children attending integrative education is rising with the importance attached to preschool education in Turkey. Data from the Ministry of Education shows that 3,217 and 11,156 CSNs aged 36-72 months were referred to preschools in 2009 and 2010, respectively (Acarlar, 2013). On the other hand, while the rate of preschooling reached 60% between 2010-2013 with the Power to Preschool Education Project, the lowering of the school starting age in 2012-2013 and the changes in the education system (known as 4+4+4) regressed preschooling back to 44% in the 2013-2014 school year (TÜİK, 2015). As shown in Table 1, the number of children in integrative education is rather low, despite the Ministry's 2014-2015 statistics of children in official preschools alone (MEB, 2015). This is attributed as much to the problems families have about their CSNs being educated with their

normally developing peers as to the changes in the educational system. Statistics from previous years also show that the rate of integrative education was not high enough.

Table 1: The number of children in preschool and integrative education in 2014-2015

Official preschool education institutions affiliated to the Ministry of Education	Number of Children		
	Boys	Girls	Total
Kindergartens-Preschools	516.075	468.942	985.013
Integrative education (Kindergartens)	186	118	304

Indeed, previous research on preschool integrative education in Turkey shows that teachers believe in educating CSNs in the same in classrooms as their normally developing peers (Gök & Erbaş, 2011; Varlier & Vuran, 2006), but also that they face many problems in the integrative education process (Altun & Gülben, 2009; Artan & Uyanık Balat, 2003; Gök & Erbaş, 2011; Metin *et al.*, 2009; Özaydın & Çolak, 2011; Şen, 2003; Yavuz, 2005; Varlier & Vuran, 2006). Research also shows that the special or integrative education courses that teachers take while still a candidate teacher at university and in-service training after starting to work are not sufficient to equip teacher for implementing integrative education (Özaydın & Çolak, 2011; Özbaba, 2000). As a result, they frequently complain about not being competent enough to adapt the preschool curriculum for CSNs, to prepare an IEP, to cope with problem behaviors, and to cooperate with CSN parents (Altun & Gülben, 2009; Dikici Sığirtmaç, Hoş & Abbak, 2011; Gök & Erbaş, 2011; Özbaba, 2000). The results of previous studies also reveal that the physical conditions of inclusive education schools are mostly insufficient (Bilen, 2007; Varlier, 2004) and the level of arrangement and adaptation for integrative education is rather low (Çerezci, 2015; Vural, 2008). Considering educational support services, these are limited to primary schools in Turkey, therefore exposing teachers to serious problems in the classroom and leaving them on their own to solve them (Çerezci, 2015; Kargin *et al.*, 2003; Sucuoğlu & Bakkaloğlu, 2015; Uysal, 1995). As preschool teachers cannot adapt the curriculum for children with different developmental courses, the benefits these children derive from the curriculum and the educational process do not satisfy parents or teachers. From the perspective of families, they are glad for their CSNs to be placed in the same classroom as their peers, but they worry that inclusion practices do not provide their children with adequate education (Kargin *et al.*, 2003).

In conclusion, effective preschool integrative education practices require extensive preparation, theoretical and practical teacher training, physical and instructional arrangements at the school and in the classroom, cooperation with families and educational support services. There are serious problems in Turkey in preparing for preschool integrative education, in arranging schools and classrooms both physically and instructionally, and particularly in equipping teachers with the skills necessary to offer this education. However, despite all these problems, it is promising that teachers still believe in educating CSNs with their normally developing peers.

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Chapter 14

Opinions and Attitudes of Pre-School Teachers Regarding Teaching Profession: A Case Study in Afghanistan

Şafak ÖZTÜRK AYNAL, Rukiye ŞAHİN and Ömer Faruk SÖNMEZ

INTRODUCTION

Arguments concerning education process for 0-6 years old children, referred as early childhood education or pre-school education have gone back a long time. In the western history, references regarding early childhood education can be encountered in views of Aristotle and Plato; a book on this issue was published by J. J. Rousseau; in general, it can be realized that pre-school period had gained prominence institutionally after the beginning of the eighteenth century (Aslanargun & Tapan, 2011).

The initial doyens of this faculty, educators such as Montessori, Fröbel, Pestalozzi, McMillan, and Isaacs, were of the opinion that organizing rich and diversified environments for children in order to ensure that they gain necessary skills in their future school an Oktay (1983) daily lives and setting them free would be sufficient for pre-school education to fulfill its tough task aforementioned (Senemoğlu, 1994).

According to, the view that “a child is a model of an adult and he/she must be trained through the toughest rules” which prevails for centuries has lost its significance owing to the new ideas introduced by these educators; and the view that children desire love, safety and to be counted on instead of sternness has gained prominence.

Fröbel who was trained by Pestalozzi was the first person who introduced kindergarten in Germany. Fröbel referred this school as “Kindergarten” which means garden for children. Fröbel put emphasis on games in children education; and according to him, a child is and artist and engineer who is delighted to build up something (Çalışandemir, 2002, p. 11).

Maria Montessori, frontier of the first woman medical practitioner view and preschool education view in Italy, opened a child house (“Casa dei Bambini”) in 1907; and gave education through tool that she developed herself. Montessori, based on the study and observations carried on children who do not have any disability, determined things that children like or dislike (Montessori ve Kaynaştırma Eğitimi Geliştirme Derneği, 2012).

Loris Malaguzzi, following the World War II (1945), has brought a distinctive view in the field of preschool education in Reggio Emilia Town in Italy, which is well-known as the Reggio Emilia opinion in the world in preschool education area; and introduced a child-centered education method implementing its activities by relying on a project approach, and based on curiosity and creativeness (Inan, 2012).

The pre-school education program covers activities ensuring healthy physical developments of children by maintaining of enriched learning environments for children attending pre-school education institutions and experiences; ensuring their

developments in terms of their psychomotor, emotional, cognitive and other development areas at highest possible level; assisting them to gain their self-care skills; and preparing them for the primary education (AÇEV, 2010)

General View Toward Pre-School Education

According to the Turkish National Education Essential Law, pre-school education process in Turkey is consisted of education process for children aged 36-66 months. Pre-school education is a process organized according to the individual characteristics of this age group of children; and supports their physical and mental developments, which exposes their creativeness and talents, contributes their emotional development, and developing their talent for perception and expression.

Pre-school education, as an optional process, is given in independent kindergartens, nursery classes operating under the primary schools, or practicing classes in other relevant education institutions (Yıldırım, 2008).

In Turkey, although there were several attempts for establishment of pre-school education programs and raising teachers for these schools in 1952, however, they have not resulted in successful results. Together with the “Primary School and Education Law with 222 Serial Number”, pre-school education institutions were included as optional educational institutions that give education to children who are not in their compulsory education age; then, studies in the preschool education had gained a pace. In 1962, the first “Regulation for Kindergarten and Nursery Schools” was enacted.

The current applicable regulation was Ministry of the National Education Pre-school Education and Primary School Regulation published on the Official Gazette on July 26th, 2014. According to this regulation, preschool education is separated in three groups as kindergarten opened for education of children aged 36-66 months; nursery classrooms opened within the bodies of formal and non-formal education institutions for children aged 48-66 months; and practicing classrooms at the vocational and technical secondary education institutions in the fields of child development and education for children aged 36-66 months.

In Turkey, institutions that are giving pre-school education currently were presented below (Akçay, 2006):

1. Pre-school education institutions under the Ministry of National Education
 - Independent pre-schools (for children aged 36–66 months)
 - Kindergarten under body of primary schools (for children aged 48–66 months)
 - Practice pre-schools and nursing classes in the bodies of the Vocational High Schools for Girls (for children aged 36–66 months)
2. Pre-school educational institutions under Social Services Children Protection Institution
 - Nursing houses
 - Kindergartens
 - Child clubs
 - Child houses
3. Pre-school education institutions under bodies of Universities
4. Pre-school education institutions under body of the Ministry of Labor
5. Pre-school education institutions under bodies of Funds, Organizations, and Cooperatives (Akçay, 2006).

Apart from these, according to the 6th article of the regulation contained in the

issue of the Official Gazette published on July 26, 2014, it was also possible to provide pre-school education through summer schools and mobile pre-school practices in Turkey. Summer schools is an education practice organized by school principality along with the pre-school education program within the program that will be approved by local governorships, and that covers all subjects important to children for maximum two-month period in order to generalize and develop pre-school education, and to fulfill needs of working parents for children from all age groups in case any application may arise. In this practice including summer period, children who cannot utilize pre-school education and who would start their primary school education in coming education year are prioritized. The fact that these children participated in summer school does not guarantee school registration for the new education year.

Mobile pre-schools are described as free pre-school education service given in mobile vehicles such as buses to the children of the economically disadvantaged families who live in rural areas and who live away from opportunities of cities in order to ensure them to benefit from pre-school education. Method and principles of mobile classes are determined by the regulation (MEB, 2014a, Article 82).

Pre-school education is applied in private education institutions based on full or part time basis. If pre-school education is conducted in non-formal education institutions, it is given in fifty-minute-long courses, for 6 daily activity hours in dual education form. The number of children allowed for each group is required to be in the range of 10 - 20. In case number of children is high, the second group is formed. Additionally, a new group is not formed unless maximum number of children is reached for a group. For a single nursing class and application classroom, as long as classroom capacity is convenient, number of child can be up to 25. If number of children in classroom decreases below 10 during education year, first of all, it is combined with other groups. In case this is not possible, these groups continue education until the end of the education year.

Pre-school education service is a paid service at private institutions. On the other hand in official pre-school institutions, education is given for free. However, certain fee is charged for food, cleaning service and education materials required for execution of the education program. This fee is determined by an authorized commission on April of each education year. While maximum monthly fee is determined, economic situation of the community in the neighborhood is taken into consideration. The maximum monthly fee is determined at certain level in order to ensure it would not prevent generalization and development of pre-school education; and compel economic situations of parents. School management determines monthly fee that would be charged to parents according to the maximum level declared by the city commission and pay attention not to exceed this level. School administrations and parents are notified about the requested fee. However, parents are not charged fee for services given to children (MEB, 2014a, Article 67).

Pre-school education and primary education institutions are governed by principals together with other employees along with the provisions of the relevant regulations. Principle is responsible for students, all sorts of education, management, personnel, realization, and movable properties (MEB, 2014a).

Evaluation of students in the pre-school education institutions is implemented

though Progress Report prepared for students along the Pre-school Education Program. This progress report is entered into the e-School system; and a copy of this is submitted to the parents. The progress report does not include non-pedagogical and confidential information (MEB, 2014a). Children who receive pre-school education are issued Certificate of Participation at the end of year (Article 73).

Pre-school education institutions must be safe environments which prepare our children for the future in terms of respect, love, sharing, division of labor, responsibility, establishing social environment which constitute basic structure of the society (MEB, 2014a).

Of the core objectives of the pre-school education, they ensure children gain physical, mental emotional development and fine habits, to get ready for primary school education, to provide mutual equitable learning environment for those from the disadvantageous environments, to ensure Turkish to be spoken without mistake and efficient (Kilimci, 2006).

Ethnic and Educational Status in Afghanistan

Afghanistan is surrounded by Pakistan in the east and south; by Iran in the west; by Turkmenistan, Uzbekistan and Tajikistan in the north. Indeed, this territory is referred as Afghanistan. As a junction point of the roads from west and east, Afghanistan has rich ethnic and cultural heritage. There is no an ethnic group called as Afghan. The ethnical groups constituting population of Afghanistan are Pashtun (42%), Tajik (27%), Hazara (9%), Uzbek (9%), Aimaq (4%), Turkmen (3%), Baluji (2%), and other (4%) (Yılmaz, 2005; 19). Population estimate of Afghanistan as of July 2007 was 31,889,923. It was determined that the population is largely composed of youth; 44.6% of the population was consisted of 0-14 age group; 53% was consisted of 15 -64 age group; and 2.4% was consisted of 65 and over. Additionally, population growth rate was 2.625%; the average expected life for men and women are 43.6 and 43.96 respectively (Gülecen, 2008). Moreover, when overall society attitude toward their children is considered in general, it can be observed that male children are regarded more than females; as female children kept in the background. When male child is married, they stay with the family and they constitute survival resource of the family. In this geography where patriarchal family structure prevails, it is possible to encounter plural marriage as well (Sönmez, 2013; 13).

In Afghanistan, almost 80% of the population resides in rural; the rest 20% lives in urban parts. Influence of this prevailing situation can also be observed on education level of the population; hence general literacy rate remained at rather low level. As of 2005, it was estimated that 75% of the population was living in countryside in Afghanistan generally. According to the data published by the UNESCO, concerning the rural population older than 15,90% of females and 65% of males were illiterate. On the other hand, literacy rate was higher for urban population but the difference between genders was still significant. According to the data published by the central state statistical office, 660,000 children in Afghanistan reached their school age (7) in 2005; and in the next five years, number of children at their school age will continue to row (Ministry of Education, 2007:28 Reported by Gülecen, 2008).

Table 1: Course curriculum in Afghanistan (Cevizcan Educational Directorship, 2013).

COURSES	HIGH SCHOOL			SECONDARY SCHOOL			BASIC EDUCATION						مضامین وساحت نصاب تعلیمی
							SECONDSEMER			FIRSTSEMER			
	12	11	10	9	8	7	6	5	4	3	2	1	صنوف
Islamic Courses													تعلیمات اسلامی
Holy Quran				2	2	2	3	3	3	3	3	3	قرآن کریم و تجوید
Tajweed													
Religious Knowledge, Akaid, Fiqh, Moral							3	3	3	3	3	3	تعلیم و تربیه اسلامی (عقاید، فقه، اخلاق)
Religious Knowledge, Hadith, Fiqh, Prophetic Biography				3	3	3							تعلیم و تربیه اسلامی (حدیث، فقه، سیر)
Religious Knowledge, Akaid, Hadith, Fiqh	3	3	2										تعلیم و تربیه اسلامی (عقاید، حدیث، فقه)
Paraphrases of Holy Book	2	2	2										تفسیر شریف
Language Courses													لسانها
First Language	2	2	2	3	3	3	5	5	5	6	6	6	لسان اول (زبان مادری)
Second Language	3	3	3	3	3	3	3	3	3				لسان دوم
Third Language													لسان سوم
Arabic				2	2	2							لسان عربی
Foreign Language	3	3	3	3	3	3	2	2	2				لسان خارجی
Mathematics													ریاضیات
Calculus							5	5	5	6	6	6	ریاضی
Calculus, Algebra, Geometry and Trigonometry	6	6	6	5	5	5							ریاضی (الجبر، هندسه و مثلثات)

Natural Sciences											ساینس		
Health and Environ-ment						2	2	2			ساینس، محیط زیست و صحت		
Physics	3	3	3	2	2	2							فزیک
Chemistry	3	3	3	2	2	2							کیمیا
Biology	3	3	2	2	2	2							بیولوژی
Geology			2										جیولوژی
Social Courses											علوم اجتماعی		
Social Sciences						2	2	2					دروس اجتماعی
History	2	2	2	2	2	2							تاریخ
Geography	2	2	2	2	2	2							جغرافیه
Civil Knowledge	1	1	1	1	1	1							تعلیمات مدنی
Technology, Painting, Calligraphy, Culture, Hand Skills, Physical Education													تعلیم تکنالوژی و رسم، حسن خط و تربیت بدنی
Technology Knowledge and Painting				1	1	1	2	2	2	2	2	2	تعلیم رسم
Calligraphy							2	2	2	2	2	2	حسن خط
Hand Skills (Social Study)										1	1	1	مهارت های زندگی
Vocational Course				1	1	1							حرفه
Computer	1	1	1										کمپیوتر
Physical Education	1	1	1	1	1	1	1	1	1	1	1	1	تربیت بدنی
Cleaning													تهذیب
Selective Courses											مضامین انتخابی		
Culture, Agriculture, Vocational Skills, Environ-ment, Family and Its	1	1	1	1	1	1							فرهنگ، زراعت، لیافت های مسلکی، محیط زیست، خانواده و اقتصاد

Economy

Weekly Total Course	36	36	36	36	36	36	30	30	30	24	24	24	مجموعه ساعات درسی هفته
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As it can be seen from the table 1 above, it can be hardly said that there is an education system specific for the preschool period in Afghanistan.

As it is known, in harmony with the Support Strategy of the United Nations for National Education, development of human resources and increasing institutional capacities were prioritized in terms of education of educators during the transition process of Afghanistan because of the Afghanistan's need for raising human resource sufficient for its country and even to gain the country competitive strength in its region and international arena. To that end, Turkey introduced a series of education projects in Afghanistan. One of these projects is preschool formation education of teachers who will be appointed in Afghanistan. Nearly almost all of teachers were outside the preschool major; and they were given short-term formation education through academic support received from Turkey in order to fulfill their needs concerning basic subjects in preschool education. As this project is an international project; it was conducted jointly by the R.T. Prime Ministry, R.T. Ministry of National Education, Turkish City Building Team in Afghanistan (PRT), International Security and Support Force (ISAF- NATO), and local governments of Cevizcan and Sar-I Pul Cities in Afghanistan.

Figure 1 clearly portrays the status in Sarı Pul City in Afghanistan in terms of teachers, students and preschool education. Just based on this figure, it is possible to see that status of the preschool education in Afghanistan was rather low under the international measures. According to this evident need, a group of teachers who would be assigned at preschool education in Afghanistan were given formation education; at the end of this education, their opinions and attitudes regarding the preschool education were tried to be determined.

3. Purpose of the study

The present study aims to determine opinions and attitudes of participant Afghan pre-school teachers, who were on active duty at different education institutions, concerning the preschool education at the end of formation education given to them.

METHOD

Experimental method was utilized in the present study. Experimental pattern is a method which allows causative relationships among variables (Johnson and Christensen, 2014). It was aimed that whether formation education given prospect teachers has influence on their opinions and attitudes toward teaching profession, or not. Since conditions were not appropriate to form control group, it was not included in study. This situation constitutes limitation of the study.

Study group

The present study was applied on 31 prospect teachers in Sarı Pul City in Afghanistan in 2013. Of these participants, while one participant was male, thirty participants were female; 9 were high school graduate, 20 were college graduate and 1 was university graduate.

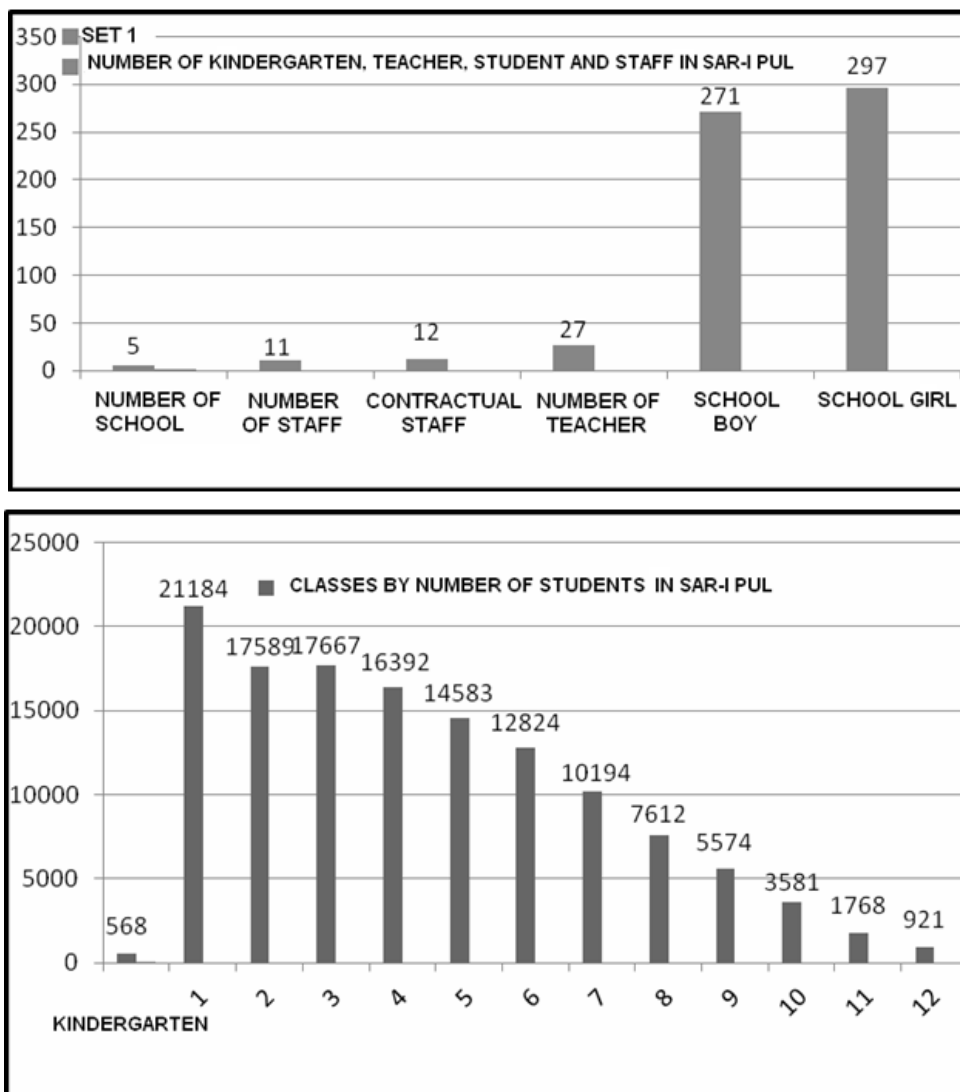


Figure 1: Need for preschool education based on numbers (Afghanistan Cevizcan City Building Team, 2013)

Data collection tool

Attitude Scale for Teaching Profession:

In this study, “Attitude Scale for Teaching Profession” developed by Çetin (2006) (Reported from Girgin *et al.*, 2010) was utilized. The scale is composed of two sections as “personal information” and “attitude expressions”. The scale uses five-point Likert Scale in the range between “strongly agree” and “never agree”; positive and negative expressions were prepared as mixture. While attitude scale is consisted of totally 35 articles, there were 20 positive expressions which were scored in the order of (5 – 4 – 3 – 2 – 1); and there were 15 negative expressions which were scored in the order of (1 – 2 – 3 – 4 – 5). According to the analysis conducted by Çetin

(2006), Cronbach's Alfa reliability coefficient of the scale was found as 0.95 ($\alpha = 0.95$).

Survey for Opinions of Teachers Regarding Preschool Education:

The survey developed by Öztürk (2007) (reported from Önbaşı *et al.*, 2007) is consisted of two sections as demographic information and opinions regarding preschool education. The second section uses the Five-Point Likert Scale as its answers ranges between "totally agree" and "totally disagree". As a result of the analysis through the scale including 17 expressions (totally includes 25 items), Cronbach's Alfa reliability coefficient was found as 0.88 ($\alpha = 0.88$).

Measurement tools were translated from Turkish to Farsi by Afghan Project Translator who has good command on both Turkish and Farsi. However, there was no chance to make adaptation to the Afghanistan sampling; thus, participants answered survey based on the translated text.

Data Analysis:

Data collected according to the general purpose of the study was run in the SPSS (Statistical Packet for Social Sciences) for statistical analysis. Of the descriptive statistical methods, frequency (f) analysis was applied in the study. In order to determine whether the score measured with the experiment group for their opinion survey regarding preschool and their attitude toward teaching profession were differentiated after the education, or not; the paired samples t test was utilized for measured scores. Quantitative data was organized and interpreted in tables; and it was tested that whether there was significant difference between the pretest and Post-Test scores of the experiment group at $\alpha = .05$ level.

Demographic characteristics of the study group

Demographic characteristics of the individuals from the study group were presented in the table 2.

Distribution of the marital status of participants was presented in Table 2.

Of participants, 74.2%weremarried, 19.4%were single and 1%was widow. One of the participants did not express his/her marital status. Percentage distribution regarding participants' educational status indicated that while 32.3% were graduated from high school, 64.5%were graduated from university. One of the participants did not give information regarding his/her educational status. Participants were also asked to indicate their department if there is one. Accordingly, while 51.6%did not indicate, 16.1%were from Mathematics, 12.9%were Literature, 6.5%were History; and percentage of graduates of Teaching, English, Engineering and Biology Departments was determined as 3.2%.

In addition to the demographic information of participants, they were asked whether they attended preschool education, or not. They were also asked about the reason for discontinuance, and whether they have a family member from teaching profession. Their answers were summarized on Table 3.

According to the answers of participants given to the question whether participants had preschool education before, or not, it was found that none of them had this education before. According to the answers given to the question requiring them to present reason for not to have preschool education, the most significant answers of participants was that there was no relevant institution giving preschool education (51.6%); secondly, their family did not find it necessary to have this

education (6.5%); and finally, their family was not sufficiently knowledgeable about preschool education (3.2%). According to the distribution of answers given to the question investigating whether there was a teacher family member, it was revealed that 38.7% of participants had a teacher family member; 61.3% not.

Table 2: Distribution of Participants' Marital Status, Educational status and Departments

Characteristics	Categories	N	%
Marital status	Married	23	74.2
	Single	6	19.4
	Widow	1	3.2
	Total	30	96.8
Educational Status	High school	10	32.3
	University	20	64.5
	Total	30	96.8
Department	Undeclared	16	51.6
	Literature	4	12.9
	Mathematics	5	16.1
	Teaching	1	3.2
	History	2	6.5
	English	1	3.2
	English	1	3.2
	Biology	1	3.2
	Total	31	100

Table 3: Distribution of Attendance of Participants to the Preschool Education; Reasons for Discontinuance; Any Family Member from Teaching Profession

Characteristics	Categories	N	%
Have you received preschool education before?	Yes	11	35.5
	No	19	61.3
	Total	30	96.8
Reason for not to have preschool education	Economic disadvantage	-	100
	Family ignorance	2	6.5
	Lack of relevant institution at the residential town	16	51.6
	Lack of information and cognition regarding preschool in the family	1	3.2
Is there any teacher family member?	Yes	12	38.7
	No	19	61.3

FINDINGS

This section includes statistical analyses conducted according to the end of the study and relevant results. Survey for evaluating opinions of participants regarding preschool education, and results of the paired samples t test conducted to compare pretest and post-test scores of teachers' attitude toward the preschool education were presented.

Concerning opinions of teachers regarding preschool education differentiated along the education process, results of the paired samples t test analysis were summarized in Table 4.

Opinions of participants regarding preschool education were found significantly positive after the education given by the researchers, $t(30)=-4.72$, $p<.05$. While average scores of participants in terms of their opinion regarding preschool education before the education was $\bar{x}=68.32$; it increased to $\bar{x}=72.81$ after the education. This finding suggests that given education has statistically significant contribution to the opinions of participants regarding preschool education.

At the end of the education given by the researchers, there was no significant difference between attitude scores of participants toward teaching profession measured before and after the preschool education process, $t(30)=-.63$, $p>.05$. While average score of participants in terms of their attitude toward teaching profession before the education process was $\bar{x}=130.35$, this increased to $\bar{x}=131.45$ after the education. This finding suggests that preschool education given by researchers has no significant influence on attitude of teachers toward teaching profession.

Table 4: The Paired Samples T-Test Analysis Results to Determine Whether Opinions of Participants Regarding Preschool Education Differentiated

MEASUREMENT	N	\bar{x}	S	sd	t	P
Pretest	31	68.32	5.71	30	-4.72	.000
Post-Test	31	72.81	3.36			

Table 5: The Paired Samples T-Test analysis to determine whether opinions and attitudes of participants regarding teaching profession have changed

MEASUREMENT	N	\bar{x}	S	sd	t	P
Pretest	31	130.35	15.75	30	-.63	.54
Post-Test	31	131.45	12.87			

RESULT AND DISCUSSION

As it can be understood from both observations of researchers during formation education within the scope of the project and from results of scales applied during education, there is still long way to progress in Afghanistan within the scope of the preschool education because, according to the information received from authorities, there has been barely solid development in preschool education in Afghanistan in the past and contemporary period. There has not been any educational institution established in any area of specialization (school for girls, technical schools for girls, or at the university department level) in the past. As it can be seen Figure 1 in the beginning of this study, education was initiated at the basic education level and continued based on a certain program.

The historical connection between Afghanistan and Turkey since Mustafa Kemal Atatürk's period resulted in development of friendly relationships between two countries up until our present time. In this regard, Turkey's assistance to Afghanistan in the education field is substantially important. Not only in the preschool education area, but also providing education to Afghan teachers in other different branches of education would deepen positive diplomatic relationships between two countries further.

Majority of teachers included in formation education project were female, they were participants mostly graduated from high schools and colleges from various majors. Participants have not received both theoretical and practical information about the preschool education and children development before. Although two-three weeks of education process is rather short period, participants stressed at the end of the education process that they were quite satisfied with the program many times. Results of the conducted pretest and post-test revealed a positive increase which suggests that there was certain progress. However, the finding indicating that teachers' attitude toward preschool education remained unchanged was an interesting result. As a result of the studies conducted in both Tukey and in abroad (Bozdoğan *et al.*, 2007; Çelik & Köse, 2007; Öztürk Aynal, 2013; Woods & Jeffrey, 2002), it is reported that normally it is observed that prospect teachers who are educated for teaching profession exhibit positive attitude toward their profession. Nevertheless, unchanged attitude level found in our study can be correlated with the fact that participant prospect teachers were individuals from other professions and difficulty experienced in teaching profession can have negative impact on them.

Finally, the most significant school variable that affects success levels of children is "quality of teacher". With the help of qualified teachers, the difference in success levels between students from low and high income levels of society can be eliminated and poor-performing students can take advantage of qualified teachers. Competent teachers tend to set great targets for their students to achieve; and they continuously search for ways for developing (Reported from Afghanistan Cevizcan City Building Team, Project Book, 2013, p.4). Accordingly, first of all in preschool education area, there are studies required certainly to develop both quantity and quality of teachers in Afghanistan.

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Chapter 15

Evaluation of the Views of Teachers and Pre-Service Teachers on the Effect of Enviromental Pollution on Genetics

Zeynep ÖZBUDAK KILIÇLI

INTRODUCTION

Environment is described as total of surroundings of living organisms. Environment encompasses all living species and non-living things in the ecosystem. Natural events and natural powers comprise in natural environment. It is largely unchanged and has no human influence (Çabuk, Karacaoğlu, 2003). There are interactions among all components of the natural environment. Natural environments and habitats in many areas in the world are greatly transformed and diminished by human activities.

Technological development and industrilization damaged the natural environment and many environmental problems emerged. Extinction of plant and animal species, depletion of energy sources, water, air and soil pollution, nuclear danger and rapid population growth are the main consequences of impact of human on environment (Borden, 1985, 56).

World population to grow four times in last century (Özgüç ve Tekin, 1998), and the growing basic necessity of human and depletion of resources insensibly caused very serious environmental problems. Thus, the balanced interactions and dynamic equilibrium in the ecosystem were damaged and natural environment was altered.

Such problems have intensified over recent years and sustainability and restoration capacity of ecosystems and natural enironments have been reduced. Therefore, Environmental issues were raised for the first time at the confrenece held by United Nations in Stockholm in 1972 and the enviromental problems remained on agenda until today (Çevre Bakanlığı: çevre notları, 1998).

Enviromental problems are the problems regarding obstacles which make it difficult or impossible to meet the requirements and essentials for life.

Some of these obstacles are caused by environmental pollution (Çevre Bakanlığı, 1991, 47). Environmental pollution; can be discussed under three headings, namely air, water and soil pollution.

Depletion of natural resources, population growth, wars, the air, water and soil pollution are threatening the human health. These problems have increased of human illness and death (Batak, 1997, 28). Today, rapid industrialization, depending on the increase in environmental pollution is making a negative impact on living organisms.

Harmful effects of physical and chemical factors on the living things attract the researchers' attention. The toxic, mutagenic, carcinogenic and teratogenic effects harm to human and future generations. It is needed to determine these harms and to take precautions. For example, the use of pesticides in agriculture for controlling the pests and herbs increase the yield. But, it is known that the pesticides are used in

cleaning products, paints, paper production and water disinfection (Al-Saleh 1994). The usage of these chemical compounds in many areas at high amounts causes environmental pollution. This also increased the concern that the chemicals will enter the human body and change the genetic material (Ribas *et al.*, 1996). The human's who the basic factor of these problems; behaviour and attitude to environment are questioned much more. But in literature, studies are not common on the evaluation of the views of teachers and pre-service teachers on the effect of environmental pollution on genetics.

The aim of research is to determine the views of Science pre-service teachers from Kocaeli University and teachers on the effect of environmental pollution on genetics. On this direction, the answers were sought for below questions:

- What are the sub-dimensions of environmental pollution and genetics relation scale?
- What is the distribution of the views regarding the relationship level of environmental pollution and genetics on gender basis?
- What is the distribution of the views regarding the relationship level of environmental pollution and genetics for groups?
- What are the views of them regarding the effect of environmental pollution on genetics?
- What are their suggestions regarding hereditary effect of environmental pollution?

MATERIALS AND METHODS

In this work, combined design where qualitative and quantitative dimensions are examined together was used. The data obtained in the research were analyzed by using SPSS (Statistical Package for Social Sciences) for Windows 22.0 program. Numbers, percentages, averages and standard deviations were used as descriptive statistical methods in the evaluation of data. T-test was used in the comparison of quantitative continuous data between two independent groups. The obtained findings are evaluated at 5% level of significance in 95 % confidence interval.

Qualitative research is a research approach in which the data are generated without any statistical operations and any numerical tool (Altunışık, Coşkun, Bayraktaroğlu ve Yıldırım, 2005). Qualitative data were collected by using open ended question form prepared by the researchers and semi structured interviews.

Sampling: The sampling of this work is consisted of 106 Science pre-service teachers from Science Teacher Education Department of Kocaeli University and 22 teachers from Kocaeli province.

Data Collection tools: Likert type scale consisted of 22 articles developed by the researchers was used to determine the views on the effect of environmental pollution on genetics. Opinions were taken from the experts regarding the scope validity of scale. Obtained numerical data were analyzed with percentage, frequency and average analysis. Qualitative data were collected by taking the opinions of teachers and pre-service teachers with 3 open ended questions via same form.

“Environmental Pollution-Genetics Relationship” Scale’s Validity and Confidence Studies

Cronbach Alpha value of confidence of scale articles was found out 0.864 as

very high. Factor analyze method was applied in order to put forward the structural validity of scale. After performed Barlett test ($p=0.000<0.05$), it was determined that there is connection among variances which were taken for factor analysis. It was determined that the size of sampling is sufficient for factor analysis application after performed test ($KMO=0.760>0,60$). It was ensured the structural relationship to remain same by selecting varimax method at factor analysis application. Environmental Pollution and Genetics Scale of 24 articles were decreased 22 articles by removing 2 articles (15. and 23. Articles) as they were breaking the factor structure. Variances were collected under 4 factors those variance is 57.87% after factor analysis. It was understood that Environmental Pollution and Genetics relationship scale is valid and confident tool according to alpha and variance value calculated for confidence. Factor structure formed for the scale can be seen in Table 1 below.

Table 1: Factor structure of Environmental Pollution-Genetics Relationship

	Items	Factor load	Variance	Cronbach's Alpha
Environmental pollution Mutation Relationship sub dimension (Latent Value=6.512)	9. X rays taken during her pregnancy can cause birth defects.	0,877	24,137	0,927
	4. I know that one of the factors causing mutation is environmental pollution	0,853		
	10. I would like to have knowledge to avoid radiation	0,848		
	16. I think that chemical wastes harmful to human and other living things.	0,838		
	7. I think that, chemical wastes, radiation and X rays, ultra violet ray and sudden temperature changes affect the organisms	0,816		
	8. I think that, next generations are also affected when human were exposed chemical wastes, radiation and X rays, ultra violet ray and sudden temperature changes,	0,799		
	17. I think that there is change at next generations of the living things which were exposed to chemical wastes.	0,693		
	6. I know that mutations are the permanent changes in the chromosome of the species.	0,623		
Environmental Pollution and Modification	11. I know that the modifications which the changes occur with the effect of environment are not	0,743	15,236	0,780

relationship Latent Value=3.236)	hereditary			
	22. I know that some specifications of the living things occurs with mutual interaction between genetics and environment although some specifications are only hereditary	0,664		
	13. I would like have much more knowledge regarding the factors causing modifaciton	0,656		
	2. News about mutation, mofidication and adaptation attract me	0,607		
	14. I think that the specifications gained from modification are transfered to next generations.	0,595		
	12. My knowledge for the factors causing the modification is sufficient.	0,518		
	5. When the environmental conditions revert back, new character is not transferred descendants.	0,494		
	3. I think that hereditary specifciations change with environmental conditions.	0,408		
Environmental Pollution and Adaptation relationship sub- dimension Latent Value=1.674)	1. I think that, development of hereditary character can be affected by environmental pollution.	0,876	10,803	0,694
	18. I think that the adaptations to environment of the species are transferred to their babies hereditary	0,843		
	21. Natural selection is the extinction of the species which are not adapting to environmental conditions.	0,470		
The effect of Environmental conditions on genetics sub- dimension Latent Value=1.309	20. I know that the adaptation is the hereditary specifications behaviours and physical structures which are increasing living and reproduction chance in specific environmental conditions.	0,685	7,694	0,603
	24. I think that monozygotic twins Show different specifications for length, weight and IQ if they grow in different environmental conditions.	0,617		
	19. I know that the differentiations forming from environmental factors and mutation are called as variations	0,435		
Total Variation 57.87 %				

It was taken into consideration the factors those latent values are higher than 1 to be dealt, the factor loads showing the weights of the variants in the factor to be high and factor loads for same variant not to close to each other, Confidence coefficients of the factors forming the scale to be high and explained variance rates to be high, reflect that the scale has a strong factor structure.

The articles in first factor were dealt as “Sub-Dimension of Environmental pollution and Mutation Relationship” The confidence of 8 article forming factor of “Sub-dimenison of Environmental pollution and Mutation Relationship” was calculated as $\alpha=0.927$ and explained variance value as 24.137 %.

The articles in second factor were dealt as “ Environmental Pollution and Modification relationship The confidence of 8 article forming factor of “Environmental Pollution and Modification relationship” was calculated as $\alpha=0.780$ and explained variance value as 15.236 %.

The articles in third factor were dealt as “Sub-dimenison of Environmental Pollution and Adaptation relationship” The confidence of 3 articles forming factor of “Sub-dimenison of Environmental Pollution and Adaptation relationship” was calculated as $\alpha=0.694$ and explained variance value as 10.803%.

The articles in fourth factor were dealt as “The effect of environmental conditions on genetics sub-dimension” The confidence of 3 articles forming factor of “The effect of environmental conditions on genetics sub-dimension” was calculated as $\alpha=0.603$ and explained variance value as 7.694%.

While calculating the points of the factors on the scale, factor points were attained by aritmetic average of factor articles.

The Studies of Validity and Confidence of Open Ended Questions

Qualitative research techniques’ having susceptibility, the researcher’s having a contributing role, having integrative approach,, ensuring the perceptions to be revealed , having flexibility in research design and having a indiction analysis are the important specifications (Yıldırım ve Şimşek, 2011). Preparing open ended questions and adding new questions during interview, were done in order to ensure “the researcher to be flexible principle” as Yıldırım and Şimşek (2011) stated. Thus, the validity of study was ensured.

The data obtained from open ended questions were examined with open coding technique from qualitative data analysis techniques. The codes were enlightened by giving examples from discourses. While applying this method, teachers were coded beginning from 1 respectively and gender factor is asked as demographic data.

After teachers and pre-service teachers’ completion of open-ended question forms, the content analysis was done and interview questions were prepared in order to detail the given answers. Sound recording was done at the interviews. Also, the researhcer took the notes regarding the interview. Sound records are also prepared as tape scripts, after that; content analysis was performed for attained data. However, analysis of the data were attained from data collection tools and the results were evaluated by three experts and the validity was ensured.

RESULTS

In this section, there are findings obtained from the analysis of data collected through the scale from teachers and pre-service teachers for the solution of the

problem. Explanations and comments were made according to the findings.

Table 2: Descriptive Specifications.

Tables	Groups	Frequency (n)	Percentage (%)
Gender	Male	69	53,9
	Female	59	46,1
	Total	128	100,0
Group	Pre-service teacher	106	82,8
	Teacher	22	17,2
	Total	128	100,0

The students are distributed as 69 of them is male (53.9%) and 59 of them is female (46.1 %) The participants are distributed as 106 of them are pre-service teacher (82.8 %) and 22 of them are teacher (17.2 %).

Table 3: Environmental Pollution-Genetics Relationship Scale (Sub-dimension point levels)

	N	Avg	Sd	Min.	Max.
Enviromental Pollution-Mutation Relationship Sub Dimension	128	4,348	0,724	2,120	5,000
Enviromental Pollution-Modification Relationship Sub-Dimension	128	4,248	0,495	2,250	5,000
Enviromental Pollution-Adaptation Relationship Sub-Dimension	128	4,065	0,835	1,000	5,000
The effect of environmental conditions on genetics Sub-dimension	128	4,188	0,666	1,330	5,000

The teachers' and pre-service teachers', "Enviromental Pollution -Mutation Sub Dimension" was calculated as $(4,348 \pm 0,724)$ very high; "Enviromental Pollution -Modification Sub Dimension" was calculated as $(4,248 \pm 0,495)$ very high, "Enviromental Pollution-Adaptation Sub-Dimension" was calculated as $(4,065 \pm 0,835)$ high and "The effect of environmental conditions on genetics Sub dimension" was calculated as $(4,188 \pm 0,666)$ high. According to this, it can be said that teachers and pre-service teachers make connection at high level between environmental pollution and genetics.

Table 4: Environmental Pollution Genetics Relationship Scale (Averages for gender)

	Group	N	Avg	Sd	t	p
Enviromental Pollution-Mutation Relationship Sub-Dimension	Male	69	4,246	0,809	1,725	0,080
	Female	59	4,466	0,596		
Enviromental Pollution-Modification Relationship Sub-Dimension	Male	69	4,232	0,539	0,398	0,691
	Female	59	4,267	0,441		
Enviromental Pollution-Adaptation Relationship Sub-Dimension	Male	69	4,087	0,874	0,319	0,750
	Female	59	4,040	0,793		
The effect of environmental conditions on genetics Sub-dimension	Male	69	4,246	0,615	1,082	0,281
	Female	59	4,119	0,721		

It was observed that especially environmental conditions and environmental pollution causes mutation and modifcaiton in the species.

At the t-test in order to determine whether the sub dimensions averages of teachers and pre-service teachers contributing to research are differentiating significantly or not for gender factor, it was found out that the difference between group averages is not significant statistically. ($p>0,05$).

Table 5: Environmental Pollution Genetics Relationship Scale (Averages for groups)

	Group	N	Avg	Sd	t	p
Enviromental Pollution-Mutation Relationship Sub-Dimension	Pre-Service Teacher	106	4,507	0,551	6,228	0,000
	Teacher	22	3,580	0,952		
Enviromental Pollution-Modification Relationship Sub-Dimension	Pre-Service Teacher	106	4,277	0,437	1,466	0,290
	Teacher	22	4,108	0,706		
Enviromental Pollution-Adaptation Relationship Sub-Dimension	Pre-Service Teacher	106	3,994	0,858	-2,155	0,033
	Teacher	22	4,409	0,617		
The effect of environmental conditions on genetics Sub-Dimension	Pre-Service Teacher	106	4,195	0,684	0,277	0,782
	Teacher	22	4,152	0,588		

At the t-test in order to determine whether the sub dimensions points averages environmental pollution-mutation relationship for of teachers and pre-service teachers contributing to research are differentiating significantly or not, it was found out that the difference between group averages is significant statistically ($t=6.228$; $p=0.000<0,05$). The sub-dimension points for environmental pollution-mutation relationship of pre-service teachers ($x=4,507$) was found out higher than the sub-dimension points for environmental pollution-mutation relationship of the sub dimension points for environmental pollution mutation relationship of teachers.

At the t-test in order to determine whether the sub dimensions' points averages for environmental pollution-adaptation relationship of teachers and pre-service teachers are differentiating significantly or not for group factor, it was found out that the difference between group averages is significant statistically ($t=-2.155$; $p=0.033<0,05$). The sub dimension points for environmental pollution-adaptation relationship of teachers ($x=4,409$), was found out higher than the sub-dimension points for environmental pollution-mutation relationship of the sub-dimension points ($x=4,409$), for environmental pollution-adaptation relationship of pre-service teachers.

At the t-test in order to determine whether the sub dimensions' points averages for environmental pollution-modification relationship of teachers and pre-service teachers are differentiating significantly or not for group factor, it was found out that the difference between group averages is not significant statistically ($p>0,05$).

The open ended questions were asked to teachers and pre-service teachers contributing to research. Findings at result of analysis of collected data are like below:

1) "Do you think that enviromental pollution is changing genetic code of the species? Yes/No. If the answer is yes, please give example" question was asked to teachers and pre-service teachers. According to this, it was observed that most of participants answered as "Yes". For example, it was determined that 25, 26, 29,15, 17

coded participants thought that hazardous chemical wastes disposed and dumped to land and sea harmful for the species and next generations by using same statement 5 and 18 coded pre-service teachers gave example that “Environmental pollution is a problem affects life of the species negatively and disrupt natural balance. Water and air pollution causes illnesses like cholera and typhoid. There is genetic specified factors is the leading for natural immunity which are transferred to babies and controlled genetically. This character transferred to babies genetically reflects some differentiation among races, species and people. Some bacterial and viral factors causing scarlatina, measles, pertussis, cholera, typhoid in human body but, don't make sick the animals.”

For example, 26,7,6,5,29,90,89,88,87 coded participants expressed that nuclear power plants caused environmental pollution in Hiroshima and Black Sea Region in Turkey. Increasing cancer cases in Hiroshima and environs were common. They also expressed the children in Black Sea region were borned with genetic diseases. Also, respiratory tract infections and cancer cases in Dilovası region were given examples to the effect of environmental pollution on genetics by the most of participants. Also 86 coded pre-service teacher gave example as “the fishes' unhealthy reproduction and death and physical appearances changes for next generations in the lakes in which chemical wastes were dumped”

2) “What can be done in order to avoid hereditary effects of environmental pollution?” question was asked to teachers and pre-service teachers. The studies to be done for natural energy resources to be preferred and the nuclear power plants' harmful effects to be removed were suggested by 31, 85, 86, 81, 83 28, 12, 2, 78, 9, 11 coded participants. 74 numbered participants expressed that a big budget should be allocated and public should be educated for this aim in order to avoid environmental pollution. 78 and 79 coded participants summarized other suggestions like; “*Nuclear power plants should be removed, industry should be taken under control and removed, education should be given to avoid radiation, trees should be planted, treatment facilities should be built, we should keep environment clean, hereditary harmful effects should be prevented by not using chemicals for farming, and pesticides for removing impurities in soil*”.

3) “Please give the examples on the biological and hereditary effects of radiation, chemical waste, X rays, ultraviolet ray and sudden temperature changes.” question was asked.

Common view of 78 and 79 coded participants is that cancer, sudden death, roseola and burning can be observed. While 25 coded participant was expressing “*Hereditary diseases, cancers, burns on skin and sudden deaths were observed at the generation lived at time period when an atomic bomb were dropped on Hiroshima, together with next generations. Also 72 numbered participants expressed that the children can have hereditary diseases if the mother was exposed to radiation during pregnancy period. As a different view 82 coded participants have a view like: “All indicated factors here can cause mutation. Mutation can cause change in DNA of species. Such that, it is not known in details which parts of DNA reflects which effect. For this reason, it can create positive effects for human. For example, we can improve our immunity to certain illnesses. But, negative examples are much more nowadays and it bears a specification like today's plague. It can cause disability and mental*

diseases.”

DISCUSSION AND CONCLUSIONS

Today, environmental problems reached to important extents due to industrilization and rapid population growth in the world. In this study, it was observed that participants think that environmental pollution affects the genetic codes of species negatively and they supported their views with lots of examples.

Studies of Yücel ve Morgil, (1998) and Aydın ve Kaya, (2011) which are expressing primary enviromental problems as global warming, acid rains, ozone layer depletion, greenhouse effect, natural resources depletion, increasing solid wastes, decrease in green areas, conurbation, decrease of species of animals and plants or extinction, pollutions occuring due to nuclear wastes, desertification, loss of fertile soil with erosion are paralel with the findigs of this research.

It can be said that teachers and pre-service teachers made contact at high level between environmental pollution and genetics. It was observed that teachers and pre-service teachers think that environmental pollution and conditions cause mutation and modification in the species. It was observed that the views on the effect of environmental pollution on genetics do not differ for gender and group factors.

Below suggestions were offered by the participants in order to prevent hereditary effects of environmental pollution.

To decrease the chemical factors containing carcinogenic materials

to built factories far away from residential area,

To inspect the industrial zones

To keep under control the nuclear powerplants

To give importance the renewable energy resources and cycling.

To install chimney filters to the factories

To prohibit the chemicals harmful to ozone layer

To keeping seas clean in order to prevent water pollution.

To protecting pregnant women from the devices emit radiation.

To offer trainings in order to protect against radiation and nuclear disasters

We hope that the results from this study will help us to better understand the environmental pollution

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Chapter 16

Educational Sciences Students' Views and Expectations about Graduate Education: Turkey Case Study*

Hasan Güner BERKANT & İsmail EREN

INTRODUCTION

Education is one of the most powerful instruments for reducing poverty and inequality and lays a foundation for sustained economic growth (World Bank, 2009), and it is accepted as the profound step for development and a key to attaining the Millennium Development Goals (UN, 2000). As well as the undeveloped and developing countries, many developed countries such as Australia, USA and England have attempted public reforms after 1980. Governments in countries such as Australia, the United States, and the United Kingdom initiated public management reforms in the 1980s. One of the most significant and specific concerns within these reforms has been that the governments seek to introduce private sector practices in the public sector. The primary purpose of these reforms is to aid governments achieve their goals more efficiently, economically, and effectively (Peters, 2002). Since then, education has been one of the most significant issues on the policy agenda of these governments (Donnelly, 2004). Even though higher education is a non-compulsory educational level following the completion of secondary education, it is considered as an indicator of people's ability to compete in the job market, as well as a catalyst for their economic prosperity, which also provides opportunities in the burgeoning knowledge-based economy emerging in the developed world (Freeman & Thomas, 2005). Economic globalization and the growing importance of knowledge are the key challenges facing the role and function of higher education (Wan, 2011).

The process of transition to information society in developed countries has begun by the last quarter of the twentieth century, and a new global economic structure as 'knowledge economy' has been formed. In this new structure, economic power of individuals is measured within information and education levels while competitiveness power of countries is measured within the human capital and social capital they have. This process has increased the expectations from the universities which are mainly responsible for producing and sharing knowledge and higher education has become very popular in almost all countries (HEC, 2007). Hence, it is indicated that higher education is an important factor in the training of qualified manpower for needs of a country and in the production of knowledge and service to the community (Erdem, 2006). Universities as institutions of higher education are the most prestigious ones among the social institutions.

Generally accepted definition of the university makes us find the reason for this: Universities are the institutions of seeking the truth, producing and distributing

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science (Timur, 2000). Graduate education comes to the fore to the training process of qualified human resources. Therefore, it is aimed at graduate education to get students gain the ability and skills of making more comprehensive scientific research compared to undergraduate education, solving complex problems, specialization on professional areas, producing knowledge and developing skills of deduction.

Nowadays, the necessity of graduate education has emerged as a result of prerequisite of pursuing a master or doctorate degree to get employed at both industrial and other work areas in addition to training researchers and academicians. Programs of graduate education are developed to fulfill this need (Karaman & Bakırcı, 2010). It is discussed in the survey by The Economist (2005) that why higher education faces fundamental change is endowed with four reasons:

- The democratization or “massification” of higher education means that ever increasing numbers of people in “developed” and “developing” countries are gaining higher education qualifications,

- The growth of the knowledge economy for which universities are a vital driver,

- The globalization of higher education, turning the sector into an import-export industry, and

- The competition higher education institutions face up to students and funding.

These changes mean that funding, recruitment, research, collaboration, and teaching in higher education must take place in an outward-looking, international setting (Lunn, 2008).

Owing to the growing needs, societies have imposed different functions to universities. These functions can be listed in general as education, research and training of highly skilled. Depending on these functions, arousing expectations of different segments of society from universities in the process of transition to the information society and knowledge economy in Turkey are stated as (HEC, 2007):

- Massification as providing education to more students and a wider age group,

- Academic expansion as expanding programs to comprehend the rapidly generated new knowledge and all the new information fields,

- Relevance as employment for graduates and encourage to application in studies as well as research,

- Establishing strong bridges within society and contributing more to regional and national development,

- Accountability as accounting to stakeholders and developing open and transparent governance models,

- Living up to these expectations within relatively decreasing public funding.

Advanced economies are in need of labor force that is qualified, highly adaptable, trained on a specific vocation with the basic industrial training (Baykal, 2006). Training of highly qualified labor force required for development of the countries is expected generally from the universities and specifically from graduate programs. For this reason, it is a significant issue that the importance should be given to graduate level of education for training of highly qualified labor force required for development of the countries (Aslan, 2007). In this regard, improving and developing the quality of higher education with proper regulations stand as the top priority for current and future years. Some factors are effective on the regulations for developing and improving higher education.

The internal and external factors that affect the changes in the institutional structures of higher education are stated in the report of policies of change and development in higher education by UNESCO (1995). The external factors are stated below:

Increased social demands for higher education and the needs to cater for a much more diversified clientele,

Drastic cuts in spending on public higher education, thus compelling institutions to design alternative, more cost-effective programs and delivery systems,

Constantly changing labor market needs which have required higher education institutions to make provision for training in new professional, technological and managerial fields and in new contexts, as a result of the globalization and regionalization of economies.

The internal factors are stated below:

Enormous advances in science, resulting in the development of academic disciplines and their further diversification,

Growing awareness of the need to promote interdisciplinary and multidisciplinary approaches and methods in teaching, training and research;

Rapid development of new information and communication technologies and their growing applicability to various functions and needs in higher education.

Cranier and Dearlove (1999) argue that college and universities worldwide must adopt more self-restraint and the enhancement of academic standards for fulfilling their own potential commoditization. Further, critics argue that major schools around the globe and their governing bodies assume a more visionary role. Without effective leadership, control, standards, and vision, it is dreadful that the value of a graduate degree will be compromised. Changes in higher education are closely linked with the interest on them. Austin and Wulff (2004) evaluate the key factors that contribute to increasing interest on graduate studies in four categories: the role of the faculty members, the labor market, the attrition rates of graduate education students, interest of researchers in the areas of academic career. The studies on development of experiences in graduate education show that training and development of faculty members as well as training graduate students as the future faculty of the university emerges as one of the vital factors in increasing interest in higher education. Since 1970s, universities have developed programs to train graduate students as a subsequent faculty member. Basically, these programs are regarded as the initial training, leading graduate students to gain faculty roles in time and reflecting the different information and the provision to their careers depending on the needs of institutions and departments with ongoing education. According to previous reports by international organizations such as OECD (2002), UNESCO (1995, 2009) and World Bank (2005) the number of students in higher education was approximately 20 million in 1985 all around the world and increased to 26 million in 1990, then to 38 million in 1995 while the number of students in higher education in 2001 rapidly exceeded 85 million. This number today is estimated to exceed 100 million while it is expected to reach the level of 200 million in 2020. While the rising percentage of number of students in higher education between 1998 and 2003 was an annual average of 0.2% in Japan, 2.2% in the USA, 3.1% in EU countries, it shows 8% in India and almost 20% of an increase in China in 2004.

Increased interest in graduate education brings new expectations and challenges. According to Wan (2006), one of the challenges to be faced by the higher education, is altering and diversifying student expectations together with the number of students entering universities. With the advent of globalization and information technologies, today's students, attitudes, behaviors, values, and perspectives of the world are changing and diversifying expectations accordingly. These changing attitudes and behaviors are the most important factors that shape students' expectations from higher education. It is stated by Coaldrake (2002) that a wide range of parameters is available to determine the expectations of students in higher education as listed below:

- The quality and professionalism in visions of university and its institutions
- Providing highly qualified and experienced teachers and learning support
- Contribution of the programs to students' life (especially in professional life)
- Suitability and accessibility of education be treated respectfully
- Economical values
- Ensuring high academic standards.

One of the significant features in the expectations of students is the variety of these expectations (Nelson, Kift & Clark, 2008). James (2002) stresses out that student expectations diversify individually depending on social roles, responsibilities and participation of students. While a student's expectation may be associated with the quality of education and material value, another student might find the attribution of the individual courses important. Conversely, though the individual expectations are opposite with the realities of graduate education currently, they may be related with the long-term objectives and experiences in individual's career and achievements.

Byron (2002) indicates that various expectations reflect "the characteristics of the experiences of students". James (2002) points out that mismatch between the expectations of students' and expectations of university are not always harmful, and this mismatch provides students to become a part of an educational process by being exposed to differences and challenges that liberates their minds. Certain studies (Anderson & Seashore Louis, 1991, Austin, 2002; Bess, 1978; Golde & Dore, 2001; Weidman, Twale & Stein, 2001) indicate that the initial step in academic career is the socialization process the graduate studies take place and includes the core experience of the degree program, as framed by the institutional culture of the university; the socialization processes of interaction, integration, and learning; and the core elements of socialization, including knowledge acquisition, investment, and involvement. Specifically, students are socialized through interaction with faculty and peers and integrated into the department's activities and the culture of their disciplines (Gardner & Gopaul, 2012). However, Golde and Dore (2001) reveal that there is a divergence between the trio of student goals, training and their real career, while Nyquist, Austin, Sprague, and Wulff (2001) indicate that graduate education does not meet the expectations and needs of the changing society and the academic world.

The reason behind incomplete needs may be related with the uncontrolled increase in the number of universities and university graduates that have brought negativity on some issues. For example, many employers have begun to seek different qualities of employment other than being graduated from college. Increasing number of graduates at the undergraduate level members leads the students to get qualified

with more and different levels of further education and qualities. In this sense, graduate education can be seen by students as an investment in order to increase their future income and social status in society (Bülbul, 2003). Future graduate students and graduate education must accept the axiom that personal and professional growth does not exist for a specific and limited period of time. Developing a program or plan for identifying and delivering or acquiring new skills become the responsibility and opportunity for graduate programs, students, and alumni alike (Festervand & Lumpkin, 2005).

Individual investment through education for a future career depends on educational surroundings of the country. Graduate education in Turkey is attached to institutes dependent upon universities. It is regarded as an issue of great importance to focus as related with efficient use of resources of the country and level of development (Karaman & Bakırcı, 2010). The purpose of higher education is defined by Turkish Ministry of National Education as training students in direction with their abilities, interests and skills accordingly with the need of the society and high level labor force, making scientific research, publishing every kind of publication showing the results of research and reviews to advance in science and technology, undertaking researches and studies required by the government, distributing enlightening and informative publication to society and provide services of formal and extensive education (MNE, 2011). The World Bank (2007) reports that education and skill levels in Turkey fall back below the international standards, including those of the EU, and that international tests show poor performance for many students and low participation in secondary and tertiary education by international standards. Significant disparities also exist in educational quality and access by gender, social and economic group and geographic location. Therefore, setting higher benchmarks should be the aim of all those responsible for higher education, not simply ensuring that current standards are being met. With the growing interest in higher education, enrollment in higher education shows increase in Turkey quantitatively as well as all over the world. According to data from Student Selection and Placement Center (SSPC), there were 169.773 graduate students in 2010-2011 education year among the total of 3.817.086 students in Turkey while it has become 220.970 students by increase of 12% (SSPC, 2011, 2012).

As Marginson (2004) observes, competition in higher education is now a fact of life. Students compete for entry into universities while universities compete for the best students. Governments also encourage a greater measure of competition between universities. Due to the globalization, national and world standards are taken into account and universities want to rank highly in teaching and research quality. Although increase in demand for higher education is observed in Turkey, there have been divergences with the expectations of students and the opportunities for graduate students provided by universities and the state. One of the most prominent of these divergences has occurred among the students of faculties of education. It is regarded that education faculties in Turkey are assigned with teacher training, as well as providing the opportunity to pursue graduate education and providing programs such as non-thesis master programs and pedagogical formation programs for students of faculties of arts and sciences that enable them to become branch teachers. Though education faculties are assigned with teacher training, students should attend and have

enough points from Public Personnel Selection Examination (KPSS) to get assigned for teaching in state schools. Application of such a test is result of the imbalance between the employment rates of teachers in state schools and the excess of demand. However, effectiveness for fulfilling the missions of faculties of education is only possible with a modern outlook for teaching profession and the employment plans of state.

Nowadays, the content of the teaching profession has changed and gained a different dimension within its necessary knowledge, equipment and competence with the technology and the changing world. Ensuring the education of a highly qualified manpower as one of the indicators that determine the levels of development of the communities requires contemporary teachers to be well equipped, highly absorbed with new and fresh knowledge, open to change and development (HEC, 2011). Fulfilling such a requirement emerges the need of a new approach to the organization of the faculties of education that educational sciences shouldn't be limited to only subjects such as science and art but should also be related to social, cultural and economic aspects of the society within the context of learning, teaching and evaluation. Graduates from faculties of education should be trained to carry the qualifications, skills, values and competencies that next generations require, and become aware of their roles in varying conditions as well as aware of the priorities in education by reconciling the theory and practice in educational sciences. It is considered that increase in the quality of teachers will relatively increase the qualifications of students (Fullan, 2001; Guskey, 2002). This increase in quality can be achieved via graduate education. Finland, that has attracted the attention of education world with highly successful results in PISA exams, has established that the basic condition of being a teacher is to have a master's degree on teaching (Sahlberg, 2007; Simola, 2005). According to Teaching and Learning International Survey (Hans *et al.*, 2010), the ratios of teachers with a master's degree in education are of 59% in Austria, 84% in Belgium, 94% in Poland, 96% in Slovakia whereas the percentage of teachers with a master's degree in Turkey is approximately 7%, which is clearly below the educational standards for developing countries.

Current conditions for branch teachers in Turkey (mathematics, physics, chemistry, biology, history, geography, etc.) require them to attend to two-semester of pedagogical courses following their undergraduate education. Branch teacher candidates who enter to KPSS exams gain the right to get assigned to a state school with a quota according to their exam scores. Likewise, teacher candidates who graduate from the education faculties gain the right to get assigned to a state school according to their KPSS exam scores with a quota without the need for additional pedagogical course assignments. Although the training of pedagogical formation is compulsory for branch teachers, it is neither qualitatively nor quantitatively equivalent to graduate education. Although the pedagogical courses of branch teachers are alike to a master's degree education, it never holds the adequacy of quality and quantity of graduate education. It is an obligation for Turkey to make significant breakthroughs in the field of higher education to close the gap between developed countries of the world in the field of educational sciences and teacher training (HEC, 2007). It is important to take into consideration their opinions and expectations of the individuals studying in these fields in order to meet their goals of higher education, updating a

continuous review of the teaching process, the improper identification of matters and elimination of possible defects.

Studies on the opinions, matters and expectations of the students pursuing master's degree in different fields of educational sciences in Turkey are discussed in the literature review (Ağır, Gür & Okçu, 2008; Alhas, 2006; Aslan, 2007; Aslan, 2010; Başer, Narlı & Cantürk Günhan, 2005; Bülbül, 2011; Cengizhan & Akkul, 2005; Demirpolat, 2005; Güven & Tunç, 2007; Karaman & Bakırcı, 2010; Kaya, Sezgin & Kavcar, 2005; Kızmaz & Çilek, 2011; Nayır, 2007; Oluk & Çolak, 2005; Özmenteş & Özmenteş, 2005; Sabancı, 2011; Savaş & Topak, 2005; Sayan & Aksu, 2005; Ural, 2007). In this context, the problem of this study is stated as 'What are the opinions and expectations of the students pursuing master's degree in educational sciences in Turkey?'

Purpose of the study

The general purpose of the study is determining the opinions and expectations of the students pursuing master's degree in educational sciences in Turkey towards their graduate education. Within this general purpose, the questions below are sought to be answered: For the students pursuing master's degree in educational sciences in Turkey, what are;

The students' purposes in getting graduate education?

The contributions of graduate education to students' lives?

The contributions of graduate education for professional life?

The contributions of graduate education for individual developments?

The contributions of graduate education to the social relationships?

The students' opinions on the positive and negative aspects of graduate education?

The students' opinions on distance education?

The students' opinions on getting graduate education via distance learning program?

The students' opinions on exploiting information technologies for graduate education?

The students' opinions of their field on whether it is the right area for them?

The students' expectations from graduate education?

The students' expectations from graduate education for professional life?

The students' expectations from graduate education for individual development?

The students' expectations from graduate education to the social relationships?

The students' opinions on their willingness assuming they start again?

MATERIALS AND METHODS

In this section, model of study, the sample, data collection tools and data analysis are given.

Model of the study

This descriptive study is designed as a qualitative study. The opinions and expectations of the graduate students from graduate education are described and analyzed in qualitative terms (Punch, 2005; Yıldırım & Şimşek, 2008). One of the most common study models in educational research is the descriptive survey, which is

used to describe and summarize the characteristics (skills, preferences, behaviors, and so on.) of individuals, groups, or circles (Fraenkel, Wallen & Hyun, 2012). To describe students' views, interview method was used. This method is one of the qualitative study methods and used to collect data according to opinions or thoughts about a situation, fact, event, etc. (Yıldırım & Şimşek, 2008).

The sample

The sample of the study includes total of 18 graduate education students in educational sciences involving 16 students with master's thesis, two with non-thesis from five different universities in Turkey. Maximum diversity sampling is used to increase the diversity of opinions of the sample which involves 13 men and 5 women between age rank of 22-40 from five different universities. Maximum diversity sampling is used to reflect the multiple characteristics in qualitative studies (Fraenkel, Wallen & Hyun, 2012). The aim of using maximum diversity sampling is not generalization but determine whether there are any common or shared aspects among diversifying matters (Yıldırım & Şimşek, 2008).

Data collection tools and data analysis

For the purposes of this study, an electronic form is used to determine students' opinions via an online form which was developed by the researchers. The form includes a total of 10 questions composed of seven open-ended and three closed-ended questions. Response options of the closed-ended are composed in 'yes' and 'no' answers and the participants are asked to state the reasons for their responses. The data is collected by sending the link of the online form to the students' e-mail addresses for filling out the form. As considered that sharing of the data and interpretations reached by the investigators with the experts who have studied in the field increases the value of the study (Daymon & Holloway, 2003), the experts' opinions of educational sciences on the content validity of the form questions are taken. It is regarded that asking the experts with adequate knowledge on the issues related to study and qualitative research methods to review the study in various scopes is one of the measures to improve the quality of a study (Yıldırım & Şimşek, 2008) that leads the researchers reach a consensus in the decoding of the data. Encodings are made on the collected data by content analysis, and interpretations are obtained on these codes (Glesne & Peshkin, 1992; Simpson & Tuson, 1995). Content analysis in qualitative research is used to describe the codes and their meanings through themes in the qualitative data (Yıldırım & Şimşek, 2008). Students' views were cited directly to make clear the findings.

RESULTS

The data obtained from the interview form are analyzed within the sub-aims and the results below are reached.

Results for the students' purposes in getting graduate education

The results from the results for the students' purposes in getting graduate education mainly focus on *providing professional development* (8/18), and *pursuing career in academia* (7/18) One of the students states that his/her purpose for graduate education is '*to advance in academia and work in researches that I love doing*', while another student explains it for '*becoming more proficient in the field and broadening my knowledge*'.

One of the students, who gives the statement of '*contributing to the field*' (4/18), also indicates his/her purpose for graduate education in the sentence: '*I want to extend the education given in education faculty, contribute to the field in both theoretical and practical dimensions as well as progressing my individual development continually by putting out new products for the field.*' Some of the students state their purposes in phrases as '*gaining expertise* (3/18), '*personal development* (3/18), '*gaining qualification* (2/18) and '*putting forward original products* (1/18)'.

Results for contributions of graduate education to students' lives

Results for contributions of graduate education to their lives are reviewed in three categories: The contributions of graduate education for students' professional life, individual developments and social relationships.

Results for the contributions of graduate education for students' professional life

It is reached out that students consider the contributions of graduate education for students' professional life as in the concepts for *qualification* (4/18), *professional success* (2/18), *academic competence* (2/18), *contribution to the field* (2/18), *gaining perspective* (2/18) and *professional development* (2/18). It is stressed out by one student that '*I have learnt more professional approach in my business and issues I learned comes up with current events*', while another student expresses the developments of graduate education into their professional life as in this sentence: '*Getting people around me to sense my qualifications and by this, it gets possible that I feel more competent. The books and articles I have read lead me to lean more on research with multifaceted ways of thinking. Being successful in my work affects my life and makes me feel incredibly happy with myself.*'

Students also append that graduate education provides contributions as *versatile thinking* (1/18), *happiness* (1/18), *continuous improvement* (1/18), *democratic thinking skills* (1/18), *objectivity* (1/18), *academic career* (1/18) and *expertise* (1/18). The statement of a teacher in a state school as '*I have learnt to approach my students democratically and objectively*' comes out one of the abstract outputs of the graduate education.

Results for the contributions of graduate education for students' individual developments

The contributions of graduate education for students' individual developments are submitted mostly in the concepts of *self-esteem* (6/18), *gaining new perspectives* (6/18) and *personal development* (5/18). One of the students stated his/her idea in the following sentence: '*Not only in my working environment, but also in my personal life, self-confidence is something that is very important for my superiority in any subject in terms of defending while discussing a subject. It is nice to speak out loudly that I'm reading, researching and knowing.*'

One of the students says '*I believe it has gained us new perspectives*', while another student expresses '*I haven't refreshed myself and my pedagogical knowledge after college, teaching get out of being monotonous anymore*' in his/her statement. Some of the students acknowledge the contributions of graduate education in their personal life as *gaining the knowledge of the field expert* (3/18), *the scientific competence* (3/18), *expertise* (3/18), *happiness* (2/18), *self-renewal* (2/18), *producing original products* (1/18) *social interaction* (1/18) and *professional success* (1/18).

This is the opinion of one of the students for academic environments: *'I think I know now how to talk to the lecturers and how to communicate better with academicians in academic environment.'*

Results for the contributions of graduate education to students' social relationships

Mostly in response to the contributions of graduate education to students' social relationships, students express that they mostly have benefited from *social interaction* (11/18), *recognition of academic environment* (3/18), and *gaining a social status* (2/18). Contribution of graduate education in terms of social interaction as provided by one of the students is stated as follows: *'As in social relations, I have begun to join among the scientific community which is rather differently from my undergraduate terms. I have been surrounded with the people interested in graduate education. Thus, my social relationships are formed in this direction.'* Another student put forwards his ideas as an expression of gaining social status as follows: *'My status among both my colleagues and friends seems higher in a sense.'* Statements of students also include *communication skills* (2/18), *self-esteem* (2/18), *gaining awareness* (1/18) and gaining a new perspective as contributions of graduate education within their social relationships.

Results for students' opinions on the positive and negative aspects of graduate education

According to the opinions of students on the positive and negative aspects of graduate education, the majority of positive sides stated by students are about *personal development* (8/18), *recognition of academia and participation in academic environment* (3/18), *self-esteem* (2/18), *gaining new perspective* (2/18) and *professional success* (2/18). One of the students' expressions is as follows: *'the graduate education helps me expertise in my field, earning new perspectives as well as providing the grasp of scientific style'*. Another student states: *'It helps me improve myself in scientific sense, do research, use my knowledge and make use of this knowledge effectively.'* The students also experience the positive aspects of graduate education as *working with experienced lecturers* (1/18), *consistency among courses* (1/18), *scientific competence* (1/18), *social status* (1/18), *decision-making skills* (1/18), *expertise* (1/18), *the original product* (1/18) and *its motivational effect* (1/18).

Most of the students' thoughts on the negative sides of graduate education are enclosed to *the technological deficiencies* (2/18) and *physical / mental fatigue*. One of the students expresses this opinion that is quite remarkable: *'Negative sides are getting affected from internal struggles among academics, unnecessary workload, expectancy of academics from us to ally in their internal struggles and us being quiet knowingly on these.'* Other expressions of the negative sides involves in such statements: *Focusing on the former studies* (1/18), *inadequate literature review* (1/18), *lack of guidance* (1/18), *lack of planning* (1/18), *evaluation failure* (1/18), *unproductive time management* (1/18), *conflicts with seniors* (1/18), *bureaucratic obstacles* (1/18), *intra-organizational conflict* (1/18), *unnecessary work* (1/18), *bias* (1/18), *exhibiting negative attitude to student* (1/18) and *ego satisfaction* (1/18). A student explains attitudes towards students and ego satisfaction in the following statements: *'... We are treated as young high school students, and they ignore that we have responsibilities while some faculty members attempt to prove themselves on us, which is hurting us.'*

Results for students' opinions on distance education

Students' positive and negative opinions on distance education are reviewed in two categories. Students find the distance education positive due to *providing ease of access* (3/18), *interactive environment* (2/18) and *economic benefits* (2/18). The opinions expressed in this direction from a student are as follows: *'... I think distance education will reduce costs, facilitate access to information and another university courses can be pursued without going there, and I think it can provide an interactive learning environment.'* Certain aspects such as *adherence to the individual* (1/18), *flexibility* (1/18) and *functionality* (1/18) are evaluated positively by the students.

On the other hand, students states that the negative aspects of distance education students are *lack of interaction* (7/18) and *the need for improvement* (5/18), *inefficiency* (2/18). One of the students stresses out the situation as follows: *'... I believe it feels missing due to the lack of dialogue with people working in the field. Though it seems useful to some extent, it cannot provide the desired yield in every field in my opinion.'*

Results for students' opinions on getting graduate education via distance learning program

Large majority (12/18) of students' opinions on getting graduate education via distance learning program focuses that they do not want to perform graduate education via distance education; while a number of the students (6/18) states that they would like to pursue graduate education via distance learning program. Positive opinions of one of the students include the ideas such as *'It provides a degree of flexibility and saves time for students'*, while another student points to the flexibility of distance learning program by stressing out *'The compulsory attendance and coming from distance provinces are exhausting.'* On the other hand, one of the students considers that *'one-to-one interaction would be more effective'*, while another student thinks *'It wouldn't be effective enough in distance education due to the lack of interaction.'*

Results for students' opinions on exploiting information technologies for graduate education

The students' opinions on exploiting information technologies for graduate education show an interesting separation that more than half of the students make use of information technologies adequately and in high level while almost half of the students (10/18) state that they don't benefit from information technologies in adequate level. One of the students expresses how sufficient they benefit from information technologies as in following statement: *'... I use it at an indispensable level.'* A student with inadequate usage of information technologies emphasizes his/her ideas as follows: *'An education which is based on contemporary teaching methods and computer-aided teaching or requires having too much information is none of its concern in graduate education.'*

Results for students' opinions of their field whether it is the right field for them

Students who participated in the study are asked to state whether the study field they choose is the right one for them and their own desired study field. Even though a few of the students (2/18) state that they do not pursue in the right field of education

for them, the majority of students (16/18) state that the field they study is the right choice for them. One of the students explains this situation as follows: '*... The education we take is mostly determined on theory and the works and descriptions of important people in education.*' This affirms the statement '*focusing on the former studies*' expressed in the negative sides of graduate education.

Results for students' expectations from graduate education

The expectations of students from graduate educations are reviewed in three categories: Professional life, individual development, social relationships.

Results for students' expectations from graduate education for professional life

Expectations of most students in graduate education are majorly focused on *academic career* (5/18), and *gaining competence* (4/18) while *contributing to the field* (2/18), *interactive learning* (2/18), *contribution to career* (2/18) *expertise* (2/18), *qualification* (2/18), *professional development* (2/18) are among the certain expectations. One of the students explicates his/her expectations of *contribution to career* and *qualification* as follows: '*It should ensure me to be qualified to get promoted in my professional life.*' while another student explains it as '*becoming someone who knows the expertise field and utilizes it.*' Expectations of students for professional life also involve the expectations of *gaining knowledge of the field* (1/18), *specificity* (1/18), *improvement in technological aspects* (1/18) and *job satisfaction* (1/18).

Results for students' expectations from graduate education for individual development

Expectations of students from graduate education for their individual development involve *personal development* (4/18), *gaining new perspectives* (3/18), *professional improvement* (3/18) and *gaining competence* (3/18). One of the student's statement as '*expanding my thinking horizons, and providing me a scientific point of view*' is included in the expectation of *gaining new perspectives* while another student's statement as '*.. Its effectiveness in using the knowledge, sharing, questioning the reliability of sources of information to be effective in social, cultural, and academic senses.*' is considered similar to the expectation of *gaining competence*. Other expectations for the individual development of the students are listed as *happiness* (2/18), *gaining skills of time management* (2/18) and *continuous improvement* (1/18).

Results for students' expectations from graduate education to the social relationships

Expectation of '*social interaction*' is expressed by most of the students (10/18) while the expectations of *gaining academic competence* (3/18) and *participation in academic environment* (2/18) are among the highly remarkable expectations. One of the students explains the expectation of *social interaction* as '*to have a strong and respected social environment*' while another student specifies it as '*meeting with more people that have improved themselves in the field and exchange information*'. *Gaining social status* (1/18), *gaining new perspective* (1/18) and *gaining awareness* (1/18) are the other expectations expressed by the students.

Results for students' opinions on their willingness assuming they start again

It is asked to the students whether they would be willing or reluctant to start again to graduate education if they were recently under-graduate. The answers as 'yes' and 'no' are discussed in two categories along with the reasons. The majority of students (16/18) report positive opinion that they will start again, though only two students give negative statements referring they wouldn't start. The students with positive answers emphasize the reasons are: *Continuous improvement, professional development, academic career, professional success and academic activities*. One of students with negative opinion explains his/her reason as follows: *'If my occupation wasn't teaching, I wouldn't have started.'* when another student refers *'I wouldn't start right now, only after at least 1 year of gaining experience in business life and getting career'*.

In the form, students are also asked to state any further opinions on the subject noted above and some of the students (2/18) stress out *lack of communication* they experienced in the academic environment and *insufficient guidance* (1/18) with the following expressions: *'... The guidance and communication of faculty members at major universities remains at a lower level.'* On the other hand, *technological proficiency* (1/18), *encouragement for graduate education* (1/18) and *becoming purposeful* (1/18) are among the other opinions for the importance of graduate studies.

DISCUSSION AND CONCLUSIONS

In the study, it is concluded that students' purposes for graduate education are mostly based on academic career and providing professional development. In certain studies (Aslan, 2010; Başer, Narlı & Günhan Cantürk, 2005; Cengizhan & Akkul, 2005; Demirpolat, 2005; Sayan & Aksu, 2005; Sözer & *et al.*, 2002) the purposes and aims of students to pursue graduate education involve gaining expertise, promote in professional career, self-development, to gain the scientific approach and competence, have a better status and career, become more useful for students, make scientific studies and to get assigned to another city as well as feeling a professional obligation, special interest. It is stated by Kim (1994) that it is a common belief that only the one with higher social status of the community can benefit from higher education and education is an important indicator of social status, while revealing that 63% of families indicates that they will encourage their children to higher education even if they don't work at highly-paid occupations following their higher education. In another study (Kim, 2002), 33% of respondents state the reasons for choosing higher education are "gaining expertise and knowledge ", 24% of them "to create an original personality" while only 17% of the respondents state for "finding a better job".

The findings of the study determine that the contributions of graduate education for students are qualification, gaining perspective, self-confidence and social interaction. Students focus on the positive aspects of graduate education mostly as personal development while the physical and mental fatigue, and technological deficiencies are identified as negative aspects at most. It is considered that the aspect of personal development in this study co-occurs with the previous studies (Alhas, 2006; Nayır, 2007) declaring state school teachers increase their knowledge and skills in graduate education and it improves the quality of education. It is discussed in the literature that certain studies (Alhas, 2006; Başer, Narlı & Günhan Cantürk, 2005;

Nayır, 2007; Sayan & Aksu, 2005) suggest that teachers, administrators and inspectors pursuing graduate education in the field of educational sciences endure with the problems caused by institutions and programs of graduate education such and these problems involve time-consuming assignments, difficulties in accessing electronic library facilities, students' difficulties in accessing for counseling, spending less time for social activities and their families due to the intensity of the courses. Similarly, Güven and Tunç (2007) indicate that the most important academic problems of graduate students comprise inadequacy of classrooms, computer and internet facilities, missing opportunities for attending scientific meetings related to the field and huge financial burden that graduate education bears upon students. The negative aspects of graduate education stated in the study of Demirpolat (2005) such as the lack of equipment and not setting hours of courses due to working hours of the employee students are compatible with the statements of this study as the unproductive time management and technological deficiencies. Kaya, Sezgin and Kavcar (2005) indicate the problems emerged from the graduate education that the majority of graduate students can't attend scientific activities such as congress, symposium, workshops, and don't make scientific research and activities since they are not among academic staff, therefore find themselves insufficient in the aspect of scientific research while advisors' lack of support combines on this issue as well as being unable to spare time for courses and certain economical shortcomings. The factors sourcing these matters such as individual work culture among academicians, the additional burden of information technologies within project-based learning approach, the uncertainty created by the new ones, the lack of work models, the common view of the separation of research and education and ineffectiveness of institutionalized integration of research and education functions at universities (Acun, 2010) may be considered.

In this study, students' positive aspects for distance education foreground the access facilitation of distance education. Students stress out the negative aspects of distance education as the inadequacy of the interaction and necessity for improvement in distance education systems. The majority of students are negative for pursuing graduate education with distance education when some of the students are the positive for distance education. Ural (2007) determines that there are no direct positive impression of the students on open and distance learning. Similarly, Demirli (2002) found in his study with 30 students that the majority of students prefer face-to-face training programs. Weidman and colleagues (2001) emphasize that face-to-face interaction prepares students for their role of further years, and while students should adapt to harmonization of technological improvements, the determination of the professional qualifications of graduate students developed through a process of socialization should be ensured. Şimşek, Alper and Çakır-Balta (2007) found that most of the prospective teachers prefer face-to-face training programs. However, Ağır, Gür and Okçu (2008) indicate attitudes of the teachers working at state and private schools are highly positive for distance education. Kızmaz and Çilek (2011) discuss in their study of determining students' opinions for quality of distance education that certain differences occur with master's degree via distance education through their views on the profession, and it leads to increase in level of awareness, making studies grounded on scientific basis, affecting positively their self-confidence, changes in

outlook for the environment with this increased confidence. It is also discussed that distance education meets the expectations of the lecturers and experienced academic staff, the quality of the service provided, properly adapted contents of the courses, studying in a constructive interaction. Odabaş (2004) stresses out that the problems such as loss of time, money, and labor, technological deficiencies, difficulties in use of the system, failures and hardships of evaluating the education, disregarding e-learning with the traditional learning models make the distance education objectionable. Şahin (2005) suggests internet-based distance education as an alternative way to meet the grave demand for college education as one of the substantial problems in higher education in Turkey.

Students are asked to indicate their level of use of information technologies in graduate education, and more than half of the students state they benefit from it in adequate and high level. The findings of this study coincide with the results of Akpınar, Dönder and Doğan's (2011) study indicating that graduate students benefits from information and communication technologies for access to sources of information and e-mail, but the internet using levels are intermediate and the computer using levels are advanced levels and also they frequently use computers and the internet.

Most of the students think that the field they choose is right for them, while very few students think that they have not made a proper choice about the field. Students' expectations for graduate education are mostly focused on pursuing academic career\personal development and social interaction. In certain studies (Özmenteş & Özmenteş, 2005; Savaş & Topak, 2005) students' expectations from master's degree are listed as academic career, specialization and development, acquiring scientific attitude, elimination of the deficiencies in education. Braxton, Vesper, and Hossler (1995) argue that there is a close relationship between expectations and college experiences of the students during determining expectations from graduate education, and expectations of students are figured as academic and intellectual development, extensive information on their fields, getting a good education in general, pursuing graduate education in school and field they choose to study.

In certain studies, expectations of students in graduate education are specified that students expect the utility of what is learnt in graduate education for career development, providing a profession or specialization, working with the experienced teachers (Braxton *et al.*, 1995; Savaş & Topak, 2005). When considered the positive relationship between education and personal income, the more level of education arise, the more personal income increases and the positive effect of education on income distribution (Baykal, 2006) and the expectations of the individuals can be diverged with relation to the improvement of the socio-economic conditions.

Increasing the number of elective courses in graduate education, supporting international education, supporting the demands given in the form of programs to be practical (Demirpolat, 2005; Sözer *et al.*, 2002) are also among the expectations of students in today's higher education students in the literature. Coaldrake (2002) argues that there are sets of expectations of students from graduate education such as improving the professionalism in the visions and qualities of institutions such as university and organizations, providing qualified and experienced teachers with learning support programs, cumulative addition of values to students' life (especially

to the professional life), compliance and eligibility, respectfulness, material values and setting higher academic standards.

Expectations such as providing guidance to students, encouraging him to explore and getting away from traditional teaching methods are compatible with the problems expressed by the students in this study such as lack of guidance and discouraging for graduate education. The cause for lack of communication might be considered that faculty members might find communication and social skills of graduate students in general sufficient (Dilci, 2011). It is regarded that the expectations from graduate education can be compatible with the expectations of college students and their parents from undergraduate education. Kim (2002) reveals in his study graduate students have expectations from graduate education as expanding their circle of friends via social environments, having a job that provides good working conditions and opportunities, gaining social status, development opportunities of potential and skills, the ability to develop the living conditions, the opportunity to experience a variety of learning opportunities, enjoyment of life, getting away from socio-economic disadvantages and feeling unashamed from himself. The expectations of mentioned here and other studies should be conceived in order to meet the expectations of the students exclusively by the authorities.

Fagen and Wells (2004) noted in their research that satisfaction was strongly related to choice, reflecting a perception that decisions made by graduate students were often not respected by persons of authority. In such an environment, expectations of the students for education are hard to stay high and retain a positive opinion on education.

As almost all of the students are in favor of beginning the graduate education again when assuming they are new graduates, they stated the reasons to start again as "continuous improvement, professional development, career in academia, professional achievement and academic activity". There are only two students reported negative opinions about it. In certain studies, the problems of graduate education are stated as deficiencies of the classrooms, computer and internet facilities, lack of participation to scientific studies and meetings, the lack of information and guidance in the selection process of courses, the time divergence, financial burden of studies, technological inefficiencies, bureaucratic obstacles, internal conflicts in institutions, density of course work and homework, lack of scientific knowledge and practice of research techniques, lack of the current knowledge, utilizing the education given only at the theoretical level (Bülbül, 2011; Demirpolat, 2005; Güven & Tunç, 2007; Kaya, Sezgin & Kavcar, 2005; Kurnaz & Alev, 2009; Nayır, 2007; Oluk & Çolak, 2005; Özmenteş & Özmenteş, 2005; Sabancı, 2011; Sayan & Aksu, 2005).

According to the results of the study, following suggestions can be argued:

The views and expectations of graduate students in this study are taken into account. Expectations of students from graduate education are determined as pursuing academic career, personal development and social interaction. When courses and content of graduate programs are prepared, functional skills and knowledge for the students' academic careers professions, social and daily lives can be taken into consideration.

It is determined in the study that graduate education provides qualification, gaining perspective, gaining self-confidence and opportunities of social interaction.

Most of the positive aspects of graduate education ground on the personal development of the students while its negative aspects are mostly identified as the physical and mental fatigue, and technological deficiencies. The coordinators of graduate education in institutions may pay attention to these results.

Regarding the mentioned impact of faculty members on the training of graduate students, attempts to increase communication between faculty members and students should be provided and faculty members should be a role model for and further studies should be conducted to determine the criteria for this model. To improve the efficiency of role model, universities and institutions should ensure to provide necessary facilities and the technological equipment during the academic studies.

The study reveals the positive views of the students on distance education as provision of ease of access and it should be improved in many ways. Though the majority of students are negative on studying graduate education via distance education programs, some of the students respond positively due to its ease of access. Distance education programs should be implemented correctly in order to promote the interest and expectations of students in such programs with the functionality of graduate training programs and the provision of the necessary technological and educational infrastructure.

For further research, the views and expectations of faculty members and administrators of educational institutions about the educational process can be determined. In addition, the problem of the study can be examined in different levels of education as well (bachelor's degree, doctorate degree etc.).

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Chapter 17

Factors Affecting Preschool Children's Socio-Emotional Adjustment

N. Merve DALKILIÇ KILIÇ & H. Elif DAĞLIOĞLU

All developmental areas interact in early childhood. Social and emotional development mutually influence each other and grow together. While social development regulates a child's communication with his environment, emotional development determines his reactions to it. While social development is essential for adapting to life, emotions become important when establishing social ties. Therefore, the term "socio-emotional" needs to be treated as a whole (Bayhan & Artan, 2004; Çelik, 2012). While socio-emotional development is affected by a set of complex factors, it also plays a significant role in children's adaptation to their environment and in supporting their character development (Martin *et al.*, 2015). Children's adaptation to their environment is known as socio-emotional adjustment. This chapters focuses on the development of preschool children's socio-emotional adjustment and the factors that affect it.

SOCIO-EMOTIONAL ADJUSTMENT

Socio-emotional adjutment is defined as being able to adapt to other people and reveal oneself freely in a group. In the narrowest sense of the term, socio-emotional adjustment refers to adaptation to daily life, while in a more comprehensive sense it covers a long period that starts at birth. Its most commonly accepted definition covers developing sensitivity to the pressures and difficulties of social stimuli, being able to act like others, getting along with others, and developing approvable patterns of behavior (Öğüt, 2000; Shapiro, 2004; Yapıcı & Yapıcı, 2005).

Socio-emotional adjustment is a lifelong process. For a successful social life, children need considerably high levels of it. This shows the importance of families and preschool education. Socio-emotional adjustment starts in the family. Children start to display the behaviors that are approved by their families more often, while they gradually give up those that do not get approved of by them. In the school environment, children reflect the social behaviors learned in the family. Once they master skills such as responsibility, cooperation, audacity, relationship formation and maintenance, self control, groupwork, self-expression, planning, problem solution and social relationships with their peers in the school environment, they improve their socio-emotional adjustment (Günindi, 2008; Kulaksızoğlu, 2001; Nix *et al.*, 2013; Toran, 2011).

There are three theories about socio-emotional adjustment in the preschool period: psychodynamic, social learning and cognitive development theories. The psychodynamic theory pioneered by Freud and Erikson stresses children's emotions, urges and developmental conflicts. According to this theory, socio-emotional development is a significant development criterion. The theory emphasizes the role of

ego and super ego in socialization. This stage starts around age six. Children's sexual urges are suppressed in this period. Freud contends that preschool children must learn how to transform their strong inner feelings into a socially acceptable form. Erikson emphasizes the need in this stage to strike a balance between autonomy and dependence on parents. According to him, regardless of their positive or negative emotions, children in this stage need to learn how to cope with them and express themselves in a socially acceptable way (Bayhan & Artan, 2004).

The social learning theory was developed by Albert Bandura and acts as a bridge between the behaviorist and cognitive theories. It is based on imitation and learning by observation. Learning by observation happens when children learn new things by watching adult behaviors or the events around them. On the other hand, imitation refers to sifting events through a cognitive sieve and gaining new knowledge. Children learn through the processes of seeing and remembering as they use observational learning and modeling. Therefore, cognitive factors are critical in observational learning. Children themselves display the reinforced behaviors of their observed models, but avoid punished behaviors (Selçuk, 2000). The rewards may be internal. This makes children act with an increasing self-confidence and success (Boeree, 2006; Demirbaş & Yağbasan, 2005; Santrock, 2011; Sarı, 2007; Yeşilyaprak, 2011).

Considering cognitive development theories, even though Piaget is credited with a sociocultural development theory, Vygotsky needs to be remembered as well. Piaget wrote about the importance of the interaction between maturation and learning in cognitive development. He posited that children make meaning through a complex interaction with biological maturation levels as a result of their experiences (Erden & Akman, 2014). The theory emphasizes that children's thoughts and perceptions regulate their social behaviors. They acquire increasingly more complex concepts and learn what it means to be a boy or girl. As children grow up, they become less reliant on rules, expectations, rewards and punishment. In addition, their judgment and self-control skills develop (Bayhan & Artan, 2004). Vygotsky (1896-1934) argued that children's cognitive development is affected by the children themselves and their environment. He therefore finds social and cultural influences critical to individual development (Palmer, 2001; Shabani, Khatib & Ebadi, 2010). He stated that children grow up in a cultural environment, and learn as a result of relations with more knowledgeable and talented peers and adults. He further claimed that this was a result of communication skills and the zone of proximal development, while the zone of proximal development was a result of social interaction (Nicolopoulou, 2004). The zone of proximal development refers to the difference between the potential that a child uses when solving a problem independently and the potential he uses when doing so with the guidance of an adult or the cooperation of peers. Naturally, a better performance can be observed when the child is interacting with others than when he is on his own. Vygotsky believed that development lies within this zone. He further noted that character is affected by the zone of proximal development, as well (Vygotsky, 2004). For this reason, inner development is essential. Vygotsky stated that inner development overshadows cognitive development until the child reaches age two. However, he added in relation to mental development that inner development gives way to external development after age two (Ataman, 2004; Bacanlı, 2005;

Gauvain & Parke, 2010; Holzman, 2009).

THE DEVELOPMENT OF SOCIO-EMOTIONAL ADJUSTMENT IN THE PRESCHOOL PERIOD

At the heart of children's social development lies their communication with the people around them and trust. Trust is the first psychosocial need of a baby. It forms the basis of the interpersonal relations that the baby will establish with others in the future. The closeness and interaction between a baby and his mother also forms the basis of positive socio-emotional adjustment. Positive social behaviors rely largely on taking family members as an example. Anyone can be taken as an example; however, adults have more influence on children's behaviors. This is because children like being approved by adults and make more of an effort to display positive social behaviors that will get approved of. These efforts transform children into active family members. They start to establish relationships with the people around them and become independent individuals (Işık, 2007; Morgan & Cole, 2001).

Children start growing into individuals at the age of three. To become socially healthy individuals, they need to learn how to co-exist with their peers and how to share. However, as children start to become aware of "I", they become more focused on receiving rather than giving when they interact with their peers. Adult intervention can therefore be necessary at times. At the end of age 3 or beginning of 4, children gradually grow out of this mindset and learn and follow rules. At age 4, children start to become curious, calm, adaptive, and more able to control their behaviors. They also start to socially imitate adults. At the same time, peers become more influential on their experiences. Peers are useful for both modeling and socialization. Four-year-olds are in the process of learning how to wait their turn, offer help, cooperate, care about other people's wishes, share, defend their rights, and establish good relations with others (Işık, 2007; Kandır, 2004). Denham, Blair, Demlilder, Levitas, Sawyer, Auerbach and Queenan (2003) studied the contributions of preschool children's emotional competence on their socio-emotional adjustment, and concluded that emotional competence at ages 3 and 4 contribute to social competence in the long run.

When children turn five, they start to take responsibility and expand their circle. They are now emotionally and socially balanced. They start to perceive concepts such as right and wrong, beautiful and ugly based on the views of their society, respect others, help them, participate in group activities, honor the wishes of the group, and share other people's emotions. They are fantastically curious and love gaining new experiences. Empathy also starts to grow in this stage (Çağdaş & Seçer; 2002; Işık, 2007; Kandır, 2004). Age 6 is a critical turning point in child development. Children start to reveal their emotions to others and try to understand social rules with their reasons. They learn about socialization, defending their own rights, respecting others, sharing, helping, winning and losing (Aral *et al.*, 2002; Ünsal, 2010). Although fear is not emphasized, they may get affected by the stories they hear or the films they see (Oktay, 2000).

FACTORS AFFECTING SOCIO-EMOTIONAL ADJUSTMENT

The socio-emotional adjustment skills gained during childhood influence people's interactions throughout their lives. The preschool period is critical to future life as this is the time when children actualize their socio-emotional adjustment most

accurately. Factors that may affect children's socio-emotional adjustment are vital in this stage. It is therefore important to identify them.

Socio-economic level: The family is the biggest influence in children's socialization process. Children gain their character and behaviors through family education. This type of education affects children's thoughts and behaviors. Therefore, living in lower socio-economic conditions may affect children's character negatively. As anxiety is a constant state for the children of these families, they feel unconfident and develop a negative self perception. The negative behaviors of their parents can also affect their socio-emotional adjustment (Gardner, 1982). While poverty and lack of care threaten children's healthy socio-emotional adjustment, their attention directing strategies are vital for low income children's socio-emotional adjustment (Güner, 2008). Ensar and Keskin (2014) found that socio-emotional adjustment increases parallel to the family's income level. Similarly, Özgülük (2006) concluded that the children of high socio-economic level families have higher socio-emotional adjustment than the children of middle and lower socio-economic level families.

Children's characteristics: Children gain positive and negative social behaviors throughout their lives. They need to be properly supported to be able to form positive social relationships. The people taken as models by children lead to positive or negative behaviors in them. The negative behaviors that become modeled upset children's socio-emotional adjustment and stop them from establishing social relationships with their peers and those around them (Zembat & Unutkan, 2001). Leadership emerges in preschool children between the ages of three and six. In young children, leadership is displayed through talkativeness, audacity, talent, strength, or starting new games. These reflect children's social-emotional adjustment skills (Çağdaş & Seçer, 2002). Ladd and Troop-Gordon (2003) found a direct relationship between negative behaviors at preschool and maladaptation in later years.

Parent-child interaction: A democratic attitude on the parents' part affects parents' social-emotional adjustment positively. Three factors are essential to child socialization: Modeling, imitation and social reinforcement. Modeling is learning behavior patterns from the surrounding individuals. Imitation is learning how to act by watching others. Social reinforcement is understanding that every imitated behavior has a different acceptability level and the approved ones get rewarded (Yavuzer, 2001). Parent-child interaction is therefore very important for children's socio-emotional adjustment. A healthy communication between particularly mothers and children help the development of a robust personality. Such a mother-child relationship additionally helps children establish positive relationships with others. Parents that support children's socio-emotional adjustment usually spend quality time with their children, share their social experiences, listen to them, answer their questions, solve problems with a democratic attitude, and set limitations when necessary in a confident and tolerant manner. On the other hand, if parents treat their children inconsistently and negatively, they may cause difficulties for socio-emotional adjustment (Çağdaş & Seçer, 2002; Dehart *et al.*, 2004; Dirim, 2003; Yavuzer, 2001). Pettit, Bates and Dodge (2000) state that supportive parenting contribute to children's social, academic and behavioral adaptation. However, they found that the positive results of this were more significant among girls.

Sibling relationships: There are multidirectional relationships and interactions between siblings, and this plays a significant role in their social relationships. In early childhood, siblings are children's first and foremost socialization tools. In the preschool period, sibling relationships include both competition and sharing. A longitudinal study concluded that older children imitate younger ones until the latter turn one, but that the situation gets reversed once the younger child turns one (Bee, 2000; Deckard *et al.*, 2002). Deckard *et al.* (2002) examined sibling relationships in different family environments. They found that children from single-parent families have higher sibling conflict and aggression, and that sibling conflict is mostly related to children's behavioral and emotional problems.

Schools and teachers: In the development of children's self perception, the educational environment follows the family as the second most important factor. Self perception is not only shaped by the teacher but is also based on how the child perceives the teacher's thoughts about him. In addition, the teacher's plans, activities, and personal characteristics also affect children's self perception. Teachers should encourage positive social behaviors, particularly in preschoolers who are first-timers at an educational institution. Teachers become a model for children by displaying positive in-class social behaviors. In order to be able to develop positive self perception in children, teachers need to establish a positive social learning environment and act as a guide (Gül, 2003; Işık, 2007). Howes (2000) associated the social-emotional classroom climate at preschools with the qualities of child-teacher relationships. Problem behaviors in the group, the quality of child-teacher relationships, and the quality and frequency of playing with peers have been identified as the factors that form the social-emotional classroom environment. Also, when children have access to a trusting and tolerant teacher relationship, they generalize this to all social relationships.

Peers and friendship: For socio-emotional adjustment, children must make friends and join friend circles. Friendship helps children embrace social rules, develop a sense of trust and grow social-emotional adjustment. Children with friends are socially more sufficient. Those who feel the support of their friends are more sociable and display fewer behavioral problems. Being approved by friends acts as social support for children. As preschool children start to spend more time with peers, their communication and adaptation skills improve (Gülay, 2009; Hartup, 2000). Six-month-old babies start to show interest in other babies, and display the first signals of playmate preferences when they turn eighteen months. By two and a half years, they are not yet ready for rules. They feel the need to join a play group at age three but form short friendships. At age four, children can form good peer relationships based on their social competencies. At age five, they start to enjoy spending time with peers; and by age six, they learn what social relationships are and who to form them with. In this stage, they improve their adaptation and cooperation skills. Owing to empathy, they start to better understand others around them and opt for gender discrimination (Işık, 2007; Maccoby, 2000; Poole *et al.*, 2003). Children are divided into four groups based on their social behaviors: popular, excluded, neglected and problem children (Palut, 2003). The latter three tend to have problems in their future lives. These problems include not being able to adapt to the school, academic failure, and insufficiency in solving problems. Being unable to solve problems stops children from

effectively adapting to their environment. They constantly face different people and problems. They fail to solve them and experience problems with communication. When children cannot solve the problems they face and experience communication problems, they start to feel socially insufficient. Therefore, in order to raise healthily developing children, they need to be supported in problem solution and positive social adjustment (Mertoğlu & Öztuna, 2004; Yıldırım, 2007).

An examination of the literature shows that many studies have been conducted into the socio-emotional adjustment of preschool children. Some of the studies on the relationship between these children's problem behaviors and socio-emotional adjustment levels found a negative relationship (Malik *et al.*, 2006; Ramazan & Ünsal, 2012; Youngstrom *et al.*, 2000), while others found no significant difference (Can, 2011; Kargı, 2009). Studies focusing on teacher views and children's socio-emotional adjustment levels found results in favor of preschool children's socio-emotional adjustment scores (Can, 2011; Dinç & Gültekin, 2003; Özbek, 2003). There are also studies that centered around the relationship between children and family demographics, parent attitudes and children's socio-emotional adjustment. While some found a negative relationship (Eisenberg *et al.*, 2003), others found no significant difference (Can, 2011; Çimen, 2000; Dalkılıç, 2014; Işık, 2006; Rhoades *et al.*, 2011). Further, some previous research focused on the effects of curricula on children's socio-emotional adjustment levels. These studies concluded that curricula affected children's socio-emotional adjustment levels positively and that this effect continued into future times (Durualp & Aral, 2010; Johnson, 2000; Turaşlı & Zembat, 2013).

In sum, socio-emotional adjustment means being able to adapt to other humans and is a lifelong process that must be acquired. Within the preschool period, this process starts with the close relationship and sense of trust between the baby and mother, and continues until age six when children learn socialization, defending their own rights, respecting others, sharing, cooperation, and winning and losing. In the meantime, children's socio-emotional adjustment is affected either positively or negatively by factors such as family's socioeconomic level, children's characteristics, parent-child interaction, sibling relationships, schools and teachers, peers and friend relations. Some previous research has concluded that children who attend preschools and those with few problem behaviors have higher socio-emotional adjustment. At the same time, curricula designed by professionals have also been found to be effective in developing their socio-emotional adjustment.

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Chapter 18

Development of Attitude Scale towards Constructivist Approach

Alper KABACA, Sami ÖZGÜR and Burcu GÜNGÖR CABBAR

INTRODUCTION

Lots of theories have been put forward regarding how the learning process proceeds. Constructivist learning approach that has come forward recently is an approach that examines the learning process and the phases of the occurrence of this process in mind. Constructivist approach which includes many methods and styles has taken part in our education system. This approach puts forward the idea that besides intellectual factors, environmental factors also affect the learning process in the mind of an individual. According to Constructivist approach, the individual should have some basic information about the topic in mind before the occurrence of the learning. This basic information is associated to the new one, and reconstructed (Matthews, 2002).

According to Constructivist approach, learning is a process in individual's mind, and happens as an outcome of construction of the information that has already been there (Yaşar, 1998). In this sense, the individual is not a passive receiver of the stimuli coming outside. By internalizing these stimuli, the individual carries them through intellectual processes and constructs the information. The mind does not serve as an empty storage, that is, the information is not stored by directly moving there (Şaban, 2002).

Constructivist approach argues that information and the individual are not independent from each other. While constructing the information, we use our observations, experiences, comments and intellectual processes like these. That is why scientific information is not objective, and cannot be directed to the students passively (Yıldırım & Şimşek, 1999; Kılıç, 2001).

Constructivism says that the basic information of each individual differs, and based on this, the information construction process differs as well. It also adds that individuals actively take part in this process. In learning environment, the teacher is shifted from the active position, which gives the information, to the position of mentor (Ergün, 2004).

The main purpose of Constructivist approach is not to determine beforehand what the learners will do. Instead, by arranging a learning environment, with the help of various activities and learning materials, the purpose is to make the learners direct their mental processes however they want (Erdem & Demirel, 2002).

According to Deryakulu (2000), the world is a place where an individual experiences various things, but the meaning of this world comes from the individual. So, we cannot think of the individual and the meaning separately. For Constructivist approach, the information of the meaning is constructed by the individual himself/herself. Only one objective reality cannot be put forward about any incidence,

phenomenon or term. Learning is a process, and the learner makes sense of it in his/her own ways. In this process, the learner reconstructs the information in mind by adding the new information to it. The presentation of the information in construction process of the individual, and the involvement of the individual in intellectual processes are of the essence since the information can be constructed in a social environment.

The attitudes of the teachers that lead the program largely affect their motivation and behavior. For Tavşancıl (2005), attitude is a factor affecting the behaviors of an individual, and happens as a result of a learning process. Attitude that affects the behavior is handled in three ways: sensual, cognitive and behavioral dimensions. Determination of the attitude in a specific activity is an important factor in determining the success of this activity (Ekici, 2002).

As a result of the configuration of our education system with Constructivist approach, the testing of the attitudes of the teachers, who are going to teach as the enforcer of this approach, towards the approach is important. So, a study has been needed. Below, the purpose, importance, the problem and limitations of the study will briefly be explained.

The Purpose and Importance of the Study

The Purpose of the Study: to develop a scale that can test the attitudes of the undergraduate teacher candidates towards Constructivist approach.

The Importance of the Study: After the regulation of Ministry of Education in education program, teacher-centered approach has been replaced by student-centered approach. In other words, Constructivist approach has been adopted in education program. As a result of it, teachers, the conductor of this approach, must be much more successful in educational sciences. It is important to develop scales so that attitude, one of the factors affecting this success, can be tested. Thanks to these scales, with feedbacks taken from the teacher candidates, how the undergraduate education affects the attitudes of teacher candidates, how it changes according to the grades, and whether it changes with regard to certain factors can be examined.

The Problem of the Study: Can the attitude of the teacher candidates educated in undergraduate programs in Turkey towards Constructivist approach be tested with an attitude scale that will be developed?

MATERIAL AND METHOD

This study has been conducted with 283 teacher candidates in 2011-2012 academic year in Balıkesir University Necatibey Education Faculty. Candidates that participated in the study were at first, second, third, fourth and fifth grade, and were randomly selected. 19.79 % (n=56) of the candidates were first, 20.49 % (n=58) were second, 19.79 % (n=56) were third, 20.14 % (n=57) were fourth and 19.79 % (n=56) were fifth graders.

The attitude towards Constructivist approach scale has been developed in five phases:

- The phase of forming an item pool
- The phase of taking an expert opinion
- The phase of preliminary try
- The phase of validity

The phase of reliability

The Phase of Forming an Item Pool

With five open-ended questions asked to the teacher candidates, the perspectives of them were obtained and necessary literature review was done. The attitude towards Constructivist approach scale developed by Evrekli *et al.* (2009) had 19 items. The scale Ocak (2010) used in the study had 31 items.

The Phase of Taking an Expert Opinion

Items formed in forming an item pool phase were shown to three experts so as to provide validity. In the items that were thought to be in the pilot scale, “Constructivist approach” as a word was tried not to be used in any way because it could affect the feedbacks of the students. Instead, the principles of the approach were examined while trying to form the items in the scale.

Based on the feedbacks taken from the experts, the scale was roughly divided to sections, and equal amount of items were put into each section. The numbers of positive and negative items were also tried to be kept equal. Ultimately, items that were thought to be inappropriate were excluded from the pre-study questionnaire. In the final form of the pre-study questionnaire, there were 37 items. 20 of them indicated positive attitude whereas 17 of them indicated negative. This questionnaire was a likert type of 5 in which each item has five possible options: “strictly disagree, disagree, indecisive, agree, strictly agree”. Items in the pilot study are in Table 1.

The Phase of Preliminary Try

During this phase, teacher candidates were randomly selected. Based on the number of the samples that had been thought to reach in the study, equal numbers of students from each grade level were tried to reach. The time of answering the questionnaire was about 15 minutes. It was thought that the teacher candidates were sincere and intimate while answering the questionnaire and the answers that were obtained were used in the study of validity and reliability studies of the scale.

The Study of Validity

i) Item Analysis

During this analysis, the points the teacher candidates got from the test were obtained, and these points were ordered from the highest to the lowest. Top 27 % and bottom 27 % (n=77) groups were formed. The difference between the average points of these two groups was tested with unconnected t-test thanks to the SPSS packed software. In this test where the self-reliability of the scale was tested, no meaningful difference in the items in terms of statistics was observed. If there had been a difference, removal of that item from the test would have been appropriate (Büyüköztürk, 2006).

ii) Factor Analysis

The structural validity of the attitude scale was provided by doing an explanatory factor analysis. This analysis is the process of finding the factors in the test by looking at the relationships between the variables (Büyüköztürk, 2006).

The prepared draft of the scale was applied to 225 students, and the factor analysis was done with SPSS packed software. The scale was likert type of 5, and it assigned 5 to the option “strongly agree”, 4 to “agree”, 3 to “indecisive”, 2 to “disagree” and 1 to “strongly disagree”.

Table 1: Items in the Pilot Scale

1	The important thing in Science is to teach students how to learn.
2	A real learning in Science is possible if the student overcomes a learning obstacle on his/her own.
3	I do not like the fact that that evaluation in Science is done with multiple choice questions.
4	I do not like the fact that the information is conveyed from teacher to the student in Science classes.
5	The purpose of learning Science is to get good grades.
6	Terms used in Science are certain.
7	In experiments in Science classes, there should be an environment to test the first thoughts of the students.
8	There is no need to use scientific research steps in a good Science teaching.
9	If we learned one big complicated problem in Science classes by breaking it into small problems, I would like it more.
10	The evaluation of Science teaching must only be done with grades.
11	Experiments in Science teaching are conducted in order to test what has been learned in the classes.
12	I do not see students as blank sheets on which the information will be written in Science teaching.
13	Learning a topic by memorizing makes me successful in Science.
14	I use the evaluation process in Science teaching to test what the students know.
15	Real learning in Science teaching happens if conceptual changes are provided.
16	Teachers in Science teaching are responsible to look for the reasons behind the failures of the students.
17	In my opinion, evaluation in Science should be done for the students to learn what they do not know.
18	In Science teaching, sticking to a certain program is not pleasant for me.
19	Information forming process in Science learning should be built based on students' wrong ideas.
20	There are more disadvantages of making students work in small groups in Science classes.
21	When I make an experiment in laboratory in Science classes, I want to give students a leaf that includes all steps of the experiment.
22	I look for the right answer while deciding if there is learning or not in Science.
23	I do not use what I have learned in Science classes in my daily life.
24	In Science teaching, the wrong first thoughts of the students that they think correct are ignored.
25	In Science classes, teaching activities should be regulated in a way that students can find out their mistakes.
26	The evaluation of Science teaching should not be done apart from teaching.
27	I firstly emphasize laws and generalizations in Science classes.
28	The teacher should correct the mistakes of the students as quickly as possible in Science teaching.
29	In Science teaching, examining the terms from the whole to the pieces is pleasant for me.
30	The main thing in Science is to evaluate the reasons behind the wrong answers as well.
31	The evaluation in Science should not be objective (stable).
32	I include myself, too, in evaluation process in Science.
33	I do not look at the historical processes of the terms in Science teaching.
34	In Science, I like it if the evaluation is subjective (flexible), not objective.
35	I feel comfortable when laboratory practices are done after the theoretical information is given in the classroom in Science teaching.
36	I do not prefer a learner-centered evaluation approach in Science teaching.
37	I like it in Science if how it has been gained instead of what has gained is evaluated.

Yet an opposite rating was used for the negative items in the scale. In order to determine whether to apply factor analysis to the scale, KMO (Kaiser-Meyer-Olkin) value and Bartlett Test (Bartlett's Test of Sphericity) were calculated.

Table 2: Values of KMO and Bartlett Test

Sample Adequacy of Kaiser-Meyer-Olkin		0.913
Bartlett Test	K-Square	3000,240
	Degree of Independence	276
	p	0.000

The fact that the KMO value was above 0.50 (KMO=0,913, $p<0.01$) showed that the sample group was appropriate in terms of factor analysis. Likewise, the fact that the outcome of Bartlett test (3000,240) was substantive in $p<0.01$ level showed that the mean of scale could be divided into factor structures. As seen in Table 3, items (K=24) Varimax conversion was applied to gathered under two factors the values of which were above 1 in scale tool. Distribution of the items which were made present in the scale after the factor analysis to the factors, and their tables regarding to factor loads were given separately for each factor.

Table 3: The explanation percentages of the total variance for student health attitude scale of 24 items

Component	Total	Primary Value		Total of Converted Checked Loads		
		Variance %	Cumulative	Total	Variance %	Cumulative
1	7,232	30,133	30,133	5,890	24,540	24,540
2	4,310	17,958	48,091	5,652	23,550	48,091

After conversion, first factor's rate of variance explanation was 24,540; second factor's was 23,550; and both factors' rate of variance explanation was 48,091. Accordingly, two factors together that came out as important in the analysis seemingly explained most of the total and scale-related variances.

This situation was tested with Cattell's "scree" testing, and the following graph was obtained (Fig. 1).

As seen in the graph above, a highly accelerated fall was observed after first and second factors. After the third factor, the general continuum of the graph was horizontal, and there was no significant fall there. That is, the contributions of the third and latter factors were similar, which made us think that the scale was shaped with two factors. Values, variance percentages and total variance percentages related to these two factors were given in Table 3 (Büyüköztürk, 2006).

At the end of the factor analyses, 3 factors that had 52.691 % expressiveness were detected. These were "Attitude towards Teaching, Attitude towards Evaluation and Attitude towards Learning".

As seen in the table above, "Attitude towards Evaluation", the first factor, includes 14 items; and "Attitude towards Teaching", the second factor, includes 10 items. Factor loads of the items in the first factor are between 0,785 and 0,455; and those in the second factor are between 0,807 and 0.633.

Table 4: Findings about Factors as a Consequence of Factor Analysis of Attitude towards Constructivist Approach Scale

Factor 1: Attitude Towards Evaluation		
<i>Item No</i>	<i>Item</i>	<i>Factor Contr.</i>
I 24*	In Science teaching, the wrong first thoughts of the students that they think correct are ignored.	,785
I 23*	I do not use what I have learned in Science classes in my daily life.	,776
I 5*	The purpose of learning Science is to get good grades.	,740
I 8*	There is no need to use scientific research steps in a good Science teaching.	,719
I 13*	Learning a topic by memorizing makes me successful in Science.	,717
I 18	In Science teaching, sticking to a certain program is not pleasant for me.	,666
I 26	The evaluation of Science teaching should not be done apart from teaching.	,623
I 10*	The evaluation of Science teaching must only be done with grades.	,619
I 33*	I do not look at the historical processes of the terms in Science teaching.	,607
I 31	The evaluation in Science should not be objective (stable).	,565
I 36*	I do not prefer a learner-centered evaluation approach in Science teaching.	,559
I 20*	There are more disadvantages of making students work in small groups in Science classes.	,533
I 6*	Terms used in Science are certain.	,491
I 29	In Science teaching, examining the terms from the whole to the pieces is pleasant for me.	,455
<i>Cronbach's Alpha Value of the First Factor (α)=0.889</i>		
Factor 2: Attitude Towards Teaching		
I 30	The main thing in Science is to evaluate the reasons behind the wrong answers as well.	,807
I 7	In experiments in Science classes, there should be an environment to test the first thoughts of the students.	,785
I 25	In Science classes, teaching activities should be regulated in a way that students can find out their mistakes.	,784
I 2	A real learning in Science is possible if the student overcomes a learning obstacle on his/her own.	,752
I 1	The important thing in Science is to teach students how to learn.	,741
I 32	I include myself, too, in evaluation process in Science.	,717
I 15	Real learning in Science teaching happens if conceptual changes are provided.	,701
I 37	I like it in Science if how it has been gained instead of what has gained is evaluated.	,690
I 9	If we learned one big complicated problem in Science classes by breaking it into small problems, I would like it more.	,683
I 17	In my opinion, evaluation in Science should be done for the students to learn what they do not know.	,633
<i>Cronbach's Alpha Value of the Second Factor (α)=0.774</i>		

* Since items indicate negative attitudes, their ratings were done adversely.

For the reliability analysis of the scale, Cronbach's Alpha Value was calculated as 0.790. This value was a parameter which was used to test whether the items in the

scale tool were consistent among themselves. Reliability parameter varied between 0 and 1, and when the value was closer to 1, the reliability was higher (Table 5) (Ural & Kılıç, 2006).

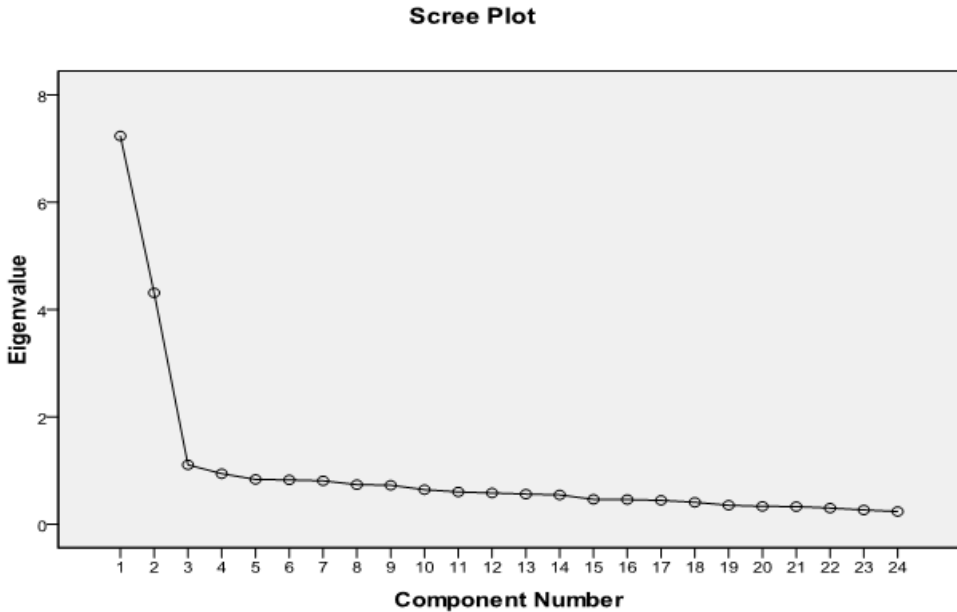


Figure 1: Slope (Scree Plot) Graph Related to Factors

Table 5: Results of Reliability Analysis

Cronbach's Alpha Value (α)	Number of Items	Number of Data
0.790	24	283

The average of the scale in the relevant item columnar is given in the first column of the table above. In the second column, the variance of the scale in the relevant item columnar is shown. The third column indicates the correlation between each item and the whole. In the final column, there is the reliability parameter (α) of the scale in the relevant item columnar. It has been seen in the last column that reliability parameter would increase if the items 15, 17 and 37 were excluded from the scale. However, it was thought that the presence of these items in the scale would positively affect the factor distribution.

In the next parts of the study, distinguishing properties of the items are given. Testing of the differences between average item points of the top 27 % and the bottom 27 % groups formed according to the total points of the teacher candidates will be done with unconnected t-test. So, groups that form the 27 % ($n=77$) of the sample are defined firstly according to the total points for $N=283$. For the average item points of the teacher candidates in these groups, t-test testing was done. Distinguishing index for each item was examined by determining the statistical expressiveness level in the study as 0,05 (Büyüköztürk, 2006).

Table 6: Statistics between the Item and the Whole

<i>Item No</i>	<i>Average of the Scale in Item Columnar</i>	<i>Variance of the Scale in Item Columnar</i>	<i>Correlation between the Item and the Whole</i>	<i>Reliability Parameter of the Scale in Item Columnar (Cronbach's Alpha)(α)</i>
I 6	86,94	106,648	0,279	0,786
I 8	86,07	101,46	0,512	0,773
I 10	86,57	104,728	0,347	0,782
I 13	86,18	100,95	0,493	0,774
I 18	86,34	104,585	0,407	0,78
I 20	86,73	106,901	0,237	0,788
I 23	86,14	99,949	0,598	0,769
I 24	86,19	99,682	0,515	0,772
I 26	86,47	104,789	0,331	0,783
I 29	86,69	105,103	0,301	0,785
I 31	86,59	103,031	0,405	0,779
I 33	86,64	105,14	0,308	0,784
I 30	86,15	107,084	0,23	0,789
I 7	86,08	106,143	0,331	0,783
I 25	86,2	106,055	0,324	0,784
I 1	86,21	106,116	0,293	0,785
I 2	86,17	106,666	0,297	0,785
I 15	86,53	109,896	0,139	,792*
I 32	86,32	107,666	0,256	0,787
I 37	86,42	110,011	0,102	,795*
I 9	86,21	107,331	0,25	0,787
I 17	86,39	109,082	0,157	,792*
I 5	86,14	100,701	0,519	0,772
I 36	86,75	106,373	0,219	0,79

In Table 7, when the p values between bottom 27 % and top 27 % groups in 0,05 expressiveness level are examined, there is no statistically meaningless situation in any of the items. As a result of this process, it can be said that items as they are can be present in the scale.

With the analysis, it can be concluded that data obtained with “Scale of Attitude towards Constructivist Approach” are valid and reliable.

Table 7: Unconnected T-Test Results for the Top and the Bottom 27% Groups

<i>Item No</i>	<i>Group</i>	<i>N</i>	<i>Average (X)</i>	<i>Standard Deviation</i>	<i>Degree of Independence</i>	<i>t</i>	<i>p</i>
I 1	Bottom %27	77	4,45	,717	152	7,074	,000
	Top %27	77	3,21	1,370		7,074	,000
I 2	Bottom %27	77	4,45	,660	152	6,334	,000
	Top %27	77	3,39	1,319		6,334	,000
I 5	Bottom %27	77	4,58	,615	152	7,089	,000
	Top %27	77	3,29	1,486		7,089	,000
I 6	Bottom %27	77	3,70	1,001	152	5,497	,000
	Top %27	77	2,84	,933		5,497	,000
I 7	Bottom %27	77	4,49	,529	152	6,812	,000
	Top %27	77	3,38	1,338		6,812	,000
I 8	Bottom %27	77	4,58	,714	152	6,912	,000
	Top %27	77	3,36	1,376		6,912	,000
I 9	Bottom %27	77	4,36	,826	152	5,880	,000
	Top %27	77	3,32	1,312		5,880	,000
I 10	Bottom %27	77	4,06	,922	152	5,586	,000
	Top %27	77	3,05	1,297		5,586	,000
I 13	Bottom %27	77	4,44	,896	152	6,351	,000
	Top %27	77	3,22	1,429	152	6,351	,000
I 15	Bottom %27	77	3,94	,767	152	3,910	,000
	Top %27	77	3,27	1,274		3,910	,000
I 17	Bottom %27	77	4,09	,876	152	4,248	,000
	Top %27	77	3,31	1,350		4,248	,000
I 18	Bottom %27	77	4,19	,859	152	4,976	,000
	Top %27	77	3,32	1,272		4,976	,000
I 20	Bottom %27	77	3,61	1,149	152	3,253	,001
	Top %27	77	2,96	1,322		3,253	,001
I 23	Bottom %27	77	4,52	,736	152	7,655	,000
	Top %27	77	3,18	1,345		7,655	,000
I 24	Bottom %27	77	4,53	,699	152	6,825	,000
	Top %27	77	3,14	1,644		6,825	,000
I 25	Bottom %27	77	4,43	,594	152	6,610	,000
	Top %27	77	3,30	1,377		6,610	,000
I 26	Bottom %27	77	3,96	,952	152	3,158	,002
	Top %27	77	3,31	1,533		3,158	,002
I 29	Bottom %27	77	3,88	1,147	152	4,576	,000
	Top %27	77	3,00	1,246		4,576	,000
I 30	Bottom %27	77	4,43	,768	152	5,183	,000
	Top %27	77	3,39	1,582		5,183	,000

I 31	Bottom %27	77	4,25	,876	152	7,500	,000
	Top %27	77	2,94	1,260		7,500	,000
I 32	Bottom %27	77	4,25	,746	152	6,036	,000
	Top %27	77	3,25	1,248		6,036	,000
I 33	Bottom %27	77	3,92	,957	152	4,248	,000
	Top %27	77	3,06	1,490		4,248	,000
I 36	Bottom %27	77	3,79	1,151	152	3,346	,001
	Top %27	77	3,05	1,564		3,346	,001
I 37	Bottom %27	77	4,13	,864	152	4,484	,000
	Top %27	77	3,25	1,497		4,484	,000

CONCLUSIONS

This scale prepared to determine the attitudes of the teacher candidates towards the Constructivist approach has been tried to be proven with the analyses that it is appropriate for the purpose of the scale, and it can represent the area that is wanted to be measured. The reliability parameter of the data obtained from the scale has been calculated as 0,790, and it has been said that two factors are present in the scale. 14 of the 24 items in the scale indicate positive attitude while 10 of them indicate negative attitude. It can be said that this study is an important step for the studies of attitudes towards Constructivist approach that will be conducted in education faculties.

When the fact that studies about Constructivist approach will positively affect the success of the teacher candidates is considered, it can be seen as an important investment for the future. In the study conducted by Evrekli *et al.* (2009) in which the attitudes of the Science teacher candidates towards Constructivist approach were examined; a scale has been developed as well. Nevertheless, no item included terms like “Constructivist approach” or “Behavioral approach” in this scale. It was the purpose that the answers of the teacher candidates to the scale would not be affected. This study is distinguishable from other studies in this sense.

To develop other scale aimed to test the attitudes of the teacher candidates towards Constructivist approach, and to use advanced statistical techniques in the process of developing a scale may be important for the further studies. Besides, different samples and increase of the number of the samples are also important for the sake of the development of the study.

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Chapter 19

Recognition and Evaluation of Preschool Children

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INTRODUCTION

The acquisition of basic skills, which will be required by children, starts in the preschool period. The preschool period is very important in terms of the recognition and evaluation of children, the introduction of the individual differences, the development of the child's interests, their abilities and potential in the framework of their surroundings and conditions. Studies are regarded as a process in order to identify the child, to plan and evaluate the educational process in the preschool period. This process includes both the information obtained from the findings and the knowledge of an individual's mental products. Therefore, it should be noted that the developmental features, interests and requirements of children and the theoretical structure and examinations related to children's development and learning processes should be considered in the identification and evaluation studies (Mağden, 1993: 172-175; Bentzen, 2005: 528).

Recognize and evaluate pre-school children is to have knowledge about the features of children in terms of the cognitive development, language development, psycho-motor and social-emotional development, the requirements of children, the child's personal characteristics, their strengths and weaknesses and the positive or negative effects of the environment (Yıldırım, 2002: 146; Babaroğlu, 2013: 57).

It is important to recognize and evaluate preschool children in order to (Güler, Eren, Karabacak, 2005: 122-145; Yeşilyaprak, 2001: 305-324; Özgüven, 2002: 198-199):

- Make the child realize her/his properties
- Determine the developmental levels, interests and necessities of a child
- Prepare the training program in line with the needs of the child
- Increase the success of a child in the learning process
- Determine whether the child have problems and lead the child to gain new skills in addition to her/his present abilities.

Fundamental Principles and Considerations in the Identification and Evaluation Process of Children

Recognition and evaluation of the child is a process and there are some principles in order to carry out this process correctly. During the process of recognition;

The main aim should be to help the child to recognize herself/himself.

Various different techniques should be used.

The child should be evaluated in terms of her/his behaviors not only in the educational institution but also outside the institution according to the information obtained from different individuals.

The techniques used to recognize the child should not be converted into a purpose.

The measuring tools, which will be used to recognize the child, should be appropriate to the child's age and development properties.

There should be interaction between individuals related to the child in the application of the recognition techniques and evaluation of the child.

It should not be expected the child have emotional or behavioral problems in order to recognize the child.

The recognition techniques should be used continuously.

The findings should be efficiently used.

The ethical rules must be followed (Kuzgun, 2000: 42; Yeşilyaprak, 2000: 291; Kepçeoğlu, 2001: 105-107; Yıldırım 2002: 146; Yılmaz & Üre, 2002: 72; Kutlu & Kaya, 2008: 204; Babaroğlu, 2013: 57).

The points, which must be taken into account by individuals who are involved in the recognition and evaluation process, are;

It is very important to attract the attention of children to new learning areas by evaluating their current knowledge. Therefore, it is important to reveal what the children know and their level of knowledge rather than revealing the topics that they do not know.

The techniques should be appropriate for the age and the developmental level of children. The evaluation should involve all areas of the development and it should be compatible with the gains and indicators in the learning process.

The recognition and evaluation studies should be planned based on the abilities and interests of children in order to reveal the strengths of children and support the development of their positive self-perception.

Even though children are in the same age group, their developmental features can be different from each other and therefore child-centered and multiple assessment methods and tools should be used.

During the recognition and evaluation process, there should be cooperation with families and others who have already known the child.

The data should be systematically recorded and the results should be used efficiently in the planning of the learning process.

The validity and reliability studies of measuring tools should have been performed.

Children should be evaluated by different methods and techniques in different times and circumstances.

The evaluation method should be appropriate for the preschool children's language development.

The person who performs the recognition and evaluation process should be objective. The feelings regarding the child and the family should not be allowed to affect the results. The important considerations should not be taken about the child according to only one evaluation. The private information about the child should be hidden (NEGP, 1998; NCREL, 1999; NAEYC and NAECCSDE, 2003; Tuğrul, 2005: 382; McAfee and Leong, 2007: 26-28).

The physical development and characteristics, health status, success capabilities, interests and attitudes, emotional and perceptual characteristics, personal characteristics as well as family characteristics can be learned by using recognition and evaluation methods (Kutlu and Kaya, 2008: 205-209; Güven, 2010: 52;

Babaroğlu, 2013: 64-65). This information should be systematically recorded and preserved because the knowledge can be forgotten or remembered incorrectly in time. Therefore, the information obtained should be kept in private folders. The folders that are prepared for this reason are named as 'batch file, development files' (Babaroğlu, 2013: 59). In a functioning registry file;

The information should be gathered continuously and systematically and they should be arranged chronologically.

The folder should be arranged to provide information in a short time when someone needs to find something.

All scores should be arranged to give the opportunity to compare and the graphical explanations should be performed if it is possible.

There should be information involved in the folder regarding the child's identity, developmental characteristics, background information about the health status, socioeconomic status of the family and nature of the relationship in the family, the names of schools and the information obtained from these schools in case the child continued to any of them, child's personality and temperament traits, observation records related to the child, information about the child's talents and interests, the test results and information about child's private problems (Kuzgun, 2003: 42; Babaroğlu, 2013: 59).

The techniques that can be used in order to recognize and evaluate children

The techniques used to recognize children can be classified as test techniques and non-test techniques. The aims of tests used to recognize children are to predict, uncover the causes, identify needs, and perform the evaluation and research. The tests should be valid, reliable and useful regardless of their purpose.

Test techniques:

The tests used to recognize children are classified into five main groups according to the aims and the measured attributes. These are achievement tests, aptitude tests, personality tests, attitude scales, interest inventories and compliance inventories.

Achievement tests are the ones that measure the maximum performance and they are used to determine how much the children have benefited from the activities of the learning process.

Aptitude tests are the ones that are used to gather the information about children's academic or cognitive skills.

Personality tests are for gathering information about the personality characteristics of individuals. The scoring and evaluating of these tests requires expertise. Internal structure of personality and the personality are tried to be revealed in projective personality tests (Rorschach Ink Blot Test, Test Psychoanalytic Stories, Bier Sentence Completion Test, Thematic Perception Test-TAT etc.). The personality inventories are the tools that are used to reveal the psychological needs and values of individuals (Minnesota Multiphasic Personality Inventory, Edwards Personal Preference Inventory, Hacettepe Personality Inventory, etc.) (Öner, 1997; Özgüven, 2001: 88; Babaroğlu, 2013: 68; Atlı, 2014; Bilgin, 2014).

Attitude scales can be used to measure various attitudes such as the children's attitudes towards the environment, family attitudes, etc (Özgüven, 2001: 88).

Interest inventories are developed to measure the children's interests and these are tools that help individuals to recognize their features which they like or do not like. They are important to determine which areas, programs, professions or activities are interesting for children and these tools are used to canalize the children into these areas (Kuder Preference Interests Inventory, Strong Interest Inventory, Edwards Personal Preference Inventory, etc.) (Karagözoğlu and Kemertaş, 2004: 112; Gazioğlu and İldar, 2008: 73). Compliance inventories are used to determine the compliance level of an individual. Compliance inventories can be Bell Adjustment Inventory, Inventory for Social Cohesion (Ültanır, 2005: 103).

Non-test techniques:

The non-test techniques that are used to recognize children can be evaluated in four groups; observation based techniques, self report techniques, techniques of others' evaluations and interaction based techniques.

Observation based techniques are observation, observation list, anecdotal records, property records schedule and grading scales.

Self record techniques are autobiography, wish lists, timetables, problem screening and survey lists.

Techniques of others' evaluations are sociometry, 'Guess who?' technique, role distribution technique and social distance techniques.

Interaction based techniques are interviews, home visits, drama (psychodrama, sociodrama) and games.

Additionally, *bibliotherapy* is another technique that was inspired by the literature and it is beneficial for individuals to solve the problems or understand themselves better. The use of bibliotherapy is based on very old history. Literary works are important for the language development and the intellectual powers of children, it is beneficial to shape their personalities, let them to gain positive values and facilitate their adaptation to the environment in which they live. Thus, future generations can gain the requirements of social life, community values, ethics, lifestyle (Borders and Paiskey, 1992: 132; Pardeck, 1994: 423; Yeşilyaprak, 2006: 113; Babaroğlu, 2013: 87).

The scales used for preschool children in Turkey

It is noteworthy that the tests, which are used in education and psychology, are classified by various researchers. As competence and personality tests, measurement tools are also classified according to the nature of the behaviors, scoring (objective or subjective), a number of the variables measured by the test (one dimensional or multidimensional), the individuals who prepared the test, the number of participants, the duration of the test, the administration mode of stimulus and the responses against them (Öner, 1999; Doğan, 2006).

There are some measuring tools which are directly applied to children or applied to mothers, fathers or preschool teachers and they allow us to perform measurement and evaluation related to children. Some of these measuring tools have been developed in different cultures and adapted to Turkey. For instance; some of them are Brazelton Baby Assessment Scale, Brigance Early Development Inventory, Cattelan Baby Intelligence Test, Frosting Developmental Visual Perception Test, Vineland Social-Emotional Early Childhood Scale, the Wechsler Preschool Intelligence Scale,

etc. Some other measuring tools are developed in Turkey and their validity and reliability studies have been performed. For instance; these are Preschool Social Skills Rating Scale (OSBED-PSSRS), Ankara Developmental Screening Inventory (AGTE-ADSI), Problem Solving Scale for Children in Pre-School and Primary School (1st to 5th class), Marmara Primary School Preparation Scale, Marmara University Social Emotional Adjustment Scale (MASDU-MASEA) and the Gazi Early Childhood Assessment Tool (GEÇDA-GECAT). Primarily, the measuring tools were developed for different cultures and they have been adapted to Turkey and Turkish culture.

Recently, developing new tests and adapting the existing tests to Turkish society has often been performed in both graduate and doctoral studies. There are post graduate studies in which new scales have been developed or the original scales that are adapted to Turkish culture. Developing new scales, which are appropriate for the Turkish culture, provides important contributions to this area. At the same time, the importance of the monitoring and evaluation studies should also be considered. Therefore, it is very important to perform the monitoring and evaluation studies as well as implement the findings.

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Chapter 20

Inclusion at Preschool Period

Emine AHMETOĞLU

INTRODUCTION

Social adaptation of an individual is possible with satisfaction of his needs. Recently, modern education is planned according to individual differences and requirements of people (Diken & Sucuoğlu, 1999). Children with special needs can join community and are accepted only if they are able to communicate and adapt to society. In order to enable these people to use their interest and skill optimally and facilitate their social life, they must be placed in a least restrictive educational setting, in other words an inclusive setting where they will be with their peers and their needs will be satisfied. Inclusive education is the principle which was adopted in order to enable maximum individual development and social integration of children with special needs and it means education of children with special needs in the same teaching environment as their peers (ERG, 2011).

It is not a coincidence that famous educators have referred to education and social justice simultaneously throughout history. Prerequisite of providing these two valuables to all society members is inclusive education, which is in favor of all social groups rather than a minority group with special needs. Inclusion is also defined as a comprehensive education and there have been various opinions about its necessity. However, it is possible to say that majority of educators argue that special education is not only diagnosis but also integration and separating a person with special needs from his peers is not ethically right (Thomas & Loxley, 2007). When concepts such as human rights, equality, modern education, democratic society considered, it is better understood how important education of individuals with special needs is because all children differ in physical features and learning abilities. These differences may be categorized as physical, cognitive and sensorial in general. Each child has a unique physical structure and functions, learning rate and sensorial features. When these differences are within certain limits, children are able to benefit from general education. However, general education is not adequate and special education services are necessary for children whose differences are greater (Akçamete, 1998).

Despite the difference between the terms “inclusion” and “integration” in the whole world, their common meaning is that people with special needs must socialize with their peers, be included in joint education program and encouraged for active participation (Lewis & Doorlag, 1999). History of inclusion shows us that education system has full of conflicts and dilemmas. While separation of special education was more commonly adopted in the past, there are efforts today to generalize inclusive education from early ages on. Recent studies show that inclusion and integration are supported in all countries due to an increase in their positive aspects (Smith, 2006).

Legal definition of education refers to freedom, equality, justice, autonomy and self-realization. These are undoubtedly goals of special education or inclusive

education schools. Educating individuals with different characteristics at the same institution according to their special needs is only possible through inclusive education. Inclusive education does not allow any child to be deprived of general education schools because of his language, culture, race, class, behavior and learning differences (O'Hanlon, 2003). Inclusive education is a practice that helps children with special needs to make more constructive relationships with their peers. While children influence each other in various forms through inclusive education and find development opportunities in academic and social fields, they also gain many positive behaviors that will contribute to their social adaptation. Inclusion has recently become one of the urgent policies of governments and laws have been enacted in order to integrate all students into daily life at society and school to the possible extent. Inclusion must be attached importance in order to create equal opportunities so that all students can achieve high success with their potential (Hayward, 2006).

Important goals of inclusion include enabling children with special needs to interact with their peers, achieve academic knowledge at class setting by observing them and make friends. If teacher enables a positive interaction between individuals with special needs and normally developing individuals, the first stage toward success is passed (Aral & Gürsoy, 2007; Kemple, 2004). Inclusion removes tagging and its ill effects, causing uncompetitive learning among peers. Moreover, if conditions support the student, transitions can be applied efficiently at inclusion process (O'Hanlon, 2003).

Preschool inclusive training is very important because it is one of the most critical stages of life when child with special needs can acquire basic communication skills required for social adaptation in the following years and accelerate his development. At preschool period, the child with special needs will have the chance to develop many skills by observing, imitating and developing them at game settings, educational practices and other activities that he will join with his peers. Children with no deficiency will have the chance to know their peers with different features and develop positive attitudes toward disabled individuals (Allen & Cowdery, 2005; Lindsay 2007; Metin, 1992; Özdemir and Ahmetoğlu, 2011; Shickedanz, 1994).

1. INCLUSIVE EDUCATION

Inclusion is defined as educating students with special needs in general education classes full-time or part-time with their peers on condition that these students and teachers are provided relevant support services. While it was initially named as mainstreaming/integration, concepts of integration have recently been used more commonly in this field. Integration is educating students with special needs in general education classes full-time with their peers by "providing relevant inner-class support services in cooperation with the class teacher". Based on the belief that students have individual differences and needs but this does not prevent them from being educated together, general education schools make arrangements related to physical conditions, curriculum and teaching methods in order to satisfy the needs of all children at general education schools including students with special needs (ERG, 2011).

The most significant goal of inclusive education is to educate disabled children and normally developing children at the same educational setting in order to

contribute to their development and socialization. Another important goal is to safeguard disabled children's right to take education at the same setting with their peers without being separated (Lewis & Doorlag, 1999; Özdemir, 2010). Long-term goal of inclusive education is to facilitate social recognition and help them to live as independent and productive individuals within society (Darica, 1992; Metin, 1997b).

Basic goal of inclusion is to educate the child with special needs in the least restrictive setting based on his disability. Batu and Kırcaali-İftar (2011) defined the least restrictive education setting as education where the child will spend most time with family and peers and his needs will be satisfied optimally. Educational setting ordered from the least to the most restrictive is as follows as Diken and Batu (2013) cited from Salend (2008):

- General education class (limited or no support)
- General education class (based on cooperation with teacher's help)
- General education class (with the support of special education teacher or expert)
- General education class (with resource room support)
- Part-time special education class (part-time education at a general education class)
- Full-time special education class
- Special education school
- Special education boarding school
- Home education
- Hospital

2. INCLUSION TYPES

According to Yıldırım-Doğru (2013), inclusion-integration may be defined as placing individuals with special needs into normal education programs to the possible extent depending on the type and degree of their needs and educating them at the same setting with their peers. Inclusive education has benefits for individuals with special needs, normal children, families and teachers. Inclusion may be implemented full-time, part-time or in the form of inverse inclusion.

a. Full-time Inclusion: Disabled students is registered at a normal class and stays in the normal class for the whole day and takes education from teacher of normal class. Teacher is responsible for the student's all requirements in the class. Individualized educational programs must be used and physical arrangements must be done in classes that implement full-time inclusion. Children with special needs must be distributed among classes equally and number of students must be minimum 14 at preschool classes and 30 at other classes (Batu & Kırcaali-İftar, 2011).

b. Part-time Inclusion: Disabled child is registered at a special class but is taken into normal classes for the subjects that he is able to do (Batu & Kırcaali-İftar, 2011). For children with multiple deficiencies, necessary measures are taken in order to educate them at special education classes of special education schools with special tools and materials through individualized developmental education programs and to enable their social integration. Maximum number of students is six and there are two teachers in the se classrooms.

c. Inverse Inclusion: Individuals with no disability may voluntarily register classes at special education schools that implement inclusive education, particularly at

preschool period.

3. SUPPORT SERVICES OF SPECIAL EDUCATION

Special education support services require cooperation of normal class teachers and experts in order to satisfy educational needs of disabled individuals. Special education support services are provided in three forms; resource room education, inner-class assistance and special education counseling (Batu & Uysal, 2009).

a. Support education room (Resource room): Support education room must be opened at schools and institutions with special tools and educational materials in order to give special education to students with special needs and talented students. Support education rooms are opened by directorates of national education with suggestion of the institution. More than one room may be opened at an institution depending on the number of students. School administration plans the activities that will be carried out in the room. Children to take education in support room are determined by commission of guidance and counseling services with suggestions of BEP (Individualized Education Plan) development unit.

Number of weekly hours a student will spend in special education class must not exceed 40% of total class hours per week.

Educational performance of students is taken into account and individual education is given in support rooms. However, group education may be given to students at the same level (URL-1).

Support room is the place where a disabled child spends minimum 21% and maximum 60% of a school day outside general education class to take special education (Ysseldyke, Algozzine & Thurlow, 2000). Here, the disabled child takes individual or small group education from special education teacher, who often tries to follow the education of general class (Peterson & Hittie, 2003). In order to achieve goals of support room, normal class teacher and support room teacher must follow a close interaction and cooperation. In cases with no cooperation, there may be inconsistencies between normal class teacher and support room teacher. The child who finds chance to study closely with his teacher may expect to find the same situation in general education class, which causes hardships for inclusive student in a general education class (Kircaali-Iftar, 1998).

b. Inner-class Assistance: Support education expert assists class teacher on performance-appropriate program development, tool designing, presentation, classroom management in order to satisfy educational needs of students with special needs. Support service expert and class teacher must be in the classroom together, which requires a very good interaction and communication between the two (Batu & Uysal, 2009).

c. Special Education Counseling: It is an indirect form of service that is given upon request of disabled student's request. Teacher applies to the counselor (special education teacher) to help the student.

4. ADDITIONAL SERVICES IN SPECIAL EDUCATION

Accessibility has found a well-deserved place in human rights literature and works of international organizations as one of the issues that is as important a human rights issue as discrimination and even involves discrimination. Accessibility for the disabled is a condition of independent life and full participation in all walks of social

life. The disabled must be provided equal access to physical environment, transportation, and information and communication technology including information, communication and public facilities and services (Çağlar, 2012).

The most common and active services at schools for full independency are transportation services, language and speech therapy, physiotherapy, occupational therapy, counseling and medical services (Batu & Kırcaali-İftar, 2011). There are also other services which have undeniable benefits but are not so common yet. These are transition counseling (Landmark, Roberts and Zhang, 2013) paraprofessional support (Spann, Kohler & Soenksen, 2003).

Transportation services: They include assistance to the students with advanced ability while moving from one place to another within school and coming to school or home.

Language and Speech Therapy: It is an additional service provided to students with special needs in receptive or expressive language.

Physiotherapy: It helps students develop their gross muscle skills.

Occupational Therapy: It includes activities for fine and gross muscle skills of children with special needs. These activities are designed to develop children's ability to use materials at home or school and skills that require coordination.

5. INCLUSION PRACTICES IN TURKEY

While special education services for individuals with special needs were provided by the Ministry of Health and Social Affairs from 1924 to 1950, they were assumed by General Directorate of Primary Education under the Ministry of National Education from 1950 to 1980 and General Directorate of Special Education was founded in 1980. It was turned into Directorate of Special Education and Counseling in 1983. General Directorate of Special Education Guidance and Counseling Services was founded with 30 April 1992 dated and 3797 numbered law in order to provide more effective service in response to increased need for guidance and special education. This unit was held responsible for management and generalization of special education, guidance and psychological counseling services.

2916 numbered "Law on Education of Children with Special Needs" enacted in 1983 was the first step toward a comprehensive law for individuals with special needs and the law legally adopted inclusive education of children with special needs. Later on, Basic Principles on Education of the Disabled were specified with 573 numbered Legislative Decree on Special Education. This structure which was previously dominated by special education schools was then turned into an organization based on inclusive education. 24th article of the aforementioned decree states that state and private preschools, primary and secondary schools and general schools are responsible for providing special education to individuals who need special education. After 573 numbered Legislative Decree on Special Education, Regulation on Special Education Services was issued in 2000s.

18.01.2000 dated and 23937 numbered Legislation on Special Education Services of the Ministry of National Education includes provisions on inclusion. This legislation defines inclusion as "special education practices based on teaching individuals with special needs at the same setting with their normal peers at state and private preschool, primary, secondary and general schools" (MEB, 2000). At the same

time, 5th article of the legislation refers to principle of the least restrictive setting, 67th article makes a detailed definition of inclusion while the 68th article contains practice principles of inclusion and 69th article explains practice criteria of inclusion.

In Legislation on Special Education Services of the Ministry of National Education (2006), inclusion and practice principles of inclusion are explained in a separate section. A section of the relevant legislation titled “Educational Practices through Inclusion” defines inclusion and explains critical aspects of inclusion. 23rd article suggests that individuals with special needs must be given the opportunity to have education at the same institution with their normal peers, may join full-time or part-time inclusive activities, receive support room services and support services may be provided in the support room or classroom in the form of inner-class assistance. Legislation also suggests that schools and institutions must make relevant physical, social and psychological arrangements depending on deficiency of students, provide special tools and educational materials and open support rooms in order to carry out educational activities effectively. Based on programs that students follow, BEP (Individualized Educational Plan) is designed (URL-1).

According to 29th article of Legislation on Special Education Services, which was amended in 2012, “Preschool education is compulsory for children with special needs between 37-66 months. However, preschool education for these individuals may be extended to 78 months with Special Education Assessment Council Report and parent’s written permission. Children who are registered on e-Okul system and whose educational period is extended are placed at appropriate institutions with parent’s application and decision of provincial/district board of special education services. Moreover, “While the basic principle is that individuals with special needs take their preschool education with their normal peers at preschool classes of preschool institutions under inclusive practices, special education kindergartens may be opened for children between 37-66 months and special education kindergarten classes within institutions or schools may be opened for children between 48-66 months.” 35th article related to special education services at childhood period reveals legal basis of special education services at this period very clearly by stating that “Early childhood education involves individuals between 0-36 months. Special education early childhood education units may be opened within special education centers (schools) with proposal of directorates of national education in order to provide education to children between these months (URL-1).

On 24/08/2009, Ministry of National Education started a campaign named “Generalization of Inclusive Education at Preschool Period” in order to provide free education to preschool children with special needs, enhance professional competence of teachers and directors within inclusive education and generalize inclusive education services. Project Central Counseling Board and Project Central Executive Board were founded for the project and duties and responsibilities related to project activities were specified. In provinces where inclusive education will be carried out, a Provincial Project Executive team was founded, led by Provincial Director of National Education and with participation of branch directors of special education, preschool education, a RAM (Guidance and Research Center) principal and one director from each preschool education institution.

Needs of special education students (wc, ramp, support room etc.) will be taken

into account while making physical arrangements at institutions where students with special needs will continue their education. Children who are directed to preschool institutions through inclusion will be placed according to class student numbers specified by legislations. In this case, they will be registered at preschool institutions and classes without exceeding 10 students in classes with two individuals with special needs and 20 students in classes with one individual who needs special education. Parent information meetings will be held in relevant cities in order to inform the society and increase parents' awareness level (URL-1).

Inclusive education should not be regarded as a model that only contributes to development of disabled children. Communication must be two-way, considering its advantages not only for disabled but also normal children (Darica, 1992).

Supporting inclusive practices by law is not adequate. Several functions have to be considered to work the system effectively. These factors are teachers, school staff, parents, inclusive students, normal class students, physical arrangements and individualized education programs, school administration and senior directors.

6. FACTORS IN A SUCCESSFUL INCLUSION AND ACTIVITIES TO PREPARE FOR INCLUSION

Children with special needs who take place at inclusive education in early years will be socially accepted by their normally developing peers in the following years. Integrating disabled students into a normal classroom setting is only possible with a well-organized curriculum and educational adaptation (Wolfe & Hall, 2003). A successful and student-centered inclusion must focus on several aspects such strategic planning and leadership, diagnosis and intervention, accessibility and support, curriculum adaptations, learning and teaching processes, effective transition, management, monitoring and responsibility (Hayward, 2006). Some of these aspects will be dealt in more detail as main goal of the program is preschool inclusion.

For the success of inclusive education, normally developing children, teachers and other school staff must be informed about the disabled child, which will strengthen their self-concept (Güleç & Metin, 1999). Moreover, families must be prepared for this program as well as children (preparation of disabled and normal children, interaction and cooperation between special education teacher and class teacher) (Metin, 1997b).

a. Preparation of Normally Developing Children

Basic principle of disabled children education is that they must be normal members of the class. This depends on their successful interaction with other children (Sarı, 2002).

Based on this principle, the inclusive student must be introduced to his normal peers in the classroom. As normally developing children have very limited experience and knowledge of the disability, class teacher or counselor may inform them about individual differences and people with special needs, organize activities where children will put them in the place of children with special needs for empathy, invite a disabled person to the classroom to tell about his experiences, read stories about the issue, make them discuss and find ways of helping their disabled friend and organize drama activities. First practices that are started gradually and inside certain activities must be spared more place depending on children's development. Duration and

selection of activities are other important factors. It is best to begin at the right time when children are socially, emotionally and academically ready (Darica, 1992; Kırcaali-İftar, 1998). Various activities and camps for normal children outside school hours are the best learning experience. Sharing this experience with disabled children will promote positive attitudes (Ercan & Haktanır, 2001).

b. Preparation of the Child with Special Needs

Preschool children are able to reveal their potential with early inclusion. Individuals who are developmentally behind their peers or have superior talents find chance to develop themselves when detected at early age and involved in an appropriate education program (Smith, 2006). It is important that preschool children with special needs be prepared for behavioral requirements of the setting and skills that they will need. The child must also have several skills (e.g. going to the toilet independently, feeding himself, dressing and undressing, following instructions, maintaining attention, expressing himself verbally or physically, observing and recollecting, responding to questions, joining conversations and classroom routines etc) or some of these skills. These skills enable success of inclusion as well as social recognition and adaptation of the child.

One of the important points in inclusive practices at preschool period is inclusion preparation skills. The child with special needs must have adequate linguistic-speech skills, self-care skills and social skills that he will need in order to be successful at inclusion practices. Skills that preschool disabled children must have are listed as below in literature;

- adequate social skills to make positive interaction with teacher and peers,
- basic academic skills to continue school program,
- social skills that will support teaching in the classroom,
- self-care skills to satisfy his own needs,
- initiating and sustaining communication with adults and peers,
- listening to and joining group conversation,
- joining an activity for a certain amount of time,
- having no problems in activity transitions
- waiting at the queue, sharing things,
- following activity instructions,
- following rules and routines etc..

However, not having these skills does not mean that the child with special needs will not benefit from inclusion setting. The child may acquire these skills with good support and planning after being placed at inclusion setting. In order to support his development, the child must be given information about inclusion class setting, activities and friends to the possible extent, his class must be observed, curriculum content must be examined for necessary arrangements, and a decision must be made as to where to start teaching. Then, a decision is given which skills to study first. In order to assess the child's current skills, checklists and behavioral descriptions can be used. When these skills are listed, special education teacher and preschool teacher can make cooperation. With good planning of preschool activities, children can be taught skills that they need to be supported and developments may be conveyed by both teachers to each other (Avcı & Bal, 1999; Odluyurt, 2012).

Inclusive student may be prepared for inclusion in a group as well as

individually. Some of the things to do for the disabled child are arrangement of classroom setting (increasing or decreasing the stimuli, reforming the sitting plan in order to involve disabled child in activities, dividing skills into small steps, direct teaching, peer teaching, cooperative, exploratory learning etc, using various types of reinforcements, small and big group work etc) and teaching materials so that they address all senses (Odluyurt 2012; Özdemir, 2010).

On the other hand, there are several other important points. The disabled child must previously know the inclusion school, class and teacher, go through exercise activities, be informed about classroom order, rules and friends while teachers must guide both disabled and normal children in this process (Batu & Yükselen, 2015).

c. Preparation of Teachers

Inclusion requires satisfying the needs of all children at inclusion schools. People who have important roles in inclusion are the whole school staff and families. However, teacher is vitally important for success of this process. In addition to learning special needs of every individual, teacher must also know how they learn. Continuity of assessment, formation of BEP (Individualized Education Plan), adaptation of teaching and program are among teacher's duties and they require too much time and effort (Reid, 2006). Therefore, success of inclusive education that needs starting at early ages depends on the preschool teacher. He is a strong mediator under all classroom conditions for integration of disabled students into the class of normal students, for the social atmosphere of the class and their behaviors. Teacher is an important figure for the disabled child to acquire basic communication skills that will facilitate his social adaptation and accelerate his development (Dönmez, Avcı & Aslan, 1997). In addition to teacher, families of normal children are also important. If teacher and families display positive, receptive attitude and behaviors, normal children are equally receptive and interact with disabled children, which cause better preschool education results (Batu & Kırcaali-İftar, 2011).

Main problem in inclusion stems from the fact that school and teacher have no adequate information about inclusion and disabled child and therefore are not well-prepared for the process. Here, teacher seems to be the most important factor. Working with a student who has features that teacher has not heard of before causes anxiety and organization problems.

Whether inclusion teacher has receptive attitude toward the child affects success of inclusion. Studies have found out that attitudes of teachers whose classes have inclusive student differ depending on whether they have enough knowledge of inclusive students, whether they have adequate inclusion materials as well as disability type (Bozarslan-Malkoç, 2010; Diken & Sucuoğlu, 1999; Özbaba, 2000; Sünbül & Sargın, 2002; Türkoğlu, 2007; Uysal 2004; Varlıer, 2004; Varlıer & Vuran, 2006), lack of training on the subject during undergraduate education (Temel, 2000; Özdemir, 2010), teachers' sense of inadequacy (Artan & Uyanık-Balat, 2003; Kaya, 2005).

Before beginning inclusion, teachers must know that inclusion will be implemented at their schools. Teacher is is a strong mediator under all classroom conditions for integration of disabled students into the class of normal students, for the social atmosphere of the class and their behaviors. Making and sustaining proper interaction, social recognition of disabled children and satisfaction of the needs of all

students depend on the teacher. Some of the preparation activities that can be done with teachers are; informing teachers about disability types and features, educational adaptations, assessment methods, material selection, disruptive behaviors and their solutions, organizing visits to relevant institutions, joining organizations, increasing teachers' motivation and emotional support meetings to enhance empathy skills (Aral & Gürsoy, 2007; Odluyurt & Batu 2012).

As every behavior of teacher is taken as model by children, teacher's positive attitude toward inclusive student will influence other normal children positively. It will make recognition easier for the inclusive student. Teachers may also display a model behavior by telling students that all children are valuable as human beings (Sarı, 2002).

Teacher must be ready to solve problems and cooperate with others (Kırcaali-İftar, 1998). Sharing information about the child with all relevant people is important for effective inclusion. It is also important that class teachers are willing for inclusion. Teachers must be aware of the fact that everyone has the right to education.

d. Preparation of Families

Readiness of families of normal children in inclusion class and families of inclusive students is an important factor for the success of education (Darica, 1992).

Works must be done in order to eliminate worries of normally developing children's parents and to encourage them to develop positive attitudes toward disabled children. In order to eliminate anxiety and doubts of inclusive students' parents, they must be informed about the child and benefits of this program for the children (Avcı & Bal 1999).

Enlightening family members of both groups about program content, asking for their views and presenting tangible examples to display positive aspects of the program will be useful in enabling family recognition (Darica, 1992). On the other hand, it is important to inform parents of disabled children about where and which institutions they have to apply for their rights and responsibilities and enabling them to come together with experts from relevant institutions are important.

e. Preparation of School Administration and Staff

Another important factor in inclusion is preparation of school administration and school staff. This group should have the following features: common vision and harmony in inclusion, confidence and support, being open to communication, turning conflicts into opportunities and being constructive, setting a clear route and regularly observing and auditing the process (Hayward, 2006).

Features of the setting are also important for inclusion to achieve its goals. Age group, developmental features and number of children in the classroom are effective. Besides, architectural and educational environment arrangement must be done depending on type and severity of the child's disability (Avcı & Bal, 1999). Student taken into inclusive education will be in interaction with other individuals at school while following education in normal class. All school staff must be informed about the inclusive student. School administration must support the teacher in providing services and materials needed for inclusive student. School staff must also fulfill their responsibilities for recognition of inclusive student by the whole school (Kırcaali-İftar, 1998). Interest and relevance of other school staff on the subject is also important for inclusive education. Inner-service training s must be given for different

situations (Darica, 1992).

Implementing inclusive education without support services causes various difficulties for both class teacher and inclusive students and normal students. Preparation activities are not adequate for a successful inclusive education. In addition to preparation, the teacher, student and normal students must be provided support educational services.

f. Preparation of Physical Conditions and Materials

The most important point in inclusive classes is that number of students in a class must be appropriate for physical conditions and it must not exceed teacher's capacity. Maximum number of students for preschool inclusive classes is 14. Keeping number of students low may inhibit teacher's negative attitudes toward inclusion. Arrangement of inclusion classes must be interesting and encouraging for children. Classroom plans must allow them to move freely and communicate with each other (Batu & Kırcaali- İftar, 2011).

23rd article of Legislation on MEB Special Education Services states "The number of students in a preschool class that has inclusive students must not exceed 10 if there are two students with special needs and 20 if there is one student with special needs. In other educational institutions, it must not exceed 25 if there are two students with special needs and 35 if there is one student with special needs". However, this principle is not fully practiced due to conditions of our country.

7. ASSESSMENT AND INDIVIDUALIZED EDUCATION PROGRAM

There are various opinions related to early diagnosis and assessment of children with special needs. Several researchers believe that some precautions must be taken through early diagnosis and intervention while others argue diagnosis and tagging will mean separating children from their peers and it will not change the fact that the child is the "other" even if he is in inclusive class and this situation will have negative impacts on the child. However, all studies show that assessment is a life-long process and the earlier it starts, the more useful it will be for individuals (Jones, 2004).

For quality special education services, assessment is needed in both preschool and primary education in order to specify children's development and performance, qualities of families and develop individualized education programs. Students in general education classes may have various problems in academic, behavioral and physical areas. Students' problems in development and discipline areas must be determined and teaching adaptations and amendments must be introduced that suit students' qualities. Steps of educational assessment process must be followed in order to implement this process successfully (Kargın, 2004; Vuran & Gürsel, 2013):

Assessment Steps

1. Realization – First Detection
2. Pre-delivery
3. Application/ Delivery
4. Diagnosis/ Detailed Assessment
5. Placement
6. Individualized Education Plan
7. Monitoring Development
8. Assessment

It is very important to apply each step successfully. However, each one will be described briefly as theme of this section is inclusive practices. Class teachers have to collect information about students in the class and use various assessment techniques in order to detect students who need support. Assessment techniques at the first detection phase may be used for all students. Tests and checklists designed by class teachers, students' classroom activities, homework and systematic observations are frequently used for first detection (Spinelli, 2002). Students' work is assessed in 2 ways; reaction analysis and fault analysis. In fault analysis, teacher states the faults of students in their work in order to specify difficulties that they experience at various fields (Taylor, 1997). At pre-delivery process, teacher first makes adaptations for the student based on information he collects and determines which students need adaptation and support. At delivery process, all precautions, adaptations and information related to the child are brought together in a report. Decision to deliver student for detailed assessment must be given jointly by class teacher, counseling service department and student's family (Vuran & Gürsel, 2013). Detailed assessment process implemented by Guidance Research Centers (RAM) is assessment of students who have showed little or no development in intervention program before delivery. Placement decision is based on student's individual qualities and educational requirements and a decision is made about where the student will take special education support. Following decisions can be made: 1. Continue education at the same class with no special education support 2. Have education in inclusion class through Integrated Education Plan as a student with special needs 3. Have education in special education school / through Integrated Education Plan as a student with special needs (Kargin, 2004). Individualized Education Plan (BEP) includes a statement on student's, current educational performance, long-term goals for the end of one academic year (yearly goals), educational methods and materials needed to achieve long-term goals, start and finish dates, assessment methods and criteria and details about additional special education services including time, place, implementer and duration (Jones, 2004). Purpose of development monitoring process is to assess student's development and decide if any change is necessary if there is no progress. Assessment process helps to decide whether goals have been achieved and implementers have fulfilled their duties. There are two assessment types to decide to what extent BEP goals have been achieved; formal (used to determine students' level at school program and academic progress and how they are in comparison to peers) and informal (done through program-centered assessment, criteria-centered assessment, assessment of student product file, skills analysis, direct observation, interview, fault analysis and checklists (Vuran & Gürsel, 2013).

8. ADAPTATIONS AT PRESCHOOL INCLUSION

According to Kemple (2004), many school programs today involve both children who develop normally and children who have developmental deficiency. If children with special needs are integrated into normal classes, special needs of children with special needs may be satisfied in normal classes with support of development experts (Kemple, 2004). The number of children with special needs placed at preschool institutions at early childhood period increases every day, which makes preschool teachers meet more inclusive students. There are various adaptations that teacher does during practice. Teacher needs support and knowledge in issues such as assessment,

planning, arranging teaching environment, coping with behavioral problems. Below are several techniques that will be used for adaptations in inclusion classes (Batu, 2014; Batu, Çolak & Odluyurt 2013).

A. Methodological Adaptations

a. Divide Skills and Learn: Individuals with special needs cannot learn like their peers. However, it does not mean that they will not be able to learn difficult skills. Skills analysis is appropriate for dividing skills into small parts. Through skills analysis, the skill will be divided into small steps each of which will be taught separately. The less competent student is, the more steps there will be in skills analysis. For example, if “hand washing” routine after meal is analyzed, following steps may be presented:

- He gets up from his chair.
- He pushes the chair under the table.
- He goes to the washbasin.
- He opens the tap with one hand.
- He takes the soap on his hand.
- He soaps his hands.
- He rinses his hands under the tap.
- He closes the tap.
- He dries his hands.

b. Helping as much as Necessary: Teachers help their students numerous times in their daily routines. Helping students as much as they need is important. Helping a student with special needs more than necessary will prevent him gaining independence. Degree of help is gradually reduced through physical, modeling and finally verbal cue and the student begins to perform skills alone after a while.

c. Draw attention to Activities: If children are not paying attention to or interested in an object, they cannot learn it. In other words, children learn what attracts them. Preschool teacher must know their students and what attract students’ attention. Knowing this will help the teacher while arranging classroom activities. When teacher knows which objects and toys attract student’s attention, he may use that object as a reward in order to attract their attention on the activity. Some activities used in preschool inclusion classes are as follows: Books and book corner, drawing and creative activities, imagination, music time, board games, outdoor games (Dukes & Smith, 2006).

B. Teaching Adaptations

a. Environmental Arrangements:

Physical Environment: Classroom and school environment design are effective on self-respect, sense of belonging and controlling other indecisive feelings in their own worlds. In a school designed according to children’s needs, children will display more natural and respectful behavior and thus contribute to classroom order. Depending on weather conditions, all classrooms and other important educational settings must receive adequate light and classrooms must be ordered in east-west direction. There must be access to educational materials every time and everywhere at school. A classroom’s light, color, noise level, size, accessibility, setting order and

amount of stimuli are physical factors that affect learning (Lewis & Doorlag, 1999).

Emotional Environment: “In a preschool class, teacher is reading a story to the students and turns to Jeffrey before finishing and asks him to read the rest of the story. Jeffrey and his friends get excited. When teacher stops reading, Jeffrey stands up and goes to the teacher’s table; all his friends are clapping hands for Jeffrey. Jeffrey is a student with down syndrome but has no difference with others thanks to support of his teacher and friends” (Kemple, 2004). As in the example, classroom atmosphere makes students feel good or bad, therefore classroom atmosphere and environment must be positive and emotional. Positive atmosphere gives students the following messages “This is a place I can trust”, “This is my place”, “You belong here”, “We belong here” (Kemple, 2004).

b. Student Arrangements:

Knowing the level that student is ready to learn: Before stating learning process, it is necessary to determine the starting point and what the student know or doesn’t know. Thus, teacher will make necessary arrangements while teaching familiar and unfamiliar subjects.

Repetition and Routine: Students feel anxious when they don’t know or can’t predict. This is the case not only for students with special needs but also for children who grow up in irregular families. These students are better at pursuing familiar routine than joining unfamiliar activities. Following a routine will make the student feel better and increase his likelihood to succeed. Repeating the same activity at certain intervals will give students a chance to realize familiar activities and improve their self-confidence. Preschool teachers must plan time, program and routines carefully. Having a plan of what to do before starting the day will make things easier for the teachers. It is important to decide what attracts students’ attention and what they must learn.

Coping with Behavioral Problems: Behavioral problems are likely to occur in any class. Every student can display behavioral problems. When necessary measures are not taken, inclusive students are also likely to display behavioral problems. Behavioral problems of children differ according to their special needs. For example, a student with attention deficit cannot control his reactions or have trouble in suppressing his anger while an autistic student is sensitive to different sound and light. Teachers must consider both developmental features and special needs of their students. Teachers may be careful about the following points in classroom practices:

Avoid excessive stimuli: loud sound, too much light, materials with different tissue etc.

Form daily routines and set the classroom rules to obey. Hang these on a visible place in the classroom and practice them consistently.

Give persistent and consistent reaction against problem behaviors.

Give students appropriate amount of time to complete skills.

Reduce students’ anxiety of realizing the skills by dividing them into small parts.

Use alternative communication systems such as pictures for students who cannot express their needs and demands.

Inclusive education may be useful for all related people only with a good planning and preparation process. In order to help teacher to prepare their plans easily,

adaptation sections were added to activity plans of Preschool Education Program, which was put into practice in 2013. Moreover, an appendix (Appendix 11) was issued related to features of disabled children and important points in their education (Koçyiğit, 2015; URL-1)

9. EFFECTS OF INCLUSIVE EDUCATION

Effects of inclusive education can be gathered in five groups.

a. Effects on normal child: Inclusive practices are not useful only for inclusive student. Normal children find a chance to share the same educational setting with peers of different features under control of their teachers and family. Normal children learn to be tolerant to differences and develop positive attitudes, improve their cooperation and solidarity skills. Responsibility of modeling a friend with special needs makes the normal child feel confident (Darica, 1992; Kırcaali- İftar, 1998)

b. Effects on disabled child: The most important benefit of inclusive education for students with special needs is that they are at the same setting with their normal peers. Thus, inclusive students gain more life experience academically and socially. With appropriate educational services and opportunities, inclusive student become more self-confident and may develop themselves in academic and social areas. Being at the same setting with normal peers makes disabled children take responsibility and behavior of normal students become model for children with special needs (Kırcaali-İftar, 1998; Darica, 1992).

c. Effects on parents: Parents who see their disabled children at the same setting with their peers support them socially and academically. It helps parents to see their children as they are. It also helps families to see good sides of their children, assess their weaknesses more realistically and adopt an appropriate attitude and thus parent-child dependence gradually decreases (Uğurlu, 1992). Active participation of families in inclusive programs cause them to be more active in their children's education and know them better as well as change their life perspectives (Metin, 1997a).

d. Effects on teacher: One of the most important factors in success of inclusion is willingness of class teachers to accept disabled students into their classes and determination to be successful in inclusion program (Kırcaali-İftar, 1992). As a result of inclusive education, teacher accepts individual differences, develops teaching skills, gains professional experience and. Academic and social progress of disabled child increases teacher's motivation. Inclusive practices enhance cooperation and interaction of teacher with other school staff (Aral & Gürsoy, 2007; Kırcaali-İftar, 1998; Odluyurt & Batu 2012).

e. Effects on social interaction: Disabled child finds a chance to observe, model, imitate, cooperate, share and interact with normal developing children who have different developmental features. Moreover, support given to educational fields at inclusive settings enables children to learn many skills during activities or games without any enforcement and most importantly realize that they are accepted by their friends. It also causes normally developing children to develop positive attitudes such as helping, supporting, guiding, cooperation, sharing and in some cases assuming the role of teacher in order to encourage their friends. Responsibility of modeling or helping a disabled friend will make normal children feel self-confident (Darica, 1992).

A study found out that disabled children who participate in an inclusion program have more advanced social interaction and more active in their relationships with normal peers when compared to disabled children who do not participate in inclusive program (Diamond, Hestenes & O'Connor 1994).

CONCLUSION AND SUGGESTIONS

The best time to take children into integration program is preschool period. Studies show that preschool integration influences disabled and normal children positively in terms of positive attitudes, interaction and learning. Children in both groups develop more positive attitudes and initiate social interaction at this setting (Yıldırım-Doğru, 2013). As preschool children are natural, their friendships develop spontaneously and social integration happens when they receive sincere answers to their questions and accept disabled children. Thus, disabled child feels better and behavioral problems are less likely to accompany disability. When disabled child joins various activities with his peers, he will feel more self-confident and develop a more positive character as part of a bigger community. At preschool period defined as critical years for the child's development, child learns new behaviors by observation, may find chance to practice those new behaviors and develop independent life skills by taking teacher and peers as models in order to develop appropriate social behaviors.

As a result of preschool inclusive practices, development of both normal and disabled children accelerates and secondary deficiencies may be prevented, learning and behavioral problems may be reduced or eliminated. The child is seen as a part of the family system in early childhood inclusive practices. When family takes a part in education, it turns into the most important factor in education process. Child-adult interaction develops and family's stress due to sense of inadequacy decreases. Families of disabled children feel much better as their children are educated under the same conditions as normal individuals (Eripek, 2003; Odluyurt 2012).

Preschool teachers must receive support before and during inclusive practices in order to implement the program successfully and experience fewer problems. For a successful inclusive program, preschool teachers must know that students' social and individual development is as important as their academic achievements and student must be able to use every convenience in the classroom (different materials, people, setting etc.) in order to generalize knowledge into whole life.

Inclusion training programs must be provided for teachers through pre-service or inner-service training programs and emotional, ideological and physical support programs must be organized to assist teachers.

Enabling preschool teachers to gain knowledge and experience on inclusive practices during their undergraduate training is considered important.

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Chapter 21

The Important of Physical Education and Sports Activities in Preschool Period

Arzu ÖZYÜREK, Zuhale BEĞDE, İsa ÖZKAN and Nadire Ferah YAVUZ

Preschool education covers the period from the birth till the early years of primary school and it is the first step of the planned and supervised education besides the one provided by the family. It is a 'basic' education process since it ensures the rich-stimulating environment according to the personal characteristics and the developmental levels of children. It also supports the cognitive and social development of children (Cetinkaya, 2006). The preschool period has been known as critical for the development of motor/movement skills. The motor skills in this period are generally locomotor and object control skills and these skills underlie the participation in the games as well as sports later in childhood (Draper *et al.*, 2012).

Being healthy depends on the proper development of the body and fulfillment of its functions with its all sub-systems (Simsek, 1998). During the development, a child requires not only the basic needs such as nutrition, to be loved and to be safe, but she/he also needs to play games and move. The movement starts at birth and continues till the death and changes from simple reflexive movements to highly complex ones (Tepeli, 2010; Ozbayraktar *et al.*, 2012). The body is the first tool that is used by the child in order to explore and recognize the world. The natural movements of the child such as walking, running, jumping, climbing, pushing, pulling and turning create the personal tendency to develop the basis of her/his physical background. The skills that are gained at an early age will be the basis for the development of the movement in the following years and they make it easier for children to learn more complex skills (Altınkök, 2006).

Children, who live in the apartments in big cities, go to school via private transportation and spend time in front of the TV and computers, do not have playgrounds and parks due to the unplanned urbanization. So, they are grown up with the lack of experiences in natural environment (Saka *et al.*, 2008; Tufekcioglu, 2008). Current living conditions and technological developments limit the children's field of action. It has been thought that the city life prevents the development of various perceptual motor skill of children (Ozer & Ozer, 2012). In this case, sport activities and games, which energize and meet the movement needs of children, have become increasingly important. The games have been present as a sport activity in children's life from ancient times to the present day. The basis of the high mental capacity, a healthy mood and health as well as consistent personality development depends on the game environment (Celik & Sahin, 2013).

Physical training and sports are the concepts which complement each other. Physical training is intended to protect the mental health of an individual and develop the body skills. It has flexible rules which can change according to the environmental conditions and the characteristics of participants. Physical training can be games,

gymnastics and all sports-based exercises (Simsek, 1998; Ozbayraktar *et al.*, 2012). Sports satisfy the need to move of an individual and it is preferable to gain status in the society, to entertain and also to be social as well as it can be a profession for an individual. Besides, it can be performed either alone or within a group and it generally depends on the competition. Finally, it is a total of body movements which can be performed according to rules. (Heper, 2012). The main aim of the physical training and sports, which are one part of the basic training, is to assist children to reach the maximum movement capacity by providing education to them with physical activities (Simsek, 1998; Ozbayraktar *et al.*, 2012). As many other habits, habit of sports is also gained in the childhood (Ozer and Ozer, 2012; Ozyurek *et al.*, 2015).

Physical training and sports have versatile effects on the individual development. They develop the ability of thinking together with cognitive processes, support the problem solving skills and concept development, provide emotional relief and contribute to the social and personal development. They support the development of the basic movements, small and large muscle motor development and muscle coordination, increase the physical awareness, develop the physical adaptation and provide a background for the lifelong habit of doing sports (Simsek, 1998; Caglak, 2005; Guven, 2005; Kale, 2007; Light, 2010; Caglak Sari, 2011; Celik & Sahin, 2013). Physical activity and regular exercises are important and vital for all children since they can decrease the likelihood of high blood pressure, coronary heart disease, obesity, depression (Kiluk *et al.*, 2009; Ghosh & Datta, 2012).

When to Start Physical Education and Sports?

Like all other areas of development, preschool period is an important time for a child in terms of physical development and motor skills. According to existing studies, if a child did not gain motor skills till the age of five, it could not be entirely possible for her/him to develop the ability of motion even additional supports such as doctor and health care are provided. Contributing to the physical development of an individual is only for the physical training. Physical training aims to learn the moving via different movements and contributes to the general education via these movements. Physical training, sports and games develop the features of children such as cooperative attitudes that are present in the life, acting in unison, acting on its own and order-discipline (Altunkök, 2006).

In this regard, one of the important periods of an individual's life in which the sport is the most effective, is the childhood era. Childhood years are quite important in order to specialize in fundamental movement skills. Even though the preschool period comprises the very important years to specialize in fundamental movement skills, physical training and sports are among the least emphasized activities in this period. The most appropriate activity to meet the needs of children is the physical training and sports (Tepeli, 2010; Ozer & Ozer, 2012; Ozyurek *et al.*, 2015). Moving and acting is crucial for children to be aware of the things happening around themselves. Moving and acting is the basic way for them to express themselves (Simsek, 1998).

According to the study performed by Genc and Ogretir (2002), they examined the activities of preschool institutions in terms of gaining the sport habits. They observed that not enough attention has been paid to this issue. The institutions had insufficient tools and areas for doing physical training and sports. The findings are obtained by the teachers' opinions which show the importance of the habit of doing

sports during the earlier ages. The motor development goals of the preschool education program will ensure the versatile development. The regular and planned exercises (mostly games) will lead the children to be ready for the further development periods and to be an active participant in sports in their entire lives (Kerkez, 2004).

Application of the Physical Training and Sport Activities in the Preschool Period

One of the aims of the Turkish National Education System is to provide the children to gain the physical and social skills additional to the formal education. Similarly, one of the missions of the preschool education is to provide the training environments which support the versatile developments of children such as physical, emotional, cognitive, social, cultural, language and movement developments (Durualp & Aral, 2011). The expression is included in the preschool education programs regarding the moving education: ‘There should be activities which pay attention to the characteristics of children, motivate them as well as support and encourage their self-esteem and self-confidence. The tools, which are appropriate for the environment, the age of the children, should be chosen. These tools should also be effective in bringing basic motor skills’. During the activities, additional to the open air tools such as ball, rope, chalk, hula-hoop, balance board, there should also be materials and places such as areas with different ground offered by the nature, climbing facilities and billets can be used to balance. Furthermore, including the traditional/local children's games, and outdoor games played on the street will also diversify the moving activities (MEB, 2013).

Certain points should be taken into account in the physical training and sport activities in the preschool period. Before the physical training, the children should undergo medical checkup, the appropriate places should be prepared in order the children to learn the physical practices and children should not be forced for a high level of sporty performance (Karaman *et al.*, 2012). Children, like adults, should participate in the physical activity regularly min 30 min/day and 3 or 4 times a week. Children can participate in all safe activities which entertain them (Baltaci, 2008). During the physical training, the steps such as warm-up movements, gaining the skills and finalizing the activity in an entertaining way should be cared. Approximately 30-45 min jogging and jumping, warm-ups to move the joints, group activities and musical games can be planned as activities for all classes (Güven, 2005; Ozer & Ozer, 2012).

The most important and indispensable occupation for a child is the ‘game’. Therefore, there should be mainly game type activities in preschool children. There should be regular exercises should contain basic moving skills such as jogging, running, throwing, jumping, hopping as well as other activities which contain all the body movements and train large muscle groups. Appropriate methods should be applied according to the interest, attitude and the motivation of the child and sufficient explanations should be given during the trainings (Güven, 2005; Eniseler, 2009; Çağlak Sari, 2011; Ozer & Ozer, 2012; Celik & Sahin, 2013;). Children should wear flexible, soft and non-sweat clothes. Sports shoes can sometimes be used whereas the exercises can be done barefoot. The hygienic training should also be given such as the cleaning of sportswear, the cleaning upon the exercise, etc. Furthermore, children

should be well informed in order to prevent the disabilities and the tactics development capability of children should be supported while teaching the sporting rules (Altınkök, 2006).

Mobility decreases as the child grows and she/he tends to the games in which the physical abilities are in harmony with the mental skills (Altınkök, 2006). Physical inactivity negatively affects all individuals, particularly children. Regular physical activity is beneficial in all ages. Even though the various motor activities of children are supported in the preschool period, they need to explore their moving skills, fulfill their potentials and have information about their bodies. Physical training and sports should be regarded as a part of the education, children should be directed to sports from the preschool periods, and awareness must be created among children that doing sport is important for the health. The physical health which is gained in the childhood and adolescence period is required for the body in order to function at the highest capacity. Therefore, it is important to gain the habit of doing sports in the childhood. It is hard to gain this habit in the advancing ages (Baltacı, 2008; Koc, 2009; Saygin *et al.*, 2012).

It is very important that mothers and fathers, who are primarily responsible for the education of their children, encourage their children to do physical training and sports. Kotan and Yaman (2009) have determined that the attitudes of children towards sports can be affected by the educational and income status of the parents, whether there is a sportsman in the family. They have stated that the family's interest in sports can also positively affect the attitude of children towards sports. Therefore, it is important to create the awareness in parents that sports and the education are elements which support each other (Anonymous, 2014). Yang (1996) has performed three years follow-up study with children (9-15 years old) and their parents and according to the study, Yang has shown that the rate of the participation in sport activities was higher in families with active parents compared to the families with passive or only one parent. Meanwhile, it has also determined that the association between the participation of children in the sports and physical activities and the socio economic and educational status of the father was not as strong as the relationship with the fathers' physical activities.

CONCLUSION

The importance of sports cannot be ignored in the development of a healthy society. It is clear that the children, who were directed to physical activities and sports from the early ages, will have less health problems in the future. Physical training and sports give an opportunity to have an active life by providing movement requirements. The participation in the sporty activities is not only for the physical development of a child, but also for the social, emotional and aesthetic development.

Mothers, fathers and teachers should direct children's interest through physical activities, participate in the sporty activities together with children and should be a model for their children. Physical and sporty activities should be game like activities before the primary school period. Physical activities and sports that have been done from the early years of the life will affect both the physical and all other developments of children. Meanwhile, it will also contribute to individuals who believe that sports are the essential part of the life.

Even though the importance of game activities in the movement requirements of children is emphasized in the education programs in the preschool period, the physical activities and sports are not regularly performed in schools. The physical activities and sports should be performed by trainers who know and believe the importance of physical activities in the development and psycho-motor capacities of children. In order not to have negative results of improperly performed exercises, physical activities should be thought to particularly small children by educated individuals in this regard. Therefore, it can be possible to employ the expert teachers in the field of sports in the preschool period, as in the primary, secondary and high school period. At least, the preschool teachers can be supported in this regard via in-service and pre-service training programs.

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Chapter 22

Portfolio as a Learning and Assessment Method from Preschool to University Teacher Education

Belgin PARLAKYILDIZ

INTRODUCTION

Developments in Science and Technology affect all developed and developing countries. These developments have caused rapid changes in social, political, economical and cultural systems in our country. As a consequence demand for education has been increasing and the necessity to invest in the quality workforce and manpower has been well understood. Consistently changing world and the new needs of society made changes in the educational system inevitable. Educators changed roles from the position of imparting knowledge into a position of guidance making the learning easier and encouraging the learner to think. Students should be trained as inquirers who can seek knowledge, assess the information they are given and discuss and question these. This is a as part of the critical thought processes and able to produce new knowledge instead of rote memorization (Bilen, 2002, s.2). In short, life expects human beings to be better problem solvers, decision makers and more creative individuals.

Learning is a complex process which includes all steps from planning to evaluation. All parts of learning process need to be in harmony for learning process to turn into life skills; the goal of education should consider planning, practice and evaluation techniques as a whole. This situation, draws attention to the need to undo the disconnect among planning, practice and evaluation with new research. The reasons of the disconnect are multifold. Changing goals of education is one reason (1). The changing goals of education have caused the need for new learning methods and techniques (2). The new learning methods and techniques have caused the need to create and develop new assessment tools. However, classical methods of evaluation still persist at the face of these changes (Doğan, 2001; Wright, 2002, s.62). In order to surpass these problems it is highly essential to sustain harmony among planning, practice and evaluation.

Assessment and evaluation carried out in the recent years can be summed as all activities that students and educators engage in order to reach new information during the in the learning and teaching process (Black ve William, 1998, s.74). For this reason, it is necessary to prepare situations for students to use their knowledge and performances in new circumstances. Considering the fact that evaluation process influences the learning process directly, it is unlikely to increase quality in the learning process or achieve more effective learning without undertaking some changes in the evaluation process (Doğan, 2007, s.40). Evaluation process is considered an inseparable part of education. Evaluation presupposes interpreting the results of research undertaking, realizing whether the process works systematically or not, decision making to improve and promote the process (Wolansky, 1985, p.3). Learners

are not only evaluated in the evaluation process but also they are supported in gaining valuable experience as researchers (Roeber, 1997, p.8).

Starting with Preschool Teaching teachers at every stage of education need to preoccupy themselves with what their students learned at each stage and formulates appropriate assessment techniques in order to follow their development. It is vitally important for educators to consider learning about students and student evaluation along with the learning process, and take every activity as a data about the student (Parlakayıldız and Yıldızbaş, 2007, p.377). Every evaluation method has its own strong and weak aspects that are unique to that particular evaluation approach. Therefore, no single evaluation on-its-own can provide the educator with all the desired information, but can achieve to the extent it is used appropriately in proper contexts along with conventional assessment approaches.

While assessment in conventional approaches focuses on the end-product, today's educational approach which supports active learning is grounded in the framework of constructivist theory and multiple intelligences, and forefronts the evaluation process in its approach in addition to the end-result product. The core of the constructivist approach presupposes establishing one's own system of learning and processing information according to their own potential (Erdoğan, 2008, p.10). This, in a sense, means bringing to surface strengths of the student. Drawing attention to what students already know, new areas of learning can be targeted (MEB, 2006, p. 88-89). Therefore, evaluation should not be carried out only at the end of the semester or the mid-semester, but should be carried out regularly. Assessments do not only evaluate the end-results, but also students' learning as process in stages. This will allow for boosting student gain with ongoing assessment returns. Active and ongoing assessments occur during the learning process and students find ample opportunities to evaluate their own learning (Bağcı Kılıç, 2006, p.79).

At the beginning of the 1990s all dimensions of educational programs recognized as important constituents of student development and thus the process is also noticed as an important aspect in the evaluation of student performances and academic success just like the product. This new evaluation approach is performance-based and reliable as well as having realistic and practical features. In recent years an alternative assessment method known as "individual development file" (portfolio assessment) started to be used in education discipline for assessing the student individually or as part of a group (Kaptan and Korkmaz, 2000, p.212; Doğan, 2007, p.40). Conventional assessment systems of the new models of evaluation if used on-its-own creates a number of problems in the education process. That is why alternative assessment methods are utilized to enable students to participate actively in the evaluation process and chosen activities are combined efficiently with applicable methods and techniques (Banta, 2003, p.2).

The purpose of this research is to examine the use of portfolio as a learning and evaluation approach from preschool to university teacher education as a theoretical framework. In order to achieve this goal the following question have been attempted to be answered:

What are the alternative assessment methods/ techniques?

What is portfolio?

What is included in portfolio?

What is the purpose and content of portfolio in education?

In teacher education portfolio application and evaluation process how are the teacher and student depictions?

What are the superior and limiting aspects of portfolio use in teacher education?

MATERIALS AND METHODOLOGY

This study is a literature review about determining the use and analysis of teacher education with an analytical research undertaking. Document analysis was used in this research study which is a qualitative research methodology. Document analysis is a document review process which involves the analysis of written documents containing information on specific phenomenon or phenomena (Yıldırım and Şimsek, 2006). As a data source the study utilized articles in academic journals in Turkey and other countries.

FINDINGS

This section includes findings in-accordance with the questions that guided the research.

Alternative Assessment Methods

Each new system emerges as a result of the previous system's shortcomings and prevail to a larger spectrum than the previous one. One way to determine the level of students' depth of knowledge and skills is through alternative assessment applications. The use of alternative assessment activities are supported by learning theories and classroom experience. Each student learns in different ways and they constitute knowledge from their own experiences. Differences in learning styles and the nature of learning forces teachers to make use of alternative assessment methods (Vyortkina, 2003, p.11). In short, alternative assessment includes all other types of evaluation systems that are outside of the assessments that are limiting, unquestionable with one-answer responses such as multiple choice questions. It focuses on the knowledge and skills students can use in real life outside of school (Erbil *et al.*, 2004).

In this study, the main reason why portfolio is selected as an alternative assessment method is due to encompassing all the features of the new assessment methods and its widespread use worldwide.

The following includes various reserachers' interpretations and descriptions of alternative assessment methods:

It is systematic and time consuming

Case (1992); Elliott (1995); Gardner (1989); Wolf (1987-88). Student work is collected within a specific time-frame, students' learning materials are combined, and this enables the evaluation of success, skills and process.

It inspires confidence

Case (1999); Hart (1994); Ryan and Miyasaka (1995); Thurlow (1995); Valencia (1990); Wiggins (1990). Homework assignments that are related to problems in real life are associated with real life considerations in solving it and the assessment is based on the connection to real life as well.

It is open and there is no obscurity

Baker, O'Neill and Linn (1993); Dietel, Herman, and Knuth (1991); Chenevert, Miller, and Trucha Roth (1997); Gooding (1994); Linn, Baker and Dunbar (1991). Assignments are known; publications are discussed, and evaluated with students. It

encourages communication between students and allows for the use of resources.

Conforms to Multiple intelligences Theory

Lam (1995); Stiggins (1995); Thurlow (1995); Wiggins (1989). Makes configurations according to the new needs in education, can change the content and reflective skills as they occur.

The process is directed

Artery and Spandel (1992); Barton and Collins (1993); Berk (1986); Gooding (1994); Lane and Hysmith (1991); Wiggins (1990.1993). Involves both the student and teacher in the process of learning.

It is student-centered and naturally developmental

Elliott (1995); Hart (1994); Herman (1992); Lowe and Banker (1998); Mitchell (1992); Ryan and Miyasaka (1995). Involves students in the in planning and implementation process of learning; self-assessment allows students to reflect individual needs and create a list of tasks to be completed. The goal of achieving a past enables students the opportunity to create a list for self-assessment and reflection of individual needs.

It is multi-dimensional and blended information-wise

Gardner (1989); Gooding (1994); Ryan and Miyasaka (1995). It is based on a concept of broad spectrum of intelligences, skills and learning abilities. It enables students to reach different sources of information.

It is open to Multimedia

Leschi (1995); Pellegrino, Chudowsky and Glaser (2001. It includes projects of a variety of multimedia formats such as paper, electronic, video, etc. (Akt, Vyorkina, 2003, p.12-13).

As can be seen in contemporary educational system teaching and evaluation are not considered as separate processes and rather they are integrated to reduce challenges in education. This supposition brought also the process of evaluation to the table.

What is Portfolio?

When a response to the question what portfolio is sought, different researchers gave different definitions at different times. Some of them are as follows:

Portfolio is a collection of students' cumulative and systematic work that displays student's current level of ability chosen or suggested by the student, teacher or colleagues (Simon and Forgette, 2000, p.85).

Teaching Portfolios is the sum of the documents related to the teacher's practices, lesson plans and student assignments, the teacher's written instructions, also video tapes, and as well as adviser's assessments (Wolf, 1996, p.35).

Learning products that reflect the learning experience of the learner over a specific period of time with different work and activities representing the detailed development and performance of the individual (Demirel, 2003, p.24).

Portfolio is an intentional collection of display of student performance and endeavor in many areas. This collection is a quality criterion for decisions, an evidence of the student's own reflections and also includes student sections in the selected content (Paulsen and Meyer, 1991, p.60).

Portfolio is the combination of process and product and encompasses reflection, selection, realization and evaluation stages (Winsor and Ellefson, 1995, p. 81).

The portfolio usually is the history of the learning, an evaluative tool, and strategically it reflects the perception and attitude of the student toward a specific issue. Portfolio represents the collection of an organized and systematic development.

What's in the portfolio?

A student's work could be in the portfolio as one piece or several pieces of the work representing different stages or phases of his/her performance. For instance, reports on a student's portfolio, mind maps, worksheets, test results, results as letters, stories, parts of a novel, drafts of poem, drafts of research paper, finished version of a writing, audio and video cassettes are probable ingredients of a portfolio (Kaptan and Korkmaz, 2000, p.214).

Therefore, a portfolio includes desired learning objectives of the student, what aspects of the goals are represented in the portfolio and why that/those work (s) are selected as part of portfolio according to which criteria the/these work would be assessed as well as a self-assessment of the learner (Morgil *et al.*, 2004, p.109). As a result, a portfolio includes drafts of writing and a completed version of the work. Since the portfolio represents the best work of the learner, it allows for revising the work to be included in the teaching portfolio in order for attaining improvement and excellence. Despite the simple design of portfolio, it can be used in a versatile style for engaging in creative activities (Larson, 2003, p.8).

The Purpose and Content of Portfolio Use in Education

Portfolio use in education leads the way to alternative assessment methods. The portfolio is defined as an important program pattern (Arter, 1991, p.1). The objective of the portfolio is to enable tracking of student progress, giving the student an opportunity to monitor their own development, documenting their learning over a period of time, putting forth what student really learned, passing on the student's repertoire of knowledge to the next year, and to provide a convincing and realistic evidence on student learning. Portfolio offer clues about how students learn. It renders feedback to learners themselves, teachers, parents and the school/university at large. Also, portfolio is stated to be used as a tool for enabling "building of a better communication between parents and teachers" (Lambdin and Walker, 1994, p.318).

Mitchell (1992), groups the objectives of the portfolio into four categories (1) as a tool for teaching, (2) as professional development, (3) as evaluation, (4) as research. (Act. Vyorkina to 2003, p.18-21). Some authors, on the other hand, state two types of portfolios:

The Process Portfolios include all finished and unfinished work of students and are utilized in identification and expression of areas of improvement.

The Product Portfolios have been designed to be produced at the end of a program. It includes the goals desired to be achieved and it is utilized only when the student materials are desired to be shared (Cole, Ryan and Kick, 1995, p. 11).

Teachers and Students in the Portfolio Application-Assessment Process

Portfolio applications provide more opportunities for building dialogues and establishing communication between teachers and students (Calfée and Perfumo, 1993, p. 536). Development of a positive approach in students and teachers is another strong aspect of portfolio mentioned in the literature (Ryan and Kuhs, 1993, p.77., Stahl and Mitchell, 1993, p.539). Perkins and Gelf (1993) indicate in their research

that portfolio improves the behavior of teachers in particular (Act. Benjamin, 2003, p.12).

According to Wellensiek, Lembens and Schallies (2001) the teacher starts with interesting and relevant questions to describe the purpose of the portfolio application. In order to ensure student motivation in portfolio application, it is also necessary to state its criticality in the assessment of the student work. After the time-frame and subject of portfolio is determined, educator demands the collection of relevant materials on the topic. This way different perspectives on the topic would be seen by all and collected material are assessed in accordance with the determined goals (Act. Morgil *et al.*, 2004, p.109). In the portfolio application, the educator demands to keep a copy of drafts, corrected manuscripts, and developmental products of each student as representation of their ongoing performance towards the end-result.

The student in portfolio application continuously monitor their own development as part of a process instead of accepting a single score on paper as an indicator of their achievement. Portfolio application displays the drafts, feedback, shortcomings and the time students exert during the process of learning in a detailed manner. Students realize that each stage of the portfolio is equally significant and interrelated starting with the outline, to drafting, feedback, correction until the final product. In this sense, portfolio applications display students' learning as these several stages of portfolio are realized by students themselves. Henke's (1993) research found that portfolio application as a valid assessment system contributes to the engagement of higher order thinking skills by students (Act. Benjamin, 2003, p. 11).

Portfolios include the documentation of all the student gains; Students are responsible for successfully completing all the tasks. At the same time, teachers are liable to create opportunities for students to develop their skills in line with their expectations (MLO Model, 1999, p.77). Students learn to place their best work in portfolio file and be proud of their creation and take more responsibility for their work. Teachers guide students in becoming better evaluators of their own work. They encourage students to be more conscious in developing their creativity. Portfolio never seeks to replace the conventional assessment system which seeks to find "which students know more". In portfolio 'what do I know' is the question that an answer is sought. The teacher needs to start with appropriate and interesting questions to the portfolio application. Portfolio applications should include proper goals and learning steps. Students should ask what they learn with the portfolio they form and how they can display it. These are some key considerations in the generation of portfolio application. The work students produce can show differences. Student determines what they want to learn, how and why to learn and assumes the role and responsibility of the teacher (Morgil *et al.*, 2004, p.1 11). Teachers assist learners to organize their educational orientations instead of organizing their learning for them (Hessler and Kuntz, 2003, s.31). In this regard, remarkable responsibilities fall both on teachers and students in the preparation and performing of the learning tasks and their monitoring thereon. Establishing an effective feedback mechanism is of significance both during the application and assessment process (Büyükoztürk *et al.*, 2007, p.112).

Although there is no single standard system for the assessment of portfolio quality, a ranked rubric system is recommended for use. Rubric can be defined as a tool to assess a work or performance in gradation or a guide that includes evaluation

criteria for grading the work (Goodrich, 1997). In order to engage in a robust assessment the standards and the goals to be reached should be clearly defined. Grading/marking could be carried out in a holistic or analytical style. What type of a scoring/grading rubric to be used depends on the purpose of the assessment (Popham, 1997). Performance tasks in portfolio do not only reveal skills and abilities students bring to work/task, but also the repercussion of the teaching and the education program (Larson, 2003, p.9). Several researchers report that portfolio assessment provides a more holistic assessment opportunity than a conventional assessment (Calf and Perfumo, 1993, p.535; Lambdin and Walker, 1994, p.317).

Privileges and shortcomings of Portfolio Use in Teacher Education

Literature review and findings indicate that portfolio has an important place as a learning and assessment tool in the monitoring of student progress as well as assessment of student achievement. At the beginning of the 1970s portfolios started slowly to be used in assessing students' skills and abilities. In the late 1980s, portfolios were used to evaluate the effectiveness of education act. In 1999, on the other hand, web-based portfolios attracted the attention of many universities and are used for assessment purposes (Banta, 2003, p.2). Portfolio is enriched with reflections of activities and naturally occurring relationships in the classroom and includes a collection of samples of student work from these instances. Thus, it provides a road map for the program and provides opportunities for authentic assessment (Kaptan and Korkmaz, 2000, p.215). At the same time portfolio is expressed as "a significant self-assessment tool in daily life or business world that we can use to reach our individual gains at ease" (Miller and Daloz, 1989, p.30). Some researchers define portfolio as a "process of collecting a student's progress and documenting the details of his/her efforts in a systematic way" (Hanson and Gilkerson, 1999, p.81; Nilsen, 1997, p.11). Students are "active learners and thinkers for problem solving" in the process of assessment (Valery-Golden, Olson and Deming, 1991, p.298).

Students who understand portfolio culture in education, also have the responsibility about what to know and how to act/engage in the classroom and are aware of the principles of cooperation in a portfolio assessment classroom (Wolf, 1989, p.37). In this system, students are able to go over their work again and have the chance to revise their work, and both students and teachers are able to proudly represent their individual work. When student opinions about the portfolio assessment are asked, it is observed that students interact within the group to make up for their shortcomings. These achievements are evidenced in the flash statements of students (Parlakyıldız, 2008, p.93). When all findings are considered, importance of assessment is noticed once again and the need for change is easily understood (Bahçeci, 2006, p.6).

Portfolio application and assessment assist educators in monitoring students' performance and assessment. It also assists in revealing strengths and weaknesses of students through the documents gathered in portfolio, and helps educators to display student achievement, knowledge and attitude in these productions (Adams and Hamm, 1992, p. 104). Strengths of the portfolio in teacher education can be summarized as bringing students to the forefront in the educational environment during the education process, encouraging students to work with fellow students, combining theoretical knowledge with practical knowledge, emphasizing the importance of shared purpose

of education, providing the reflection of the changing and evolving progression by means of strengthening critical thinking (Barton, 1993, p.208). Detailed literature review theoretically highlights multiple research pointing to the necessity of portfolio application, but only a limited research pinpointing its use as an assessment tool by educators, students and parents.

CONCLUSION AND SUGGESTIONS

With the change of 2006 educational system preschool education witnessed a shift toward performance-based assessment with constructivist approach by introducing multiple assessment techniques and departing from the conventional assessment approach. One of the performance assessment techniques is portfolio application. In this conceptualization from preschool to university a student's developmental gains are multidimensional and progressively change along with individual development. Therefore, mediums through which students are assessed should be diversified, different application-assessment channels should be developed in addition to tests/exams students are given to enrich, monitor and record student development in the learning process. Similar to other assessment methods, portfolio also has unique advantages and disadvantages of its own and requires time as a process. Portfolios do not only portray students' knowledge and skills but also effort exerted in planning and assessment, and that's why it is also an assessment style that teaches how to learn or ways of learning (Banta, 2003, p.3). Portfolios are valid because of providing real evidence about what students know and can do.

Portfolio application and assessment are on the rise recently in Turkey. What is the reason for this appeal in portfolio? As an alternative assessment method portfolio continues to attract many more educators' attention who desire to enable students to participate in their own assessment process and to develop students' creative thinking skills through meaningful means. This last feature, namely development of students' creative thinking appears as an alternative to conventional assessment styles. Therefore, broader and more meaningful ways should be sought in assessing student knowledge and skills as alternative evaluation and assessment approaches.

As literature review indicates no assessment tool alone would be sufficient on its own to evaluate what students know about a concept or subject, and each student would be very unlikely to perform their best performance in all situations, and that's why a single measure of learning development is unacceptable for the learning process. Therefore, researchers are seeking ways for assessing students' real knowledge and skills. Because portfolio includes a collection of student work throughout a semester, year, or entire university life and displays student knowledge, skills and learning styles/methods, it is appealing as a student assessment strategy. On the other hand, conventional assessment fails in achieving long-term learning despite providing commonly encountered learning methods and techniques. Thus, students are encouraged to actively take part in their own assessment process. In this approach, activities are combined with appropriate methodology and techniques.

Students plan their activities in accordance with their own unique set of skills and abilities in the portfolio application process. Thus, the preparation of a portfolio's content develops students' reflective thinking skills by choosing the compatible activities and work by the student as representative of their learning. In addition to the

assessment of student learning, portfolios also provide an evaluation of the course (s), educational program or the university at large. In this respect, student portfolios can show strengths and weaknesses of the university, also. Portfolios can be used in addition to the grade point system and skills tests implemented in universities (Banta, 2003, p.4). Drawing attention to the application of knowledge and self-assessment are thought to improve individual abilities and development of skills and values (Shackelford, 1996, p.31). Clearly, portfolio application offers evidence of positive effect both for the student and university. Thus, a portfolio is a powerful tool that provides communication among students and also a significant part of education that enables witnessing one's own learning and development process (Jones, 1996, s.287)

Portfolio assessment in teacher education is used for different purposes. These four purposes of portfolio assessment in teacher education are as follows for providing quality information about student performance as an identifier (summative description), certification for students in starting higher education or beginning their career (certification as a selective function), educator's assessment of students' learning and development (appraisal or promotion), provide evidence for learning and teaching experiences for career development (Professional Development) (Klenowsky, 2001, p.67). Portfolio provides opportunities for professional development, leadership skills, self-assessment skills, self-confidence, risk-taking in addition to allowing for reflection of ideas (Brown and Irby, 1997, p.42). Thus, researchers advocate that career/professional development via portfolio application is a key in academic achievement (Milstein and Associates, 1993, p.72).

As literature review evidence, portfolios are full of successful applications in university programs of foreign countries. In this context, portfolio application enables students to demonstrate linkage between previous information and the new information with the help of awareness reflections and by means of activities in content which provide an educational perspective for students. In Turkey, portfolio assessment started to appear in relevant regulations and in the educational programs only for the past five years.

Overall, portfolio in teacher education is viewed from three angles: a reference that validate the student learning (1); a series of estimates for learning and teaching experience (2) ; and a strong learning-assessment experience (3) (Lyons, 1998, p.5). Research studies in the literature claim about the superior qualities of portfolio assessment that conventional assessments do not possess (Benjamin, 2003, p.11).

Increasing the awareness of portfolio application and enlarging portfolio assessment in various educational programs will prepare students for life and will provide a potential strength for students.

For all these positive reasons related to portfolio use in educational programs, portfolio application should be embraced by universities in order for effectively meeting novel and emerging needs of education as well as the potential of development for a variety of key skills.

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Chapter 23

Values and Gender

Gülseren ÇITAK TUNÇ & Dilek (KARA) YILMAZ

INTRODUCTION

Individuals create the system of value from childhood with cognitive and emotional changes in various ways. Basically, there is a development from complex cognitive structure in childhood towards more complex emotional structure over time. Families which individuals have grew up, especially have largest share of the formation of value. In some cultures, while providing the formation of values of child in pre-school age with reward and punishment, confrontation of child with strict discipline in school age that child's first time recognize the outside of family life has great influence on the shaping values. In addition, the experience of sex discrimination can be felt heavily on the values system (Tosun, 2013).

Value is the identity of a community. All indicators of the social habits of the population are located in this identity. Human individuals living in the community, no matter how they demonstrate different behaviors, because of they carry the yeast of society that they are members of it, they absolutely put on the scent themselves. Better understanding of values, essential to keep society to look at the future with confidence and to keep away society from social diseases (Kuzudişli, 2015).

THE CONCEPT OF VALUE

Value is a term defined very difficult despite its frequent usage in daily life (Tosun, 2013). The concept of value is defined in many different ways in the literature. It is observed that linked to ethical values generally. But morality reflects only a portion of human values. The cause of the variety of definitions of value that the value perception can be change by people, environment, time, space and the structures of social relations, it is defined in local or global levels and it is examined by many fields of science. Values is a subject located in the areas of sciences like philosophy, sociology, social psychology, economics, social anthropology, educations and it is also subject of the thought field of morality and religion. While value is being described as the ideas, beliefs, actions and ideals that guiding the life in philosophy, as exchange of goods and services in economy, as thoughts and behaviors regulating the relationship between people in sociology and it is defined as beliefs about something is desirable or not in psychology. Educational Sciences represent the value with both person and society dimensions. So, it is used with perspective of philosophy and sociology. Within the view of person, value is emotions, thoughts and behaviors that provide individuals in the school age to make appropriate moral decisions and show proper behaviors (Özensel, 2003; Tomul & Çelik, 2014; Vurgun & Öztıp, 2011).

Value is defined in a dictionary of philosophy as follows: "value is an expression of practical attitude or intention rather than theoretical attitude or intention of subject or mind. The value is a qualification which has been subsequently added by subject after the other qualifications, in order to express the relationship between personal

goals and actions. After this process, value is objectivated and reflected to object with objectively seen as something valuable in itself. As a criterion, value includes the distinction between what is and should be and always appears as positive or a negative thing (Canatan, 2008). Another definition of value is can be defined as the selection of the powerful, motivational, subjective, true, beautiful which are owned by individual, object and thought (Orak & Alpar, 2012). Also values; are ideals, beliefs, traditions, behavior modes, qualifications or objectives that are rewarded or preferred by groups or society (Burkhardt & Nathaniel, 2013). According to the moral of value and value philosophy, the value defined as abstract entities underlying regulatory principles and criteria of our moral behaviors. So, it is in the foundation of complementary and guiding perspectives. Values may also be mainstream (objective) as vary from person to person (URL-1)

Values are the importance that imposed on the different factors in the life of the individual. Values are considered as criterions that guides all behaviors of individuals like thoughts, attitudes and emotions. Values constitute an integral element of social totality. Individual must know what are the values established in the community in order to live balanced in society.

Values are criteria which explain what should be what. Because of values are abstract, they are difficult to observe and can be perceived when they turn to behavior. Although the values are abstract concepts, their results are tangible and they build a bridge between our behavior and what we believe. While desire of success is related to personality, how we perform success is about our values. According to quote of Tomul and Çelik (2014); Aydın (2011), stated that the features of values are the person's own choice, about beliefs and adoption, carrying positivity in any case, can be common and carrying social feature. Also values have features which help individuals to adopt their identity of community, ensure people binding to community by affecting individuals (Tomul & Çelik, 2014).

Values that learned through conscious or non-conscious ways, become part of an individual's character. When we faced with choices, our preferences and rankings of them reveal. If we committed to both view and comfort while dressing up, when we choose to wearing a suit instead of a comfortable outfit while going to a professional meeting, the ranking clearly show itself. Whether we realize our values are guiding to our selections, they affect our preferences and behaviors. Values give direction to life, give meaning and provide a reference framework for combining, explaining and assessing the new experiences, thoughts and relations. Values can be expressed explicitly in the form of standards which are expressed verbally or they can be demonstrated indirectly through verbal statements and nonverbal behaviors (Burkhardt & Nathaniel, 2013).

ACQUISITION OF VALUES

Cultural, ethnic, familial, environmental education and the other life experiences help to shape our values. We start to learn and internalize the values in early age and we continue this process throughout our life. Values can be learned in conscious way through education of parents, teachers, clerics and educators, professional and social group leaders. Many values formally adopted by groups and are expressed in writing in the professional ethical codes, religious teachings, public laws and corporate

philosophies. Another way to acquisition of values that socialization and role models, leads more to subliminal learning. Some values can differ or change depending on our development and experiences while some of them remain the same throughout our lives. Choosing the values that we give great importance freely or discard the values that we do not care, is an important step in the formation of values (Burkhardt & Nathaniel, 2013; Seroke 1994).

Values are very important because they affect the decisions, choices, behaviors and the way of life of individuals. A value affects the decision of the individual because of it may have a stimulating effect when it entered into the individual's value system (Tosun, 2013). We constantly make decisions that reflect our values and we do not realize that we have a series of values and these values affect our decisions (Engebretson & Headley, 2005). Being aware of individuals about their values is an important step in their ability to give clear and careful decisions. Being aware of individuals about their own values and helping others to make them define their own values is especially important in making ethical decisions (Burkhardt & Nathaniel, 2013).

Values are formed over many centuries, are alive, they are continuously added something and pull something from them continuously. However, these change and development are very slow in normal process. In the periods in which they accelerated or artificially accelerated, this process may be painful and may have cause social disorder (Kuzudişli, 2015).

FEATURES and FUNCTIONS of the VALUE

There are general characteristics of the values below;

- Values are requests, expectations or purposes in life.
- Values are source of the behaviors.
- Value is an abstract phenomenon, but it gains meaning when it attributed to the terms.
- Values are the resident beliefs of the individual.

It is reported that functions of value has three types; The emergence of conscious presence by achieving self in time and place, the manifestation of identity is shaped by cultural history, sustainability of the historical subject (Asan *et al.*, 2008).

Functions of value defined as follows:

- a) it helps to individuals to know where they stand in eyes of people who around.
- b) Values make people's attention on desirable, material culture objects which are seen as useful and important. This precious object may not always be the best in an individual or group, but leads to efforts to that object.
- c) Draw a diagram of socially acceptable behavior.
- d) Values guide people to choose and perform behaviors which may accept as social.
- e) They are the tools of social control and repression, they prevent the behavior inappropriate.
- f) Serves as a tool for solidarity, common values connecting people (Asan *et al.*, 2008; Özensel, 2003).

THE TYPES OF VALUES

Personal Values

Individuals make their choices based on the value system that they created with their own religious belief, cultural structure, educational status and vital experience. The vital experiences developed based on the value judgments and the established beliefs of the society that a person is raised, creates and forms the individual values of that person (Tosun, 2013).

Individual values refer to the choices made to realize the ideals that individuals own and count as important (Başol *et al.*, 2012). Individual values are developed in the social environment. In this regard, it is a product of the social system or culture (Meglino & Ravlin, 1998). Individuals, from birth to death, learn values through their parents, friends and the people beloved and accepted as important, through significant changes in life and learning based on experience, also through laws, customs and traditions, religion, education and media; or in short thanks to the continuous socialization process in the society. In other words, the value system of individuals develop in early childhood with the socialization processes and with the help of cultural and social assimilation become a part of his cognitive and mental structures (Russell, 2000; Uyguç, 2003).

The formation of values starts in childhood, in the family and shaped with socio-cultural, political, economic etc. factors. A child, changes his behavior with the impact of the values throughout his life-cycle. In our society, some of the most important values that are being developed in primary education are hard work, respect to elders, protection of little ones, uprising, patriotism, love of nation and flag, justice and freedom. The ones that act in accordance with these values are seen as good and valuable in societies (Altun, 2012).

Individual values affect a person's professional lifestyle, attitudes towards the profession and organizational values. Referring to a study that Bektaş and Nalçacı (2012) carried out related to the topic, use of personal values of class teacher candidates to predict their attitudes towards the teaching profession; the result shows that the personal values of teachers help to predict the attitudes towards the profession (Bektaş & Nalçacı, 2012). Also a study by Taşdan (2010) aimed to demonstrate the level of alignment between the individual values of teachers and organizational values schools, according to perceptions of public and private elementary school teachers. As a result of that study, it is observed that in public and private school teachers there is a medium level, in a positive way and meaningful relation between perception points related with the individual and organizational values, and that private primary school teachers have a higher level of consistence with their school than public school teachers (Taşdan, 2010).

Cultural Values

Cultural values are important factors which determine the view of people and societies to the world and source their attitudes. Cultural values are "such values of direct or indirect love, honesty, loyalty, respect, fairness, clear thinking, that arise in interpersonal relationships, that an individual put the forefront on his life that outweighs the living.

Cultural values, as an important element of the culture, are products of people

have lived in the community in a certain period. However, once they are formed, they are not a product of any specific person. People affect the cultural values as they are affected by them, and also recreate them. However, cultural values neither can be a product of one, nor can be kicked with the wish of one. Cultural values also have nothing to do with maturity or inheritance; one get the social values from environment. Sometimes these values are imposed on individuals. Value systems retain their assets with positive and negative sanctions; while the ones with appropriate behaviors are rewarded, the improper ones are punished (URL-2).

Migration can be one of the processes that may affect the cultural values. In a study that held by Phinney *et al.* (2000), that aims to investigate the differences between generations of 701 immigrant and non-immigrant families, it is stated that in immigrant families, when an adolescent shares their needs to cope to the transition to an adult process, they are exposed significantly different values and immigration can complicate this process (Phinney *et al.*, 2000).

Vocational Values

Vocational or professional values are considered as values that are adopted by a profession group and approved as a guide to them (Tosun, 2013). Values are first gained in the early stages of life, and if they are developed they can especially be directed to educational strategies while gaining professional training (Orak & Alpar, 2012; Weis & Schank, 2000).

Professional values are used to explain the moral knowledge of professionals. They are the norms and rules that guide the activity and behavior of professional groups, they provide a framework to assess the beliefs and attitudes, and they are behaviour standards that are accepted for expression and function by practitioners (Altun, 2012). Referring to a study on the subject; Martin and his friends (2003) in a study they conducted to determine professional values adopted by graduate nursing students, found that the professional values of the students were associated considerably with gender and ethnicity (Martin *et al.*, 2003). Rassin (2008) in his study, aimed to measure the professional and personal values of nurses and to identify the factors that influence these values. At the end of this study, three basic nursing values of human dignity, equality of patients, and relief of pain were assessed as priority values (Rassin, 2008). Göriş and her friends (2014) in a study they found that mean score of nurses' professional values was found to be above the middle level (Göriş *et al.*, 2014). Apart from these studies, in a study that held by Kaya and her friends (2012), aimed to determine nursing freshmen individual values at the beginning and the end of the academic year and professional values at the end of the academic year and also was conducted to present the data that shed light on nursing curriculum at the higher class. At the end of this study, found that nursing freshmen would prefer social values as individual values at the beginning and the end of the academic year, they prefer human dignity as professional values and view all professional values as significant (Kaya *et al.*, 2012).

Values vary over time depending on the permanent and historical conditions, and this reveals the fact that there is no society, social group, or culture values that can be universal. Historicity and universality are contradictory since if it is called universal, it must function and remain the same in every era. Though there is a degree of commitment to the social group, society, culture, professional circle we are in, it

should be noted that they will change throughout the history of process. Besides, in order to understand the change in values in the community, in social groups and cultures, and to see the quality and form of these changes, one must have a conscious understanding. In order to benefit from these changes, we need to take into consideration the dynamics and characteristics of our own society, our profession, our culture. Setting of values for a society, profession or a group by another society, profession or a group makes them dependent. Therefore, each group must take charge of their profession or cultural values, and organize them according to their own understanding and requirements (Orak & Alpar, 2012).

Although the types of values vary, types other than the ones explained above, summarized below;

Theoretical Values: Values of people whom care realism, critical thinking and reasoning.

Aesthetic Values: Values associated with the beauty, form, and harmony.

Political Values: Values care about the power and authority.

Religious Values: Due to the perception that religion is a unifying force, they are the values that take unity as the most important motive of interest.

Economical Values: Values related with achieving results in a useful and practical way (Tosun, 2013).

THE ROLE OF VALUES

As can be understood from their various definitions, values fulfill an important role in social life. Values guide people to make choices in life and to show the way. To direct the energy of people has an important role in answering some basic questions such as; "What is the difference between right and wrong?", or "What is the meaning of life?" Individuals create a personal value system for them while their life in community continues, and this value system is shaped by the people of their society and their culture (Canatan, 2008).

The role of values in ensuring internal cohesion and order in society is also emphasized (Layder, 2006). Values that determine the way of understanding what is happening around, are provisions that notify and determine one about what and how to do starting from family as content of social expectations and in further expansion (Canatan, 2008).

VALUES ORIENTED TO GENDER

Gender is defined as a demographic category determined by the individual's biology. Social gender states the meanings and expectations imposed by society or culture to be a woman or a man. With the social gender definition, the social dimension of the differences between women and men is discussed (Ersoy, 2009). These gender differences are expressed as psychological and behavioral characteristics that are believed affect different genders in different amounts. With the process of separation genders related with psychology, definitions of talents according to gender, personality characteristics, behaviors and acquisition of self-concept are made (Özen & Bayraktar, 1993). Behavioral gender variations are associated more with biology. There are differences in brain development between men and women and these differences between sexes are reflected in behaviors and attitudes. On the basis of these differences the effects of hormones are emphasized. Due to biological

and psychological differentiation, a male and a female perceive and evaluate differently and as a result reacts differently (Ersoy, 2009).

Social scientists imply the fundamental importance of values in explaining human behavior. There are differences in values on gender. Gender-related differences in attitude play an important role in shaping the attitudes and values.

Values and Sexuality

Sexuality is an action that allows the continuation of the human species and enables sexual gratification and satisfaction. There are specific regulations and rules in each society towards sexuality-related values. Today, with the globalization, important changes related to sexuality have occurred especially in women's lives. Popular culture has created a change on the values towards women. Women in popular culture are transformed into a commoditized and a for-profit figure to consume at the basis of sexual desires and wishes. Here, rather than the gender roles and values of woman, the sexual side of her is put forward (Wark, 1997).

In society, values and norms of genders related with sexuality are affective in shaping the sexual attitudes and behaviors. In Turkish society, the accepted place of sexuality is marriage. Ersan (2009) 's work showed that 64,2 % of men and 65% of women are against sexual intercourse before marriage. This thought of not approval sexual intercourse before marriage is reflected to social values (Ersoy, 2009). This assessment of not approving sexual intercourse before marriage by both women and men represents the social solidarity related with sexuality. Because values effective elements in ensuring the continuation of social unity and social solidarity.

Values and Abilities

Values are versatile standards the beliefs of individuals about ideal behavior and life goals and they guide the behaviors. Studies investigating the effect of gender values showed that while men care about theoretical, economic and political values, women give more importance to aesthetic, religious and social values (Flowers, 2006). It is stated that men value the intellectual pursuit and success, and women care more about love, intimate relationships and family. In the same direction men take into consideration about professional values. Men are more interested in adventure, machines and equipment and science, while women in household chores and art and that they are more skilled in those. There are differences between men and women as temperament; men react seriously while they express emotions or during their speeches whereas women are more emotive, sensitive about aesthetic and more serious on moral norms (Ersoy, 2009). In Uyguc (2003)'s study of uncovering the gender differences in the importance they attach to the values, it has been detected that boys pay less attention on values than girls. According to this, besides that female students holding priority to interest other people, equality, social approval, benevolence, compassion, kindness and genuine friendship, they also value more about masculine values such as logical, ambitious, capable, responsible, independence, freedom, an exciting life and a comfortable life (Uyguc, 2003).

The process of socialization is important in determining the values and trends. Studies investigating the effect on the values of gender, determined that since from the birth men are socialized with individual values (masculine values), and women are to service or maintenance values (feminine values), men are prone to individual values

and women are collectivist values (Uyguç, 2003).

Values and Personality

Personality, defines the characteristics and trends of an individual, and can be described as the ongoing and constant thinking, feeling and acting of an individual (Kubat & Kuruüzüm, 2010). Schwartz (1994) defines values as a person's guiding principles to life. Values do not only develop the interest of one, but also motivates the development of other individuals and environment. There are 10 different values types that are determined by Schwartz (1994). This value types are "power, achievement, hedonism, excitement, self-direction, universalism, benevolence, tradition, compliance and security". Schwartz (1994) argued that different cultures take place in one of the 10 different value types (Schwartz, 1994; Struch *et al.*, 2002). Values are one of the most effective factors in ensuring the unity and solidarity within the community (Özkan, 2014). Every individual has a different personality within society. Values are constant characteristics of personality and give direction to personality when faced with different situation. Some values are more dominant than others, so they influence the personality more (Kubat & Kuruüzüm, 2010).

There are differences on gender related values associated with personality. Studies performed regarding specificity stated that women are more genuine in social relations, that they have a more associative self-structure (İmamoğlu *et al.*, 2011) and they are more perfectionist than men (Acuner *et al.*, 2014). In a study investigating the effect of gender on identity process with Turkish youth, it is seen that there are differences between men and women; women give more importance to friendship and education and their identity is affected more by symbolic concepts such as relationships and happiness and they also have a higher tendency toward art and creativity (Uyguç, 2003). The problem-solving behavior of men and women is also affected by their personality (Roccas, 2003). During a problem, women tend to protect and maintain their social relations. Men, on the other hand, tend to solve problems with logical questioning such as justice and equality and approach dilemmas as practical problems. Social relationships are less important to men and they rather focus on benefits and harms (Özdemir & Koruklu, 2011).

Some say almost all psychological theories dealing with human development are at the side of men. Kohlberg's theory of moral development is one of the theories in this regard hence it is accepted at the international level and also the basis for many studies. In his theory he states that "people with high morality acts appropriate to their moral level. About gender, Kohlberg mentions that men focus on rules based on justice and equality and women focus on interpersonal basic relationships, and that, women are less mature or inadequate than men on decision-making about morality (Çinemre, 2014).

Values and Vocational Choices

Gender, by value, affects the career choices of individuals. The vocational choices of the people are defended to be associated with personality traits and it is stated to occur in two ways. First, it is focused that a person's emotional state affects the way he sees and with this his aspect on profession and second, different personalities go towards different professions (Kubat & Kuruüzüm, 2010).

Individuals have a personality that gives importance to "self-development" as a

value, are motivated by social status. It is stated that individuals have the aim to self-improvement as an intrinsic value are more superior and more successful than others (Altıntaş, 2006).

It is suggested that, there are differences on corporate purposes and career opportunities perceived by men and women. To be successful in aggressive commercial organization, ambitious, it must be competitive and that such features are called ascribed to men. Myyry and Helkama (2001) carried out a study with university students and research resulted that among students studying social sciences, business administration and technical fields, there are differences of priorities in terms of value; business students pay more attention to power and success, social sciences students to universality, charity and spirituality, and technical field students to security (Myyry & Helkama, 2001).

In Turkey, Dilmaç *et al.* (2008) studied the value perceptions of teacher candidates from different variables, and detect that female students give more importance to hedonism, self-direction, universalism, optimism and custom values whereas male students more to power, success, and adhere value (Dilmaç *et al.*, 2008).

Some other researches reveals the differences of the leadership behavior, decision making, terms of operation and management styles of women and men in working life, and claims that men are more tend to act towards work and women to relations (Uyguç, 2003).

According to the results of studies on the impact on the business value of sex is that men adopt conceptual business values and women emotional values. Women give less importance to their career goals and more importance to the relationship between the work environment and work colleagues. While, it is reported that men value their salary and promotion opportunities (Kubat & Kuruüzüm, 2010).

Values and Social Relations

Individual values are developed in the social environment. Therefore, they are seen as the product of a social system or culture. Individuals learn values from birth until their death the effect of parents, friends, learnings based on experience and important changes in people's life who beloved by them, laws, traditions and customs, religion, education and the impact of media (Uyguç, 2003). In Turkey, close ties between family, relatives, neighbors and social groups are important. However, with the impact of globalization, in Turkey's attitudes, it is also indicated there is a shift to individualism in values and self-identifications (Özdemir & Koruklu, 2011).

The concept of value can be defined as the provisions of value which is accepted and wanted to apply by society in order to ensure the continuity and moving together. It is guiding to individuals constituting society and it determines good-bad, right-wrong, beautiful-ugly etc. observance should be avoided, determines the motion styles, should be renewed over time or should assume the different jurisdictions. Because, the values do not stay always the same. In human life, they vary from country to country with the organization and civilizations. If the values were completely constant, individual and social change would be impossible. Unlike, if the values were completely variable, continuity of society and individual would be impossible. Parallel to protection or overlook the value of the individuals in society, values whether disappear over time or change (Özkan, 2014).

The kinship which represents a major system in the social relations continues to

be a solidarity and support unit. However, it is observed that the kinship values are weakening within modernization and urbanization processes. Importance of kinship values differs depending on gender. While men give more importance to the values of kinship, women feel themselves less important. In this case, it is based on the desire of the woman who has no right to speak in family and dependent to determine her own destiny and to be independent. While men accept the kinship as an important factor in protecting lineage and tradition, they also see it as a center of power and solidarity in the face of the difficulties of modern life (Ersoy, 2009).

In terms of value, the happiness of individual, according to the values developed by Schwarts (1994), values that “success” like personal achievement, ambition, capabilities, “hedonism” like pleasure, a funny life, “autonomy” which includes features such a moving are can be related with happiness of people living in the west. On the other hand, it can be said values that “benevolence” about protect and increase the welfare of the family, friends and neighborhoods, “tradition” about giving importance to traditional culture, cultural values have stronger relationship with happiness of individuals living in eastern societies (Struch *et al.*, 2002).

CONCLUSION

Knowing the differences in the value systems enables understanding of the social and family structure. Knowing the differences of value in terms of gender helps us to understand the needs of men and women, expectations and perceptions and thus helps to ensure the effectiveness of interpersonal communication. In this regard, to be informed about gender and values has great importance especially for those who have undertaken the training mission.

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Chapter 24

Preschool Ceramics Education

Figen GÜRSOY & Burçin AYSU

INTRODUCTION

Art is an indispensable part of life, teaching human beings to perceive the world via different ways, communicate, think, and appreciate. Art contributes in humane behaviors and development of a sense of affection by making human beings more productive and balanced due to the fact that art relaxed human beings by refining emotions and pleases them with the beauty dimension. Integrating human beings into their surroundings and blending people into nature are among the important functions of art (Cevher Kalburan, 2011).

In its most generalized definition, art is the endeavor of seeking beauty, becoming sensitive. Artut (2009) defines art as the “expression of aesthetic relation between human beings and objective reality in the nature.” Art education indicates the ways and methods to seek beauty and improve life perspectives by enriching human beings’ lives (Cevher Kalburan, 2011).

Art education, which is important for people can understand the truth and make them tolerable, is required for children can recognize and change the world that surrounds them. Children see but not merely look and sense but not merely hear thanks to art education; in other words children learn awareness and perception. By means of art children adjust their social relations, learn to select and express what is right, and finish what they have started (Aral and Can Yaşar, 2009). Ceramics education in the scope of art activities also influences the children’s development. Ceramics education promotes psychomotor, cognitive, linguistic, emotional, and social development areas especially during the preschool period.

Preschool Ceramics Education

Children will be able to develop self-confidence regardless of the outcome of their efforts, enjoy the art activity process, and sustain positive attitude towards artistic activities in case an environment, in which children with different personality traits and developmental characteristics can experience different art activities. This requires providing children with activities that positively affect their developmental characteristics and enable them to make new experiments and discoveries. Such materials help children with enjoying the activity through their discoveries (Erişti, 2008).

Hooper (2002) recommended art-based educational curriculum as an alternative educational model for disabled and culturally diversified populations, where Büyükekiz (2008) underscored that expressions in the drawings of children that received preschool education were clearly indicative of schematic stage of artistic development, compared to the expressions of children that did not receive preschool education, which still preserved the traces of pre-schematic stage, and that such children experienced problems with advancing to the schematic stage. Büyükekiz also

observed that children with preschool education were more active compared to those who did not, more enjoyed drawing activities, and proposed various ideas in line of which they conducted their work. Özalp (2009) concluded that multi-disciplinary art education as adopted in art education during the preschool period formed and accelerated artistic development of children. Davun (2009) found that art education during preschool period as supported by activities improved the aesthetic judgment skills of children. Ayaydın (2010) emphasized that preschool art education was an indispensable and lifelong needed field of education and that due care should be taken for preschool art education.

Children highly enjoy working with kneading materials beginning from early childhood. Such materials include salt ceramics, paper clay, saw dust clay, plastiline, wax, glazer's putty, cookie – bread clay, and clay (Cevher Kalburan, 2011).

Education on art of ceramics as a part of plastic arts includes forming clay as the main material.

Definition and Importance of Ceramics Education

The ceramics word is derived from Greek “Keramos,” or literally horn. Ceramic containers were called as keramos, ceramic producer potters as “kerameus”, and settlement of such potters as “keramikos.” Ceramics is the general term for any item with clay as the raw material that is formed manually or by means of dies, and kiln-dried. From porcelain to terracotta materials each object can be considered in the scope of the term (Sözen & Tanyeli, 2001; Dizdar Terwiel, 2010).

Having started centuries ago with pottery, ceramics today is a branch of science, which contributes in the production technology of a number of industrials sectors. Ceramics can be defined as manufacturing products using the appropriate mixture of naturally occurring element compounds by means of heat energy (Doğan,1985).

Ceramic art is the art of producing containers based on the container need of primitive humans. It has been considered the oldest art, one of the first discoveries of human beings due to its purpose of use. Ceramic containers were first shaped manually, then after the use of fire and wheel. Rotating wet clay around an axis paved the way for the future original art values. After the containers obtained by shaping the wet clay started to be kiln-dries, the basic conditions of ceramic art were completed. Ceramic art education is one of the plied art education branches and suitable for three-dimensional and planar (two-dimensional) activities. Children are provided with many opportunities thanks to the ceramics clay, which cannot be easily obtained in other art techniques. Children may rework a paper-based house figure in three dimensions with clay and conceive the existence of a world, in which one can wander about (Kaçar, 2010).

Children conceive the importance of art thanks to ceramic education and become creative and productive through experiences. At the same time children start to assess and criticize, which help in the making of aesthetic sensitivity (Ayancı, 2006).

While studying branches of art that require particular mastery and technical knowledge, it is important that the same is developed parallel to the changing era and conditions and adapted to preschool education, which should be tailored to the needs of children (Ayancı, 2006).

Materials used in Ceramics Education

Clay is the main material of ceramics education and is a by-product of earth crust. It is a product of fragmentation old rocks under natural conditions (Frigola, 2006). It is cheap and easily found. Children can find rich expression opportunities thanks to stick-, round-shaped clay, and hybrid forms using a composition of the foregoing.

The reasons of why clay is used for educational purposes are as follows:

Allow children to express their emotions since it is easily shaped.

Suitable for children at all age groups.

Ready, cheap, and found everywhere.

Allow children to perceive sense since both hands are at work.

Reusability of clay allows children to conduct seek new forms many time (Coşkun, 2008)

Clay can be procured from potters or in powder form. After water added to powder clay it is kneaded until a non-sticky consistency is attained (Oğuzkan & Oral, 1995).

Children enjoy squeezing, battering, rounding, and manually shaping clay and learn a lot of things. Burnable clay does not dry until and unless it is kiln-dried, thus it is different from hard clay. In that respect burnable clay should be preferred even if the clay will not be kiln-dried. Clay can be kept in a plastic container, when it is not in use. If clay becomes excessively wet and sticky, it should be left on newspaper for drying. A box of clay can be used through put the entire childhood period. Clay should not be disposed of when it dries out. It can be recycled. Below steps can be taken to recover clay:

Clay should be fragmented using a hammer on a thick block of newspapers placed on linoleum cloth.

Fragments should be placed in a plastic container, added with water, and the mixture should be stirred by means of a stick every day, until required consistency is attained. If it becomes too stick, it can be placed on newspapers for drying (Striker, 2005; Frigola, 2006).

Ceramics Education Methods

Basic techniques for modeling ceramic clay, which is ready after to shape kneading, include manual shaping, sausage, plate, coating inside the die, and shaping by potter's wheel (Frigola, 2006).

Manual shaping technique is method by which mud ball is squeezed manually without any tool and a hollow form is obtained. As one of the oldest shaping techniques it is a practical method for producing small pieces (Frigola, 2006).

In sausage method, clay takes the shape of a snake. Long and narrow forms can be obtained by superposing the shapes onto each other using (preferably) scoring method. It is possible to align the size and width of objects by using thick or thin piping (Frigola, 2006; Kaçar, 2010). Plate technique includes leveling clay mud into plates, which is suitable for smooth-surfaced works composed of combining cut out pieces. Clay should be kneaded and pressed down for leveling before making plates. This technique is very suitable for use in cornered and sharp edged forms, containers, and storage boxes (Frigola, 2006; Kaçar, 2010).

In Coating method, clay is pressed on to the walls of ready-made plaster or similar dies from inside to take the shape of the die. Cloth or newspaper is placed between clay and die so as to facilitate removal. Clay should not left in the die for long in order to prevent from cracks. Both inside and outside of the die can be used. The die is tapped from outside for intended modeling. After convex model is obtained it is removed from the die. Newspaper, cloth, or powder can be placed between die and mud. All ceramics for daily use are manufactured at workshops or factories using this method (Frigola, 2006; Kaçar, 2010).

Ceramic designs can be created by carving, cutting, texturing, stamping, and relief thanks to the fact that ceramics mud can easily be shaped. Ceramic mud can be ornamented by cutting or lining, when it is not harder than leather. Such tool as toothpicks, metal or wooden sticks, wire, and fish line can be used for above procedures besides plaster or mud pieces intended for children can be used. Although creation of original designs is preferred pattern works can also be done. Mud-on-mud decoration technique is adding mud pieces of the same or different color to the design after mud becomes leather-hard following modeling. In this technique, pieces, battered, split plates, or forms can be stuck by roll. Decoration can be done using the sausage-shaped designs, sharp-edge linings, and various round-shaped pieces. By this method, children can make various additions to their products, freely alter the design, and express their artistic interpretation (Frigola, 2006; Kaçar, 2010).

Effect of Ceramics Education on Children's Development

Ceramics education contributes in physical development of the children, helps them becoming familiar with their own talent, and develops large motor and small motor control and hand-eye coordination. Children learn and use new words as regards the names of the materials used and types of use during ceramics education, which improves children's imagination and creativity. They can measure the materials while watching preparation of ceramics and predict the result of the measurement. They observe the changes in mud and conduct measurements with non-standard units during activities. Their learning as regards balance is supported. Accordingly their cognitive and linguistic development is reinforced. They are emotionally relaxed when they express their internal conflicts via their products. Furthermore, their social development is promoted. Children have to wait for their turn during ceramics education, and thus learn to share and show respect for others' rights. Thanks to group activities, working in collaboration with friends is encouraged. Sense of self develops in a positive way and children are socialized via their works. They blend into the group by talking about their works. They express themselves and their communication skills are improved.

During ceramics education, children learn to be patient, when they wait for their turn for clay distribution, for talking to teacher, and for distribution of such materials as tooth picks, stamps etc. While working with mud, they learn to share in activities that transform individually created products to group work or when they prefer to create with their friends. Furthermore they learn to defend their rights while showing respect for the rights of others both in individual and group works. Throughout the group activities, work in collaboration is promoted and they learn to take responsibilities, enter into solidarity, and finish what has been started. They learn to

use kind words, when asking for clay, roll, rope, and stamp etc. They learn to show respect for one's and their friends' works and examine the artworks as regards such characteristics as size of the figure and texture. Sense of self is improved and children become socialized via the created works. They blend into the group by talking about their works. Köse (2005) observed that thanks to ceramics education applied at special education centers, children with special education need felt better and expressed themselves better.

RECOMMENDATIONS

Art activities is important for children can conceive their emotions and thoughts, and reflect their problems, fears, concerns, sorrow, happiness, dreams, and what they wonder about (Aral *et al.*, 2003; Darica, 1997) and for their thinking skills improve and motivations towards learning are enhanced (Dywer, 2011; Rajan, 2012). Nevertheless Ayancı (2006) found that ceramics education was neither prevalent, nor granted an appropriate place in institutions. Ceramics education as applied in the scope of art activities, which have positive reflections on children, has an important effect on children. Below recommendations can be made in line with the present study:

Families should attach importance to art and support their children in art activities in order to develop artistic sensitivity and aesthetic perspective.

They should introduce different branches of art to their children.

Educators should plan activities, which comply with children's age and developmental characteristics, from individual to group work levels, and increase the time spared for group work in their activities.

Ceramics education should be more improved.

Educators should frequently support children in working with clay-like materials on the grounds of such positive aspects that clay can easily be found in nature and it is recyclable, easy to form, easy to clean, and economic.

Educators should support children in talking about their work during ceramic education.

Due to the fact that preschool children are more familiar with children and in order to establish artistic sensitivity, preschool teacher candidates should be introduced to ceramics education and encouraged to use it in their activities.

Parents and teachers should be informed about ceramic art.

Kindergarten headmasters should be careful about selecting teachers, who will provide ceramics education.

Kindergarten headmasters should prioritize teachers, who are familiar with child development and preschool education during the selection process, and that teachers without necessary knowledge should be informed or otherwise supported and canalized by the headmasters to acquire fundamental knowledge as regards child development.

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Chapter 25

Fear and Violence in Children's Tales: An Implementation Study

Havise ÇAKMAK GÜLEÇ

INTRODUCTION

Preschool period is a cycle that starts from the children's birth until the time when they start going to primary school. This cycle is considered as the critical one in terms of overall development of a child. Studies indicate that the significant part of their development is almost completed in this cycle. Preschool education is also provided in this cycle.

Children's Literature is a kind of a literature starting from a child's early childhood, covering all the period of time leading to adolescence, and presenting to the child written and oral literary works which are appropriate to the child's level of understanding and mental level. They are not, as some think, any book created for adults which are later adapted for a child's understanding because children have their particular interests, developments and necessities which are specific to their age period. Children's books should have a special layout and interest which are supporting children spontaneously (Tuğrul, 2002).

There are different genres of children's books such as alphabet books, start reading books, fairy tale books etc... However, the most essential one with a long-standing background is the fairy tales.

Fairy tales

A fairy tale is defined as "a folktale with imaginary themes which generally includes extraordinary heroes and adventures, and is found in oral tradition". (M.Lauresse, 1992).

In another definition, it is defined as "a narrative form which is entirely fanciful, usually includes supernatural events, occasionally has supernatural creatures, and its story takes place in a non-specific place (the country of the fairy tale) in non-specific time (once upon a time)" (B.Lauresse, 1986).

The term "fanciful" in the fairy tale definition should not be perceived as only in the meaning of "supernatural things". Although fairy tales are fictional, it's not possible to find supernatural personas and events in all of them. Whether the story is extra ordinary or realistic, fairy tales are the narratives which leave the impression of being fanciful.

One of the principle characteristics distinguishing the fairy tales from the other genres is that the difference in style and narration. The story is short and intense. Brevity and intensity are the climax point especially in fables and anecdotes. And in longish stories, when the multitude of events and the length of the elapsed time are taken into consideration, the brevity and the intensity of the anecdote will attract the attention.

The plot in fairy tales is a whole based on supernatural and unreal grounds. As a

hero in fairy tales; we behold people, animals and some imaginary creatures. These creatures always take the back seat as the assistants of human heroes. The time and place in fairy tales are uncertain. Fairy tales which are types of oral folk tales are transmitted from generation to generation through words. Master story tellers have changed them a bit on their each performance. The objective of usefulness in fairy tales is fundamental. Besides, each hero is a symbol of a character. A lesson is implied in whatever the characters do. The good is glorified and the evil is condemned. Children imitate the heroes, and they enshrine them in their hearts. However, there are educationists such as J.J. Rousseau who believe that fairy tales ruin the purity of children's soul with lies in his banned fables *La Fontaine* (Yaldız, 2006).

Fairy tales are told from the old people to the young people that are to children. However, children also could make up and tell stories to the old people. Its purpose is to support children's language development more and improve the communication between the child and the adult.

Fairy tales are known as the most books containing violence and fear among the types of books designed for children. Since the fables are considered among the legendary types, we should consider the fables when examining the themes of violence and fear.

According to Karatay (2007), the exploitation of children's feelings by upsetting them or making them cry should not be done, it must be known that these problems will never be solved in this way. The child should know the reason why the things that upset people in books he reads are like this. He should show the ways of resistance against life difficulties, and the fact that sustaining life without violence should be indicated. Children' preschool books should be the provider of children's learning about their own bodies and satisfaction with their external appearances. They should draw them away from loss and separation concerns along with the fears heard about dark and supernatural creatures. They should comfort them.

According to Keskin (2010), fear is a feeling arising from the presence of an external threat. It has to be the signal of escape from the threat. It is observed in all creatures. It ensures being prey. Thanks to fear, the creatures that can anticipate the threat and take measures can continue living. Fear is the signal of a concrete threat coming from the external environment. Quick anxiety and fear are concepts deal one with the other. However, it's stated there are some points distinguishing them from one to another. Anxiety means depression, worry, concern, illusion, and signifies that it's the spokesman of specters and the internal signal of fear. Whereas fear is instant means in the short period, anxiety maybe as instant as it may be chronic. Fear is more corrosive.

According to Keskin (2010), metropolitan city life; the forced coping with life contribute to countless stress factors. As such, it's not a type of anxiety, also, at the same time, its form of exteriorisation has changed. The cases that lead to different forms of anxiety have been changed by inability to get on the plan or the elevator, inability to speak in the community, to integrate oneself into society, together with the variety of community conditions. Besides, in the vastness of human nature, his weakness coming from his own fears of dogs, insects, darkness, flash have been continued since before now.

Is fear the factor that arises violence or is violence a reason for fear?

Fromm is one of the scientists that supports the idea of “human beings are not born evil” (Fromm, 1994). From who underestimates especially the evil ability in humans, says that human beings choose the way of good or evil by themselves. However, after the long clinical experiences and spirit analysis, he states that it’s difficult to convert the destructive power and violence in humanbeing into constructive energy (Fromm, 1994).

One of the important names of humanistic approach, Maslow, speaks of the necessary requirements in order to develop a healthy personality and that are in a hierarchy in a shape of a pyramid. At the base of the pyramid we find the physiological needs. The next step is the necessity of feeling secure for a person. The fact of not satisfying this need will pave the way for the objective of life which is the quest of security in this case. Satisfying this need helps human to move away the feeling being in danger.

The notion of violence is defined as rigidity, rigid and stiff behavior, using brute force. Violence events are defined as the attempts or incidents which are created for suppressing or scaring people (Ünsal, 1996; 29). Violence is an obstacle preventing a person’s feeling of security. Violence is not just beating. Violence can be shaped in different forms such as physical, economical, psychological, and sexual. Violence is classified into various types. The phenomenon of violence has many aspects. That’s why it can be perceived through different perspectives. For instance, the psychological aspect, the ethical aspect or the political aspect can be tackled. Added to this, economic and juridical aspects can also be examined (Kocacık, 2005).

Being subjected to violence is a situation related to awareness. The way how violence is defined, our own definition for violence, the way we perceive it, our awareness of our own rights are the most important questions to prevent violence.

Domestic violence is, as being admitted in the Family Protection Law 4320, defined as executing any physical or any type of acts or treatment applying physical, verbal, emotional violence between the victim of violence and perpetrator of violence in an implicit way between the family members and paving the way injuring, suppressing, or applying emotional pression.

As a result of The Turkish Prime Ministry General Directorate of Family and Social Research’s 4287 meetings and in-depth interviews with 525 households, in 1997, it is deduced that domestic violence is quite common. 34% of these families are the subject of physical violence, and 53% of them are the subject of verbal violence (ucansupurge.org). The Prime Ministry circular published in the Turkish Official Gazette on Tuesday 4 July 2006, it is stated that violence against women and children has maintained its place in humanity's agenda. According to the same newspaper the the continuing violence against women and children in Turkey necessitates the adoption of new and urgent measures. It is also expressed that major duties and responsibilities have been fallen to the public enterprises, non-governmental organizations, and our citizens in order to eliminate the problem by gradually increasing the level of education and culture with economical development and growth.

Nowadays, the human being has been developing in a very quick way in terms of his potential. However, there aren’t enough sources for breeding and sheltering. This situation brings about wars in the world. Güneş (2006), ranks breeding, struggle for

life, natural resources, geography, region, competition as the main reasons of violence. Among the other reasons, some factors such as instinct and biological-genetic explanations, the impulse-reaction, and psychical structure, mind and selection are considered as reasons for violence. He has also stated that the pent-up feelings, traumas, the moral development, obsession, personality paradox, and beside them some reactional aggressiveness like anxiety, fear and anger can be the reason for violence.

It is obvious that the sources of violence are elements that are found in children's books. Ömer Seyfettin stories like Kaşığı, Falaka, etc... are the most well known ones. As fairy tales in Western literature are concerned, so many offensive characters are found such as wolf, witch, and stepmother.

Fear and Violence in Children's Books

Preuschhoff (1998) pointed out that the subject of fear and dealing with fear has been discussed in many fairy tales and children's books. He stated that fear in fairy tales has been symbolized as the symbols like a dark forest in "Snow White" or "Hansel and Gretel". However, he also stated that heroes always find the way to solve problems that seem to be unsolvable like escaping from the forest's darkness, crossing the mountains of glass or killing a seven-head monster, and that they are solved thanks to the trust given to animals or extraordinary fearless human.

"Hansel and Gretel", one of the most well-known fairytale, is one of only Grimm's Brother's fairy tales. In our childhood, it was almost the most heard from all our old people or our friends. I wonder if that question came to our mind. We listened "Hansel and Gretel", Snow White, Cinderella, and many other fairytales with a big passion. And maybe we still tell it to our kids and pupils. What are the meanings of these fairy tales in our lives? We do not mention it will teach us something or ensure a benefit for us. Does being told for centuries come from being liked? Is it possible that these tales have contributed to our fears; such as fear of stepmothers, darkness, and many other fears from our childhood? Fear and violence that occur in this fairy tale are rather obvious. Hansel and Gretel's left in the woods, the witch's behaviors containing violence. In this fairytale, very wrong examples and behavioral examples are stood out. For instance, stating that children were welcomed by their families when they got back home with jewels and that they lived happily. Those are bad situations to be created about using things belonging to another person easily.

Let's look at this fairy tale from another perspective. The good wins, the evil loses. In this fairy tale, the bad witch loses, and the good children win. Yet, the mother or the stepmother, as we mentioned, wins too. The only reason why the children are accepted is gold. If there was not gold, she would not accept them. This fact can not be a humanistic approach. In this kind of families, can children feel themselves in secure? The given message is that there are conditions for being able to make ourselves accepted or beloved. If the stepmother's applied things were a kind violence, at the end, she would have to bear the results of her behaviors that this may be the accurate model for children.

If we want to read this fairy tale, we can use the situation mentioned above in order to ensure developing children's awareness of their own rights, and ability to solve problems. By asking some questions, we can raise awareness. When the fairy

tales are used with this purpose, fairy tales will be a good means of education. Within this context, the fairy tale “Cindrella” has been read and some questions have been asked to children below with this purpose.

According to Preuschoff (1998), fairy tales in education, as well as those given by parents play an important role as a cultural heritage given in literary types. Life, which seems to be complicated for most of the children, we must give the opportunity to make them know the circumstances themselves, and to pick out a meaning from the chaos of their feelings. In order to create an order in his inner world and then in life, a child needs to acquire ideas. A child must receive moral education. This education shows the advantages of moral behaviors. The more accurate ideas are the ones seen by eyes rather than abstract ideas and that’s why they are occurring in a meaningful way. Fears and tension in fairytales are mentioned a lot so the child comprehends it in his uncounciousness. Thus, he has found out many examples on how to solve his problems or overcome his fears. Moreover, fairy tales teaches children that problems are a part of life. When one could stand up to the unexpected and unfair problems patiently and fearlessly without stepping back, the obstacles would be abolished and eventually the war would be won. When the father tells a fairytale to his child, the child will feel that his hidden desires and his bad feelings are understood. The child will sense that the human being came to this world for the meaning of facing difficult tasks yet for living wonderful adventures.

According to Aydın (2003), in order not to develop children’s fears, the fairy tales and stories that are a reason for children’s fears shouldn’t be read. They have to be selective when it comes to TV movies. Yet, these shouldn’t be done through banning but through ensuring cooperation.

Because violence is an inescapable reality of the world, this paper asks the question, "Does violence have any place in children's literature?" For centuries, children's literature has encompassed stories in which the virtuous were rewarded and evildoers suffered retribution. Historically, violence was frequently part of punishment. Children of the past were directly confronted with their responsibility for their choices and actions and the likelihood of severe punishments following closely upon wrongdoing. Violence in juvenile literature has also been praiseworthy and even glamorous, expressed as people "doing their duty," for example, in a wartime situation. Stories that did not concern war often incited children to demonstrate physical courage. Females as well as males were forced to face danger or be ready to sacrifice themselves. It is only in recent decades that the place of violence in children's books has been so vigorously questioned. Some current viewpoints take the position that children's books may encompass violence and conflict, but it is essential that they do so in ways that show the suffering caused, and offer solutions other than retaliatory violence. Once one has accepted that there is a place for violence in children's literature, it is still difficult to judge which books are acceptable. It is important to find books that pose the issues for children in terms meaningful to them in their world (Nimon, 1993).

Violence considered as a degree of aggression and is referred to as a hard and painful behavior directed to individuals’ physical integrity. According to Aydın (1997), the aggressive tendency is a universal reaction which is found in human nature, and which is seen as an inhibition against frustration no matter what the person’s age is.

According to psychologists, aggression is considered as one of our innate basic instincts whereas the social psychologists consider it as a motivation acquired later on. Nowadays, when the offensive behaviors show up the role that both of the factors play along with the ability of being admitted, “aggressive behavior is more learned” is gaining importance (Özdoğan, 1997). Human being, inherently, is a creature that oscillates between aggression and compassion. In other words, whether the child's aggressive behaviour is executed, the environmental and experiential factors have a important role. If there are examples on such aggressive behaviors in his environment, he will be affected.

The step mother figure, whom we have come across especially in European fairy tales, is an aggressive character who applies violent behaviour frequently. Since the fairy tales are more told in preschool cycle, this character creates a frightening situation in children that they cannot handle. It can create the fear of losing their mothers and living with a stepmother. The witch figure is not as scary as this one. The stepmother character can do scary things to the child hero or heroine. In these fairy tales, fathers do not realize the situation. Fathers' unawareness of this situation is also thought-provoking.

The sample situation that was told by a psychologist who has worked in a prison is a good example how fairy tales develop step mother fear. When the psychologist chatted with the male prisoners, one prisoner told about an event that had come to his mind. One day, he told his 5-6-year-old daughter the fairy tale, Snow White and the Seven Dwarfs. After his wife's death, he remarried. After the story, the girl asked her father that if her step mother would behave her like that, too. The father was touched by this situation.

As we have understood in this example, a prejudice is placed in child's mind without being aware. Could this child be uneasy about her stepmother if she didn't hear the fairy tale? Another question which can be asked is which one of us did not have the fear of stepmother? The cultural transmissions and TV must be the factors for considering a stepmother as an object of evil and developing fear from that for a person who hasn't got a stepmother. The most important source is talebooks as seen.

Beside the fairy tales, fables, which are ranked among the legendary works, also contains a harsh style with regard to violence and fear. The fable “The Ant and the Grasshopper” is not a good example for children. It gives the idea of “Either you will always work or you will always have fun” subconsciously. Moreover the notion of even leaving someone die in order to punish him is dominant. This situation damages the prosocial behaviors or the values education that we want to develop in children

Güneş (2006) stated that in his book called “Emile”, Jean Jacques Rousseau had expressed the damages of fables on children's. Nowadays many men of letters have supported the idea that some of the fairytales especially the ones of Grimm Brothers' affect children negatively.

To draw an attention to the negative effects of violence on children, Nimon (1993) examined the elements of violence in children's books, and at the end of his work he insisted on how it's difficult to find books for children through highlighting the content violence in most of the publications.

In the study by Firat (2012), comparing to other books, the elements of fear and violence have emerged more frequently in fairy tales. Among tale books, in books

known as world children's books that the existence of elements of fear and violence are noticed most.

Fairy tales have a great importance in the world. However, children are unable to make difference between positive and negative behaviors. In this regard, some of Grimm's fairy tales are very detrimental to a child education, because children imitate or play what they see in their positive or negative sides. In Grimm's "Frau Holle" (1989) fairy tale, a girl jumps in a wellhole and loses her consciousness. When she woke up she was in greenery. Yavuzer (2000) pointed that children would keep this situation on their minds and place it in their subconsciousness (akt.Güneş, 2006).

Schafelberger (1990) stated that, because children had learnt scary things before going to nursery school, violence must be in a planned form in books. However, the examples of fairy tales that contain violence is quite bad according to many writers. Kotla (1974) emphasized that many fairy tales were excluded and not chosen because of containing violence. One reason for this type of fairy tales could not be chosen may be said to be a very simple example for children (akt.Güneş, 2006).

Violence has often played an involved role in children's literature, but in recent years questions have been raised about whether violence should have a place in children's literature. This is evidenced by modern storytellers' decisions to modify the gruesome parts of classic fairy tales to make them more palatable for modern readers. Does omitting violence really make for higher quality children's literature? Many scholars argue that violence, if used appropriately, has its place in some children's books. They point out violent literature is often not to blame for violent behavior in children; rather, the inclusion of violence in quality literature can create positive influences in children's lives. Children are often naturally drawn to stories with violence in them. Many can relate to violent situations portrayed in children's stories, and, when used effectively, these situations can be used to teach children how to avoid violent resolutions in their own lives (Creasy, 2010).

This trend in children appreciating violent stories is especially prevalent in boys, and there are worries that with the general condemnation of literature containing violence by teachers, young males with the potential to become great readers and writers may lose interest. Williams (2004) pinpoints why teachers and parents have become so squeamish about violent children's literature in recent years: "Violent reading and writing brings with it the fear that such violence might erupt beyond the page into the classroom". Williams (2004) goes on to state such fears have intensified since recent school shootings, and that this fear and panic rests on the assumption that boys cannot tell the difference between violence in a story and the violence in real life. However, this assumption is primarily false; most boys can differentiate between violence in stories and real life. Using the example of her young son, Williams portrays a boy who writes vividly violent stories but is a perfectly mild-mannered and peaceful boy in real life. Many boys enjoy the kinds of violent stories that are often considered inappropriate for school, but when teachers bar these stories from the classrooms, it can do more harm than good. Williams (2004) worries about her son, "who is being told, explicitly and implicitly, that the reading and writing he is drawn to not only has no value but is also potentially dangerous". When teachers do not allow young boys to read or create the kinds of fiction that most interest them, they could be squelching potential literary lovers' interests in fiction of any kind, thus

failing to reach the primary goal in teaching children about literature (akt.Creasey, 2010).

Bandura carried out an experiment on “aggressive behaviours in children” in 1965; the children were organized into 3 groups.

The first group watched a film about beating and assaulting a doll by reinforcing an aggressive model; the second group watched the film by punishing the aggressive model; and the third group watched the film by neither reinforced nor punishing the aggressive model. After the movie, a doll was given to the children in each group, and their aggressive behaviours were measured. As a result of the experiment, those who have the highest rate of the aggressive behaviours were the children watched the reinforced model, those who have the lowest rate of the aggressive behaviours were the children watched the punished model, and the children watched neither reinforced nor punished model were between these two groups. The children who had watched the punished model learnt aggressiveness, but they didn't perform this. As a consequence, individuals' behaviors can be affected by the others' experiences. (Aydın, 2012).

According to Bandura's theory, children do not imitate the characters of fairy tale books that commit violence, because, these characters are punished at the end of the tale. All good win and the evil ones loose at the end of the tale. However, the negative messages about the wicked stepmother can not be given in this case.

In this case, fairy tales can be evaluated as an opportunity for children in terms of dealing with problems. Fairy tales can be used as a tool to solve the problems they deal with in their friendships or family.

Just like the example of the application given below, children's thoughts can be shown up like the questions “If you were him, what would you do?”, “what is the unpleasant behaviour here?”, “What could the do for solving the problem?” Moreover, whether there is a problem such as lack of confidence, tendency to violence, introversion.

A Sample Application

Once upon a time, there was a widower who married a proud and haughty woman as his second wife. She had two daughters, who were equally vain and selfish. By his first wife, he'd had a beautiful young daughter, a girl of unparalleled goodness and sweet temper. The stepmother and her daughters forced the first daughter into servitude, where she was made to work day and night doing menial chores. After the girl's chores were done for the day, she would retire to the barren and cold room given to her, and would curl up near the fireplace in an effort to stay warm. She would often arise covered in cinders, giving rise to the mocking nickname "Cinderella". Cinderella bore the abuse patiently and dared not tell her father, since his wife controlled him entirely.

One day, the Prince invited all the young ladies in the land to a ball, planning to choose a wife from amongst them. The two stepsisters gleefully planned their wardrobes for the ball, and taunted Cinderella by telling her that maids were not invited to the ball.

As the sisters departed to the ball, Cinderella cried in despair. Her Fairy Godmother magically appeared and immediately began to transform Cinderella from house servant to the young lady she was by birth, all in the effort to get Cinderella to

the ball. She turned a pumpkin into a golden carriage, mice into horses, a rat into a coachman, and lizards into footmen. She then turned Cinderella's rags into a beautiful jeweled gown, complete with a delicate pair of glass slippers. The Godmother told her to enjoy the ball, but warned that she had to return before midnight, when the spells would be broken.

At the ball, the entire court was entranced by Cinderella, especially the Prince. At this first ball, Cinderella remembers to leave before midnight. Back home, Cinderella graciously thanked her Godmother. She then greeted the stepsisters, who had not recognized her earlier and talked of nothing but the beautiful girl at the ball.

Another ball was held the next evening, and Cinderella again attended with her Godmother's help. The Prince had become even more infatuated, and Cinderella in turn became so enchanted by him she lost track of time and left only at the final stroke of midnight, losing one of her glass slippers on the steps of the palace in her haste. The Prince chased her, but outside the palace, the guards saw only a simple country girl leave. The Prince pocketed the slipper and vows to find and marry the girl to whom it belonged. Meanwhile, Cinderella kept the other slipper, which did not disappear when the spell was broken.

The Prince tried the slipper on all the women in the kingdom. When the Prince arrives at Cinderella's villa, the stepsisters tried in vain to win over the prince. Cinderella asked if she might try, while the stepsisters taunted her. Naturally, the slipper fitted perfectly, and Cinderella produced the other slipper for good measure. The stepsisters both pleaded for forgiveness, and Cinderella agreed to let bygones be bygones.

Cinderella married the Prince, and the stepsisters also married two lords.

In this short study related to this fairy tale, after the fairy tale had been told children, the questions below were asked:

1. If you were Cinderella and your sister made you do all the housework, what would you do?
2. If you didn't have dress and shoes to go to the ball, what would be your solution?

These questions were asked to 5-6-year-old children. The answers have been reported below:

Melike:

1. It's a quite difficult question. I would do what they wanted. I would clean the house.
2. I would wash and iron my old clothes. I would paint my old shoes and go just like that.

The child's desperation has been noticed in this reply. However, the attitude of the adult is really important since this sample could be used so as to find a solution against violence for the child. Melike has been given information about her rights she has in this situation. A series of books about children rights have been read regularly to raise awareness of her rights. Melike's painting about this fairy tale is below. Some conversations about their rights also made with the other children.

Duru:

1. I would try to find another family for myself.
2. I would take money from my stepsister's wallet and I would buy beautiful

clothes and shoes.

This child shows the desire to escape from the situation. This escape may be thought as a solution.

Eren:

1. I would never complain. I would do my job and I would be tired.
2. I would make clothes from the covers of my belongings and I would ask my friends for clothes.

Eren gave a similar answer with Melike. Fear and acceptance is observed.

Mustafa:

1. I would say” This is a bit shameful I won’t always do that, you do a little and you also get tired, let’s share the burden, and then let’s do it together.”
2. I would make shoes for myself. I would knead the paper and bake it in the oven. Then I would paint it with golden yellow.

Mustafa’ first answer shows his desperate, his second answer is creative.

Zeynep:

1. I would say: «what you’re doing is not nice at all. I am your sister.”
2. I wouldn’t go to the ball.

In the answer that Zeynep gave, her being self-confident is recognized.

Ahmet:

1. I would say” I wouldn’t do that. And I will go away from this house.”
2. I would go to the market and buy something secretly.

The fear inside Ahmet is shown.

Deniz:

1. I would wish to make animal friends. I would go out without being seen by my sisters.
2. I would hang out in the street desperately and beg people to give me a dress.

Deniz’s despair and the hopelessness drew the attention too much.

Meriç:

1. I would say “why are you doing this to me?” and I would tell them that I am exhausted.
2. I would sew stitches.

Arda:

1. I would be sad, and I would use my mind.
2. I would wear new shoes just like the ones on my feet.

Ömer:

1. I would call the fairy and ask her for help.
2. I would ask money from her.

Irmak:

1. I would say to them: "I could be a princess too. Why are you behaving to me like this?"
2. I would try to look for money, I would beg people.

Irmak is seen as a child trying to look for solutions to get rid of the unfavorable situation. She is such a strong child who can defend her rights rather than showing despair and hopelessness.

All in all, despair, hopelessness and obeying are noticed in the children’s answers. The number of children who want to defend their right against violence is

few. This is a work that could be studied with more examples. By increasing the number of examples, getting more generic results will be possible.

RESULTS

Children's books are as well as TV are quite effective for the acquisition of aggressive behaviour. Among these books, especially the fairytale books contain violent elements excessively. It is determined experientially that in the children's daily life the aggressive scenes they see in TV programs have enhanced the aggressive behaviors in them. Under these circumstances, the usual applied preventive way is punishment. There is no doubt that the severe punishment will stop the attack for a while. We should investigate the individual and the environmental reasons that created the child's aggressiveness, think that the child's behavior is inappropriate, explain to him his wrong behaviors, and take measures like preventing the result expected from aggression that is rewarding. Again, we should avoid the situation of seeing and taking as example the aggressive behaviours (Aydın & Hülya, 2013 p. 95).

If we started up the idea of being fairytales would be one of the most favourite types for children, we need to tell or read fairy tales to them. However, the content is an important consideration. The fairy tales that we read or tell have to be appropriate to the kid's age and development. The factors containing serious violence or horror that a child can not deal with may cause chronic fears in the child's subconscious. The most accurate method is to read and debate on the fairy tales which are appropriate to their age and development.

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Chapter 26

Children and Politics: Mental Images of Elementary School Students about the Concept of Politics

Özge TARHAN

INTRODUCTION

One of teachers' duties in the education system to train individuals who will be politically literate in their whole lives is to teach children the basic knowledge, skills and values related to politics, and how politics is done. Children's being interested in politics and acquiring basic knowledge related to politics start in childhood years in the family. The family's being interested in issues related to politics, having conversations on politics in the family, having a democratic attitude in the family environment, and children's expressing their ideas freely enables them to bear positive feelings towards politics. Another important factor in children's becoming conscious of politics is schools.

In all democratic countries in which elementary education is compulsory, planning the school program in a way that will create citizenship awareness features its effect as becoming a tool of political socialization (Türköne, 2005:244). In order for the society to be consisted of politically conscious individuals, "Political Education" is of great importance. One of the important dimensions of political education is democracy education. For this reason, early ages are ideal to introduce the requirements of democracy to students. In early ages, they learn the importance and necessity of working together, the need for rules and the justice system, and having the knowledge of basic politics (Wallace, 2006: 14). Learning basic politics presents individuals a pathway to define the political environment, discussions and political identities. It is necessary to set out how students' knowledge of politics can be enhanced at schools and how this knowledge would contribute to their development, rather than them viewing politics negatively. The best way for this is to guide them for reading, planning and supporting (Betty, 2006; 130). It is of significance to know on which elements elementary school students' views on politics concentrate mostly, or over which elements they mostly perceive politics. The answers of these questions will reveal the problems in Turkish politics, and show that politics has a direct or indirect influence on students and affects everybody's life. The basic definition of politics is the discussion of different ideas. Many educators avoid discussing issues related to politics in the classroom environment. A systematic politics education starting from elementary school level will teach young individuals to participate in discussions in a kind and consistent way, and show respect to different views. In this process, students acquire the required political knowledge and internalise it (Tarhan, 2015: 124). Therefore, the social studies course in elementary school level is of significance. This course is necessary for children to prepare them to social life with clear and comprehensible information, facilitate their adaptation to the society, and remind them that they are not only a biological human beings, but also a

member of the society and a social being (İnan, 2014: 2).

Individuals learn the political structure of the country and the operation of this structure through education, and thus, get more interested in politics. Individuals who are equipped with a set of values, beliefs, attitudes, orientations and expectations will start to take a role within the political system starting from a certain age (Kalaycıoğlu, Sarıbay, 2000: 170). Particularly in the elementary school period that has an important place in children's personality development, the politics education to be provided to children who are the future citizens at schools is of great importance. Schools affect children's perception of politics from three perspectives. Firstly, covering political messages in coursebooks raise awareness of the political culture in individuals. Secondly, children's group of friends also has a role in the formation of their political culture. Thirdly, the social and cultural activities (such as participating in various student clubs, and taking part in music, painting or sports teams) also have an effect on individuals' formation of political culture (Çam, 1998: 287). Besides all these, the importance of mass communication tools in children's development of positive or negative views towards politics cannot be denied. Negative news that they hear from the media and their environment can affect their views on politics. In these ages when children's perception is quite open, mass communication tools convey them the phenomena such as the operation of democracy, human rights, political structure and political parties in the country (Akay, 2006: 32). It can be argued that in Turkey, a sufficient politics education is not implemented, a consumption society is formed, a generation who does not have sensitivity to the country's problems has been raised, and the effect of the policies followed after 1980 on all these is obvious. For this reason, studies should be conducted to increase the number of effective individuals who form the basis of their mentality about politics during their elementary school education, and are aware of their political roles and responsibilities. Because metaphors enable making comments on a topic of research, they can be an effective method in identifying the views of elementary school students related to politics. Based on this aim, the themes and reasons of the metaphors developed by the students related to the concept of politics were determined. In this way, it was aimed to reveal how elementary school students perceived politics. The population of children being intense in the society is an important advantage that should be considered for developing countries.

METHOD

Research Model: This qualitative study is based on phenomenology and examined elementary school students' perceptions of the concept of politics through the metaphors they developed. In phenomenological studies, it is aimed to reveal individual perceptions regarding a phenomenon and interpret these perceptions (Yıldırım & Şimşek, 2006).

Participants: The participants of the study were a total of 94 students, 53 female and 41 male, who were sixth, seventh and eighth graders at three elementary schools randomly selected from regions with different socio-economic levels and cultural environments in the city of Denizli. 56,3% of the students were female and 43,6% were male.

Data Gathering Tool

The students in the participant group were provided with a form including a sentence with gaps: "Politics is like because". They were given enough time to fill in the forms, and then, the forms were collected. In the analysis of these forms, content analysis was performed in accordance with the qualitative research design. The analysis was conducted by two individuals. Seventeen of the 111 forms collected were excluded because they were not filled correctly, and the forms of 94 students were evaluated. Forceville (2002) stated that for a phenomenon to be accepted as a metaphor, it should have a topic, a source, and a reason for attributing the source to the topic.

Analyzing the Data

The metaphors formed by the students were analysed in four steps: (1) Coding and sorting the data, (2) Developing categories for the data, (3) Ensuring the validity and reliability of the codes, (4) Interpreting all codes.

1. Coding and sorting data

In this step, the metaphors developed by the students and the reasons of the metaphors were transferred to the computer environment. Seventeen forms in which there was no rational relationship between the metaphors and the reasons were excluded. For instance, a student wrote "you know" as a reason for the metaphor "work of a tradesman". Although the metaphor was suitable, the reason was not meaningful. Another student wrote "pine tree" as the metaphor and "it is good" for its reason. Neither the source of the metaphor nor its reason was found sufficient to describe politics. As a result of this process, a total of 17 forms were excluded from the analysis.

2. Developing categories for the data

In this step, the metaphors produced by the students were examined in terms of the common characteristics they had related to the concept of politics. The metaphors were analysed by performing content analysis. The primary aim of content analysis is to reach conceptions that will describe the gathered data. The gathered data are firstly conceptualized, then the conceptions are organized reasonably, and the themes explaining the data are found (Yıldırım&Şimşek, 2006). In content analysis, the metaphors stated by the participants were gathered, and those that were repetitive were identified. Then, the metaphors and reasons were examined, and the categories were formed.

3. Ensuring the validity and reliability of the codes

In this step, validity and reliability studies were conducted for the metaphors developed by the students. This process was implemented separately by two researchers. The agreement and disagreement rates of the researchers were determined by using Miles and Huberman's (1994) formula ($\text{Reliability} = \frac{\text{agreement}}{\text{agreement} + \text{disagreement}}$). The agreement between the two researchers was 91%.

4. Interpreting the codes

The categories were examined considering the data in the literature, and the students' analogies of politics were interpreted.

FINDINGS

In this section of the study, the findings obtained from the analysis of the data

were presented in tables and interpretations related to the tables were made. Sixth, seventh and eighth graders in the participant group produced a total of 76 valid metaphors related to the concept of politics. As a result of the analyses, the themes "Crowd, Fear, Discomfort, Power, Caring, Love and Fight" were revealed. The metaphors and frequencies were presented in tables.

DATA ANALYSIS

The students' metaphors related to the concept of "Politics" were listed. The listed metaphors were then grouped between each other. The themes were identified considering the reasons of the metaphors.

In Table 1, the metaphors and frequencies related to the theme "Crowd" are presented.

Table 1: Students' Metaphors and Reasons Related to the Theme "Crowd"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
1	Female	CROWD	Orchestra	In orchestras, many people play many instruments. Once they start working together, they produce beautiful sounds.	11
2	Male		School	In schools, there are teachers, students, servants, the principal and the canteen keeper. Similar to schools, there are also many people in politics.	
3	Male		Apartment building	Apartment buildings are huge and many families live there.	
4	Female		Forest	Forests are big and mixed. You get lost if you don't know a forest well.	
5	Female		Salad	We use many ingredients to make a salad. The outcome is delicious.	
6	Male		Hamburger	There are many ingredients in an hamburger. Similarly, there are many people in politics.	
7	Male		Basketball Team	If individuals in a party are in solidarity, the party makes progress.	
8	Female		Football	There is a ball. Everyone	

		Match	in the football team runs after it to score a goal. To do this, they can hit each other.
9	Male	Football Match	If individuals in the team play well, they score goals and win the game.
10	Male	Community Performing A Play	Everyone reluctantly states the same views in a different way. People in crowded places have varying views.
11	Male	Theatre	There are many players in a theatre. Each one of them has a different role.
12	Male	Theatre	It is difficult to perform a role in a theatre play in front of a crowd.
13	Female	School	Schools are always crowded.
14	Female	Shopping Malls	There are many shops in shopping malls. These places are complex and crowded. Politics is also complex and crowded.
15	Male	Basketball Team	Politics is crowded like teams. So, it is difficult to make common decisions in a crowd.
16	Female	Theatre	Theatres are crowded places. There is much noise in crowded places.

As is shown in Table 1, 16 students (17,02%) developed 11 different metaphors under the theme "Crowd". The fact that these metaphors were developed from a characteristic of politics that is being crowded is a remarkable finding. It can be argued that the students had a special perception of the concept of politics. Regarding the reasons for the metaphors in this theme, the students perceived that the concept of politics was not lean, and it consisted of many people, parties, politicians and different ways of thinking. In addition, the students emphasized that there was usually a crowded group in politics. The lack of statements regarding what politicians do may show that the students did not have sufficient knowledge on this topic or were insensitive to politics. The metaphors and reasons related to the theme "Fear" are presented in Table 2.

Table 2: Students' Metaphors and Reasons Related to the Theme "Fear"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
17	Female	FEAR	War	Everyone fears of war.	7
18	Female		Lightening	I fear of politics just like I fear of lightning at nights.	
19	Female		Thunder	Thunders frighten me, I can't sleep.	
20	Female		Monster	Everybody fears of monsters. I think politics is also a monster.	
21	Male		Horror Movie	Horror movies make people fear.	
22	Female		Lightening	I fear of the loud noise when the lightening flashes.	
23	Female		Lightening	The sound of the lightening is very strong. That sounds scares me.	
24	Male		Father	My father is very stern. I fear of him.	
25	Female		Dog	I always fear of dogs.	
26	Female		Horror Movie	I fear while I watch.	

Table 3: Students' Metaphors and Justifications Related to the Theme "Discomfort"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
27	Female	DISCOMFORT	Dishes in the Sink	The dishes pile up in the sink, and if not washed, I would be uncomfortable.	11
28	Female		Cloud	I feel very uncomfortable when I get wet.	
29	Male		Disturbed Environment	People feel disturbed in disturbed environments.	
30	Female		Bottomless Well	You cannot get out of politics once you are interested in it.	
31	Female		Ice	It is cold like ice. Cold makes people sick. No one likes to be sick.	
32	Male		Creamy yoghurt	I like yoghurt. Yoghurt with cream disturbs me. I like yoghurt without cream more than with cream.	
33	Female		My Fatness	I am disturbed with being fat, I don't like myself. I	

			don't want to be like this at all.
34	Female	Messy Places	I can't stand messy places, I feel disturbed, but I am comfortable in neat places.
35	Female	Rainy weather	Wetness disturbs me. I can't go out when it is rainy.
36	Male	My Tidy Bed	My bed being tidy disturbs me.
37	Male	Someone telling me to read	Being told to read books makes me feel uncomfortable.

Table 4: Students' Metaphors and Justifications Related to the Theme "Power"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
38	Female	POWER	Dragon	Dragons do whatever they want. They are very big and powerful.	9
39	Female		Camel	Camels are tall and big.	
40	Male		Sultan	All wishes of a sultan are fulfilled. They are the most powerful in the country.	
41	Male		Money	You don't have money, you don't have power.	
42	Male		Money	You get what you want if you have money.	
43	Male		Father	My father is the powerful member of our family.	
44	Female		King	All wishes of a king are fulfilled.	
45	Male		Lion	Lion is the king of the forest. All animals in the forest listen to him.	
46	Male		Males	Males are powerful. They have influence on everybody.	
47	Female		Sea	Seas are very large. It would be a disaster if they overflow.	

In this theme, 10 students (10,63%) developed four different metaphors. Three students (3,19%) developed the metaphor "lightning". The reason for the lightning metaphor was the fear of lightening. In general, as the reason for the metaphors, politics was linked to fear and was seen as a concept to be feared of. It was observed

that the students attributed a negative meaning to the concept of politics. It can be argued that the students had undesired perceptions related to politics. The metaphors and reasons related to the theme "discomfort" are presented in Table 3.

As is shown in Table 3, 11 students (11,7%) developed 11 different metaphors under the theme "Discomfort". The fact that these metaphors were developed from a characteristic of politics that is forming an uncomfortable and unpeaceful situation is a remarkable finding. The students perceiving the concept of politics as being uncomfortable shows that they had negative views on politics. The emergence of the discomfort theme could be due to the politicians' actions and attitudes. This situation shows that the students expressed their metaphors in a way that is related to their daily lives. The metaphors and reasons related to the theme "power" are presented in Table 4.

Table 5: Students' Metaphors and Reasons Related to the Theme "Caring"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
48	Male	CARING	Field	If you care about your field and put your effort in it, the product will be high quality. If you care about politics and make effort, you will be successful.	7
49	Female		Glass	Glass gets broken. Politics is like glass, sensitive and important.	
50	Male		Lamp	Lamps provide us light. We cannot do anything without light. Light is important in our lives.	
51	Female		Baby	Babies are precious and important. They are delicate.	
52	Male		Diamond	Diamond is very valuable.	
53	Female		Light	I believe that if parties can work without fighting, Turkey will develop a lot. Our country will be in the light and everybody will be happy. Therefore, politics is important.	
54	Female		Baby	Everybody cares about the development of babies. Mothers try hard to keep them healthy.	
55	Male		Torch	A torch lightens its environment. It is an important tool in dark.	

As is shown in Table 5, 8 students (8,51%) developed 7 different metaphors under the theme "Caring". These metaphors emphasized the necessary care and sensitivity is not paid to politics, there will be bad consequences. It is notable that politics was regarded as important by the students. Two of the students also associated the concept of politics with the baby metaphor. Regarding the reasons for this metaphor, politics was associated with babies being prominent entities. As for the light, lamp and torch metaphors, they emphasized the characteristic of politics in enlightening and informing people. The metaphors and reasons related to the theme "love" are presented in Table 6.

Table 6: Students' Metaphors and Reasons Related to the Theme "Love"

No.	Gender	Themes	Metaphor	Reason	Number of Metaphors
56	Female	LOVE ELEMENT OF POLITICS	Father	I love my father.	11
57	Male		Library	I like spending time at the library.	
58	Female		Painting	I feel happy when I paint. I like watching politics news on TV. I carefully listen to what is going on in our country.	
59	Male		Me	I am very hard-working and successful. I love myself.	
60	Male		My mother	My mother loves us. Even if we annoy her, she kisses us afterwards.	
61	Female		Father	My father loves me very much. I love my father, too.	
62	Female		Studying	I like studying.	
63	Female		Books	I like reading books. I read a lot.	
64	Male		Cream of the Milk	Someone who likes milk also likes its cream.	
65	Female		My brother	My brother is gentle. He doesn't yell. He does as I say. He loves me.	
66	Male		Video Game	I like playing video games. If I play with my friends, I enjoy it even more.	
67	Female		My mother	I love my mother.	
68	Female		My Friend	I share all my secrets with my friend. We love each other.	

In this theme, 10 students (10,63%) developed 9 different metaphors. The examination of these metaphors showed that the reasons for developing these metaphors were associated with the concept of politics, and that there was a power that can be gained through politics. The fact that people who are in politics are in powerful positions can be observed in the metaphors developed by the students. The concept of power was associated with negative features and caused the perception that politics had an attitude away from democracy. The metaphors and reasons regarding the theme "Caring" are presented in Table 5.

Table 7: Students' Metaphors and Reasons Related to the Theme "Fight"

No.	Gender	Themes	Number of	Reason	Number of Metaphors
69	Female	FIGHT	Conflict	People who express their own views have a fight with others whose views are different and say bad things about those views.	20
70	Female		Neighbours	In our neighbourhood, the neighbours always fight with each other. I watched a meeting at the national parliament. People don't have respect to each other even there and they fight.	
71	Female		Different Views	People who have different views always fight with each other.	
72	Male		Playing Games	Sometimes we can't get along well while playing games and we fight.	
73	Female		Area of disturbance	There is always fight in the parliament.	
74	Female		Not being able to share a toy	There can be a big fight because of a toy.	
75	Male		Wars	Politicians fight with each other all the time.	
76	Female		Game	Sometimes we can't get along well while playing games and we fight. Politicians also fight and cannot get along.	
77	Female		Teams	Parties also fight with each other like teams.	
78	Female		Friend	Sometimes we have fight with our friends and sometimes we get along well.	
79	Female		Wild Boy	There is wildness in	

			politics, too.
80	Male	Conflict	Parties fight with each other all the time.
81	Male	Bumper Cars	Parties always fight with each other.
82	Male	Supporting a Team	I support Cimbom, you support Fener. Two old rivals fight with each other all the time.
83	Female	Marriage	You are sometimes happy, but sometimes have fight. Politics is also like marriage, makes people happy and unhappy.
84	Male	Street Fight	Politicians always fight.
85	Male	Bullfighting	If you annoy the bull, or hurt him, there will be a fight.
86	Male	Wife-Husband	They always fight.
87	Female	Conflict	Politicians have a conflict with those who have different views.
88	Female	Game	We start playing a game with children in the neighbourhood. We end up fighting before we finish. We take offense at each other and go home.
89	Female	Boxing Match	Politicians always fight in discussion programs.
90	Male	Panel Discussions	Politics refers to the conflict of different views. In panel discussions, people with different views cannot talk to each other, they fight.
91	Female	Teams	Teams are rivals of each other. There is always fight in football grounds.
92	Male	Bullfighting	There is a fight in environment where there is bullfighting. Sometimes the bull wins this fights, and sometimes the matador.
93	Female	Neighbour Fight	Neighbours love fighting. The old ladies in our

			neighbourhood are very aggressive.
94	Male	Wars	There are always conflicts in wars. Nobody can be happy in an environment of fight.

When the metaphors presented in Table 6 are examined, it can be seen that the students used the elements of love while developing metaphors related to politics. The students using metaphors that remind them love shows that they had a positive attitude towards politics. Metaphors such as father, library, painting, me, my mother, studying, books, cream of the milk, my brother, video game, my father and my friend are rich metaphors since they emphasize politics being a tool representing positive values. In addition, the library and books metaphors point out that knowledge is prominent in politics. The paining metaphor refers to solving the problems of the country, whereas the studying metaphors feature the importance of working hard. The metaphors and reasons related to the theme "fight" are presented in Table 7.

The findings show that 26 students (27,65%) developed 20 negative metaphors. When the source of this negativity was examined, it was found that for the analogy, the students mentioned reasons such as the conflicts of people having different views due to their communication problems and politicians being in fight with each other. The metaphor that can be regarded as the most interesting is "bumping cars". The parties being in a constant conflict with each other is the analogy used in this metaphor. The reasons for some of the metaphors included the following: "Nobody in the parliament have respect to each other, they fight. Politicians fight with each other all the time. Parties are in a constant fight. Discussion programs end up with fighting.". Students seeing politicians fighting and performing wrong behaviours seem to significantly affect their views about politics. In an environment where there is respect to human rights, children learn showing respect to human rights, while they learn tolerance in an environment where there is tolerance. The students' statements show that politicians do not accept differences and end up with fighting. Students at this age group being aware of this are a remarkable issue.

RESULTS AND DISCUSSION

Sixteen elementary school students who participated in the study (17,02%) associated the concept of politics with being crowded. Based on the students' metaphors, it can be concluded that politics has many elements, and it is represented by a crowded environment and crowded group with all these elements. Politics is, before anything else, a social activity. Arguing that politics is always a dialogue, not a monologue, Heywood (2014) mentions its characteristic of involving many individuals in dialogue, and at the same time, being perceived as crowded due to different views being together.

Ten elementary school students (10,63%) developed seven different metaphors related to the theme "fear". Regarding the reasons for developing these metaphors, it was found that politics was associated with the concept of fear. The students compared politics to elements that cause fear. Therefore, politics seem to connote power/powerful people in every respect. Discussing whether it is the fear that created

politics, or it is politics that created fear, Halis Çetin (2012) indicates that politics that is based on fear teaches individuals to obey in areas such as religion, media, bureaucracy and particularly education. He pointed out that individuals should not be afraid of their own state.

Eleven elementary school students (11,7%) developed a total of 11 metaphors related to the theme "discomfort". As for the reasons for developing these metaphors, politics seems to have a discomfoting aspect. Eleven students developing 11 different metaphors show that each student identified politics with a discomfoting situation in their lives.

The results of the current study also revealed that 10 elementary school students (10,63%) associated politics with metaphors related to the theme of "authority". Authority generally means the power of being able to have an influence on others and affect their behaviours without forcing and punishing them (Öztekin,2000:12). Within this theme, the students compared politics with metaphors that have the qualities to influence others (e.g. dragon, sultan, father, king and lion).

Eight elementary school students (8,51%) developed a total of seven metaphors related to the theme "caring". Regarding the reasons for developing these metaphors, it was found that the students perceived politics as important. Two of the students comparing politics with a baby metaphor revealed that they regarded politics as important as a baby. It is remarkable that the students associated politics with fear, but they also attached importance to politics and did not see it as unnecessary. Although they developed metaphors emphasizing fear, this caring and trustworthiness is the degree of expertise of the source in that area of communication and in addition, the degree of trust they feel against the audience; therefore, you trust the source you believe in and you regard it as important (Freedman, Sears, Carlsmith 1998: 350). For example, if a leader is minded on an issue related to the problems of the country and he/she is trusted, the words of that leader become more influential.

Thirteen elementary school students (11,41%) developed a total of 11 metaphors related to the theme "love". The female students were found to develop more metaphors than male students. Eight female students out of 13 elementary school students (8,51%) produced seven different metaphors, whereas five male students (5,31%) produced five metaphors towards the concept of politics. Recent studies university students showed that male students' tendency to politics, their levels of following political issues and their interests in politics were higher than those of female students (Dursun, 2007; Akhan, 2010; Çakmak, 2011; Tarhan; 2015). This finding of the study shows that while female students are more interested in politics during their elementary school period, this interest is gradually replaced with feelings such as being indifferent to politics, not liking politics and hating politics. One of the reasons why female students are interested in politics at elementary school level, but have opposite feelings afterwards can be that males are more dominant in real political life and do politics with a combative style. It is thought that by teaching students basic information related to politics starting from elementary school to university, students would be interested in politics and have positive feelings towards politics.

According to the results of the study, 26 elementary school students (27,65%) formed 20 metaphors related to the theme of "fight". In these metaphors, politics were compared to fight, conflict and disturbance. The high number of metaphors and the

students developing these metaphors shows that they see politics as a corrupted area. Politics being perceived as conflict, fight or war reveals the fact that politicians' way of doing politics is wrong. The elementary school students thought that politicians were not tolerant to those who have different views, and in this regard, they developed metaphors such as conflict (Female, 69; Female, 87), neighbours (Female, 70), different views (Female, 71) and panel discussions (Male, 90). It should not be disregarded that in this age of advanced transportation and communication opportunities, social interaction rapidly affect individuals in the positive or negative direction. Therefore, examples of clean politics should be increased in mass communication means. In order for the culture of democracy to develop, situations in which there are tolerance and respect to differences should be displayed.

It is also remarkable that students developing many negative metaphors as well as positive metaphors for politics. As a result, the findings of this study present important insights regarding that metaphors can be used as a powerful pedagogical tool in terms of revealing sixth, seventh and eighth graders' perceptions of the concept of politics. The students' positive and negative metaphors and thoughts obtained in this study can be used as needs analysis data for developing a social studies teaching curriculum in the future. In this respect, there is a need for more studies revealing elementary school students' views on the concept of politics. Then, the reasons behind their fear of politics can be found out.

Studies on politics mostly focus on university students. However, developing positive attitudes towards politics starts at early ages and not all young individuals go to university. Perhaps since it is thought that university students are more into politics, such studies are more frequent in the literature. Children start having certain political views and performing many political behaviours with the effect of their families, environment and media. That is why teaching children the information and skills towards politics starting from early ages is an important step to develop positive feelings in them. In this regard, it is of significance to start providing politics education at elementary school level. Consequently, studies on elementary school and middle school students should find more places in the literature.

This study was conducted with a small sample in the context of politics. Similar studies can be carried out with a larger sample, and with faculty members, teacher candidates or teachers.

Programs towards politics education in social studies course can be developed and their effectiveness can be tested in experimental studies.

Seminar can be organised for elementary school teachers on adjusting the issue of how basic information and skills of politics can be taught to students depending on grade levels and covering these topics in classes using appropriate methods and techniques.

Public service ads should be prepared to develop positive attitudes towards politics. Politicians should regularly visit elementary and middle schools and communicate with children.

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Chapter 27

Assessment of Process of Social Information Processing in Six-Year-Old Children

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INTRODUCTION

An individual is a being that comes into prominence with his/her social interactions in community life. Healthy relations established by an individual with his/her circle enable the development of their social skills. Social skill has an interpersonal quality and intends to maintain communication. According to Köksal-Akyol and Oğuz (2014), communication is in question in every aspect of social life and every individual needs to communicate with his/her circle. As children communicate with their families and friends in early childhood, they intensely gain social skills. Atay (2011) emphasises that social skill has different categories such as interacting with other individuals, establishing and maintaining communication, problem-solving, decision-making and implementing decisions, self-management, conflict-resolution and coping with difficulties, assertiveness, being together with peers, sharing, and cooperation.

Having social skills brings individuals to certain benefits in interpersonal relations. The use of these skills helps the individual to reach their goals. They enable them become a healthy and happy person in mental and psychological aspects and increase quality of life. In addition, those with social skills are more loved by their circle. Having social skills increases an individual's self-esteem and therefore ensures an opportunity to gain a place within the society (Avcıoğlu, 2005; Aşar & Öztürk-Kuter, 2007; Pfeffer, 2012; Sunderland, 2010; Yüksel, 1999, 2004).

Social skill generally signifies the condition where certain skills and knowledge are combined and includes cognitive and social competence (Dewe, 2001). Gaining primary social-emotional skills is expressed as a development task in early childhood and accepted as a prerequisite required for an individual to maintain their life in the future (Pfeffer, 2012).

Social skills develop firstly with family members within family, then with peer relations and other adults (Atay, 2011; Bacanlı, 1999). No person is immune to problems, given scarce resources, unlimited needs and inevitable change (Konan, 2013). Children need to combine various social understandings in order to solve social problems. As also explained in the Social Information Processing Model asserted by Crick and Dodge (1994), information processing model concerning social problem-solving is circular. This is because children usually participate in more than one information processing activity (interpretation of information, production of problem-solving strategies, assessment of these strategies etc). Additionally, in social information processing model, mental condition and particularly children's knowledge on social rules as well as their previous social experiences and their expectations

related to future experiences are effective on social information processing. Peers' evaluation and reactions on strategies that were put into practice are among the factors that are importantly emphasised in social problem-solving (Berk, 2013).

Social information processing model is a model which was established by Dodge *et al.*, in 1980s and focuses on the cognitive processes under the behavioural reactions of children against social situations (Dodge, 1985; Dodge & Crick, 1990; Crick & Dodge, 1996). The model expresses the significance of social cognition in terms of social competence. Social cognition stated in the model refers to the skills of reading and interpreting social situations correctly (Webster-Stratton & Lindsay, 1999). Crick and Dodge (1994) specified that there is a series of mental steps in this model before conducting social behaviours and these steps are listed as follows;

Encoding of external and internal cues: In this process, the child perceives social situations in their surroundings that they find more important. In this perception; sense systems and viewpoint are important. Socially competent children are interested in and attentive to the situations in social surroundings. Therefore, they can recognise conditions in a short time. On the other hand, aggressive children tend to think that conditions "include hostility and are conducted on purpose".

Accurate interpretation of those cues: The children interpret the social situations they face. In this interpretation process; information, memory, personal expectations, mental capacity, and experiences may be effective. In coding and interpretation, the children select and interpret what are related to them among the stimuli in their surroundings.

Clarification or selection of a goal: In this phase, the children notice their own goals. They create a series of behaviour examples towards the condition in question in their memories in line with these goals. Culture's influence may also be observed in the reaction search process. The children would seek the reaction among the behaviour examples of their own cultural structure.

Response access or construction: The children designate behaviours in their long-term memory in order to show their reactions. Children who are not inadequate in social information process skills have limited repertoire in terms of solutions. They can develop aggressive reactions according to their perceptions.

Response decision: The children designate the reaction they will give according to the situations they will face.

Behavioural enactment: The children conduct the reaction they designate (Crick & Dodge, 1994).

Children who show sufficient performance in each step are deemed as having social competence and developed social skills. Children, who experience problems in these steps and cannot give appropriate reactions, may likely exhibit aggressive and detrimental behaviours (Dodge, 1986). Studies have reported that aggressive children may experience some problems in the aforementioned steps compared to their nonaggressive peers (Dodge, 1994; Milich & Dodge, 1994).

The primary factors affecting children's social information processing in preschool period are family-related variables (socio-economic level, parents' attitudes, relation between parents and child, attachment, sibling relations), gender, age, and social skills (Abu-Taleb, 2013; Bigras & Crepaldi, 2013; Crick & Dodge, 1994; Perlman *et al.*, 2007; Raikes *et al.*, 2013). In this study, social information processing

of six-year-olds has been examined in terms of gender. Upon related literature review, some studies (Çorbacı-Oruç, 2008; Feldman & Dodge, 1987; Walker, 2004) have found some gender-inclusive differences in certain steps of social information processing; whereas some have revealed no differences in some steps. It has been reported in these studies that boys may develop more aggressive solutions compared to girls, and girls' tendency to prosocial behaviours has higher levels than their male peers. A great majority of studies concerning social information processing have examined the aggression. The main reason for this is that there is a close correlation between aggression and giving appropriate reactions in any step (or steps) according to the model (Crick & Dodge, 1994). Therefore; it is possible to encounter studies examining the correlation between gender, aggression and social information processing. For instance; in their study, Stetson-Werner *et al.*, (2006) reported that there was a correlation between boys' physical aggression and social information processing, but there was no correlation between relational aggression and social information processing in both genders. In parallel with them, Murphy and Eisenberg (2002) also state that boys produce more aggressive solutions in peer relations compared to girls and the number of solutions including constructive and prosocial behaviours is lower in men compared to girls. As is seen, some of the studies conducted on this subject have indicated a more evident difference particularly in the fourth (response access or construction) and fifth (response decision) steps between genders in terms of social information processing.

Even though the number of studies conducted in Turkey regarding social information processing in the early years of life has increased in recent years, they still are not at the sufficient level. Related studies examine social information processing in terms of social competence, skills of understanding emotions, behaviour problems, and peer relations (Çorbacı-Oruç, 2008; Dereli İman, 2013; Dinçer, 1995; Gülay-Ogelman & Seven, 2012; Kuyucu & Tepeli, 2013). As is seen, there is a need for studies analysing the social information processing of young children in Turkey in terms of different variables. When number of studies concerning this subject is increased, how preschool children interpret social situations they go through with their peers and what kind of strategies they develop in these situations can be investigated in terms of more different variables. Starting from this point of view, the purpose of this study is to assess social information processing of six-year-olds in terms of gender. Sub-goals of the study are as follows:

Do six-year-olds' ways of coding social situations presented show a statistically significant difference in terms of gender?

Do six-year-olds' ways of predicting the intention in social situations presented show a statistically significant difference in terms of gender?

Does the number of alternative solutions produced by six-year-olds regarding the social situations presented show a statistically significant difference in terms of gender?

Does the content of alternative solutions produced by six-year-olds regarding the social situations presented show a statistically significant difference in terms of gender?

Do the behaviours preferred by six-year-olds among the alternatives they produced for the social situations presented show a statistically significant difference

in terms of gender?

METHOD

This study, aiming to determine the effect of gender on processes of social information processing in children in the age group of 6, was conducted by using a screening model.

Participants

Determined by two kindergartens at Yenişehir district in Mersin as study groups, 115 children (59 girls, 56 boys) in the age group of 6, who voluntarily agreed to participate in the study, consisted the study group of the study.

Measures

In this study, “Personal Information Form” to collect information regarding the children and “Social Information Processing” scale to evaluate children’s social information processing processes were used.

Personal Information Form: Personal Information Form, developed by researchers with the purpose of obtaining demographic information of the children in the age group of six, included questions related to the child’s gender.

Social Information Processing Evaluation: For this study, children were presented various hypothetical situations in order to gather information regarding social information processing. Children were presented with one or more situations, and asked to produce a reaction. Researchers assessed the reactions of the children by scoring them. There are numerous studies that use the hypothetic method to interpret social information processing (Burks *et al.*, 1999; Dodge *et al.*, 1995; Dodge & Price, 1994; Feldman & Dodge, 1987. Cited in Çorbacı-Oruç, 2008). In this study, 11 items from the 60-item Preschool Taxonomy of Problem Situation (PTPS) were chosen with the help of teachers’ views for social information processing. These items, which were scale items that define hypothetical social situations, were illustrated by a painter that drew pictures for professional textbooks. The eleven items are the items that define the social situations which children face in peer relations; response to provocation, peer group entry, social expectations, and response to failure sub-scales. Children were shown the prepared pictures and were asked the questions stated below regarding each picture.

1. What do you see in this picture?
2. Why do you think the child is acting like this?
3. What do you think the child in the picture is capable of at this point (or in this situation)?
4. What would you do if you were in a similar situation?

Answers (reactions) given by the children regarding the picture-related questions were solved according to the categories stated below.

1. *Encoding of cues:* The perception of children towards the hypothetic situation can be “right” and “wrong.” Children scored “1” if they perceived the hypothetic situation correctly, and “2” if they perceived the hypothetic situation incorrectly.

2. *Interpretation of those cues:* Children can perceive the main intent of the hypothetic situation presented to them as “hostile,” “not hostile,” or neutral. Children that perceived the main intent of the hypothetic situation presented to them as “hostile” scored “1,” “2” if they were neutral, and “3” if they perceived the main

intent of the hypothetical situation as “not hostile.”

3. *Number of response decisions:* Children were asked to make response decisions for the hypothetical situations which they were presented. In terms of response decisions for eleven pictures, children scored “1” if they made “0-8” response decisions, “2” if they made “8-16” response decisions, “3” if they made “17-24” response decisions, and “4” if they made more than 25 response decisions.

4. *Content of the response decision:* The content of response decisions made by children for the hypothetical situations presented is assessed as aggression, authority dependent, passive, and solution based. Children that made behaviour alternatives such as physical violence, verbal harassment, name calling, and threatening were categorised as “aggressive,” children that made behaviour such as crying, walking away, sulking, and doing nothing were categorised as “passive,” children that created behaviour alternatives such as complaining to their parents and teachers and asking them for a solution were categorised as “authority dependent,” and those that verbally intervened to resolve the issue were categorised as “solution-based.”

5. *Behaviours selected from response decisions:* Which response decision do children decide to apply among the response decisions they make when presented hypothetical solution (s). As like the previous stage, the behaviour categories were determined as aggression, authority dependent, passive, and solution based (Çorbacı-Oruç, 2008).

Procedure

Interviews were held with kindergarten headmasters and teachers of classes, where study was planned to be conducted, in order to collect demographic information through the Personal Information Form and apply Social Information Processing Scale on children. During the application of Social Information Processing Scale, children were separately taken to a quiet room specified previously. Children who were not willing to participate in the application were not forced to participate. While applying Social Information Processing Scale, no break was taken between eleven pictures in order not to distract the attention of children. The scale’s pictures were respectively applied. The scale was applied four days a week for an approximate period of three months. Application of the scale lasted for 25-30 minutes for one child. The application was not completed with children who responded, “I don’t want to do this, I am bored” and stated that they were not willing to go on. Evaluations were made upon completion of the scale for every child.

Data Analysis

In this study, frequency and percentage calculations were made on a crosstab in order to determine if steps related to social information processing varied according to gender. The reason for preferring this analysis instead of chi-square analysis can be specified as follows: for the bivariate Chi-Square Test; when degree of freedom is $sd > 1$, if the number of subsets with an expected value lower than 5 exceeds 20% and if it is impossible or very difficult for the researcher to increase the number of subjects, there are three different solution options. The first one of these options is a rational combination at the related line or column levels; the second option is to exclude the lines or columns from the analysis in order to reduce the subsets with an expected value lower than 5, and if the first two options are not applicable,

interpretations could be made only by using frequencies and percentages on the crosstab (Büyüköztürk, 2010). In this study, frequencies and percentages on the crosstab were evaluated since the number of cells with the expected frequency number lower than 5 was higher than 20%.

RESULTS AND DISCUSSION

Results of this study conducted to evaluate the effect of gender on process of social information processing among children in the age group of six are given below.

When Table 1 was examined, it was observed that in the encoding process which is a sub-step of social information processing, 52.5% of female children encoded social situations right; whereas, 47.5% encoded wrong.

While the rate of encoding social situations right was 48.2% among boys, the rate of encoding wrong was 51.8%. When these rates were taken into consideration, it could be asserted that the rate of encoding social situations right among girls (52.5%) was higher than boys (48.2%). When the rates of all children included in the study were examined regardless of gender, it was remarkable that the rate of encoding social situations right among children was 50.4%, and the rate of encoding wrong was 49.6%. In a study conducted by Çorbacı-Oruç (2008) in order to evaluate process of social information processing among kindergarten children in terms of gender, it was reported that while all girls encoded social situations wrong, 99% of boys encoded them wrong. According to Köksal-Akyol and Körükçü (2003), it was observed that emphatic communication develops in children as cognitive development improves. The effect of withdrawing from egocentrism is great in order for them to play others' parts. In the study conducted by Oğuz and Köksal-Akyol (2008) to analyse the correlation between perspective-taking skills of children in the age group of six and their parents' empathy skills; no significant correlation was found between children's perceptive, cognitive and affective perspective-taking skills and their parents' empathy skills. The age of six is a phase that children do not yet grow out of egocentrism, however start to grow out of it towards the end of this age. Considering this development feature of children, it could be interpreted that their perspectives regarding social situations are not sufficient or developed completely yet.

In the intention-interpreting category, which is one of sub-steps of social information processing, 93.2% of girls were found to have a non-hostile intention. 6.8% of girls were neutral in terms of interpreting intention. None of the girls gave a response with hostile intention. According to this result, it could be interpreted that the girls included in the study did not adopt a hostile attitude when faced social situations. In the intention-interpreting category, 93.1% of boys had a non-hostile intention when evaluating social situations, whereas 7.1% were neutral; and 1.8% assessed social situations as hostile. In the intention-interpreting category, majority of all children (92.1%) with regard to evaluating social situations had a non-hostile intention. According to this result, it could be asserted that a great majority of children in the age group of six did not exhibit a hostile attitude or have a hostile intention when faced social situations regardless of gender. At this point, it could be thought that parents' attitudes towards the child or child's personality traits affected this result positively.

Table 1: Distribution of reactions regarding social information processing steps in terms of gender

Social Information Processing	Gender	Girls		Boys		Total	
		n	%	n	%	n	%
Encoding of cues	Right	31	52.5	27	48.2	58	50.4
	Wrong	28	47.5	29	51.8	57	49.6
Interpretation of those cues	Hostile	0	0.0	1	1.8	1	0.9
	Neutral	4	6.8	4	7.1	8	7.0
	Not hostile	55	93.2	51	93.1	106	92.1
Number of response decisions	0-8	0	0.0	3	5.4	3	2.6
	9-16	21	35.6	20	35.7	41	35.7
	17-24	32	54.2	28	50.0	60	52.2
	25+	6	10.2	5	8.9	11	9.6
Content of the response decision	Aggression	0	0.0	1	1.8	1	0.9
	Authority Dependent	0	0.0	0.0	0.0	0.0	0.0
	Passive	0	0.0	3	5.4	3	2.6
	Solution Based	59	100	52	92.9	111	96.5
Behaviours selected from response decisions	Aggression	0	0	2	3.6	2	1.7
	Authority Dependent	2	3.4	1	1.8	3	2.6
	Passive	0	0.0	2	3.6	2	1.7
	Solution Based	57	96.6	51	91.1	108	93.9

In the study of Aktaş (2001) where he analyzed the correlations between children's aggression and negative intention tendencies, children who were known to be aggressive in terms of social relations chose behaviour options including negative reactions more (interpretations on personal reasons and negative intentions) compared to non-aggressive children. The primary effect of gender was also observed on the tendency of interpreting hostile intentions. Additionally, in terms of aggression's sub-dimensions, the conditions of physical, passive and verbal hostility in hostile interpretation have generally been found more in boys compared to girls. The fact that none of the girls had the hostile intention and gave aggressive responses in our study may be associated with this correlation between aggression and hostile intention. Similarly, the fact that 1.8% of boys had the hostile intention and 1.8% focused on the solution that included an aggressive response may also be related to this correlation.

In the study conducted by Çorbacı-Oruç (2008), it was found that 21.2% of girls included in the study had hostile intentions whereas 75.7% had non-hostile intentions; 10.3% of boys had hostile intentions and 75.8% had non-hostile intentions. In the study conducted by Çorbacı-Oruç (2008), the number of girls was 33 and the number of boys was 29. In our study, on the other hand, the number of girls in the study group was 59, and the number of boys was 56. The difference between the obtained results may be associated with the number of children in the study groups. Or parents of the girls included in the study may have an authoritative and protective attitude.

When Table 1 was analyzed, it was observed that 54.2% of girls produced 17-24 alternative solutions for the eleven pictures in which social situations were presented, while 35.6% produced 9-16 alternative solutions and 10.2% produced 25 and above alternative solutions. The rate of boys who produced 17-24 alternative solutions for the social situations was 50%, whereas the rate of those who produced 9-16 solutions was 35.7%, and the rate of those who produced 25 and above alternative solutions was 8.9%. In terms of number of alternative solutions, the rate of all children who produced 17-24 alternative solutions was 52.2%. The rate of those who produced 9-16 solutions was 35.7%. The rate of children who produced 0-8 alternative solutions was considerably lower than the others (2.6%). The rate of children who produced 25 and above alternative solutions was 9.6% among all children. This result could be interpreted as the fact that a great majority of children were adequate in terms of the number of alternative solutions they produced when faced social situations. Children in preschool period encounter many problems. Most of these problems help children evaluate their daily lives, become good observers and reach their solutions in the process. When children encounter similar problems, their perceptions related to similar problems develop and therefore children focus on different solutions. There are similar social situations in the Social Information Processing Scale (for instance, a child is not wanted to play a game with others, a child wants to participate in a game of others). It was remarkable that the solutions produced by children for similar social situations during the study were similar. Additionally, they were also observed to think of different alternatives while producing solutions. This result may be asserted to be confirmed with this judgement. In their study, Çorbacı-Oruç (2008) found that girls and boys focused on the second category (9-16). In our study, girls and boys focused on the third category (17-24). In addition, families of children included in the study had medium and upper levels in terms of socio-economic level. In their study, Can-Akbaş (2005) reported that children's problem-solving skills increased as socio-economic level increased. This may have affected the number of problem-solving of children. Some studies have revealed that children's gender are not effective on their problem-solving skill (Dereli, 2008; Ertuğrul-Aydoğan, 2004; Gredlein and Bjorklund, 2005; Korkmaz, 2002; Kurt, 2007; Oğuz and Köksal Akyol, 2014; Şahin, 1999; Şahin, 2009; Tavlı, 2007; Terzi, 2003; Terzi-Işık, 2000; Thornton, 1999).

When the content of alternative solutions was analyzed in terms of gender, it was found that all girls (100%) were solution-based. This rate among boys was 92.9%. Girls were more solution-based among them compared to boys. Girls were observed to express themselves better in terms of gender compared to boys. They were more skilled at starting and maintaining communication than boys. This gender-specific feature of girls may be the reason for the fact that girls considered in a more solution-

focused manner than boys. Only 5.4% of responses given by boys to social situations were passive. 1.8% of boys gave responses that included hostility. When compared to boys, none of the girls mentioned any alternative solution that included hostility. Passive and hostile thinking tendency may be thought to affect each other. This is because boys who gave aggressive responses also gave passive responses. However, among girls, no aggressive or passive responses were observed. Independently of gender, the rate of children who thought passively in terms of the content of alternative solutions was 2.6%; whereas, the rate of those who gave hostile responses was 0.9%. 96.5% of children included in the study considered in a solution-focused manner. This results makes us think that the majority of children in the age group of six included in the study were able to solve social situations easily. Children are affected by their parents at home and by their teachers at school. In addition, children's personality traits may have also affected this result positively. In a study conducted by Çorbacı-Oruç (2008), 54.5% of girls produced solution-focused alternatives, whereas 39.3% of boys produced solution-oriented alternatives.

When the recommended behaviour category of the social information processing was analyzed; it was observed that while 96.6% of girls exhibited solution-focused behaviours, 3.4% exhibited authority-dependent behaviours. None of the girls suggested aggressive and passive behaviours for social situations. When the contents of alternative solutions were analyzed in terms of girls in the study, it was also observed that they did not give aggressive and passive responses. It was remarkable that recommended behaviours among boys were passive and aggressive at rates of 3.6%. In addition, 1.8% exhibited authority-dependent behaviours. On the other hand, 91.1% of boys recommended solution-focused behaviours. Yavuzer (2011) reported that boys were affected by their fathers' positive and negative attitudes towards them. Accordingly, the fact that a father always has high tolerance levels for his son or approaches his child with a strict discipline plays an important role in the child's behaviours. According to Cüceloğlu (2014), it is a common view that aggression may be a learned behaviour. According to this opinion, aggression is not only an innate characteristic, but it is also shaped by the environment. According to the Social Learning Theory of Bandura, children learn by imitating many things they see around themselves. As boys learn behaviour patterns and gender-specific behaviours by identifying themselves with their fathers in early childhood, the behaviours exhibited by fathers to their children are important (Dodge, 1985). Therefore, children who give aggressive responses and prefer such options as solutions are thought to be influenced by the father factor. In a study conducted on parental attitudes (Işık, 2006), children of parents who exhibited democratic parental attitudes were found to develop prosocial behaviours compared to the children of authoritative parents. Other studies have also reported that parental attitudes are effective on the aggressive behaviours of their children (Hatunoğlu, 1994; Kadan 2010; Olcay, 2008; Yavuz, 2007). In another study conducted with kindergarten children, it was reported the goals focused by children as solutions while problem-solving and the strategies they chose showed consistency with the social information processing patterns of their parents and particularly the social information processing patterns of their fathers (McDowell and Parke, 2002). When the literature is reviewed, children are seen to be influenced by their parents' behaviours. According to the results of this study, one can interpret that children were

similarly influenced by the positive behaviours of their parents positively and did not prefer non-aggressive and non-passive behaviours. When recommended behaviours were evaluated in terms of all children, it was remarkable that 93.9% of children, which is a high rate, recommended solution-focused behaviours. It was specified that 1.7% of children recommended aggressive behaviours, 1.7% recommended passive behaviours and 2.6% recommended authority-dependent behaviours. While giving answers in the recommended behaviour category of the study, children were affected by alternative solution content and gave answers. In other words, when children gave answers for the recommended behaviour, they preferred responses among the responses of children to alternative solutions. Therefore, these two categories were thought to affect each other. In a study conducted by Kurnaz and Kapçı (2008), it was found that a child's gender did not lead to a significant difference in observed and relational aggression levels. In this study, percentage distributions were taken in terms of gender. However, when analysed in terms of the responses which included aggression independently of gender, the percentage distribution was observed to be very low. In a study conducted by Çorbacı-Oruç (2008), 60.6% of girls were solution-focused in terms of recommended behaviours, whereas 42.8% of boys were solution-focused.

CONCLUSIONS

The following recommendations can be made in the light of the results obtained from the study:

- Parents can affect their children's perspectives, intentions and behaviours related to social situations even more positively in the communication they establish with their children.
- Parents can observe their children's behaviours when they face social situations and lead their children for developing ideal behaviours.
- A small part of girls and boys was found to give authority-inclined responses in terms of the recommended behaviours in the study. According to this result, parents can be recommended to be democratic in their attitudes towards their children. Children exhibit behaviours accordingly when they encounter parents who adopt oppressive and authoritative attitudes or protective attitudes. This leads to authority-dependent behaviours preferred by children when they encounter social situations.
- Preschool teachers can develop activities in preschool education programs that enable children solve problematic situations efficiently regarding their daily lives.
- 1.8% of boys in the study gave answers with a hostile intention. Male children gain their sexual identities in the preschool period by identifying themselves with their fathers. A qualitative study can be conducted regarding to what extent and how the father factor affects a boy's perspective with regard to social situations.
- While very few boys gave passive and aggressive responses in the study, almost no tendency was observed among girls in terms of giving passive and aggressive responses. This situation's correlation with violence can be investigated. It can be examined whether there is a difference between genders.
- A study can be planned by assessing the content of alternative solutions in social information processing of children and the recommended behaviours.
- The same study can be conducted on a broader sample group.

- The correlation between parental attitudes and children's social information processing processes can be examined.

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Chapter 28

Sensory Integration Disorder

Saliha ÇETİN SULTANOĞLU & Neriman ARAL

People response to stimuli in variety of ways, from the outside world or from their own body. Beginning of the incident, emergence of the stimulus and the way for perceiving that event is very important in this process. Sensory organs are special organs that percieves stimuli from the environment and transmits them to the centers in the brain and then interprets the stumili. These organs are auditive-balance, tactile, visual, taste and olfactory organs. Sense is defined as being able to percieve changes such as physical, chemical, electrical and mental stimuli which occur in an organism and around organism through sensory organs. Sensory integration can be defined as appropriate responses to the stimuli through sensory input from the environment that stimulates the senses and processed by the sensory processing centers in the brain (Kronowitz, 2006; Miller and Lane, 2000). Sensory integration disorder is inability to organize sensory stimuli or caused by incorrect processing of sensory stimuli at the brain and inappropriate response to sensory input or sensory organization disorder (Engel-Yeger, 2008).

Sensory integration is very important for individuals to have healthy interaction with their own organisms and their environment. If any problem occurs about sensory integration this problem affect the whole life of the individual negatively. Increase in the studies and researches for the sensory integration dysfunction area are thought to be important in terms of offering diagnosing, appropriate training and treatment services. To sustain a life in a way that is compatible with an individual's own and their environment is possible with healthy sensory integration.

In this section the definition and importance of sensory integration, sensory integration theory, sensory integration and sensory integration disorder and its types and recommendations for sensory integration are evaluated and described.

SENSORY INTEGRATION

Sensory integration is neurological processes and organizations that occur through reception of sensory information and interpretation of it through the central nervous system. Senses are being used to survive, to learn new things, enjoy doing activities and comply with the environment (Isbell and Isbell, 2007; Kronowitz, 2006; Miller and Lane, 2000).

Sensory integration is in general creating whole from the parts, making meaningful stimulates that is recieved through the senses by the help of central nervous system. In addition, sensory integration represents registration of physical stimuli, neural transmission, perception, learning and movement (Ahn *et al.*, 2004; Altıok, 2011).

For sensory integration brain should choose, develop, demonstrate, compare, adapts sensory information in short brain should combine the informations (Maurer, 1999).

Investigating the literature about sensory integration in every twenty children have sensory integration disorder is observed. Sensory integration disorder is responding difficulty to the (adaptive) sensory stimuli appropriately (Ahn *et al.*, 2004). Appropriate response is essential in a healthy sensory integration. Reaching to their rattle is an indication of an appropriate response for the baby. To be the appropriate response for the movement should be meaningful and meaningless movements do not include appropriate responses (Altıok, 2011).

Sensory Integration Theory

Scientist have various studies related to the senses throughout history. However, sensory integration and sensory integration therapy theory was put forward in 1960 by Ayres who is an American doctor. Jean Ayres is a clinical psychologist and also an occupational therapist at the same time. She has studies about neuroscience, physical development and neural muscular functions. The original definition of sensory integration is the ability to organize sensory information to use it. The book of Ayres which is published in 1973 "Sensory Integration and Learning Difficulties" identification of sensory integration disorder and sensory integration theory is mentioned. Sensory integration therapy put in practice by J.Ayres, after research and studies done in the University of Southern California, and after that it's used for the solution of many problems in children around the world as an important method of therapy. Stimulating certain areas of the body and providing senses work in harmony among the purpose of this theory (Maurer, 1999; Miller and Lane, 2000) Sensory integration is a theory which is containing brain-behavior relationships. Sensory integration theory shows the reasons for the behavior of individuals, intervention according to the specific difficulty, the changes can be observed in behavior after necessary interventions (Bundy *et al.*, 2002).

Sensory Integration Disorder

It is a functional disorder for editing sensory input, organizing, depth and dysfunction to respond appropriately to sensory input. This disorder can be seen in one or more sensory systems or in all sensory systems as well. Sensory integration dysfunction is not only seen in children with special needs. The rate of sensory integration disorder seen in children without special needs ranged from 5 % to 10 % (Engel-Yeger, 2008).

Sensory integration disorder is seen in various groups such as; children with speech and language problems, children with autism and pervasive developmental disorder, children with hearing-vision problems, children with learning disabilities, gifted and talented, with cerebral palsy and those born prematurely. Considering the quantitative and functional neuroimaging studies in some sensory motor disorders and sensory mapping disorders are thought to arise from anatomical differences (Eide, 2003).

According to Nelson (1999), all individuals may experience sensory integration problems due to changing circumstances of their biological and physiological conditions time to time.

The development of sensory integration usually covers the period from birth until the age of seven. In this period children learn by their senses and their body to explore the world. Because of the the play has very important place on learning for children,

activities should include senses and feelings during the zero to seven year old period. The first years of this period is called the sensory-motor period. If children in sensory-motor development period carry out the sensory integration in healthy way they can provide a solid infrastructure for the future life skills (Altiok, 2011).

Sensory Integration Disorder Types

Sensory integration disorder is also known as regulatory sensory processing disorder or sensory integration disorder. Bundy *et al.* (2002), have divided sensory integration dysfunction into two sub-categories such as movement planning disorder and weak movement skills.

Sensory integration disorder is often described by dividing into three groups. These are;

Sensory modulation disorder,

Sensory discrimination disorder,

Motor planning disorder (dyspraxia) (Bundy *et al.*, 2002; Goldstein and Morewitz, 2011).

Sensory Modulation Disorder

Modulation is defined as central nervous system's (CNS), regulation of its own movement and activities. If a problem occurs in this regulation some information that reaches to the central nervous system is perceived more or less than necessary and also different types are seen according to the individual those exposed to these disorder (Bundy *et al.*, 2002; Miller and Lane, 2000).

There are three sub-types of sensory modulation disorder such as extreme hypersensitivity extreme insensitivity and unresponsiveness. These can be explained as follows.

Extreme hypersensitivity is named as sensory defense. Children with hypersensitivity can develop reactions to sensory input more than it should be. Children with hypersensitivity usually do not like being touched, some fabric textures can irritate them, overly sensitive to light and do not like directly looking into eyes so they avoid eye contact. When they exposed to this kind of situation can develop behavior problems (Goldstein and Morewitz, 2011).

Extreme insensitivity, children having extreme insensitivity are extremely insensitive to sensory inputs compared to their peers and their toleration levels to sensory input are quite high. These children are in search of sensory input, unlike the overly sensitive children they like touching, hitting around and friends, excessive light and noisy environments. Also children with extreme insensitivity usually chew an object in their mouth (and Isbell Isbell, 2007).

Unresponsiveness, in this kind of modulation disorders children are extremely unresponsive to sensory input. These children needs very strong sensory input in order to respond to sensory input compared to their peers. Children who develop unresponsiveness do not respond when they hit an object and an individual or someone hits them. Therefore, they are frequently exposed to injuries. These children usually do not participate in peer group play and prefer the activities that they can play alone (Isbell and Isbell, 2007; Kronowitz, 2006).

Sensory Discrimination Disorder

Children with sensory discrimination disorder have problem in defining, distinguishing the sensory input and complying with sensory information. These children usually have poor body control and motor planning disorder, they can also have attention and organization related difficulties (Goldstein and Morewitz, 2011; Miller and Lane, 2000).

Motor Planning Disorder

Motor planning disorder is also named as praxis, it is an ability to transform sensory input into the purposeful movement and ability to conduct sequence needed for movement. Acquisition of gross and fine motor skills is very important in order to have motor planning healthfully. Children with motor planning disorder can not perceive the sensory input correctly so they can not perform the movement in a right sequenced way that they need to do. Children with dyspraxia often avoid activities and behavior in a group, may not perform fine motor skills that is required by the age and may move slowly (Bumin, 2007, Bundy *et al.*, 2002).

Disorders in Senses

Successful and effective learning experiences takes place by processing the information received by the senses. Sensory integration disorder is experienced when there is any problem in one or more of these senses (Moyes, 2010). Sensory disorders in general are;

Disorder of Visual Sense: visual sense depends on visual ability that includes visual skills, use of eye muscles and controlling eyes appropriately. Controlled eye movements are important for finding objects, following, focusing, and proper hand-eye coordination. Some problems may occur if objects around can not perceived properly (Altıok, 2011; Moller, 2003). Visual information is very important in providing body control particularly in those individuals with kinesthetic system disorders (Connolly, 2004). Visual integration skill is converting appropriate output for the objects that are visually perceived. Visual integration requires visual perception, psycho-motor speed and hand-eye coordination. Central nervous system, brain and sensory systems are effective in the formation of the visual integration (Tekok- Kılıç *et al.*, 2010).

Visual integration disorder is a problem in responding to the perceived visual stimuli appropriately. Various visual problems can be seen in children with this disorder. While some of these children are extremely sensitive to visual stimuli the others can be extremely insensitive or unresponsive.

Children with visual integration disorder generally;

Have attention deficit

Limited eye contact

Feel uncomfortable in bright areas

Can not read book for long time

Have difficulty in finding the stuff.

Have double vision problems.

May have difficulty in following an object with their eyes.

Difficulty to understand part and whole relation.

Stay away from sun light or other bright colors.

Rubs their eyes.

Closes their eyes when someone throws an object or a ball to them.

Distance awareness is undeveloped (Isbell and Isbell, 2007).

Sharp colors, lights that are lively and fast changing, activities or events have orange and red colours used in should be established for children who are insensitive to visual stimuli. Constant light, dim light, event that has soothing visual stimuli with blue and green colors used in should be organized for children who are hypersensitive to visual stimuli (Altiok, 2011).

Disorder of Hearing Sense: Some children with hearing problems may hear sounds but in insufficient and incorrect way. These children also get normal scores in from hearing tests. Although some children with sensory integration disorder feels to hear everyday sounds very uncomfortable while some other children are interested in the sounds with higher frequency. Children with hearing impairment are generally divided into three groups. While some of them are extremely hypersensitive to sounds the other group is extremeley insensitive, and children who are in third group is completely unresponsive to the sounds (Isbell and Isbell, 2007; Schneider, 2001). Gavin *et al.* (2001), found children with Sensory Integration Disorder were varying in response to the visual stimulus than their peers with normal development based on their study.

Disorder of Taste Sense: Taste sense is basic sense that is necessary to survive as in other senses the fetus starts sucking approximately thirteen weeks of maturation with swallowing the womb (Tecklin, 2008). Through this sense a nutrient is percieved as sweet, salty or sour. Although a sense of taste and olfactory to be intertwined large proportion of the taste sense perception based on olfactory (Coran *et al.*, 2004). It is stated that because of the flu nose is stuffy its imposibble to smell and the appetite is low during these times. In case of taste sense disorder individual could be extremely sensitive or unresponsive tastes and texture of some foods. Therefore the individual can consume harmful foods without being aware of it or avoid eating certain beneficial foods, life-threatening problems might occur in both cases (Kronowitz, 2006).

Disorder of Olfactory Sense: The olfactory sense is one of the senses that often unrecognized but could greatly affect human life. Fragrances can access more quickly to memory rather than in other senses. The brain interprets information about the olfactory sense quickly and this often ocur below the level of consciousness. Fragrances classified as secure, should be avoided and the fragnences which are dangerous. When the dangerous fragnences are percieved immediate action signal given to the brain. For example, when exposed to a gas leak signals are transmitted to the brain with intense fragnence (Jacob, 2002; Schneider, 2001).

The sense of taste is intertwined with the olfactory sense, an edible substance smell before eating if the sense of smell is perceived as pleasant it becomes edible. When substances snuff such as mold, chemicals substances perception of harmful and inedible and the tendency to staying away from this type of material is shown. Exposure to intense smoke or gas leakage is prevented through the senses from situations that might be dangerous except taste. People with disorders of smell have difficulty in perceving negative situation about smell and after that may come across

to difficult situation (Altınok, 2011).

Disorder of Touch Sense: Sense of touch disorder occurs when there is coordination problems in the system of touch and unable to make sense of the information coming through the receptors or a result of interpreting wrongly. Majority of people with sense of touch disorder have eating problems and also eating disorders. While some of the individuals with this disorder are extremely sensitive to touch the others might be extremely insensitive or unresponsive (Bundy *et al.*, 2002; Isbell and Isbell, 2007). When studies examined children who are more sensitive to the sense of touch exhibits abnormal behavior patterns, by making repeated movements they represents discomfort (Tomchek and Dunn, 2007).

Disorder of Balance Sense: Neural output is effective in the formation of postural balance which is known as the motion and balance function of vestibular system. Other factors which are effective in maintaining postural balance is pressure receptors in the foot skin, receptors that provide tension in the tendons and muscles and visual ability. Mixed messages to the brain from multiple sources might cause a problems in the brain to get visual signals right and convert them to the motion. The disorder that occurs in vestibular system named as motion sickness and during this sickness sweating, vomiting, dizziness, drowsiness and nausea is observed (Moller, 2003; Spence, 2002).

Vestibular system provides balance, posture and movement sense through the receiver placed in the inner ear. By providing the balance gives information about the gravity and position in space (Bundy *et al.*, 2002).

If there is a functional disorder between motor planning and sensory integration problems occurs such as inability to adapt, have balance problems feeling not being part of the body. When there is a functional and coordinational disorder in balance and motion system integration dysfunction is observed cause of this might be the brain's interpretation of the signals in a wrong way. Children with sensory motor disorder have also developmental coordination disorder especially who has damaged perception. Developmental coordination disorder incidence stated 6% in children aged from five to eleven years old. Children with developmental coordination disorder are physically weaker than their peers (Kaufman and Schilling, 2007). Children with balance-movement disorders have problems in lateralization which is usage and awareness about the concept of right and left sides of the body. Compared to their peers for some children having this awareness lately or not having it at all might be shown between the symptoms of vestibular sensory integration disorder (Schnider, 2001).

Disorder of Body Awareness Sense: When there is a problem with body awareness sense of body awareness can not be occur fully; and also problems seen in knowledge about body position and parts, regulation of gross and fine motor movements. In addition, this sense named as "sense position" which collaborates with sense of touch and sense of movement. The knowledge of joints bended or strained and the information about where the body parts are felt by the sense of body awareness (Moyes, 2010).

According to Isbell and Isbell (2007), children with sense of body awareness advanced more exhibits behavior such as thumb sucking, nail biting, like being hit by objects or people, biting, pushing and kicking. In addition, these children like sleeping

when being wrapped tightly in a blanket and being shaken, prefers to play difficult games that require physical strength and power. Children with less developed sense of body awareness have generally poor in fine muscle motor skills and have coordination problems in gross muscle motor skills. These children do not cry if they physically injured, learns dressing and undressing skills slowly, do not realize when they hit an object or person or they been hit by somebody.

CONCLUSIONS AND RECOMMENDATIONS

Although sensory integration disorder is seen more in children cases can not be considered to be noticed or noticed later as it is seen with different disabilities. Therefore, early diagnosis is important for the treatment and education of sensory integration disorder. The type of sensory integration disorder and the degree of it should be determined when diagnosing. The type and degree of sensory integration disorder is important in treatment and education of sensory integration dysfunction. Because of this awareness of professionals working in the area about sensory integration disorder will be effective in diagnosing. In this context informational meeting could be done on the issue with professionals working in the area for families. Hypo therapy, hydrotherapy, dance therapy, play therapy, sherborne developmental movement training, dolphin therapy, drama therapy, occupational therapy may be included in to the children's education and treatment programs.

In this section it is intended to maintain awareness of the sensory integration disorder and give some information about this disorder. Professional who works with children having sensory integration disorder should be aware each child's personal and developmental characteristics and must take these aspects into account when planning.

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Chapter 29

The Effect of Physical Environment in Preschools on the Development of Children

Nalan ARABACI

INTRODUCTION

The initial education of individuals begins with the family; then develops further with play, school environment and other social environments. The first step of formal education in Turkey and all around the world consists of pre-school education. Most of the research studies indicate that the effects of childhood experiences last for a lifetime and the basic tendencies acquired during childhood have an important and considerable effect on the later years (Dewey, 1996; Yeşil, 2004). The pre-school curricula developed for this aim, to contribute to the ultimate development of the child, are prepared in accordance with the age and development level of the child as well as the characteristics of the environment of the child and in line with the needs of the child and the society.

Although there are several differences between the pre-school curricula; they have common characteristics such as achieving specific objectives, ensuring appropriate conditions for the individual needs of the child, creating an atmosphere based on human relations, having activities directed and guided by the student and the teacher in balance and having a fun environment where students enjoy the activities. In a research conducted by Zembat *et al.*, pre-school curricula have been analysed in terms of developmental areas and it has been identified that cognitive development is the most considered area within the curricula (with a rate of 43.7%). Within the same research, it was identified that social development covers 17.6% of the curricula, whereas self-care skills cover 10.1% and physical education covers 9.9%. According to Özer & Özer (2000), the least considered activity in pre-schools is physical education and motion-related activities. In addition, families do not attach importance to these activities (Özer & Özer, 2000; Arabacı, 2003; Dursun, 2003; Arabacı & Aksoy, 2005).

The environment where education and teaching processes take place and learning activities are conducted are referred to as 'environment', where participants interact with each other and with the knowledge. *Educational environments* are dynamic structures consisting of sub-components such as staff, physical environment, equipment, learning materials and special set-up. As a dimension of this structure, *physical environment* refers to the environment allocated for the educational activities and it has specific characteristics. The appropriateness of physical environment and conditions would refer to consistency with the curriculum content and objectives; as well as a set-up in cooperation with the components affecting the learning process. Well-designed education environment helps children to develop skills such as motor, cognitive, lingual, social development, learning, decision making and aesthetic and also gives opportunity to reveal their natural talents and creativeness. Steiner explains

the effect of environment on education as follows: “The child can only reach his/her real potential in a learning environment equipped in accordance with his/her development. Children in pre-school period express their reactions towards the environment with instant behaviours. For this reason, the context of design for designing the environment and structures appropriate to early ages should consider “affective variety and diversity” (Aydın, 2000; Uludağ & Odacı, 2002 ; Yazıcı *et al.*, 2003 ; Steiner, 2008).

THE RELATIONSHIP BETWEEN SCHOOL ENVIRONMENT AND THE CHILD DURING PRE-SCHOOL PERIOD

Early childhood pedagogues and neurologists believe that the first eight years of life are very important for the brain development. In this period, children can have opportunities to think, generate innovation, feel good, control the environment, experience self-respect and belonging feelings through active learning in a well-arranged environment. Most of the theoreticians and pedagogues working on early childhood development agree that learning in children begins with motion and their intellectual success in the future will enhance with the use of senses and motor skills. Acquiring motor skills is not only important for the physical and intellectual development, but also for the social and emotional development. Psychomotor skills, especially in the childhood period, play an important role in developing self-respect and establishing a place among friends. The inadequate development of motor skills can cause children to perceive themselves being ‘incompetent’ during the physical activities. If the motor learning during the childhood period is not sufficient, more complex learning in the later years can be hindered. Child’s motor activities have a very important place in contributing to the achievement of complex activities in the later stages. For this reason, children should be able to move comfortably in physical environments that have been arranged specifically for them. According to the researches conducted, all the dimensions of basic motor skills that could be acquired by the children are shaped during pre-school and primary school periods. One of the main characteristics of pre-school children is their mobility. This mobility can be seen in gross motor activities such as running, jumping, bouncing and playing with the ball and rope. It is known that 6-year-olds are very fond of activities related to throwing the ball and running. In the study conducted by Güven (1994) on the analysis of skills within child development areas for the aim of suggesting appropriate curricula, motor skills of children that attended pre-school and motor skills of children that did not attend pre-school have been analysed. It was identified that the children who did not attend pre-school had better motor skills in areas such as catching the ball, skipping rope, jumping and turning around, leaping off, standing on one foot and hanging from a bar; because they have more environmental opportunities to develop these skills and they have more freedom to move around in a natural environment. Wider spaces are needed for developing these types of skills. While children realise their borders of abilities within the scope of sports and motion, they gain experiences in using their bodies and they can have a more efficient relationship with the environment. The child does not only learn how to use his/her body in coordination and based on skills but also strengthens his/her communication with the environment by using the skills he/she has acquired. This is another effective way of self-expression. In a study conducted by Diem (1982) on 165 children between 4 to 6-year-olds, it was identified

that motor stimulants provided for children at an early stage affect their motor, social and individual development significantly (Sevimay, 1986 ; Güven, 1994; Tuğrul, 1997 ; Muratlı, 1997 ; Theemes, 1999 ; Weikart, 2000 ; Demiriz *et al.*, 2003 ; Dursun, 2003 ; Yılmaz & Bulut, 2003; Bal, 2005; Sivrikaya, 2009; Özer, 2012).

Another way of expressing emotions during the learning process in pre-school period is play and motion. Emotion in the child means motion and it is known that physicality triggers learning. Play is the most efficient way that affects the creative thinking process of the child, preparing the child to adulthood. Within the scope of the IPA Declaration of the Child's Right to Play (1977), the essential importance of play for the development potential of every child is emphasized besides the need for nutrition, health, sheltering and education. As the child plays, the skills enhance and the abilities develop. According to the Article 7 of the UN Declaration of the Rights of the Child; the child should be provided with all the opportunities regarding play and amusement together with education, and the society should make efforts to increase the possibilities for the child to make use of this right. It is known that the environment has an effect on the potential of play. Research shows that playgrounds are not only important for physical power, but also for the development of mental, social and emotional skills. Play environment should facilitate different activities and different types of games such as creative games, play/games with natural elements, water and sand games and silent games. For the establishment of an environmental awareness and for stimulating the development of perception and motor skills, the child should experience different environments. For the child to have a feeling of environment and space, the child should learn concepts such as below-above, inside-outside, open-close, left-right, close-far. Repetition of shapes, textures, colours, designs and sounds is important for the child to learn these concepts. A playground should help the child to develop concepts such as shape, dimension, number, relationship between the pieces etc. On the other hand, environmental consciousness is a universal value that needs to be acquired during childhood years. A child that grows up with this consciousness will be well-educated, consistent and sensitive about keeping the environment clean and protecting it. It is argued that environmental education supports the self-confidence of children in addition to supporting their learning and development via direct interaction with the environment as well as establishing a positive attitude towards the environment. For this reason, environmental education should be included in pre-school period, when the development and learning capacity of the child is the fastest. For all these reasons, play and child development should be included into the curricula of all individuals that interact with children throughout their professional life; including architects, planners, landscape architects and educators. Governments and local authorities should solemnly consider ensuring the right conditions of the child's life, inside and outside the school (Wilson, 1996; Tekkaya, 2001; Yılmaz & Bulut, 2003; Tuğrul, 2005; Güler, 2009; Gülay, 2011).

THE EFFECT OF OPEN SPACES IN PRE-SCHOOLS ON THE DEVELOPMENT OF CHILDREN

Even though the importance of motion and play is very well known for the development of children, the number of green and empty areas around us are getting less and less due to rapid urbanisation and unplanned settlement; creating a problem

for our age.

When we look around us, it could be seen that the spaces and areas where children can be in nature are very limited; there are not enough places that respond to their needs and contribute to their education. Therefore, due to the lack of secure open spaces and outdoor areas (such as parks, playgrounds, city forests, squares etc.), most of the children spend the majority of their time indoors and have a very limited relationship with the nature. It is observed that there are no unique structures around us, or within the educational institutions that are intended for the children, including the outdoor areas. However in the research studies conducted on the advantages of spending time outdoors for children, it has been identified that open air supports the physical development of children, strengthens their imagination, extends their attention span and makes them more creative, cooperative and stressless. Besides, certain research studies indicate that natural light makes people happier by stimulating pineal gland in the brain, that is essential for the immune system and that regulates the biological clock. Learning and productivity increases with the natural light and Vitamin D synthesis in open air. In parallel with this information, according to an approach followed by the Scandinavian countries for the children to make maximum use of open air, babies sleep outdoors during nap time in some of the pre-schools in Denmark. The justification for the babies to sleep in open air even during rainy and snowy weather is for them to get used to cold weather and to make maximum use of open air and its advantages (Gönen, 1992; Wake *et al.*, 2003; Başal, 2005; Onur, 2007; Erden, 2012; Akkılıç Kansu, 2015).

The condition for reaching all these advantages during pre-school education is to have outdoor and indoor facilities that can provide these opportunities for children. Within the research studies conducted in Turkey on the analysis and review of physical equipment and structure of pre-school institutions in Turkey, it has been identified that there are significant deficiencies in terms of cleanliness, sound insulation, security, playgrounds and schoolyards, appropriateness of educational materials, quantitative sufficiency of materials and their use. Apart from these academic studies, within the Internal Inspection Report on Pre-School Education Process prepared by the Ministry of National Education in 2010, it is mentioned that there are significant insufficiencies in terms of physical environment and materials. Gallahue (1982) emphasizes that a regular, systematic and high-quality learning and teaching environment is needed for the child to develop his/her motor and social abilities. Children can only lean to various activities in line with their interests and needs in a well-organised and stimulating environment; their creativity can also be supported. Learning centres should be organised as they are intended, for children to benefit from activities inside and outside classrooms. It should be remembered that education institutions should be planned with flexibility in order to make building volume expand or narrow and there should be a possibility to change the design easily. In line with this information, the design aspect of the educational environments should not be ignored and the designs should be created consciously. Being one of the most important sections of kindergartens, yard areas should not be perceived as an independent area from indoor places. Outdoor spaces and materials in these areas in pre-school education institutions are as important as indoor spaces and materials for the development of children. Especially allocating an open space for the planning of a

schoolyard will not be the solution for its design. Open spaces should be planned in line with the character of the school, the education level, its type and function as well as the social structure of the environment and recreational opportunities. It is important that students, educators, school-family union members, decision-makers and experts are all involved in the design of schoolyards (Aydoğan, 1972; Willams, 1983; Gallahue, 1989; Moore & Lackney, 1994; Oğuzkan *et al.*, 2000; Algan & Uslu, 2009; Özdemir & Yılmaz, 2009; Zembat, 2001; Biehl, 2011; Pinar, 2012).

It should be accepted that the nature of education would require indoor and outdoor facilities. In Turkey, in pre-school institutions, most of the activities during the day are conducted in the classroom environment. Schoolyards are mainly used for special days and celebrations. There is usually not an allocated space for motion, music, dance, drama etc. In these types of situations, limitations on facilities and space cause the removal of most of the activities from the curriculum by the teacher. Organisation and arrangement of the space inside and outside the classroom can contribute to the effectiveness of education. It has been observed that schoolyards that are active and dynamic reflect a vivid and positive message to the neighbourhood they are located in; whereas schoolyards that are not well-organised or worn-out reflect a negative image about the neighbourhood they are situated in. According to the research studies conducted; more opportunities arise for play, sports, educational activities as well as social-cultural events if the schoolyards are well-organised and this also contributes to the development of children in many aspects (Takahashi, 1999; Fjørtoft & Sageie, 2000; Menino, 2000; Fisman, 2001; Corson, 2003; Özdemir & Yılmaz, 2009; Miller *et al.*, 2009; Sabırlı, 2012).

Within this context, there are several issues that need to be considered in planning the schoolyards of pre-school institutions. The first issue is the use of school grounds with their natural characteristics without much intervention. Excessive filling and excavation work should be avoided as well as high retaining walls with steps and side slopes. In addition, the main entrance of schoolyards should be from the side roads where the traffic is not busy; cars and school busses should leave the school from the backyard; there should be easy access to the school building by the ambulance and fire truck when necessary. One of the most important aspects of learning is to experience the environment, changing the environment and observing the outcome; thus learning through this whole experience. For this reason, playgrounds should be appropriate to the child's dimensions, sense of discovery, cognitive development, development of creativity skills, child's instinct to move, concentration, knowing self and social development. Experimental research outcomes indicate that concepts such as shape, dimension, colour, direction, perspective, distance, texture etc. develop during pre-school years. For this reason, schools should be designed with rich stimulants in different forms, colours and textures to provide opportunities for children to explore and experience their environment. Soil, sand and water are attractive play instruments for children at any age, allowing them to experience, discover and create. For this reason, there should be materials in the playgrounds that allow children to build new structures; such as sand, water, pebble etc. Water is an important play element for children to develop the sense of touch and for releasing stress. Children are also very much fond of the feeling of speeding-up, climbing and reaching heights. They gain new perspectives in regards to their

environment from these heights. Various mechanisms and trees that children can climb to would make the garden more attractive and trees can provide shadow during the summer. However it is important to know other characteristics of the plants besides their general, technical and esthetical specifications, especially during the landscape planning of school gardens. It is appropriate to have green trees and bushes in schoolyards that are steady, durable, that grow fast and are always green. Considering that 70% of the accidents in playgrounds are related to falling down, it is very important that the surfaces of these spaces are safe and secure against falling down. It is necessary to have an allocated area for sports activities and equipment, wide lawns that children can play on and firm ground to ride bikes on in schoolyards for pre-school institutions. In various studies conducted on behaviour patterns, it has been seen that sitting down and talking are among the primary activities. In several studies on behaviour patterns, it has been found out that sitting down and speaking are two principal activities in playgrounds. Activities that involve sitting down cover one fourth of outside activities for children. Therefore, the arrangements and set-up in playgrounds should meet these needs of the child as well. Colour is another important component in playgrounds. This research shows that children pick colours according to their mood thus, this can be used to stimulate and strengthen their reactions. The wind and the sun are two other important factors in playgrounds. Playgrounds should be protected from the summer sun and winter wind and should be available at all times (Kuş, 2001; Baran *et al.*, 2007; Ünal, 2009).

CONCLUSION AND SUGGESTIONS

Physical environment and conditions play an important role in the development of children, for them to become healthy individuals. In today's world, it is known that education and teaching is a continuous process in all paths of life and learning environments should not be limited to classrooms. Schoolyards have an important role as social environments that contribute to the child's intellectual, physical, social and emotional development and they are important for sustainability and increasing quality in schools. Open areas of the school should be designed very carefully. Schoolyards should be areas appropriate to the physical, psychological and mental development of the child, contributing to the education of the child. For this reason, various disciplines such as architecture, landscape architecture, education, psychology and child development should be working in cooperation for designing educational environments. The designs that were previously created should be reviewed and analysed, and modified if necessary in accordance with the above-mentioned objectives.

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Chapter 30

The Effect of Environmental Education Program on 48-66 Month Old Children's Environmental Awareness

Füsün KURT GÖKÇELİ & Adalet KANDIR

INTRODUCTION

Environmental education is an interdisciplinary field which aims to develop an understanding that is sensitive and insightful about natural and artificial environment. In other words, environmental education is providing how children and adults should learn and investigate the environment they live and make intelligent and informed decisions about how to protect the environment they live (Gülay ve Öznacar, 2010; Nagra, 2010). In order to provide these skills in the early ages, it is important that necessary studies and implementation should be started in the early ages. Because shaping necessary skills and responsibilities, values and attitudes for protecting the environment are started at early ages. As the limited availability of the studies oriented at developing environment awareness in the early childhood or as these studies are taken superficially, it has increased the need for the studies to be done in this direction. Environmental education which is not taught systematically can be failed to satisfy to raise individuals who ask, question, research, discover, are sensitive to the environment and environmental problems, promote awareness, bringing solutions to problems and can implement these proposals, think scientifically and achieve their learning by using all their senses effectively. An environmental education programme which doesn't support all the developmental areas balancedly cause difficulties at gaining environmental responsibility behavior and habits by affecting the level of awareness of children's environmental perception negatively. Therefore, it is very important to plan and implement pre-school education based on accelerator basic skills of responsibility towards the environment and supportive environment education (Stapp, 1997; Culen, 2005; Damerell, 2007; Wells & Davey Zeece, 2007; Davis, 2009; Early Childhood Environmental Education Programs, 2010; Moseleya, Desjean & Utleyb, 2010; Broyles, 2011).

The research was conducted in order to test the impact of "Environment Education Program" which was developed towards 48-66 month old children based on the environmental education, which increase willingness to explore and which was considered to raise individuals who are interested and sensitive to the environment, who can think scientifically, who are capable of active exploration with all the senses, who investigate, who question, and who have problem-solving skills" on children's environmental awareness.

MATERIALS AND METHODS

In this research pretest/posttest/follow-up test, experimental design with control group and interview and observational method which are kinds of qualitative research were used as the research has an experimental nature. 48-66 month-old children who

show normal development and who go to 19 independent nursery schools that affiliated to Eskişehir provincial directorate of national education in the 2012-2013 academic year in Eskişehir city center constituted target population of the study. A total of 40 children were taken to study group, including 20 children from experimental group and 20 children from control group. The information of children were collected by means of "Personal Information Form" making use of their personal files.

When examined demographic information collected children's personal information form; it was found that %55 of the children in the experimental group are girls and % 45 of them are boys. % 50 of the children are only child. None of the children in the experimental group went to pre-school educational institutions before. In the control group, % 55 of the children are girls and 45% of the children are boys and % 85 of the children are only child. None of the children in the control group went to pre-school educational institutions before.

The data which are the basic premise of the research were collected with "Environmental Awareness Assessment Scale for Children 48-66 Months" developed by Kurt-Gökçeli ve Kandır (2015). "Teacher Observation Form", "Teacher Interview Form", "Family Participation Assessment Form" and "Family Interview Form " were used to evaluate the effectiveness of the Environmental Education Program.

For the validation studies of "Environmental Awareness Assessment Scale for Children 48-66 Months"; which was developed by researchers; content validity and construct validity were examined. Content validity assessment was carried out by taking expert opinions. Later, in the scope of construct validity of "Environmental Awareness Assessment Scale for Children 48-66 Months", exploratory factor analysis (EFA) was done in order to decide the factor structure of "Environmental Awareness Month Rating Scale for Children" 48-66 month-olds. And, confirmatory factor analysis (CFA) was implemented to confirm whether the factor structure is a valid model or not.

The KR-20 reliability coefficients were calculated for reliability. Accordingly, It was found that the reliability coefficients of all sub-factors and sub-dimensions of the the scale ranged from .52 to .63. The results were statistically adequate and the scale was accepted to be valid and reliable.

The content analysis of the scale **of which** validity and reliability study were done is as follows:

1.Factors: Ecosystem

Subdimensions

Alive-Dead

Plant-Animal

Food Chain

Biodiversity

2.Factor: Enviromental Responsibility Behavior

Subdimensions

Ecological Awareness

Use of Energy Sources

Responsibility for Historical Artifacts

3.Factor: Environmental Interest

Development and Implementation of "Environmental Education Program" It was aimed to improve the environmental awareness of children through "Environmental Education Program" which is designed for children 48-66 months of age. The environmental information in the "Environmental Education Program" was prepared considering activities and skills related to environmental publications, environmental awareness, and environmental information, the principle of from simple to difficult and the readiness of children. Accordingly, "Environmental Education Program" is an integrated program which has different features, is comprehensive, attractive, conducive to children to use their senses effectively, aims children to participate activities actively, enables the application of all activities by fusing each other.

In the parts of activity format, the expected outcomes and indicators that children achieve/obtain, learning process, materials that will be used, new concepts and words, evaluating the activity, points to consider when applying the activities, classroom activities and family support activities that they can do at home are. Examples of foreign environmental education programs were examined when creating "Environmental Education Program". The basic common grounds in relation to environmental awareness in education programs were identified. These basic points were taken as the subfields of "Environmental Education Program".

The sub-fields of "Environmental Education Program" are as follows:

- Environmental Information: Activities that support the basic concepts, knowledge and skills related to environmental education took place.
- Environmental Awareness: Activities like gaining positive attitude towards the environment, developing sensitivity to environment, awareness of environmental problems and learning knowledge about solutions to problems that support their knowledge and skills took place.
- Environmental Publications: Activities took place in order to develop their interest and ideas and enable them to look from a different perspective to the publications related to environment.

Activity distribution was taken into account to all areas in a balanced manner in the "Environmental Education Program" that will be applied to the experimental group by the researcher. Activities were planned to be applied in changing times about 35-40 minutes, three days a week, for ten weeks. The program, which was prepared by taking into account "subfields (environmental knowledge, environmental awareness, environmental publications) of Environmental Education Program" has been established to support children's environmental awareness. Accordingly, "Environmental Education Program" consisting basic fields of environmental information, environmental awareness and environmental publications comprises of 30 unique activities and learning processes that support environmental awareness focusing environmental education. In addition, for situations that may arise during the implementation process regarding these events, a total of 10 alternative activities related to each sub-field were planned. So, the program has 40 activities. At the end of each activity, there are activity pages under the name of "Classroom Activities" related to the activities carried out in the classroom, which are appropriate to the feature of the activity and support it. "Class Story Books" and in accordance with the effectiveness of the feature associated with the activities carried out in the classroom for the children, "Family Involvement Activity Pages, Take Home Plays" were

prepared.

Every week after the practice, "Family Involvement Activities Page" with "Environmental Education Program Family Involvement Assessment Form" were sent to the families. Later, forms were collected from families and placed in the file of each child. This practice has continued in the same way during ten weeks.

Before the implementation of "Environmental Education Program" to the experimental group, after the completion of the implementation of it, "Environmental Awareness Assessment Scale for 48-66 month old children" was applied as a pre-test and post-test to both groups. In order to determine whether the effect of "Environmental Education Program" is permanent, "Environmental Awareness Assessment Scale for 48-66 month old children" was applied to the children again in the experimental group approximately four weeks after the post-test.

After the implementation of Environment Education Program to the experimental group, for the analysis of data collected from "Environmental Awareness Assessment Scale for 48-66 Month Old Children" as pre-test / post-test / as follow-up test and "Personal Information Form" SPSS package 20 was used. Mann-Whitney U test was used for independent samples for comparison of scores, while in the paired groups Wilcoxon Signed Rank Test was used. 0.05 was used as a significance level. It is stated that if $p < 0.05$, there is a significant difference, if $p > 0.05$ there is no significant difference.

RESULTS AND DISCUSSION

Results about the Assessment of Implementation Process of "Environmental Education Program"

The assessment of teachers towards the implementation of the application process of the activities in "Environmental Education Program" was done by means of "Environmental Education Program Teacher Observation Form". According to the results obtained, it was seen that teachers didn't have problems in the implementation of almost all of the activities. In order to evaluate the application process of "Environmental Education Program" in terms of family participation, "Environmental Education Program Family Participation Evaluation Form" was used.

Accordingly, it was seen that by the majority of the families attended to the family participation activities given during the program and these activities were implemented for the purpose of it appropriately. Besides, families stated that "Environmental Education Program" has a positive effect on children's development. At the end of the application process of "Environmental Education Program", the views of teachers about the program they applied were evaluated via "Environmental Education Program Teacher Interview Form". Accordingly, it was stated that "Environmental Education Program" is applied successfully by the teachers, and it made a major contribution to themselves and children.

At the end of the application process of "Environmental Education Program", the views of families about the program applied was evaluated via "Environmental Education Program Family Interview Form". Families stated that they made great progress in children's development through the program, an increase occurred in environment-related concepts and words, and the environmental education programs was effective.

Findings Regarding to the Impact of “Environmental Education Program” on Children's Environmental Awareness

The Findings of The Impact of "Environmental Education Program” Regarding Children's Environmental Awareness is given from Table 1 to Table 5.

Table 1: Mann-Whitney U Test Results Regarding the Subfactors, Subdimensions and Pre-Test Scores of “Environmental Awareness Assessment Scale for 48-66 Month Children” of the Children in the Experimental and Control Group

E.A.A.S.	Groups	Mann-Whitney U Test		
		Mean Rank	U	p
Ecosystem				
Alive-Dead	Experimental	21,15	187	0,694
	Control	19,85		
Plant-Animal	Experimental	21,375	182,5	0,607
	Control	19,625		
Food Chain	Experimental	21,85	173	0,456
	Control	19,15		
Biological Diversity	Experimental	21,7	176	0,474
	Control	19,3		
Total	Experimental	22,1	168	0,383
Environmental Responsibility Behavior	Control	18,9		
Ecological Awareness	Experimental	22,7	156	0,137
	Control	18,3		
Use of Energy	Experimental	19,525	180,5	0,487
Resources	Control	21,475		
Responsibility	Experimental	20,525	199,5	0,987
for Historical Artifacts	Control	20,475		
Total	Experimental	20,075	191,5	0,811
Environmental Interest	Control	20,925		
Total	Experimental	18,975	169,5	0,388
	Control	22,025		

When examined Table 1; There seems to be no significant difference in the level of ($p > 0.05$) in Ecosystem sub-factor, Environmental Responsibility Behavior sub-factor and Environmental Interests sub-factor, sub-dimensions and the mean of the pre-test scores and total received of “Environmental Awareness Assessment Scale for Children for 48-66 Month Old Children” of the children of experimental and control groups.

In Table 2; it is seen that There is a difference at significant level between mean scores of pre-test / post-tests of The sub-dimensions of the ecosystem sub-factors and The total scores of the subdimensions ($z = -3.5$, $p < 0.05$).

It is seen that There is a difference at significant level between mean scores of pre-test / post-tests of The sub-dimensions of the Environmental Responsibility Behavior sub-factors and The total scores of the subdimensions ($z = -3.5$, $p < 0.05$).

It is seen that there is a difference at significant level between mean scores of

pre-test / post-tests of The total scores($z=1,99$, $p<0.05$) related to the environmental subfactors.

Table 2: Wilcoxon Signed Ranks Test Results Regarding to Subfactors, Subdimensions and Pre-Test/Post-Test Scores of "Environmental Awareness Assessment Scale for Children for 48-66 Month Old Children"

E.A.A.S.	Experimental Group	Wilcoxon Signed Ranks Test	
		z	p
Ecosystem			
Alive Dead (pre-test)			
Alive Dead (post-test)		-2,27	0,023*
Plant-Animal (pre-test)			
Plant-Animal (post-test)		-2,5	0,013*
Food Chain (pre-test)			
Food Chain (post-test)		-3,1	0,002*
Biological Diversity (pre-test)			
Biological Diversity (post-test)		-2,1	0,033*
Total (pre-test)			
Total (post-test)		-3,5	0,0001*
Envirnmental Responsibility Behavior			
Ecological Awareness (pre-test)			
Ecological Awareness (post-test)		-0,82	0,414
Use of Energy Resources (pre-test)			
Use of Energy Resources (post-test)		-1,6	0,102
Responsibility for Historical Artifacts (pre-test)			
Responsibility for Historical Artifacts (post-test)		-2,2	0,026*
Total (pre-test)			
Total (post-test)		-2,98	0,003*
Environmental Interest			
Total (pre-test)			
Total (post-test)		-1,99	0,046*

$p<0.05^*$

James and Bixler (2010) conducted by a three-day environmental education program called ethnography that an investigating the experiences of the environment that children experience. As a result, the environmental education program applied offer unstructured or semi-structured plays and right to choose for children. In this regard, it was observed that children's social interactions have increased and their perception of the environment has improved. It was stated that environmental education program has a potential to support this improvement in children.

In the study carried out by Pauw and Petegem (2013), the impact of eco-schools on children's attitudes towards environmental values and on environmental behaviors were examined. According to the findings, scores of children attending eco schools are higher than the children in the control group. In addition, the attitudes towards environmental values and environmental behaviors of these children have emerged more positive.

The results obtained from Table 2 have parallels with the research results

presented above. According to the results of the research; it has emerged that environmental education programs increase environmental awareness in children, develop their sense of responsibility towards the environment, develop the knowledge and skills and children transfer their experiences to their lives as a common effect. The results of this research is said to be consistent with the effects of “Environmental Education Program” on children.

One of the causes of this result can be the support to “Environmental Education Programm” applied to the experimental group in the study with activities involving environmental education program and integrating with other academic fields (art, plays, music, science, language, mathematics, preparation for literacy).

However, the other reasons for this result might be that the program was specifically designed for individual differences of children, consists of activities supporting all the skills necessary for the development of environmental awareness and implementation of these activities in a balanced and systematic manner.

Table 3: The Results of Wilcoxon Signed Rank Test scores regarding Sub-Factors, The Subdimensions and Total Pre-Test / Post-Test of "Environmental Awareness Assessment Scale for 48-66 Month Old Children" in The Control Group

E.A.A.S.	Groups Control Group	Wilcoxon Signed Rank Test	
		z	p
Ecosystem			
Alive-Dead (pre-test)			
Alive-Dead (post-test)		-0,33	0,739
Plant-Animal (pre-test)			
Plant-Animal(post-test)		-0,302	0,763
Food Chain (pre-test)			
Food Chain(post-test)		-1,89	0,058
Biological Diversity (pre-test)			
Biological Diversity (post-test)		-0,73	0,464
Total (pre-test)			
Total (post-test)		-1,74	0,081
Environmental Responsibility Behavior			
Ecological Awareness (pre-test)			
Ekolojik Farkındalık(post-test)		-1,23	0,218
Use of Energy Resources (pre-test)			
Use of Energy Resources (post-test)		-0,91	0,366
Responsibility For Historical Artifacts (ön-test)			
Responsibility For Historical Artifacts son-test)		-1,41	0,159
Total (pre-test)			
Total (post-test)		-1,85	0,051
Environmental Interest			
Total (pre-test)			
Total (post-test)		-1,11	0,266

In addition, preparation of the educational environment with adequate equipment, the use of rich materials, making feedback and guidance to educators on how to help children can be displayed as another reason for this result. When examined table 3; There is not a significant difference between the total scores of pre-test / post-tests of the sub-dimensions of the ecosystem sub-factor in the control group.

It is seen that there is no significant difference between the means of pre-test/post-test scores of subdimensions and the total scores ($z = -1,85$, $p > 0.05$) of subdimensions of Environmental Responsibility Behavior subfactor.

It is seen that there is no significant difference between the means of pre-test/post-test scores of total scores ($z = 1,11$, $p > 0.05$) regarding to Environmental Interest subfactor.

In Table 3, it is seen that there is no significant difference between the scores the children got from posttest and pretest in the control group. The reason why there is not a significant difference can be explained like that: in the educational process educators may have given less space to the implementations related to environmental compared to the previous period, and in this case, some of the children may have not remembered the knowledge and skills.

Furthermore, one of the other reason can be that As the Ministry of Education to continue the implementation of the Early Childhood Education Program the activities related to environmental education couldn't be implemented in a systematic manner in the control group.

According to Table 4; it is seen that there is a significant difference in ecosystem subfactors, subdimensions, and the post-test mean ranks ($p < 0.05$) of total received scores of "48-66 Monthly Environmental Awareness Assessment Scale for Children" of children in the experimental and control groups.

Environmental Responsibility Behavior subfactor, The Use of Energy Sources subdimension and Environmental Interest dimension are not statistically significantly different ($p > 0.05$), but it is higher in the experimental group.

In the other dimension, a statistically significant difference ($p < 0.05$) is observed. In addition, in favor of the experimental group the realization of a significant increase in post-test scores of the experimental group to be considered as a result. As there is a significant increase in post-test scores of the experimental group, it can be considered a result in favor of the experimental group.

In the Palmer *et al.* (1999)'s study, increasing children between four and six year olds information about environment, developing a positive attitude towards environment, giving the meaning of things happening around and gaining a meaningful experience and transferring these experiences to their lives. it was aimed about children between four and five year olds.

According to the results of this study, it was found that when education about environment is given to children or provide them to deal with these issues, they can understand some of the concepts related to the environment and they are more responsible towards the environment.

It was found that these children have some information they receive with these concepts before the education, however after the education they increased their information, developed themselves and applied it to their lives.

Table 4: Mann-Whitney U Test Results Regarding to Subfactors, Subdimensions and Total Test Scores of "48-66 Environmental Awareness Month Assessment Scale for Children" of Children in the Control Group

E.A.A.S.	Groups	Mann-Whitney U Test		
		Mean Rank	U	p
Ecosystem				
Alive Dead (post-test)	Experimental	23,15	147	0,046*
	Control	17,85		
Plant-Animal(post-test)	Experimental	25,725	95,5	0,001*
	Control	15,275		
Food Chain(post-test)	Experimental	29,5	20	0,0001*
	Control	11,5		
Biological Diversity (son-test)	Experimental	25,3	104	0,005*
	Control	15,7		
Total (post-test)	Experimental	29,1	28	0,0001*
	Control	11,9		
Environmental Responsibility Behavior				
Ecological Awareness(post-test)	Experimental	25,15	107	0,002*
	Control	15,85		
Use of Energy Resorces (post-test)	Experimental	22,725	155,5	0,112**
	Control	18,275		
Responsibility for Historical Artifacts (post-test)	Experimental	25,65	97	0,001*
	Control	15,35		
Total (post-test)	Experimental	26,95	71	0,0001*
	Control	14,05		
Environmental Interest	Experimental	22,55	159	0,255**
Total (post-test)	Control	18,45		
p<0.05*				

p<0.05*

The research results are parallelwith the results emerged in table 4. According to the table 4, the scores they received from subfactors and subdimensions of “48-66 Environmental Awareness Assessment Scale for 48-66 Month Old Children” of the children who had the environmental education program appear to be significantly different than in the conrol group.

The reason for this can be that environmental education program applied to the experimental group was implemented by integrating it into the Pre-School Education Program by The Ministry of Education and implementation of activities in a systematic and balanced way. In addition to this, application of activities in an effective way, constituting the educational environment to allow children's participation to the activities actively and performing the education in a natural environment from time to time can also be a reason for this result.

When examined the Table 5; there appear to be a statistically significant difference between the average sub-dimensions of ecosystem subfactors of the

children in the experimental group and average pre-test / follow-up-test scores ($z = -3.7$, $p < 0.05$) of total scores of subdimensions.

Table 5: Wilcoxon Signed Rank Test Results of Pre-test / Post-test and Follow up Test Scores of "Environmental Awareness Assessment Scale for 48-66 Month Children" of The Children in The Experimental Group

Experimental Group Test	Pre -Test/Follow up-Test		Post-Test/Follow up-Test	
	Wilcoxon Signed Rank		Wilcoxon Signed Rank Test	
	z	p	z	p
Ecosystem				
Alive Dead	-2,6	0,008*	-1,00	0,317
Plant-Animal	-2,7	0,006*	-1,41	0,157
Food Chain	-3,1	0,002*	-0,26	0,796
Biological Diversity	-3,2	0,002*	-1,67	0,096
Total	-3,7	0,0001*	-1,29	0,197
Environment Responsibility Behavior				
Ecological Awareness	-1	0,317	0,00	1,00
Use of Energy Resources	-1,98	0,047*	-1,00	0,317
Responsibility for Historical Artifacts	-2,2	0,026*	-1,00	0,317
Total	-2,97	0,003*	-1,00	0,317
Environmental Interest				
Total	-2,98	0,003*	-1,71	0,087

There appear to be a statistically significant difference between the average sub-dimensions of Environmental Responsibility Behavior subfactors and average pre-test / follow-up-test scores of total scores ($z = -2,97$, $p < 0.05$) of subdimensions.

There seems to be a significantly difference between the mean scores of pre-test / follow-up of Total score ($z = -2.98$, $p < 0.05$), related to environmental interest subfactors.

According to these results, as a result of the implementation of the "Environmental Education Program" applied in the experimental group, the average score of post-test and the implementation of the post-test follow-up done after four weeks test average scores were higher than the pre-test average scores.

Engels and Jacobson (2007) in Brazil, were intended to measure the effectiveness of environmental education programs with the study called "Golden Lion Tamarin Association". As a result, it was seen that information of the public, especially the women who participated increased about general environmental issues and their habits. Also, the public support increased.

This result shows the impact of environmental education programs implemented and it proves that it develops over time.

According to the statements of Robertson (2008), some environmental education

programs are applied for children between three and five years in the Kerry Wood Nature Centre. In order to measure the impact of the education they receive in subsequent periods, a study in which children, their families and the control group participated was conducted. Even if the children and their families, who participated in the program, were divided after a few years, the effect of this education continued, even they improved largely and developed. After this program, families and children participating the program stated that they feel better about themselves, and they noticed that they have significant changes in their behaviors.

Research results above can be said to be similar to with the results obtained in Table 5. Also, The results in Table 5, after the application of "Environmental Education Program", post-test and follow-up and test scores of "Environmental Awareness Assessment Scale for 48-66 Month Old Children" of the experimental group are significantly different than they received from the pre-test and so in this case, it can be considered as creating a result in favor of the experimental group.

CONCLUSIONS

As a result of the research; it was found that the "Environmental Education Program" applied to the experimental group was effective on the 48-66 month old children in the experimental group about their environmental awareness and the impact of the application continued four weeks after the application.

The following suggestions have been presented in the light of research results:

- By choosing pilot schools to test the effectiveness of Environmental Education Program, a larger study group can benefit from the education provided and the results can be tested.

- "Environmental Education Program" can be applied in preschool educational institutions to which diversified socio-cultural children go and comparisons can be made with data obtained.

- In order to test the effectiveness and expand "Environmental Education Program", international comparative studies can be conducted.

- Training seminars can be organized about "Environmental Education Program" and the use of its materials at Pre-school educational institutions and it can be available to teachers.

- The effect of "Environmental Education Program" can be researched in terms of different variables such as age, cognitive development, parent education level, socio-economic level, attendance of pre-school educational institutions.

- The effect of "Environmental Education Program" to the environmental awareness of children who participated in the application when they come to the first class of elementary school can be researched.

- At the end of the education program, the permanence of "Environmental Education Program" can be monitored in 3, 6, and 12 month periods.

- Information can be given by organizing seminars, conferences and so on. to improve method information of pre-school teachers relating to the development of skills of children such as fulfilling their responsibilities, demonstrating a positive attitude towards the environment, gaining awareness.

- Researches can be conducted that examine the relationship between attitudes towards the environment-oriented skills of parents of children in preschool and

educational environment provided at home and children's environmental awareness.

- “Projects for environment-oriented education” that support Environmental awareness can be prepared and executed with pre-school children.

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Chapter 31

The Past and Present of Social Studies Instruction in Turkey

Bariş KAYA

INTRODUCTION

The objective of education is to raise future generations who can inherit the lifestyle, history and civilization of the country from prior generations. There have long been discussions about the subjects, setting, time, duration and methods of education, and they are still in progress today. The primary aim of education is to provide young generations with humane qualities and academic knowledge which will enable them administer and maintain the country.

Is it the academic knowledge (e.g., formulas, multiplication table, historical knowledge, geographical knowledge) that matters, or is it the humane qualities? Today, many pedagogues argue that humane qualities are more important than academic knowledge in education since these qualities represent the socialization of the individual. The socialization of children in education starts in kindergarten or nursery school when they raise their hands and ask for permission to go to the bathroom for the first time, wait in the queue to eat, form a line in the bathroom to wash their hands and brush their teeth and share their play with friends.

Socialization is reinforced by the teachers teaching children how to read and write and the numbers along with ways of attaining knowledge. The academic concerns become more intense. Sadly, in our country, students are required to take an examination to pass to the next stage in most phases of education. Thus, there is an inclination to attach secondary importance to socialization. The importance of social studies emerges at this point. Individuals who have gone through an effective socialization process and are equipped with academic knowledge are capable of finding their places in society. An individual who has great academic achievement, yet has failed to be socialized, will be obliged to choose a solution from the choices offered to them in problems (e.g., social, economic or familial problems) he faces for the rest of his life. Solutions are not available to individuals in real life as they are on multiple choice examinations. However, people who have been socialized and are equipped with academic knowledge find solutions on their own.

After fourth grade (and previously in the Life Sciences course at an introductory level), the task is to raise good citizens who are active, productive, aware of responsibilities and rights, sensitive to others, society and nature. They should have questioning skills. They cannot be cheated or herded. In sum, they attain humane qualities and are capable of inheriting the country without putting it at risk. The social studies curriculum explains how, at which stage and when this task will be performed and which concepts, values and skills should be taught to students.

This study aims to analyze the global and national history and current situation of social studies.

WHAT ARE SOCIAL STUDIES?

The term, social studies, was officially accepted in 1916 by the Committee of Social Studies of the Commission on the Reorganization of Secondary Education of the National Education Association. The committee described it thus: "knowledge directly related to the existence and development of society and to humans, who are a part of this social union, is included in social studies." This committee made an extensive explanation about the objectives of social studies. Indeed, the Convention of Administration, Economics and History Pedagogy" held in Madison, Wisconsin in 1892 combined all these subjects under the topic of social studies. In following years, the subjects of history, geography and civics attracted more attention as stated in committee reports and publishing.

The committee claimed that, although all types of knowledge have social objectives, the information included in social studies has the particular content of problems that affect society, and that the indirect result of all studies done at school is a social outcome. In this respect, social studies is more relevant than any other course offered by schools. In fact, the school itself is a social institution, which creates a sense of responsibility in students as members of society along with intelligence and good will to participate in school activities. Social studies increase the content of students' social life and their appreciation of law to achieve these aims (Moffatt, 1957).

What is social studies? Researchers have provided many different responses to this question throughout the twentieth century. Although it has been a course of study for many decades, there is no general agreement about its aims, content and methods. Barth and Shermis managed to define it in a way that many researchers found agreeable in 1970. However, social studies teachers continued to redefine it in different ways until the end of the cold war (Öztürk, 2006).

The emerging process of social studies as an interdisciplinary civics training program began as a result of efforts by the US to find solutions for problems created by massive transformations in social, cultural, economic and other areas beginning in the twentieth century and continuing in the twenty-first century (Öztürk, 2011).

Welton and Mallan (1992) described social studies as, "a discipline that unites the aims of teaching social things such as cultural inheritance, thinking and making decisions along with the social studies." The first and third aims are related to the content of social studies and the second aim is related to the process of education. All three of these objectives aim to raise good citizens with social competencies (cited by Melendez, Beck and Fletcher, 2000).

Social studies is a curriculum, a basic education course and a field of study which is mainly based on social and human sciences and is informed by all disciplines related to humans with the purpose of improving the knowledge, skills, values and attitudes that students need in a developing and changing world (Sever, 2015).

Turkey's 2005 Social Studies Curriculum says that social studies is a primary and elementary level course on subjects in the social sciences and civics such as history, geography, economics, sociology, anthropology, psychology, philosophy, political sciences and law. It combines these subjects in units or themes, examining the relationship between the humans and their social and physical environment. It is based on a collective learning approach with the purpose of helping the individuals to

realize their social existence (MEB, 2005).

Since the early 1950s, the process of using social studies to deal with social outcomes and raise individuals who are resistant to propaganda was mainly replaced by a focus on instructional techniques and the teaching of rational analyses (Parker, 1991).

In 1979, the US National Council for the Social Studies (NCSS) stressed that the core of the social studies curriculum was human dignity and rational processes. Rational processes or methods indicate any mental effort required for the creation of testable or provable knowledge. Here, the emphasis on reason is meant to draw attention to individual critical and investigative thinking and research, intentions and creativity (Osborn *et al.*, 1979).

The social studies curriculum is capable of teaching children to think about real and vital problems. As a result, students will not only become honest thinkers, but they also will become individuals who can think without teacher guidance (Ragan and McAulay, 1964).

The main purpose of the social studies is to raise engaged citizens as well as teaching lifelong competencies to students. It is an expected outcome that social studies emerged as a result of the search for social integrity at the beginning of the twentieth century. States became aware of these social dynamics and the reality of change, so they transformed the social sciences into a normative system of rules and included it in school curricula claiming to aim to raise good citizens, yet with the purpose of controlling and orienting change for their own benefit. In Turkey, the social studies was included in the curriculum in 1968, and it has been an important course, mainly for the teaching of civics, since then (Kara, Topkara and Şimşek, 2012).

Current curricula require that the preparation individuals for life and their instruction in civic competencies be performed solely by educational institutions. This is attempted both by the general objectives of the course and by the curricula for life sciences, social studies, civic and human rights (Akengin, Sağlam and Dilek, 2002). The 2005 curriculum states, "This course encourages the students to think, ask questions and exchange opinions" (MEB, 2005).

Social studies include the main and common aspects of social sciences' findings which are required for people to be able to live in a society collectively. Social studies is a course that uses an interdisciplinary approach to integrate cultural elements with knowledge from research in a variety of fields and simplifies it to make it suitable for school children (Sözer, 1998).

Thus, the main resource of social studies is the social sciences, including history, geography, economics, law, philosophy, psychology and sociology, all of which are sciences with social content. In sum, social science is integrated, simplified and regulated knowledge selected from the social sciences for education (Akdağ, 2014).

The terms, social sciences and social studies, are often used interchangeably. However, it should be stressed that they are not identical. The content of social studies instruction is usually selected from disciplines in the social sciences. Although social sciences and social studies are not synonymous, they are closely related (Sözer, 1998).

In the 1930s and 1940s, American researchers adopted the approaches of reconstructionism and child-centered education, and made effort to develop social

studies. However, the content of the social studies remained dominated by history and geography until the 1960s (Safran, 2008). Social studies instruction in the US was criticized severely in the 1960s and 1970s, when it was reformed and dubbed “the new social studies.” This reform was created by many projects supported by federal and private funds. The dominance of history and geography was weakened, while sociology, anthropology, economics, political sciences and social psychology gained prominence. Researchers developed interdisciplinary approaches based on the concepts and techniques of these disciplines.

The popularity of the new social studies movement began to diminish in 1970s. The main two reasons for this were that the traditional approach to education was still strong and the teachers did not receive adequate training for the new program. In the 1980s, the traditional approach to social studies instruction grew even stronger (Naylor and Diem, 1987; Nelson, 1987; cited by Öztürk, 2011).

In 1994, the US National Council for the Social Studies (NCSS) set the standards of social studies instruction for learners, teachers and classrooms:

- Culture and cultural diversity
- Time, sustainability and change
- People, places and settings
- Personal development and identity
- Individuals, groups and institutions
- Power, authority and government
- Production, consumption and distribution
- Science, technology and society
- Global networks
- Citizenship ideals and practices (Ellis, 2007).

These ten standards were also used to prepare the fourth, fifth, sixth and seventh grade curricula in Turkey in 2005.

SOCIAL STUDIES IN TURKEY

Fundamental changes in Turkish national education were made in the years 1924, 1926, 1936, 1948, 1962, 1968, 1992, 1998 and 2005. Interdisciplinary social studies were first made a course in Turkey in the 1960s. Until then, related disciplines in the social sciences taught separately in both the Ottoman and Republican Periods (Öztürk, Keskin and Otluoğlu, 2012).

Thus, the history of social studies in Turkish schools is not very long. It was included in the curricula of elementary schools in the 1968-1969 school year and in those of the middle schools as a pilot course in 1970-1971. When this course was first included in the curricula, some sectors of society did not fully understand it, which resulted in the birth of different approaches. Some regarded this course as merely civics instruction, while others considered it a combination of history, geography and civics, and still others inaccurately saw it as teaching about the organization of societies (Gündem, 1995).

Until 1968, history, geography and civics had a very important position in the elementary and middle school curricula. Particularly in the early years of the Republican Period, establishing the hegemony of the Turkish Revolution and Kemalism gave an important mission to history, geography and civics course s. This

mission was to raise Turkish children who were to maintain the Republic forever. They were to be engaged and qualified individuals with the knowledge and skills every citizen needs and most importantly, be aware of their history, love the country and have a positive attitude towards democracy (Öztürk, Keskin and Otluoğlu, 2012).

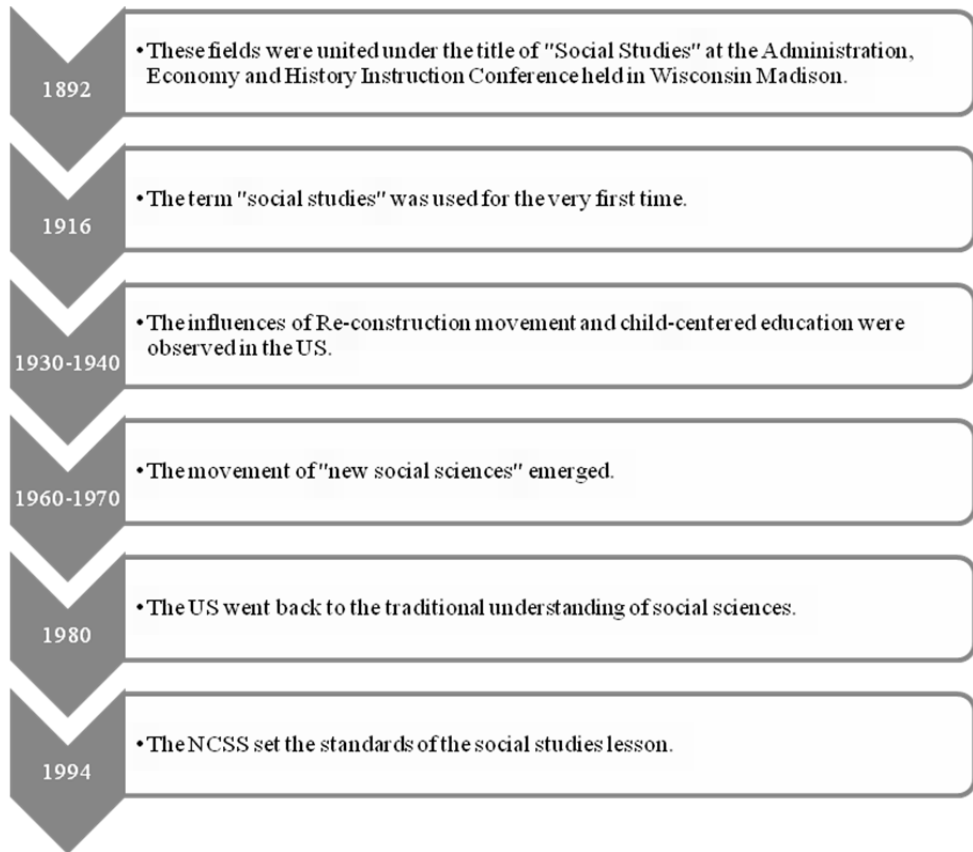


Figure 1: Timeline for the Global History of Social Studies (Yalçınkaya and Uslu, 2015).

Turkey's National Education Council gathered from August 23 to August 31, 1949, and determined that, "The courses in History, Geography and Civics, currently taught separately during the second level of elementary education, will be taught as a single course and organized to be suitable for child psychology" (URL-1). However, this decision was implemented almost 20 years later in 1968 (Akdağ, 2014).

In 1952, a new course entitled, "Social Studies," was included in the curricula of teacher training schools instead of the separately taught History, Geography and Civics courses. Although it was decided to include social studies in the curricula of elementary and middle schools by the Fifth National Education Council in 1952, in the Draft Curriculum of Primary Schools, which was put into operation in a limited way in 1962, it was referred to as "Analyses of Societies and Countries" (Sözer, 1998). This shows that social studies began to be taught in schools, even though it had a different title (Tay, 2011). Why did it take so long to include social studies in the curricula? Akdağ (2014) claims that political, social, economic and other relevant

factors in Turkey and the world may have caused the delay, and that the conditions of this period should be examined.

The goals of the "Analyses of Societies and Countries" course in the 1962 Draft Curriculum of Primary Schools were very limited. However, these goals had a very wide range in the curriculum of 1968. These goals of social studies were included extensively in this curriculum and almost none were discipline-specific.

There are five units in the fourth grade curriculum and six units in the sixth grade curriculum. The units in the fourth grade curriculum are Our City and Region, Turkey: Our Country, Modern Life in Our Country, Islam and the Acceptance of Islam by the Turkic People and the Settlement of Turkic People in Anatolia. An analysis of these units shows that the first two units are based on geography, the third unit on civics and citizenship, and the final two units are based on historical subjects.

The units in the fifth grade social studies curriculum are Our Country and Neighbors, the Ottoman Empire, a Holistic Analysis of the World, the Ottoman Empire (Periods of Stagnation and Fall), The Major Countries in the World and Our Republic. An analysis of these units indicates that the first, third and fifth units are based on geography, the second and fourth units on history and the sixth unit is based on civics and citizenship (Keskin, 2009).

With the implementation of eight-year compulsory education in 1997, the Board of Education determined a new social studies curriculum for elementary and middle schools (1998). This new curriculum excluded the subject repetitions in the elementary school and middle school (5+3) system. However, this development failed to create the foundation for student-centered education. The content retained unnecessary details about history, geography and civics.

Although the 1998 curriculum featured many real subjects such as human rights and traffic, it was still deficient relative to global trends in the modern world. For instance, the rational use of the world's resources, population growth, micro-nationalism, global pollution and natural disasters were either partially included or not included in the curriculum at all (Öztürk, 2012).

The 2005 social studies curriculum

In Turkey, social studies are included in the curricula of the fourth, fifth, sixth and seventh grades. The social studies curricula of the fourth and fifth grades were revised and implemented in 2005. The sixth grade social studies curriculum was implemented in 2006, and the seventh grade curriculum was implemented in 2007 (Safran, 2008).

A variety of internal and external dynamics influenced the creation of the 2005 social studies curriculum which promised important changes in the process of instruction by modifying its philosophical approach and its underlying theories of learning. The main external dynamics were the principles of NCSS and the criteria of the European Union. Additionally, international institutions and researches such as PISA, TIMSS and PIRLS were also influential. The internal dynamics that affected its development were the effects of changes in science and technology on education, the increase in the quality of education, creating a sensitivity for economics and democracy, the improvement of personal, national and global values, integrating the curriculum with eight-year compulsory education and others (Yaşar, 2005; cited by

Akpınar and Aydemir 2012).

The curriculum does not include any behaviorist approaches. Instead, it considers the value of knowledge and experiences of the individual, structuring their participation in life, good decisions and solutions to problems with a supportive and enhancing approach. The ministry's new approach is an effort to implement student-centered and activity-centered learning, create a balance between social studies knowledge and skills and encourage students to interact with their environment (MEB, 2005).

These fundamental changes in the curriculum of social studies are consistent with the constructivist approach, as in many other courses. These changes will be better understood when the vision, approach and structure of the curriculum is analyzed more deeply.

The vision of the 2005 social studies curriculum

The 2005 Social Studies Curriculum says: "The vision of this course is to raise Turkish Republic citizens who have adopted the contemporary twenty-first century Atatürk's revolutionary principles, understand Turkish culture and history, are equipped with democratic values and respect for human rights, are sensitive to their environment, interpret knowledge according to their experiences creating, using and organizing it in social and cultural contexts (have critical thinking skills and make creative and good decisions), have well-developed social skills, have learned the methods used by social sciences experts to create scientific knowledge, are active in social life and productive and aware of their responsibilities" (MEB, 2005).

The main approaches of the 2005 social studies curriculum

The main approach of the 2005 Social Studies Curriculum is to equip students with the skills, concepts and values required for the creation and use of knowledge and to raise engaged Turkish Republic citizens.

First, there is a certain change in the description of social studies. The old approach dictated that this course was limited to a number of topics such as history, geography and civics. In the new social studies curriculum, these disciplines have been enriched by anthropology, law, philosophy, psychology, sociology and economics. The new units were created to include all these disciplines. The new approach underlines that social studies is shaped by the collective approach to education (Ata, 2011: 35).

The social studies curriculum:

Accepts that each student has a unique personality.

Illuminates students' future lives and remains sensitive to individuals' development of positive qualities.

Helps the development of knowledge, concepts, values and skills, while prioritizing learning to learn.

Encourages students to think, ask questions and exchange opinions.

Aims to raise students to be happy individuals who are healthy both physically and mentally.

Focuses on national identity and cares about the adoption of global values.

Aims to improve students' spiritual, moral, social and cultural aspects in the framework of their own traditions and customs.

Cares about students' being raised as individuals who know about and use their rights and fulfill their responsibilities.

Makes students sensitive to social problems.

Creates opportunities for the students to use their experiences in the learning process and interact with the environment.

Uses the diversity of learning and teaching methods and techniques to try to reach every student.

Makes periodic assessments by examining students' files in the process of learning and teaching (MEB, 2005).

These items reflect the essence, the content and the range of the changes in the new social studies curriculum. Social studies explain complicated social truth in a systematic way so that children can understand it. This is done by making use of research fields and their methods and findings. It concretizes the aspects of social life that are in organic interaction with each other and expects students to analyze these interactions by considering the dynamism of life (Köksal, 2013).

The new curriculum reflects the traditions of social studies instruction, which: are 1) reflective thinking, 2) social science and 3) citizenship. These traditions have an important place in social studies. "Individual and Society" is a typical leaning field which reflects the new approach to social studies as a tool for personal development (Ata, 2011).

Social studies as reflective thinking: This approach is based on the thought of John Dewey. The primary aim of this approach is to help students obtain and use problem solving and decision-making skills. Thus, the curriculum also focuses on learning and teaching processes that can help students to understand and analyze individual and social problems and make knowledge-based decisions about them. There is no predetermined content that must be used. The activities to be done in the classroom are expected to focus on subjects and problems that directly concern, affect and worry students. Although it emphasizes the uniqueness and status quo, it concentrates on the development of a healthy skepticism and the skills to research and analyze dominant beliefs, values, policies and practices. The major techniques of this approach are research and analysis (Öztürk, 2006).

Social studies as social sciences: This approach is based on the idea that the best way to promote engaged citizenship is the teaching of the knowledge, skills and values of the social sciences. Thus, students learn about human behavior and citizenship by analyzing the fundamental principles and concepts of social sciences. The content requires that the branches of social sciences are taught both separately and in an integrated way. The method of this approach is the method of social sciences. This method involves learning by research, analysis and invention. In sum, the children think like a social sciences expert, use the methods of social sciences and become engaged citizens using this approach (Barr, Barth and Shermis, 1978; Barth and Demirtaş, 1997; Doğanay, 2005; cited by Safran, 2008).

Social studies as citizenship education: This is the oldest and most common approach to social studies instruction. The general purpose is to maintain social stability by introducing the doctrines of society's major institutions, values and beliefs. According to Barr *et al.* (1978), the aim of this approach is to raise generations who will keep our culture alive. The content is determined by adults.

Learning about the past, being proud of the past and its traditions, taking responsibilities, showing appropriate attitudes, behavior and loyalty to authority are among the targets of this approach. It requires the use of teacher-centered methods (Öztürk, 2006).

The structure of the 2005 social studies curriculum

The 2005 Social Studies curriculum introduced many brand-new terms: learning acquisitions, fields of learning, skills, the teaching of concepts and values, activities, association and intermediary disciplines. The curriculum considers the vertical and horizontal correlations between the units and the concepts, skills and values included in them. There are eight units in the curricula of the fourth and fifth grades. The learning acquisitions are supported by a teachers' guide that includes sample activities. The titles of the units reflect the range of the learning fields and the content of the learning acquisitions. The diagrams of the units consist of three columns: the learning acquisitions column, the sample activities column and the explanations column (Ata, 2011).

Social studies provide data about different aspects of social truth. Social studies require bringing these data into the classroom and analyzing them. Different aspects of social truth are categorized by the social studies curriculum as learning fields:

- Individual and society
- Culture and inheritance
- People, places and environment
- Power, government and society
- Groups, institutions and social organizations
- Production, distribution and consumption
- Science, technology and society
- Global connections (Köksal, 2013).

The 2005 Social Studies curriculum consists of skills, concepts, values and general purposes. It abandons the idea of the passive, good citizen required by modern states and opens new doors to the dimension of values and skills for citizenship training that suits the structure of the new world order. Thus, the general purpose of social studies is active and engaged citizenship (Kara & Bulut, 2012).

The most extensive purpose of social studies is to raise active and engaged citizens. An active citizen is an individual who adopts the culture of their society, internalizes it and can improve it. In this sense, the maintenance of nations depends on raising active citizens. Methods of raising citizens vary according to their philosophical principles. They can be based on a single discipline, multidisciplinary or interdisciplinary. The one-discipline approach requires teaching history, geography and civics separately, while multidisciplinary or interdisciplinary approaches require that the information selected from the branches of social sciences be integrated in a social studies course (Safran, 2008).

In recent years, new perspectives have been included in both the goals and content dimensions of social studies curricula. These perspectives indicate important processes to be stressed in the curriculum and are listed below:

- The dimension of past, present and future
- Global sensitiveness

- The balance between local, regional, national and universal elements
- The balance of knowledge, values and skills
- Pluralism: the harmony of differences
- Discussing current events
- Discussing controversies
- Focusing on superior thinking skills
- Social participation or learning by providing service to the community
- Emphasis on human rights
- Education on peace and conflict resolution (NCSS, 1994; Alberta, Canada social studies curriculum, 2005; Social Studies in New Zealand Curriculum, 1997; History-Social Science Framework for California's Public Schools, 2005; quoted from Doğanay, 2008).

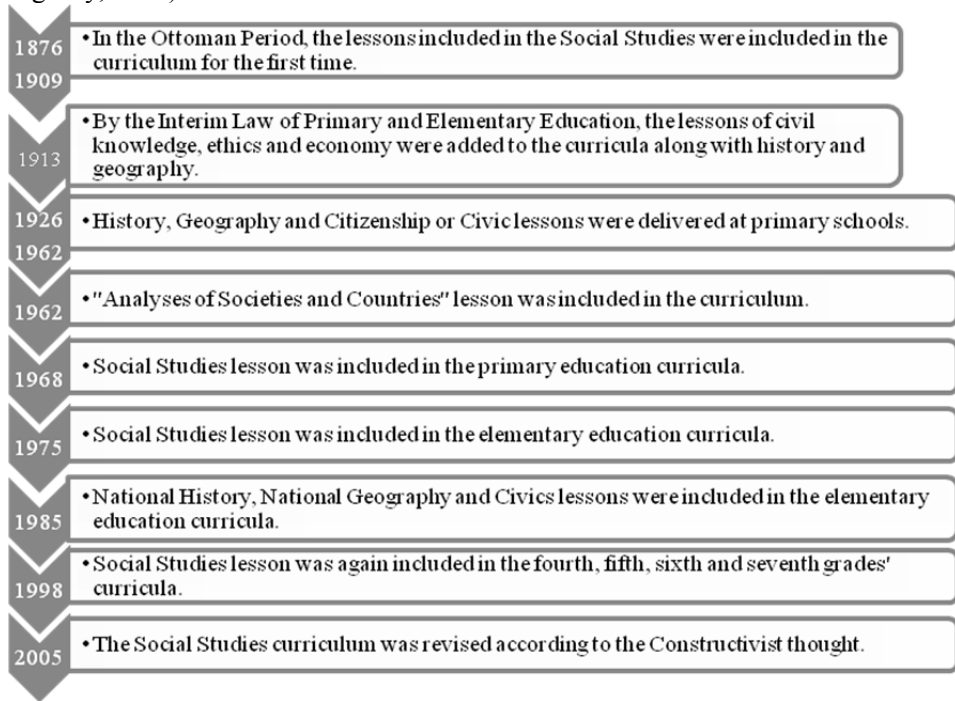


Figure 2: Timeline for the History of Social Studies in Turkey (Yalçınkaya & Uslu, 2015).

In Turkey, social studies instruction is still not at a desirable level. There are deficiencies both in civic duties and the values and behaviors to be taught to students (Safran, 2008). The curricula are not or cannot always be implemented in the way anticipated by the experts who design curricula, and there are many other factors that affect this issue. Studies conducted in the US on the implementation of curricular innovations found that some teachers applied these innovations since they thought they were advantageous, while others did not because they saw them as limiting their autonomy (Datnow and Castellano, 2000; cited by Bumen, Çakar and Yıldız, 2014).

In addition, remarkable chaos has been created by the 4+4+4 system which was put into effect in the 2012-2013 academic year since no changes have been made in the undergraduate teacher training curricula despite this change. This change requires

that the fifth grade social studies be taught by social studies teachers rather than classroom teachers. However, social studies teachers do not have the pedagogical information (taught in undergraduate courses about children' cognitive development) needed to teach this course, and today these undergraduate courses are still not being offered.

To understand the contribution made by social studies in the maintenance of states, the US case should be analyzed. In the early 1900s, the crisis of citizenship became a social problem in the multicultural US. Social studies courses were initiated as a solution to this problem and led to many remarkable achievements in raising American citizens. The civics course in Ancient History offered by Israel's educational system and its achievements are worth analyzing and understanding to be able to express the importance of social studies for communities (Safran, 2008).

The primary objective of social studies is to bring up good citizens who are role models for others in every respect. Therefore, it is natural to expect these citizens to think rationally when making decisions and ask questions, to consider many variables when voting and to engage in critical thinking about social problems and seek solutions to them (Kaya, 2008).

One of the main responsibilities of social studies is to raise generations to live in the Turkish Republic who are bound to each other with Atatürk nationalism, are ready to protect the acquisitions of the Republic, preserve the positive aspects of our traditions and also ready to accept contemporary and global values. Effective social studies training is the way to raise good citizens who are active, responsible, productive, respectful to each other and patriotic (Safran, 2008).

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Chapter 32

Children in National Literature Era Novels

Yıldız YENEN AVCI

INTRODUCTION

Humans are separated from other living things with thinking, interpretation and creativity and one of their fundamental qualities is to create and seek beauty. Literature is one of the most important products which born from human creativity. There is a strong relationship between literature and education; “edeb” the base of edebiyat (literature) means nurture is the indicator of this. Besides both literature and education have the same topic, human and human communities, this two area complete each other (Kavcar, 1999: 2). Because “*Literature, feds on life. It mirrors life, reflects it.*” (Özdemir, 1979: 19-22)”

Literature, based upon life and understanding humans, with being esthetics expression as mediator language, at the same time it is an area where most competent samples of the language are presented. Meeting the possibilities of this field at an early age, children, can acquire multi-dimentional thinking habits and will contribute to grow as sensitive individuals (Sever, 2013: 93-94). Like Özdemir indicated the art of literature language usage; novelist, storyteller, poet or essayist are workers of language and their power of utilizing the language are the leading aspect that shows their mastership (Özdemir, 1979: 19-22). Another feature which increases the significance of literature is its relationship with society. Be likened to a map describing a nation’s geography of emotion and thinking, literature, clearly indicates this situation:

Literature is also tightly attached to the structure of society. Literature is a social institution. There is a strong connection between developments and changes of a nation’s literature and developments and changes of a society’s structure... A nation’s literature encircles that nations all verbal and written creations through ages. It is an inseperatable piece of culture and civilisation. In another saying, a nation’s literature is like a map of that shows nation’s emotion, thinking, imagination, longing and passion. Poems, novels, stories, games, essays, memories are this map’s mountains, plains, plateaus, hills and planes. Whoever study this map, knows that nation’s emotional and ideational geography (Özdemir, 1979: 19-31).

According to Aktaş & Gündüz (2011: 26) reading fictional texts, not only gives esthetics pleasure to person; but also can change person’s life philosophy and life style. Reader, enters the rich inner world of that work, coalesce with it, completes some of its defects. Thus finds a better chance to know his or herself. Articulation fictional texts mean novel, story, theatre etc. Novel is the longest among literal species, develops around an event; but it deepens with second degree events which supports main event and analysing heroe’s emotions.

Yalçın (2001: 344) says that experienced or likely to be experienced novels reflects a life created with authors imagination, artistic personality, good manners,

knowledge and they determine every topic involved with human's character, passions, opinions and thoughts; biggest topics of human history. Karataş (2004: 390) also supports this thought. Fictional world that established in author's imagination has a lot of properties overlapping with real world and tells that it reflects the feeling of reality in person. Before looking into the term 'novel' another topic that come forth is it's similarities with 'story'. Oğuzkan, (2013: 98) indicates both story and novel look alike, their difference is in volume more than core and structure. Among species, novel which can be read with pleasure because of having an event plan and it dwells on children's literature which is an important element on personality development.

Novel, as a children's literature species, are artworks that can be read with pleasure, after child completes concrete operations period; after eleven years old which can think events on multi-dimensional plane. Novel gives children the opportunity to widely think on why and how of the events, make connections among events and see the details of all events. With novel, children can expand their imagination, horizon of thought and creative power. Therefore, during elementary and high school education classics must be taught to children and make them face great novelists (Güleryüz, 2003: 274).

Because of children form an emotional parallelism by entering fictional worlds, the habit of reading novel, which has an important contribution in their education and joy of reading, have an important function. Meaning children novel, it should not mean only works with children topic. It's only natural children, which we can not isolate from society, take interest in adult's life and select them as role models. A point that must be taken into consideration, work must be appropriate to children's development, psychological balance must be taken into account, to help to have a balanced and consistent personality (Yalçın & Aytas, 2012: 161-164). Novel which has important function in personality development and childhood education was introduced to Turkey two centuries ago. Yel (1979: 121) indicates that first products in novel were started given in Tanzimat era, our authors presented their products of novel one by one after translations from West. The search of writers and poets, understanding they adopt also caused different streams – Tanzimat Era (1839-1896), Servet-i Fünun Era (1896-1901), other than Servet-i Fünun Era, Fecr-i Âti Era (1909-1912), National Literature Era (1911-1923) and Republic Era (1923-...)- fall into place. In 1911 National Literature Era which aims Turkish literature come out of imitation and pass onto creation era and for that lean to society's life and problems, started with Ömer Seyfettin's "Yeni Lisan (New Language)" article on *Genç Kalemler* journal and in a short time spread wider fields (Kavcar, 1999: 10-19). Akyüz (1995: 180) states this era's stories and novels handles Turkish social life and matters from different angles and entirely, however it does not have a satisfying deepness; to be opened widely from individuals life to social life, in theme, that a large shift towards social issues. Özdemir (1979) in other words, says about properties of National Literature Stream, a.k.a. "Motherland Literature":

Writing in a language people can understand is one of the most distinctive features of National writers. This trend soon expanded, became a common attitude among this era's novelists and story writers... Novels and stories takes their subject from our lives, expand their environment and sieve different parts of the country is another feature of National literature era. By terminological denotation, opening "Motherland literature" epoch and be the first successful

examples of this epoch was during this period. Weather Tanzimat priod or Servetifünun period, subjects of novels and stories were chosen from İstanbul, enviroment didn't go out this citie's boundries. Though, map of National literature era's novels and stories expanded, every corner of the country started to become subject of stories and novels (Özdemir, 1979: 107).

National literature era artists, in their novels, which spokes for people from every classes, make point of local subjects, regenerates folk literature products (tale, saga, folk stories), brings out Anatolian people and problems; made their contribution to Turkish literature with precious works (Kavcar, Oğuzkan & Aksoy, 2004: 103). Another inovation that National literature era bringed to Turkish literature was reality of children that they reflected child related problems from a wide frame.

"People in growth period that starts from two years old until adolescence (Yardımcı & Tuncer, 2000: 7)" described as childhood "started to appear in literature works as human after Tanzimat, and evoke its precence fully in Servet-i Fünun and National literature eras. (Akın, 2009)" Values are hearings, thinkings and acceptings that come out from thousands of year's life of nations. There is a value of children in our national culture. This value is told with different forms as motto, story, saga etc. Of course children have a value that exceeds national values, a universal value that concerns all humanity. From this point of angle, there are a lot of things that adults can learn from children and children's sensitivity (Gülyüz, 2003: 17). Investigating the handling of child in National literature era's novels is like making a universal travel with national ways. Because works national; children have universal significance. In this journey via little heroes child sensitivity and reality were tried to be expressed. Books are strong tools that help to form a strong bond between reader and heroes. Also "they are resources which support child's language development, feeds them emotionally, develops their abilities, shapes their personality, affects their attitude and behaviour (Yardımcı & Tuncer, 2000: 25)."

Dated 2006 Turkish Lesson Curriculum (Classes 6, 7 and 8th grade) Programmes one of the general purposes is "Reading suitable novel to their levels; chosing, listenening and watching science, culture and art activities appropriate to their levels" and "Knowing national and universal values through Turkish and World culture and artworks" (MEB, 2006: 4) starting from these principles, it is appropriate to say, in Turkish lessons elite artworks were taught suitable to childeren's levels. National literature era has been a topic for a lot of works because it forms an important part of Turkish literature and history. Some works with topics of literature and education relationship are as fallows: Güneş in his study titled "Millî Edebiyat Dönemi Romanlarında Aydın Tipi" (1997) indicates this period's novelists always defended progressivism and innovation, contributing society's idea life by semtinazing intellectual responsibility. Erdal, in his research (2005) two academician authors – Halide Edib Adıvar and Halide Nusret Zorlutuna- takes teacher and educations topics in their novels. Akın, (2009) with investigating children's situation in novels during National literature era, states children's position in family and social enviroment, child education that reflected at novels and what author reflected in his/her works. Yenlen-Avcı (2013) studied period's novels with respect to human values and contributions to Turkish education.

The aim of this study is to investigate novels of National literature era with

respect to child concept. Eight work, whose authors lived in this era (1911-1923), were chosen and investigated and findings were tried to be explained as the occasion arises. Study is in descriptive analysis model with respect to qualitative research methods. "According to this approach, data obtained summarized and interprets according to predetermined themes. (Yıldırım & Şimşek, 2013: 256)" Data, were obtained from the works below: Halide Edib Adivar, *Mev'ut Hüküm* (1973); Reşat Nuri Güntekin, *Çalıkuşu*; Yakup Kadri Karaosmanoğlu, *Kiralık Konak* (1979); Refik Halit Karay, *İstanbul'un Bir Yüzü* (2005); Ömer Seyfettin, *Yalnız Efe* (2007); Aka Gündüz, *Aysel* (1943); Halide Nusret Zorlutuna, *Küller* (2012); Ebubekir Hazım Tepeyran, *Küçük Paşa* (1984). Findings of child concept in period's novels are:

Halide Edib in *Mev'ut Hüküm* gives place to children who is absent from mother and father love and tries to fill this hole with hands that tries to reach them. Author indicates, dereliction, weakens the bond between children and parents.

Kasım, lost his mother four years ago. Hero who lived with his father, does not neglect his health condition also delights his spiritual side. Young men with such respect and attachment to his father, when country's benefit is on the line, puts his old and sick father among the things he left behind, and goes to the battlefield. Blonde, colored eyes, beautiful faced, warmblooded and most cute Atife, lives an unfortunate life under the shadow of his parents sorrowful but neverending relation. Aunt in law Behire and her ill, unhappy son Hayri are her only relatives. She, who couldn't find family peace even her environment, evaluates her meeting with Kasım as a new page in her life. Atife, with this, reaches a friend and a father which takes care of her, doesn't deprive from his love and compassion, and undertakes her guardianship. Because of her mother's biased attitude, at first, keeps his distance to uncle Hüseyin Kâmi, little girls also writes his name on the list of people she loves due to his sincere and generous interest. Sara, Atife's mother; loses her second child after a short time after birth, but this incident isn't dwelled on much in the novel.

Mehmet is the son of Cartwright Ahmet who wounded and died because of tuberculosis after an argument. His mother thought to withdraw his son from school and make him porter to cover her husbands care, Kasım prevents this. Mehmet feeds upon the eggs Kasım sent and delighted with chocolate which he always carry in his pocket. Little hero's, enrolled to Galatasaray, education expenses were also covered by Kasım.

Hayri is, the child of jealous and histeric Behire and ugly-puny Rıfat Bey, thin, pathological, calm, silent and unhappy child. He doesn't know and like any games. He stands idle by Atife's offers of fun and spending time together and withdrawn. It can be seen that Hayri, who isolates himself from games, doesn't know love and stays away from them. He catches scarlet fever and dies without knowing love, shairing and friendship.

In Reşat Nuri's *Çalıkuşu (The Wren)* novel child, is smiling face of life, meaning and happiness of it. With their wildness and naughtiness they are always cute beings. However, author feels uncomfortable from saying unpleasant words as a "punishment" in children nurture. In fact name is not only for children, it carries importance for all humans. A nice appeal will flatter persons pride and will become one of the most meaningful expressions of respect to him. Parents, of course, must include nice appellation under kindness, call their children, but these nicknames

shouln't be repulsive. Also in education, it should be known calling kids with their names will form a bond of love between teacher and student.

Tugging and bringing her hair in front of her eyes: "that I think, I was a child that fascinated by the life around me and light, careless. Obviously I was trying to put a curtain between my eyes and the World to be alonewith myself and with my own thoughts." (p. 9) says Feride, embrassed with ink stains on her lips which always presents. Feride, is an energitic, impish and a noughty kid who hurts her friends and cause them cry. Her enthusiasm that not fits its cup but only calming between trees, will bring her the nickname Çalığışu (Wren). Feride is not going to lose this side of her that puts cuteness to her after she finishes school even when she engaged. Bussles with her causins and nephews around the hause will be seen normal.

It is possible to say that she was trying to ease her pain and loneliness of losing her parents ant an early age with her overflowing actions. Relatives must have noticed this because they don't do anything to stop her, they tolerate her every teasing.

Munise is obedient, smart, decent, helpfull and sincere child. Her beautiful chracter gives happiness to Feride. Seenig Munise becoming mature everyday, she thinks how right was her decision that ignoring gossips about her mother and taking her with herself, says Feride. No matter where she goes Munise, for her, a good doughter, sister and friend. Munise falls to bed as a result of a throat disease. High fever results in death of the little girl. Her death causes Feride, she calls her "Abam (Big sister)" to suffer from a brain fever which stays forty days. Other children in the novel also defined as implike and cute. Kâmrân is a silent, polite, decent, well-behaved and educated child, these chracteristics are what always bores Feride:

"But what's happening to Kâmrân whose close to his twenty and above his pointed thin lips he has a thin mustache that just started to grow? On his little girlish feet there is white suede shoes, silk socks and his delicate body that swings like a thin branch when he walks, his long white neck that rises from his open collar he looks like a girl more than a boy that I resent. His virtues that have exaggerated by male relatives and neighbourhods boil my blood. I don't remember how many times I faked like my feet slipped and fall on him, tear his books apart, started a fight with fake reasons.

But God's servant, cheer up a little one day, girl, say something opposite so I can jump to your neck like a cat and swirl you in dust, pull your hair and threaten your snake like green eyes with my fingers.

I remember the day that I agonize him by throwing a stone to his foot, with shaking from pleasure and grudge. But he always looks down on me like a saint, grown up man, with a trecheraus smile on his eyes asks: 'How long will you stay child Feride? ' ' (p. 28)

When we look these examples, it is possible to say a person's chracter develops from childhood.

In the hotel, Hacı (Hadji) Kalfa who takes care of Feride's room services, gains young girls love ans interest in short time. The hero builds nice bridges in human relationship but when it comes to child education displays wrong attitude. When angry she calls her son "meret (awful)" instead of Murat, besides when he doesn't like his food she makes factoids that reachesinsult level:

"Hacı Kalfa, one day said about his son:

– You must have paid attention to Mirat’s name. What a wise name it is, I tought two weeks to find it. It suits to both languages. Armenian is Mirat and Ottoman is Murat.

Then she closed one of her eyes like she will say something very clever and continued:

– When Mirat does something naughty, and made me angry I say him you are neither Mirat nor Murat, you are just a meret.

One of this old Armenian’s fury scenes occured as a coincidence when I was in their house. What a scene to see! Child’s only fault did not like the food that her mother cooked.

Hacı Kalfa, scolds him with proverbiales and couplets:

– Look at that layz kid. He has little height but lots of different habits. They give a cucumber to a beggar and he threw it away it because of it’s crooked. Cast pearls before swine? Stuff my considerable suggestion down your throat(!). One deserves beating if doesn’t understand scolding. Who are you to dislike the bread and blessings the God gave?!..

Know yourself

If you don’t know yourself

They will blow your neck.” (p. 156)

This situation is a psychological punishment that father gave to his son, namely it is a different form of anger that found a shape in another extent. Besides father’s threats his son with a beating when meke her son do what he likes is another point to be discussed.

Yakup Kadri in *Kiralık Konak (Rental Mansion)*, indicates that children idolize the one who is near to them, the one they like most and the one they canonized in their eyes. Moreover, he points out in their development of identity and personality, novels they read, friends, teachers and enviroment is effective.

Author, thinks in child education choosing a midway (neither too relaxed nor too conservative and tyraniser) will be more accurate. Otherwise individual can make wrong decisins about his life, can think destroying the taboos as a courage or thinks violating the rules as an intereting thing. Yakup Kadri, also suggests that parents should communicate them with understanding mood without losing their common sense¹. Nonetheless, in the novel, it is another salient property that children always stays child in their parents eyes, never becoming a friend or a confidant. Author, tells adults rather than understanding and communicating with children, they prefer to restrain children according to the envioments rules and expectations and try to clamp down on the children.

Sekine Hanım, even she leaves the mansion on her husband’s request, visits her father on the occasion. She was taking care of her old and sick father while her husbands and kids are having fun. Seniha is Naim Efendi’s most loved grandchild. The rumors about young womans name involved in love gossips with Faik Bey sadden old men very much. Naim Efendi visits Faik’s father to stop these rumors. Purpose is to get married these two young ones and save his family honor. Learning this Seniha, tries to tell her grandfather that marriage is out of option.

“... Yes, yes we love each other. If I want we can marry and be together that nobody can separate. However we don’t want it.

Yet, our thoughts on marriage don't alike. To us marriage is not a matter of heart. It is not a necessity either. Me and him, thinks this as a matter of mind and calculation; a Money related thing..." (p. 123-124).

Even if this divergency between grandfather and grand child separates them physically Naim Efendi, carefully follows news about Seniha, and follows developments. He has her empty room cleaned, thinks about beautiful memories – when he finds the strength to stand up and hold on to walls- of his granddaughter. Seniha always goes to places that she desires after arguing with his grandfather about how he intervenes the decisions related to her life. In her letters, she says that the love and compassion that her grandfather felt towards her was sacrificed to conflict of generations and can not be avoided; she wants them to take care of him. This becomes some sort of redemption:

"Father, I act like a child and made madness, but, for my account I don't regret it; I don't feel any pain but to make you worry about me. For so many years you diverted and amused me with the idea of taking me to Europa. So I thought, until the end of my life I will be amused and diverted with empty promises like this and die without reaching my life's only purpose. I did what you couldn't do; yet this desire will poison me if it remained in me. Don't you prefer my temporary absence to an eternal trip? Yet, if I stayed there, I would possibly kill myself; you couldn't know, recently what a strong heaviness invaded my heart, what a terrible thought appeared in my brain. For months, under your noses, I was alone yet none of you noticed, none of you said what's happening to this poor girl. Your share of grief of what I have done, be sure of it, is a punishment of your own fault, of course only you will suffer it. Everything is in order... I only pity my grandfather among you; he, is the least sinner among you; between us there is a pile of years and a lot of false ideas, superstitious dogmas, unmeaningful traditions; behind all of this pile it is impossible for him to see my soul and act according to it; I was an unsolvable riddle for him. He only knew how to love me; more than anyone else. Without a doubt, my last act will be devastating, if it is not deadly, for him. My request is to take care of him (p. 147-148).

Köknel (2005: 285-286) indicates the main reason of this conflict as disconnection of communication between young and old generation, in a word the messages that sent and received can not be understood mutually. He states that youngsters couldn't get the people around them, also mature and old generations couldn't understand them this results in a conflict of generations that last hundreds and thousands of years, a universal fact.

All through the novel Naim Efendi only speaks to his concern about pudicity and family honor, without communicating² with his grandchild, Seniha, he offends and withdrawn.

Another grandchild of Naim Efendi, Cemil, -twenty one years old- despite being a student, is a permanent resident of entertainment places. Moving of his parents to Kanlıca for summer interrupts his addiction to pleasures which became part of his character. Cemil rushes to catch his ferry, for not rifting with his father who says "At least at midnight, or not possible before sunrise, must be in his bed" (p. 28) before Beyoğlu life awakens.

Adler in his "*Yaşama Sanatı (Art of Living)*"³ work, points out that child, during development, seeks a solid and a closer purpose to him/her, looking his/her

environment, detects the most powerful one and idolises him/her. Like Seniha, Cemil idolizes her father instead of his weak characterised mother also supports this idea.

Selma Hanım's poet-minded grandchild Hakkı Celis, raised connected to his traditions and customs. Hakkı, also criticises his relatives not to think about country's future but their own interests and he has a patriot identity that he goes to Çanakkale for war. Therefore young men draw a profile that fears from his grandmother, connected to his values, respectful but couldn't hold himself to be the prisoner of his emotions.

With his father's pressure Servet Bey kept his European wannabe only in his room, but this habit widens after he gets married.

It can be seen extreme freedoms that presented to person can lead wrong decisions and behaviours, pressure and insistings makes prohibitions more attractive. Then, in child education a midway should be chosen and problems should be solved with dialogs.

Refik Halit Karay in *İstanbul'un Bir Yüzü (İstanbul's One Face)*, gives place to kids that hate their country, humiliating its people and dreaming to go to Europe by idolising their mother and father. Besides it has been told that adoption will be an example behaviour in the person of Fikri Paşa who adopted Şâyan, an orphan. Absence of a good education and care (feeding, health, cleaning), children, doesn't give a good first impression, but it can be fixed with closing the missings. Author says perception of "dirty and impudent" child can change based upon adults. For him "there are no dirty and dowdy children, only ignored kids" exists.

Although Kâni's daughter are thirteen years old, their around is full of fortunes and they don't stay not to them. Their father finds them beautiful and smart, he states that he is proud of them because they hand it to violin, piano and English lessons they took.

Girls, like their parents, don't like their country and its people and they say they want to live in Europa:

"– Let's go father she says, you can make me 'Sörti dö bal', we can have lodge there, we can go every night, I will continue conservatoire... How can someone live in İstanbul in stead of Berlin? Wien, Budapest, or even Bucharest is okay..." (p. 179)

Refik Halit Karay, tells that parents are proud of their children's success and shape their ideal world.

Ömer Seyfettin in *Yalnız Efe (Alone Swashbuckler)*, tells about adventures of a girl who questions her sexual identity, wanting to be born as a strong, brave man Kezban. These requests are subconsciously thrown young girls heart and make her heart sting; but it doesn't weaken the bond between father and daughter. According to Yenen-Avcı (2013: 72) author melted Kezban character and the profile of men and woman he yearns in the same pot. Although Kezban is a heroin who has emptied from her female features author wanted to draw attention to the property that gender represent, not the gender itself. Seyfettin's purpose was to idolize the ones who rise their voice against injustice and criticize cruel people where they do what they want on the place that government deserved.

Kezban, even though she knew that her father wanted her to be born as a man and saddens there is a beautiful relationship between father and daughter based on love and respect. After losing her mother recently, her father became all she has. Murder

of her father as a result of unjust opens a big wound in Kezban's soul. Her pain becomes hatred, hatred brings grudge, and grudge brings rebellion. Kezban doesn't accept injustice and after a while she disappears. She appears as a brave young man known by the villager by the name of "*Alone Swashbuckler*". The character Alone Swashbuckler was built on Kezban's love of his father, and continues in novel without sexual identity and personal desires. Kezban takes mercy, benefactor, patriotism that she saw from his father, as a model and becomes enemy of all bad and evil.

In novel, a profile that is a genderless and a child who idolizes her father can be seen.

Aka Gündüz in *Aysel*, indicates negative effects of social and economic status of families on children.

Aysel before falling in love with poor Ali whose a son of sharecropper, she leads a life of pleasure with her family's fortune and power, with her relationship she in fact pays the price of what she has. This rich girl-poor boy love reaches a level that causes trouble to themselves or even their families and friends. Despite being one of the few educated young men in his village because of his father's job, he makes sharecroppings in blend feasts harm. Therefore he is exposed to Hacı Nazif's humiliating attitude.

Halide Nusret in *Küller (Ashes)*, while she indicates that the importance of the future of children be ensured by adults, having children, is not only to mean loving them.

Namık who has two kids named Tarık and Seciye, almost after three years, he thinks they won't need him anymore (Tarık will 24, Seciye will 20 years old). He states with that he can even die comfortably.

Nejat, who is Suzan's nephew and first love, has three sons and one daughter. It can be seen that father made these children not from his love of children but he made these children because of era's necessity.

In Ebubekir Hazım's novel *Küçük Paşa (Little Pasha)*, it is told that children can't get enough food because of poverty and misery, their body hygiene is ignored, they are bereft from education rights and they were forced to answer economical expectations at early age. Yenen-Avcı (2013: 77) makes observations about his novel:

Distress and hardships that Anatolian people live, this time, tried to be shown from a child who met life's sorrowful side at early age. *Küçük Paşa*, in fact, is a novel that makes adults, who think the World is turning around them with good and bad, think about child sensitivity and suggest them to care about children. Salih, not only in Anatolia, but in the whole World, is a representative of all children, who have forgotten small body and big soul that lives their tragedy.

Salih lives her first seven years of life in Salih Paşa's mansion. Until he is three, he lived all the privileges and beauties that title "*Küçük Paşa*" gave him. This spring era turns in to winter with the death of Suat Bey, and Salih was sent to his village.

"Salih is accustomed to eat with knife and fork in Alafranga (European) tables, Haçça's only an inch in height dirty wooden tray makes even the greatest food look disgusting, for sometime, he couldn't find even hard cooked bread. Cooked by sticking to the walls of the tandoor heated with manure, more precisely, with reason can't withstand the stomach, didn't cooked enough and pulled out as soon as started to crust, and the next day these cookies turn in to stone and he couldn't eat them. Skim

milk cheese, which swallowing is like to swallow a Word that came to your tongue's tip and formidably swallow it, bulgur rice which rarely smells oil, pumpkins that cooked with only water in soil jugs, inevitably eat tasteless beets, negligence of his father to protect himself against that black bird even at least like a scarecrow, gives pain to this poor child's heart as big as mountains" (p. 120).

Salih, here, grows without parental love. His step-mother's cruelties are not bearable. Beatings with or without a reason, pinches that bruise his body, overwhelming works for his body and age, despising attitudes and insults opens a huge wounds on Salih's body and personality. Squalidity, lovelessness, misery and sanctions outweighs his heart, causes his little body to catch tuberculosis. Ill fortune of this little children, he was seen as an unwanted entity in the mansion and thrown out like garbage, continues as fast as possible.

Haçça was uncomfortable from Salih's coughings and thrown out, he tries to enter imam's stable to get warm but shreds by wolves. Güssün and Mevlüt, although they didn't forced to work and obligated to dry bread like their step brother, they grow with motherly love but they are kids covered with dirt.

An exaple tho this is: their mother didn't care about their bodyly hygiene and makes them sleep on the beds that they pissed. Besides another point that draws attention is that children were fed on only a few kinsd of foods. Ebubekir Hazım, tries to tell that children, who grow in difficult geography and sometimes in emotional longing, can not have an ideal childhood.

RESULTS

National literature era represents one of the important processes; also this era's novels are among the national culture elements. The focus of this study is on child concept in National literature era's novels (1911-1923).

Aspect to children in the novels inspected are: Yakup Kadri sees them as entities that must be declined as soon as possible for the sake of society, Halide Edib forms an emotional bond, Halide Nusret sees them as a worry for future, Reşat Nuri sees them as a source that adds color to life and entities that should be taken care, Ömer Seyfettin describes them as a bond whose gender depends on God. Ebubekir Hazım and Refik Halit loads an economic value to the children.

Childeren, in Ebubekir Hazım, can't live their childhood, meets the sorrows of life at early ages and an adult miniature who obligated to carry families work load. Author, tries to point out that being a child in a geography that misery and poverty shows up, equals to a lot of concept that recalss misfortune. Tepeyran indicates, children obligated to face economic expectations in weak economic structures and for this reason they couldn't live their childhood.

Refik Halit tries to tell, children, becomes an instrument to families economic force and flatulency. Aka Gündüz indicates, children was seen as an inheritor to families sins and good deeds, wealth and poverty, mistakes and truths, that human kids are forced to pay the price for their inheritance from their parents, and sometimes they are honored for this pride and happiness.

As a result, child concept is handled with different angles and features although they were written in same era. This situation shows that authors didn't remain insensitive to child reality, that they carried their missing, fear, problems and

happiness, tries to point out children sensitivity via heroes.

FOOTNOTES

1. Communication and empathy are two active and determinant in societies relationship. In Turkish Lesson Curriculum “Communication” is a theme, “Empathy” is among the gains that must be taught under subthema “Personel development” theme. *Bkz. MEB (2006), İlköğretim Türkçe Dersi (6,7,8. Sınıflar) Öğretim Programı.* p. 58-59, Access: <http://ttkb.meb.gov.tr/program2.aspx>
2. Moran also draws attention to the importance of communication in this regard. *Bkz. Berna Moran (1994), Türk Romanına Eleştirel Bir Bakış – I, İletişim Yayınları, İstanbul,* p. 151
3. Alfred Adler (1998), *Yaşama Sanatı*, Turkish: Kâmuran Şipal, Say Yayınları, İstanbul

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Chapter 33

The Relationship between the Talent Management Leadership of School Administrators and the Job Satisfaction of Teachers

Tufan AYTAÇ

INTRODUCTION

One of the main subjects of the recent researches, which present the relationship between the efficiency of organizations and productivity of personnel, is job satisfaction. As being one of the major actors in educational field, job satisfaction (JS) of teachers is considered as one of the factors that contributes school efficiency, and increases their performances and commitment to school (Metle, 2001; Menon & Reppa, 2011; Magee, 2013). It has been proved with several studies that teachers with have higher level of JS establish more positive relationships with students; efficiently help their academic success; and, increase the efficiency of school (Sargent & Hannum, 2005; Hongying, 2007; Tillman & Tillman, 2008; Chen, 2010). In most countries, educational leaders and politicians make an effort to remove the negative factors that affect JS of teachers in schools.

Job satisfaction

Within the context of the definitions in the literature, JS is the perception level of the transactor with regard to his/her job, payment, working conditions, opportunities of promotion and advancement, people he/she works with, and the organizational environment (Canbay, 2007; Hongying, 2007). Zembylas and Papanastasiou (2004), on the other hand, define JS of teacher as a positive emotional situation, which occurs as a result of the relationship between expectations and perceptions of teachers with regard to teaching role.

Within the scope of Herzberg Double Factor Theory, high or low levels of JS of teachers are affected by motivational and hygiene factors. In various studies, based on Herzberg Double Factor Theory, internal (motivation, self-evaluation etc.) and external (payment, workload, working conditions, support of administrators etc.) factors, which affect JS of teachers, are handled (Sargent & Hannum, 2005; Hongying, 2007; Tillman & Tillman, 2008; Chen, 2010). Along with the external factors such as size of schools, working hours, working conditions, and payment, JS of teachers is also affected by personal and occupational characteristics (Reese, *et al.*, 2001; Akhtar, Hashmi, Naqvi, 2010; Judge *et al.*, 2010). Along with the internal factors of teachers such as self-efficacy, communication, and self-evaluation, especially gender, educational level, and marital status of teachers are also effective on JS (Woolfolk & Davis, 2006).

Researches, which present that there is a relationship between demographical characteristics of personnel (age, gender, educational level, marital status) and JS (Pugliesi, 1995; Canbay, 2007; Chen, 2010; Hongying, 2007; Lee *et al.*, 2009), are

frequently addressed in the literature. Within the context of these moderators, JS is attempted to be explained; and, it is presented that JS is a significant independent variable in most of the meta-analysis studies concerning especially stress and health of personnel (Cass *et al.*, 2003).

Talent management (TM)

TM is a strategic management process, which comprises defining the required skills and efficiency of the organization and its personnel; accordingly directing the personnel towards leadership and senior management positions, making organization-oriented career planning of all labour force, evaluating their performances, and creating and performing a high-performance culture (Aytaç, 2013, 2014).

Recently, TM is begun to be seen as a crucial success factor in the improvement of educational organizations. Skills of personnel and TM abilities of school administrators have come to the front as a primary source in the success of educational organizations. Focusing on TM will contribute to the implementation of other strategic targets such as creating a high-performance learning environment, and constructing in-depth leadership in schools. Being different from still existing simple success plans and performing typical hierarchical leadership roles, it is a process that enables the rise of skilful individuals who will create new and different leadership models in the future (Davies & Davies, 2011; Aytaç, 2013; 2014). In educational organizations, TM mostly focuses on drawing more skilful teachers to the schools; ensuring its continuity; supporting career developments; and increasing JS (Behrstock, 2010).

Leadership and job satisfaction

In educational organizations, different leadership approaches of school administrators affects JS and performance of teachers. Various researchers state that school leadership and JS of teachers can be a significant factor in the efficiency and success of the schools (Hoy & Miskel, 1996; Çelik, 2000; Weiqi, 2007; Yılmaz & Ceylan, 2011). In several researches, it is proved that there is a relationship between JS of teachers and leadership behaviours (Reyes & Shin, 1995; Bare-Oldham, 1998; Yılmaz & Ceylan, 2011; Jacobsen *et al.*, 2014). In the studies conducted by Ledoux (1999), Ayhan (2006), Nguni, Slegers and Denesse (2006) and Karadağ, Başaran and Korkmaz (2009), the role of Transformational Leadership of school administrator; in the studies conducted by Ilgan, Parylo and Süngü (2015), the role of educational leadership; and in the studies conducted by Çek (2011) and Değirmenci (2006), the role of cultural leadership, are presented to have a positive effect on JS of teachers. In the meta-analysis study conducted by Aydın, Sarier, and Uysal (2013), it is proved that transformational leadership characteristics of school administrators have positive effects on JS of teachers. In the study conducted by Stone (1992), it is observed that subscriber leadership behaviours of school administrators do not affect JS of teachers. In the research carried out by Tok and Bacak (2013), a low level of relationship is found between transformational leadership characteristics of school administrators and JS of teachers.

In the conducted literature scan, it is found out that although there are studies handled with regard to the relationship between leadership approaches and JS of teachers, there isn't any study, which discusses the TM leadership approach and JS

together. It is important to specify that throughout the world and in Turkey, how TM leadership approaches displayed by school administrators are perceived by teachers; and to present whether these behaviours are related to JS of teachers or not.

The aim of this study is to define the relationship between TM leadership of school administrators perceived by the teachers of Anatolian high schools and JS; and to put forward the prediction level of JS by the perceived TM leadership. With this aim, answers for the following questions are looked for:

1. Is there a meaningful relationship between TM leadership of school administrator and JS with regard to the perceptions of teachers?
2. Is the perception of teachers related to TM leadership of school administrator (individual qualifications, strategic talents, working with others, value dimensions) a meaningful predictor of JS?

METHOD

Model of the research

This research, in which the relationship between TM leadership of school administrators and JS perceived by the teachers is analysed, is a descriptive research in relational screening model (Büyüköztürk, 2008).

Research group

Target population of the study is comprised of 5691 teachers working in state Anatolian high schools in Altındağ, Çankaya, Keçiören, Mamak, Yenimahalle, Gölbaşı, Sincan and Etimesgut, which are metropolis counties in Ankara Metropolitan Municipality. According to Yazıcıoğlu and Erdoğan (2004), with a “0,05 margin of error,” a sample of 390 people represents a target population of 5691 people. Therefore, it is thought that the acquired sample in this research can represent the target. The sample of the research is comprised of 412 teachers who work in randomly chosen 16 Anatolian high schools, located in metropolis counties in Ankara Metropolitan Municipality.

To reach this number of samples, 412 of 448 Anatolian high school teachers, who are applied measuring tools, return. When the demographical characteristics of the participant teachers are analysed, it is observed that 44.6% of the teachers are male; and, 56.4% of the teachers are female. When the percentage distribution in accordance with the alma mater of teachers are analysed, it is observed that 42.5% of the teachers are graduated from faculty of education; 32.3% of the teachers graduated from faculty of science and letters; and 25.3% of the teachers graduated from other faculties. When the professional seniority of the teachers are analysed, it is observed that 10% of the teachers have been working for 1-5 years; 25.6% of the teachers have been working for 6-10 years; 28.4% of the teachers have been working for 11-15 years; 20.2% of the teachers have been working for 16-20 years; and 17.8% of the teachers have been working for 21 and more years.

Data collection tools

In the research, two scales are used as data gathering tools:

Job Satisfaction Scale: To determine the job satisfaction of teachers, a short form of “Minnesota Job Satisfaction Scale,” which is used in several domestic and foreign researches, is used (Gençtürk, 2008; Ceyhun, 2009).

Talent Management Leadership Scale: This scale has been developed by Davies and Davies (2011) to determine the TM leadership qualifications that school administrators should have. This scale, validity and reliability studies of which are carried out by Aytaç (2015), is used as a data gathering tool in the research.

Data analysis

Data were collected from teachers, who work in the Anatolian high schools where the samples were taken, between the dates September 2014-January 2015; in the analyses of the data, SPSS 20.0 package software was used. In the calculation of the relationships between variables, Pearson moments two-way correlation analysis (r) was used. In addition to this, to determine the independent variable's (TM leadership) prediction level of dependent variable (JS), Multiple Linear Regression Analysis was made (Hair *et al.*, 1998). In the interpretation of regression analyses, standardized Beta (β) coefficients and t-test results, related to the meaningfulness of these, were taken into consideration.

RESULTS

With regard to the first question of the research, the relationship between TM leadership of school administrators and JS, perceived by the teachers, is given in Table 1. Teachers state their opinions such that school administrators have “moderate” level ($\bar{x}=2.70$) of TM leadership qualifications. According to the opinions of teachers, it is observed that their JS is on “moderate” level ($\bar{x}=2.69$).

Table 1: Results of the Correlation Analysis between TML and JS

Variables	1	2
TML	1,00	,71**
SS	,71**	1,00

When the data given in Table 1 is analysed, it is observed that there is a positive, moderate-level, and meaningful relationship between TM leadership and JS ($r=0.71$, $p<.01$). In accordance with this, it is possible to say that as the perception of teachers related to TM leadership displayed by their school administrators increases, their JS also positively increases.

To determine the relationship between TM leadership of school administrators and JS dimensions, perceived by the teachers, Pearson moments two-way correlation analysis is made and the findings are presented in Table 2.

According to the data given in Table 2, the perception level of participant teachers with regard to external JS ($\bar{x}=2.29$) is lower compared to their perceptions with regard to internal JS ($\bar{x}=2.91$) and general JS ($\bar{x}=2.89$). It is observed that among general JS and TM leadership dimensions, teachers have a positive high-level relationship with strategic talent ($r = .75$, $p < .01$). Also, it is observed that among general JS and TM leadership dimensions, teachers have a positive moderate-level relationship with individual qualifications ($r = .46$, $p < .01$), working with others ($r = .48$, $p < .01$), and values ($r = .48$, $p < .01$). It is observed that among external JS and TM leadership dimensions, teachers have a positive low-level relationship with individual qualifications, strategic talent, and values.

Table 2: Results of the Correlation Analysis Made to Determine the Relationship between TML and JS Dimensions

Variables	\bar{X}	S	1	2	3	4	5	6	7
1. Individual Qualifications	2,73	,15	1						
2. Strategic Talent	2,69	1,12	,44**	1					
3. Working with others	2,69	1,20	,79**	,46**	1				
4. Values	2,71	1,15	,80**	,47**	,91**	1			
5. Internal job satisfaction	2,91	0,96	,49**	,39**	,62**	,60**	1		
6. External job satisfaction	2,29	0,96	,20**	,20**	,32**	,28**	,24**	1	
7. General job satisfaction	2,89	1,12	,46**	,75**	,48**	,48**	,42**	,25*	1

** $p < .01$

Prediction of job satisfaction

Results of the multiple linear regression analysis made with regard to job satisfaction are given in Table 3.

Table 3: Results of the Regression Analysis Made With Regard to the Prediction of JS

Variable	B	Standard Error B	β	t	p	Dual r	Partial r
Fixed	2,71	,20		13,21	,00		
Individual Qualifications	-,23	,10	,14	-2,26	,02	,11	-,08
Strategic Talent	,42	,07	,24	6,05	,00	,28	,21
Working with others	,81	,14	,50	5,69	,00	,27	,20
Values	,25	,15	,16	1,81	,07	,09	,06
R = .70 R ² = .49 Corrected R ² = .48							
F (4, 407) = 98.140 p = .00							

When Table 3 is analysed, it is observed that individual qualification, strategic talent, working with other, and values dimensions of TM leadership together have a high-level and meaningful relationship with JS ($R=.70$, $p<.01$). These predictor variables explain 49% of the total variance in JS perceptions of teachers. Relative order of importance of predictor variables on JS in accordance with standardized regression coefficient (β) is as follows: working with others, strategic talent, values, and individual qualifications. When the results of t-test concerning the meaningfulness of regression coefficients are analysed, it is observed that strategic talent, working with others, and individual qualifications variables are significant predictors on JS. Values variable, on the other hand, does not have a significant effect.

As a conclusion, the most important dimensions that effect JS of teachers are strategic talent, and working with others dimensions of TM leadership. According to the results of regression analysis, regression equality of teachers with regard to the prediction of JS is given below: $JS = 2.71 + 0.42 \text{ Strategic Talent} + 0.81 \text{ Working with others} + 0.25 \text{ Values} - 0.23 \text{ Individual Qualifications}$.

DISCUSSION AND CONCLUSION

Findings demonstrate that perceived TM leadership of school administrators is a

significant variable that predicts JS. It is observed that there is a positive, moderate-level, and meaningful relationship between TM leadership and JS. Especially existence of a relationship between JS of teachers and working with others (communication, attention, care, reliability, support, and hardships), strategic talent (strategic aim, actualization of works, sharing the future, establishing communication, seeing the biggest picture), and values (respect, confidence, accuracy) dimensions of TM leadership approach can be interpreted as a significant dimension in the creation of TM culture in schools. It is observed that strategic talent and working with others proficiencies of school administrators are significant predictors on JS of teachers. In this research, it is observed that perceptions of teachers with regard to individual qualifications and values dimensions of TM leadership of school administrators have a low-level relationship with their JS. These results show parallelism with the results of the researches carried out by Xin and McMillan (1999), Weiqi (2007), Sancar (2008), Yılmaz and Ceylan (2011) and Lassibille (2012), which present that leadership styles (cultural, bureaucratic, distributor, educational, attendant, interactionist, transformational etc.) displayed by school administrators positively affect JS of teachers and they are the predictors of JS of teachers. It can be said that the more school administrators display especially TM leadership behaviours, the more JS of teacher will increase. In the research carried out by Weiqi (2007), within the context of Herzberg Double Factor Theory, it is observed that external factors are more effective on JS levels of teachers.

TM leadership focuses to increase the emotional attachment and JS of teachers (Davies & Davies, 2011); by this way, it aims to create a TM culture in schools. The lack of confidence, respect, accuracy, and justice in educational administrators, or lack of educational administrators to represent these, can negatively affect JS of teachers (Lewis & Heckman, 2006). In this study, the result that administrators have these values on a moderate level and the JS of teachers are on a low level is meaningful.

The facts that effective school principals have higher proficiency of communication with teachers; they give confidence to teachers; they are sensitive about opinions and emotions of teachers, positively affect JS of teachers (Davies & Davies, 2011); and it can be perceived as such that within the context of the results of this research, school administrators need more support especially in working with others dimension. Within the context of the results of this research, the lack of school administrators in the working with others dimension of TM leadership and their lack of motivating teachers and being sensitive to personal problems of teachers support the result that JS of teachers are not on the demanded level.

Consequently, according to the opinions of teachers, it can be said that within the context of TM leadership dimension, school administrators do not have the demanded proficiency; and it is linked to the low JS level of teachers. Other significant results of the research can be summarised as follows: i) It is observed that external JS of teachers are on a low level. ii) It is observed that internal and general JS of teachers are on a moderate level.

Based on the results of the research, it is observed that besides strategic proficiency of the school administrators such as having vision and strategic aims, seeing the biggest picture, and sharing the future with teachers; communication and social skills of school administrators are also effective in providing JS of teachers.

Consciousness-raising and training of school administrators in TM leadership can be evaluated as an alternative to increase JS of teachers. Within the context of the results of this research, it can be suggested that qualitative researches should be carried out to determine the relationship between TM leadership approach and JS. Additionally, for the efficiency of school administrators and for the creation of a positive school culture, it should be evaluated as a requirement for school administrators to have postgraduate education level in fields of educational management and planning; and for the personnel to be assigned in this position to have these qualifications not as optionally but as obligatorily.

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Chapter 34

Occupational Problems of Health Care Personnel in Health Transformation in Turkey

Nevin UTKUALP & Aysel ÖZDEMİR

Together with Health Transformation Program (SDP) started in healthcare system in 2002 in Turkey, entire organizational structure, working conditions and modes of employment in healthcare services have been changed by legislative regulations and the healthcare team comprehension has also changed in public healthcare services (Anonymous, 2012a). Occupational groups which have continuously co-existed have diverged after the change from secured working system based on personnel cadre to contract employment and become remote from cooperation and solidarity and are now in pursuit of occupational performance criteria; they have been trying to secure their own positions by becoming estranged to each other. The increasing cost of healthcare services with Healthcare Transformation System has multiplied ethical problems together with social request. Most frequently encountered problems of nurses and midwives are different approaches of institution and other members of the team regarding the care and treatment of the patients, protection of patient rights, distribution of limited resources, and unethical attitudes of colleagues (Tokaç, 2012).

With Healthcare Transformation System we confront with some obstacles in exercising “right to health” which is one of the fundamental human rights of the individuals. Arrangements such as contribution margin, performance system, precarious work conditions etc. which are put into effect with this health model increase disparity in health. Moreover, a health model which includes important problems such as the use of performance criteria imposed with Health Transformation System which disrupts the cooperation and work peace of the health team and increases the workload of nurses and midwives and downgrades the personal and economic rights of the employees has been introduced. At this point, the aforementioned problems adversely affect community health care.

HEALTH CARE POLICIES AND RELATED LEGISLATIVE REGULATIONS

Transformation in Healthcare

Studies towards Healthcare Transformation System (SDP) in Turkey has started with the adoption of Health Project Loan Contract signed between World Bank and Turkish Republic government in 2003 (Anonymous, 2012b). It is seen that all the components that form healthcare system of Turkey, namely hospitals and service finances have been restructured.

Ministry of Health states the objectives of Health Transformation System (SDP) as “organizing, financing and providing health services in an effective, productive and equitable manner”. It is claimed that with this program it is aimed to decrease the costs by using the resources appropriately and to provide more services from the same

resource. Moreover, it is stated that one of the objectives within the scope of the term equity is to ensure the minimization of the difference between social groups by bringing healthcare services to every part of the country.

Ministry of Health also indicates that it aims to improve the health level of the society by preventing diseases for the healthcare program to be effective (Tokaç, 2012).

The fundamental principles of Healthcare Transformation program are as follows:

- Anthropocentrism
- Reconciliation
- Sustainability
- Volunteerism
- Continuing Quality Improvement
- Separation of Powers
- Participation
- Decentralization

“Healthcare Transformation Program” has aimed to transform around eight themes within the frame of the aforementioned principles announced to the public by the Ministry of Health (Anonymous, 2014).

- Planner and Supervisor Ministry of Health,
- General Health Insurance that gathers everyone under a single roof,
- Encouraging private sector,
- Contracted personnel recruitment,
- Performance based service,
- Using private sector methods,
- Actualization of health businesses with financial and administrative autonomy,
- Institutional structuring of rational drug and equipment management,

Regarding the third, fourth, fifth and seventh articles above, it is transited to Public Hospitals Union by gathering the hospitals under one institution. The qualifications of this Union are defined with legislative decree and relevant regulation issued by the Ministry of Health (Resmi Gazete, 2012).

Public Hospitals Union

Planning and Budget Commission of Grand National Assembly of Turkey passed “Draft of Law for Public Hospitals Union” on 18th March 2010. Draft of Law for Public Hospitals Union states the rule basis for the establishment and execution of Public Hospital Unions with the aim of providing Secondary and Tertiary Healthcare Services in an equitable, in line with the needs and expectations of the community, easily accessible, productive, qualified and effective manner (Anonymous, 2011a). Davas indicates that it is attempted to develop a program which involves all models for providing goods and services that include joint participation of public and private sector with this mechanism which is ranked between providing public services by the government and providing all services by the private sector (Davas, 2011).

It is indicated in articles 29 and 30 of the Draft of Law for Public Hospitals Union published in the Official Gazette numbered 28103 and dated 2nd November 2011 (Resmi Gazete, 2011).

General Health Insurance:

In Healthcare Transformation Program the pre-existing institutions such as Social Security Institution, Social Security Organization for Artisans and the Self-Employed (BAĞ-KUR) and Retirement Fund of Civil Servants are gathered under the same roof and turned into General Health Insurance Institution. Combination of three social security institutions has entered into force upon its publication in the Official Gazette dated 20th May 2006 as 5502 numbered Law of Social Security Institution. In the sixth article of the aforementioned law, the individuals who are not considered as insured in the implementation of the short and long term insurance clauses are defined. The law has made a regulation which has narrowed down the insured coverage. Thus, all agricultural laborers, house cleaning staff and self-employed workers who earn less than the minimum wage are deprived of social security (Anonymous, 2006a).

General Health Insurance has undertaken studies concerning the following:

A poverty threshold will be determined in order to locate insolvent individuals.

A rating system will be established in order to determine the solvency of the citizens.

A fund will be created in order to compensate insurance premiums of the insolvent citizens partly or totally with public funding.

A structure which will determine whether or not received services comply with the defined qualities by conducting “conformability and suitability” inspections will be established.

The development of private health insurance will be encouraged as well as the establishment of General Health Insurance and private insurance will be promoted by providing its existence in the system with a complementary role.

Hamzaoglu underlined that when General Health Insurance is considered with the fact that the large part of the population is below the poverty line and the unemployment level is very high, the majority of the citizens will not be able to pay insurance premiums and thus the rate of benefitting from the health services have significantly decreased (Hamzaoglu, 2006). Additionally, Hamzaoglu called attention to the fact that with this transformation program circulating capital practices have been executed in inpatient treatment institutions with the health service provided to the community and thus the concept of providing health services as a team is damaged with the circulating capital interest disbursed to the personnel based on their performance (Hamzaoglu, 2006).

It is recommended to gather General Health Insurance under the roof of the Ministry of Labor and Social Security and to take over “compulsory general health insurance” model (Anonymous, 2011b). In collected work of Ataay, it is underlined that health services is a system clear of civil rights and this framework and that the insolvent sector is kept away from benefitting health services (Ataay, 2007).

Application Communiqué in Health

The aim of the communiqué issued by the Ministry of Health is based on the notification the basis and procedures of benefitting from the health services, travelling, daily wage and paid companion allowances financed by their institutions and the remunerations determined by Health Services Pricing Committee and to be

paid by the institution of the individuals whose health assistance is provided by Social Security Institution and who are defined within the scope of the article (Anonymous, 2011b).

Rendering Uninsured

According to World Bank report, there is a need for fundamental changes and reorganization in public health systems in Turkey. In such recent changes, differently from the notion that health services are fundamental human rights, health services are the rights of the citizens who pay their general health insurance and private health premiums (Belek, 2012).

Belek indicates that it is started to execute contracted model for the institution employees by abandoning integrated model and that there is a monopolistic structure in Turkey (Belek, 2012). It is seen in the questionnaires that the fundamental changes conducted in healthcare system and health service delivery have given satisfaction to the citizens whereas those changes have created a significant amount of dissatisfaction for the healthcare workers. The aim in the fourth theme of Healthcare Transformation Program, namely “healthcare manpower who is equipped with knowledge and skill and work with high motivation” is not fulfilled.

Payment Based on Performance

“Circulating capital payment” which was put forward in healthcare services within the scope of Healthcare Transformation Program in 2004 has been presented nowadays as “circulating capital payment based on performance”. In the study by Kizek *et al.*, it is indicated that the changes brought by “payment based on performance” have caused more medical service applications and the increase in therapeutic practices (Kizek *et al.* 2010). However, regarding the same subject, Etiler indicates that circulating capital payments of the employees of Ministry of Health are determined according to medical procedures, examinations and operations performed in their hospitals and thus there is no improvement in health parameters as there is increase in number of inpatients and bed cycle and decrease in average hospital stays (Etiler, 2011). In a study by Seren and Yıldırım it is indicated that in Turkey the number of nurses per patient is not sufficient and that their workload has increased together with performance practice (Seren & Yıldırım 2013). Additionally, it is underlined that performance policy is doctor-oriented and that the team work of nurses and midwives who are in the most ill-affected occupational group has been completely hindered.

Subcontracting

Ministry of Health has indicated the inadequacy of the number of nurses in its national and international reports and nurses have been employed in various statuses to solve this problem since 2003. With Healthcare Transformation Program, types of employment until today are as follows: civil servant according to article 4/A of the Law numbered 657, civil servant according to article 4/B of the Law numbered 657, contracted employee according to the Law numbered 4924 and contracted employee in the operations conducted as purchase of services. In this process, by means of subcontractors contracted healthcare workers have provided health services in public hospitals. In this context, as nurses and midwives have executed the same work in the

same institution in different statuses, this practice has made team work impossible (Anonymous, 2003) .

THE EFFECTS OF HEALTH POLICIES AND RELATED LEGISLATIVE REGULATIONS ON NURSING AND MIDWIFERY

The Effects of Performance-Based Salary System on the Profession

One of the prominent elements in Public Hospitals Union management is the presence of performance audit in healthcare personnel working in health institutions from the point of “quality”, “productivity” and “patient satisfaction”. In the study by Ataay , it is underlined that regarding the Public Hospitals Union process there is a quest for the transition of civil servants in healthcare personnel status to “private contracted” personnel status (Ataay, 2007). Therefore, it is projected that the administrators of Public Hospitals Union will easily be able to annul the contract of the nurses and midwives whose performances they deem as unsatisfactory. Today, the nurses and midwives who are newly-recruited in these unions are employed in “private contracted” status and their job-security and rights are not protected as the healthcare staff working in old civil servant status (Dinç, 2006).

It is thought that health services in Turkey should be accessible and sustainable for everyone and that macro policies determined in health policies by Healthcare Transformation Program have caused an inequitable situation in micro distribution (Anonymous, 2006b). Regarding the healthcare system, not only the individuals who have health insurance but also the ones who do not have health insurance or are not able to pay sufficient amount of premium should have the right to receive the health services they need.

Within the context of Healthcare Transformation Program, we are hindered by obstacles such as contribution margin, performance system, and insecure working conditions. Social security is a fundamental right for every individual. Despite social and private health insurance, when the individual wants to receive the health service they need, a new healthcare model such as paying contribution margin and premium is created. With this contribution margin payment, the individual has to directly pay the amount exceeding the prices determined by the government (Anonymous, 2006b).

Additionally, the patients who have premium debts or not able to pay contribution margin are not able to receive healthcare services. One other obstacle of health system is the performance criteria. It is possible to say that with these criteria the fact that health service is a team work is ignored and a doctor-oriented system is created. The doctors who aim to increase performance criteria may allocate less time for the patients. On the other hand, increasing diagnosis and therapy procedures multiply the workload of nurses and midwives in the institutions (Körükçü *et al.* 2006). Healthcare institutions established within the frame of Healthcare Transformation Program try to decrease health expenses in order to make more profit. As the centralized purchases of health expenses has been ended, expensive medical equipment and drug purchases of healthcare institutions have increased the inequity in healthcare. Nurses and midwives are obliged to overcome the problems regarding these expenses with their own personal efforts (Bahar, 2006).

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Chapter 35

Performativity as a Postmodern Legitimation Narrative and the Position of Knowledge: Case Study of Jean-François Lyotard

Özgül EKİNCİ & Hülya YALDIR

1. INTRODUCTION

Meta-narratives are no more needed in the postmodern age. The narrative of capitalism no more requires any modern meta-narratives to legitimize itself. Today it is legitimized by informatics. Therefore, in our day, when the input and output relations via computers are performed in the most profitable and the most cost-efficient way, the greatest legitimation is information. The history of postmodern conditions is in fact a history of the evolution of capitalism into techno-capital on one hand and a history of the demise of the Marxist grand narrative on the other (Grant, 2006: 29-30). Technology and capitalism which advanced in the postmodern age have so transformed knowledge into a commodity. One of the well-known experts on the issues at the heart of Lyotard's work, including modernity and postmodernity, ethics, the sublime, knowledge, the university and the future, Simon Malpas points out that "Nowadays, Lyotard argues that knowledge is no longer organized towards the fulfilment of universal human goals. Instead, postmodern knowledge is valued in terms of its efficiency and profitability in a market-driven global economy" (2003: 28). Lyotard believes that postmodernism is not against the narratives but is against meta-narratives. In other words, postmodernism allows an image where many narratives are present but it is against meta-narratives that intend to clear all these images and become the only image itself. Although postmodernism avoids the meta-narratives, we observe that a new meta-narrative, that is, performativity, has a strong influence as the basis of the legitimacy of the knowledge in the postmodern period. Lyotard asserts that performativity, the measure of legitimacy of the knowledge for postmodern period, does not transform into a meta-narrative even though it is a measure. Because, performativity, as the narrative of legitimation for the postmodern period, does not have the characteristics of any metanarrative. However, it is still possible to assert that performativity in the postmodern period is a narrative that brings legitimacy to knowledge in this period with some of its characteristics. In this chapter, we shall discuss performativity as the narrative for legitimation in the postmodern period and try to provide the logic of performativity as a narrative of legitimation, along with the relation of performativity with some areas such as technology, power, commodification of knowledge, and the positions of universities etc. The position of knowledge together with these subjects will also be taken into consideration from the viewpoint of Jean-François Lyotard (1924-1998), one of the most celebrated proponents of postmodernism.

2. NARRATIVE OF PERFORMATIVITY

When we discuss postmodern epistemology, we see that the legitimacy of knowledge in this period is based on the performativity. However, performativity is not a pure area. One can say that it involves many areas. We will assess performativity by discussing the relationship of performativity with some areas while we are discussing the narrative of performativity in the postmodern epistemology. These can be categorized under some headings:

- Relation of Performativity and Technology
- Performativity and the Commodification of Knowledge
- Relation of Performativity and Power
- Performativity and University

Performativity can be thought of as an expression, a general definition of all these. With the period dominated by the narrative of performativity, “Science has now transformed to a discourse, field of technology and field of knowledge are fields which were focused on language proficiency. Discussions on communication problems, innovations on cybernetics, linguistic theories, modern algebra, informatics, office automation, presence of computers and the effect of the language of these on the sociology and on the formation of society of surveillance are all concentrated under the base of performativity after 1950” (Akay, 2010: 26-27). Especially after this period, the presence of technology in our lives has gradually and rapidly gained importance. Lyotard’s statements of technological language in the *Postmodern Condition* in 1979 have growingly started to reveal themselves after 2000s.

Today, there is not much place left to knowledge supported by the meta-narratives. Questions asked and the method of legitimation has been changed. “The question now being asked by the student, the state or the university is no longer *Is it true?* but *What use is it?* In the context of mercantilisation of knowledge, by and large this question is equivalent to: *Is it saleable?* And in the context of power-growth: *Is it efficient?*” (Sarup, 2004: 198-199). As just expressed above, knowledge influenced many different areas in the postmodern period. Knowledge has become a commercial commodity, a tool for the growth of power. One of the most important reasons for this is the fact that mechanization has increased as the technology is advanced. This changing condition of the knowledge has also caused changes in the structure of universities. The condition of the disciplines in the university has also brought about changes in the conditions of researchers and lecturers. While the main measure is the performativity, one can observe that knowledge is in relation to many areas. In brief, this logic of performativity had its effect on many areas. Let us discuss these under the following topics.

3. RELATION OF PERFORMATIVITY AND TECHNOLOGY

Technological advancements may be seen as the most important reason in performativity. It is observed that the non-performative knowledge had lost its ground and receded into the background with the ever-growing changes in technological advancement. In this regard, Lyotard writes:

It can fit into the new channels and become operational, only if learning is translated into quantities of information. We can predict that anything in the constituted body of knowledge that it not translatable in this way will be abandoned and that the direction of

new research will be dictated by the possibility of its eventual results being translatable into computer language. The "producers" and users of knowledge must now, and will have to, possess the means of translating into these languages whatever they want to invent or learn (1994: 19).

Indeed, today those who are not involved in this technological game of inputs and outputs cannot hold a place in the game of knowledge. This game of inputs and outputs has moved to a further stage with technology and with respect to the past. Technology has also changed the production of proof. In this context, in his accessible and popular book, *An Introductory Guide to Post-Structuralism and Postmodernism*, Sarup Madan (1930 - 1993) writes:

An important aspect of research is the production of proof. Proof needs to be proven. A scientific observation depends on the facts being registered by sense organs. But the range and powers of discrimination are limited. This is where technology comes in. Technical devices follow the principle of optimal performance, maximizing output and minimizing input. Technology is, therefore, a game pertaining not to the true, the just or the beautiful, but to efficiency. A technical "move" is "good" when it does better and/or expends less energy than another. Devices that optimize performance of the human body for the purpose of producing proof require additional money. The game of science becomes the game of the rich, in which whoever is the wealthiest has the chance of being right (2004: 197).

We are always taught that we shall not suspect the absoluteness of knowledge. But, as one can see here, knowledge has become a game of the rich, a game of power as of today. Knowledge is not a simple thing as it was in the past. The approach that knowledge depends on is the harmony of the outside object and the idea that the mind has lost its effectiveness. Today, it is easy to access the knowledge. Knowledge is as close to the individuals as a click of a key, individuals are bombarded with information when they enter the Internet. It is indeed possible to learn what is required in the easiest and quickest way and it is no longer possible that the knowledge is destroyed, that it disappears or it is kept in the hands of specific regions. Circulation, into which the knowledge has entered, has also covered the whole world. These are the results of technological advancement. Today, living in a village or in non-accessible regions does not prevent accessing the knowledge any longer. The world itself has become a village with the globalization. This is because it takes a shorter time to reach anywhere in the world and this brings the same condition for knowledge. It may seem that what is expressed above contradicts the Lyotard's statement on calling knowledge a game of the rich, but actually it is not so. Yes, everyone who knows about general browsing in the basic level, i.e. anyone who understands the language of the machines can access knowledge today but this does not contradict the fact that knowledge is a game of the rich. Even if it is possible for everyone to access knowledge, the people who load this knowledge onto the machines and who allow us to access the amount of knowledge they desire are the rich ones. We can only know that they desire us to know. Thus, while technology allows everyone to access knowledge quickly and in the shortest possible time, it has also allowed that the powerful to dominate the knowledge that can be accessed with it. Therefore, people who have the authority to enter these machines have also the right for domination, but this does not show the fact that this is simply the issue of communication. Regarding the matter, Lyotard states:

If the problem is described simply in terms of communication theory, two things are overlooked. First, messages have quite different forms and effects depending on whether they are, for example, denotatives, prescriptives, evaluatives, performatives, etc. It is clear that what is important is not simply the fact that they communicate information. Reducing them to this function is to adopt an outlook which unduly privileges the system's own interests and point of view. A cybernetic machine does indeed run on information, but the goals programmed into it, for example, originate in prescriptive and evaluative statements that it has no way to correct in the course of its functioning - for example maximizing its own performance (1994: 45).

Although it seems that we access the knowledge without mediation, computers do not load knowledge themselves and they do work with the information loaded on them. Therefore, computers and technological devices do not provide knowledge directly, they provide it indirectly. As we see, knowledge is especially an issue of power today. Before moving on to the subject of knowledge and power, it will be convenient to add some other things on technology and knowledge. "The revolution in genetics and the change in the medical devices, the age of micro-surgery, computerized surgeries differentiate from the modern period in terms of social practices, too. Tools have got smaller and smaller, and created the revolution in the social area" (Akay, 2010: 27). Particularly, after 2000, mankind has entered an age when these technological advancements have grown more rapidly. While making a discovery or developing a technical tool took about a century or so in the past, a new model of the phone one has recently bought with new features is introduced to the market within a week or a month today. This speed in advancements is due to rapid access to knowledge, but it is also caused by another more important feature of the technology: *Storage*. Although the computers get smaller and smaller in time, their contents have expanded at an inverse ratio. Thanks to the computers, data obtained may be collected and compared or one can exchange information by entering into a dialog with someone. While the understanding of knowledge in terms of discoveries and new techniques has advancing further, this also brings some negative effects. "The technological transformations are having a considerable impact on knowledge. The miniaturization and commercialization of machines are already changing the way in which learning is acquired, classified, made available and exploited" (Sarup, 2004: 190). The exploitation becomes more prevalent as the technological tools that will store knowledge and that allow access to it to become smaller. This shows that knowledge has started to become a commodity. "Knowledge is already ceasing to be an end in itself. ...It is and will be produced in order to be sold" (Ibid.). Computers and phones that allow us to access Facebook, twitter, google etc. are good examples of this.

It seems that the informational aspect of the knowledge prevails as observed in the changes of the period we live in. It may be more correct to put it this way: knowledge shall have informational codes otherwise any other kind of knowledge is not much required today. This brings to light the fact that the legitimation attributed to the knowledge does not come from the knowledge itself and indicates the presence of a problem with the legitimacy of the knowledge.

4. RELATION OF PERFORMATIVITY AND POWER

Postmodern society is a society where messages and codes are present and where each individual exists in the context of these relations. Postmodern society of today is

not a society that can be explained by the theories of society of the past. Therefore the central part of this society is not the administrators but the machines and the persons who have the right to access these machines. Lyotard states:

For brevity's sake, suffice it to say that functions of regulation, and therefore of reproduction, are being and will be further withdrawn from administrators and entrusted to machines. Increasingly, the central question is becoming who will have access to the information these machines must have in storage to guarantee that the right decisions are made. Access to data is, and will continue to be, the prerogative of experts of all stripes. The ruling class is and will continue to be the class of decision makers. Even now it is no longer composed of the traditional political class, but a composite layer of corporate leaders, high-level administrators, and the heads of major professional, labour, political, and religious organizations (1994: 41-42).

As specified in the text above, the power dominating the postmodern society shall not be misunderstood because this power does not represent a state or a government. It is mainly the power of the owners of capital and the ones holding this technological equipment. This may sometimes be seen as a company, an institution or a sometimes as a state.

Suppose, for example, that a firm such as IBM is authorized to occupy a belt in the earth's orbital field and launch communications satellites or satellites housing data banks. Who will have access to them? Who will determine which channels or data are forbidden? The State? Or will the State simply be one user amongst others? New legal issues will be raised, and with them the question: "Who will know?" Transformation in the nature of knowledge, then could well have repercussions on the existing public powers, forcing them to reconsider their relations (both *de jure* and *de facto*) with the large corporations and, more generally, with civil society (Lyotard, 1994: 22).

Here, let us think of Jean Baudrillard (1929-2007), who has proved a crucial influence on postmodern theorists. According to him, it is not possible to distinguish the reality of the world we live in and fictional reality. When simulation and the reality are so intertwined, it is also not possible to distinguish it too. But Baudrillard, like Lyotard, does not make as much fuss about it. Simulation is more real than the reality now. Because the fiction (simulation) which ensures the winning of wars, which determines how people will live, and which gives a form to knowledge is more real than the reality itself. And the narrators of this reality are the ones holding the technology, i.e. they are the ones holding the power in this case. Today, narratives that legitimize knowledge are more widespread than in the past. We are all surrounded with postmodern narrators: We live in a world surrounded by many postmodern narrators such as advertisements, TV series, posters, facebook, twitter, internet, google and others. These narrators are not the type of local narrators that are specific to that society, that are originating from the culture of that society as in the past. On the contrary, these are grand narrators as in meta-narratives and they are not human, they are machines. This does not indicate that machines operate by themselves. This is also a herald of the powers that are holding them. What legitimize our knowledge are these narrators that surround us nowadays. Although Lyotard defines postmodernism as distrust to meta-narratives, postmodernism in fact reflects a period when numerous meta-narratives (such as the internet, TV, facebook, twitter etc.) have become rooted more and more in our lives. We can assert that the logic of performativity lies under all of these. "Foucault argues that knowledge is a power over others, the power to define others. In his view knowledge ceases to be a liberation and becomes a mode of

surveillance, regulation, discipline” (Sarup, 2004: 101). As Foucault states, today power is available everywhere in micro level. “Scientists, technicians, and instruments are bought not to find truth, but to augment power. Since performativity increases the ability to produce proof, it also increases the ability to be right; the technical criterion cannot fail to influence the truth criterion” (Ibid., 198). And this shows the intertwinedness of truth, power and technology in accessing knowledge and how much they affect each other. Today, knowledge has become a tool for the show of power. Who holds the knowledge also holds the power. With respect to the issue, Lyotard expresses:

When we examine the current status of scientific knowledge - at a time when science seems more completely subordinated to the prevailing powers than ever before and, along with the new technologies, is in danger of becoming a major stake in their conflicts - the question of double legitimation, far from receding in the background, necessarily comes to the fore. For it appears in its most complete form, that of reversion, revealing that knowledge and power are simply two sides of the same question: Who decides what knowledge is, and who knows what needs to be decided? In the computer age, the question of knowledge is now more than ever a question of government (1994: 27-28).

This intertwinedness of power and knowledge today reveals the fact that the legitimation of knowledge does not come from the knowledge itself more and more. In the past, it was not possible to access as much knowledge as today. Accessed knowledge was more related with the events that occur in the immediate surroundings. However, an earthquake, a scientific discovery, a social crisis or many other events or conditions are within our reach whenever they occur. As it is possible to access these events or conditions via the technology and the ones holding technology in their hands, these are presented to us in different forms or in line with the power of the authority that holds this power. “The growth of power, and its self- legitimation, is now taking the route of data storage and accessibility, and the operativity of information” (Benhabib, 1984: 105). Power holds the sources of accessing the knowledge. Thus it is possible to access the knowledge in the extent that it allows. “It has to be accepted that power produces knowledge..., that power and knowledge directly include each other; that a relation of power is not possible without a field of knowledge connected to it and a knowledge or a field of knowledge, which do not presume a relation of power, are also not possible” (Bal, 2006: 149-150). This shows that knowledge and power cannot be completely pulled apart. For Lyotard, knowledge in the form of an informational commodity indispensable to the productive power is already, and will continue to be, a major - perhaps *the* major - stake in the worldwide competition for power (1994: 21). According to Sarup, “Lyotard suggests that power and knowledge are simply two aspects of the same question: Who decides what knowledge is? Who knows what needs to be decided?” (2004: 191). Indeed, the tightness of the connection between knowledge and power has become stronger especially today. If knowledge has become a relation of power or a problem of power, this also shows that knowledge has started to be commodified.

5. PERFORMATIVITY AND THE COMMODIFICATION OF KNOWLEDGE

Commodification of knowledge shows that knowledge has become open to

exploitation and that it does not have its value in itself. It gains value as it has properties that make a saleable thing valuable, such as effectiveness, efficiency etc. In his valuable article, entitled “Academic Dystopia: Knowledge, Performativity, and Tertiary Education”, Peter Roberts writes: Lyotard saw that knowledge in its commodified form becomes virtually indistinguishable from information. Where knowledge in the past might have implied the existence of a knower and something to be known, now neither of these are necessary. Once it has been reconceived as information, knowledge can circulate, be traded and exchanged without the presence of a knower in any traditional philosophical sense (2013: 34).

Therefore, knowledge has already torn off its subject. In other words, knowledge today is nothing more than a commodity. Internet, databases etc. may be seen as the storage areas of this knowledge, which has been torn off from the subject (from the one who knows). Internet, databases ... and many more communication tools offer piles of information getting more and more than required. This may be called a pile of information as the information is actually offered as a pile, and the individual is buried under this wreck of information. Now, the individual has much more to do than ever. Because it seems more difficult for the individual to select what may be of use and to use it. This process we are in is the process of transformation of knowledge to profit. “The main threat facing postmodern society is the reduction of knowledge to a single system whose only criterion is efficiency. Lyotard sees the capitalist system as ‘a vanguard machine dragging humanity after it, dehumanizing it’ as all knowledge is judged in terms of its financial value and its technological efficiency” (Malpas, 2003: 30).

This also affects the universities and the development of the disciplines available in the universities. Because if knowledge depends on some kind of performativity, the value of sciences which cannot perform this performative duty will be reduced against the ones which can perform it or these sciences will face extinction. Lyotard maintains that “Information is and will be produced in order to be sold; it is and will be consumed in order to be valorized in a new production: In both cases, the goal is exchange. Knowledge ceases to be an end in itself, it loses its ‘use-value’ (1994: 20). If knowledge gains value because it brings profit, unavoidably the sciences or the epistemological branches which cannot bring this profit cannot find a place for them in this narrative for legitimization and as they cannot find a place, they shall be either put in the background or face extinction. Malpas’ account of Lyotard’s position on this issue can be mentioned as follows:

Lyotard argues that states are beginning to lose their positions of power in the world as the most important bodies in this new knowledge-based economy. Multi-national corporations such as computer firms, oil companies and the pharmaceutical industry are replacing them as the key players as knowledge itself becomes a commodity. These multi-nationals fund vast amounts of research and use the patent laws to claim ownership of the knowledge generated by it, which can then be put to use to make money. Lyotard’s argument here seems particularly prophetic of the changes that many commentators have identified as taking place during the 1980s and 1990s: international corporations’ influence has penetrated to the very heart of the decision making processes of national governments, and international treaties now threaten to dictate the legal systems and cultural policies of countries throughout the world (2003: 19).

The place of states has been threatened in this economy-political epistemology. Because, this economy-politics is owned by the companies in the global level, not by the states.

6. PERFORMATIVITY AND THE STATUS OF UNIVERSITIES

One of the best places that one can observe the changes in the status of knowledge in postmodern period is the universities. Today, mechanization and uploading of information (databases) in machines have deeply affected the disciplines and the researchers or professors in the universities. Lyotard and some other thinkers agreeing with him expressed that this could mean the death of professors. Is that true, do not we need or require professors or teachers anymore? Before providing an answer to this question, it would be appropriate to discuss the statuses of disciplines in universities. Universities were the most important institutions where meta-narratives were present before the postmodern era. “Correspondingly, growing incredulity towards metanarratives signals the end of the modern university and the arrival of its postmodern or, to use Reading’s term, *post-historical* iteration... The university is no longer *an ideological army of the nation-state*, but is instead *an autonomous bureaucratic corporation*” (Gietzen, 2010: 169).

With the epistemology shattered in the postmodern period, the duties of the universities have also been changed and the structure of the modern university has also been shattered. Postmodern is not just a problem of the legitimacy of traditional knowledge. It also threatens the position of universities, which are placed in the central position of this knowledge. In the postmodern period, the university has become a center where skills suitable for the logic of performativity are created instead of being the center of theoretical knowledge (Gietzen, 2010: 169).

Universities have also started to put importance on areas such as engineering, technology, communications, genetics etc. in conformity with the narrative of legitimation for performativity. And they have assumed the effort for training qualified staff in these fields. In his article, called “Jean-François Lyotard and the Question of Disciplinary Legitimacy”, Garrett Gietzen examines the relationship between universities and the logic of performativity via a consideration of Lyotard's ideas of performativity and language games:

The disciplinary language games that inhabit the academy are not only different from one another, they are composed of rules that necessarily make them irreconcilable. The important issue is not the commensurability between disciplines, but between a discipline and the criteria of performativity. These criteria are not equally suited to all types of knowledge. As Lyotard explains, performativity is reconcilable to scientific knowledge because certain types of scientific knowledge are essential to technology, and technology is in the service of the market, capitalism and power. Lyotard’s observation provides insight into why basic science has become increasingly underfunded relative to types of marketable technoscience such as biotechnologies and engineering (2010: 170).

Disciplines that are funded are the ones that are conforming to the logic of performativity. “Hence, it is no mere coincidence that two undersubscribed undergraduate programs recommended for elimination by the Indiana State University provost are philosophy and physics: areas of study that might appear disconnected not only from day-to-day life, but also the performance of the decidedly capitalist social system” (Ibid.: 170). This disconnectedness has caused them to be moved to the

background. Do universities have to toss their past into the waste for the sake of global economy of knowledge? This may be answered as "yes" if it does not conform to performativity. Anyone who has assisted undergraduate students in curricular choices knows the difficulty of convincing a student that a major in history or English literature is not a necessary ticket to poverty (Ibid., 171). Because fields with the highest unemployment rate in the societies we live in are disciplines which do not conform to a performative logic such as philosophy, literature, history etc. The types of knowledge that are most likely to succeed in the postmodern university are those that can be best reconciled with the logic of performativity. Other types of knowledge are less sustainable as they conform less to the performativity (Ibid., 169). Is it possible to protect these disciplines despite the performativity? On this subject, Gietzen states:

In many areas of study, disciplinary knowledge is often criticized for its lack of engagement with the 'real' world. Whereas the discipline of engineering is applauded for making worthwhile goods for the marketplace, the discipline of philosophy is frequently disparaged for its disconnection from day-to-day life. No longer is it possible to claim that philosophy – once the essential faculty of the university - serves a necessary function in society and not anticipate derision... It is possible to find a means through which multiple disciplines can combine efforts and proceed in concert. Of course, not all disciplines can participate in all problem-based referents equally. However, it is possible to see how many disciplines can participate. For example, addressing an energy problem should require, and benefit, from both the technical expertise of engineers and the ethical caution of philosophers. Such collaboration would require sacrifice and it is, admittedly, likely to create power differentials... Such an approach is a possible means for the continued viability of many disciplines facing obsolescence in the postmodern university (Ibid., 174).

As expressed in the text above, what we observe in the universities is that many disciplines which do not conform with the logic of performativity are left in the background or that they face the danger of becoming extinct. Now let us return to the second question we asked in the first place. Does the criterion of performativity and mechanization indicate the death of teachers and professors? "Lyotard's announcement of the death of the professor may be proved correct in the longer term but at present it seems unlikely that either teachers or researchers will be entirely replaced by machines. Nonetheless, there is every possibility, if trends already underway continue, that researchers will be encouraged to become more *machine-like* in their activities" (Roberts, 2013: 35). However, even if we can access all information via machines in the era we have stepped into, there is still a place for researchers and professors in providing the formation for accessing this information and for preparing and selecting the information required in this pile of information. In fact, the requirement for them has increased although their duties have been changed.

7. CONCLUSION

In the current period, what brought legitimization to the knowledge were the meta-narratives. Even if the meta-narratives change from period to period, what does not change is the fact that our knowledge is dominated by one of these meta-narratives. With the postmodern era, modern meta-narratives have lost their functions. Meta-narratives have reached an end because of the contradictions they have included in themselves and also as they have reached their goals. All these caused a crisis of

legitimacy of the knowledge. Because, knowledge has been deprived of meta-narratives that provided the ground for legitimacy for it. This period is called the period of legitimization crisis or the period of the crisis of narratives.

With the postmodern age, meta-narratives have reached an end. In the postmodern period, performativity as a narrative based on the context of relation of input and output caused by capitalism and on the criteria of efficiency has appeared. In the postmodern period, knowledge is based on the meta-narrative of performativity, but this meta-narrative is different from the meta-narratives of the modern period. First, this meta-narrative does not have a predetermined goal or scheme. Therefore Lyotard asserts that performativity is not a meta-narrative. However, "Far from grand narratives having disappeared, it looked as if for the first time in history the world was falling under the sway of the most grandiose of all: A single, universal story of liberty and prosperity, the global victory of the market. How was Lyotard to adjust to this uncovenanted development? His initial reaction was to insist that capitalism, though it might seem to represent a universal finality of history, in fact destroyed any" (Anderson, 2002: 50). Because performativity is a narrative which tries to attract everything to itself, but does not add any criteria other than efficiency. However it is possible to think performativity as a kind of meta-narrative since it determines a criterion. The meta-narrative that Lyotard in fact tries to demolish is the meta-narrative of performativity which is a by-product of capitalism. Yet, the meta-narrative of performativity does not have a simple structure like the other meta-narratives.

Performativity has a more complex structure than the other meta-narratives. Because performativity is seen to be in relation with many areas, such as technology, power, commodification, university etc. Performativity of knowledge also means that it is functional and adapted to the language of machines. With the ever advancing technology, we observe that the logic of performativity has grown in strength. In the narrative of performativity, knowledge gains meaning by its conformity with machine languages and by the fact that it has a performativity. If knowledge is assessed by its conformity with machine languages, this indicates that the people who have the right to access these machines have an authority on the knowledge. Then, we can say that knowledge has become a game for the rich, a game of power.

Today, we also observe that the machines we use to access knowledge are becoming smaller. This shows that we can access knowledge whenever we require but also that knowledge has become a commodity open to exploitation. As knowledge has been reduced to the language of many machines or databases such as facebook, twitter, google, smart phones etc., it has both become more easily accessible and more easily exploitable. It has become exploitable because anyone can access knowledge any time, and use it for his/her own purpose. Thus, knowledge has been torn off its subject today and become a commodity open to exploitation. This commodified knowledge is being used by the holders of authority to increase their power more comfortably. Today knowledge has lost its power to be a value in itself. What is required of knowledge is that it provides a benefit, i.e. that it is performative. This caused many disciplines that are not performative (such as philosophy, history, literature etc.) to die away or to lose their values.

Another consequence of the reduction of all knowledge to machine language is

that it causes us to think that professors and teachers are no longer needed. However, the individual put under the bombardment of information needs skilful teachers in order to access the information required in the quickest way within this pile of information. As can be deduced from the discussion above, knowledge has a very different position today from its position in the past. This is exactly what Lyotard means when he states that the position of knowledge has changed. Today the problem of the legitimacy of knowledge is not a pure problem of knowledge. It has also become the problem of numerous areas such as power, technology, economy etc. It appears that legitimacy of knowledge is not a product of an objective and exact process.

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Chapter 36

Care and Education of 0-36 Month Old Children in Turkey

Sibel ATLI & Gülen BARAN

Education is the process whereby positive changes in a person's behavior are brought about. The first step of education is preschool education, which spans the period from birth to primary education. Education in the 0-36 month period is crucial in that children's physical, cognitive, social, and emotional development is fast. Care and education services during this phase are important in terms of social impacts.

The 0-2 year period, called infancy, is when the child physically develops the fastest (Bayhan and Artan, 2011; MEBa, 2013). Brain development is also very swift in the first years of life (Kopp and Lindenberg, 2011). As the brain develops, the child's perceptual development progresses (Bee and Boyd, 2009). The sustaining of this rapid brain development is achieved through the provision of perceptual, motor, and linguistic experiences (Trawisk-Smith, 2014). Erikson points out that the foundations for self-control and respect of 0-36 month old children are laid in this period (Senemoğlu, 2009). Apparently, 0-36 month old children go through all development phases rapidly and critically. This unique development is as crucial for children as for those responsible for their care and education (Morrison, 2007).

In fact, inadequate social conditions could lead to irreversible impacts on children. For this reason, creating opportunities for complex perception and physical experiences has a positive effect on the development of various learning abilities in the future (Sucuka and Şenocak, 1999). Early childhood is one of the most critical phases of life. It directly affects the person's life in that it is the period when the base of personality is laid, and the child is equipped with basic information, skills, and habits. The physical and social environment where the child spends his or her first years plays a key role in development. This environment should be governed with a serious, scientific, and systematic organization, or education (MEBb, 2013).

There are three important stages in child learning, which home learning, preschool learning, and primary education are learning. These are all strongly related to each other. It is possible to raise better educated children if a connection among them is established (Dall, 1997). Education in preschool education institutions, important components of this connection, has a positive effect on the academic achievements of the later educational periods (Demiral, 1989; Sözer, 2000).

Everything is caused by a need. Preschool institutions emerged in Europe and some other countries in the 19th century, when industrial centers were established. Mothers who were employed there had to avail of the services offered by these institutions. Such services included healthcare, shelter, and education. The first nursery school was established in France in 1840. In many countries, baby care and preschool education are provided by the state. For instance, nursery schools in Italy, Russia, and France were incorporated into the school system (Tos, 2001).

In Turkey, care and education for 0-36 month old children are provided by nursery schools and day care centers. Institutions that undertake the healthy care of 0-

36 month old children and consequently serve mothers are named nursery schools (Oğuzkan ve Oral, 1995). They are mostly established for working mothers and operate for approximately 10 hours a day. The general purpose of the programs employed in these institutions is to contribute to the care, nutrition, and mental development of 0-36 month old children (MEB, 1994). Day care centers provide care and security for children from birth to the mandatory school age. They mostly focus on the healthy growth of the child (Koçyiğit, 2007). Nursery schools and day care centers operating with the permission of the Ministry of Family and Social Policies can be either private or public institutions. The regulation regarding the establishment and operation of private nursery schools and day care centers dictate that these institutions are responsible for the care, protection, and nutrition of 0-66 month old children.

Teachers underlie education systems. Particularly in the period prior to primary education phase, the educator plays a key role in children's education. The educator can prove even more important than the materials and programs employed (Oktay, 1999). Care and education programs for individuals responsible for the care and education of children of different age groups are important. However, not everyone is eligible for providing emotional and professional care and education services for 0-3 year old children. This age group needs adults who are aware of children's developmental features and special needs. For instance, children particularly need nutrition support at 1 year of age while they need an adult who encourage autonomy and independence at the ages of 2 and 3 (Morrison, 2007).

There has been significant improvement in training early childhood teachers in Turkey. In the past, it was attempted to meet the need for teachers in early childhood education institutions by employing graduates of girls' vocational high schools, primary school teachers, and child development and education departments of girls' technical and art higher teacher school. The first early childhood education teaching program started in the academic year of 1980-1981, and it was then an associate degree program. As of 1991-1992, teacher training institutions in Turkey started offering 4 year bachelor's degree programs (Başal and Taner, 2004).

Aside from the problems of teacher training institutions of early childhood education, there are some other points to tackle, the most important of which is dealing with the inadequacy of training teachers for the 0-3 age group. In the light of the fact that development in the first years of life is very fast, and creating a supportive environment in this period is of utmost importance, it is possible to say that there is a great need for training teachers for children in this age group. Besides, it is true that graduates of other fields or vocational schools still work together with early childhood education teachers in private early childhood education institutions (Köksal-Akyol, 2006).

Turkish laws dictate that educators to be employed in nursery schools and day care centers must graduate from higher education institutions' child development and education, pre-school education, kindergarten teaching, child development and education, bachelor's or associate degree programs of child development, or departments of child development and education of girls' vocational schools (APSB, 2015).

0-36 month old children spend most of their time with their families. Institutions

also offer programs for this specific age group, which is a very critical period in all aspects, and therefore, it is crucial to focus on the features and care/education studies of this age group.

DEVELOPMENTAL FEATURES OF 0-36 MONTH OLD CHILDREN

Development is defined as changes in structure and thought and continuity based on biological environmental effects occurring in time (Bayhan and Artan, 2011). The most striking element separating the childhood period from adulthood is the continuous growth and development (Ceylan, 2011). The discussion of heredity-environment and continuity-discontinuity is still going on among modern development psychologists. However, many psychologists are of the opinion that child development is totally a product of interaction between heredity and environment (Bee and Boyd, 2009).

Cognitive development was best defined by Jean Piaget. Piaget calls the period from birth to age two the ‘sensorimotor stage.’ He believes that the act of thinking at this age boils down to the physical conclusion of actions through the use of sensory organs. Thinking is not independent from physical actions. Unlike adults who design, analyze, infer, and imagine, babies only act (Trawick-Swift, 2013).

According to Piaget, newborn babies know very little about the world and cannot discover it on a planned basis. Circular reaction is a special tool in the harmony of first schemas. This involves babies encountering a new experience caused by their own motor movements, and the reaction is circular because when they try to repeat the movement, the sensorimotor reaction that occurs incidentally gradually gets stronger in the form of a schema (Berk, 2009). Behavior that babies acquire at this stage lay the basis for their cognitive development. Even though babies are unable to distinguish themselves from other objects in the beginning, they try to discover their bodies by sucking, clutching, and catching. They also begin to distinguish themselves from the outer world by forming meaning relations with other objects. In this period, babies coincidentally discover their existing schemas and try to explore their surroundings through organization and create new cognitive structures (Senemoğlu, 2009). Other cognitive abilities such as memory, attention, and playing are acquired during infancy (Trawick-Swift, 2009).

The bones and muscles that develop at an incredible pace in infancy gradually increase coordination. Developing simultaneously with the bones and muscles, the brain enables babies to coordinate their physical strength. Children enter a new developmental phase towards the end of infancy or between 18 and 24 months of age. This is the time when children can stand upright and start to walk. This new ability provides them with a number of opportunities; they can now explore on their own, without the permission of adults. Children are equipped with fine motor skills, which allow them to use their fingers coordinately. They can play fine motor games after they learn how to clutch objects by using their thumbs and index fingers (Trawick-Swift, 2009).

Before they start to speak, babies first develop receptive communication skills that help them perceive and understand people talking. The first words that babies understand are either their names or “no” (Bayhan and Artan, 2011). Productive communication, which means the baby’s ability to communicate with people around

him by using words, crying, producing sounds, or even making silent gestures, develops before a certain age. 8-12 month old babies utter their first words, and they gradually combine words when they are 18-24 months old (Trawickh-Swith, 2009). Their vocabulary is slowly enhanced. Within a few weeks, a baby starts using around 50-400 words (Bayhan and Artan, 2011). Reading and writing can be encouraged between the 12-36 month period. When parents read books in the presence of their babies, they can equip infants with the basic reading skills such as how to hold a book and turn pages (Trawickh-Swith, 2009).

Social development is the process of learning how to behave in a way that is accepted by the society that the individual lives in (Fazlıoğlu, 2009). A person with good social skills establishes positive relations with people around him and do not cause problems. Even if this person has problems, he or she can solve them in ways approved by the society. Such people can set a balance between their own wishes and needs and the society's requirements. They manage to share and cooperate with people with whom they are living and express their feelings in a manner that does not conflict with the respective culture (Baran, 2011).

Children devoid of social skills, on the other hand, are rejected by their friends and may have academic failures. Such children may encounter more social problems in the future than their friends (Baran, 2011).

The period between the 0-36 months is the most critical time span when the babies' brain and personality development begins. It is when the seeds of a sense of trust, independence, and curiosity and the wish to search and discover are planted. All of these qualities are essential for the growth of a healthy individual. For this reason, the presence of an environment with a lot of correct stimulants and an adult who makes use of them in the right way is of vital importance. Babies experience happiness, surprise, fear, sadness, and anger in the first six months. Self-awareness appears after this period, bringing about a sense of awareness, jealousy, empathy, pride, shame, and guilt. Babies achieve the ability to "laugh loudly" after three-four months (MEBa 2013).

Children with healthy emotional development bond with one or multiple caregivers (Trawickh-Swith, 2009). Separation anxiety (separation protest), expressed in the form of sadness and crying, first shows up at 7-8th months and is in its peak between 13-15th months. This feeling arouses when the mother or the caregiver is away. Babies form a basic sense of trust within the first year. Towards the end of this period, they display "social referencing", which stands for the understanding of others' emotional states. Babies understand others' feelings by looking at their faces. They show an interest in their peers after they reach the first 6 months. The amount of face-to-face playing declines, and babies are interested in their peers. From 18 months to 2 years of age, babies "play with their peers" by jumping, running, and imitating one another, and it is mostly non-verbal. After 1.5 years, they prefer to play with other children rather than adults. Symbolic games take place towards the end of the second year. They perform parallel play between the ages of 2 and 4. Around 2.5 years of age, they start playing dramatic games in which they imitate their loved ones and perform. Symbolic games become more convincing at the age of 3 (MEBa, 2013).

CARE AND EDUCATION OF 0-36 MONTH OLD CHILDREN

Early childhood is one of the most critical phases of life. It directly affects the person's life in that it is the period when the base of personality is laid, and the child is equipped with basic information, skills, and habits. The physical and social environment where the child spends his or her first years plays a key role in development. This environment should be governed with a serious, scientific, and systematic organization, or education (MEBb, 2013). Programs in which child care experts create stimulant and language rich environments and positively interact with babies have greatly enriched their mental abilities (Trawick-Swift, 2013).

The potential development level is above the skill level that the baby displays on its own, and the environment and education setting it is in play a key role in its reaching of this level. Children raised in inadequate settings may not achieve their potential. Preventing the impact of negative conditions with qualified early education and support programs is viewed as a much more positive approach. The effects of early education can be summarized as following: (MEBa, 2013).

- It allows children to be more productive, creative, and better at problem solving in the long run.
- It boosts self-confidence and self-esteem.
- Mentally, physically, socially, emotionally, and verbally developed children are ready for school and easily adaptable, which enhances the quality of education.
- Children who are ready for school have lower class failure and drop-out rates, which decrease relevant costs.
- The number of qualified workers in the society rises, and booming production benefits the economy.
- Crime rates go down.
- Socio-economic and gender-based inequalities become less severe.
- A higher number of women participate in the labor force, and additionally, their work efficiency increases.
- Death rate is lower among children on a healthy and balanced diet.

Research has shown that children raised in a healthy, happy, and enriched environment are more successful. The environment in which 0-36 month old children are looked after and educated must be supportive, cozy, safe, healthy, interesting, and exclusive. It should be organized in line with the culture of children.

When arranging healthy and safe areas (Morrison, 2007),

- Eating and potty training zones must be away from cooking and activity zones.
 - Non-toxic and unharmed toys must be preferred. The area must be regularly sterilized.
 - All toys, class equipment, and furniture must be safe and in good condition.
 - Garbage and unnecessary equipment must be stored and safely transferred to another area.
 - Action policies and plans must be prepared for first-aid requiring emergencies.
 - Educators, volunteers, and other personnel must wash hands with plenty of water and soap after contacting blood, other bodily fluids, pets, and other animals.
 - The cleaning equipment must be hygienic.
- The environment must support children's development needs:*
- 0-36 month old children want to be in a warm and sensitive environment.

- Affection is influential; being affectionate to children is important. Children must hear the phrase “I love you.”

- All attention must be focused on children in order to meet their needs and respond to their actions.

- It must not be forgotten that every children is unique and important.

The environment must catch children’s attention:

- Materials must be conducive to development of children and multiple senses and contribute to children’s physical, social, emotional, and verbal development.

- Materials must be provided to stimulate senses and to be touched.

- Children must engage in climbing, jumping, kicking, and walking, which can be conducive to big and small muscle development.

- There must be mirrors where children can see themselves and others.

The environment must encourage children to be active:

- Toys and materials must ensure that children feel, clutch, and suck.

- Cups and objects must be used in a way that children can fill and empty them by themselves.

- Toys must produce sounds. They must be openable, matchable with various colors, and moving.

- For children’s ease of movement, a safe ground, indoor areas, and lawned outdoor areas must be present.

- The environment must allow children to freely and safely crawl, walk, and explore.

- Low shelves where children can find their own materials to play with must be preferred.

Qualified early childhood programs employed in this period also mean a great investment for the future. Cost-benefit analyses demonstrate that every 1 dollar invested in early childhood education generates a 13 dollar return to the society (MEBa, 2013).

Programs aimed at 0-36 month old children involve certain activities and experiences in addition to providing care. They support socio-emotional, motor, verbal, and cognitive development of children. Teachers of this age group plan every activity and content. Eating, bathing, toilet/diaper changing, playing, learning, interacting, expeditions, etc. are crucial in terms of developmental appropriateness.

Thanks to programs taking into consideration individual differences, children will develop different learning strategies on how to study and think. If an adequate environment is provided, children from various groups and cultures can be educated and cared for together (Morrison, 2007). In addition, baby education programs have been deemed effective particularly for children under risk (Trawick-Swith, 2013). Educators practicing such programs must possess certain features. There are some qualities that early childhood educators must have. They need to have sufficient information and experience in early childhood education, music, drama, play, and painting (Oktay, 1999). Teachers in this field are with children throughout the day, and children at this age place their trust in educators who share their passion and are in constant communication with them. It is thus imperative that educators communicate well with children (Köksal Akyol, 2006). Care and education programs for individuals responsible for the care and education of children of different age

groups are important. However, not everyone is eligible for providing emotional and professional care and education services for 0-3 year old children. This age group needs adults who are aware of children's developmental features and special needs. For instance, children particularly need nutrition support at 1 year of age while they need an adult who encourage autonomy and independence at the ages of 2 and 3 (Morrison, 2007).

Educators view children as individuals and cherish them. They exert themselves for children's learning and self-improvement at the highest level possible by taking into consideration their development levels, social and cultural differences, and their areas of interests. Teachers prompt children to know themselves and others, use their self-awareness in daily life, develop positive behavior, and motivate themselves. They create a democratic setting in which they can actively contribute to children's learning. Accordingly, children will gain self-control, grasp their and others' rights and responsibilities, manage their feelings and thoughts, and freely express themselves (MEBa, 2013).

The qualifications that educators must have are the following (ASPB, 2015):

- They implement the activities they have prepared for children's physical, mental, emotional, and social development by following a program.
- They prepare and implement education and care programs for children.
- They organize relevant forms in education and care programs for every child and keep them in the child's respective file.
- They are responsible for the planning and implementation of activities on special days.
- They take necessary precautions to meet all kinds of needs related to care and education of children.
- They prepare education materials for activities and protect and provide maintenance for such materials and tools.
- They take necessary measures for care and education of children with special needs or adaptation problems and work to address these issues.

CARE/EDUCATION PRACTICES FOR 0-36 MONTH OLD CHILDREN IN TURKEY

Historical Process

Gokturks and Huns had customs for child education. Uyghurs, who adopted a sedentary life, stood out in the Turkish education history with their particular features. Because they were settled, Uyghurs provided planned and formal education. In addition, various proverbs state that children were raised in line with the knowledge and abilities of their parents (Akyüz, 2009).

Al-Farabi, Ibn-i Sina, Mahmud Al-Kasghari, Mahmud Ghazan, and Al-Ghazali were the most prominent thinkers who enlightened the public in the field of child health and education in the Kara-Khanid Khanate, Seljuk Empire, and Ottoman Empire, which were states that adopted Islam (Poyraz and Dere, 2003).

Ibn-i Sina states that education should start right after weaning and before the child "gets into bad habits" (Akyüz, 2009). This also indicates that education is as important as care for this 0-36 month age group.

Mahmud Al-Kasghari (1072-1074) focuses on in-family care and raising of the

child and does not provide information on then existing formal institutions. He mentions the cradling, toilet process, words used in child education, and games in his Diwan (Akyüz, 2009).

Ottoman Daru'l Eytams (orphanages) partly functioned as nursery schools. The Ottoman Empire suffered heavy casualties in the Balkan War in 1912 and World War I in 1914, causing many children to become orphans. There was considerable pressure for the establishment of Daru'l Eytams as those children were neglected and no one (Çağlar, 1973; Akt. Atlı, 2011). Daru'l Eytams, emerging out of a social need, were set up as a result of Education Minister Ahmet Shukru Bey's proposition and Enver Pasha's contribution. They first started operating under the Committee of Union and Progress in 1915 (T.D.V.İ.A., 1993 c.8, :Akt. Atlı, 2011). Pre-school education was provided in Daru'l Eytams for children under 6 in accordance with the program of kindergartens (Akyüz, 2009).

The kindergarten regulation (Regulation of Kindergartens) was approved in the Republic of Turkey on 29.1.1940. It was for the cities with a sufficient budget. The regulation was passed for mothers who worked in factories and had no one to entrust their children to. It remained in effect until 1953 (Atlı, 2011). The Health Law (Hıfzıssıhha) was passed in 1930 which included articles protecting mothers and children and ensuring social order. It required municipalities of large cities and towns to establish a child care center and a kindergarten for every 40.000 inhabitants excluding the private sector that employed women workers. In accordance with this law, Istanbul Metropolitan Municipality opened "Edirnekapi Child Care Center and Nursery School" in the Fatih-Atik Ali Pasha Madrasa and then "Üsküdar Child Care Center and Nursery School" in the Üsküdar İskele Mosque (Atlı, 2011). Women left their children there in the morning and took them after work. This institution provided food and functioned as a kindergarten (Oktay, 1999). In İzmir, for example, a nursery school was opened in Kurtuluş first, followed by another in Karşıyaka (Atlı, 2011).

The Society for the Protection of Children (Himaye-i Eftal Cemiyeti), established in 1917, was forced to open day care centers. In 1930, it established 3 day care centers, and the number increased in later years. The number of the day care centers affiliated with the institution reached 8 in 1935, 10 in 1937, 24 in 1940, and 25 in 1945. A number of state institutions and organizations opened nursery schools in the 1960s, and private nursery schools sprang up, which is why the Society for the Protection of Children slowed down its services. The laws passed in 1923, 1930, 1936, and 1942 touched upon important issues regarding the protection of children and mothers (Atlı, 2011). As can be seen, there have been child care/education efforts throughout the history.

Today

Education practices targeting the 0-36 month group in Turkey are not adequate. In Turkey, early childhood related studies have begun in recent years. Programs such as the Mother-Child Education Program, Portage Early Education Program, and Small Steps Early Education Program are now employed in early childhood education (Ercan, 2011).

Parents who would like to have a better insight into how to raise children can attend free family education courses. General Directorate of Lifelong Learning affiliated with the Ministry of Education prepared programs for 4 different age groups

in order to make parents more aware and informed. They were created as part of the “0-18 Family Education Program.” One of such programs is the 0-3 Family Education Program. As part of it, Child Education Materials were prepared (MEB, 2013).

Child care and pre-school education in Turkey take place within the framework of different laws. These laws are concerned with children in need of protection, care, and help, pregnant and nursing women and their working conditions, child care and care centers. According to the Law of Special Provincial Administration, special provincial administrations have the duty and authority to establish kindergartens within city boundaries as long as they are for the local use (TBMM, 2013).

One of the important regulations concerning child care services in Turkey is the Labor Law. It requires businesses employing 100-150 women workers to have nursing rooms for 0-1 year old children. The law also stipulates that nursery schools/care centers for 0-6 year old children be established if such businesses employ over 150 women workers (TBMM, 2013 and DPT, 2006). The Prime Ministry Mandate named “Increasing Women Employment and Provision of Equality of Opportunities” came into effect on 25.05.2010. This mandate states that the obligation of previously mentioned public and private businesses to provide nursery schools and day care centers will be enforced and controlled, thereby emphasizing that public control will be underscored in terms of child care services for the enhancement of women employment (TBMM, 2013). Below are the institutions and practices regarding care/education of 0-36 month old children in Turkey.

Institutional Practices

Care and education of children through an institutional infrastructure are the first examples of pre-school education institutions. Factors such as the changing sense of children, regarding children as individuals, the new family type and active compulsory involvement of women in labor force as a result of industrialization played a key role in the emergence of such institutions. Children used to be raised and looked after by their families until the age of school. Yet, the transforming social structure caused the transfer of the family’s duties and functions to pre-school education institutions to a great extent. The first examples of pre-school education institutions aimed to best meet the care, nutrition, and protection needs of 0-6 year old children by ensuring healthy and well-arranged conditions for their development in keeping with the society’s cultural features. These institutions employ an expert staff of educators and, over the years, have become social organizations that lay the foundations for a solid personality, intelligence, and social awareness (Atlı, 2011).

Nursery Schools

They are institutions that care for 0-36 month old children and, accordingly, serve their mothers. These institutions are established under the Ministry of Family and Social Policies. They are mostly opened for working mothers and operate for about 10 hours a day. The programs employed in such institutions aim to contribute to the care, nutrition, and mental development of the previously mentioned age group (MEB, 1994).

Day Care Centers

Day care centers provide care and security for children from birth to the mandatory school age. They operate under the Society for the Protection of Children.

They mostly focus on the healthy growth of the child (Koçyiğit, 2007). Nursery Schools and Day Care Centers: They are non-boarding social service institutions that have been established to care for 0-6 age group and charge for services. The law states that institutions affiliated with the Social Services are Kindergartens, Nursery Schools and Day Care Centers. In practice, however, these institutions are expressed as Child House, Kindergarten, Children's Club etc (AÇEV-Unicef, 2003). According to the by-law, nursery schools and day care centers must possess the following features (ASPB, 2015):

a) The institution must have a garden of appropriate size; it must be 1.5 m² for every child. Terraces cannot be used as gardens.

b) The institution can be opened on the ground floor or upper floors connected to the ground. It can be a house or a multi-story building. All rooms to be used for children must be bright, spacious, and windowed (for the passage of daylight). So, they are naturally illuminated. Rooms must be moisture free in order to prevent any health complications. The basement, floor below the road level, and attic are not included in the area.

c) The building cannot be located close to any business that sells or stores potentially hazardous materials such as ovens, explosives, or flammables. If the institution is close to a business that sells or stores such items, a report is obtained from competent authorities regarding the required distance set by the relevant legislation and the Turkish Standards Institution.

d) The institution building cannot have or be near a base station. If there is a base station nearby, a report is obtained from competent authorities regarding the required distance for health and safety.

d) There must be at least 100 m from the garden door or the building doors (if there is no garden) to pubs, coffee houses, bars, electronic gaming centers, and similar public areas, liquor-vending businesses, and places that display disorderly conduct. If there are multiple doors, the closest one is taken into consideration.

e) If private nursery schools, day care centers, and private children's clubs are located together in the same building or garden, each one has its own independent section and apartment and different entrance and exit doors. The main entrance door of the building, on the other hand, can be used by all.

f) If the institution is planned to be opened in a multi-story building, it must have its own entrance and exit doors besides the main entrance door of the building.

g) Institutions must have an exit door, evacuation system, or a fire escape for the smooth evacuation of children in case of an emergency.

h) Electrical wiring must not pose fire or explosion danger. The project, installation, and materials of electrical wiring and the choice of protective devices depend on the voltage to be used and present conditions. Authorities are enabled to provide maintenance and controls.

Programs for 0-36 Month Old Children in Turkey

Pre-School Education Program for 0-36 Month Old Children

This program has been created in order to ensure 0-36 month old children's constant growth through learning experiences, maximize their motor, socio-emotional, verbal, and cognitive development, and equipping them with self-care abilities. It is a

multi-purpose program that is supportive and preventive in that it aims to prevent inadequacies in all areas of development . It is a “development” program whose goal is to improve children’s all areas of development. The adopted approach is “cyclical” while the model is “eclectic.”

The program includes development indicators that have been prepared based on the developmental features of the age groups. Teachers must select the areas of development in which children in their group need support and improvement. If deemed necessary, a non-present indicator can be added to the education plan by teachers. However, such modifications must have a legitimate reason, be in line with the Purposes of Turkish National Education, Pre-School Education, and main philosophy of the program. They also cannot conflict with the other indicators (MEBa, 2013). Below are the features of the 0-3 Years of Age Education Program (MEBb, 2013):

- They prepare education settings for children’s physical, socio-emotional, mental, verbal, and self-care development.
- As children’s ages, developmental features, areas of interests, needs, learning speeds, and amenities are considered, each child receives the best education that can be provided.
- Children are equipped with the habits of following a healthy diet and regular sleeping.
- From early ages, children acquire values and qualities such as affection, respect, cooperation, participation, responsibility, helping each other, and sharing. Thanks to outdoor activities, child is encouraged to become environmentally-conscious individuals.
- Children coming from environments with unfavorable conditions or families experience the equality of opportunities in an education setting rich in stimulants.
- Features of families’ settings are always taken into consideration in the preparation of education programs, prompting active family participation. According to this program, a regular day spent in a nursery school or day care center consists of the following:

1. Arrival in the institution, depending on the child
2. Activity time
3. Garden time
4. Lunch
5. Activity time
6. Garden time
7. Leaving the institution, depending on the child.

Multi-purpose development is encouraged in institutions for the 0-3 age group. Individual, small or big group activities, field trips, drama with puppets, and story reading are utilized for social development. For language (verbal) development, Turkish activities, nursery rhymes, songs, and finger games are employed. Mental development is supported by offering object continuity with miscellaneous toys and materials, puzzles, memory cards, and attention enhancement activities. Sense education is crucial, thus senses are stimulated both at home and in institutions with the use of certain materials as part of the 0-3 education program. For movement development, children are provided with activities involving crawling, walking,

running, jumping, dancing, and climbing (MEBb, 2013). The sooner parents get involved in children's education during the 0-3 age period, the more their children will get. Therefore, the Family Support Guide Integrated with the Education Program for 0-36 Month Old Children (EBADER) was prepared for the families supportive of the current program (MEBb, 2013).

Family Education Programs

Parents who would like to have a better insight into how to raise children can attend free family education courses. General Directorate of Lifelong Learning affiliated with the Ministry of Education prepared programs for 4 different age groups in order to make parents more aware and informed. They were created as part of the "0-18 Family Education Program." These programs are (MEBb, 2013):

0-3 Family Education Program.

3-6 Family Education Program.

7-11 Family Education Program.

12-18 Family Education Program.

These programs can be attended by families, caregivers providing services for the respective age group, pregnant women, and prospective mothers. These education programs are carried out for 14 weeks, during which a 3-hour face-to-face session is held once a week. They provide support to families regarding in-family communication, communication with children, health, nutrition, children's rights, methods to induce positive behavior, and promotion of areas of development.

Child Education Materials have been prepared in order to support children's development within the scope of the 0-3 and 3-6 family education programs. Activities in Child Education Materials are first performed in classes in the presence of families. Later, families conduct them at home for a week (MEBb, 2013).

PROBLEMS FACED IN CARE/EDUCATION OF 0-36 MONTH OLD CHILDREN

One of the biggest global obstacles to women's participation in labor force, employment, continuation of their careers, and promotion up the career ladder is the fact that child, elderly, and patient care is regarded as a feminine responsibility due to the gender-based social division of labor. Other reasons are inadequate institutional care services and high fees charged by private institutions. In parallel with the fact that women have to be responsible for the care of their children, it is a common situation in Turkey that married working mothers need to end their careers. It is worth attention that there are many problems regarding the extent and quality of public care services. For children younger than 3, there are virtually no nursery schools (TBMM, 2013).

A good teacher is a product of a good teacher training program. The first rule of training a good teacher is to ensure unity and singularity in the existing professional teaching knowledge programs. The principle of unity and singularity must be applied to the program duration, credit system, content categories, electives, internship and applied activities, assessment processes, and similar aspects (Küçükahmet, 2007). For this reason, updating BA degree programs so that they will incorporate the 0-3 age group development courses as well can equip teachers with more competency

regarding 0-36 month old children's development.

A study conducted in the USA with 1300 teachers randomly selected from child care centers shows that teachers who deal with babies and children starting to walk need university training (Howes, Whitebook and Phillips, 1992). Associate or BA degree holders in Turkey who work in nursery schools have difficulty in their expertise in the 0-3 age group.

SUGGESTIONS

The 0-36 period is critical in terms of child care and education. Child care/education programs play a vital role in child development.

Since the foundation of the Republic of Turkey, various regulations regarding care/education of 0-36 month old children have been passed; however, implementation has not been sufficient.

There are programs targeting this age group that can be applied both in institutions and family education. Yet, no research has been carried out on their implementation level, effects on child development, and views of educators and families on such programs. Below are some suggestions:

- Educators dealing with 0-36 month age group must possess certain qualifications. Turkey needs scientific research on the adequacy of BA or associate degree programs in child development and pre-school education programs. Thanks to the pre-school teaching program, such programs for care and education of 0-36 month old children can be looked into.

- The relevant ministry should review the staff and physical environment of existing institutions.

- Educators must be provided in-service training in such programs.

- With family support programs targeting 0-36 group, social awareness can be raised for these children.

- Scientific research on health, care, and education of 0-36 month old children in Turkey may further contribute to this field.

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Chapter 37

Knowing and Assessing Children in Preschool Education

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In its simplest meaning, assessment provides the answer to the question “*what do children know and what can they do?*”; however, it also includes comprehensive collection and interpretation of data about children by using various measurement and assessment tools such as tests, observations and interviews which provide an answer to the question above (McAfee, Leong & Bodrova, 2004; No Child Left Behind, 2002; OAPA Handbook, 2001).

Knowing a child is essential in supporting his development and adjustment. Each individual's development is unique. Therefore, it is vital that children benefit from learning environments positively and effectively, and find opportunities in line with their own learning needs. Knowing a child's interests, needs, developmental features, strengths and weaknesses and learning style enables educators to design a physical environment based on these. Knowing and assessing a child should thus be a first step in developing school programs (MEB; 2006; Tagay, 2015). This chapter focuses on the need for and importance of knowing and assessing children and mentions the tools that may be used to do so with preschool children.

THE NEED FOR AND IMPORTANCE OF KNOWING AND ASSESSING PRESCHOOL CHILDREN

Children in the preschool period display quick physical, mental, social and psychological development. Therefore, they need to be known with all their aspects in this period. In order to know children, their physical and biological development including height, weight, previous diseases; the sociocultural and economic conditions of their family; their interests and talents, personal traits and emotional states, habits and behavioral characteristics based on self perception should be studied as a whole (Forman & Hall, 2005; MEGEP, 2005; Yeşilyaprak, Güngör & Kurç, 1996). Preschool children's assessment is a complex issue owing to a set of reasons:

- Simultaneous assessment of multiple development areas (physical development, cognitive development, language development, socio-emotional development) and the effects of each of these areas on children's school achievement affect the outcome of assessment.
- Not each child's development is equal and at the same speed. Some children may develop quickly over a short time and suddenly go ahead of others.
- Children in this stage cannot complete standard tests. Their limited reading skills, inadequate pencil holding and marking skills and short attention span affect their assessment.
- Children in this age group may display what they know but cannot express this finely in written or spoken language.
- The performance that children display in assessment is related more to his experiences than his academic success. In the assessment of children with and

without previous school experience, those with that experience are usually more successful.

Considering these points, it may be concluded that assessment is a highly sensitive process, and care needs to be practiced in data collection and interpretation (Scott-Little & Niemeyer, 2001).

When assessment is effective, so are instructional activities. Assessment reveals the strengths and weaknesses of children. Effective and sound educational programs may then be developed to meet these particular needs. In addition, teachers can choose learning methods, techniques and tools which match children's characteristics and, as a result, organize high quality learning environments. This at the same time helps the recognition of children who are relatively strong, weak, or display different development than normal at an early age so that they can be supported and guided. It also helps children get to know themselves and improve their individual and social differences. However, the most important benefit of assessment is revealing the progress, slowing down or differentiation in their development. Thus it becomes a trustworthy guide when informing and guiding families about their children (MEGEP, 2005; Taner, 2005; cited in Tagay, 2015).

As knowing and assessing children are a sensitive process, some principles need to be followed. Concerning the particularly sensitive period of early childhood, the principles are as follows (MEGEP, 2005; NAEYC, 2009):

- Assessment should be to the child's benefit.
- Assessment should be planned with a certain purpose, and be valid, reliable and in line with its purpose.
- Assessment should help the child know himself.
- The child should not be treated individually but together with his environment.
- This should be a continuous process. The work needs to be continuous, systematic and regular.
- A single method or tool is not adequate in knowing a child. Children's different characteristics should be identified with different methods.
- How and why children do certain things should also be taken into account as much as what they do.

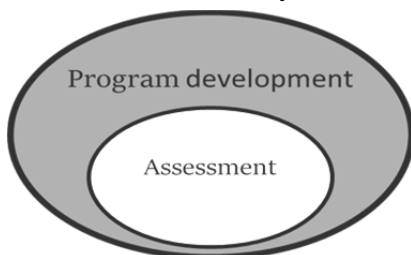


Figure 1: The process of knowing and assessing a child

In addition to these principles, both families and children should be a part of the process of knowing and assessing children. The families' knowledge and perspective about their children are crucial in understanding their developmental characteristics. The process of knowing and assessing children should not be limited to the end of instructional activities but also used during program development.

Therefore, assessment by teachers should not only take place the end of instruction but throughout children's learning process (Figure 1). In other words, the goal of knowing and assessing children in early childhood should not be based on

learning outcomes but the entire process (Carr, 2001; MEB, 2013a).

GOALS OF ASSESSMENT IN THE PRESCHOOL PERIOD

One of the aims of assessment in the preschool period is to understand children's needs throughout their development, and to properly organize children to meet these needs. In order to do this, the children need to be assessed in proper, unbiased and varying environments and conditions. Assessment should help the decision of children's strengths and weaknesses. Each child's individual differences and needs should be revealed at the end of assessment. Sometimes, children may perform better in different environments (Karaman, 2013; Morrow, 2007; Stiggins & Chappuis, 2005).

It is a difficult process to assess preschool children. Their assessment is not the same as in other levels of education. Assessment during this period should make comparisons based on cognitive, social and physical development and children's performance should be assessed as a whole (Wortham, 2005).

In preschool education, assessment is generally made with four aims. These are: assessment for screening, instruction, diagnosis, and program assessment.

Assessment for screening

These assessments are made in order to identify possible problems stemming from the educational environment or children's developmental characteristics. This kind of assessment reveals whether children need a further and more detailed assessment (Bencik Kangal, 2014). There are many scales and inventories that may be used for screening such as problem screening lists, wish screening inventories, Hacettepe Personality Inventory.

Assessment for instruction

Used frequently and continuously in the classroom, this kind of assessment provides information for the teacher about the learning process and helps the maintenance of activities in line with children's needs (Learning for All, 2013). Assessment for instruction is made to improve student success. It is used to guide the teacher in issues such as identifying the best instructional activities or deciding whether to hold these in big or small groups. Teachers can reconsider their plans by looking at the points that children do and do not know. Assessment for instruction gives teachers more information about the children's skills. They are closely related to learning environments and are used inside the classroom (Learning for All, 2013; Scott-Little & Niemeyer, 2001).

Assessment for diagnosis

This is a professional type of assessment which includes educational assessment and provides information about the certain conditions that affect children's language and speech, medical or psychological state (Learning for all, 2013). It aims to identify at-risk children (Scott-Little & Niemeyer, 2001). This assessment should be conducted before planning instruction so that educational activities can be planned in accordance with children's needs (Learning for all, 2013). Educational diagnosis is made with methods such as Performance Assessment, Academic Achievement Tests, Criterion Referenced Tests, Performance Tests, Product Files, Program Based Assessment, mental, physical, emotional, social development stories, medical and psycho-social assessment reports, and development features based on competencies.

The child and family information forms included in the Preschool Integrated

Family Support Education Guide prepared by the Ministry of Education (2013b) also provide information about children.

Program Assessment

Assessing an educational program with appropriate methods and using these outcomes in revising the program is at least as important as proper design and implementation (Özdaş *et al.*, 2005). Varış (1996) defines the concept of program assessment as a continuous process undertaken to make educational programs more functional, life-based, and able to respond to the changing needs of the society and individual. Ralph Tyler's Objective Based Assessment Model is the basis of all assessment models (Demirel, 2003). Program assessment is a process in which the effects of an educational program are observed. This process also identifies the level to which the goals of education are realized. Program assessment is a planned and continuous job. In order to increase the quality all the decisions to be made, reliable and ample data needs to be collected during program implementation. In order to assess the effectiveness of a program, the program process needs to be observed and information needs to be collected during implementation (Sapsağlam, 2013). Assessment conducted with the aim of screening, instruction and diagnosis study the development of a child and his learning level individually, while program assessment concerns a group of children (Bencik Kangal, 2014).

In Turkey, the first modern preschool education program was introduced in 2002 by the Ministry of Education's General Directorate of Preschool Education. This program was designed by revising the 1994-1995 creche, preschool and kindergarten programs by using scientific methods and data, placing children at the center of the program, treat children as a whole with all their development areas, considering their personal traits, paying attention to the function all educational institutions, determining goals and objectives based on certain criteria, emphasizing the diversity, flexibility and creativity when deciding on instructional processes and tools and materials, and forming the basis of family involvement (MEB, 2006). As a result of this study, scientific data showed no problems in the creche program and no need for improvement, and it was therefore continued. The kindergarten and preschool programs were combined and one single program was designed for 36-72 month children. This program came into effect as of the 2002-2003 school year and was used until 2006. Thereafter, it was reviewed, revised and improved based feedback from experts and implementers (teachers and principals in 81 provinces); modern program development, child development and learning theories; changing needs of the society; and the principles, approaches and characteristics of the new elementary school program. During program development, different preschool education practices from various countries were analyzed, various program approaches and models were examined, and the data from these studies were integrated with children's characteristics, the society's structure and cultural values as well as the qualities needed in educated individuals in the 21st century (MEB, 2006).

In 2013, preschool education program was revised and updated. The contributions of all stakeholders offering preschool education were considered and program development studies were completed. The updated Preschool Education Program sees assessment as one of the most important components of the instructional process, and takes its various aspects into account, such as analytically and holistically

observing child development in all areas, reporting on observation results, assessing the designed and implemented plans with all their dimensions, and teacher self-assessment (MEB, 2013a).

TYPES OF ASSESSMENT IN PRESCHOOL EDUCATION

Various assessment techniques and tools are used in assessing and meeting preschool children's needs. Many of these techniques and tools are used to realize educational assessment. Some of these techniques are used for initial assessment or to monitor success, and some others for diagnosis. Assessment techniques and tools are divided into two groups known as formal and informal assessment (Alper, Ryndak & Schloss, 2001). It may be conducted naturally (informally) or formally through standard tests. Both types of assessment have strengths and weaknesses. They need to be used in conjunction with each other to properly assess children's development (Gullo, 2005).

Formal assessment methods

Formal assessment is used to benchmark children's state in different areas of instruction against other children in the same age group. Formal assessment aims to compare the levels and academic advancement of children in schools against their peers. Based on the information obtained from these assessments, children are categorized according to their success, placed in schools and programs, and their improvement is monitored. The preparation, implementation, scoring and interpretation of the test results require following certain rules. These tools are implemented with the help of test booklets. The behaviors of test givers and takers must follow the rules mentioned in test booklets. Formal tests are mostly standardized tools consisting of multiple test questions that may be given to many individuals at one time (Yaşar, 2010). Some examples of preschool formal assessment methods include achievement tests, talent, skills, development and IQ tests, interest and personality inventories (Ergül, 2007).

Considering that children display holistic development, standard test results may provide false or incomplete information about the children by revealing only one single aspect. Hanes (2009) states that, revealing children's strengths and weaknesses in early childhood must rely minimally on formal assessment.

Informal assessment methods

Informal assessment aims to identify children's functioning levels at various instructional areas. As information gathered with standardized tests are not enough to plan the instruction of children with special needs, many educators have adopted informal assessment as an alternative to standard tests. Informal assessment tests include performance measurements related to the program that children are following or real life tasks. This kind of assessment mostly takes place in natural environments and with routine activities. As teachers observe their children in the classroom everyday, as they examine children's work, as they solve problems, they use informal assessment techniques (Bal, 2013). Some examples of preschool informal assessment methods include observation, group activities, questioning, scales, portfolio files, and teachers' strategies (Guddemi & Case, 2004; Ergül, 2007). Using a number of different methods in assessment will make it more effective (NAEYC, 2009).

ALTERNATIVE ASSESSMENT IN PRESCHOOL EDUCATION

Alternative assessment covers all assessments not included by traditional assessment procedures which include multiple choice tests with one correct answer. They are related to real life, in other words they are authentic and child centered. In authentic assessment, different strategies, methods and techniques are used. Some of these are observations, audio and video recordings, questionnaires and interviews, family assessment forms, checklists, portfolio assessment and standard tests (MEB, 2004; Morrow, 2007; Mueller, 2005). Alternative assessment methods evaluate children not against one another as in traditional assessment, but within their own performance.

Program based assessment

Program based assessment covers the entire educational program or curriculum used in the instructional process. In order for program based assessment to be conducted in the best way possible, the goals in the program need to be expressed openly and clearly (OAPA Handbook Program, 2001). Program based assessment is conducted with the aim of revealing children's developmental level in different environments with different approaches and different materials. Data can be obtained with a checklist consisting of behaviors that the children are expected to acquire (Gullo, 2005).

According to the Turkish Preschool Education Program updated in 2013, daily activities are assessed at the end of the day, and monthly assessments are done in light of these to form a holistic picture of the activities. In addition, daily assessment chats are attended by the whole group at the end of the day which is set aside as assessment time. In addition, general assessment is treated under three headings: the assessment of children, the program and teachers. Here, what happens in daily assessment and the outcomes of activity assessments are expressed by taking into account the dimensions of children, programs and teachers. In program based assessment, development observation forms and development reports are also used as assessment tools (MEB, 2013a).

Performance assessment and portfolios

Performance based assessment includes assessment of children's skills (Bencik Kangal, 2014). To do this, observations, portfolios, audio and video recordings, questionnaires, and family assessment may be used.

Observations include ready-made or teacher-made forms to record child behaviors in detail. The goals of observation should be planned and the forms should be designed in line with these goals. Observations should focus on a certain quality of children. Observations describe behaviors and verbal dialogues get recorded (Yıldırım & Şimşek, 2005).

Audio and video recordings are used to make decisions about language development, and to assess skills such as understanding a story. Children may listen to their own voice recordings and assess their storytelling (Karaman, 2013).

Questionnaires are prepared by teachers. The questions in the forms are answered verbally (Adanalı, 2008).

Family assessment forms are used to make a written collection by families of work and child behaviors at home. Families are an important source for reflecting the home perspective on child (Farris, 2001).

Portfolio assessment is a way for teachers, children and families to collect children's work samples. It is important to determine the goals of a portfolio at the onset. Children's developmental levels and ages affect teachers' options in determining portfolio goals. The aim of a preschool portfolio is different from that of a fourth-grade portfolio. While preschool portfolios emphasize growth in relation to developmental milestones, elementary school portfolios may emphasize child development in relation to the special goals of the program. In addition, portfolio assessment does not compare individuals to others but to their own previous performance, and also includes incomplete pieces of work selected by the children (Kan, 2007).

Dynamic assessment

This defines the level and kind of support needed to increase an individual's communicative performance (İşitan & Turan, 2014). In the child and educator assessment process, full and active participation of both the child and educator and the communication established with the child are very important. Education is based on child behaviors and their responses to instructions (Bencik Kangal, 2014).

Educational assessment types and scopes show that teacher views about assessment and educational environments are very important (Brassard & Boehm, 2007). Previous studies show that teachers make use of different methods in the assessment process, that educational assessment affects both teachers' professional development and child development positively, and that assessment results guide teachers (Hanes, 2009; Flowers, Ahlgrim-Delzell, Browder & Spooner, 2005). In addition, studies have shown that teachers working at some regions and some stages of schools could not make full use of assessment processes, and that assessment related training needs to be increased (Aydın, 2005; Susuwele-Banda, 2005).

To sum up, regardless of the stage of education, knowing and assessing children is essential to be able to plan the next step in the educational process as well as to identify the effectiveness of instructional activities. In order to asses a child, first it is necessary to know him. Knowing a child aims to help his development and adjustment, and requires a full understanding of the child including his physical, cognitive, social, emotional and behavioral aspects. Assessment identifies the areas where the child needs help, and his strengths and weaknesses. In this way, robust and effective educational programs may be developed to meet children's needs. The process of knowing a child and assessment should also be used while developing a program, instead of only at the end of it. Therefore, teachers need to learn the assessment process. Assessment may be done in four ways based on its goals: assessment for screening, instruction, and diagnosis, and program assessment. At the same time, alternative assessment methods using different strategies, methods and techniques may also be preferred. Teachers can thus get to know children with all their unique aspects, and design and implement more effective and efficient educational programs in line with the children's interests, wishes and needs.

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Chapter 38

Improving Children's Success in Mathematics: Problem-Solving Strategies for Children with Learning Disabilities

Ayşegül Şükran ÖZ

INTRODUCTION

Many nations are undertaking significant efforts to improve children's mathematics education. To meet the challenges of an increasingly sophisticated world, the United States has also been impacted by these global trends (English, 2002). The history of US mathematics education during last 50 years can be divided into two major time periods: the period from 1950 to the early 1970s, and the standards-based movement of the last twenty years or so (Kilpatrick, 2001). The first period was characterized by increased emphasis on mathematics as a reaction to developments in the Soviet Union in the late 1950s. A movement was begun to develop better mathematics programs in order to boost the number of technical workers such as engineers. During this time period, educators were concerned that K-12 mathematics curriculum was outdated. In addition, students entering college did not have adequate understanding of mathematical concepts (Woodward, 2004). These needs led to the "new math" of the 1960s (Woodward, 2002).

During this period, the term learning disabilities (LD) began to be used (Swanson, Harris & Graham, 2003). Even though the definition of LD included mathematics disabilities, knowledge of specific instructional techniques for teaching mathematics to children with LD was limited. Due to the lack of extensive professional development opportunities for teachers and the abstract nature of the mathematics reforms, the "new math" of the 1960s failed (Woodward, 2004).

In the early 1970s, a back-to-basics movement started; schools put more emphasis on reading, writing and arithmetic (Rivera, 1997). The National Institute of Education was founded to improve research in education. Districts and states also began using standardized tests to demonstrate the success of their schools. The use of a cognitive sciences framework resulted in increased emphasis on metacognition and problem-solving in mathematics education. Policy statements by the National Council of Teachers of Mathematics (NCTM) in the 1980s such as *An Agenda for Action*, *Educational Standards*, and *Everybody Counts* created a basis for mathematics reform in the 1990s. The core of these reforms was classroom discussion and students' critical thinking (Rivera, 1997; Woodward, 2004). In the 1990s, research moved from cognitive frameworks to social constructivist approaches. However, the effects of these reforms were not obvious in mathematics education for students with LD (Woodward, 2004).

Between 1990 and 2005, the average mathematics achievement levels of US fourth graders increased by 25 points, and eight graders by 16 points (NCES, 2005). Results of the Trends in International Mathematics and Science Study demonstrated that US fourth and eighth graders exceeded international averages (NCES, 2004). In

2003, nevertheless, fourth graders scored lower in mathematics than in 1995, while eight graders' standing improved among members of the Organization for Economic Cooperation and Development, outperforming 4 of 14 countries in 1995, but 6 of 14 in 2003 (NCES, 2004). During this period, educational policy in the US shifted toward content standards and statewide accountability assessments as a reflection of the No Child Left Behind Act in 2001 and the reauthorization of the Individuals with Disabilities Act (IDEA) in 2005 (Smith, 2004). Both of these acts mandated that schools and states include students with disabilities in their accountability system.

High-stakes tests have become the main tool for accountability (Cohen, Gregg & Deng, 2005). According to recent legislation, students with special needs will be held responsible for reaching the content standards established for general education students (Schulte, Villwock, Whichard & Stallings, 2001; Smith, 2004). Although the purpose of this requirement is to improve student outcomes, it creates concerns because the mathematical content standards and high-stakes assessments may not be well associated (Smith, 2004). Exclusion from general education and grade retention are other possible consequences for students with LD who do not attain expected levels in high-stakes tests (Schulte, Villwock, Whichard & Stallings 2001). Furthermore, the special education community is skeptical about the NTCM standards for mathematics education (Woodward, 2002).

Meanwhile, Learning Disability is one of the fastest-growing categories of disabilities in the US. Because of increased public awareness, improved evaluation and assessment techniques, and social acceptance, the percentage of students identified as having LD increased from 1.8 % to 5.6% between 1978 and 1999 (Lerner, 2003). Smith (2004) reports that children with LD compose 50% of all students with disabilities, and currently 4% to 7% of the school population has some type of LD. A presidential commission has identified the increasing number of students with learning disabilities as a major problem (Woodward, 2004). There is a pressing need to understand the characteristics of children with mathematical disabilities and to provide them with better mathematics education. This paper attempts to provide teachers with information on the following questions:

What are common characteristics of children with mathematical difficulties (MD)?

What are the predictors of MD in young children?

Is there a relationship between reading difficulties (RD) & MD?

How can teachers improve the problem-solving abilities of students with LD?

What are common characteristics of children with LDs regarding mathematical difficulties?

While students with LD are a heterogeneous group, common characteristics include attention problems, limited gross- and fine-motor abilities, and deficits in psychological process and information processing. In addition, most of these students experience oral language, written language and mathematics difficulties, as well as failure to develop and use cognitive strategies and problems with social skills (Lerner, 2003; Wood, 2006).

Mathematical characteristics of students with LD have not been studied as extensively as reading characteristics (Bender, 2001; Geary, 1999), although many students with LD have been identified because of their difficulties in mathematics.

More than 50% of the students with LD have Individualized Education Plan (IEP) goals in mathematics. Furthermore, almost 26% of this population needs support for problems related to mathematics (Lerner, 2003). As of the term LD, there is little consensus among educational professionals concerning a definition of mathematics learning disabilities (MLD) (Mazzocco & Thompson, 2005).

Neuropsychological studies conducted related to children's learning, mathematical disabilities, and the deficits leading mathematical difficulties give a valuable insight into the characteristics of students with MDs (Kesler, Sheau, Koovakkattu & Reiss, 2011; Soltész, Scüz & Scüz, 2010; Kaufmann, Vogel, Starke, Kremser, Schocke & Wood, 2009; Kaufmann, 2008). An experimental study demonstrated that children with developmental dyscalculia have a deficiency in number magnitude knowledge. Functional MRI's provided evidence for strong activations in the left intraparietal regions including Angular Gyrus demonstrating that children with MD are trying to compensate for their insufficiency by resorting to verbal strategies (Kaufmann, *et al.*, 2009).

Although a significant number of children achieving poorly in mathematics, it is imperative to distinguish the students with MD from poor achievers. An important difference between these two groups is the common working memory deficits among children with MD (Geary, 2011). A recent study results suggests that high school students with MD scores lower on the measures of visual-spatial processing, visual short-term memory, visual and verbal working memory compare to their average achiever peers (Swanson, 2012).

What are the predictors of MD in young children?

Though MDs become apparent during elementary education (Cohen & Spenciner, 2005; Lerner, 2003; Mazocco, 2001), for many children, difficulties with mathematical concepts start at a very early age. Lack of number sense (e.g., reading numerals, number consistency, and magnitude judgments for one-digit numbers) is believed to be one of the best predictors of future MD (Mazzocco & Thompson, 2005; Gersten, Jordan & Flojo, 2005; Berch, 2005). Vukovic and Siegel (2010) suggest that early identification measures of MD should include an area focusing on mathematical background knowledge since it specifically distinguishes children with persistent mathematics difficulties from those with transient MD and without learning disabilities.

Although executive functioning skills of a young child provide indications for his/her general learning, visual short-term and working memory explicitly predict achievement in mathematical domain (Bull, Espy, and Wiebe, 2008). Swanson (2012) reports a strong link between visual-spatial processing and MD in adolescence years. Children with MD may have difficulties in understanding spatial relationships as well. At preschool age, they are confused by concepts such as up-down, over-under, top-bottom, and high-low. In later years, they may have difficulty in understanding distances between numbers. Incorrect body image is another shared feature, with unrelated and misplaced body parts often seen in their human figure drawings (Lerner, 2003).

Children with MD may demonstrate limited visual-motor and visual-perception skills (Salend, 2005). Some are unable to count objects in series, while others cannot

see objects in groups; that is, they lack the ability to recognize the number of objects quickly. They also have difficulties perceiving geometric shapes or number symbols visually (Lerner, 2003). Some of these children understand the number system but cannot recall number facts quickly because of memory deficits (Geary, 1993; Geary, Hoard & Hamson, 1999). If these children do not receive specific intervention, MDs continue to exist and negatively affect their daily lives during adulthood (Lerner, 2003).

Lerner (2003) states that many students and adults experience continued math anxiety. Though each student with MD is unique, most of these students encounter information-processing difficulties, as well as problems with prediction, number reading, and mental representation (Desoete, Roeyers & De Clercq, 2003). MDs are also mixed with oral language and reading difficulties for many children, causing misunderstanding of mathematical terms (plus, minus, etc.) and making word problems harder (Salend, 2005; Lerner, 2003). Since these children may have difficulty reading or understanding the language structure of problems, they cannot plan and perform the tasks necessary to solve the problems. Common difficulties at the secondary level include basic operations, decimals and percentages, place value, and understanding the language of mathematics. Most adolescents have limited strategies for solving mathematical word problems. Problem-solving is the most difficult area of mathematics for many students with LD because it not only requires analyzing and interpreting information but also knowing how to use mathematical concepts and computation skills in a novel situation. These students either do not use strategies or utilize the wrong strategies (Lerner, 2003).

Geary and Brown (1991) compared gifted, normal, and children with MD in terms of strategy choice and speed of processing. They found that gifted students used memory-retrieval strategies more than the other two groups and made fewer retrieval errors. Children with MD used sum-counting procedures more than the other groups and utilized retrieval strategies less than normal-achieving students.

Is there a relationship between RD and MD?

Although research on LD and word-problem solving is limited (Jitendra & Xin, 1997), research on MD is growing (Jordan & Hanich, 2003). Researchers have begun to investigate the characteristics of students with MD, with RD, and with both RD and MD. Geary (1993) reviewed the literature about the characteristics of children with MD, which revealed that many children have both MD and RD, resulting in difficulties in the representation and retrieval of semantic information from long-term memory, including fact-retrieval problems in mathematics and limitations on word-recognition phonological awareness in reading. Children with comorbid RDs show cognitive patterns different from children with MD only (Fuchs, Fuchs & Prentice, 2004; Jordan, Hanich & Kaplan, 2003; Geary, Hoard & Hamson, 1999). Compare to the average achievers, students with MD, RD and both MD and RD display verbal working memory infirmity. MD students differ from their RD peers by their lower scores in visual-spatial working memory and processing. However, they perform better than students with only RD in random generation and motor speed tasks (Swanson, 2012).

Fuchs and Fuchs (2002) explored the mathematical problem-solving profiles of

students with MD and without comorbid RD. They administered three types of problems (arithmetic story problems, complex story problems and real-word problem-solving) and found that both groups had large deficits in mathematical problem-solving, but that the differences between groups were determined by performance dimension and problem-solving level.

Jordan and Hanich (2003) confirmed the advantage of good reading skills for mathematics achievement. A study by Jordan, Hanich and Kaplan (2003) demonstrated that the third graders with MD only perform better in problem solving than the third graders with both MD and RD. Research results suggest that educators should take into account the profiles of students with MD only, with RD only, and with both MD and RD when planning mathematics instruction or conducting research (Fuchs, Fuchs & Prentice, 2004; Jordan, Hanich & Kaplan, 2003).

How can teachers improve the problem-solving abilities of students with LD?

The NCTM identifies problem-solving as the most important goal of mathematics instruction and a vital part of mathematical activity (NCTM, 2000). Providing all children with meaningful problem-solving experiences is necessary (Diezmann, Thornton & Watters, 2004). To reach this goal, teachers must understand the needs of exceptional children and the strategies available for educating them (Diezmann, Thornton & Watters, 2004). Research-based literature reveals three functional approaches for improving the performance of students with LD: cognitive-, metacognitive - and visual-spatial representation-based problem-solving strategies.

Cognitive strategies: Cognitive strategies (strategy instruction) are a promising approach for children with LD (Montague, 1997; Van Luit & Naglieri, 1999; Maccini & Hughes, 2000). Maccini and Hughes (2000) studied the effects of a problem-solving strategy on the introductory algebra performance of secondary students with LD. The researchers used STAR as a cognitive strategy to teach. STAR included six modified instructional procedures from the Strategic Math Series. In addition, students worked with a worksheet consisting of the STAR strategy steps and substeps and a workmate. To measure student performance, the researchers used a holistic scoring guide to standardize procedures, with points for correct or partially correct responses. They recorded the students as they solved problems and later analyzed the audiotapes. In addition, both teachers and students filled out a survey and answered open-ended questions about the strategies. As a result of this intervention, compared to baseline data, all participants improved in strategy use; participants' accuracy in computation of integer numbers increased; and the cognitive strategy was effective even 10 weeks after the intervention. Also, participants agreed that STAR helped them become better problem solvers and that they would recommend it to others (Maccini & Hughes, 2000).

Case and Harris (1992) examined the effectiveness of a strategy for solving simple addition and subtraction word problems for 4fifth- and sixth-grade students with LD receiving educational services in a self-contained classroom. For this study, a multiple-baseline-across-subjects design was used, and the problem-solving strategy was taught using self-regulated development procedures, with 35-minute strategy instruction sessions taking place two or three times a week. During baseline, students' pre-instructional response rates and correct responses were determined. In the first instructional phase, students were taught strategies related to addition. They were

allowed to proceed to the next stage only after they had mastered the skills for the current phase. The second phase was post-instructional problems, in which students learned to apply the skills learned in the first phase to subtraction problems. After this phase, students were given word problems. The last phase was maintenance and generalization. The researchers found that after being taught strategies, the students' performance increased and their errors decreased. In addition, teachers noticed the positive changes in students' performance and task behavior.

Owen and Fuchs (2002) compared four groups of third-graders. The three experimental conditions were acquisition (four students with disabilities), low-dose acquisition plus transfer (five students with disabilities), and full-dose acquisition plus transfer (seven students with disabilities). A control group of eight students with disabilities was also included for comparison only. All students received instruction from the same basal mathematics program in a curriculum that included word problems. Each student in the experimental group was paired with a high-achieving student. After a large-group instruction session focusing on a six-step way of solving word problems, students practiced problems with their partners. For amount of work, significant differences favored the low-dose acquisition plus transfer and full-dose acquisition plus transfer groups over the control group. Student and teacher attitudes toward the instructional strategy and working with a partner were positive.

Among there viewed cognitive strategy studies, three (Kroesbergen, Van Luit & Naglieri, 2003; Naglieri & Johnson, 2000; Naglieri & Gotting, 1997) focused on the effects of cognitive intervention on students' cognitive processes: planning, attention, simultaneous and successive (PASS). The use of PASS theory rather than intelligence tests to understand students' cognitive capability made this group of researchers unique. According to PASS theory, planning processes provide for the programming, regulation, and verification of behavior and are responsible for problem-solving and self-monitoring. Attention processes provide selective recognition of stimuli. Simultaneous and successive processes receive, analyze and store information (Naglieri & Gotting, 1997). Students with MLD are weaker in all four processes when compared with their peers. The studies showed a positive relationship between students' performance in basic mathematics and their strength in PASS processes. Planning and successive processes play an important role both in reading and in solving math problems (Kroesbergen, Van Luit & Naglieri, 2003). Cognitive intervention is most effective for students with weaknesses in planning processes (Naglieri & Johnson, 2000).

Van Luit and Naglieri (1999) studied the effectiveness of another cognitive strategy, MASTER. They assigned 21 children with LD and 21 children with mild mental retardation (MMR) to the experimental group. The experimental group was divided into groups of five and they received the MASTER program, including self-instruction in arithmetic training. The experimental groups worked with experienced special education teachers who were explicitly trained for the MASTER program. These teachers taught the children for three 45-minute sessions per week for 4 months. The control group also included 21 students with LD and 21 students with MMR. This group was divided into two in each school and they received arithmetic training in their own classroom from their own teacher. The researchers found that even though students with LD showed more improvement, the MASTER program

was effective for students with MMR as well.

One group of researchers (Gillies, Walker & Bailey, 1995) designed an experimental study to determine the effects of metacognitive strategy and attributional interventions on students' ability to solve mathematical word problems. The study included 59 students without disabilities from two different classes in different schools, divided into pretest-intervention, post-test and wait-control groups. Students in the first school were placed in two groups. One group received strategy and attribution training, while the other group served as control. Students in the second school were also placed in two groups. The experimental group received only strategy training while the other group acted as a control. Intervention lasted for four weeks, after which the control group in the first school received strategy plus attributional training, while the control group in the second school received strategy instruction. All groups completed pre- and post-tests. Strategy training included seven steps: read, paraphrase, visualize, plan, estimate, compute and check. The attributional training occurred in the form of planned and guided discussions. In these discussions effort and strategy use were emphasized. The research results demonstrated that the seven-step metacognitive strategy had the most significant effect on students' mathematical problem-solving abilities.

Hohnand Frey (2002) designed two experiments. The goal of the first was to compare the training developed by the researchers in the SOLVED program with a textbook-based approach to problem-solving. The second experiment's purpose was to analyze strategy use, to find its association with performance, to examine possible interactive effects of gender and ability and to observe whether the program was still effective after two weeks. As a result of these two experiments on 223 third-, fourth- and fifth-graders, the researchers found that SOLVED was more effective than traditional problem-solving instruction in short-term and delayed problem-solving. Both below- and above-average students profited equally from SOLVED training.

The majority of these cognitive strategies were developed based on Polya's heuristic problem-solving approach (Schoenfeld, 1985), defined as "strategies and techniques for making progress on unfamiliar or nonstandard problems" (p. 15). According to Schoenfeld, mathematical performance depends not only on what one knows but also on how effectively one uses the knowledge. Some children naturally learn how to use this knowledge to solve mathematical problems effectively through informal and formal experiences; however, other children may encounter difficulties gaining and using this knowledge. The heuristic approach provides a structured series of steps for all types of learners to follow when attempting to solve mathematical word problems (Hohn & Frey, 2002). Polya's heuristic approach involves four main steps: understanding the problem (What is known? What is unknown? What are the data? What is the condition?); making a plan (finding the relationship between data and unknown, restating the problem, remembering slightly different problems solved before); applying the plan; and looking back and checking (Schoenfeld, 1985).

Visual-spatial representation strategies: Another strategy for teaching problem-solving skills to students with or without LD is using visual-spatial representation. Experimental studies have showed the positive effects of this strategy on junior high students (Jitendra, Star, Dupuis & Roriguez, 2012; Jitendra & Star, 2011; Van Garderen & Montague, 2003; Jitendra, DiPipi & Perron-Jones, 2002). With

this strategy, students are taught to recognize problems' patterns; to organize and represent important information with schematic diagrams; and to select and apply appropriate mathematical operations to find solutions (Jitendra, 2002). The main difference between the visual-spatial representation-based approach and cognitive and metacognitive approaches is the utilization of schema diagrams to map important information from the question and draw attention to semantic relations within the problem in order to assist problem transition and solution. The other techniques focus on the heuristic procedures of problem-solving, even though they may use diagrams (Jitendra, DiPipi & Perron-Jones, 2002).

In a recent study, Jitendra and colleagues (2012) compared two groups of seventh graders in terms of their proportional reasoning. Experimental group received a six weeks schemata-based instruction (SBI), while the control group continued with their traditional mathematics curriculum. SBI in this study specifically stressed the mathematical structure of the problem, used visual representation tools, encouraged problem solving heuristics, and taught various solution methods. The results demonstrated that although there was no difference between groups in transfer test of problem solving, experimental group students (including those with disabilities) were more successful in problem solving both in posttest and in follow-up assessments. The same strategy can be used effectively to teach problem solving for students with LD in inclusive settings (Jitendra & Star, 2011).

An earlier research by Van Garderen and Montague (2003) revealed that gifted children use the visual-spatial representation strategy more frequently than average achievers or students with LD. The same study also demonstrated a positive relationship between schematic-spatial representation and mathematical problem-solving. Students who use visual-spatial representation achieve more correct answers than others. According to this research, using visual-spatial representation increases students' performance in solving both one-step and multi-step problems. In addition, students consider the strategy helpful and enjoyable, and according to teachers it helps students become independent (Jitendra, DiPipi & Perron-Jones, 2002). Xin, Jitendra, Deatline-Buchman, Hickman and Bertram (2002) found that for students with LD visual-spatial representation is more effective than the heuristic approach in learning to solve word problems and maintaining skills and performance.

CONCLUSIONS

Difficulties with mathematics are frequently seen among children with LD. There is a concern that the impact of educational reforms has not been seen very quickly in the mathematics education of children with LD and that prevention efforts are not sufficient (Fuchs & Fuchs, 2001; Woodward & Montague, 2002). Furthermore, the needs of students with only MD differ from students with both MD and RD. There is a growing body of research in the US investigating methods to enhance these students' mathematical abilities, especially in the area of problem solving. Cognitive-, metacognitive- and visual-spatial representation-based approaches separately have been successful in word problem-solving for students with LD. These strategies, however, can overlap. Teachers can best decide whether to use these strategies separately or in combination. They can create their own methods by combining strategies based on student need or problem type. Most importantly, to facilitate

children's abilities in mathematical word problem-solving, strategies integrating a variety of instructional techniques such as planning, self-regulation, and using diagrams, seem more effective for students with LD (Jitendra & Xin, 1997). In addition to research evidence related to effectiveness of different strategies, implementing a culturally responsive math education should be taken into consideration in order to promote mathematical skills of LD students with different cultural backgrounds (Shumate, Campbell-Whatley & Lo, 2012). Finally, it would be beneficial to combine information coming from the growing neuroscience research, when developing strategies to use in classrooms to improve the problem solving skills of students with LD.

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Chapter 39

As a Tool for the Evaluation of the Clinical Skills Performance in Nursing Education: Objective Structured Clinical Exams

Aslı AKDENİZ KUDUBEŞ, Murat BEKTAŞ and İlknur BEKTAŞ

INTRODUCTION

It has been observed that the basic clinical abilities could be learned in internships and the view regarding the needlessness of the structured skills trainings in the syllabus was dominant in the mentality of the traditional nursing education. In years, some factors (the increment in the healthcare quality as well as applications depending on the evidence, incomplete and insecure feelings of nurses about some applications and abilities) created a serious concern in both the nursing students and the newly graduated nurses. Incorporated the trainings structured skills in the nursing education programs increase the confidence of the students, the quality of the health care and the frequency as well as the chance of their application. Besides, including the structured skills trainings in programs is widely accepted in the world. Therefore, it is very important to include the structured skills trainings in the nursing curriculum and evaluate the abilities properly.

The most important aspect of the nursing education programs is the integration of the theoretical and nursing abilities (Fotheringham, 2010). Although the development of skills is very important, the same importance is not given to the measurement and evaluation of these skills in the nursing education. However, the efficient evaluation of these skills is one of the most crucial components of the nursing education process. It is important because the ability of providing the reliable health care by the nursing students before the graduation is the main objective of the nursing education institutions (Ulfvarson & Oxelmark, 2012). In literature, it has been addressed that some issues in institutions offering the nursing education (the high number of students, low number of academicians, the crowdedness of the clinics, inadequate number clinical application areas for students) decrease the opportunities to teach, apply as well as evaluate these skills (Cato *et al.*, 2008; Mitchell *et al.*, 2009; Nulty *et al.*, 2011). The insufficient transfer of the students' theoretical knowledge in practice and the non-objective evaluation of the students by academicians are basic problems of the nursing education in Turkey (Taşkın *et al.*, 2011). Thus, it is important to measure and evaluate the clinical skills in order to provide the objectivity.

The evaluation is one of the key components of the studentship and learning experience and there are many methods used to evaluate the skills. The evaluation of the clinical abilities in nursing education has gained an importance due to the awareness of the concept of competence in nursing and the recent medical errors. However, the clinical abilities cannot be evaluated at the desired level due to the insufficient number of the academicians and the excess number of nursing students in institutions offering the nursing education. At this stage, the academicians should

determine their aims clearly and decide the appropriate evaluation methods. Therefore, the need for the innovative assessment strategies has emerged in order to evaluate the skills. Objective structured clinical exam, which is one of the innovative assessment strategies, can be regarded as a valid and reliable method. On the other hand, the combination use of more than one method (triangulation) has been recently accepted in the efficient evaluation of the abilities (Boztepe & Terzioğlu, 2013).

MEASUREMENT AND EVALUATION CONCEPTS

The measurement and evaluation concepts should be based on a scientific basis in order to design the efficient measurement and evaluation system (Tekin, 2004). The concept of measurement and evaluation, which is very important in education, has been defined in different ways. The definition of ‘measurement’ done by Tekin (2004) as ‘measurement is to determine whether or not a particular object (or objects) has a particular feature and if it has, it is the determination of the observation findings by symbols and especially numbers via observing the level of the presence of this feature’. However, it is not only enough to express the features of the cases with numbers of symbols via measuring them. The evaluation of the data is crucial upon measuring the features. The definition of Turgut (1995) was as follows; ‘evaluation is reaching a value judgment about the measured feature by the results of the measurements’. Measurement is an identifier process and it is used to determine the quantification of a result or a feature objectively. However, evaluation is a judgment process. It depends on the comparison of the two things (Eğitmiş, 2007).

There are various definitions about clinical evaluation which is a part of the measurement and evaluation. Zafrir and Nissim (2011) explained the clinical evaluation as the decision-making process about the qualification of the student in the clinical application. On the other hand, Scriven (1996) defined the evaluation as the process of systematically obtaining the data from various sources about the clinical qualification of the student as well as the results/outputs of this process (whether the student pass the course or not).

Miller defined a pyramid about the evaluation of students. Here are the listed concepts located on each step of this pyramid; respectively starting from the lowest one: evaluation of the knowledge (knowledge of the basic concepts), evaluation of the qualification (knowledge about the normal-abnormal structures, mechanisms and functions as well as application of these knowledge), evaluation of the performance (demonstrating the knowledge, abilities and attitudes in the educational environment and under observation by applying them to patients) and evaluation of the behavior (implementation of the profession in real life conditions) (Miller, 1990). Multiple-choice exams, oral exams and classical texts exams have been performed in order to evaluate the knowledge whereas multiple-choice exams, clinical problem solving exams and classic texts exams have been performed in the evaluation of the qualification (Bektaş & Kudubeş, 2014). In order to evaluate the behavior, direct observation, confidential standard patient interviews and portfolio have been used. In the evaluation of the performance, standard oral exams with the presence of the patient or objective structured clinical examinations (OSCE) have been performed (Miller, 1990).

OSCE has become essential in nursing education since the clinical competence of students and newly graduated nurses is not sufficient and they cannot establish the connection between the theory and practice (Major, 2005). Besides, it has been accepted that the evaluation of the clinical skills can only be done when there is a real patient since these abilities can be effectively gained in the clinics (Ward & Willis, 2006). The application of the skills during the simulation education decreases the need for the clinical applications, provides a controlled learning to students who will be new graduates and simplifies the clinical preparation (Nulty *et al.*, 2011).

Objective Structured Clinical Examination (OSCE) is performed both at the undergraduate level and graduate level as a method for the evaluation of the clinical skills. This evaluation mechanism is about how to perform the Miller's pyramid. The basic structure of OSCE is giving an opportunity to evaluate the clinical skills by supervisors via observing the students with the help of the structured and objective evaluation criteria (Miller, 1990).

HISTORY OF THE OBJECTIVE STRUCTURED CLINICAL EXAMS

It has been specified that OSCE was first performed in 1977 in Dundee University/Scotland in the exams of the surgery departments (Davis, 2003; Elçin *et al.*, 2005). Furthermore, it has been reported that it was applied primarily in a medical faculty in England and then in North America, Canada, Australia and other western countries and all over the world (Elçin *et al.*, 2005; Rushforth, 2007; Ünver, 2007). Harden has thought that the prejudice of the supervisors is a risk factor and this ensures the subjectivity during the evaluation process. Therefore, the OSCE was developed in order to prevent the problems that negatively affected the validity and reliability as well as to evaluate the clinical skills and competence of final year medical students (Rushforth, 2007). In the last 30 years, it has been observed that the OSCE was performed not only in the medical profession but also in other health professions including radiology, physiology, and nursing throughout the world (Selby *et al.*, 1995; Rushforth, 2007; Ünver, 2007).

OBJECTIVE STRUCTURED CLINICAL EXAMS

OSCE is among the innovative assessment strategies. OSCE is designed in order to evaluate the professional knowledge and skills in the clinical applications and it is defined as an approach that can evaluate the components of clinical competence by a structured or well structured objective approach. The OSCE has patterns such as "Short tasks" and "stations". Each station has typical task and each task in each station takes 5-8 minutes (Nulty *et al.*, 2011).

All students can experience the basic skills, apply and evaluate them with OSCE before the clinical application (Fidment, 2012). OSCE provides the evaluation of both the theoretical and the skills in many ways. When it is compared with other evaluation methods, it has many advantages. The OSCE has both formative and summative components. It leads to evaluate the performance owing to the feedbacks during the applications of the skills. Furthermore, the theoretical concepts and applications should be thought to nursing students since the applications performed in OSCE laboratory are quite similar to their professional tasks in their real clinical life (Mitchell *et al.*, 2009; Fidment, 2012). OSCE encourages the students to assess their own applications and provides the students to take the responsibility of their own

education (Major, 2005). OSCE is a reliable and valid measurement tool that provides the students to measure their competence (Rushforth, 2007; Cooper *et al.*, 2010; Abeer *et al.*, 2012). The importance of the evaluation of the nursing education before the graduation increases the importance of the OSCE (Carraccio & Englander, 2000). Communication skills, evidence-based medicine, diagnostic procedures, management skills, learning and teaching practices, teamwork and the ethical approach can be evaluated by OSCE (Harden *et al.*, 1975).

There are some usage and features of objective clinical exams in the evaluation of the clinical skills in the nursing education. OSCE is one of these exams that take 10-30 minutes and is composed of multiple stations. Students perform this exam by passing from one station to another. Scenario based OSCE method (this evaluation method is named as objective clinical evaluation (OSCE)) is composed of one or two long OSCE stations which take about one hour and with scenarios based on the same patient. In another method called 'Head to Toe Assessment', the student evaluates the patient entirely from the head to toe. In OSCE/random selection method, students choose the scenario and evaluate the cases by themselves. In these exams, students are not evaluated for the same cases (Rushforth, 2007).

THE FEATURES OF THE OBJECTIVE STRUCTURED CLINICAL EXAMS

There are some features of form in each evaluation. The most important feature of OSCE is that the evaluation is objective. It is an exam with high validity because it directly examines the related skill for the evaluation. Candidates are evaluated under similar conditions. Besides, the OSCE is a suitable evaluation tool for cognitive skills. The communication and application skills that are hard to be evaluated by other measurement tools can be evaluated by OSCE. The participation of standard patients-volunteers, the use of models and the evaluation of the scenarios during a certain time are some of the important features of OSCE. The teamwork of the candidates with suitable evaluation guidelines can also be evaluated by the OSCE (Lowry, 1993). OSCE is an evaluation method in which the drafters, practitioners, standard patients or volunteers are in harmony (Selby *et al.*, 1995). Other features of the OSCE are that designing the evaluation guidelines according to the stations, showing them to candidates during the presented period of time and the trial of the feasibility of the desired skill (Odabaşı & Elçin, 2011).

OBJECTIVE STRUCTURED CLINICAL EXAMS, THEIR IMPLEMENTATION AND PLANNING

After the preparation and planning process of OSCE, the application phase comes. The station chains that are passed in a loop create the basis of the application. The clinical environment and the problems are similar to real life. There are series of clinical skills in each station and these skills are applied in front of observers who use the evaluation guidelines before passing to the following stations. The basis of the evaluation is to observe the appropriate performance according to standards (Elçin *et al.*, 2005; Ünver, 2007; Ahmad *et al.*, 2009). The OSCE should be regarded as not only an evaluation process but also a learning process (Newble, 2004).

There are some steps that should be performed during the preparation process of the OSCE. They are;

1. Determination of the Learning Outcomes and Review of the Lecture

Care should be taken to revise the learning objectives while planning and implementing the OSCE (Newble, 2004). The skill that will be questioned in the exam should be suitable for the student while organizing the structured objective clinical exams. The important skill steps with the determined skill should be determined and scored objectively. For instance; if the disease history learning skills are questioned, all steps of this skill should be determined, these steps should be prioritized and the feasibility of the application should be clearly defined and scored according to these steps. The appropriate skills can be present in OSCE with one by one or all together (Selby *et al.*, 1995). The content and the skills that will be evaluated in the nursing education before the graduation should be determined in the education program (Selby *et al.*, 1995).

2. Deciding the Applications of OSCE

The cases that will be used in OSCE should be chosen from the real life. The case should carry the sufficient clinical knowledge and skill. The evaluation guidelines should be prepared for each skill that will be measured at each station and it should be checked before the OSCE. One should be alert against the possible alternative responses among the options. The preparations should be reviewed by others (Odabaşı & Elçin, 2011).

3. Deciding the Skills that will be Evaluated in the Exam (Determination of the Station Number in the Exam)

The factors, which will be evaluated in order to control the skills, should be determined and the guidelines should be prepared according to them (Nicol & Freeth, 1998; Elçin *et al.*, 2005). After a decision of performing an exam as the OSCE, the skills should primarily be determined. Therefore, the number of the stations is also determined. The required status should be defined for each station and if it is needed, the scenarios should be prepared. The duration of the exam, the number of stations and the numbers of parallel exam sessions should be clarified regarding the number of students, the number of observers, the amount of the materials and the model numbers to be used (Nicol & Freeth, 1998; Elçin *et al.*, 2005).

4. Determination of the Acceptable Time Interval for each Skill

The optimal time intervals are determined for each skill. The duration of the evaluation, the number of stations for the skill to be evaluated and how much time the candidates spend in each station should be determined. While determining the station numbers, the number of the observer should also be considered. For instance; when there should be more than 20 observers in an exam, the excess number of candidates can create a problem. When the number of the station is less than 10, the confidence interval of skills to be evaluated can be narrow (Selby *et al.*, 1995; Tudiver *et al.*, 2009).

5. Creation of the Guidelines for the Assessments of the Skills

While preparing for the OSCE, the entire exam and the skills to be evaluated in each station should be defined. OSCE instructions should be prepared in detail in order the candidates and the observers to successfully understand and apply the skills

in each station (Odabaşı & Elçin, 2011). The validity and reliability studies of the guidelines should be finished before the exam. The use of the guidelines should be thought to observers. They should receive the trainings about the critical behaviors related to each skill in each station with the help of simulations and games (Nicol & Freeth, 1998; Elçin *et al.*, 2005).

6. The Education of the Academicians who will Take Part in the Exam

The number of observers, the number of tools that will be used in stations in order to simulate the real life and the features of the place where the application will be performed are decisive in order to determine the number of OSCE station number. In order to decrease the number of observers in OSCE, the stations can be designed in which the computers can be used instead of observers, the candidates can be informed about problems and the responses can be taken from forms. At this stage, computers offer an important contribution to OSCEs (Holyfield *et al.*, 2005). The standard attitudes of observers are very important in the objectivity of the OSCE. The communication between the observers and the candidates should be clear and it should be emphasized that the evaluation will be performed according to the guidelines. The evaluation guidelines should be studied by observers and if there are points that are not understood, they should be explained to them. This is very important for the objectivity of the evaluation. Observers are more in the passive state in OSCE compared to the unstructured oral exams. The individuals who are complaining about this passivity can behave more freely and they can exhibit independent behaviors during the evaluation process. Some of them do not evaluate all the steps for all students whereas some others can even add new evaluation steps. Therefore, it is very important to well introduce the evaluation guidelines to observers. On the other hand, opportunities should be provided to observers in order them to give their evaluations and feedback regarding the OSCE after the exam (Odabaşı & Elçin, 2011).

7. Establishment of the Examination Order

The stations where the candidates can rest and give their feedback can also be designed. The features of the skills are decisive in the regulation of the exam place. For instance; a small station can be enough when the findings or images (for instance for the eye evaluation) are evaluated. However, the exam place should be silent and far from other stations for respiratory/circulatory system auscultation (Selby *et al.*, 1995). The stations should be prepared before the exam, the transitions should be organized, the bell should be controlled whether it can be heard from anywhere, the stations should be numbered and the detailed guidelines should be posted on the walls where the candidates can easily see them; particularly in the stations in which there is no observer. The patient examination beds and models should be located before the exam (Selby *et al.*, 1995).

8. Controlling the Examination Order

The place where the OSCE will be performed should be prepared for the exam. Generally, there is a need to have wide corridors while performing OSCEs. All these preparations should be controlled before the exam and if there are hitches, they should be resolved (Odabaşı & Elçin, 2011).

9. Informing the Students about the Examination Order

There should be places where the students can wait till the exam, read the instructions about the OSCE, prepare themselves for the exam, leave their personal belongings, rest and give their feedback both before and after the OSCE. The students should be informed about these places (Odabaşı & Elçin, 2011).

10. Starting the Exam

Each station control different clinical skills (learning the anamnesis, communication, interpretation of clinical data, the evaluation of the examination and interventions as well as the interpretation of the laboratory data, clinical decision-making and problem-solving skills, diagnosis of nursing, injection, etc.). There can be 2, 5, 20 or even more than 20 stations (Elçin *et al.*, 2007; Ahmad *et al.*, 2009). The increment in the number of stations also increases the validity of the exam (Ahmad *et al.*, 2009; Nulty *et al.*, 2011). The acceptable time should be determined for each station after the skills are decided. The time interval is same for each station (Ahmad *et al.*, 2009). In OSCE, each student presents the same skills at the same time and same observers evaluate the same station by using the same and previously prepared control lists by marking and scoring (Ahmad *et al.*, 2009). This is the structured and objective feature of OSCE (Ahuja, 2009).

11. Finalizing the Exam

Students pass from one station to another after hearing the bell that specifies the expiry of the time. Upon hearing the bell, the student enters the station and performs the previously determined task within a given time. The student leaves the station with the bell and passes to the further station. Thus, the sharing of students regarding the exam in the corridors is prevented (Ahmad *et al.*, 2009).

ADVANTAGES AND DISADVANTAGES OF THE OBJECTIVE STRUCTURED CLINICAL EXAMS

There are some advantages and disadvantages of OSCEs as other exams have. Deciding by considering the advantages and disadvantages of the planning and application of OSCEs is very important (Troncon, 2004; Rushforth, 2009; Ünver, 2007; Mitchell *et al.*, 2009; Ahmad *et al.*, 2009; El-Nemer & Kandeel, 2009; Nulty *et al.*, 2011).

RESULTS OF THE OBJECTIVE STRUCTURED CLINICAL EXAMS

There are many studies regarding the OSCE. In literature, it has been stated that OSCE is an efficient evaluation and education method as well as students can interrelate the nursing applications and their OSCE performances and this increases the self-reliance of students (Yoo & Yoo, 2003; Nulty *et al.*, 2011; Fidment, 2012). El-Nemer and Kandeel (2009) performed the study with respect to the views of students about OSCE. According to their study, students support the idea that OSCE widely evaluates the knowledge, allows the students to show themselves, determines the level of knowledge needs of students, gives an opportunity to learn as well as the OSCE scores ensure that accurate measurements in the evaluation of the clinical skills. In another study, Bartfay *et al.* (2004) have pointed out that the performance under stress conditions increases the validity of the OSCE and the clinical application is in accordance with the stress of the real world. In a study performed with child

health nursing students, it has been stated that OSCE is a favorable learning experience and an efficient evaluation strategy in the nursing education (Walters & Adams, 2002).

Table 1: Advantages and disadvantages of the objective structured clinical exams

Advantages	Disadvantages
It is more objective with higher validity and reliability compared to classical oral exams.	Since OSCE is the imitation of the real life, it costs money due to the use of the standard patients, tools (catheters, syringes, etc.), materials (gloves, sterile gloves, gauze, syringes, etc.).
It evaluates the skills better compared to other exams. It can give the opportunity to distinguish the students who have knowledge or not.	
OSCE helps the development and motivation of students regarding the clinical applications.	This created stress on students.
It increases the quality of the health professions.	It requires intensive labor of academicians.
OSCE evaluates the holistic approaches of the students (such as particularly encounter with the patient, learning the anamnesis, physical examination, identification of initial problems, the selection of the necessary tests, discussion of the results, the development of treatment and care advice).	There are some difficulties in OSCE regarding the organization and staff such as the high costs, the high number of students. Particularly, ensuring the privacy of the OSCE stations before the evaluation is one of the difficulties of OSCE.
The educational objectives and the issues to be considered in line with these objectives are certain in OSCE and the same students are evaluated in the same place under the same conditions.	It takes time to organize the OSCE and prepare the several case studies for the exam.

In literature, it has been stated that OSCEs increase the student satisfaction and they are more advantageous according to other methods whereas the increment in the costs put this satisfaction in the shade. Besides, it has also been specified that OSCE is a valuable experience in order to maintain high standards of psychiatric nurses (Selim *et al.*, 2012). In a study performed with oncology nursing students, it has been indicated that %90 of the students give positive feedbacks about OSCEs despite the increased stress levels and find OSCEs valuable due to the opportunity to apply the theoretical nursing knowledge (Furlong *et al.*, 2005).

Recently, ‘Best Practice Guidelines for use of OSCEs’ is prepared by experienced nurses, educators and academicians as a result of detailed literature reviews in 2011 (Mitchell *et al.*, 2009; Nulty *et al.*, 2011). It is composed of with 7 subtitles. The recommendations of this application guideline are;

1. The OSCE should be performed in applications which are directly related to the safe patient care

2. The OSCE should be performed in applications which are likely to be encountered commonly

3. The OSCE should be applied by using a comprehensive guideline in order to increase the reliability and thoroughness of the evaluation

4. During OSCE, students should be asked to perform an integrated performance by combining their different and unique abilities

5. The knowledge and skills that are questioned in OSCE should be distributed and structured adroitly

6. The possible clinical tasks in a professional nursing life and the lecture objectives should be put in order compatibly.

7. The feedbacks should be provided in time in order to help the development of students

It has been specified that all studies and the best OSCE guideline can direct the OSCE planning and application in the clinical evaluation which is a part of the nursing education.

CONCLUSIONS

OSCE not only evaluates the skills of students, but also determines the level of nursing knowledge of students. The OSCE has importance in interrelating the clinical skills and the theoretical nursing knowledge. The status of the student can be analyzed by OSCE and synthesis making skills, interpretation making skills and objective evaluation skills are provided to students.

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Chapter 40

Montessori Education at Preschool Period

Emine AHMETOĞLU

INTRODUCTION

Preschool education is becoming increasingly important in Turkey and the whole world. When individual development considered, preschool education is an important step that trained the child for primary school education. It may help children to develop their senses and learn through experience by introducing child-centered educational environment and child-centered educational materials to teachers. The more important preschool education becomes, the more number of preschool education classes increases (Özerem & Kavaz 2013). Preschool period is extremely important for pediatric development. The child develops very fast at this period spanning the ages of 0 and 6 (Kol, 2012). Some personal attributes of children develop before primary education. Preschool education allows children to reveal their creativity and frees children from parental addiction. Physical, mental and social development is integrated at preschool period (Gedikoğlu, 2005).

Preschool education is both related to methods and principles that appropriately contributes to the child's development and learning and important for development of child's personality and reasoning skills. Therefore, preschool teachers have great responsibilities. In order to enhance quality of education, teachers must design an enjoyable and peaceful setting and try to learn a positive learning environment (Vodopivec, 2010).

The child has his first practical experience by exploring himself and environment (Vodopivec, 2010). Maria Montessori has suggested that a child's attention and personality comprise his interaction with objects and persons around. Vygotsky has argued that a child's reasoning skill will develop if he participates in activities that support development (Thomson, 1995). Preschool education not only trains the child for the next educational step but also takes place in the child's real life experience. Preschool education focuses on children's talents and experiences (MarjanovikUmek& Fekonja Peklaj, 2008).

Preschool educational institutions have a determinant role in children's lives and their quality differs between countries and institutions according to different working conditions, number of students and their teaching methods. Institutionalized preschool educational institutions guide families in their child-rearing process (Vodopivec, 2010). Preschool education programs are one of the factors that influence quality of preschool education. Various education programs are implemented at preschool educational institutions. One of these education programs is Montessori education program. Having an important role in supporting development of preschool children, Montessori education program is implemented at numerous schools all around the world and the number of preschool educational institutions providing Montessori education is increasing day by day (Mutlu *et al.*, 2012).

WHO IS MARIA MONTESSORI?

Maria Montessori who opposed to traditional practices in pedagogy field was born in Italy on 31st August, 1870. Maria Montessori registered at a technical secondary school in 1883 and graduated in 1886 with a high graduation average. She got engineering training from 1886 to 1889. She attempted to register at Rome Faculty of Medicine where only boys were trained but she was rejected. Maria Montessori did not give up, passed entrance tests in 1892 and was accepted to Rome Faculty of Medicine. Maria Montessori received pediatrics training for the final two years of Medicine Faculty. She won a prize as the first female to have won the medical doctor title in Italy. She studied on mental retardations and psychological disorders for doctorate (Kramer, 1976). She was impressed by Itard and Seguin's studies in special education field and wanted to carry out researches on special education. Montessori founded a medicine and education school with Guiseppe Montesano (Gutek, 2004). Montessori began to take psychology and philosophy courses in 1901 (Wilbrandt, 2014). She took place in education field and became Anthropology professor in 1904 (Kramer, 1976). She opened a children's house in a poor neighborhood in 1907 (Donabella& Rule, 2008). Montessori opened five Children's Houses in 1909. She began to give trainings at these schools.

More than one hundred Montessori schools were opened in the United States in 1913 (Pollard, 1996; Wilbrandt, 2014). There was less interest in Montessori schools after World War I but European countries maintained their interest until 1930s (Feez, 2007).

She began giving international educator courses in many different parts of the world. Montessori schools spread in many countries. Maria Montessori wrote books on Montessori education. Maria Montessori died at the age of 82 in Holland (Kramer, 1976).

MONTESSORI'S UNDERSTANDING OF EDUCATION

When Montessori's works and books reviewed, it is understood that her educational philosophy was influenced by numerous thinkers and educators. Some of them are J.J. Rousseau, Ovid Decroly, Itard and Seguin.

In order to understand basic philosophy of Montessori Method, it is necessary to study hoe she handled a child anthropologically. According to Montessori, the child must be kep active from birth to adulthood and assisted in developing his personality gradually. Montessori summarized this basic idea as "help me so that I can" (Wilbrandt, 2009).

Montessori's method is based on 5 basic principles:

1) Absorbent Mind, 2) Sensitive Periods, 3) Prepared Environment, 4) Review and Free Choice 5) Polarization of Attention

Absorbent Mind: Each child's mind functions differently from that of an adult for the first six years of life. Absorption of knowledge by mind without child's effort is called absorbent mind. How can just a three-year-old child form basic concepts of language? A child who cannot speak a language till the age of three will have gained a wide vocabulary in mind when he becomes six years old. Though not in the same way, he will improve the language after the age of six. Children who learn multiple languages simultaneously not only acquire each language's vocabulary but also pronounce

sounds perfectly. An adult cannot pronounce sounds as correctly as a child, no matter how well he has learnt it. Children's minds are like sponges. If we put the sponge into the water, it will absorb water. A child's mind will absorb everything around like a sponge with no effort (Lawrence, 1998).

Regardless of where they are born, babies come to the world with a competency that Montessori defined as "absorbent mind". "Absorbent mind" principle is more important for the child to reveal his physical activity (Oğuz & Köksal Akyol, 2006).

According to Montessori, absorbent mind is divided into two sub-phases. The first phase is from birth to three years. Development of mental functions and realization of learning process occur as a result of interactions with the environment. Children begin to form their own personality and mind through environmental exploration in this phase. They begin to acquire language and culture of their countries. The second phase is from three to six years. In this phase, children are more conscious in their exploration. They form their knowledge and opinions due to environmental interactions. They begin to explore the environment, form knowledge, use language and recognize their own culture in both phases (Gutek, 2004).

Sensitive Periods: They are time blocks when a child focuses on an attribute and neglects others. Reinforcement of certain actions with no apparent reason is the result of his intense desire to make connection to his inner world. What compels him to do this is his love of the environment. If the child is prevented from pursuing his interest, a natural opportunity for exploration will be lost. When the child loses his interest, it influences psychic development negatively. Development must not be left to chance at sensitive periods and the child must be helped to explore sensitive periods. Montessori has observed that sensitive periods in a child's life are related to environmental order, exploration of environment with language and hands, development of walking, intense interest in small and detailed objects and interest in social aspects of life. Maria Montessori recommended that educators study sensitive periods (Çiftçi, 2013).

Prepared Environment: According to Gebhardt-Seele (1985), teacher is responsible for teaching everything in traditional teaching system. In every stage of Montessori education the child learns thanks to his interaction with environment. Teacher is only a part of this environment. Organization of the environment by teacher is not seen as a way to success (Çiftçi, 2014). Classroom setting comprising educational materials, educator and physical environment is very important for all children's development. Child development is positively affected by children's right to free choice and decision-making and discovery of interest on a particular subject on a prepared environment. Prepared environment also involves the classroom's physical conditions. Chairs, desks, tables, books, electric switches, taps and everything children use arranged for their height. Maria Montessori attempted to create an environment where children could assume their own responsibility in their classrooms. For example, the sweeper is small to use all classroom materials (Korkmaz, 2014).

Prepared environment means a setting and environment free of obstacles that only serves children's needs. A chance for real education is only possible with such an environment (Willbrandt, 2014).

Review and Free Choice: According to Montessori, children do not pay attention to anything when they are occupied with a material and repeat it again and again until

they are able to use that material correctly. For example, actions are repeated when a baby bubbles and hand-eye coordination is developed (Erben, 2005; Wilbrandt, 2014). Parents must observe the child closely. They must monitor the activity types they choose on their own. They can give these exercises to the child at their level and then develop and change them. Activities that children easily do are the most appropriate ones for their needs (Çiftçi, 2013).

Polarization of Attention: According to Montessori, a child needs to be left alone in a stimulating environment in order to form his personality. Child develops with his own practices. Child must only be given a stimulating environment and left alone there. If adults offer this rich environment to the child, children will be able to focus on the object that will answer their inner needs. When their needs are satisfied with environmental objects and outer instruments, the child will form himself and organize his personality (Demiralp, 2014).

Attention is focused at three stages:

a. Preparation: The child first decides upon a learning issue and organizes his work. At this stage, educator introduces a new entry and a short instruction.

b. Study: The child enters a new path to explore science and tries to do what is given. He is supported with materials while gaining experience.

c. Focus of attention does not come to an end but the child becomes peaceful and quiet (Demiralp, 2014).

CHILD'S DEVELOPMENT PHASES IN MONTESSORI EDUCATION

Montessori conceptualized development as four phases, first of which lasts from birth to six years (Haines, Baker & Kahn, 2000). As seen on Table 1, in the first development phase instinctive, unconscious growth between 0-3 years turns into conscious knowledge between 3-6 years. In this phase, children need spontaneous activity and sensorial exploration, work based on a practical goal, self motivation for personality development and a nutritious environment that supports their “integrated” development. From this point of view, Montessori education models and programs take into account teaching settings and materials as well as social, ethical, cognitive and emotional fields of child development (Haines, Baker & Kahn, 2000). In the other phase, child begins to develop skills in certain areas and is now ready to receive universal knowledge at this development phase lasting between the ages of 6 and 12. Child's learning pace falls at the beginning of this phase that gives rise to ethical and social sensitivity. The child begins to become aware of good and bad in this stage. Children who question only personal behaviors in the previous phase now try to understand social phenomenon by looking from different points of view. In this phase, child's conscience becomes the center for decision of the difference between good-bad and right-wrong. Thus, the child is able to achieve social awareness. The child also develops a sense of justice and is ready to obey his childish community. According to Montessori, the child is “a newborn baby in social sphere” at this phase (Schafer, 2006 & Wilbrandt, 2009: cited by. Durakoğlu, 2011). At the final phase he has started to adapt to social life as a social being. This phase will go on forever. The child who has gained ethical awareness in the previous phase no develops social and religious feelings in this phase. The child who gains spiritual values also assumes several ideals. As ethical and social awareness of a child comes to maturation level at this

phase, this child may be taught ethics (Montessori, 1953: cited by Durakoğlu, 2011). The child must be able to pass through development phases consciously in a rich environment prepared for them. Primary responsibility of an adult is providing this environment to the child. Children must be given opportunities at this phase to develop their sensory organs (Topbaş, 2015).

Table 1: Child's Development Phases According to Montessori (Wilbrandt, 2011).

Phases	Age	Characteristics
First Phase	0-3 Years	The child builds himself through instinctive development and internalization.
First Phase	3-6 Years	The child gradually passes from unconscious knowledge to conscious knowledge.
Second Phase	6-12 Years	The child acquires knowledge about the universe. At this phase the child tries to satisfy his need for knowledge. As an explorer, he tries to understand his role in society.
Third Phase	12-18 Years	The child adapts to the society as a social being. At this stage he tries to satisfy his intellectual curiosity. This phase lasts for the rest of life.

TARGET DEVELOPMENTAL OUTCOMES IN THREE-SIX AGE MONTESSORI PROGRAM

After identifying characteristics of child development, Montessori developed appropriate method and materials and used them in her studies in order to develop children in several areas. These areas are senses, maths, language, history and culture, nutrition and cooking, art, music, science and nature, kindness and behavior, sport and communication (Oğuz & Köksal Akyol, 2006).

Developmental outcomes expected in Montessori Program for three-six ages have been listed by Haines, Baker & Kahn (2000) below; Social development outcomes, self-discipline, increased independency brought by new skills and competence, special pro-social behaviors, patience and sharing skill, respect to others, willingness to obey rules that create social order. Ethical development outcomes are persistence and good working habits, selecting skill, self-discipline, independency, mental balance, tolerance, respect to others and environment, willingness to obey rules that create social order. Cognitive development outcomes are clarification and classification of the effects of impressions up to the age of three, enhancement of knowledge and vocabulary, perfection of the ability to see and understand small details, reasoning, new skills and competencies, sustainable attention, learning symbol systems (language and maths), concrete works with Montessoti materials and symbol systems. Emotional development outcomes are pleasure from purposeful activities, calmness, tranquility, satisfaction, sensorial balance, happiness, joy, life concerns, love for objects and people, emotional welfare, warm, emotional load, warm, sympathetic, meaningful and optimistic individual attributes

MONTESSORI CLASSROOM

Montessori's method has two basic components. They are the environment factor that involves educational materials and exercises and teacher factor. Environment

design must allow the child to form his personality and present us his development patterns and character. The child must be designed for the child by conscious and sensitive adults (Çiftçi, 2013).

Maria Montessori called the “classroom” a prepared environment. Environment is designed with the help of teaching materials that suit the child’s interest and needs. Like in life, there is only one of an object in Montessori classrooms. Classroom and furniture do not restrict child’s movements. Desks and chairs in a Montessori classroom fit children’s height and easy to carry. There are easily accessible cabinets, drawers and a kitchen counter. Guests of Montessori have observed and impressed by the fact that children study in order and discipline with materials they prefer (Gutek, 2004).

Montessori classrooms are designed attractively as esthetic and atmosphere are very important. The class must be refreshing, warm and encouraging. There is an atmosphere of respect in Montessori classes and children choose projects, project partners and time by themselves. Self-discipline develops at this setting. There is also only one of an object in Montessori classes. When the child wants to use that object, he waits for others to finish their job. Thus, the child learns to respect others’ rights (Dere& Temel, 1999; Temel, 1994).

When Montessori used the term “prepared environment”, she did not mean to say that teacher should organize the environment as he wished because this would hinder children’s freedom. On the contrary, she conceptualized environment as a transparent area that would allow students to express themselves freely and reveal their self-motivation for exploration (Montessori, 1966). Therefore, students are as respectful and attentive to the social and physical environment as to each other (Montessori, 1966).

In addition to prepared classroom environment and the conceptualization that “prepared environment is an ecosystem rather than a school”, Montessori extended her learning environment concept by suggesting that learning setting goes beyond physical setting. She argued that when children left classroom setting for real life experience they developed an understanding about the world around by using their imagination and observation skills. This “going out” view was emphasized by adding that “When the child goes out, the world offers itself to him. We must take the child out and show real life objects instead of closing them in cabinets and produce objects that represent ideas” (Montessori, 1994). In Montessori classrooms, students are both allowed to go around the classroom and go out to the open field. Children are free to roam at this area. Time for study, rest and game is not divided in Montessori schools due to this freedom.

MONTESSORI MATERIALS AND ACTIVITIES

Montessori opposed to memorization and materialized knowledge at a comprehensible level, developing a method and a series of materials named “keys opening the world” that would transfer this knowledge. It is organized from simple to hard, concrete to abstract and allows the child to check his faults. There is only one problem to solve in each material. For example, cylinders which are one of the most common Montessori materials have either a different shape or color. There is not a tack that children separate cylinders of different shape and color simultaneously. Thus,

teacher mentions the child's mistake and the child explores it himself. If the child cannot realize his mistake, it means that he has not developed sufficiently.

There are some rules to use Montessori materials. The child to use the instrument must bring necessary materials, arrange them carefully on a mat or rug, put them back to the shelves after working so that the next child can use them freely. However, although the setting is quite tidy, it is not compulsory or necessary to put each part at the same place (Lillard, 2011).

Lillard (2013) has suggested that Montessori activities and learn through play have a lot in common. However, it is not correct to say that Montessori activities are a game. They are the real life itself. According to Dr. Montessori, "Child's work makes the person that he will be in the future". While an adult tries to develop the environment, a child tries to develop himself. Using the child's natural inclination as the starting point, Dr. Montessori structured many classroom exercises. These exercised help to satisfy the child's needs through meaningful activities. There are materials in Montessori kindergartens for various fields:

1. Daily Life Skills Exercises
2. Sensorial Development Materials
3. Mathematics Skills
4. Linguistic Materials
5. Cosmic Education Materials (Geography Materials)

1. Daily Life Skill Exercises: Daily life activities reflect social aspects of cultures. Each activity is a reflection of real life and a daily routine performed by adults every day. One of the gifts of Montessori education for children is that they are able to do these activities independently at early ages and thus develop their free will. Will requires a person to be attentive, choose and realize relevant actions to achieve goals and be persistent until achieving goals. A child who gains will has taken a big step on the way to adulthood (Feez, 2010).

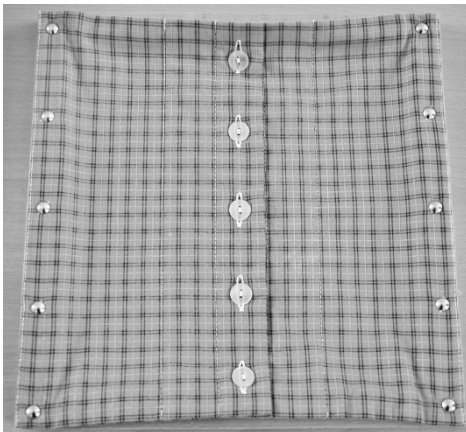


Figure 1: Buttoning Frame with Small Buttons

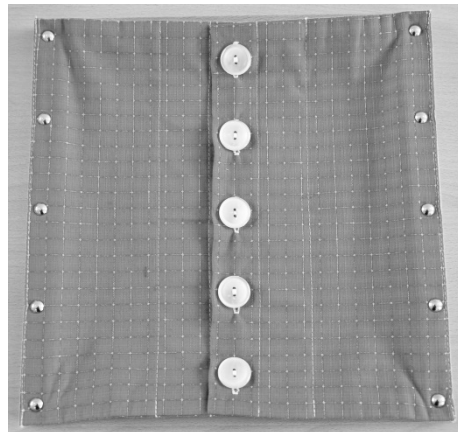


Figure 2: Buttoning Frame with Large Buttons

Exercises for developing sense of balance include setting the table, washing hands, squeezing orange juice, slicing cheese, making sandwiches, dusting, polishing shoes and sweeping the floor. Exercises to develop action coordination are table

carrying and spooning. Buttoning and unbuttoning exercises are done to develop self care skills (Fig. 1 and 2). Silence exercises enhance the child's concentration, making them more responsible to their environment. Nutrition is also very important in Montessori education. Children learn four basic nutrition groups (fruit and vegetables, cereals and pulses, milk and dairy products, meat and meat products) needed for a healthy body (Oğuz, Köksal Akyol, 2006).

2.Sensorial Development Materials: They promote sensorial organ development of children. These materials are wooden blocks, cubes of different side lengths for tower building, color tablets, sound boxes containing stone, sand, pebbles, corn, seed, taste bottles and clothes of different textures (Montessori, 2005). Children learn and consolidate concepts related to five main senses such as big-small, tall-short, deep-shallow, thin-thick, heavy-medium weight-light, colors, shapes, smooth-rough, hot-cold, sweet-bitter-sour through the materials in sensorial education activities (Mutlu *et al.*, 2012). There are cylinder blocks and geometry drawers for developing visual perception, heat tubes for perception of heat, weight tablets to discriminate between weights, geometric object and surface cards, trinomic cube as well as object grouping exercises (Wilbrandt, 2014).

3.Mathematics Materials: Basic feature of math materials is that they materialize the abstract concepts. Therefore, math materials help to understand basic math concepts such as quantity, symbol (Fig. 3 and 4). Moreover, materials have a certain order among themselves as they are taught from simple to hard. Math materials promote cognitive area as they teach quantities, symbols, counting and four operations while they support social-emotional area as children work together (Mutlu *et al.*, 2012).

Math materials are red and blue sticks, number cards and number sticks (1-10), cycle boxes, golden bead materials, golden sticks and Seguin board, golden hundred necklace, golden thousand necklace, small abacus and big abacus.

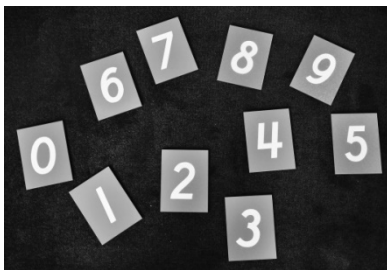


Figure 3: Sandpaper Numerals



Figure 4: Spindle Boxes

4.Linguistic Materials: Linguistic teaching materials are flashcards, sound game, sand letters, moving letters (handwriting), capital letters, metal shapes, picture word cards as reading activity.

Montessori divides child's linguistic development into two phases; the first phase is called explosion of words. The second phase is the explosion of thoughts. It is the phase that language is shaped. Montessori also focused on reading and writing in linguistic education. According to Montessori, writing skill develops before reading skill. In Montessori's method, children learn letter pronunciation before learning their names. They learn by touching sandpaper letters in order to detect through sound,

which attracts their attention. Reading education starts with children getting more interested in using sandpaper letters and asking about the meanings of words they see. In Montessori education, reading habit is acquired by producing words with letter cards and writing exercises. Children learn grammar rules through games (Wilbrandt, 2009).

5.Cosmic Educational Materials: Based on concrete to abstract, close to far principle, cosmic education materials primarily present to the child history, traditions, dance of their homeland and then introduce other countries in order to make them aware of the world and environment (Wilbrandt, 2009). There are relief and colorful globes, jigsaw puzzles of the world in Montessori classrooms (Fig. 5). At the beginning, the child uses maps only as jigsaw puzzles. He gradually learns the names of the countries as well as their climate.



Children learn geographical formations and concepts such as island, peninsula, and mountain through jigsaw puzzles. Montessori suggests teaching history by using time periods. Formation of universe and life and human development are presented on a black stripe made of 50 m cloth rolled on a reel. Time periods are made from long rolled paper and laid on the floor in the classroom.

Figure 5 : Globe of the Continents

Certain historical events are marked. Introducing the concept of history to children begins with children stating time periods related to their own lives and photos of babyhood are placed at the beginning (Durakoğlu, 2010; Demiralp, 2014; Oğuz & Köksal Akyol, 2006; Wilbrandt, 2014).

According to Montessori, children should understand combination, harmony, and beauty of Nature and feel the happiness for this sense (Montessori, 1994). Under the cosmic education, groups of animals and plants are to be studied regularly so that children may feel the love and appraisal towards them (Oğuz & Köksal Akyol, 2006) (Fig. 6 and 7).

TEACHER IN MONTESSORI APPROACH

A Montessori teacher has consistent attitudes and understands children's feeling and continually observes their behavior at learning phase. While development of each student is being observed, learning environment is prepared according to their development. Montessori teacher is a good observer and competent teacher. Montessori teacher helps learning process of children as they try to bring together their knowledge, impressions and experiences. A Montessori teacher has significant effects on children's character as he is typically calm, moderate and kind toward each child (McCormick and Stoops, 1992). Contrary to authoritarian teachers who teach children how to behave and dictate rules, Montessori teachers help students to develop inner discipline by allowing them to learn on their own (Harris & Callender, 1995). Montessori teachers also allow students to choose freely while satisfying their own needs (Crain, 1992).



Figure 6: Animal Puzzle: Frog

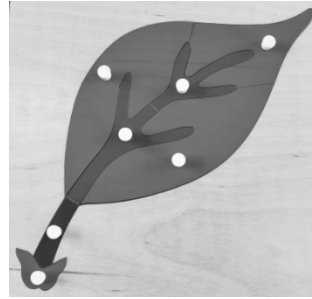


Figure 7: Botany Puzzle: Leaf

Teacher's role in Montessori approach is to arrange the environment according to the child's needs and to support his development. Materials must be arranged from simple to hard, concrete to abstract by the teacher. Montessori teacher is also a guide who helps students in using their potential (Lillard, 2013).

Knowledge is not directly given to the child in Montessori's method. Teacher rather mediates the child's self-learning. The child obtains knowledge from the setting instead of the teacher. Therefore, teacher has to be a competent observer rather than transfer knowledge (Durakoğlu, 2010).

In addition to being patient and self-confident, a Montessori educator must have no prejudices related to child education. When Maria Montessori opened The Casa dei Bambini (Children's House) in a poor neighborhood in 1907, she employed a young woman who had no prejudices on child development and no training as a teacher (Thayer-Bacon, 2011). A Montessori teacher must be able to assess child's observation at learning environment. Assessment of Montessori education has three phases (Kroenke, 2006). The first is teaching phase. At the second phase, teacher checks whether knowledge has been learnt. At the third stage, he assesses whether knowledge has been understood.

While observing, teacher has the chance to monitor the child and helps him to set short and long term goals (Donabella& Rule, 2008). In order to satisfy educational needs of the child, teacher prepares material, content and activity presentation and observes the child. While observing the child, he learns about the child's knowledge level and prepares him for the next learning step. Teacher does not give the child knowledge as it is but only helps him to discover it (Malone &Lepper, 1987).

Providing children a well-organized supportive and cooperative setting and observing carefully are the most important duties of a Montessori teacher. A Montessori teacher assumes a "guide role" by guiding students' spontaneous actions (Ruenzel, 1997).

Peer cooperation and teaching are important in Montessori classes as they cover development levels from the age of one to three. Setting in Montessori classes is cooperative rather than competitive. Important outputs of Montessori education include development of the sense of love and tolerance (Lide, 2012).

Montessori teacher first introduces and shows materials to the students and guides them inactively after student-centered questioning process. Purpose of education is to encourage student to develop inner discipline and confidence (Edwards, 2002).

Maria Montessori turned children into center of learning. Maria Montessori has

suggested that a teacher's duty is not restricted to talking but also involves preparation and arrangement of a series of social and cultural activities designed in a framework for children. Teacher's duty is to motivate children to reveal their potential. Children must be encouraged to learn by giving them freedom in this prepared special environment (Morrison, 2007). According to Montessori, teacher is a good director and leader. Teacher must be an understanding, friendly, tolerant model for children with physical appearance and personal qualities. Learning setting must be designed so that children can move easily and must encourage them to learn (Oğuz & Köksal Akyol, 2006).

The child is in a continuous interaction with environment at learning process. According to Montessori, if a child is raised according to obedient behavior patterns dominated by adults, education must be toward the educator adult rather than the child. Here, adult seems to be a factor that dominates the child and hinders his development. Adult must become conscious, get rid of his prejudices, learn "passiveness" in response to "educational activeness" and change ethical attitudes (Topbaş, 2015).

Montessori education satisfies educational needs of numerous children who have superior ability, disability or special needs. Maria Montessori believes that each child will perceive knowledge and be motivated to learn if a proper environment is provided at appropriate developmental phases. Montessori teacher has to consider individual differences while enriching learning environment (Morrison, 2007).

As there are students from different age groups in a Montessori class, a successful inclusive education is possible. A Montessori teacher who teaches in a classroom of children with special needs from mixed age groups must have various teaching materials in the classroom (Morrison, 2007). Features of Montessori education with different students from different age groups are as below:

- a) Mixed age groups from the age of 2 to 6,
- b) Children's right to choose activities from various options,
- c) 3-hour uncut education sessions,
- d) Students explore and learn knowledge through materials instead of a teacher who directly teaches everything,
- e) Special education materials developed by Maria Montessori
- f) Independent action of students in the classroom
- g) A trained and experienced Montessori teacher (Okuo, 2014).

There are many reasons for implementation of Montessori approach all around the world. These are quality education program offered to children, a well-organized setting that allows self-learning and independency, focus on early education, individualized education and family participation (Morrison, 2007).

CONCLUSION AND SUGGESTIONS

Despite numerous criticisms, Montessori's method has survived for over a century and these critics are replied scientifically in studies. Montessori education program is implemented in many countries around the world and aims to prepare the child for life. Montessori education is an approach where the child tries to build himself in self-chosen activities at his own pace and according to his development level and education turns into self-education, teacher turns into assistant, discipline to

self-discipline and activities to self-realization. Montessori is also important in the way that it provides new experiences to teachers.

Mustafa Kemal Atatürk, founder of modern Turkey was closely interested in Montessori Education and wanted teachers of our country to learn Maria Montessori's education philosophy and understanding. However, it is possible to see that preschool institutions in Turkey are embedding several aspects of Montessori Method into their education programs. This may be caused by the fact that there are many differences between Montessori education system and Turkey's preschool education system in terms of goals and practice and that all state and private preschool institutions in Turkey are obliged to give education according to preschool curriculum of the Ministry of National Education. Therefore, it is not possible for Turkey to implement Montessori education system completely. In consideration of these facts;

- Works may be carried out in order to open Montessori schools affiliated to the Ministry of National Education, including legal regulations
- Ministry of National Education may promote opening private Montessori schools in Turkey.
- Programs in preschool educational institutions must be enriched with Montessori education
- Number of Montessori Method expert may be increased.
- Theoretical and practice books may be published on preschool education with Montessori approach
- Number of studies in Turkey on Montessori approach may be increased.

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Chapter 41

Science and Science Education in Preschools

Hatice DAĞLI & H. Elif DAĞLIOĞLU

Children are born with a natural curiosity and potential to learn. Preschool is the best educational stage to make use of this will to learn. Previous research has shown the importance of preschool education for success in life (Dickinson & Porche, 2011; Günindi, 2012; Ömeroğlu & Can Yaşar, 2004; Yıldırım, 2008). Preschool education aims to provide children with high quality school experiences, equip them with scientific thinking and problem solving skills, give them self-awareness, help them understand their place in the society, and enable them to construct their knowledge by offering age-appropriate content, curricula and learning environments (Pennsylvania Learning Standarts For Early Childhood, 2009:2).

In the preschool stage, children feel a natural curiosity to understand the world around them. Children learn best when they actively make discoveries and use all their senses. These experiences lay the foundations of abstract and scientific thinking. Children's scientific process skills and their views about the natural world develop when they are given opportunities to experiment, collect data and make conclusions (Pennsylvania Learning Standarts for Early Childhood, 2009: 33). Considering the development of scientific concept perception and the other domains of child development, science is essential in early childhood. According to modern thought, science studies need to start in preschool classrooms (Kallery & Psillos, 2002:49–61). This chapter focuses on the development of scientific concepts in the preschool period and on the points to be considered during the process of science education.

THE DEVELOPMENT OF SCIENTIFIC CONCEPTS IN PRESCHOOL CHILDREN

Science has a prominent place in many areas of daily life, at home, and in every walk of life. With science education, children understand their environment and learn different concepts. As they do this, they improve their learning skills and make discoveries, learn the scientific language and special signs, do experiments, and join discussions by explaining these experiments (Curriculum for Excellence, 2004: 252).

In the preschool period, children's cognitive, social, emotional, physical and linguistic development is rather fast. Starting at birth, children develop new ideas in order to make meaning of the world around them. Throwing off a toy from a chair is an experiment for babies. When they throw the toy, they look down at it. They observe and learn that objects which get thrown land on the floor. When they are in the bath, they also acquire experience about floating and sinking objects. When they throw their toys in the water, they observe that certain ones float while others sink. These reveal that scientific concepts are learned starting from a young age with children's own experiences (Johnston, 2005:3).

Scientific concepts are intertwined with life experiences. Children's efforts to attach meaning to everything they hear, touch, taste and feel cause them to generate

various thoughts about these events (Harlen, 1985: 4-5). In order for concepts to form, care needs to be given to objects and events, and these need to be distinguished. Children start to discern concepts as their perceptions become sharper, as their experiences grow in number and become more varied, and as their vocabulary grows. During this process, they discern concepts more clearly (Bjorklund, 1995). The bases of science, mathematics and science concepts, develop during early childhood. Mathematics and science are interrelated. Basic mathematical concepts such as comparison, classification and measurement are used in solving science problems known basically as process skills. In other words, basic mathematical concepts are needed to solve science related problems. Other science process skills (observation, communication, inference, hypothesizing and recognizing and listing variables) are equally important in solving both science and mathematics problems. For instance, considering ramp principles, a wide plank may be used as a ramp. Children may roll balls of different sizes and weights down the ramp. While they are playing this game based on free discovery, the teacher may ask questions such as “*what would happen if we rolled two balls simultaneously from the top of the ramp?*”, “*what would happen if the ramp was higher or steeper, or if we had two ramps of different width?*”. Children may regard ramps of different steepness and width as well as different types of balls, voice their observations and define similarities and differences to discover and guess. They may make observations based on the variables of speed and distance, the weight and size of balls, the height and width of the ramp among others. As can be seen, as children become involved in science observations, they use mathematical concepts such as speed, distance, height, width and counting (Charlesworth & Lind, 2012).

Wooden blocks help the integration of mathematics and science (Chalufour *et al.*, 2004). Chalufour *et al.* found that the processes of questioning, problem solution, analyzing, judging, communication, association, representation and investigation overlap with the general concepts such as shape, model, measurement and spatial relationships. To illustrate, imagine that a teacher gives her students a set of fruits including a red apple, a green apple, two oranges, two grapefruit and two bananas. Children examine their fruits in order to obtain as much information as they can about them. They observe size, shape, color, taste, texture and contents (such as juicy-dry; sliced-whole; stone-no stone). The observations may be recorded by using counting and classifying skills (How many types of each fruit? How many shapes? How many are juicy?). The fruit are weighed and measured, prepared to be eaten by the children and divided equally among them. These examples show that mathematics and science concepts and skills may be acquired by children involved in traditional early childhood activities such as playing with blocks, water, sand and manipulative materials, as well as by children engaged in dramatic play, cooking, literacy and extra curricular activities.

Mathematics and science are two fields where science education maybe effectively integrated. The integration of mathematics and science education would help children see the relationship between these two fields and recognize that they employ common cognitive processes (Charlesworth, 2005).

THE ROLE OF TEACHERS IN SCIENCE EDUCATION

Children love discovering the world around them (Campbell & Jobling, 2012:3). The ones to give them an environment to discover in this process are adults. Teachers

and families should give children opportunities to research and find their own rights. Children who are allowed to research, discover, and examine both in the classroom and at home will turn into independent, self-sufficient and self-confident individuals.

In order to support all of children's developmental areas and infuse science activities with educational value, teachers need to know the goals of science education. What is important is getting children actively involved in scientific activities, not knowledge transmission (Genç Kumtepe, 2011a:140). For example, when a child asks how plants grow, answering with pictures only expands the child's information base. He can only construct his knowledge about plants if the teacher shows the answer practically in a natural environment, and allows children to sow plants in the school courtyard and water them, thus enabling them to observe and gain experience. The best method at preschool is activating children's curiosity, surprising them and subjecting them to real problems rather than providing them with ready answers (Mooney, 2000).

Children understand life through science when the teacher guides them to actively discover using different materials. In preschool education, teachers should offer children experiences to construct their own knowledge and skills among the routine daily activities. Children need to be encouraged to learn science while they are still open to new ideas and curious so that in the future they develop a positive attitude towards science activities (McNair, 2006:4). Among the goals of preschool science education are preparing stimuli-rich, well-planned and natural learning environments to enrich children's scientific experiences, equipping children with problem solving skills by controlling the objects and events around them; raising creative, sensitive, communicative and scientifically thinking children (Taş, 2010). Therefore, children need to be given proper learning environments and exposed to a variety of topics-concepts in line with child development. The biggest responsibility in doing so lies with preschool teachers. Teachers should plan their educational practices to develop many of children's development areas, and to enable them to construct their own concepts and skills through knowledge discovery and transfer these to other areas. In order to find out how much children know about a topic or concept, their questions may be answered with the questions *'What do you think?'* or *'What do you know?'* and they may be guided with clues towards the answers (McNair, 2006:4). Instead of asking them "yes-no" questions, teachers should ask open ended questions to give them a chance to think, debate, get curious, and give different answers (MEGEB, 2013:8). While the question *'What color is your t-shirt?'* has only one answer, *'What do you think about the studies?'* is an open ended question with more than one answer. The teacher does not know the answer to the question either. Open ended questions make children think. Instead of forcing them to answer right or wrong, they encourage them to question and judge the alternatives and help them see events from different perspectives, and shape their new knowledge (Mooney, 2000).

Children tend to learn by making mistakes. Teachers should give them opportunities and be patient (Johnston, 2005:4). It is important that teachers ensure each child's participation in the activities, plan these activities properly, make sure that they are implemented in a safe environment, and use clear and open instructions with the children (Şahin, 2000:12). They also need to give students ample time to think the answer to the questions asked, allow them to discuss their answers,

encourage them to speak about their ideas, and plan activities in line with children's developmental characteristics (Alisinanoğlu *et al.*, 2011:36).

SCIENTIFIC ACTIVITIES

Children understand science as they actively interact with real events and objects and make discoveries. Science education turns children's interests into meaningful concepts and makes them learn. When children are given an environment consisting of different materials, they try out an object to learn how it works and ask questions to understand it. As they search for answers to their questions, they set up hypotheses and make guesses, observe and conclude from the data they collect (Ohio Early Learning Content Standards, 2006:36). Science education enables children to learn constantly about other people, objects, and events. They solve their problems by actively engaging in education (Brunton & Thornton, 2010:5). Children like research- and child-centered science activities more when they see that their ideas are valued. Their interest in science starts at very early ages (Skamp, 2011:1). Scientific experiences improve children's logical and creative thinking skills. They help them make better decisions in their everyday lives and solve their problems more easily (Tu, 2006). Children continuously examine and research as they learn. Therefore, the learning behaviors of a scientist and a child are similar (Uyanık Balat, 2010:1). What is important in preschool is to develop children's research, examination and observation skills, and give them a solid foundation (Aykut, 2006). The aim of science for children is to enable them to understand and recognize the world around them and turn this into skills (Tu & Hsiao, 2008:1).

Considering these, the content and quality of science education implemented by teachers in preschool education curricula are critical. The contents and scientific process skills included in preschool science education, the materials and material types in the classrooms, teacher qualities, their attitudes towards science education, and the different methods and techniques they use in the activities greatly affect the quality of education. Also, family support for all these skills and the environment affect children's development positively (Holt *et al.*, 2013).

Science activities are carried out in classroom environments by using life sciences, physical sciences and earth and space sciences. Science activities help children gain meaningful experiences. It is possible to diversify the science activities in life sciences, physical sciences, earth and space sciences that children face daily (Worth & Grollman, 2003).

Life sciences (ecology)

Life sciences include the discovery of senses, the characteristics of living things such as plants and animals, non-living things and objects in the environment, organisms, their life cycle and environments, and the classification of organisms and objects (Kandır *et al.*, 2010: 70). Living things give children the chance to make comparisons with concrete experiences and classification, long-term observation and research (Brunton & Thornton, 2010:49). For instance, children may be asked to collect animal pictures from different magazines and newspapers to give them an idea about the characteristics of living things. Through these pictures, children may acquire a lot of knowledge. They may be made to realize that birds have special beaks to find food, wild animals have strong jaws and sharp claws, and animals that live in cold

climates have large and furry paws. These differences may be brought to children's interest to give them the concept of adaptation (Ticotsky, 2006:17) because in their observations they think about, discuss and measure the characteristics of living things. In addition, sowing seeds and examining the development process, observing the growth process of different plants, and keeping an animal in the classroom help them understand living things and develop new thoughts (Uyanık Balat, 2010:4).

Keeping an animal in the classroom environment to care for and study is an ideal way to make children respect other living beings and learn about their daily needs. When they take charge for looking after another being, children develop a sensitivity for the environment and feel responsible for other living things (Charlesworth & Lind, 2012: 458).

Physical sciences

Physical sciences include topics such as objects and materials, energy, heat, light, movement, magnets, weight, and formation of colors. Physical sciences make children aware of the sun, stars and planets. Physics-related science activities cover classifying objects according to their similarities and differences, matching them based on certain characteristics, and experiments concerning their physical changes (freezing-melting) (Kandır *et al.*, 2010:62).

Our lives become affected by many science-related concepts and rules. A soap floating in the bath or using a can-opener in the kitchen are simple everyday scientific experiments which emphasize that physical science regulates our lives (Fredericks, 1998:3). For instance, children may be subjected to activities that display how heat and electricity change beings. They may be shown how heat is used during cooking activities to melt, boil and cook food (Şahin, 2000:18–19). When the teacher takes children to the park, they can ask children what happens when they sit in the middle of the seesaw or as they move farther from there in order to enable them to learn the concept of balance (Şahin, 2000: 20). Building towers in a block center, moving the blocks in different ways, keeping their balance or causing them to come down may enable children to understand movement and force. The teacher may ask the children questions such as '*Why did your blocks fall?*', '*Why don't your blocks fall even though they are high?*' or '*What is important in keeping blocks standing?*' and make them learn by attracting their attention (Worth & Grollman, 2003).

Earth and space sciences

Space science has always thrilled people. The universe, satellites, stars, meteors have always captured our interest, and people have used telescopes, observatories and research to understand the mysteries of space and quench their curiosity (Fredericks, 1998:3). Earth and space sciences are related to the discovery of the natural environment. Natural events (seasons, earthquakes, rainbows, etc.), natural materials (sand, water, mud, etc.), the sun, the moon, stars, cloud, formation of day and night, air, water, land, rocks and minerals are the scientific topics that may be treated (Genç Kumtepe, 2011a: 145; Kandır *et al.*, 2010: 69).

Space-related concepts are among the most commonly met ones for the children of today. They are continuously immersed in topics related to space. They become aware of space as they walk in open areas. They learn with their experiences that the universe is huge. As they see new places, they start to understand the size of the

world, and therefore that of the space. Children aged four and five observe airplanes, the moon, stars, the sun and clouds and start to know about the space (Şahin, 2000: 18).

The first concepts that children learn about the space are the sky, sun and moon. Many natural events such as the concepts of night and day, stars and seasonal changes are observable nature topics for children (Genç Kumtepe, 2011a: 145). For instance, they are aware that night follows day and vice versa. Daytime and nighttime activities give them an awareness of the distinction between the two (Payne, 2008: 301). In this way, children become aware of the concept of time. As it is an abstract concept, it is harder for preschool children to acquire than some others. Children try to learn by making abstract knowledge concrete. During their mental development process, children learn the concept of time as knowledge but cannot realize this conceptually (Kol, 2010:895). The concept of time may be learned more easily through examples of daily life. In this way, children can evaluate what they do, their preparations before what they do and the outcomes (Şahin, 2000: 18). Children may be told about the concepts of day and night and what they can see in the sky at those times. They may be given opportunities to observe seasonal changes and changes in the universe (Genç Kumtepe, 2011b: 237). The happenings in the sky at night and during day are easy to observe for children (Payne, 2008: 301). In addition, they can observe and record climate events. They can find the direction of the wind on a windy day. With water and sand games, they may gain knowledge about the earth's surface (Uyanık Balat, 2010: 4). This is an important stage to develop environmental awareness in children and turn it into a lifestyle (Genç Kumtepe, 2011a: 145).

PHYSICAL ENVIRONMENTS IN PRESCHOOL SCIENCE EDUCATION

The more sensory organs that a learning environment appeals to the more permanent the learning and the longer the retention of information (Oral, 2011:477). Properly arranged physical environments are vital for effective learning at preschool. Classroom learning centers and the materials in these centers should regulate children's learning (Kandır *et al.*, 2010: 14; Kandır *et al.*, 2012:28). Classroom environments are expected to be comfortable enough to allow children to do research and changeable according to children's interests (Brunton & Thornton, 2010: 28).

Science centers are designed to support children's development areas in preschool classrooms and give them different learning experiences. Children can go from simple discoveries to generalizations by using science centers and answer their own questions (Dere & Ömeroğlu, 2001: 2). Children learn how to make observations, do research, ask questions and develop manual skills via these materials (Aral *et al.*, 2011: 98).

Science centers are environments with materials and equipments that reflect the knowledge and skills aimed to be taught to children, physically enriched with various stimuli, easily re-arranged, away from noisy centers (play, art), conducive to individual and group study, including health and safety measures, and designed to give all children (different genders, ethnic origins, income and social levels, learning levels, and disabilities) equal access to activities (Genç Kumtepe, 2011a: 147; Pool & Carter, 2011:20).

Science centers should be equipped with materials with different qualities conducive to science education (Dere & Ömeroğlu, 2001:2). As the center materials

are selected, children's age and developmental characteristics should be considered to choose children-friendly, robust and easy-to-clean materials (Taş, 2010).

Materials to be included in these centers should appeal to children's imagination and selected from among real life materials (Alisinanoğlu *et al.*, 2011: 27). The materials should be easy to see and reach; the shelves should be open; and the containers for materials should be see-through (Brunton & Thornton, 2010: 28). The materials that may be included in science centers by remembering these principles are shown in Table 1.

Table 1: Materials that may be used in preschool science education

Earth and Space Sciences	Illustrated cards to introduce geographical features, maps, dry-wet pools, etc.
Life Sciences	Aquariums, live animals, eggs of various animals, stuffed animals, small cages, fur, bugs, plants, seeds, pot plants, dried flowers, nuts and seeds, pine cones, seashells, skeletons of marine animals, etc.
Physical Sciences	Microscopes, magnifying glass, binoculars, magnets, hand torches, candles, mirrors, prisms, reels, bobbins, thermometers, clocks, scales, measuring tape, rulers, measuring bowls and spoons, food coloring, locks and keys, sinking and floating materials, color chart, weather vanes, etc.
Mathematics	Counting beads, matching cards, calendars, object of different shapes and sizes, cubes, blocks, study and measurement materials, etc.
Other	Posters, paintings, books and encyclopedias, collections and albums, journals, video recordings of natural events, pictures of people from different countries, string, plastic jugs and bowls, pipes, unsharp tools, puzzles, sponges, milk cartons, lab uniforms, etc.

(Acer, 2010:382; Alisinanoğlu *et al.*, 2011:30; Aral *et al.*, 2011:98; Genç Kumtepe, 2011a:149; Healthy Child Manitoba, 2009:16; Kök, 2012:324; MEB, 2013; Pool &Carter, 2011:20; Tu, 2006).

In addition, it would be useful to keep materials in the science center that appeal to children's sense of touch such as play dough, balloons, snow, ice cubes, flour, water, starch, and cotton balls. Sensory materials play a vital role in the acquisition of science and mathematics concepts such as hand-eye coordination, big and small muscle development and social development as well as evaporation, construction, weight, mass, measuring (Alisinanoğlu *et al.*, 2011: 27). In all these activities, it is essential that preschool science education links the scientific concepts and skills that children learn with other fields. Interesting science content may be given with literacy and language activities. Discussing activities, asking questions, thinking to answer them, reading aloud (children's books), researching from books, making tables and charts, making observations, art, outdoor activities can all be integrated with science activities. Children can more easily construct critical relationships in their minds through scientific concepts integrated with different activities (French, 2004).

Considering the effects of science activities implemented in educational settings

on child development, the contents and quality of preschool science education are critical. The contents and scientific process skills in preschool science education form the bases of children's future academic skills (Dağlı, 2014; Leibham *et al.*, 2013; Saçkes *et al.*, 2010; Tao *et al.*, 2012; Valanides *et al.*, 2000). Educational content from different countries shows that many different topics/concepts are included in their science curricula (Pennsylvania Learning Standarts For Early Childhood, 2009; Curriculum for Excellence, 2004; Ohio Early Learning Content Standards, 2006). The importance of planning early curricula with rich content is obvious.

Another important point in science education is classroom materials and their effective use by children. Dağlı (2014) concluded that teachers face problems regarding science education materials and resources, and that these materials and resources are insufficient for preschool science education. In another study, Tu (2006) found that a science corner was present in the majority of preschool classrooms, but most activities implemented by preschool teachers were not about science. Learning by discovery and using many different resources and materials in this process will increase the permanence of learning. Many factors such as materials use, arrangement of the classroom environment and teacher attitudes affect the quality of the education provided. Previous research has shown that the classroom environment, the curricula and teachers' professional development affect the science activities they offer (Kallery & Psilos, 2002; Tsitouridou, 1999).

In sum, science activities are among the main activities that help children gain life skills and increase their academic skills. One may conclude from the research that many different factors such as the contents of science activities, materials, teachers' knowledge, skills and attitudes may affect the quality of science activities positively or negatively. It is believed that designing standard curricula to be implemented in classrooms would be more effective in guiding teachers and bringing uniformity to education.

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Chapter 42

Philosophical Investigations for A Holistic Approach to Education: Towards the Welfare of Mankind

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INTRODUCTION

When trying to search for the solutions for most of the problems we face in the twenty first century, we come across with the notion of education. The magical formulations that will work to resolve all the problems, flaws, and impossibilities in various fields were sought out in education. The order in the functioning of the governments, peace and welfare of the folks and the happiness of the individuals are all related to the efficiency in education. In case of the contrary of these conditions, the inadequacy of education is put forward as the possible causes.

The philosophy of education is relevant to philosophy in general in terms of its goals and is indirectly connected to it in terms of its methods. Moore suggests to look carefully to the nature of philosophy in order to understand this relation and claims that the metaphysical problems till Plato are fake because the supposedly problems are a result of the misuse of language. Moore asserts that similarly the philosophy of education should direct its route to the determination and elimination of fake problems. The many problems in education are not conceptual but rather actually practical. These problems must no doubt be solved but furthermore the route of the philosophy of education should move from the analysis of educational concepts. Moore states that linguistic analysis of educational theories and practices must not be the focus of the study of educational philosophy (Moore, 2010, 1-1).

The philosophy of education should head for the sub-disciplines of philosophy that keep company with education. Education is an important concern of the past and present and many people studying in different fields are engaged to it. Education has always been a field of study that struggles to carry humankind to better conditions. The aim of the present paper is present how education is connected to the three disciplines of philosophy and to propose a new way of investigation for the philosophy of education. The educability of mankind as a type of being will be discussed in relation to ontology, the educability of mankind by presentation of episteme will be discussed in relation to epistemology and finally the generation of morals through the input of episteme will be discussed in relation to ethics. The consideration of education together with ontology, epistemology and ethics will lead us to a new way of investigation in the philosophy of education.

The nature of education and its relation with philosophy

Education aims to provide individuals with skills and knowledge which will allow them to define and realize their targets (Phillips, 2008, para.1). It is also possible to see the phenomenon of education as a group of activities that work in various logical levels. The fact that makes them logical is that each level is dependent on and rises from the lower level (Moore, 2010, 1). According to Kant, humans are

the only beings to be educated. For Kant, education means teaching of formation, care in the meaning of protection and support and discipline in the meaning of instruction (Kant, *Lectures on Pedagogy*, 2007, 9:441, 437).

When education in ancient Greeks is considered, the ideals of education are seen to be affected by the city's social structure. The population of the city of Athens was composed of free men, serfs and foreigners. The boys were raised regularly in houses until the age of seven and only later they were trained formally at schools. A part of their education at school was physical training for the physical development of their bodies. In addition to their physical training, they were taught in different fields of arts. The aim of it is not to reach a professional level in arts but to promote entertainment and participation. In Athens the education is rather literary than being religious. The aim is to develop sciences especially the humanities. Reading, writing, arithmetic, poetry, sciences, moral philosophy and metaphysics are the subjects dealt with (Sharma, 2002, 13).

Education is a field that interests all the human beings and is an effort to make an individual or individuals acquire terminal skills and knowledge by means of certain methods and approaches. When setting forth with this definition, four variables can be analyzed in the concept of education: the one who teaches, the one who learns, the thing taught and the method of teaching. The discussions about each of these variables have been going on through centuries. These variables have also been the subjects of study in relevant disciplines of philosophy. The first two variables are related to the discussions about who are the right people to teach and whether the nature of human beings is appropriate for being trained and are connected to the ontological considerations. The third variable is closely related to the epistemological discussions about the nature of the episteme taught, how it can be acquired, the virtues and ideals to be encouraged, which are the concerns of ethics.

As mentioned above education can be regarded as an activity processing in various logical levels. The lower level activities include educational practices like informing, motivating the learners, advising and checking their performances. Generally people taking part in this level are teachers and they speak with a certain conceptual frame. They talk about the subjects like "teaching", "learning", "knowing" and "experiencing" and relate these to various concepts. These activities and concepts are basic and without them it is not possible to move to the upper levels of activities. The upper level activities rising from these lower ones concern with the development of educational theories. In this level theories about the definition and function of education are put forward which are possibly true or false. The educational theories are such as to recommend classroom practices (Moore, 2010, 4). For instance, Plato puts forward a theory of education in *Republic* and it aims to bring up citizens who can rule the city.

The teacher professionally takes part in the educational activities which are basic and foundational. They assign duties to learners by using certain methods, try to motivate learners, help them, check and evaluate their performances and develop their skills and understanding. When trying to realize all these, a teacher receives support from these theories. A teacher's asking learners to be quiet depends on a theory: in order for the learners' to hear what you communicate, quietness is necessary. All the practices in the field of education logically anticipate the presence of educational

theories. A kind of theory lies behind all educational practices.

In addition to classroom practices educational discourse includes the description of the practices, what and how it is presented, the conclusions at hand, suggestions and arguments for further practice. The theories about all these factors are explicitly introduced in books and conference discussions which are accompanied with arguments and attempts for justification. This educational discourse builds up the field of philosophy of education. Philosophy of education approaches this discourse from two perspectives. First the philosopher engages with conceptual equipment and questions the concepts used by the teachers and theorists. What does education include? What does teaching precisely mean? What has to be done in order to know something? What are the criteria for a teacher to punish a learner? What does it mean to provide all learners with equal opportunities? What is meant by freedom within the context of education?

By the help of philosophical analysis and investigation the philosopher seeks to find out the conditions of appropriate use of these terms. This investigation is in a sense a preparatory stage for the analysis of theories of education in terms of their being built on strong foundations. A theory's internal consistency is evaluated according to its accordance with what is known about human nature and moral virtues. The next sections of the paper explore the relevance of philosophy of education with human nature, episteme and virtues.

The Educability of Humans

Important elements of education are the one who educates and the one being educated which brings the discussion to the field of ontology concerning the very nature of humans and being. Whether humans are educable beings when their nature is considered, whether the factors affecting education are biological or environmental are some topics bringing together education and philosophy on ontological ground.

Babies are born without any knowledge of reading, writing, summing, the norms and culture of the society they are born to. However, they immediately learn to write, read, operate, act in accordance with their culture and society either by being encouraged by their parents and environment or by the instructions of professional teachers. While education provides the learner with a kind of social divergence, it also affects the individual's economic future (Phillips, 2008, para.1).

The limited theories Plato puts forward for education in Republic deal with the ways in which children can achieve an understanding of the order of nature, how to cope with poets and poetry, how future soldiers can be provided with strength, courage and health. But Plato discusses these theories within a more general theory of how an individual who can powerfully and skillfully rule the city (Republic, 376d-392c). In Emile, Jean Jacques Rousseau asserts theories about sensory and physical education, subjects like self-confidence and social awareness. As Plato, Rousseau makes these assertions and discussions for a more comprehensive theory of how to bring up "natural individuals" and to generate a system of an education "appropriate for nature" (Emile, 1976).

All practical theories start out for a desired end, target. A general theory of education aims at bringing up "educated man". An educated person is supposed to have certain qualifications like acquiring certain kinds of knowledge and skill,

valuable patterns of behavior. The aim is to bring up people whose intellectual skills have developed, who are responsive to moral and aesthetic interests, who are aware of the nature and power of scientific thinking, who can view the world from different geographical and historical perspectives and who have recognized the importance of the truth and wholeness in thinking. Additionally, the target of bringing up educated man will shape according to the time, place and culture. The educated man according to Plato is one who has been taught mathematical and philosophical disciplines, who has the knowledge of reality by acquiring the Forms and who has the desire and power to rule the city. Herbert Spencer who lived in a different period asserted that an educated man is one who is self-sufficient in an industrial and commercial society, who has reached an improved knowledge and intellectual faculties to spend his spare time wisely (1873, Part VIII, 178-179).

The fact that the qualities that an educated man is supposed to have changes in cultures and times shows that no single theory of education can exist to address people from all cultures. This is why there is no general and universal theory of education. But it is true to say that there is one point shared by all theories: “Educated man” is worthy to struggle for. Aristotle has pointed certain ideas about education in his *Politics*. The main goal of education is to raise individuals who can increase the welfare happiness of the republic. The second goal is to prepare the soul for making use of one’s spare time left after justifying the practical needs. For a republic to be good, it is necessary that the people who accepted its constitution are good and virtuous. The problem is about how individuals can be better and more virtuous. Nature, habit and reason are the things that make an individual virtuous. It is nature that provides the living being’s being born as a human. Habits are what encourage people to have certain qualities. Humans are rational beings. The role of education is to ensure the harmony of these three. Aristotle claims that no one can object to the idea that a legislator’s first duty is to arrange the young’s education. If this is not the case, no doubt, the qualities of the constituent will be damaged. In every case education should link together with the constituent’s scope under which they are living (*Politics*, Book VIII, 1).

What Aristotle means with education is the educating of the citizens as the citizens of the republic. Citizens should be taught to live in accordance with the laws and should be trained to be able to legislate and enforce when it is the right time. Aristotle is clear at whether education is a privately governed process or a public duty carried out by government. Aristotle emphasizes that education is a serious and important process which cannot be left to the hands of families and individual people. It must be something handled by the government and equal for all citizens. The legislation about education displays that education is a national problem. Aristotle thinks that it is important to discuss what kind of an education should be given to the citizens, how this education should be carried out, what should be taught to the young people concerning virtue and good living.

Now nobody would dispute that the education of the young requires the special attention of the lawgiver. Indeed the neglect of this in states is injurious to their constitutions: for education ought to be adapted to the particular character belonging to each constitution generally and originally establishes it- for instance the democratic spirit promotes democracy and the

oligarchic spirit oligarchy; and a better spirit always produces a better constitution (Politics, Book VIII, 1).

In general Aristotle's view of education is rather closer to moralism than pragmatism, uniformitarianism than pluralism and statism than individualism. In this respect Aristotle emphasizes that children should be told ethical tales, read such books and watch such games. According to Aristotle education is only for children who are possible citizens of the republic, on the other hand arts like housekeeping and cooking can be taught to the serfs and these arts are not included in the education of the citizens (Russell, 1996, 186).

The raw material at hand within the process of education starting with a goal and going on with a design is the individual to be educated. It is true to say that to a certain extent human nature is flexible and can be given different forms. It is claimed that the behavior originated from the educational experiences will be permanent. Otherwise there is no need to effort to educate people.

Locke pointed out that humans bring no innate knowledge and that human mind is cognitively tabula rasa at birth. Although some contemporary linguists, theorists and philosophers like Noam Chomsky are opposed to Locke, there are many people who agree with the idea of tabula rasa. According to Immanuel Kant humans are initially children, then students and finally apprentice. Unlike animals, human beings should act reasonably rather than with instincts. Only with reason humans can make plans for their behavioral development. But as a raw material human beings can't develop themselves without help. Human race has to struggle to bring out the tendencies inherent in it. Each generation educates the one that follows (Lectures on Pedagogy, 2007, 9:442, 437). Kant asserts that humans are educable beings by nature.

When all these philosophical discussions are considered, it can be concluded that human nature is open to education. It doesn't matter if we argue for the tabula rasa nature of human mind or that people bring innate knowledge and skills, by means of education the skills and knowledge will be processed on the blank slate or what already exists in the mind will rise to the surface. If humans are assumed to have a nature which can progress for better with education, the qualities of this nature will shape and direct the qualities of education.

When the assumptions about human nature are regarded, it can be seen that most of them are a priori and can't be justified or rejected by experience. Yet for a theory of education it is necessary to picture the human nature basing our conclusions on truths and facts. The things that teachers should know about learners are the learners' developmental processes of physical and sensual development, the things, activities or attitudes that motivate learners and the kinds of behavior patterns that can be expected from the learners in their different level of developmental processes can only be obtained by scientific researches. In the introduction of *Leviathan*, Thomas Hobbes resembles human to a perfectly designed mechanism. Such a way of regarding human displays an organic approach for human nature. It describes human as a "natural" whole, living, developing and growing up. This whole is more than the sum of its constituents. Unlike a machine, an organism exceeds the sum of its parts and has the ability to grow and develop. Organisms are ruled with an internal dynamic principle and its part is determined by this very principle. Froebel explains the relation between this organism and education in *Education of Man*: With the help of education the

thinking, intelligent and self-conscious man heads for the pure, refined and conscious representation of the internal principle of Divine Unity and is taught the ways and tools for it. The aim of education is the realization of faithful uncorrupted and thus a holy life (The Education of Man, Part 1, Para.2-3).

The mechanic-organic distinction of human nature has provided opportunities for various assumptions. To view humans as mechanisms having inputs and outputs has made way for the conclusion with empirical researches about human nature. On the other hand when some qualities of individuals are taken into consideration organic view of human nature seems to be inevitable and highlights that humans are open to develop and flourish. In an educational theory founded on mechanical assumptions it is believed that the external reactions can take form for better by education. Learners as mechanisms are tools whose performance can externally be managed. Learners do not develop by an internal dynamism, rather they can be renewed and reshaped to a desired end. Teaching deals with the organization of inputs like knowledge, skills and attitudes. An organic view of human nature encourages an educational theory that takes into consideration of the qualities of humans ignored by mechanical view some of which are the internal principles of growing and developing. The organic assumptions assert that learners shouldn't be regarded as living beings that can be shaped by an external power. Education can only trigger the learner's internal and individual developmental process.

Episteme and Education

Another important element in education is the target episteme that will be presented to the students. What episteme is, how episteme is different from belief, types of episteme and the ways to acquire them and the truth conditions of episteme have been discussed through centuries. These investigations are where philosophy of education come across with epistemology.

The first answer about the nature of episteme comes from Plato. Plato made a distinction between episteme and belief in Theaitetos. Before writing Theaitetos and discussions about the nature of episteme, in Republic he presented a theory of levels of episteme relating it to the hierarchy of being. Thus after presenting this theory of episteme, Plato tries to invalidate the previous theories of knowledge systematically in Theaitetos (Copleston, 1993, 142).

According to Plato, episteme is non-sensory things, namely Forms or Ideas which do not belong to the ordinary world and are outside the time and place. Forms are acquired through an intuitional understanding similar to the one in the study of mathematics. For Plato, it is impossible to know the objects of everyday world because knowledge requires a kind of certainty but the objects of change do not meet the criteria of certainty. One can only have believes and thoughts about phenomenal world. Episteme is the understanding of necessary truths about non-phenomenal world. Their necessity rises from the fact that it is impossible to be mistaken. Platon places his discussions about episteme in the sixth book of Republic. The divided line analogy of Plato displays a hierarchy of both being and types of knowledge. Like being, the types of knowledge vary according to the levels of accuracy. The accuracy level of knowledge is dependent on the level of being of which it is about. The degree of the truth and being of knowledge of something is dependent on the truth and being

of that thing (Arslan, 2008, 315). As seen, according to Plato, knowledge is realized at the highest level of mind and it is only possible to attain knowledge of Forms.

The development of this idea gave way to the rise of the rationalist tradition of 17th century. This tradition is identified with Descartes, Spinoza and Leibniz. Knowledge is equated with the understanding of mathematical truths. This view claims that mathematics represents a good example for knowledge because mathematical truths are universal. They are also necessary because the rejection of mathematical propositions will be a mistake and will have an internal contradiction (Moore, 2010, 20).

At this point it is useful to refer to Aristotle's classification of sciences and examine the types of knowledge related to the different types of sciences. First Aristotle distinguishes between sense and knowledge. Sense and perception indicate facts but not the necessity of these facts. The fact that the water in the cup is hot may be knowledge but not science because science doesn't do with factual relations. Science aims to arrive at necessary relations, generalizations and universal arguments. Burnet claims that science exists only if there is someone who is aware of it. Knowing it in posse is not enough; it should be known defacto in the meaning of regeneration of knowledge (Burnet, 2008, 8).

Aristotle not only put forward the concept of independent sciences but also realized the classification of sciences according to their methods and aims. Aristotle argued that a person either watches something or thinks about something or produces something. Thus Aristotle distinguishes knowledge and ways of thinking into three. The first one is dependent on seeing and is theoretical sciences. The second one depends on making and producing and is productive sciences. The third one is practical science that depends on acting.

The knowledge in the theoretical sciences is independent of us and is about the object and facts upon which we have no effect. Theoretical knowledge is the knowledge of the essence and composition of these objects. The knowledge regarding the science of physics is of such kind. In the knowledge in productive sciences there is production and generation. Just as the knowledge of sculpting a stone, there is impact on the objects and produce new things. The knowledge of practical science belongs to a different activity.

According to Aristotle's classification of sciences, education is a part of the science of politics. These sciences are not theoretical but are practical. It is true to say that there are many practical sciences which are related to each other. According to Plato one science produces something that another uses. Politics uses the things produced by all the other practical sciences but doesn't produce something for the use of another science (Burnet, 2008, 9).

In the previous discussions it is evident that logically the opposite of the mathematical truths are not possible while empirical truths are always "possible". In the field of education these discussions about the nature of knowledge must be taken into consideration. Before the introduction of the input, the learners must realize the distinctions among different types of knowledge. Yet, most learners frequently and incorrectly believe that scientific knowledge is necessarily precise and constant. The reason of this wrong judgment is that the students aren't aware of the distinction between mathematical and empirical truths. The conclusions presented by each

scientific study can be rejected and revised by another research.

On the other hand when epistemological discussions are considered, it is evident that education is not only the input of the target knowledge but also the ways to evaluate and to reach the knowledge. Education shouldn't be regarded as the mental storage of information. Education must provide the learners with the ability to criticize the information at hand, to pursue knowledge and question it. Education is also the training of the individual's character. As humans are social beings, they not only live for their own sake but also for the good and welfare of the families, environments, societies, states and world. An educated man is someone who gained the skill to think critically and to speculate and who uses this defacto. The education's being an activity beyond the input of knowledge directs its way to the discipline of ethics.

Virtues and Education

Another important element in education is the target virtues that are expected to be gained by the learners. What should the aims of education be, which virtues and ideals should be adopted as the target of education, whether there is an hierarchy among these values and ideals, if so, then what is the best way to arrange them in order and who will be the authority for this significant occupation are the subjects that relate educational philosophy with ethics. Whether education is for the happiness of the individual or it is the happiness of the society in which the individuals live that is the main aim of education is another topic of discussion. The connection of education to virtues takes the discussion to the questioning the nature of virtues, if virtues are universal or relativistic and if virtues change from one person to the other.

It is generally agreed that there is a close relation between education and virtues. However ethics is not included within the traditional curricula of education. For ethics is included in many other disciplines, it is not regarded as an essential part of education. But there are educators and philosophers who emphasized that ethics should be seen as an important element of education like mathematics and science. Still ethics isn't considered as a separate discipline in education, but rather is tried to be imbedded in religion lessons (Moore, 2010, 42-47).

Socrates claimed that reality is absolute. According to Socrates, a teacher's duty is to ask questions and examine the thoughts of the learners. He believes that most of the individuals are governed by prejudice, not by reality and are living in a world full of unreal things. The main principle in Socrates' doctrines regarding education is "to know oneself". A life unexamined, is one not worth living. Virtue and knowledge is one and the same thing. While virtue directs us to good habits, knowledge gives us a true picture of man, universe and God. Teacher is the leader of civilization and one who is constantly seeking for the reality. Unlike the previous philosophers Socrates considered the problem of humans more important than nature. He viewed intellectual development more valuable than external riches. The role of teacher is to awaken average man. Once the learner takes action and reach awareness, he will find a new meaning in life (Sharma, 2002, 15-16).

Socrates' student Plato thought that mind and body interaction is an obligation for all education theories. A man who united his existence with the harmony and beauty of divine universe, who harmonized his instincts and volitions in the guide of universal principles and who acted according to the four virtues, wisdom, self-control, courage and justice is thought to be educated. Only such a man will be a citizen

conscious of ruling the state. One whose physical and psychological sides are in harmony can perform his duties in happiness and thus make a powerful and effective society (Sharma, 2002, 27).

According to Aristotle, the presence of various occupations, sciences and arts will naturally lead to the presence of various ends. For instance the end of shipbuilding is ship; the art of war commanding is victory. But some of these arts are subject to some others that are in a higher level. In *Nicomachean Ethics* Aristotle gives some examples from different kinds of arts. The art of harness making is dependent on the art of riding, which is dependent on some other kinds of arts like soldiering or commanding. The distinction made here is that some arts are secondary and are in the service of some other arts higher in degree. These arts which are in the higher levels of degree are primary. It's evident for Aristotle that the primary arts are basic and more valuable than the secondary ones (*Nicomachean Ethics*, Book 1, 1). Aristotle questions if there is one art whose ultimate end is "good" and asserts that it is the art of politics because it is performed for the sake of itself. The art of politics decide the types of arts that will be performed in the state. The important practical sciences like military, rhetoric or management are all dependent on politics. The art of politics make use of all the things produced by all other practical sciences for it is basic and leading. The ends of all other practical sciences must be included within the aim of politics and this aim is the good for humans. The ultimate aim of politics isn't a good governmental theory but rather is the actual performance of the good for humans (*Politics*, Book 1, 1).

As a practical sciences education is an art dependent on politics. The main aim of education according to Aristotle is to raise good citizens for the state who can realize duties that will increase the welfare and peace of the state. In *Nicomachean Ethics* Aristotle tries to find an answer to the question of "What is good for humans?" The answer lies in the science of politics whose end includes the aims of all other practical sciences. Aristotle asserts that all sciences aim the good for something and to overcome some deficiencies. In any science good is what all actions are taken for. The definition Aristotle gives for happiness is present in *Nicomachean Ethics*.

Now such a thing happiness, above all else, is held to be; for this we choose always for self and never for the sake of something else, but honour, pleasure, reason, and every virtue we choose indeed for themselves (for if nothing resulted from them we should still choose each of them), but we choose them also for the sake of happiness, judging that by means of them we shall be happy. Happiness, on the other hand, no one chooses for the sake of these, nor, in general, for anything other than itself (*Nicomachean Ethics*, Book 1, 7).

The definition of happiness can be considered together with the concept of self-sufficiency. On its own it is what makes life worth living. Happiness must include all other goodness. "Happiness, then, is something final and self-sufficient, and is the end of action" (*Nicomachean Ethics*, Book 1, 7). The good actions are good on their own and pleasant for the ones who perform them. As Aristotle relates happiness to goodness, then it is possible to obtain with education. Happiness is something that all people except the disabled can achieve by hard work and effort.

Another important philosopher, Rene Descartes claimed that mathematical

knowledge can be used to show the existence of God and the regular nature of universe. Descartes in the second part of his Discourse on Method mentioned the four principles of education. The first one is not to accept everything as true which will avoid impatience and prejudice. The second rule is to analyze every problem in question as further as possible which will lead us to solution. The third one is to direct my thoughts from the simplest and easiest to the hardest and most complex. The final principle is to ensure that my lists are complete and my criticisms are comprehensive. Descartes' idea of education puts a great emphasis on the learner as the subject of the activity. The learners are encouraged to be critical thinkers who can analyze the input during the learning and teaching process. Education shouldn't train learners as ones who accept everything as given. Rather they must be taught to criticize, analyze and make conclusions of their own.

John Locke, an important leading philosopher of empiricist tradition, asserts that the aim of education is to train learners as individuals having a powerful mind as well as a powerful body. Unless we are physically healthy, our mental activities will be of secondary importance. Likewise an unreasonable but a healthy person will never completely be satisfied. Locke's philosophy of education presents a good balance between progressivism and conservatism. His argument for private education and proper teachers presents his favor for aristocratic tradition. His rejection of education as storage of information present in the books represents his progressive side. Knowledge should support the individual's development in all areas. Locke warns that it is important to correct the children's harmful behavior in early ages otherwise it won't be possible to inspire the good and virtues. The best enterprise for society lies in successful teachers (Sharma, 2002, 225-226).

Immanuel Kant emphasizes that humans can only realize their true nature by education. An individual can't be more than what education gives him. Training pretends the individual's following the wrong paths triggered by his instincts. By virtue of education the person inhibits himself from jumping into dangerous positions. Human beings desire for freedom by nature and education provides them with opportunities for freedom (Lectures on Pedagogy, 2007, 443-439).

John Dewey regards education as an inevitable social process. Without the help of education, society doesn't make progress. Education is a process during which civilizations are protected and proceed for further. Dewey emphasizes a significant freedom; it is the freedom to think about the ends that are essentially worth thinking. The freedom of movement in the school environment supports the intellectual freedom. Besides his defense of the freedom of movement, Dewey proposes an education system including moral and mental freedom (Dewey, 2007, 75). Dewey points that education is life itself not a preparatory stage, it doesn't begin with school but rather with birth.

CONCLUSION

The aim of the present paper was to examine the areas of study in which philosophy and education intersect so as to propose a new approach to education. The definition of education was given and the variables evident in this definition led the discussion to the relation between some philosophical disciplines and education. Some of the discussion topics within the science of education include the student and

teacher behavior, the target skills and gains, the methods and approaches used in teaching made the study progress to the investigations about human nature, epistemology and values. Thus in this study whether human nature is educable or not, what should be the content of knowledge presented to the students and what virtues and characteristics as the gains of the students are supposed to be the aim of teaching were discussed with reference to the ontological, epistemological and ethical discussions of some philosophers.

In the study, about human nature, it has been concluded that human beings are educable to a certain extent. One may claim that humans are born with innate ideas and skills or some others may argue that the mind is blank at birth. Whatever the postulate is, there is one thing right on mark: Throughout their lives people acquire certain knowledge, skills and competence that they are not born with. This clearly shows that with the help of education, human nature has the possibility to progress for better, happier, more efficient and complete. The educable nature of humans and the aim of a complete life carry the discussions to the concept of a complete life and ultimate happiness. It has been discussed that in order for an individual to fulfill his existence as a human being, there are certain virtues that he should internalize. So the discussions were directed to the relation between ethics and education.

It has been pointed that as for humans are social beings, education is not only for the individual's good or development but also for the good of one's family, neighborhood, society, state and the world. In a century when borders are questioned to be removed, brotherhood of peoples is pictured, interaction among the cultures of the world is targeted and the concepts of sympathy and love for the other are propagated, education has already exceeded individual or national extent. In a world without borders and dominated by Aristotle's happiness and good, education's being viewed from a broader perspective is a must. Thusly, a world of such educated people will present an environment of happiness, peace and welfare to all its individuals. Unlike Aristotle's time, education shouldn't be an activity carried out by individual states independent of the others in the rest of the world. "Good" is no longer the good for a single state, rather is the good for the whole world. In the areas like economics, production, management, arts or tourism, there is a tendency to union for discussion, reconciliation and decision. This case of union must broaden to field of education and a co-decision process should be encouraged. Education is far more important than to leave in the hands of certain individuals, groups, communities or states. Aristotle pointed that education is practical science dependent on the science of politics. However, if the present century's conditions are considered, politics surpassed the governing of a single state and is being carried out at the level of the cooperation of many states. Thus, like the science of politics, education must go beyond being the problem of individual states and statesmen should gather to discuss, analyze and decide for better educational systems. Otherwise education will service to the benefits of certain communities and various communities will train learners thinking, knowing, deciding and acting as they are conditioned by their community leaders. This is a dangerous case for mankind and world, for the members of all communities will live according to their community's teachings and the community's welfare and progression. This threatening case will eventually lead to conflict, incomprehension, disintegration and wars in the world. If education is in pursuit of the "good" for all

mankind, this “good” must be for all.

If the main target of education is the good for all human beings, discussions should be carried to decide what should be included within education in order to provide the good. It has been pointed that the decisions about education should be taken by a union of all states. The statesman and experts from all states might come together to carry out discussions, settle approaches, methods, contents and programs in education. Thus education will be carried away from the service of individual communities and will not bring up individuals working for only their community’s good. Only by a holistic approach to education, the “good” for all mankind can be made possible.

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Chapter 43

Political Business Cycle Theories¹

Filiz ERYILMAZ

INTRODUCTION

Political Business Cycle Theories: The understanding of the causes of business cycles in economic activities and the factors that sustain these fluctuations were always an attractive subject matter for macroeconomists and policy makers, and especially recently several different views were voiced on the reasons of economic fluctuations (Blomberg and Hess, 2001: 1). According to the first of these views, the traditional business cycles theory, which is related to the economic fluctuations caused by uncoordinated behavior of economic agents, macroeconomic variables such as unemployment, inflation and growth, could fluctuate in time (Paldam, 1981: 342). This type of fluctuations caused by macro variables is called *business cycles* in literature. In other words, cyclical fluctuations examine the premises and successors of the variations of macroeconomic variables in time (Aydemir, 2007: 72–73).

The prominent idea in cyclical fluctuations literature is that they were caused by historical events. These theories initially proposed during the industrialization process in the 18th Century put an effort to explain the depressions occurred in the world (Aydemir, 2007: 72–73). For example, in their work Communist Manifesto published in 1848, Marks and Engels considered cyclical fluctuations within the nature of capitalism and defined them as *commercial crises*. Jevons explained cyclical fluctuations as *sunspots resulting in a better harvest in certain years and in worse ones during others*. Marshall, who was a neo-classical economist, attempted to explain business cycle theories within labor processes and specialization and interaction between these. After the 1929 depression, and as the classical approach fell from grace, Keynes, whose General Theory became popular, stressed that economy could not balance itself and the governments should intervene to control cyclical fluctuations. Thus, Keynes suggested that governments should implement expansionist economic policies during recession (collapse) periods to prevent economic fluctuations (Özkan, 2010: 54–55). It could be stated that stabilization policies that assume the function of annihilating economic fluctuations were based on two precepts. These precepts were; the macroeconomic fluctuations were mostly a result of instability in the market behavior and total demand management encountered certain limitations in price negotiations (Lindbeck, 1976: 1).

Traditional Keynesian view ignored the limitations and imbalances of the political administration systems on economic fluctuations (Lindbeck, 1976: 1). Also, a careful review of the cyclical fluctuations literature would reveal that studies were concentrated on how the government would minimize the fluctuations and how it

¹This study is generated from the Author's PhD thesis entitled "Politik Konjonktür Teorileri Işığında Türk İktisat Politika Çıktılarının Analizi"

would stabilize the economy through coordination. However, the attempt to manage the economy could be unsuccessful due to mistakes made in certain cases, but mostly as a result of political pressures and the self-interest of the government (Paldam, 1997: 342). Under certain conditions, differences could be experienced on defining macroeconomic fluctuations and designing policies to be utilized in reducing these fluctuations. Particularly, the reasons for macroeconomic fluctuations could be observed in the complex interaction between the markets and the behavior of the government, since the behavior of the government contribute to these fluctuations instead of reducing them as suggested by the Keynesian view. Thus, redesign of national and international political systems is critical in developing macroeconomic stability (Lindbeck, 1976: 1).

Thus, business cycle theories fail to explain the fluctuating in the economy, since they lack a multi-faceted analysis of the effects of government behavior on economy (Özkan, 2010: 54–55). For why, as commonly known, politics or policies influence economic policies, hence the economic performance. Recently, studies on the interaction between politics and economics have become increasingly popular and created the basis for the field of “*new political economy*” developed as a result of the interaction between macroeconomics, social choice and game theories. In this newly developing field, by utilizing the contemporary technical tools of economic analysis to investigate main concepts of public policy, new points of view were developed on subject matters such as the relationship between political and economic factors and business cycle theories, inflation, unemployment, stability policies and their implementation, democracy, inequality and economic growth, and instability and conflict, the source of continuous budget deficit, international integration and the size of the state (Snowdan and Vane, 2005: 458). Thus, the *Political Business Cycles Theory* (PBCT) was developed as an alternative to business cycles, parallel to the historical evolution of economic thought within the realm of the new political economics field of study (Özkan, 2010: 54–55). PBCT, arose from the efforts to reveal the real reasons of economic fluctuations, found its roots on the real observation that “*while electorate is concerned with the economy, politicians worry about power*” that analyses the interactions between political and economic systems. Therefore, PBCT is a result of the interactions between macroeconomic theory, social choice theory and game theory, and is a significant field of positive political economics, which investigates the political reasons of macroeconomic fluctuations. Thus, it aims to enlighten the relationships between economic and political fluctuations. For the most significant basis for the theory was founded by the premise that certain economic indicators fluctuate in time, and peak and bottom points of such fluctuations match the times of elections (Telatar, 2004: 386). Thus, PBCT aims to explain the complex network of relations between macroeconomic policies, timing of elections, ideological differences among government parties, party structures, election regulations and the degrees of political independence of central banks (Paldam, 1997: 1). To achieve that aim, contrary to the traditional approaches that consider political decisions as external and assume that these decisions are made by a “*benevolent dictator*,” who tries to maximize the current values of the society, it considers political factors as internal and analyses the possible economic outcome of the interaction between economics and politics (Akçoraoğlu and Yurdakul: 2004: 3).

PBCT, developed from the relationship between the choices of the constituents on the demand side and the government policies on the supply side (Telatar, 2004: 385), could be narrowly defined as the effects of elections on macroeconomic variables (Aydemir, 2007: 74). In a much broader sense, it is the fluctuations in the economy caused by the expansionist policies of the politicians before the elections to maximize their chances of reelection and to get the votes of the constituents such as increasing public spending and money supply and reducing the tax burden, and contractionary policies implemented after the elections to reduce the budget deficit and inflation created by the pre-election policies (Özkan, 2010: 56). The reason for the government parties to implement expansionist policies before the election is to gain the votes of the electors by improving the economy via reduced unemployment and higher growth. According to the economical voting theory, the constituency that considers the economy is going well and the government party is talented in governing the economy would vote for the government party (Özkan and Tari, 2011: 224). The “*self-seeking government*” assumption of PBCT was created based on the “*self-interest leadership*” axiom by Downs (1957). According to this assumption, the real purpose of the government parties is not to be in the administration to improve the economy, but to peruse the macroeconomic policies to be reappointed. Therefore, while the primary purpose of political parties is to be in the government, for the government parties it is to be reelected. Thus, the policies promised by the governments before the elections could be considered as tools perused to win the elections. The fact that the policies implemented by governments are a result of their selfish behavior means that each party tries to get more votes, referring the government type that targets vote maximization affirming Downs’ self-interest leadership axiom, and it was accepted that government manipulated the economy so that it would earn the most votes. Thus, the economic manipulation conducted by the governments becomes a process of vote maximization based on the assumption that voters evaluate the governments based on the results on inflation and unemployment/growth rates. On the other hand, according to Mueller (1970), the effect of economic conditions on the popularity of government is negative. Popularity triggering effect of the positive economic developments is larger than the popularity attenuation effect of negative economic developments. While the voters reward the government for successful economic performance, they punish the government for disappointing performances. But there is an asymmetry between the reward and the punishment. In other words, the weight of the reward on popularity is larger than the weight of the punishment.

The issue whether the political business cycle movements observed in macroeconomic data was a result of the deliberate policies that the governments implement to win the elections had profound effects on both economic and political sciences. Thus, it was observed that an absolute recognition of the economic operations without recognizing the political cycles was not possible. Political fluctuations influencing the economy would also provide signals that the economic outcomes created by economic policies could not be optimal. Forwhy, the deliberate manipulations of the governments on the economy would carry the economy into a worse situation than the case where there would be no such manipulations (Telatar, 2000: 134–138).

Five main factors behind the existence of PBCT are as follows: (Nordhaus, 1990: 2, Telatar, 2004: 387–388)

Electorate: What are the factors that affect and drive the voting process? Do the economic developments have any effects on voting behavior? Do the voters, while making a selection between political parties, compare them based on their possible future performances or their performances in the past? Is the electorate a good and informed actor with rational expectations, or irrational and with imperfect knowledge?

Political Parties: What are the basic factors that motivate political leaders or parties? Do they exhibit “*opportunistic*” behavior to maximize their chances of election (or reelection) without considering their past stances, views of the constituency and the actual results of the policies they would implement, or exhibit “*ideological or partisan*” behavior to obtain economic and social policy outcomes favoring certain electorate groups without paying attention to becoming the government and political popularity.

Economic Structure: What is the structure of the economy? Could political parties or governments have an impact on economic outcomes via their policies, or is there a policy inefficiency? What are the political instruments (fiscal policy, transfer payments, monetary policy, etc.) significant in creating effects on economic outcomes? These instruments are controlled by which authority (government, central bank, etc.)?

Shocks: What are the shocks that influence the political process and the economy? Are the shocks external (hurricane, famine, wars with other countries), or “internal,” (transfer of a large budget deficit or a high level inflation by the previous government, etc.) which are caused by the political process?

Skill Level: Could the political parties forming the government reach their objectives sufficiently and effectively, or they could not satisfy their electorate as a result of their policies and/or could not obtain results to attain their ideological objectives?

Although PBCT, developed based on the five elements mentioned-above, was analyzed in different classifications and designations in the literature, it was frequently evaluated under traditional and rational models. The developmental phases of PBCT would be considered within the *time dimension*, parallel to Paldam (1997) in this study.

2. Political Business Cycle Theories with Respect to the Time Dimension

The process of manifestation and development of political business cycle theories is analyzed in 3 main periods of pre-1950, 1950-1980 and post-1980. In the first period of pre-1950 period, the studies by *Kalecki (1943)*, *Akerman (1946, 1947)*, *Ben-Porath (1975)*, *Hubka and Obermann (1977)*, *MacCracken (1977)* and *Tufte (1978)* pioneered the manifestation of political business cycle theories (Paldam, 1997: 342). Post-1950 period of the literature demonstrated a development in two phases. The first phase consisted of *traditional political business cycle models* commenced to be proposed in mid-1970's. The main argument of these models was that government parties, by utilizing the exploitable Philips curve, attempt to manipulate the economy systematically. The initial block of traditional models consist of the traditional opportunist political business cycle models that stress the “*opportunist*” behavior of policy makers (Nordhaus 1975, Lindbeck 1976). According to these models,

politicians do not own their political choices and prefer the political choices that would maximize their election (or reelection) possibility while determining their political choices. The literature that consists the second block of traditional models (Hibbs 1977) focuses on the “*partisan*” objectives of policy makers. This literature has the opinion that leftist parties focus on unemployment rather than inflation, while the rightist parties prioritize inflation. The second evolution for the political business cycle theories was introduced in mid-1980’s via the game theory approach to macroeconomic politics. Political business cycle theories developed during this period are examined in two sub-groups; namely the rational opportunist and rational partisan political business cycle models.

Table 1: Political Business Cycle Models

	Opportunist	Partisan
Traditional Models	Nordhaus (1975)	Hibbs (1977)
	Lindbeck (1976)	
Rational Models	Cukierman-Meltzer (1986)	Alesina (1987)
	Rogoff ve Sibert (1988)	
	Rogoff (1990)	
	Persson ve Tabellini (1990)	

Resource: Alesina, Roubini and Cohen, 1997: 2.

It is possible to demonstrate the post-1950 political business cycle models mentioned above in a 2 by 2 matrix as shown in Table 1. Political business cycle models exhibit differences in two critical dimensions. The first of these dimensions is based on the models being “*opportunistic*” or “*partisan*.” Opportunistic models claim that government parties would act opportunistic to win the elections. On the other hand, partisan models focus on the differences in policies that government parties implement and are interested in different political consequences that different ideological tendencies of government parties elicit. The second critical distinction between the political business cycle models is related to the models being “*traditional*” or “*rational*.” Traditional models underline the adaptive expectations of the constituency, while the rational models assume a rational constituency. Furthermore, traditional models assume that government parties have the capability of continuously predict and influence macroeconomic consequences, while on the contrary, the rational models underline the constraints on the capability of the government parties to continuously influence (manipulate) the economy due to the rational characteristic of the constituency (Alesina, Roubini and Cohen, 1991: 1–3).

2.1. Pre-1950 Period

Traditional political business cycle theory literature first emerged in 1940’s and continued to develop until the end of 1970’s. During the period prior to the emergence of traditional models, literature developed in two branches. Initially *Akerman* (1946, 1947) led the empirical branch supported by *Ben-Porath* (1975), *Hubka and Obermann* (1977), *MacCracken et al.* (1977) and *Tufte* (1978). This research movement mostly concentrated on political factors in public finance. According to the advocates of this movement, the governments that aim to get reelected would manipulate the economy for sure and would act based on their chances of reelection while planning their fiscal policies.

The pioneer of the second branch in pre-1975 period was *Kalecki* (1943) with his article “*Political Aspects of Full Employment*.” Later on, several authors such as *Bodly and Crotty* (1975) and *Sherman* (1979) during the 1970’s shaped this study by *Kalecki* and initiated the development of the second branch. Next section would examine in detail the pioneers of the pre-1950 literature, namely *Akerman* (1946, 1947) and *Kalecki* (1943).

2.2. 1950–1980: Pre-Rational Expectations Period

Pre-1980 political business cycle model literature developed in *two distinct stages*. The first stage started with the traditional opportunistic model of *Nordhaus* (1975) in mid-1970’s. The second stage was initiated by the traditional partisan model of *Hibbs* (1977). These models of pre-rational expectations period were based on *exploitable Philips curve* and the assumption that the relationship of Philips curve existed. *Nordhaus*’ (1975) traditional political business cycle model predicts boom and low unemployment in the pre-election period and increasing inflation and economic stagnation during the post-election period. *Hibbs*’ (1977) partisan model on the other hand, focuses on the systematic and constant fluctuations in inflation/unemployment combination caused by the political parties with different ideological orientations. The most significant hypothesis of the 1950-1980 period was that the constituency had adaptive and not rational expectations. Thus, the period was christened as the *pre-rational expectations period* and the models that assumed that the voters act adaptively but not rationally were called as *traditional models* (*Alesina and Roubini*, 1990: 1).

2.2.1.1. Traditional Opportunistic Model

Two different approaches are considered in modelling the relationship between political process and macroeconomic policies. Initially, it could be argued that the sole purpose of the political parties is to remain in government by following the views of *Downs* (1957). This type of government parties mostly ignore the effects of their policies on the economy as long as these do not affect the electoral preferences of their constituency. This hypothesis data is a voting function and means that the government parties in a dual party system present the same platform in the economic structure to the voters and implement the same policies. Thus, the results would be consistent since the government parties all have the same information about the voters, although they are ignorant about their tastes and preferences. The most significant example of this is the traditional opportunistic political business cycle approach proposed by *Nordhaus* (1975) and *MacRae* (1977) (*Alesina*, 1987: 651). In his article, which had a powerful effect on literature, *Nordhaus* (1975) formulated the traditional opportunistic political business cycle theory (*Nordhaus*, 1990: 4), and his analysis of political business cycles was based on the behavior of the electorate and politicians in a democratic political system instead of the struggle between classes (*Erdoğan*, 2004: 53). In *Nordhaus*’ model, it was stressed that government parties were rational and opportunistic and the electorate decided based on the past, hence with adaptive expectations (*Nordhaus*, 1990: 4). The main hypothesis of this model is that the politicians attempt to manipulate the economy by utilizing economic policies to be reelected (*Alesina, Cohen and Roubini*, 1991: 1). Thus, government parties, with the assumption that their myopic constituency would vote for themselves, benefit

from the unemployment and inflation trade-off in the Philips curve and dither to vitalize the economy during pre-election periods (Saraç, 2005: 39).

In the beginning of the new period, in other words during the post-election period, the inflationist effects of the pre-election expansion are eliminated by a recession. Thus, the contractionary policies implemented by the post-election government party are necessary to reduce inflationist expectations, hence moving the short-term Philips curve towards the bottom. Therefore, in Nordhaus' model, expansionist models are implemented towards the elections and the short term trade-off between inflation and unemployment is ignored (Bahçe, 2006: 100).

2.2.1.1.2. The Operation of the Traditional Opportunistic Model

Two figures below could help to recognize the operation of the traditional opportunistic model:

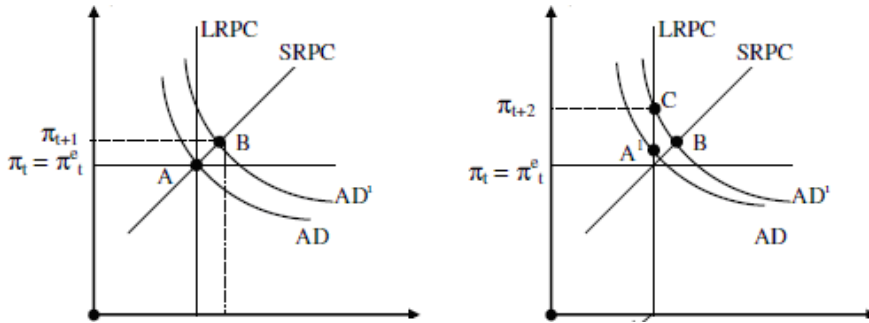


Figure 1: The Operation of the Traditional Opportunistic Model
Resource: Alesina, Roubini and Cohen, 1997: 21

In the figure above, LRPC depicts the Philips curve in the long run that represents the equality of current inflation to expected inflation ($\pi_t = \pi_t^e$); and SRPC is the Phillips curve in the short run, where the current inflation is not equal to the expected inflation ($\pi_t \neq \pi_{t-1} = \pi_t^e$). At the point A in section (a) of Figure 1, past term inflation, current inflation and the expected inflation are all equal ($\pi_t = \pi_{t-1} = \pi_t^e$) and the total demand curve with a negative slope (AD) passes through the point A as well. As an example, let us assume that there will be elections within the period of t+1. The government party, to improve the economy, would implement expansionist total demand policy and bring the economy to point B and hence would manipulate the economy. At point B, inflation is higher than the expected inflation and hence $\pi_{t+1} > \pi_t = \pi_{t+1}^e$, and growth would steer above its “normal” level. Therefore, the elections would occur at a time when the economic growth is higher than normal. In this period, inflation would show a rather moderate increase. As the short-term Philips curve gets flat, the required increase in inflation to reach a certain level of growth would be smaller. Now, let us assume that the government party has been reelected due to good economic outcomes at point B induced by the pre-election period expansionist policies. Voters would revise their expectations for the period t+2 to match the inflation realized in period t+1 as a result of the mismatch in their expectations for the period t+1. The unexpected inflation realized in t+1 period would affect the salaries and production in the period of t+2.

Thus, as long as the policy makers would not continue to increase the demand, the economy would be carried to point C through the AD curve during the $t+2$ period. Growth would be at normal levels at point C, however the inflation would be higher than the point A. Thus, the governments would implement contractionary economic policies in the post-election period. According to Nordhaus (1975), this contractionary demand would only carry the economy to point A¹, which has a higher inflation than point A. Thus, after reelection, the government would face a higher level of inflation when compared to the $t+1$ period. In summary, the model implies that during pre-elections period, growth would be over normal growth, unemployment would be below normal unemployment and a moderate level of inflation would be experienced (Alesina, Roubini and Cohen, 1997: 21–22). After the elections, significant increases in inflation would be reduced via economic decline or recession. The important point here is that, since the inflationist outcomes of the pre-election economic expansion would be experienced with a delay, economic manipulation would be timed to be implemented only after the elections. The economic cycle mentioned above is below optimal, forwhy it reflects economic fluctuations and variations useless for the activity. Thus, political business cycle fluctuations could create a mean inflation increase that would not provide any benefits for the average growth rate or unemployment (Telatar, 2004: 399). Remarks made so far clearly indicates that traditional opportunist tendencies are mainly the result of the unexpected inflation created due to the expansionist economic policy implementations, drawing the unemployment rate away from its natural course within short term (Erdoğan, 2004: 59). As a result, Nordhaus model provides open predictions about the course of unemployment and inflation during the periods of elections. During the first half of the electoral period unemployment increases, while the GDP and inflation decrease. As the elections come closer, in other words during the second half of the governmental term, unemployment decreases, while the GDP increases. Immediately after the elections, inflation rises and a recession is witnessed in the economy (Snowdan and Vane, 2005: 471).

2.2.1.2. Traditional Partisan Model

Traditional partisan theory, developed by Hibbs (1975, 1977) with *Party Control Model*, concentrates on the different priorities that political parties assign to nominal and real economic performance (Hibbs, 1994: 1). The most significant hypothesis of the traditional partisan model is that the aim of the political parties is to implement policies that are appropriate for their core constituency (Hibbs, 1992: 361- 362). In other words, different from the traditional opportunistic model, in this model the political parties have different objectives than each other (Alesina, Roubini and Cohen, 1997: 45). Contrary to the traditional opportunistic model, which supports the occurrence of opportunistic fluctuations in the economy right before the elections, this model is concentrated on the differences in economic policies that political parties systematically implement (Alesina, Cohen and Roubini, 1992: 2; Schultz, 1995: 82). Thus, the model stresses that, by referring to political signals in economic policies, changes in economic outcomes are related to the changes in government. Hibbs stated that in periods where a leftist party is in the government, more expansionist policies are implemented when compared to the periods with a right-wing government, thus during the governments of the left-wing parties would achieve higher growth rates and

lower unemployment (Hibbs, 1992: 361- 362). In other words, left-wing and right-wing parties prefer points representing different inflation and unemployment combinations on the exploitable Philips curve. Thus, left-wing parties bear the cost of inflation to struggle against unemployment (Alesina, Roubini and Cohen, 1997: 45). Therefore, *Keynesian macroeconomic policies* are preferred during the left-wing governments, while a *balanced budget policy* preference that believes in the redundancy of government intervention is prominent during the governments of right-wing parties (Erdoğan, 2004: 61- 62). In short, distinct from the traditional opportunistic model, political parties follow different policies. Hibbs accepted that different parties had different purposes and described the politicians that follow certain ideological objectives as partisan and stressed the differences between the macroeconomic policy preferences of the parties. Ideology in traditional partisan theory has a different meaning than its use in Downs' analysis. In Downs' approach, parties motivated to be the government use the ideology to cope with the uncertainty. Thus, in traditional opportunistic model, it is accepted that parties determine their policies to win the elections, in traditional partisan theory, ideology is no longer a tool, but a goal representing the policies that the constituencies of particular political parties prefer. Therefore, it is accepted that political parties would like to win the elections to implement the policies expected from them within the framework of their ideologies (Telatar, 2004: 413- 414). In summary, opportunist political parties select policies only to win the elections, partisan politicians wish to win the elections to implement the policies that their constituency desires (Alesina, Roubini and Cohen, 1997: 45).

Traditional partisan theory stresses that different social classes are effective in determination of inflation and unemployment choices (Hibbs, 1992: 361- 362). In other words, Hibbs' analysis is shaped based on the *distribution problem*. In this respect, the core constituency of the left-wing parties are people, who earn their living from low-status occupations, keep their wealth mostly in human capital, in other words they consist of low-income working class. Thus, during a recession, the most significant problem that would affect this group is unemployment. Therefore, their livelihood is quite related to fluctuations in total demand (Yıldırım, 2009b, 3). To achieve that, left-wing governments try to lower unemployment by implementing expansionist policies. Supporters of right-wing parties mostly belong to high-level income electorate consisting of people who have financial and real capital. High-income groups could provide income using several different channels. For example, in addition to financial assets, real estate is among the important sources of income for these groups. Since increasing inflation enhances the uncertainty related to these sources of income and constituency of left-wing parties would be harmed by rising inflation, they do not like inflation that much. Employment is a secondary issue for this group, which have relatively more secure occupations (Hibbs, 1992: 361- 362). Thus, right-wing parties are more disposed to implement disinflation policies, while they are more reluctant in implementing policies that would expand the total demand when compared to left-wing parties (Hibbs, 1986: 66). In summary, Hibbs' model considers political parties as representatives of different voter groups with different preferences, where they target to be reelected by determining their policies in accordance with the status and economic benefits of their constituencies (Yıldırım, 2009b: 4).

Table 2: Primary Political Goals of Political Parties in Developed Countries

	Socialist-Labor	Center	Conservatives
Decreasing Importance of Goals ↓	Full Employment		Price Stability
	Equalization of Income Distribution	Price Stability	
	Economic Expansion	Economic Expansion	Balance of Payments Equilibrium
		Full Employment	
		Equalization of Income Distribution	
	Price Stability	Balance of Payments Equilibrium	Economic Expansion
			Full Employment
	Balance of Payments Equilibrium		Equalization of Income Distribution

Resource: Hibbs, 1977: 1471

Table 2 demonstrates that as one moves from left to the right, one could observe a reversal in party preferences pertaining to different economic goals. According to Hibbs, the choices in this table obtained by a survey conducted by Kirschen *et al.*, (1994) with experts in eight industrial nations conform with the choices of different party constituencies in his model (Hibbs, 1977: 1470- 1471). Forwhy, according to the table, while left-wing parties that appeal to the low-income wage earners target full employment, in other words unemployment, right-wing (conservative) parties that appeal to high income and investment groups prioritize price stability, hence the inflation. Center parties, while prioritizing price stability like the conservative parties, on the other hand they also look like left-wing parties by adopting full employment as their third goal in order (Erdoğan, 2004: 65). In brief, supporters of left and right wing parties differentiate based on the relative significance they assign to inflation or unemployment. Thus, under the circumstances, political parties would act in different degrees of “*ideology*” and the economic policies they produce would be in accordance with the choices of their core constituency. Therefore, there would not be a convergence in the policies that the parties would produce (Hibbs, 1992: 361- 362).

2.1.1.3. Operation of the Traditional Partisan Model

The validity of the traditional partisan model, which is based on the hypothesis that political parties have separate priorities, depends on two independent points. The first validity of the model consists of the *partisan relationships* that form the economic approach. Traditional partisan model considers the influences of economic business cycles on the individual. The core of the model is based on the definition of different groups and determining the effects of economic business cycles on these groups and the suggestion that the political parties propose different economic priorities based on the characteristics of each group and decide on appropriate public policies to serve the benefits of these groups. The second validity of the model is the support given by the election results. For example, how much the citizens of a nation conceive unemployment as a significant problem? They answer this question in polls.

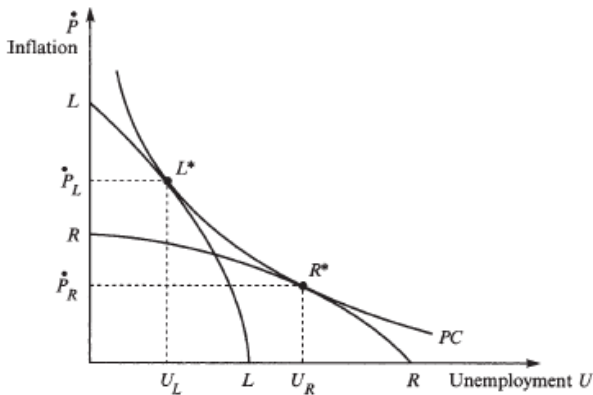


Figure 5: Operation of Traditional Partisan Model
Resource: Alesina, Roubini and Cohen, 1997: 50

Lower social classes consider unemployment always as an important problem and vote for the left-wing parties (Garatt, 1998: 12- 14; Sezgin, 2005: 64- 65).

According to Hibbs' model, different points that right and left-wing parties would prefer on the Philips curve based on the policies they implement while in government could be demonstrated (see Fig.5).

Let us assume that the economy was at point A in the beginning and left-wing party was elected. This government would try to reach point B, which represents lower unemployment in the short run. Since Hibbs was not interested in the short run Philips curve (SRPC) that is caused by adjustments in expectations, SRPC stays consistent for one or two terms, in other words at least for eight years. For that reason, the left-wing party would be able to keep the economy at the targeted level of the point B. Hibbs was more interested in delays between political preferences and the effects of politics on real economy, rather than the shifts in the short run Philips curve caused by the adjustments of expectations. Thus, according to Hibbs, for the economy to arrive at point B from the point A after the election victory of the left-wing party, at least a few years should pass.

When we assume that a right-wing party won the elections while the economy was at point B, the right-wing party would aim to arrive at point C, which represents lower inflation. To attain that goal, the party should implement contractionary policies to move the economy from point A to point C slowly or quickly. Although the shifts in SRPC make the table more complex, the message remains the same. Both parties could reach and sustain two different levels of unemployment levels where there is a stable inflation. As a result, the main point of the model is that both parties could reach two different levels economic activity, where there is a relatively stable inflation during their terms in the government. The stability in macroeconomic variables is disrupted as a result of the change in government from one party to the other, thus causing a political business cycle (Alesina, Roubini and Cohen, 1997: 49- 51; Telatar, 2004: 419- 420). In brief, according to the traditional partisan model political business cycles that are created when the government changes hands are due to changes that are results of ideological differences between the parties. Thus, the economic conditions change, not before the elections, but after. Partisan fluctuations would occur based on the time period that passes between the elections (Erkişi, 2007: 112). In Hibbs' model, different from the Nordhaus' model, these fluctuations do not occur on each election period, but only when the government party changes (Sivri, 2004: 2).

2.3. Post-1980 Rational Expectations Period

The second period in the development process of political business cycle models, post-1980 models are called *rational models*. Rational models suggest that, even when the voters are basically rational, opportunist or partisan tendencies could be observed in government parties (Erdoğan, 2004: 65).

2.3.1. Rational Political Business Cycle Theories

The second period of development for the political business cycle theories in mid-1980's was realized as the game-theory approach to the positive theory of politics. While *Cukierman and Meltzer (1986)*, *Rogoff and Sibert (1988)*, *Rogoff (1990)* and *Persson and Tabellini (1990)* presented the rational opportunist model in this period, *Alesina (1987)* developed rational partisan approach. *Different from the pre-1980 traditional models, both rational models assume that the electorate is rational.* In this aspect, this second generation of political business cycle models differs from the pre-1980 literature. Primarily, the hypothesis of rationality decreases the severity and determinability of the fluctuations, although it could not totally annihilate the regular political business cycles. Thus, *real economic activity* becomes less sensitive to *real (monetary) policies* and it becomes difficult for the voters *continuously and systematically being cheated* by the government parties before each elections (Alesina and Roubini, 1990: 1- 2).

2.3.1.1. Rational Opportunistic Model

Traditional opportunistic political business cycle theories, initially introduced in Nordhaus' study "The Political Business Cycle" published in 1975 and depended on adaptive expectations, stress that politicians manipulate the economy by expansionist policies during election periods utilizing the exploitable Philips curve (Rogoff and Sibert, 1986: 1). In this model by Nordhaus, the irrational electorate with adaptive expectations made it possible for the government to use the inflation-unemployment trade-off for its reelection purposes. For the election fluctuations to be continuous, voters should be tricked in each election period (Erkişi, 2007: 88). However, after the rational expectations revolution of the 1970's, as the interest in adaptive expectations waned, *rational* began to be accepted. In other words, the view of an electorate, who try to maximize self-benefit by utilizing the knowledge they have, became prominent (Rogoff and Sibert, 1986: 1). In rational opportunistic model, it was postulated that the electorate had *rational* instead of *adaptive expectations*. In rational opportunistic model that stresses the *limited validity of the Philips curve relationship*, voters try to maximize their benefits by using the information they have (Alesina, Roubini and Cohen, 1997: 23). According to the rational model, any of the economic agents, as long as they realize the purpose of the government, would not face the systematic manipulation of the economy before the elections as the traditional model suggested as well (Rogoff and Sibert, 1988: 1). It is not possible for the rational voters to be systematically tricked by the opportunist politicians implementing expansionist economic policies during pre-election periods (Erdoğan, 2004: 68). The real criticism on the traditional opportunist model was concerning the Philips curve formulation, since the voter expectations were formulated adaptively in the traditional model Philips curve (Rogoff and Sibert, 1988: 1). With the introduction of the rational model, the Philips curve analysis lost its functionality, hence narrowing the

application area of the populist policies that the governments implement for a short period of time (Yıldırım, 2009: 36). The rational electorate expectations in the rational model are dependent on the known features of government and opposition parties, past observations of ability shocks and the last tax bill of the government. Thus, especially expectations are not dependent on how much the party has “*deceived*” the voters in the previous elections. Since the ability shock for the government in the rational opportunist model could only be observed by the people with a delay, it is not possible for a “*deceit*” to take place during the period of elections (Rogoff and Sibert, 1986: 3; Alesina, 1989: 58). According to Alesina, Cohen and Roubini, this “*voting of the past*” that the voters perform does not contradict with the rational behavior, because pre-election evaluation of the voters based on the government performance itself is a rational strategy (Alesina, Cohen and Roubini, 1992: 6).

Furthermore, government parties differentiate among themselves based on their “ability levels” as well in the model. According to the model, a more able government refers to a government that could provide a certain level of services with a lower income. This special measurement of ability stresses the *administrative ability* of policy makers, in other words the ability to transfer the state income into public property and services (Rogoff and Sibert, 1986: 2- 3). Naturally, when everything else remains the same, voters would prefer more able governments. According to the model, governments could obtain better information about their abilities than the voters, thus the *asymmetrical information* between the voters and the government party in the model is about the ability level of the government, which is proprietary information (Rogoff and Sibert, 1986: 2- 3). The voters acquire this information later than the government and only by observing the economic outcomes (Alesina, Roubini and Cohen, 1997: 23). Since the voters could observe the competence of the government only after a term due to information asymmetry and the resulting time lag in accessing that information, they evaluate the government by analyzing the economic outcomes during the election period. Thus, the policy makers would act opportunistic right before the elections to appear as able as possible (Erkişi, 2007: 88). During the election period, the government party that is sensitive to the voters would be in an effort to send signals to the electorate to maximize the “*ability shock*” (Sezgin, 2005: 57). These efforts of the government party to appear able in rational opportunist model during each election period are the proof that it acts opportunistic (Saraç, 2005: 55). Rogoff and Sibert (1988) included “*observable ability shocks*” in their model. Observable shocks are not directly connected to the administrative ability of the government in production and distribution of public property that could limit the managing capability of the government and the prime minister (Sezgin, 2005: 57).

In rational opportunist model that belonged to Rogoff and Sibert (1988) but developed by Cukierman and Meltzer (1986), Persson and Tabellini (1990) and Rogoff (1990), the only difference between the government party and the opposition party is that the opposition party, contrary to the government party, does not have a *way or capability to send a signal* to voters that their policies are effective. Thus, the voters have no information on the abilities of the opposition party. The equilibrium in the election period will demonstrate the following features in the model: It is not possible for the government party to fool everybody, if it is aware of its lowest level of ability (shock). When the ability level of the government is at its lowest, this result

would not change even when the government attempts to improve its skills to the highest level. The deception of the voters by the parties increase with the realization intervals of the unobserved ability shocks, while it decreases with an increase in ability level. Parties with middle level ability exhibit the highest level of *deception of the voters* (Rogoff and Sibert, 1986: 2- 3).

Continuation of opportunistic fluctuations is predicted in rational opportunistic model, as in traditional opportunistic model. However, in contradiction with the traditional model, continuous fluctuations are not foreseen in total product and unemployment. In other words, political business cycles would occur in *smaller extent* and *more irregularly* when compared to the political business cycles foreseen by the traditional opportunistic model. Because, the voters are rational, which blocks the possibilities of policy makers to create such fluctuations during the pre-election period. Therefore, political business cycles would appear as the short-term manipulations of *economic policies (policy tools)*, *not macroeconomic magnitudes (policy outcomes)* in rational opportunistic model. Thus, policy makers would find it more appropriate to stimulate fiscal policy and monetary tools, in other words to print money or postpone tax hikes to influence the outcome of the elections (Alesina and Roubini, 1990: 2; Atay, 2006: 23). In other words, in rational model, governments find methods such as postponing tax rate increases and printing money more easy and more rewarding, instead of reducing the unemployment during the periods of election (Alesina, Cohen and Roubini, 1992: 6). In post-election period, similar to the traditional opportunistic model, the governments would turn to contractionary fiscal and monetary policies and they would be able to get reelected when the growth would increase and unemployment would decrease during the period of elections (Aydemir, 2007: 96). This situation is summarized in the table 3 by Alesina, Cohen and Roubini.

In summary, it could be argued that rational opportunistic model substantially focuses on electoral fluctuations generated by *temporal information (knowledge) asymmetry* in government spending, taxes, budget deficits and monetary growth. Hence, Rogoff and Sibert's (1990) model concentrates on the basic role of *temporal knowledge asymmetry* between the voters and policy makers in explaining political business cycle theories (Bahçe, 2006: 140). The asymmetric information between the voters and the government party is about the ability level of the government. In particular this model stresses the fiscal policy that comes into existence as a result of *multi-dimensional signal process*, in other words *political budget cycles* more than outcomes and inflation (Rogoff, 1990: 21; Alesina and Roubini, 1990: 6; Alesina, 1989: 63–64; Alesina, Cohen and Roubini, 1992: 5).

2.3.1.2. Operation of the Rational Opportunistic Model

There are four different models by Cukierman and Meltzer (1986), Rogoff and Sibert (1988), Rogoff (1990) and Persson and Tabellini (1990) about the operation of the rational opportunistic model. Persson and Tabellini's (1990) approach is different from Cukierman and Meltzer (1986), Rogoff and Sibert (1988) and Rogoff's (1990) approaches. In Persson and Tabellini's (1990) model, the ability of the government is determined by its management ability of the relationship between inflation and unemployment, while in Rogoff and Sibert (1988) and Rogoff's (1990) approaches it is associated with the government's financing of the public expenditures.

Table 3. Empirical Implications of Opportunistic Models

Traditional Opportunistic Model	Rational Opportunistic Model
1- Regular multi-year fluctuations in unemployment and growth: While growth is above normal in the year of elections or 2 years before the elections, unemployment is below normal. After elections, growth decreases while the unemployment increases.	1- There are no regular multi-year fluctuations.
2- While an expansionist effect is observed in the election year or two years before the elections, during the election year or two years after the elections contractionary effect is observed in monetary and fiscal policies.	2- While an expansionist effect is observed in monetary and fiscal policies two or three quarters before the election year, two or three quarters after the election year contractionary effect is observed; fluctuations are smaller and last shorter than the traditional opportunist model.
3- Inflation starts to increase just before the elections and continue to increase for a while after the elections, then it decreases.	3- Inflation starts to increase just before the elections just like the traditional opportunistic model and decreases after the elections. However in rational model, the effect on inflation is smaller and short-lived.
4- The votes of the government increase in the election year along with the increase in growth and the decrease in unemployment.	4- The votes of the government increase along with the increase in growth and the decrease in unemployment during the previous years; special case of this situation is dependent on the knowledge of the voters.

Resource: Alesina, Roubini and Cohen, 1997: 36.

Rogoff and Sibert (1988) argued that government would create a better impression on the voters if they finance the public expenditures with seignorage, which is less understood by the voters, or borrowing instead of taxes (Erkişi, 2007: 93). Budget constraint in the government competence model created by Rogoff and Sibert (1988) with *government budget* in mind is expressed as follows:

$$g = \tau_t + s_t + \varepsilon_t \quad (6)$$

Here, g represents the government expenditures for the commodities, services and transfers that are determined externally and in need of financing; τ_t represents lump-sum taxes, in other words non-distortionary taxes; s_t represents the seignorage revenues that increase the deterioration costs of the economy; ε_t represents the competency term of the government. Here, competency should be interpreted as the capability of the government to reduce the expenditures in the budgetary process. That means that the amount required for the expenditures should be financed by a very small proportion of the total revenues. The competency term has the structure of moving averages (MA). Nonetheless, Rogoff and Sibert (1986) assumed that u_t would get any value between the minimum level (normalized at zero) and the maximum value for competence shocks. The structure of the knowledge was similar

to the model presented by Persson and Tabellini (1990). Now, let us assume that elections will be held at the end of a period t . The voters could observe g and τ_t , however they could not observe s_t and ε_t . Seignorage (inflation) could be observed with a one term delay. The motivation of policy makers, structure of the elections and the rationality of voters are similar to the Phillips curve model. In this model the utility function for the electorate could be expressed as follows:

$$U = E\left\{\sum_{t=0}^{\infty} \beta^t u_t\right\} \quad (7)$$

and

$$u_t = \bar{x} - \tau_t - s_t - \Delta(s_t) \quad (8)$$

In equation 8, \bar{x} is the income level determined externally and $\Delta(s)$ is the distortionary cost of seignorage; thus, for $s > 0$ and $\Delta''(.) > 0$, $\Delta(0) = 0$, $\Delta'(.) > 0$. As per this utility function, good-natured social policy and plan makers should never use seignorage to finance government expenditures, because seignorage has a distortionary effect, while the lump-sum tax has not.

Rogoff and Sibert (1986) demonstrated that the discriminative equilibrium always exist. In this equilibrium, the government party selects certain positive values of seignorage for $u = 0$, other than the minimum realization of u , for each u_t . In other words, all policy makers with the exception of the politician with the lowest competence, disrupt the fiscal policy before the elections. Here, the basic foresight is that all policy makers apply sufficient levels of seignorage; only the politician with the lowest competence would not be able to hide his lowest level of competence. Thus, each policy maker should select optimal policies. Also, the foresight of this model is similar to the previous discussions on the Philips curve. The only difference is that the government with the highest competence does not apply seignorage. In brief, in Rogoff and Sibert's (1988) model, taxes are below the active level, inflation is above the optimal level in pre-election period. In an alternative interpretation of this model, it is possible to see s_t as budget deficit, instead of seignorage. With this interpretation, the model would be more difficult analytically, since inter-temporal budgetary constraints would have to be considered. However, the basic foresight would still be valid: During the election year, taxes would be lower than the effective level, while the budget deficit would display higher levels (Alesina, Roubini and Cohen, 1997: 28- 31).

Rogoff (1990) provided a model that stressed the *distribution of government expenditures* rather than seignorage. In this model, the government benefiting from the information asymmetry between the voters and the government, by changing the composition of the budget in favor of current consumption expenditures, tries to make a positive impression for the voters (Erkişi, 2007: 94). According to Rogoff, the budgetary constraint of the government is as follows:

$$g_t + k_{t+1} = \tau_t + \varepsilon_t \quad (9)$$

In equation 9, g_t represents government expenditures including commodity,

services and transfer expenditures; and k_{t+1} represents one term backlogged public investments. Thus, public investments are decided upon in the period t , however becomes visible and productive in period $t+1$. Competency term (ε_t) behaves just as it is explained above. Rogoff presented two types of models: with a low and high u_t values. The reason of the asymmetric information in Rogoff's (1990) model is the fact that the voters could observe g_t and k_t in period t , but they could not observe k_{t+1} . Thus, when they vote at the end of the period t , they are not aware of ε_t and k_{t+1} . According to this model, the government would send a signal to the voters that it is competent by determining k_{t+1} under the level of efficiency and g_t over the efficiency level. Therefore, competent policy maker would cause a budget deficit by relocating government expenditures to transfer expenditures and more visible programs, instead of investment projects.

Finally, Cukierman and Meltzer (1986) presented another competency model in accordance with pre-election policy distortion. In their model, governments differentiate in *predicting* the future. Similar to the previous models, due to the asymmetric information between the voters and policy makers, governments would be willing to manipulate the economy during pre-election period. Cukierman and Meltzer (1986), instead of discussing the specific empirical implications of political business cycle theories, concentrated more on the discussion of the "cost of democracy" in the absence of political rules (Alesina, Roubini and Cohen, 1997: 28- 31).

Persson and Tabellini (1990), on the other hand, explained political business cycle theories using the "moral hazard" and "adverse selection" based on the "career concern model" by Lohmann (1996) and Holström (1982) (Persson and Tabellini, 2000: 420- 425). When explaining political business cycles, Persson and Tabellini (1990) utilized the monetary model of inflation-unemployment equilibrium. In their model, policy makers and voters have the same utility function. Thus, policy makers act sensitive to government expenditures, inflation and unemployment and display utilitarian behavior (Özkan, 2010: 97).

2.3.1.4. Rational Partisan Model

Upon testing of the deductions of Nordhaus' (1975) traditional opportunistic model in USA by McCallum (1978), Paldam (1979), Golden and Poterba (1980) and Hibbs (1987) and after the findings of these studies supported these deductions, Alesina (1987) and Alesina and Sachs (1988) moved towards the partisan theory of political business cycle theories and concentrated on the effects of *unexpected policies* (Alesina, Cohen and Roubini, 1993: 2). Hence, Alesina (1987) and Alesina and Sachs (1988), in their studies based on Hibbs' (1987) model, which argued that *parties prefer different policies due to their different formations*, proposed the *rational partisan model* including rational expectations of macroeconomic politics using the Second World War data in the USA (Alesina, Roubini and Cohen, 1997: 51; Alesina and Sachs, 1988: 64). Similar to Cukierman and Meltzer (1986), Rogoff and Sibert (1988), Rogoff (1990) and Persson and Tabellini (1990), rational partisan model accepts that the voters are *rational*, therefore they are not *short-termist and myopic*. In other words, the model argues that rational and smart voters perceive the differences between parties accurately and vote accordingly. In that respect, for the first time it

was implied that the possibility of the influence of economic policy (monetary policy) on the economic activity is reduced directly and predictably and the rational electorate could not be deceived systematically (Alesina and Roubini, 1990: 2). The model also stresses that, due to *asymmetric information, insufficient monetary policy control mechanisms and the temporary nature of these controls*, voters could not control the changes in policy targets accurately. Thus, within the hypothesis of rational expectations, the *asymmetric information* between the government party and voters results in an *uncertainty*, giving an opportunity to the government party to warn the economy via *unexpected monetary developments*. According to Alesina (1987), when the voters are rational and have full information, in other words *when there is no asymmetrical information*, government party would have no chance to stimulate the economy in the pre-election period, therefore would have to implement only the necessities of their ideological approaches. Thus, it is assumed in the rational partisan model that the voters, albeit rational, *do not have full information* about the government (Erkişi, 2007: 117).

Different from the traditional and rational opportunistic models, in rational partisan model, it was argued that political parties are interested in the natural outcomes of their policies, since *parties have different objectives and intentions*. Thus, it was assumed that each party represents constituencies with different interests and each party has a different objective function as a policy maker (Alesina, 1987: 651-652; Alesina and Sachs, 1988: 64; Alesina, Cohen and Roubini, 1993: 2). In rational partisan model, both party assign different weight to unemployment and inflation as “*economic evils*.” Parties are distinct especially in two significant interests: *optimal policies* of the two parties are different from each other. Therefore, these two parties would want to implement different political regulations and would have different intentions in swerving from their political undertakings. Hence, the rational partisan model, in contrast with the opportunistic models, assumes that different parties would act differently in the first two years of their term in government and their policies would change more or less in the second half of their term (Alesina, 1987: 652; Alesina and Rosenthal, 1989: 373- 374). Thus, the most significant division between the traditional partisan model and the rational partisan model is whether the real effect of partisan policies on the economy continues during the *whole term* of the governments or it is *temporal*. Traditional partisan model argues that effects, or political business cycles, are observed during the whole term of the government, hence continuous; while rational partisan model proposes that the effects are temporal and only exist until the second term (Franseze, 1999: 4). The model notes that left-wing parties have the tendency to “*extremely expand*” the economy during the first half of their term in the government. Since the left-wing parties represent a *middle income constituency*, which is dependent on wages, they would try to reduce *unemployment* that would affect this group of people adversely. Right-wing parties representing the rich voters on the other hand, would prioritize the “*fight against inflation*” to prevent capital losses (Alesina, Cohen and Roubini, 1993: 4). In this respect, rational partisan model is similar to the traditional partisan model of Hibbs. Empirical studies demonstrated that European left-wing parties and the Democrat Party in the USA were against unemployment, while European conservatives and the Republican Party in the USA prioritized inflation.

The model by Alesina (1987) and Alesina and Sachs' in (1988), substantially analyzed the interaction between *two parties* with different political objectives mentioned above and the rational *wage arbiters* with future expectations in the game theory model developed previously by Kyland and Prescott (1977) (Alesina, 1987: 652- 653). Thus, similar to the rational traditional model, rational partisan model was shaped as a *game theory approach* to the positive theory of macroeconomic politics (Alesina and Roubini, 1990: 1). Therefore, this model is described as *neo-classical economy approach* (Garratt, 1998: 19). In the model, economic agents, or wage arbiters, initially set the nominal wages. Policy makers follow the economic agents and although they tend to announce low inflation initially, they could cause *unexpected inflation* as a result of their efforts to reduce unemployment later on. Wage arbiters, being rational and informed, would realize the intention of policy makers and would determine the nominal wages at a relatively higher level to compensate for the *surprise inflation* intentions of policy makers.

Elections are considered to be one of the most significant sources of uncertainty in an economy in the rational partisan model. Forwhy, the voters do not exactly know which party would win in the next elections. Therefore, the policies of the newly elected party are not predicted accurately before the elections, since the voters are not absolutely sure about the winning party ehrrn they form their expectations. Thus, the voters would be in an *average inflation expectation* based on the policies of the party that they predict to become the government. The fact that inflation rates would not be fully predicted would allow the elections to determine the inflation rate (Alesina, 1987: 652- 653). For example, let us assume that the right-wing party has won the elections. If the voters have predicted the left-wing party to win the elections and built their expectations accordingly, they would expect that average inflation rate would be over the actual inflation rate. But, the right-wing party has won the elections, therefore inflation will be lower than expectations. Thus, the economy will face an unexpected reduction in inflation rate. In the existence of nominal rigidities, financial decisions are taken before the elections, and could not be immediately reorganized after the regime changes that occur after elections. This demonstrates that certain real effects on the outcome and unemployment and the size of these effects are positively related to the differences in party policies. Consequently, if a right-wing party becomes the government, inflation would remain lower when compared to a left-wing government, while in a left-wing party government, as a result of the effects of expansionist policies, economic activity levels would increase beyond their natural levels and when the expectations are reorganized, inflation would increase to higher levels (Alesina, 1989: 61- 62). As a result, according to Alesina, a "*surprise*" election result would cause a *large partisan fluctuation*, while an "*expected*" election result would end up with a *smaller fluctuation* (Özkan, 2010: 81). A time-consistent but sub-optimal inflation rate would stay higher under a left-wing government even after the economic activity would turn back to its normal level in the rational partisan model (Alesina and Roubini, 1990: 9). A reason for that is the time-inconsistency problem of Kydland and Prescott (1977) and Barro and Gordon (1983) as explained before. According to the time-inconsistency problem, the voters are aware of the fact that the policies of left-wing governments would decrease unemployment while causing inflation, since the left-wing governments are plausible in fighting unemployment. Therefore, the people

would not credit the announcement of a party that is renowned for its fight against unemployment, to reduce the inflation. This is due to the fact that, even when the inflation is indeed reduced, the main objective of the left-wing party, low unemployment, could create a surprise inflation in the future. Thus, even though the left-wing party announces low inflation, voters would target a high inflation due to the characteristics of this government. Under the circumstances, the best option for the left-wing party is to conform with the expectations and avoid recession. As a result, the economy would prevail under high inflation. Hence, a government, proponent of an expansionist policy, could cause rising inflation during the second half of its term in government (Telatar, 2004: 448- 449).

The outcome caused by the uncertainty of election results and the fluctuations in inflation would occur as rational partisan political business cycles in the rational partisan model. This fluctuation displays characteristics that are different from Nordhaus' traditional opportunist model, which is based on irrational expectations, where the voters were not fully informed (Alesina, 1987: 653) and Hibbs' traditional partisan model. In Nordhaus' and Hibbs' models, the differences in the outcomes and unemployment are *continuous*. For example, Hibbs' partisan model implies *systematical and continuous differences* in inflation/unemployment combinations preferred by different political parties and these demonstrate an actual increase during the terms of different governments (Alesina, 1989: 62–63; Alesina and Roubini, 1990: 1). Contrary to traditional models, in the rational partisan model, the fluctuations in growth and unemployment are *short-term* and realized immediately after the change in government. Therefore, the claim of “systematic fluctuations in outcome and unemployment” by the traditional models is not persuasive, because, even though the politicians attempt to implement expansionist policies before the elections, they could not succeed due to the fact that the rational electorate would punish the expansionist policies implemented by the governments during pre-election periods. Furthermore, different governments deal with different problems as the elections approach (Alesina, 1989: 59). The basic reason of the uncertainty in election results despite the rational electorate is the changes in voter preferences that could not be predicted accurately beforehand. The reason for the voter preferences to change is the changes in economic outcomes. For example, a high inflation period in the economy would increase the degree of eschewal of the people from inflation, therefore could result in an increased support for right-wing parties that implement anti-inflationist policies (Alesina, 1989: 62–63). Another reason for the uncertainty of election results is the changes in the size of the electorate that would vote. In brief, Alesina has developed Hibbs' partisan model by stressing the difference between *expected and unexpected inflation* (Rogoff, 1988: 54).

2.3.1.5. Operation of the Rational Partisan Model

Alesina (1987) based the rational partisan model on the *two-party system*. The significance given to inflation and unemployment by the two parties is distinct in the model. As mentioned previously by Kydland and Prescott (1977) and Barro and Gordon (1983), the relationship between the parties and rational wage arbiters is modeled in a “game theory structure.” Economic expectations in the model are defined with an annexed Phillips curve:

$$y_t = \bar{y} + \gamma(\pi_t - w_t) \quad (1)$$

In the equation above, w_t represents the growth rate in nominal wages. Nominal wages imply that they are indexed to the inflation. Agreements that set the nominal wages are determined in the beginning of the term and are valid throughout the term. Hence, sticky wages are valid within the term. In a competitive labor market, for the real wage that clean the market to stay at that level, the rate of increase for the nominal wages should be equal to the inflation rate. In non-competitive labor markets, the unions demand wages to maximize the welfare of their members. Therefore, workers' unions target the regulation of the wages to compensate for any changes in inflation. Since the wages are regulated in the beginning of two year terms, unions, in other words wage arbiters, determine the wage level that is equal to the inflation expectations. Under these circumstances, the wages would be as follows:

$$\pi_t^e = w_t \quad (2)$$

π_t^e equals to the expected inflation rate in the beginning of the period t. If we integrate equation 2 into the equation 1;

$$y_t = \bar{y} + \gamma(\pi_t - \pi_t^e) \quad \gamma > 0 \quad (3)$$

would be obtained. Equation 3 gives the Lucas' supply function. In this function, y_t represents outcome growth rate; π_t , the inflation rate; π_t^e , the expected inflation rate; y_t represents the outcome growth rate that is compatible with the natural unemployment rate. This equation could only represent the supply portion of the economy. Demand portion was not fully included in the model, since the government party could only directly determine the inflation (Alesina, Roubini and Cohen, 1997: 52- 65; Sezgin, 2005: 69; Özkan, 2010: 83- 84).

The government party would determine the inflation rate, $\bar{\pi}_k$ that it would undertake according to wage levels established based on the inflation. However, both parties would determine another inflation rate that maximizes their utility function based on the inflation rate they undertook. This inflation rate would be π_R^* for the right-wing party, and π_L^* for the left-wing party. Thus, the inflation rate would be as follows:

$$\pi_t = \pi_k^* = \bar{\pi}_k + (b_k \lambda / 2) \quad (4)$$

In equation 4, π_t represents inflation rate in period t; π_k^* , the optimal inflation rate that right-wing (π_R^*) or left-wing (π_L^*) party considers to maximize the utility function; and $\bar{\pi}_k$ represents the inflation rate announced by the right-wing or the left-wing party. Both right-wing and left-wing parties undertake an inflation rate ($\bar{\pi}_k$) in their party programs. However, government parties, to maximize their utility function, would select another inflation target (π_k^*), different from the inflation target they have declared. The term " $b_k \lambda / 2$ " in equation 4 is the expression of the difference between the undertaken inflation and the inflation considered by the party to

maximize its utility function and this term demonstrates the benefit that the government party would gain as a result of the unexpected inflation. Let us assume that the left-wing party (L) has undertaken an inflation rate ($\overline{\pi_L}$) that would equalize the growth rate for period t (y_t) to the natural growth rate for period t (\overline{y}). However, in the following period, the government party would not keep its inflation rate undertaking, and to increase the growth rate beyond the natural growth rate, it would target a higher inflation rate (π_L^*). Thus, it would carry the economy to a higher level of production ($y' > y_t$), causing a higher rate of inflation ($\pi_L^* > \overline{\pi_L}$) (Erkişi, 2007: 122). Thus, determination of the inflation rate by the government parties higher than the rate undertaken is a result of *time-inconsistency*. Time-inconsistency in this model derives from the violation of the political program by the politician while in government. Here, the most important question is why the politician has the drive to deceive the people. The basic reason for that is the fact that *time-consistent solution has lower benefits for the government when compared to time-inconsistent solution*. In other words, policy makers benefit from the unexpected inflation (Özkan, 2010: 84-85). Based on the model, there could be three possible reasons for the government to increase the growth over the natural growth rate by creating unexpected inflation: (1) Workers' unions could establish very high real wages to maximize their members' welfare without considering its effects on unemployment. Government parties would have to consider other unemployed as well as the union members and would aim for a higher growth to provide the wages negotiated by the unions for others as well. (2) Distortions in competitive labor market. For example, income tax could lower manpower supply and could cause high natural unemployment and low natural growth rates, and this low rate growth could make the government to select growth via inflation shocks. (3) Diversions from perfect competition in commodity markets. Producers in business under monopolistic competition would supply less commodities when compared to perfect competition markets. This would cause government to intervene in the economy to prevent troubles in the market (Telatar, 2004: 454- 455).

Again, based on the model, outcome levels that were time-consistent in the beginning, but became time-inconsistent in time, could be written easily by changing the utility function of each party:

$$u^c(y) = b_L \overline{y} \quad (5)$$

$$u^f(y) = b_L \overline{y} + b_L \gamma / 2 \quad (6)$$

In equations 5 and 6, c and g symbolize time-consistent and time-inconsistent misleading solutions respectively. Here, since $u^c(y) < u^f(y)$, left-wing parties seem to be more prone to deceiving the constituency (Özkan, 2010: 84- 85). According to Alesina (1987) and Alesina and Sachs (1988), two parties of the model has different priorities: while right-wing parties (R) prefer *low inflation* and *high unemployment*, left-wing parties are for *low unemployment* and *high inflation*. In fact, although both parties agree that inflation is bad, left-wing party is more sensitive for the cost of unemployment when compared to the right-wing party. Thus, left-wing party has a higher tendency to *increase growth by creating unexpected inflation* than the right-wing party. Furthermore, in addition to unemployment, both parties have different

views on optimal inflation (Alesina, 1987: 655; Sezgin, 2005: 70). A quadratic specification was adopted for the objective functions of both parties and the *loss function (cost function)* for both parties were determined as follows:

$$Z^D = \sum_{t=0}^{\infty} q' \left[\frac{a}{2} (m_t - \psi(t))^2 + \frac{\bar{b}}{2} (yt - \phi)^2 \right] \quad (7)$$

$$Z^R = \sum_{t=0}^{\infty} q' \left[\frac{c}{2} (m_t - \psi(t))^2 + \frac{\bar{d}}{2} (yt - \phi)^2 \right] \quad (8)$$

In equations 7 and 8 above, m represents the monetary growth rate, y is the GDP growth rate, a , \bar{b} , c , ϕ , \bar{d} are non-negative parameters, q is the positive but smaller than one, negligible discount rate, which is the same for both parties (Alesina and Sachs, 1988: 66; Bahçe, 2006: 150). Equations 7 and 8 demonstrate that loss functions for parties are transformed to be explained by inflation-unemployment trade-off instead of Lucas supply function and in this form, they are identical with the standard Philips curve. Since the parties would adopt different trade-off ratios in rational partisan model, optimal inflation rate would be different for the two parties (Alesina, 1987: 656; Sezgin, 2005: 70). As a result, the inflation rate would be higher during the government term of the left-wing party when compared to the right-wing party government. Right-wing party, on the other hand would implement anti-inflationist policies, since it assigns more importance to price stability. That is not because right-wing party refrains from or does not desire growth, but because it targets price stability instead of high growth (Erkişi, 2007: 124- 125).

The operation of rational partisan model differs when the election results are ambiguous. Under such circumstances, economy is defined as primary and secondary periods. Periodical differentiation of the economy could be expressed as below:

1. Agreements are signed in the first period.
2. Elections of the first period are held.
3. The winning party elects the inflation rate for the first period.
4. Growth is realized in the first period.
5. Agreements are signed for the second period.
6. The party that won in the first period elects the inflation rate for the second period.
7. The growth is realized in the second period (Erkişi, 2007: 125).

The first period denotes the period of elections and the second period denotes the period without elections in the model. While the possibility of the election of the left-wing party is P , the possibility of the election of the right-wing party is $1-P$. When it is assumed that the possibility that P would get 50% of the votes is high, and when the voter is aware of each party's objective function, the voter would determine the inflation expectations for the first period based on his optimal inflation levels.

$$\pi_1^e = P\pi_L^* + (1-P)\pi_R^* \quad (9)$$

Based on the above equation, there are two possible election results and first period economic results for each of the two election results are displayed in the table below.

Party Elected	Left-wing	Right-wing
Inflation	$\pi_1 = \pi_L^*$	$\pi_1 = \pi_R^*$
Outcome	$y_1^L = \gamma P(\pi_L^* - \pi_R^*) + \bar{y}$	$y_1^R = \gamma(1 - P)(\pi_L^* - \pi_R^*) + \bar{y}$

Inflation expectations are predicted inaccurately in the first period of the economy due to the uncertainty created by the elections. However, during the second period, inflation expectations are predicted accurately due to the lack of election uncertainty and the adjustment process to the real inflation rates created by the winning party commences. In this case, if the left-wing party wins the elections then $\pi_2^e = \pi_R^*$, if the right-wing party wins then $\pi_2^e = \pi_L^*$, and if it is assumed that both parties are in the government, then the growth rate would be equal to the normal value. Thus, when there is no uncertainty about the election results, in other words when there is certainty, a fluctuation occurs due to $y_2 = \bar{y}$. Since voters have *inflation expectations based on the weighted average* of the expected policies of political parties in rational partisan model, when there is an uncertainty about the election results, a fluctuation that would increase the inflation above expectations would occur and as a result the outcome would be realized above the real value (Alesina and Rosenthal, 1989: 373- 398; Özkan, 2010: 85- 86). Finally, in the first period where the left-wing party won the elections, inflation is higher than the expected inflation and growth is above the natural rate. On the other hand, in the first period where the right-wing party won the elections, inflation is lower than the expected inflation and growth is below the natural rate.

As a result, the real reason for the political business cycles in the rational partisan model is the uncertainty of election results. Figures 3 and 4 show that, in the first period where left-wing party is in government, inflation is higher than expected and production increase is above natural ratio. In the first period where right-wing party is in government, inflation is lower than expected and growth is at the natural ratio. The size of the deviation of growth from its natural rate is positively related to the differences in the approaches of the two parties. As much as the optimal inflation rates and drives to increase growth of both parties are different, the deviation of growth from its natural level would be as large. Therefore, higher the ideological polarization between policies, larger the economic fluctuations that result would be. The degree of surprise in the outcome of the adopted policies also influences the size of the fluctuations in production. For example, as the winning probability of the left-wing party, P gets higher, the recession that would be caused by the winning of right-wing party would get higher, because the inflation shock would be lower than expected (Telatar, 2004: 463).

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Chapter 44

The Use of Seyahatname (Travelogue) by Evliya Çelebi in Teaching 4th Grade Social Sciences

Turhan ÇETIN & Ayşegül ÇELİK

INTRODUCTION

While the relationship between Social Sciences and Literature is a current topic, it has existed for ages in the professional literature. Sohamn Friedrich Herbart, an education philosopher, stated in the early 19th century that teachers should associate history with literature to encourage positive social attitudes in children (Quoted from Rippa by Doğanay, 2003).

The interdisciplinary approach facilitates cultural transmission which is one of the most important components of the teaching of social sciences. It also enables historically conscious new generations to adapt to the modern times, as a result of which the goal of modern education to secure the future by conserving the past is achieved (Quoted from Kavcar by Öztürk, Keskin and Otluoğlu, 2012, p.35).

The use of literary works in the social sciences course significantly contributes to the formation of national consciousness and awareness of national history, which are two of the main goals of the field.

Seyahatname (Travel book) by Evliya Çelebi is a source that can be used to a great extent for educational gains in the social sciences curriculum. An analysis of the social sciences curriculum shows that this work is appropriate for equipping students with the content, abilities, and values that the units of the course offer. Travel books (Seyahatname) have long been the most important evidence for a kind of globalization, which has been limited in the past. If travel books are critically studied and comparatively used in the class, our students could acquire many citizenship skills and realize a number of values (Ata, 2013, p. 164).

In this respect, there are many reasons to incorporate Evliya Çelebi's Seyahatname in the social sciences curriculum. This work is quite comprehensive, thus its use in the course by employing various teaching methods and techniques not only facilitates the achievement of the class goals, but also the acquisition of some skills and other aspects.

Travel books are crucial in all disciplines of social sciences. In fact, Ahmet Mithat Efendi talks about their importance: "There is a kind of prose that foreigners refer to as 'travel book' (seyahatname) from which I have a lot to learn. It makes you feel like you have been to a city without having been there. You learn everything about it. Not even a native of that land can see or know it that well no matter how much he wants" (Sağlam, 2013, p.25).

MATERIALS AND METHODS

This study aims to look into the texts in Evliya Çelebi's Seyahatname by taking into consideration the targeted gains of the 4th grade social sciences curriculum.

Accordingly, the purpose of the researcher is to focus on this work in terms of equipping students with the targeted notions of the social sciences course.

Research Model

The qualitative research model was implemented. Qualitative research is an effort to understand phenomena as part of a context and interaction (Quoted from Patton by Merriam, translation by Turan, 2013, p. 14). A case study pattern was employed within the qualitative method. In this respect, a case study pattern was used in the study. The primary feature of a case study is that it delves into one or multiple situations (Yıldırım and Şimşek, 2013, p. 83).

Data Collection Tool

Document review which is a part of qualitative research was used. In the case that direct observation and interviews are not possible in qualitative research or when the validity of a study is intended to be increased, written and visual materials regarding the research question can also be included in research (Yıldırım and Şimşek, 2013, p. 217).

Study Group

The purpose of the study is to create a 4th grade social sciences curriculum with 10 volumes of Seyahatname selected based on the maximum variation sampling method, which is a part of the purposeful sampling method. The purpose of maximum variation is to create a relatively small sample and represent to the maximum the variation of the individuals that may be involved in the problem that is tackled in this sample (Yıldırım, Şimşek, 2013).

Data Analysis

In data analysis, descriptive analysis, which is the analysis unit of qualitative research, was used. In descriptive analysis, data were summarized and interpreted based on previously set themes (Yıldırım and Şimşek, 2013, p. 256).

Validity and Reliability

The categories and codes created in order to establish the validity and reliability of the research were studied by domain experts.

Data Collection

Each paragraph of 4000 page long Seyahatname by Evliya Çelebi were studied during data collection. Categories and codes were created based on the curriculum gains. The focus has been on 4 units and 4 gains. 4 categories and 8 codes were created to that end. Data obtained were assessed through descriptive analysis.

RESULTS

1. Findings Regarding the Unit “I Learn My Past.”

1.1. Findings concerning the gain that there is evidence that “Cultural elements have been transferred to today from the past through transformations.”

1.1.1. Social Relations Category

1.1.1.1. Cultural Features Code

Trabzon: First from the Zaganos Gate to the Kavak Square in the country, all pashas (generals) play jereed (javelin throwing) on holidays with the soldiers under their command. As it is a large square, they put three masts tied one above the other right in the middle. There is a gilded ball on top of this structure. All warriors playing

the game dismount and throw javelins at it. Those who hit the target are rewarded (Kahraman and Dağlı, 2013, p. 65), (Volume 2).

İznik Tiles: The exact number of shops is 600. Though there is no masonry covered bazaar, there are all kinds of valuable items. There are 9 master (kâşi) tile workshops. There used to be 300 workshops during the time of Ahmed which were ruined due to oppression (Kahraman and Dağlı, 2013, p. 4), (Volume 3).

Uşak: Carts are constantly loaded and unloaded here; it is a big and busy city. This is like the station of the Anatolian Province's camels and carts. Even though it is a very small city, it is prosperous. As it has merry surroundings, bazaars literally bustle with people. And famous Uşak carpets are woven only in Isfahan of the Persians and Egypt, yet distributed everywhere (Kahraman and Dağlı, 2013, p. 23), (Volume 9).

2. Findings Concerning the Unit “Where We Live”

2.1. Findings regarding the gain that “He makes inferences about the geographical features of where he lives by looking at legends, sagas (dastans), stories, folk songs, and poems.”

2.1.1. Category of Geographical Features

2.1.1.1. Code of Rivers and Lakes

İstanbul Lake Terkos Hunting and Fishing Place: This is where hawks, Euroasian bitterns, geese, and ducks are hunted (Kahraman and Dağlı, 2013, p. 286), (Volume 1).

Bursa Nilüfer River is such that it never lets one cross it in spring. In the direction of Kiblah, it runs through Mount Keşiş, the Keteli Mountains, and the Kestel Mountains going through the Fildar Plain. It waters thousands of hamlets, arable lands, woodlands, and beds of roses (Kahraman and Dağlı, 2013, p. 3), (Volume 2).

The Kızılırmak Range: There are prosperous villages in the mountains. The Grand Kızılırmak River flows into the sea there. The source of this river is Mount (...) in the Ankara Sanjak (Administrative Division of Ankara). It is referred to as the Kızılırmak (Red River) as it crosses the Çasnigir Bridge, goes through the Osmancık Fortress, Hacı Hamza, and flows near Tosya, going into the sea in this region resembling blood. It is a crazy river (Kahraman and Dağlı, 2013, p. 52), (Volume 2)

The Çarşamba Pazarı Stream passing before the city of Amasya discharges into the Black Sea in the east of Samsun. It is a long river that does not allow passage (Kahraman and Dağlı, 2013, p.53), (Volume 2).

Lake Sapanca covers 20 miles of its vicinity. There are 76 villages scattered all around it. Locals have reddish faces as they drink the water of this lake. They have plenty of crops but no vineyards, and also lots of gardens. Around this lake grow melon and watermelon, which can only be transported with a donkey. They make delicious ‘zerde’ (a dessert) there and have melons. There are about seventy-eighty boats and canoes in the lake. They carry people, logs, and other items from village to village and make profits by catching 70-80 fish species. The lake has a depth of 20 fathoms and is very clean and pure. Women of the villages on the banks of this river wash their clothes three times without using any soap, and everything becomes immaculate like white muslin. When they soak a loaf of bread in water and knead it, it gets as soft as cotton (Kahraman and Dağlı, 2013, p. 112-113) (Volume 2).

The Fırat Stream: Fırat, a long river, runs right through the middle of the

Erzurum Plain. It surfaces near rocks of the Dumlu Baba Sultan visiting area in the east of Georgia. It then heads west, creating miscellaneous wetlands, lakes, gulfs, and puddles in the Erzurum Plain and harboring a hundred thousand Baghdad cranes. It passes near the Kan Village, flowing near the Kemah Fortress (Kahraman and Dağlı, 2013, p. 132), (Volume 2).

Lake İznik is big one with a 60 mile circumference and is located in the west of the fortress. Rivers from seven places flow into it, and a tributary runs towards the gulf of the town of Gemleyip (Gemlik). The lake is decorated with 45 villages with vineyards, gardens, mosques, baths, and small bazaars and has 30 fishing boats. The depth equals at least 20 fathoms. The entire vicinity can be covered by a horseman within a day (Kahraman and Dağlı, 2013, p. 4), (Volume 3).

Istanbul Lake Küçükçekmece: It is a small lake adjacent to the Istanbul Sea. Its circumference is 7 miles, but it is not so salty. Eel, European flounder, and gray mullet are favorites and very delicious (Kahraman and Dağlı, 2013, p. 217), (Vol. 3).

Istanbul Lake Çekmece: The nautical distance between this lake and Lake Küçükçekmece is 12 miles. The circumference of Lake Çekmece equals 12 miles, and 7 streams in its vicinity flow into it. The first streams to join Lake Çekmece are Azatlı, Çatalca, Baba Nakkaş, and Kovukdere (Kahraman and Dağlı, 2013, p. 218) (Volume 3).

The Grand Manavgat River gathers its water from the Alaiye and Seydişehir mountains and is long. In that location, it flows into the Mediterranean in about an hour (Kahraman and Dağlı, 2013, p. 170) (Volume 9).

2.1.1.2. Code of Climate

Adana: As this city is located on the sea coast, the air is slightly heavy, yet the 6-month-long winter is very mild. In the other half, i.e. in July (summer), all the eminent people of the city, youngsters and elderly, leave for the Payas Mountain Highlands to the east (Kahraman and Dağlı, 2013, p. 39), (Volume 3).

Water and weather of Urfa: Water and weather are perfectly moderate; summer is like summer, and winter is like winter. Snow falls in winter, and rains of grace come down in spring (Kahraman and Dağlı, 2013, p. 118), (Volume 3).

Kayseri: As the city is located on the foothills of Mount Erciyes, all the houses face the north, which is why it has such a balmy weather, reminding one of the morning (saba) winds, that a soul waking up at dawn feels the breeze (Kahraman and Dağlı, 2013, p. 139), (Volume 3).

2.1.1.3. Code of Mine

There is a high yellow mountain in the town of Sarıyer, which is in the Black Sea straits. Vineyards and gardens are all over the mountain. There is a pure gold mine in a cave that is near the coast, in the east of the mountain (Kahraman and Dağlı, 201, p. 24), (Volume 1).

On the coast of the Gulf of İzmit is a famous saltern. As salt here is tasty, there is a salt-duty officer (Kahraman and Dağlı, 2013, p. 45), (Volume 2).

Gümüşhane: This city had more goods and silver utensils and tools than anywhere else. Even the poorest person there had silver shallow pans for table. Because it is home to silver mines, it is referred to as “Gümüşhane” (Silver house) (Kahraman and Dağlı, 2013, p. 221) (Volume 2).

2.1.1.4. Code of Agricultural Products

The Bursa Sobran Recreation Area: It is a high area with no buildings; it is totally decorated with chestnut trees (Kahraman and Dağlı, 2013, p. 18) (Volume 2).

Sivas: This city has plenty of wheat, rye, chickpea, and lentil (Kahraman and Dağlı, 2013, p. 158) (Volume 3).

Fethiye: Sweetgum trees are as small as poplar trees; they cover every acre. People of the area, regardless of the age, wield crooked and sharp iron tools to tear tree barks along their way and stuff them into their sacks. Yet, they do not scrape the whole bark off a tree so it does not get dry (Kahraman and Dağlı, 2013, p. 158-159) (Volume 9).

3. Findings Regarding the Unit “From Production to Consumption”

3.1. Findings concerning the gain that “Needs are associated with professions.”

3.1.1. Category of Economy

3.1.1.1. Code of Qualified Workforce

Mudurnu: The number of shops is (...), most of which sell needles. Loads of needles are sent from this city to entire Anatolia and other cities (Kahraman and Dağlı, 2013, p. 197) (Volume 3).

Bitlis: Whether they use çuka (a kind of cloth) or other cloths, tailors wield their needles and sew so well that seams are never visible (Kahraman and Dağlı, 2013, p. 94) (Volume 4).

3.1.2. Social Relations Category

3.1.2.1. Code of Getting a Profession

Messengers: 400 privates. They are responsible for the delivery of all Muslim veterans' letters to their homeland (Kahraman and Dağlı, 2013, p. 308) (Volume 1).

Scribers: 400 shops, 500 privates. They write petitions and letters in base exchanges and the sublime porte. They are a key group (Kahraman and Dağlı, 2013, p. 309), (Volume 1).

Greengrocers: 500 shops, 500 privates. They embellish their shops with parsley, celery, cucumber, eggplant, radish, turnip, and zucchini, scattering cucumber, carrot, garden cress, and radish to people (Kahraman and Dağlı, 2013, p. 315), (Volume 1).

4. Findings Concerning the Unit “All Together”

4.1. Findings regarding the gain that “People realize social organizations, official bodies, and groups created for a purpose.”

4.1.1. Social Relations Category

4.1.1.1. Code of Institutions and Foundations

İstanbul İmaret (Soup Kitchen) of Sultan Mihrimah: Throughout the year, in the morning and evening, twice a day, they give passengers and people in the guesthouse a cup of wheat soup and some bread on a copper tray, a candle for every night, and fodder for each horse. Guests staying for more than three days do not benefit from this. The condition is benefitting from this only for the day and night (Kahraman and Dağlı, 2013, p. 278), (Volume 1).

İstanbul İmaret (Soup kitchen) of Orta Valide: This place also distributes rice and zerde to the rich and poor and elderly and young on Friday nights. 800 mosque workers get their salaries. It is a big foundation (Kahraman and Dağlı, 2013, p. 278), (Volume 1).

İstanbul İmaret (Soup kitchen) of Cedid Valide: This place, too, distributes plenty of food to the poor and rich. All food is constantly given to the poor, weak, solitary, and passengers in a folksy manner in the courtyard of 5 Selatin Mosques (Kahraman and Dağlı, 2013, p. 278), (Volume 1).

Food-distributing İmarets of Bursa: ... İmarets of Sultan Orhan Gazi, Gazi Hüdavendigar, Yıldırım Bayezid Han, Çelebi Sultan Mehmed (Green İmaret), Yıldırım Han, Emir Sultan, and Koca Murad Han. Aside from these, there are 21 more that serve the poor. Without any conditions, they are open for all passengers, the rich, and the poor day and night throughout the year (Kahraman and Dağlı, 2013, p. 11), (Volume 2).

İmarets of Trabzon: İmaret of Fatih Sultan Mehmet located in Orta Hisar distributes copious amounts of food to the rich and poor alike all year long. Hatuniye İmaret is adjacent to a mosque and is unique in Trabzon. It has a place where food is cooked and eaten in the Kiblah direction of the mosque. They provide ample food for people coming or going, the elderly, and the young, and there is a bakery where they bake authentic white bread and give it to those depending on the mosque. The kitchen has a spacious cellar to keep cereals; there are all sorts of good food there. There is also an eating place, right next to the kitchen, where all the poor and students of the madrasah eat. It is frequented by students. In the morning and afternoon, or twice a day, all scholars are given a cup of soup and a piece of bread. And, rice, zerde, and stew are given every Friday night, as requested by the founder (Kahraman and Dağlı, 2013, p. 62), (Volume 2).

Amasya İmarets of Feast: There are 10 of them. The best equipped one is İmaret of Sultan Bayezid-ı Veli where they distribute perfect food to the poor and the rich (Kahraman and Dağlı, 2013, p. 122) (Volume 2).

Features of İznik İmaret: There are 7 of them. Hayreddin Pasha has two of them; one is Eski (Old) İmaret, and the other is Yeni (New) İmaret. Soup is given to the rich and the poor twice a day. And, İmaret of Orhan Gazi is open throughout Ramadan. İmaret of Balabanoğlu and Dervish Lodge İmaret of Eşrefzade are other places (soup kitchens) where food is distributed to the rich, poor, young, and old throughout the year (Kahraman and Dağlı, 2013, p. 4) (Volume 3).

Meal centers for the old and young in Konya: There are 11 feast houses. Nevertheless, imarets of Mevlana, Sultan Süleyman Han, and (...) (...) ... (Kahraman and Dağlı, 2013, p. 17), (Volume 3).

Kayseri Meal Center and İmaret: This city in good condition had forty feast houses that distributed plenty of food to passengers coming or going (Kahraman and Dağlı, 2013, p. 141), (Volume 3).

Niğbolu: There are 20 primary schools. As there are a great number of benefactors, all children receive a monthly salary from the foundation. They also get clothes for holidays and bags once in every year (Kahraman and Dağlı, 2013, p. 238), (Volume 3).

Charities of Edirne: In the city of Edirne, all the mosques have ablution fountains with hot water in severe winters. Crowded congregations peacefully perform ablution and pray. It is indeed a big charity (Kahraman and Dağlı, 2013, p. 326), (Volume 3).

DISCUSSION AND CONCLUSIONS

1. Discussion and conclusions concerning the gain that there is evidence that “cultural elements have been transferred to today from the past through transformations.”

Texts extracted from Seyahatname by Evliya Çelebi offer detailed accounts of 17th century cultural elements. These sections could be used to facilitate the gain of the unit “I Am Learning My Past.” in the 4th grade social sciences course. Students thus become aware of the cultural change and continuity over the course of history. During classes, teachers will teach these sections to students by following various methods and techniques and fulfill the purpose of the course.

Literature activities have lately become important in that they entertain students as they teach them unlike the old understanding of education, which lacks any entertainment (Quoted from Kiefer, Hepler, and Hickman by Gönen and Veziroğlu, 2013, p. 2).

2. Discussion and conclusions regarding the gain that “He makes inferences about the geographical features of where he lives by looking at legends, sagas (dastans), stories, folk songs, and poems.”

Texts extracted from Seyahatname by Evliya Çelebi offer detailed accounts of 17th century geographical features. These sections could be used to facilitate the gain of the unit “Where We Live” in the 4th grade social sciences course. Students thus have the chance to compare the past and today with the help of Evliya Çelebi’s Seyahatname, a successful and comprehensive literary work. During classes, teachers will teach these sections to students by following various methods and techniques and fulfill the purpose of the course.

Travel books (seyahatname) got itself a place among other literary genres as travelers’ knowledge of various locations and desire to promote these places prompted them to get down to writing, which is one of the most permanent means of transferring ideas and feelings. In this respect, travel books should be placed in the field of literature. Many of these books narrate scientific, historical, and geographical facts in a shroud of feelings and thoughts, which is why travel books, originally a literary genre, can guide a number of fields such as history, art, culture, geography, and sociology if they are carefully reviewed (Işık, 2013, p. 216).

As social sciences are a combination of multitudinous disciplines, travel books and, in particular, Seyahatname by Evliya Çelebi can be used as important sources.

3. Discussion and conclusions regarding the gain that “Needs are associated with professions.”

Texts extracted from Seyahatname by Evliya Çelebi offer detailed information about professions of the 17th century. These sections could be used to facilitate the gain of the unit “Production to Consumption” in the 4th grade social sciences course. Students thus have the chance to compare professional knowledge of the past with that of today and become aware of social needs with the help of Evliya Çelebi’s Seyahatname. During classes, teachers will teach these sections to students by following various methods and techniques and fulfill the purpose of the course.

The use of Seyahatname by Evliya Çelebi in the social sciences course may enable the student to forge a link between the past and today. This course is also the most appropriate one for equipping students with social and cultural knowledge and

helping them gain experience in such areas because it teaches not only one's society's past and today, but also provides information on other societies. Such comprehensive content opens up an opportunity to taste the social and cultural knowledge that humankind has accumulated over the course of history. Literary works play a key role in this respect. Thanks to travel books, for instance, students have an insight into the political, social, and economic situation in which people in different parts of the world lived hundreds of years ago (Öztürk, Keskin, and Otluoğlu, 2012, p. 40).

4. Discussion and conclusions regarding the gain that "People realize social organizations, official bodies, and groups created for a purpose."

Texts extracted from Seyahatname by Evliya Çelebi offer detailed information about social organizations, foundations, and institutions of the 17th century. These sections could be used to facilitate the gain of the unit "All Together" in the 4th grade social sciences course. Students thus realize the concepts of social solidarity and cooperation, which are becoming increasingly important in our global world, thanks to Evliya Çelebi's Seyahatname. They then have the opportunity to compare such concepts to those of the modern day. During classes, teachers will teach these sections to students by following various methods and techniques and fulfill the purpose of the course.

Travel books (Seyahatname) have long been the most important evidence for a kind of globalization, which has been limited in the past. If travel books are used comparatively in a critical manner, out students could develop many of the citizenship skills and realize certain values. Not only written texts, but also pictures and engravings made by travelers should be studied with a critical method. Children must learn how to obtain information from pictures and look at them in a critical manner (Ata, 2013, p. 164-166).

Finally, Evliya Çelebi, a valuable traveler, and his work, Seyahatname, should be taught in social sciences classes. If this is done, Seyahatname, which is the result of 40 years of travel and is a culturally important work by Evliya Çelebi, will both facilitate the teaching of the course and contribute to formation of students' national identity.

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Chapter 45

The Perspectives of Primary Teaching Education Undergraduate Students on Electronic Reading*

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INTRODUCTION

Since the beginning of its existence, humanity has always felt the need to share their feelings, thoughts, dreams and experiences and been in exchange of information with other and the future generations. As the individuals transfer what is in their minds with the others around them through language, these particular needs have been met through engraving them on rocks, walls of caves, pieces of woods and on animal skins following the invention of writing, which is accepted as the beginning of history. Therefore, the foundations of the act of reading were laid in human history. As a result of all those experiences gained throughout the centuries together with the invention of paper, the act of reading took on a totally new dimension. Books replaced the texts engraved on rocks, walls of caves, pieces of woods and on animal skins, and consequently individuals had the opportunity to easily and commonly share their feelings, thoughts, dreams and experiences with others. This particular state of affairs enabled the increase and dissemination of the information generated. The amount of information generated that multiplied following the fast development of technology at the outset of the 21st century caused the tools of information dissemination over time. The books that provided huge amounts of information to the service of the human beings following the invention of paper were gradually replaced by the electronic screens since the beginning of the 21st century.

The developments brought about by technology exposed the people of the 21st century to many media such as computers, tablets, internet, smart phones, smart TVs and electronic billboards. Especially the tools such as computers, tablets, internet and smart phones facilitating the generation, dissemination and use of information start to use electronic tools instead of books, and help the sharing of information via screens (Güneş, 2010). It has almost a necessity for the individuals to read the written texts from a screen due to the technological changes that have taken place. Following the frequent use of these developments in information technologies in the process of education, electronic reading has started to become one of the priorities of individuals since they have made learning systematic, accessible and are portable.

The area of use of electronic reading skill defined as the act of reading texts electronically and digitally via the screens of electronic tools such as computers, tablets and smart phones (Güneş, 2010; Güneş, 2015) has diversified. In addition to materials such as books and notebooks, the skill of reading have come to be used in relation to such tools as computers, tablets, smart phones and overhead projectors

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(Maden, 2012). However, as no international standards have yet been established regarding electronic reading, individuals may encounter any given time texts written in a reorganized fashion, find it difficult to read and interpret them or have to spend long time in learning to read those texts (Başaran, 2014, s. 252). Previous studies (Abdullah and Gibb, 2008) revealed that individuals could not read the electronic texts completely, and only did selective reading by scanning the text. Many reasons such as piecemeal screening of texts, screens furnished with sharp colors and luminaries and the unergonomic reading in front the of the screen exhaust ones' body and brain in proportion to the time spent while reading on the screen. Güneş (2010) classified the factors reducing the reading speed from a screen as follows; negative effects of vertically intermittent texts on the readers' eye movements; the piecemeal text on the screen; the psychological effect of electronic reading on the individual and the eye-straining effects of the glitters on the screen. Due to the effects of physical and mental exhaustion, electronic reading proceeds more slowly in comparison to reading on paper. In their study, Joon and Joan (2013) found that readers reading on paper completed their reading in 10 minutes on average while the participants reading on an LCD screen completed in sixteen minutes on average, and answered the questions related to the text. In their study on 5th graders, Baştuğ and Keskin (2012) revealed that the students' reading speed on screen was slower than those reading on paper. The fact that electronic texts could only be read on computers, tablets, smart phones etc. poses a different disadvantage. Especially due to the fact that these devices fail in long-duration usage as they are lacking in satisfactory level of power-supply source; that some electronic texts are not supported by the software; the requirement of internet connection for the texts not able to be saved on the devices may leave individuals in the lurch.

Despite all these disadvantages, the fact that electronic reading increases the interaction between the text and the reader, that it is economical and that it enables intertextual reading (Başaran, 2014) are among the many advantages of electronic reading. The interaction of the individuals with the text during the process of reading from paper is limited to touching and seeing. The fact that during electronic reading, individuals are able to change the texts, color them and take notes on them as much as they can makes electronic reading more privileged than reading from paper. Besides, electronic reading enables the individuals to have access to much more information through internet connection regarding the expressions on the text. In this way, the reader is able to read intertextually. When the printed materials are compared, we are confronted with the fact that electronic materials are more accessible and easy to save and store. Printing costs are reduced due to electronic printing, and paper, storage, sale and distribution costs are minimized. Moreover, the fact that the reader is able to find the part in the book that s/he wishes to read enables them to save time. Besides, the fact that electronic texts are portable with such devices as computers, tablets and smart phones makes reading easier.

The effective use of information technologies in the 21st century is crucially important for the development of societies. It is because information today multiplies, is generated and shared via electronic devices. Given the fact that especially students spend more time with the internet, computers, tablets and smart phones and are more experienced with these devices in comparison to adults, the fact that students should

be made aware of informed usage skills of these devices emerges as a reality. Therefore, it is critically important that the teachers should acquire the necessary skills enabling them to use information technologies effectively and help their students as well to acquire those skills. Accordingly, the purpose of this study is to investigate and reveal the perspectives of undergraduate students studying at the department of primary teaching education on electronic literacy.

MATERIALS AND METHODS

Research model

The method of phenomenology, one of the methods of qualitative research, has been used in this study. In phenomenological studies, the purpose is to investigate how individuals or a group experience an event, a situation or concepts (Christensen, Johnson and Turner, 2015). This particular method enables us to examine the cases that we are aware of, but unable to make sense of in detail (Creswell, 2012). Even though phenomenological studies do not produce definite and generalizable conclusions like other qualitative methods, they enable a case under investigation to be better understood (Sart, 2015). The concept dealt with and tried to be better understood in this study is electronic reading.

Study group

The study group in phenomenological studies is composed of people with experiences about the subject the study focuses on and of people who will be able to represent their experiences. The study group in the present study is composed of a total of 10 third year undergraduate students studying at the Department of Primary Teaching Education of Uludag University, Bursa. The criterion sampling, one of the methods of purposive sampling was used in the selection of study group members. This sampling method is based on the principle that people who fit the pre-determined criteria should be included in the study (Christensen, Johnson and Turner, 2015). In the present study done within this framework, the participants included in the study were interviewed before hands and the study group was finalized in line with their experiences on electronic reading.

Data collection tool

The data in this study was collected through semi-structured interview questions. While preparing the semi-structured interview questions, three expert lecturers from the departments of Computer Education and Instructional Technology and Primary Teacher Education were contacted and asked for their assistance, and the relevant literature was reviewed. Based on the data obtained, the semi-structured interview questions were prepared by the researchers and finalized in cooperation with an expert in Linguistics. The same-structured interview form was composed of 11 questions. The interviews were carried out at a time appropriate for the undergraduate students and interviewers. The consent of the interviewees was obtained before the recording their responses. Each interview lasted for about 15 minutes. The audio recordings of the interviews were transcribed by the researchers and the consent for the final form of the interview was obtained from the interviewees.

Data analysis

The method of content analysis was used in order to identify the existence of the

words, concepts and characters in the text, and reveal the underlying relationships among them (Merriam, 1998; Kızıltepe, 2015). The content analysis can be implemented to any form of communication; it can also be used to analyze the content of written documents (Cavanagh, 1997). Although it was previously implemented on easily understood texts, it is used today to interpret difficult texts as well (Glesne and Peshkin, 1992).

After the transcription of audio recordings, all the interviews were examined one by one and appropriate codes for the statements were developed. The codes obtained were grouped under similar headings and the codes were matched up with the themes. The same procedure was replicated by another researcher and a consensus was reached for the different codes and themes. The coding and the themes obtained as a result of coding were presented via graphics in the findings section. Moreover, statements taken from students' expressions were coded and the themes were supported.

RESULTS

This section includes the opinions of the primary teaching education undergraduate students on electronic reading studying. At the end of the analysis, a total of 153 codes and 7 themes were obtained. The themes obtained respectively are; the definition of electronic reading (code 17), the need for electronic reading (code 19), the benefits of electronic reading (code 44), the harmful aspects of electronic reading (code 30), the interviewees' self-evaluation of electronic reading (code 17), pupils' usage of electronic reading (code 12) and the use of electronic reading in their future professional careers (code 16).

The responses of the students to one of the first themes obtained, "the definition of electronic reading" is illustrated with table 1.

Table 1: What is electronic reading?

Theme: What is electronic reading?	Percentage
It is the reading done by uploading the reading sources onto such devices as computers, tablets, mobile phones (8).	47
It is the reading done on the internet (4).	23
It is the reading done when there is no book or no access to books (3)	18
It is the reading done as the follow-up of traditional reading (2).	12

It is clearly seen that students considered electronic reading as reading done by uploading the texts onto the electronic devices. For instance;

"When I think about electronic reading, I come to think of reading sources being made available to people via electronic devices such as computers, tablets and mobile phones."

"As far as electronic reading is concerned, it is all about uploading the books onto the internet and reading them via computers etc. It has started to be widespread in recent years. Even a concept called "blog writer" has emerged. This shows that it has been adopted by people."

The responses of students to the second theme of "the need for electronic

reading” are divided into two parts. In this part, those who find electronic reading necessary and those who find it unnecessary are examined respectively.

Table 2: Electronic reading is necessary

Theme: Electronic reading is necessary	Percentage
Electronic reading is necessary not to fall behind the advancement of technology. (11).	61
It is necessary because we encounter it frequently in daily life (3).	17
It is necessary because we need it to have quick access to information (2).	11
It is necessary because today everybody has a smart phone (1).	1
It is necessary because I think that it will help me succeed in my lessons (1).	1

It was established that the undergraduate students found electronic reading necessary as they considered it linked with technology. Students’ opinions on this subject are as in the following;

“Can you image it!; with such an advancement of technology today, as everybody is doing their readings in the electronic media, it is unimaginable for us not to do the same thing; this is definitely necessary.”

“I think it is necessary because technology makes it inevitable for us. Otherwise, it won’t be possible for us to catch up with the developing world.”

Table 3: Electronic reading is not necessary

Theme: Electronic reading is not necessary	Percentage
It is because books, magazines and newspaper fail to meet my reading needs (1).	100

Table 4: Gains of electronic reading

Theme: Gains of electronic reading	Percentage
Electronic reading saves us time (11).	26
Electronic reading enables us to have access to more resources (6)	14
In electronic reading, accessing information is much faster (6)	12
Electronic reading does not constitute a burden (5)	12
Electronic reading reduces wood-chopping (4)	9
It is possible to save and store many more sources in electronic reading devices (3)	7
Others (8)	18

In this part, only one code is related with the fact that electronic reading is not necessary. The response of the student in question is in the following;

“I can’t say that I find electronic reading necessary. It is because if reading is a necessity, which I think is it is, this necessity can easily be met in traditional ways. For instance, books, magazines, newspaper etc. easily meet my reading needs.”

It seems that of the themes obtained, “the benefits of electronic reading” is the one that students have made comments about the most. In this part, 44 codes were obtained from the statements of students. The items that students considered as the benefits of electronic reading are illustrated in the table above.

Students revealed different opinions regarding the benefits of electronic reading. However, statements such as saving time, having access much more resources, acquiring knowledge and information much faster and being free from burden are the common ones. Some of the statements of students are below;

“The creativity of virtual world has been transmitted to books as well together with the eBooks. For instance, music, videos or moving pictures are available in an eBook, and reading becomes much more enjoyable; and the newspapers today are too slow to inform the public of the latest news. In this day and age, a piece of news published in a newspaper becomes obsolete even before it reaches the readers”.

“One of the benefits of electronic reading is that you have your library with you at all times; also, fewer numbers of trees are cut for paper thanks to eBooks. The piece of information sought in your electronic books is accessed much faster and easily in comparison to classical books. You do not need a lit-environment to do electronic reading. You can have access to current news in electronic sources way too faster than classical books”.

One of the other themes obtained as a result of interviews with students is the one titled “the harmful aspects of electronic reading”. In this part, students mentioned the possible harmful effects of electronic reading. The findings obtained are presented in the table below.

Table 5: Damage of electronic reading

Theme: Damage of electronic reading	Percentage
Electronic reading environments possess much harmful and unnecessary information (6)	20
Electronic reading is harmful for the eye health (6)	20
Since electronic reading fails to generate the pleasure that traditional reading provides, it diminishes the love of books (6)	20
Due to the social media accounts, it causes loss of time rather than acquiring knowledge and information (3)	10
Electronic creates the habit of spoon-fed information acquisition (2)	10
Others (4)	20

Regarding the harmful aspects of electronic reading, students predominantly provided the following statements; too much unnecessary information in the electronic media, eye-straining effect of electronic reading and its harmful effects for eye health, its failure to generate the same reading pleasure as traditional reading. Some of the statements of students regarding this issue are below;

“Electronic strains my eyes very much, turning the pages, depending on the software, may drive you mad. Its use may be difficult until you get used to it. The sincerity and severity you have in traditional books are not available in eBooks. While

the underlined parts in the books and the notes you have taken are nice surprises for the future readers, this is not possible in eBooks. It seems that the currently troublesome issue of copyrights infringement will in the future be an irrepressible problem in the electronic media”.

“As far as I am concerned, when you read for a long time on an electronic device, it causes mental and physical health problems. Another disadvantage is that when the electronic reading device breaks down, your reading is broken up as well”.

One of the other themes obtained is to do with the interviewees’ self-evaluation of electronic reading. This theme was investigated under the headings of “I consider myself competent” and “I consider myself incompetent”. The findings obtained are in the following.

Table 6: I consider myself competent

Theme: I consider myself competent	Percentage
Since I spend a lot time surfing the internet, I consider myself competent (5)	62
Since I keep up with technology, I consider myself competent in electronic reading (2)	25
Since I took an elective course during my undergraduate education, I consider myself competent in electronic reading (1)	13

The students considering themselves as competent in electronic reading are those who talk positively about their involvement with electronic devices and technology. This enabled them to think to themselves consider and that they were competent in electronic reading. The following are some of the statements of students.

“I consider myself sufficiently competent in electronic reading; I spend a great deal of time using computers, surfing the net and fiddling with smart phones and most of the time I spend in the virtual environment involves reading the texts available on the electronic media and, as a result, you naturally improve your skills as you become closely involved with it”.

Table 7: I consider myself incompetent

Theme: I consider myself incompetent	Percentage
Since I do not sufficiently keep up with the latest software, I consider myself incompetent (3)	34
As I am not an informed reader, I do not read electronic books. I am incompetent because of this (2)	22
Others (4)	44

“I’d like to think that I am competent in electronic reading because I sometimes read electronic books in English on my smart phone; and I believe that this is very beneficial for me”.

The students who did not consider themselves as competent in electronic reading put it down to the fact that they did not keep themselves up-dated with the latest software and were not closely involved with technology. One of the opinions

regarding this theme is as follows;

“No, I do not consider myself sufficient. I do not sufficiently keep up with the eBooks and the relevant software. Having said that, I am not technically fully equipped to do electronic reading”.

One of the themes obtained is the theme of “pupils’ usage of electronic reading”. Under this theme, students expressed their opinion on their purposes of usage of the electronic media. The findings regarding the students’ usage of electronic reading is as follows;

Table 8: Pupils’ usage of electronic reading

Theme: Pupils’ usage of electronic reading	Percentage
Electronic media is mostly used for entertainment (games etc.) rather than acquiring knowledge and information (5)	42
Pupils are exposed to negative/harmful information by doing electronic reading in their social media accounts (4)	33
As the pupils have been closely involved with technology since childhood, they are more competent in the use of technology in comparison to adults (2)	17
Due to the economic conditions of our country, some pupils do not use the electronic media at all (1)	8

The students’ statements can be summarized as follows; pupils in elementary school age used the electronic media generally for games and social media accounts. Students’ statements regarding pupils’ usage of electronic reading are in the following;

“I do not think that pupils are very competent in the use of technology. They use technology mostly for playing games”.

Table 9: Electronic reading in future professional career

Theme: Electronic reading in future professional career	Percentage
I am planning to use electronic reading in my private tuitions (6)	38
I am planning to use electronic reading in all my courses involving texts (4)	25
I am planning to use electronic reading since it is time-saving (2)	13
I am planning to use it as a prerequisite of the current era (1)	6
I am not planning to use it as it is beyond the competence level of pupils (1)	6
As it is a distraction for pupils, I am not planning to use it (1)	6
As I would like to earn my pupils the love of books through traditional methods, I am not planning to use it (1)	6

“Pupils use this media for playing computer games and hanging out in social media accounts. There are almost no pupils using the electronic media in an informed manner to acquire information”.

The last theme regarding electronic reading is to do with the students’ use of

electronic reading in their future professional careers. The students' relevant statements are presented in the table above.

The participant undergraduate students reported that they planned to use electronic reading in non-math (verbal) courses and in courses involving texts. The following are students' statements regarding their use of electronic reading in their future professional careers;

"I think electronic reading can be used in all courses; however, the courses that electronic reading can be used the most has to be non-math (verbal) courses because it will be a great convenience and advantage to use it in courses involving written literacy such as Turkish literature and social studies, and those courses involving the understanding and interpretation of texts".

"I'd like to be able to use it more in non-math (verbal) courses. The simple reason is that since the verbal courses include long texts and paragraphs, having to write them on the board is time-consuming. Time is no longer consumed, but instead is saved in electronic reading".

DISCUSSION AND CONCLUSIONS

Electronic reading approach is a very important skill that both students and teachers need to be informed of and use in this day and age. We are confronted with the fact that electronic reading is a serious necessity for primary school teachers to use in the lessons. In this context, it is crucially important to identify how this particular approach is perceived by the undergraduate students of Primary Teaching Education.

Based on the findings obtained from the study, the undergraduate students of Primary Teaching Education defined electronic reading as uploading reading sources onto various electronic devices and reading them on a screen. This definition has similarities with all the definitions in the studies in which electronic reading was done by mobile reading and screen reading (Maden, 2012; Aydemir, Öztürk and Horzum, 2013; Yaman and Dağtaş, 2013; Güneş, 2010; Güneş and Susar Kırmızı, 2014; Baştuğ and Keskin, 2012; Dağtaş, 2013; Aydemir and Öztürk, 2012; Tosun, 2014). Apart from that, it was revealed in the interviews with students that they defined electronic reading as the one done in the internet environment.

It is a commonly accepted reality today that electronic reading is a necessity. It was predominantly emphasized in the previous studies that electronic reading was necessary. When the literature review sections of these studies are examined, it is possible to see that the idea that electronic reading, development of technology and its use was a serious necessity was commonly expressed. In those studies, participants justified this necessity by the same reasons (Maden, 2012; Aydemir, Öztürk and Horzum, 2013; Yaman and Dağtaş, 2013).

When the previous studies are examined, it is possible to see that electronic reading has many benefits. These benefits in general are that they enable readers to have access to many more sources and that electronic reading saves time in accessing those sources (Maden, 2012; Dağtaş, 2013). These opinions have similarities with the results of this study. Moreover, there are also studies demonstrating that electronic reading enhances motivation and makes it easier to understand the texts (Aydemir, Öztürk and Horzum, 2013; Yaman and Dağtaş, 2013; Baştuğ and Keskin, 2012). The undergraduate students of Primary Teaching Education also expressed similar

opinions on this subject. In addition to this, it was also the opinions of the students that electronic reading would reduce wood-chopping and enhance the idea of sharing and the skills of using electronic devices.

When the previous studies are examined, it is clearly seen that the harmful aspects of electronic reading in general are; loss of interest in reading, hindering the motivation towards printed materials and the bond towards books, causing eye-straining problems, creating the habit of spoon-fed learning and negative impact over social development (Maden, 2012; Dağtaş, 2013). These results are in line with the findings of the present study as well concluding that electronic reading has a negative impact of electronic reading on eye health, causes the habit of laziness in children, has a negative impact over the social and psychological development of children, causes loss of interest in printed books and breaks up the bond between children and the books.

According to the finding of the study, undergraduate students' responses revealed that they were not conclusively clear about whether they were sufficiently competent or incompetent about electronic reading. The students who considered themselves competent in electronic reading reported that they had positive relationship with technology. Nevertheless, the students who considered themselves incompetent reported that they did not generally keep track of the latest software and that they were not good technology or internet users.

One of the findings of the present study is that pupils in the elementary school age usually used the electronic media not for the purpose of acquiring knowledge and information, but computer games or doing reading on their social media accounts. This particular finding has a similarity to that of studies concluding that pupils used technology to play games and keep track of the media (Yaman and Dağtaş, 2013; Tosun, 2014).

Finally, it is possible to conclude based on students' statements that they will use electronic reading in their future professional careers. Participant students reported that even though it would be mostly in non-math (verbal) courses, they would do electronic reading in all courses involving texts. Given the studies (Aydemir, Öztürk and Horzum, 2013) that proved that electronic reading enhanced reading comprehension, this seems to be a positive result.

At this point, the researchers of the present study have the following suggestions to make to the officials of the Ministry of Education and practicing teachers:

- Future studies can be carried out on how to improve the skill of electronic reading.
- Courses aimed at earning practicing teachers the skill of electronic reading in the in-service training courses can be organized.
- The teachers who can use the electronic reading approach can conduct the lessons by doing electronic reading with their students.
- An electronic reading course can be included into the syllabus of undergraduate students.
- Various reading sources can be prepared by the addition of sound effects, moving objects and visual elements into the existing electronic reading sources, and the effectiveness of such sources can be tested.

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Chapter 46

Prevention Wall against Grouping among the Students: Comments of the 6th-Grade Students on the Concept of Present*

Yaşar KOP & Bihter GÜRIŞİK

INTRODUCTION

Although we have already reached 21st century, the term culture has not been clearly defined yet. Actually a Latin-derived, the term culture appeared in the meaning of “cultivation” and gained the meaning of “high general knowledge” in Turkish. However, as it is apparent from the definitions given above, the meaning of culture is not sufficiently clear and obvious. Before the 20th century, it was also used in the meaning of “wisdom”. Although it would be wrong to say that such allocation is correct, it is a fact that the culture fills the gap left by the wisdom which gradually disappears (Baykara, 2001: 9). A common summary of the definitions made for the culture is given below.

A learned part of the human behavior, it is the entire matrix consisting of emotions, thoughts and behaviours of the people. It also covers the material elements such as house, clothing, tools and instruments used as well as the moral values such as religion, law, arts, language and traditions. Or the culture is a form consisting of the learned behaviours and consequences of such behaviours (Tezcan, 1997: 16). According to Özakpınar (1997: 80-81), the culture is any work created by the people’s own thoughts and acts basing on the spiritual energy of a civilization as a code of beliefs and ethics and in the framework of a system of values.

Basing on the definitions we have made above, we may say that the most suitable meaning of the culture is, essentially, all life style of a society.

Following this definition of culture, it would appropriate to proceed to Turkish Culture, among the cultures subject to this study. Turkish Culture is a common product of the Central Asian Culture and the Anatolian Culture with which it encountered after passing the bridge of Anatolia. For this reason, presumably, it has always been noticeable among the rival cultures as a political target in terms of both moral and material values and issue of eastern question. This attractiveness of the Turkish Culture has been extremely contributed by the characteristics we will list below.

Although the term barbaric has been associated with Turk according to a well-established formula in the western sources, the western brains confess when they are alone together that it is quite opposite and that the Turks come from a polite culture. And the greeting among the Turkish when they encounter each other is only one of

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evidences indicating such politeness (Johnstone, 1996: 5-13).

Additionally, other distinctive characteristics of the Turks include building up trust, preferring the way of cooperation, acting by pride and dignity, being wide awake, but away from deceit, humbleness, although highly beneficent, and always avoiding from vanity. In addition to them, when their characteristics of patriotism and heroism combined with the martyrdom, a necessity of their religion, make them a voluntary army of brave people beyond mind and image. Still, Turks, as the source of a frightening culture for their enemies, have never made compromised with respect to their hospitality and nice customs, traditions and manners (Tezcan, 1997: 171-234; Candan, 2002: 15-16).

A nation first builds up its civilization and then the living nation forms its culture. And the means ensuring sustainability of the national life and national culture is its way of edification. Civilization and culture may not survive without system of edification (Özakupınar, 1997: 109). Tradition is one of the components that the edification system should content. Tradition means total cultural background of a society, which is believed to have always existed in their own culture over a long time and transmitted from one generation to another verbally. As told by Yahya Kemal, it means reaching out the future with roots established in the past (Özakupınar, 1997: 115). The concept of present is a representation of the politeness of the Turkish nation, rooted in the past and reached out today.

An Arabian word, the plural form of the present is “*hedeyâ*” (Püşküllüoğlu, 1985: 341). And its Turkish synonym is “*armağan*” (for examples, see Turkish Dictionary, 1995: 145). The word present is generally defined as the object given to enhance affection and affinity without any consideration.

A present brought as a gift to please someone is social communication tool which is not considered as a personal investment in the receiver (Altay, 1983: 175; Mutlu, 2004: 136; Turkish Dictionary, 1966: 331). An article given to the others, most of the time, for forgiveness and sometimes fulfillment of a social duty (Bağdatlı, 1997: 177), the present is sometimes a gift given during the engagement period and it sometimes arises from ethical or social conditions (Alpdündar, 1977: 128).

Throughout the history of mankind, the people have given each other various goods and articles they own without any consideration. Giving presents mutually has become a custom and tradition particularly among the Muslim Turkish; and, furthermore, entertaining a guest and making a preset for a variety of reasons have been deemed among the good manners (Pakalın, 1971: 794-795). And, after adoption by the Turks of the Islam as religion, it has become a custom to wrap a minor present in a handkerchief called “*holiday handkerchief*”, telling that present is present whether it is small or big; and such custom resulting in happy and enjoyable moments has been considered as one of the fine traditions (Tuğlacı, 1971: 1048). As known, on the part of the receiver of the present, what is important is to feel that one is considered and appreciated respectfully.

As expressed by Atatürk, when we journey back to the time of our ancestor, we encounter with things explained below:

Bugra Khan of the Karahan State has thought for days a most precious present to give to a scholar who gave good advices to him and, eventually, he considered it appropriate to grant him the title of *has haciplik*”, one of the highest titles among the

Karahan people (for examples, see Turkish Dictionary, 1995: 1216).

In the Ghaznavid state, there was a treasury consisted of jewels and precious articles kept at a special chamber in the palace to spend, offer or present when required. The master of the chamber was called *hazin* or treasurer. It was given special care that they should be Turk because they would be more watchful in this respect. And, even the rulers used to assign their own courtiers for this mission (Nuhoğlu, 2002: 291).

Additionally, persons called “*resuldâr*” were appointed in the Ghaznavid State, to give presents to the visiting ambassadors to take them to their own rulers (Nuhoğlu, 2002: 292).

In the Memluk Empire, there were special markets where articles for present were sold for the high official ranks such as sultan, emir and vizier (Keleş, 2002: 431).

In the Ottoman period, we see “*Sûrnâme*”, as a unique type of literature specific to the Turkish Literature, narrating “*Sur-ı Hümayûn*”, made for the circumcision feasts for the sultan’s sons and wedding ceremonies of the sultan’s daughters or sisters. The objective of *Sûrnâme* was to tell the events in detail, rather than the artful style of the poetry. That the most noticeable thing in such details was the list of presents (Arslan, 1999: 169-171) is a significant indicator of the importance given to this matter in the Ottoman State.

Finally, according to a belief among the Yakut Turks, “*Ayzıt*”, the fertility goddess never visited the pregnant women at time of their labor pain, who failed to preserve their honor, even if the latter pleaded, sacrificed an animal or even offered the goddess presents (Kurt, 2002: 399). From the aforementioned phrase “even present” clearly shows status of the present given in the Turkish Culture (For extensive information, see Erdem, 2002: 502).

Problematic Issue

Today the real dimension of the competition is the intercultural struggle. The cultures not strong in national sense may hardly survive. In order that the Turkish culture can be strong, it should maintain its integrity because the integrity is very important for the social life. If the society losses its cultural integrity, discordance and conflict appear among the cultural elements. On the other hand, the measures to evaluate the cultural elements would, consequently, loss. In such case, non-functional factors under the name of novelty, change and dislike as well as a great number of unnecessary or even harmful cultural elements would infiltrate into the Turkish Culture dating back to centuries ago (Özakpınar, 1997: 81). Based on the idea that the first country to conquer is the man himself as pointed out by Candan (2002: 62), as the nations owe their national characteristics to the culture they have nourished and developed for centuries, then the researchers here deem it necessary to make academic study to determine how the concept of present is perceived by the 6th-grade students.

Objective of the Study

The objective of this study is to:

find out the thoughts of the 6th-grade students about the concept of present, which we may define as an attempt making happy both the giver and receiver and thus to determine whether the present, an essential element of the Turkish Culture, is used properly or not.

Significance of the Study

This study is important in that:

- the students make their comments on the present, which has an important status in the Turkish Culture;
- it concretely demonstrates that it is worth anything for the giver to see the expression of happiness mixed with surprise on the part of the receiver upon receipt of a present;
- it would open way for other research subjects for the scholars; and
- the findings of this study would be useful for the historians, sociologists, educators and Turcologists that make research in Turkey on the Turkish Culture and Civilization.

Assumptions

This research is based on the following assumptions:

1. The questions used in the questionnaire used as a means of data collection bear such effectiveness and reliability to collect necessary data according to the intention of the research; and
2. The students participated in the study have answered all questions sincerely.

Limitations

This study is limited to:

1. the questionnaire used as a means of data collection; and
2. the students of the grades 6 B and 6 C in the Çakmak Primary School in the district of Ümraniye during the academic year of 2005 – 2006.

MATERIALS AND METHODS

The research used the scan model basing on arrangement of the conditions necessary for collection and analysis of the data in accordance with the objective of the study (Karasar, 2004: 77–78). The information obtained through the questionnaire has been analyzed according to the frequency and distribution table used for describe the data basing on the views of the participants on any matter (Büyüköztürk, 2002: 21).

The questionnaire was applied to the total 100 students in the grades of 6 B and 6 C at Çakmak Primary School. The number of students subject to the research consisted of girls by 53% and boys by 47%.

FINDINGS AND COMMENT

According to the data given in the table 1, 50% of the students were born and grew up in the city, 42% in the district, 7% in the village and 1% abroad. In other word, great majority of the students subject to the study live in the city and district. The students with origins of village and foreign country considerably lag behind.

Table 1: Places where the students were born and grew up

	f	%
City	50	50.0
District	42	42.0
Village	7	7.0
Abroad	1	1.0
Total	100	100.0

Table 2: Maternal education

	f	%
Primary School	54	54.0
Secondary School	24	24.0
High School	9	9.0
University	4	4.0
Master Degree	9	9.0
None	-	-
Total	100	100.0

According to the data given in the Table 2, 54% of the mothers of the students graduated from the primary school, 24% from the secondary school, 9% from the high school, 4% from the university and 9% studied at master's degree. Another noticeable aspect is that although most of the mothers graduated from primary school, all of them went school for education.

Table 3: Paternal education

	f	%
Primary School	33	33.0
Secondary School	41	41.0
High School	18	18.0
University	7	7.0
Master Degree	1	1.0
None	-	-
Total	100	100.0

According to the data given in the Table 3, 33% of the fathers of the students graduated from the primary school, 41% from the secondary school, 18% from the high school, 7% from the university and 1% studied at master's degree. And it is also pleasing to see from the table that all fathers went to school for education.

When we analyze the Table 2 and Table 3 together, the rate of both mothers and fathers of the students was 78% in terms of completion of the 8-year education, currently compulsory. Furthermore, it also promising that 20% of the parents studied university and master' degree would set example for their children. Considering that about one and half million students take university entrance exam, but only one fifth of them is enrolled in Turkey, there is no difference in this respect.

Table 4: Income status of the families according to the students

	f	%
Low	7	7.0
Middle	89	89.0
High	4	4.0
Total	100	100.0

According to the date given in the Table 4, the students expressed the household income low by 7%, middle by 89 and high by 4%. And the information shows that the middle income, 89%, is directly proportional to the reality in Turkey.

Table 5: Number of siblings of the students

	f	%
One	11	1.0
Two	35	35.0
Three	33	33.0
Four	15	15.0
Five and above	6	6.0
Total	100	100.0

Question about number of siblings was answered by the students as one by 11%, two by 35%, three by 33%, 4 by 15% and five and above by 6%. When the data is analyzed, the general view that there is inverse proportion between the education status and number of child is verified.

Table 6: Weekly Allowance of the students

	f	%
1 – 5 million	17	17.0
5 million	23	23.0
5 – 10 million	25	25.0
10 million and above	35	35.0
Total	100	100.0

According to the information given in the Table 6, 17% of the students take weekly allowance of 1-5 million, 23% 5 million, 25% 5-10 million and 35% 10 million. When analyzed together with the household income given in the Table 4 and the number of siblings given in the Table 5 collectively, we observe a contrast.

Table 7: Prior information given to the students about the concept of present

	f	%
Yes	62	62.0
No	27	27.0
Partly	11	11.0
Total	100	100.0

The question asked to measure whether the students have been informed above the present before the 6th grade in the primary school or before the academic period of 2005-2006 was replied as *Yes* by 62, *No* by 27% and as *Partly* by 11%. While the great majority such as 62% was found noticeable for the Turkish culture, those answering *No* by 27% shows that the concerned authorities around the student should make better effort in this respect.

According to the data given in the Table 8, the students gain information about the concept of present from the from teacher by 9%, from the Social Sciences Teacher by 26%, from the family by 55%, from the books by 8% and from other sources by 2%. Those checking the option *Other*, one noted the television and one the newspaper as the source of information. Two noticeable points seen from the Table 8:

Table 8: Source and Person from which the students have mostly gained information about the concept of present in terms of Turkish Culture

	f	%
Form Teacher	9	9.0
Social Sciences Teacher	26	26.0
Family	55	55.0
Books	8	8.0
Other	2	2.0
Total	100	100.0

1) a family rate of 55% is considered very positive in terms of the problematic issue of our study, showing that the families made effort to keep alive the tradition as the vital link between the past and future;

2) share of the Social Sciences Teacher, i.e. 26%, shows that the Social Sciences teacher is also useful according to the approach of “*citizenship transmission*” out of the triple classification made by Barr, Barth and Shermis in connection with the social information / sciences teacher and, on the other hand, it also proves once more that it is a very important course in the primary school.

Table 9: Difficulties of the students in selecting the present

	f	%
Yes	36	36.0
No	20	20.0
Sometimes	44	44.0
Total	100	100.0

While, according to the table above, 36% of the students expressed they have no trouble in selecting a present, 44% of the students checked the option *Sometimes*. The result from this question is that a high rate of 80% for the *Yes* and *Sometimes* together is deemed natural, considering this age of them during which they pass from the concrete circle to the abstract.

Table 10: Rate of use by the students of the internet for selection of present

	f	%
Yes	7	7.0
No	81	81.0
Sometimes	12	12.0
Total	100	100.0

When the students were queried about use of the internet, a modern tool, for selection of present, 7% of them answered they used it, 81% did not use it and 12% used it sometimes. The noticeable point in this table is that 81% of them does not use internet clearly. We may conclude from this result that most of the students do not use internet to select present.

According to the data given in the Table 11, 58% of the students checked the option mothers by 58%, fathers by 3%, teachers by 19%, girls by 2% and the option Other by 18%. 17% of those that checked the option *Other* stated that present is given to their close friends and 1% showed the animals for giving present, an answer both showing compassion and being interesting. That the highest rate is for the mothers emphasizes once more the fact the woman has a very vital importance in the Turkish

Culture. Considering that the rate in favor of the teachers is higher than that of the fathers, we may conclude it as further evidence that the statement of the teachers to the effect that nobody brings them to their mind is false.

Table 11: To whom the present should be given according to the students

	f	%
Mothers	58	58.0
Fathers	3	3.0
Teachers	19	19.0
Girls	2	2.0
Other	18	18.0
Total	100	100.0

Table 12: Whom the present should be given according to the students

	f	%
Elders	20	20.0
Children	56	56.0
Boys	6	6.0
Girls	12	12.0
Other	6	6.0
Total	100	100.0

According to the students, those to be most happy to receive present are elders by 20%, children by 56%, boys by 6% and girls by 12%. They are followed by the teachers by 3%, artists by 2% and *Ourselves* by 1% according to a subtitle under the option *Other*. That they prefer their peers by a rate of 56%, which exceeds the simple majority, is quite normal in terms of both Turkish Culture and by social and psychological terms. And the difference between the boys and girls in favor of the latter by 100% appears as a significant clue indicating the difference of the Turkish Culture from the Western Culture.

Table 13: Means to which the students have recourse when their allowance is insufficient to purchase a present

	f	%
I might as well not purchase, so I would save money.	4	4.0
I would express my condition to the person I could not give a present, adding that I am very sorry.	24	24.0
I would request more allowance from my family	47	47.0
I would borrow from my friends again.	10	10.0
Other	15	15.0
Total	100	100.0

According to the Table 13, 47% of the students stated that they would request more allowance from their families when their money is not sufficient to buy a present. This answer shows that most of the students are in good terms with their parents. And the findings also ensure us to conclude that 24% of the students have the moral courage to say sorry for their failure to give a present due to lack of money; and 10% of the students show that they have exchange of money in the circle of friends and are still resolute about purchase of present. Under the option *Other*, 12% of the students stated that they would give up purchasing the present they thought, but purchase a present to the extent of the money they have and the remaining 3% stated

that they would purchase a present later on after saving sufficient fund for this purpose. The result we deem positive is that only a small number of students, 4%, would be in tendency to drop this idea immediately.

Table 14: Is there a special time for giving a present in the opinion of the students?

	f	%
Yes	35	35.0
No	41	41.0
Sometimes	24	24.0
Total	100	100.0

While 35% of the students surveyed stated that there should be special time to give a present, a rate of 41% stated replied *No*, making us conclude that it should be give one someone feels like. This high rate has added a promising optimism to our conclusion. 24% of the students replied the option *Sometimes*.

Table 15: Condition of the students indicating the frequency of giving/receiving present

	f	%
Each day	7	7.0
Once a week	10	10.0
Once in a month	52	52.0
Annually	26	26.0
Never gives/receives	5	5.0
Total	100	100.0

According to the data given in the Table 15, while present is given and received by 7% of the students, 10% of the students gives-receives present once in a week, 52% one in a month and 26% annually and the remaining 5% does not give/receive at all. When the data in the Table 1 was analyzed again, that the rate of 5% could not purchase any present at all is considered normal, giving no present to anybody in the same group makes us believe, depending on the student comments added to the answer, that they are either not liked by others or the habit of giving present has not established in their social surrounding. And other rates are almost in direct proportion again to the household income.

Table 16: Behaviours of the students to give a present to someone on his/her special day when they are not on the outs with them

	f	%
Yes	60	60.0
No	21	21.0
Sometimes	19	19.0
Total	100	100.0

In the light of data given in the Table 16, 60% of the students stated *Yes* for purchase of present to their friends when they are not on the outs with them. This conclusion is very important in that it shows meaning and significance of the concept of present and that Turkish Culture would hardly be destroyed in future. 21% of the students said *No* and 19% said *Sometimes*, thus causing reduction in the number of students that stated *No* completely.

While 69% of the students stated they have received the most meaningful present from their parents, 11% from their siblings, 13% from their classmate and 2% from

their teacher, a rate of 5% stated, under the option *Other*, that they received as a result of sport activities, 2%, and from anybody, 2%. It seems that when the parents and siblings are categorized in a single group, the rate reaches to a high rate of 80% and it makes us conclude once more that the family is very precious for the students. Furthermore, this rate is also considered important in that it signifies sound foundation of the Turkish family structure.

Table 17: The person from whom the students have received the most meaningful present according to them

	f	%
Parents	69	69.0
Sibling	11	11.0
Classmate	13	13.0
Teacher	2	2.0
Other	5	5.0
Total	100	100.0

Table 18: Rate of the students who are consulted when purchasing present

	f	%
Yes	35	35.0
No	32	32.0
Sometimes	33	33.0
Total	100	100.0

When the families purchase present for the students, 35% of them asks for the view of them, 32% does not asks for the view of them and 33% asks sometimes. The situation noticeable at the first sight is that all answers are close to each other. Looking at the situation from another perspective, while formation of self-confidence is sought with respect to the rate of 35% or present is casually purchased for 32% without prior consultation.

Table 19: The persons from whom the students are very happy to take present

	f	%
From my family	33	33.0
From my teacher	7	7.0
Fro my friends	5	5.0
From anybody received when received as a reward	15	15.0
From anybody making surprise	8	8.0
It does not make any difference	32	32.0
Other	-	-
Total	100	100.0

The students listed the persons from whom they like most to receive present in the following order: from their family by 33%, from their teacher by 7%, from their friends 5%, as reward by 15% and those giving a surprise by 15%.

Additionally, a high rate of 32% replied that it did not make any difference for them. None of 100 students from two grades surveyed has given reply under the option *Other*.

When the Table 17 and Table 19 are analyzed together, we concluded a meaningful analogy between them and that the family ranks first again.

Looking at the data given in the Table 20, while 38% of the students defended that the disciplinary actions should be abolished and only reward should be given, 37% of the students does not desire it and 25% of the students, that one out of four students, answered the option *Partly*. First of all, we should emphasize that the *Yes* answer given by 38% of the student should be assessed on basis of their mode of psychology and then it should be considered that the consciousness of the students was not raised basing on the reason causing them to give such reply.

Table 20: Opinion of the students whether the disciplinary actions are abolished and only rewards are given in the schools

	f	%
Yes	38	38.0
No	37	37.0
Partly	25	25.0
Total	100	100.0

If the people is rewarded only, but is not subject to any punishment, they may not appreciate the reward duly. Human nature is inclined to both good and evil. The student should be encouraged by reward and it should be kept in balance by disciplinary action. Thus, the students are encouraged for good and kindness.

Table 21: Awareness of the students about special days and their meaning

	f	%
Yes	36	36.0
No	38	38.0
Sometimes	26	26.0
Total	100	100.0

According to the information given above, while 36% of the students replied they visit places such as hospital and nursing home etc. and purchase present on special days, 26% checked the option *Sometimes*. In this table, the responses *Yes* and *No* are very close to each other and even *No* constitutes majority. Based on the comment sentences of the students they wrote as continuity of the question above, we may conclude one of the following result: that there are no organizations such as society for protection of children near the home of the students and, furthermore, traffic condition of Istanbul for the children at 6th grade have adversely affected the situation and thus made a humble contribution to the majority of the answer *No*.

Table 22: Necessity of giving a present to the teachers on 24th November according to the students

	f	%
Yes	6	56.0
No	37	37.0
Sometimes	7	7.0
Total	100	100.0

56% of the students replied that it is necessary to give present on 24th November, i.e. Teachers' Day, 37% stated it is not required and 7% responded that it may sometimes be given or sometimes not given. The response *No* given by 37% does not necessarily indicate they do not like their teachers because when these tables are reviewed, the items including the teacher comes after that of the family. The

additional comments made by the students for this question, we may conclude that their allowance is hardly sufficient for them, and they have difficulty in saving money and they desire to give expensive present collectively.

Table 23: Importance of the monetary aspect of the present to fulfill its objective according to the students

	f	%
Yes	10	10.0
No	79	79.0
Sometimes	11	11.0
Total	100	100.0

According to 10% of the students, the acceptable present is the expensive one. 79% stated that it is not significant whether it is expensive or not in order that it fulfills its objective, thus giving response in line with the objective and importance of our study and 11% checked the response *Sometimes*.

Table 24: Responses Given by the Students to the Questions Addressing to the Affective Aspect

	Yes		No		Sometimes		Total	
	f	%	f	%	f	%	f	%
During an event in the classroom, would you refrain from giving present when you give present to each other if your present is cheaper compared to those of the others?	28	28.0	50	50.0	22	22.0	100	100.0
Do you like to participate in the new year draws or similar events in the classroom?	68	68.0	20	20.0	12	12.0	100	100.0
I act in any way for my interest to receive present.	19	19.0	58	58.0	23	23.0	100	100.0
It is not my style to give present.	7	7.0	85	85.0	8	8.0	100	100.0
It is not my style to receive present.	3	3.0	90	90.0	7	7.0	100	100.0

As it may be seen from the Table 24, to the question of “during an event in the classroom, would you refrain from giving present when you give present to each other if your present is cheaper compared to those of the others?”, they expressed their feelings by stating *Yes* by 28%, *No* by 50% and *Sometimes* by 22. According to these rates, the stats of the students giving *Yes* as reply is challenging. That they are shy would hinder development of their personality and cause them to be inwardly jealous of their friends, leading to worse extent. For this reason, in addition to the guidance service, the guardians of the students should deal with this matter immediately.

To the question of ‘Do you like to participate in the New Year draws or similar events in the classroom?’, they expressed their feelings by stating *Yes* by 68%, *No* by 20% and *Sometimes* by 12%. A rate of 20% may not be underestimated. This figure corresponds to one out of five students and the school administration should, therefore, show due care that such events are not organized insistently.

To the question of 'I act in any way for my interest to receive present', they responded *Yes* by 19%, *No* by 58% and *Sometimes* by 23%. Here we should again focus on the response by 19% because of the fact that acting in any way for one's own interest is contrary to the general character traits of the Turkish Culture. For this reason, the matter should be dealt with jointly by the family, school and guidance service. With respect to the statement 'It is not my style to give present', 7% of the students replied *Yes*, 85% replied *No* and 8% replied *Sometimes*.

With respect to the statement 'It is not my style to receive present', 3% of the students replied *Yes*, 90% replied *No* and 7% replied *Sometimes*. Answers given to this question are parallel to the responses given to the other question above.

Table 25: Acts not considered as present by the student

	f	%
Giving flower on the Mother's Day	7	7.0
Remembrance of the Father's Day	9	9.0
Giving present to anybody we like heartily	15	15.0
Giving precious articles to the person on duty to urge them in order that our works are performed easily and more expediently.	69	69.0
Total	100	100.0

According to the data given in the Table 25, the students do not consider it as a present to give flower on the Mother's Day by 7%, remember the Father's Day by 9%, give a present to anybody heartily at any time we feel like by 15% and give precious articles to the person on duty to urge them in order that our works are performed easily and more expediently by 69%. As it may be understood, the desired response is the 4th sentence. Although the rate of this sentence is high, that sum of the other rates makes 31% shows that the matter of bribe has not been understood completely. What should be done first is that everybody that may set example for the children should make their best endeavors to act carefully and that what they say should be consistent with what they do and they should draw an appropriate road map. Still, the rate of 69% cannot be underestimated.

Table 26: Whether the students want the present they give or take to be useful rather than expensive

	f	%
Yes	50	50.0
No	31	31.0
Partly	19	19.0
Total	100	100.0

According to the data given in the table above, they replied *Yes* by 50%, *No* by 31% and *Partly* by 19%. It is challenging that the rate in favor of giving important on the material value of the present over the usefulness hovers around 31%. When the result is reviewed together with the Table 24, we concluded that the students should be dealt with in cooperation with the guidance service assisted by the family and school. The reason is that preference of a present with high material value seems dangerous in that it may adversely affect the character and preclude all traits required to be a good citizen.

Table 27: Consequences of the statement to the effect that a book is the best present

	f	%
Yes	62	62.00
No	15	15.00
Partly	23	23.00
Total	100	100.0

To the statement “A book is the best present”, 62% of the students replied *Yes*, 15% *No* and 23% *Partly*. Basing on these rates, we may say that the rate of the response given in favor of it is high, considering the low reading rate in our country. If the person to whom you will give a present likes reading, then the best present to give would be a book. Considering its permanence, the book is the best present. Considering that it is informative, adding value to the receiving person, we may also reach to the same conclusion. Here we conclude that the best present is book for 62% of the students.

CONCLUSIONS

According to the findings obtained in this study, sex distinction of the students that replied the questions of the questionnaire in terms of personal characteristics is almost equal. Most of them was born and grew up in the city. Parents of all students received education. Greater majority of the students perceive their household income at middle level, considering the conditions in Istanbul. Number of their siblings is two and three. That their weekly allowance is in the range of 5-10 million and above shows their economic level is not very bad.

In addition to all these findings, it has been observed that the students have sufficient information about the concept of present, considering the questions asked to determine how it is perceived by the 6th-grade students and thus we verify that the present has still a significant place in the Turkish Culture as an expression of the affection, even eliminates hostility between the societies and it survives in our country in the integrity of the culture. And we have determine they the most of the students was made aware of the concept of present as an object to atone and show satisfaction and this duty has been fulfilled to a great extent primarily by their families and Social Sciences teacher. And they have satisfaction from taking present from and giving present to the family members, who have an important place for the future of the Turkish Culture. It is to such an extent that the students try any harmless way to give present even if their allowance proves to be insufficient. According to most of the students, no special time is necessary to sustain the tradition of present. And the frequency of giving present is quite higher than their allowance. Of course, one of the most pleasing results is that even in case of their friends with whom they are not on outs are concerned, they do not wish to leave them alone on their special days and they desire to visit them together with their present. Additionally, on the holidays and special days, they fulfill one of the most important traits of the Turkish personality by visiting the orphans and deserving poor at the hospitals, nursing home and Society for Protection of Children. Even the material dimension of the present they receive and give is very low in level. The students find it proper for their characters to give and receive present and they distinguish the present from the bribe sufficiently. However, we should here underline this difference again. And, additionally, that the majority of

the students stated that the book is the best present is considered important for the value given to reading.

However, it is concluded that the students, although not dominantly, feel it difficult to select their present and do not prefer using the internet to this purpose and that they avoid to give a present considering it worthless and, consequently, it may adversely affect their development; and that one out of five students said they would do anything to receive present has been considered as indecent characteristics when the Turkish identity and the culture in which they were born.

SUGGESTIONS

In light of this study, we may make the following suggestions:

- The students should be educated more about the place and importance of the present in the Turkish Culture in the conference hall and classrooms at the school or at home in order to maintain the concept of present and, to this end, books and documentary movies in format of VCD/DVD should be used.
- The students may be taught about handmade preparation in their free time for special days and conditions. Such act would at least be advantageous for the students of the low-income families. Furthermore, it should also be emphasized that the moral value of with would have positive impact on the person receiving such present.
- The guardians should be warned against giving high amount of money to the students. Thus preference of high-priced presents may also be prevented on the part of the students.
- For the students stating that they would do anything to receive present, the guidance service and family should always act in cooperation. Eventually, it would be to their benefit; because growing up a good citizen will be useful for himself/herself, to their families, environment and culture in which they live.
- According to the findings we obtained in the study, to the question about the persons to whom present should be given, the parents ranks first by a rate above 55%. Of course, the motherhood is the most sacred profession worldwide; however, it should be taught to the students that the fathers sharing the life together with the mother and even directly facing with the physical difficulties of the life deserve to be recalled as much as the mothers.
- Compulsory events for giving presents in the classrooms should not be organized and, if required, such events should be left for discretion.
- In order to experience/cause to experience the present as part of the Turkish Culture, the following short story or a similar story should be told until it is established well in their mind.

Make the students accept the life as a game. It is like a juggler throwing up five balls by their both hands. Call these balls family, health, friends, affection and work. And tell them to hold five of them all in the air. Shortly, they will perceive that the work top is rubber because it will jump when it falls and that the other four balls are made of crystal. Tell them that if they fall one of them, they would be subject to scratch, wear, crack, break or even broken to pieces. If one of them falls, it would never be same gain. Underline this fact. Never disturb balance of your life. And never forget to give a present, which is the fortifier element among these four balls.

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Chapter 47

The Effects of Constructivist Learning Approach on Academic Success of Students: A Meta-Analysis

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INTRODUCTION

With the restructuring of primary and secondary education in Turkey in 2006, constructivism has become one of the most used and most researched theories. Constructivism is not an education theory; it is a learning approach that deals with how we learn. Getting information from somebody or something, or passively collecting knowledge without associating does not mean learning. In constructivist theory, learning is a process where students take active role. Basic assumption of constructivism is the creation of knowledge through associating new ideas or events with earlier knowledge. Based upon their prior knowledge, values, and experiences, individuals give meaning to new knowledge. For this reason, learners construct the same experiences in different ways (Brooks & Brooks, 1993; Marlowe & Page, 1998; Gagnon & Colay, 2001). In this approach, it is aimed that through learning activities performed in an environment, which is suitable for interests and characters of individuals, meaningful and permanent learning will be provided and higher order thinking skills will be improved. It is thought that this will positively affect the academic success of students.

In various experimental studies, carried out with the aim of testing the effects of constructivist learning theory on the academic success of students, it is found out that students in the experimental group are more successful than the students in the control group, in which traditional education is given (Özerbaş, 2007; Ünal and Çelikkaya, 2009; Ünlü, 2010; Karakuş, 2012; Çalışkan & Aksu, 2013; Açıslı, 2014). However, in addition to this, there are also studies, which suggest that constructivism does not affect academic success (Kızılabdullah, 2008; Bal, 2011; Chung, 2004; Kaya, 2011). Such a situation might result from school type, educational level, lesson type, and sample differences. Also, when literature is analysed, it is observed that there are only a few meta-analysis studies that examine the effects of constructivist learning approach on the academic success (Apaydın, 2009; Semerci & Batdi, 2015). Apaydın (2009) limited his study with science education in Turkey, which is based on constructivism. Semerci and Batdi (2015), on the other hand, only dealt with the level of school, period of the experimental study, and lesson type as moderator variables in their study, in which they analysed 10 articles and 18 theses. Since a large number of researches about constructivism have been carried out recently in Turkey and these researches reveal different results, the need for drawing a common conclusion and for synthesising the results arises. In this context, by handling more studies (59 studies) in this study, as well as the effect sizes towards the effects of constructivist learning theory on the academic success, it is also analysed that whether there is a difference

between effect sizes with regard to some variables, which are not handled in the primary researches, or not.

Aim of the Research: The aim of this research is to determine the effects of constructivist learning approach on academic success of students. With this aim, effect sizes concerning the academic success of the students in experimental and control groups, in which constructivist approach is used, are determined.

MATERIALS and METHODS

In this chapter, model of the research, data gathering, and analysis of the data parts are given.

Model of the Research: As being one of the methods of synthesising research results, meta-analysis method forms the model of this study (Cumming, 2012).

Data Collection: The basic data sources of this study are MA theses, PhD dissertations, and research articles about the effects of constructivist approach on academic success of students in Turkey. To access the related researches, databases such as YOK National Thesis Archive, EBCSHO, TÜBİTAK ULAKBİM, ERIC and Google Scholar are scanned through using the following keywords: “constructivism,” “5E model,” and “academic success.” After the scanning, among the conducted studies related to the research topic, 59 studies are deemed appropriate for inclusion criteria. In the selection of the studies included in the research, following criteria are considered (Aytaç, 2014:1059);

(i) *Criteria 1: Published or unpublished study resources:* MA theses, PhD dissertations, and research articles are taken into the scope of the research.

(i) *Criteria 2: Appropriateness of the research method used in the studies:* It is taken into consideration that to reach the effect size in meta-analysis studies, the included studies should be empirical; and, experimental-control academic success groups should be used.

(i) *Criteria 3: Inclusion of adequate numeric data:* To calculate the required effect sizes for meta-analysis study, sample size, average, standard deviation, F value, t value, X^2 value, Kruskal Wallis value, Mann Whitney U data and p value are taken into consideration for the academic success groups of experimental and control groups.

The sample of this research is limited with 59 studies; and, with the findings of MA theses, PhD dissertations, and research articles written on this subject in Turkey between the years 2006-2014.

Reliability of Coding Protocols: A coding protocol, which includes the identity, content, and data of the study, is created. The consistency between Coder-1 and Coder-2 is found as 95,5%. To ensure the reliability between coders, Cohen's Kappa statistic is used; and, the reliability is found as 0,95. This result demonstrates the almost-perfect consistency between coders (Card, 2012).

Validity of the research: Validity and reliability of meta-analyses depend on the validity and reliability of the studies included in the research. Also, in meta-analysis, scanning and inclusion of all the studies, which are deemed appropriate for inclusion criteria, increase the validity. In meta-analysis, combined effect size is as valid as the validity of the studies included in the analysis (DeCoster, 2004, Petitti, 2000). It is observed that in theses and research articles included in this research, validity and

reliability studies of measurement tools were made. In the research, all theses and research articles, deemed appropriate for the criteria, are accessed. Within this context, it can be said that this meta-analysis study is valid since in all of the 59 studies included in this meta-analysis, the validity and reliability of data gathering tools are ensured (Aytaç, 2014).

Analysis of the Data: In the analysis of the data, Group Difference method, among group comparison meta-analysis methods (fixed and random effects model), is used. In this study, effect sizes of each research and their variances, and the comparisons of the groups are calculated via statistical Package Software CMA Ver. 2.2.064 [Comprehensive Meta-Analysis] for Meta-Analysis (Borenstein *et al.*, 2009). In the study, as the experimental group, academic success in the control group, and as the control group, academic success in the experimental group is taken. Therefore, if the calculated effect size is positive, it is interpreted for the benefit of control group; and if it is negative, it is interpreted for the benefit of experimental group.

RESULTS

With the aim of finding a solution to the problem of the research, analyses on the data of the studies included in the research are made. As a result of these analyses, acquired publication bias, descriptive statistics, forest plot, findings of fixed and random effects models, homogeneity test, and results related to moderator analysis are given below.

Publication Bias

In this study, existence or nonexistence of the publication bias is determined by the use of two tools: (a) Funnel-shaped scatter plot, (b) Orwin's Fail-Safe N. (Borenstein, Hedges, Higgins, & Rothstein, 2009; Cooper, Hedges, & Valentine, 2009).

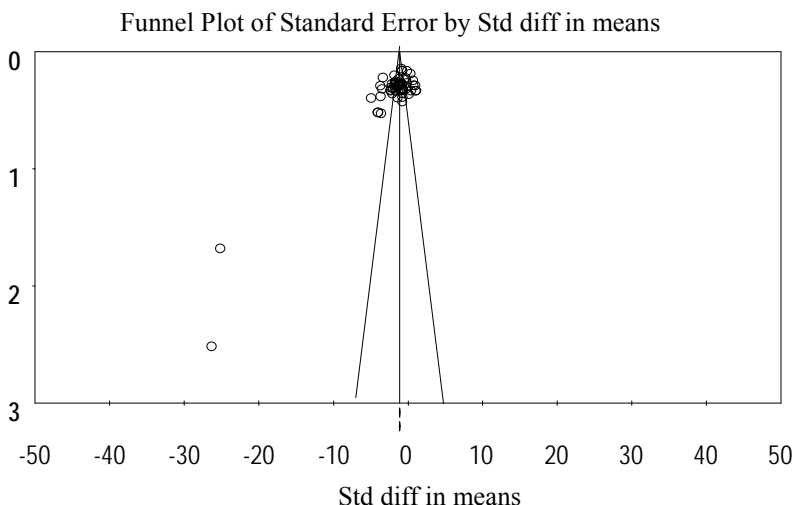


Figure 1: Funnel-shaped Scatter Plot of the Studies That Include Effect Size Data Showing the Success Differences in Experimental and Control Groups

Table 1: Effect Sizes Related to ECLAASS

Model	Study Name	Effect Size	Standard Error	Variance	Lower Limit	Upper Limit	Z-Value	p-Value	Sample Control/Experiment
	Işık, 2007	-0,797	0,160	0,026	-1,112	-0,483	-4,970	0,000	87 81
	Ataalkın, 2012	-0,784	0,260	0,067	-1,292	-0,275	-3,020	0,003	31 33
	Ketenci, 2010	-0,684	0,317	0,101	-1,306	-0,062	-2,154	0,031	21 21
	Yücel, 2011	-0,024	0,263	0,069	-0,539	0,490	-0,093	0,926	29 29
	Şencan, 2013	-0,148	0,247	0,061	-0,631	0,335	-0,601	0,548	33 33
	Bahadır, 2011	-0,163	0,268	0,072	-0,688	0,362	-0,610	0,542	29 27
	Durukan, 2011	0,959	0,290	0,084	0,391	1,528	3,307	0,001	27 26
	Duru, 2012	-0,772	0,356	0,126	-1,469	-0,075	-2,172	0,030	17 17
	Avcı, 2009	-1,751	0,260	0,067	-2,260	-1,242	-6,741	0,000	41 41
	Gürbüz, 2012	-4,024	0,519	0,269	-5,040	-3,007	-7,755	0,000	21 24
	Akbaş, 2011	-1,259	0,295	0,087	-1,837	-0,680	-4,264	0,000	27 28
	Candar, 2009	-0,624	0,298	0,089	-1,208	-0,040	-2,096	0,036	21 27
	Yolcu, 2013	-0,764	0,328	0,107	-1,406	-0,122	-2,332	0,020	20 20
	Önal, 2008	-4,694	0,382	0,146	-5,443	-3,946	-12,292	0,000	50 53
	Toksoy, 2009	-3,358	0,223	0,050	-3,794	-2,922	-15,091	0,000	91 104
	Ergin, 2007	-0,319	0,225	0,051	-0,760	0,122	-1,416	0,157	40 40
	Şahin, 2010	-0,251	0,317	0,101	-0,873	0,371	-0,790	0,430	20 20
	Şengül, 2006	-1,576	0,278	0,077	-2,120	-1,032	-5,677	0,000	34 34
	Çetin, 2010	-1,769	0,305	0,093	-2,366	-1,172	-5,807	0,000	31 29
	Yöñez, 2009	-1,051	0,267	0,071	-1,573	-0,528	-3,940	0,000	32 32
	Demirezen, 2010	-0,811	0,273	0,075	-1,347	-0,276	-2,969	0,003	29 29
	Kobal, 2011	-2,352	0,333	0,111	-3,005	-1,699	-7,062	0,000	31 30
	Mercan, 2012	-1,820	0,281	0,079	-2,370	-1,270	-6,486	0,000	34 38
	Gençosman, 2011	-0,211	0,300	0,090	-0,799	0,376	-0,705	0,481	24 21
	Ormancı, 2011	0,074	0,333	0,111	-0,579	0,728	0,223	0,824	18 18
	Tarhan, 2007	-0,496	0,287	0,082	-1,058	0,067	-1,726	0,084	25 25
	Yurt, 2012	-3,712	0,292	0,085	-4,284	-3,140	-12,726	0,000	64 64
	Ay, 2010	-0,889	0,331	0,110	-1,539	-0,240	-2,683	0,007	20 20
	Uslu, 2011	-26,949	2,516	6,330	-31,880	-22,018	-10,711	0,000	30 28
	Kaya, 2011	0,115	0,365	0,134	-0,601	0,831	0,315	0,753	15 15
	Bal, 2011	-0,242	0,240	0,058	-0,713	0,228	-1,010	0,312	34 36
	Bilgin et al. 2013	-0,797	0,164	0,027	-1,119	-0,475	-4,849	0,000	81 79
	Ergin, 2009	-2,181	0,276	0,076	-2,721	-1,640	-7,908	0,000	40 44
	Öntaş, 2014	-1,619	0,338	0,114	-2,281	-0,958	-4,797	0,000	26 21
	Özerbaş, 2007	-1,400	0,394	0,156	-2,173	-0,627	-3,549	0,000	16 16
	Yılmaz et al. 2006	-1,752	0,265	0,070	-2,271	-1,233	-6,620	0,000	39 40
	Açıslı et al. 2009	-0,927	0,325	0,105	-1,564	-0,291	-2,855	0,004	21 21
	Ünal et al. 2009	-0,722	0,323	0,104	-1,355	-0,088	-2,234	0,026	19 22
	Kızılabdullah, 2008	-0,129	0,166	0,027	-0,454	0,196	-0,780	0,435	72 74
	Gönen et al. 2009	-0,818	0,237	0,056	-1,284	-0,353	-3,446	0,001	40 37
	Ünlü, 2010	-3,611	0,526	0,277	-4,642	-2,580	-6,863	0,000	19 19
	Aksoy et al. 2013	-1,119	0,285	0,081	-1,678	-0,560	-3,923	0,000	30 27
	Tepecik, Zor, 2014	-2,265	0,306	0,094	-2,866	-1,665	-7,397	0,000	35 35
	Karakuş, 2012	-1,343	0,282	0,079	-1,895	-0,791	-4,768	0,000	33 29
	Sarıkaya et al. 2010	-1,259	0,233	0,054	-1,715	-0,803	-5,410	0,000	48 41

Çalışkan et al. 2013	-4,938	0,397	0,157	-5,715	-4,161	-12,453	0,000	50	53
Arı et al. 2012	-0,726	0,188	0,036	-1,095	-0,357	-3,852	0,000	60	60
Gök et al. 2014	-25,786	1,681	2,827	-29,082	-22,490	-15,335	0,000	58	61
Ergin et al. 2007	-1,634	0,252	0,064	-2,128	-1,139	-6,477	0,000	40	44
Saygın et al. 2006	-1,217	0,318	0,101	-1,840	-0,595	-3,832	0,000	23	24
Gül et al. 2011	-0,813	0,278	0,077	-1,358	-0,267	-2,922	0,003	28	28
Teyfur, 2010	-1,985	0,315	0,099	-2,603	-1,366	-6,292	0,000	30	30
Aktaş, 2013	-2,314	0,328	0,108	-2,957	-1,670	-7,049	0,000	30	32
Açıslı, 2014	-1,312	0,285	0,081	-1,870	-0,754	-4,609	0,000	30	30
Ayvacı et al. 2013	-0,799	0,210	0,044	-1,210	-0,387	-3,803	0,000	50	48
Yeşilyurt et al.2011	-0,680	0,330	0,109	-1,328	-0,033	-2,059	0,039	21	18
Özbudak et al. 2014	-0,907	0,144	0,021	-1,190	-0,624	-6,287	0,000	104	108
Çetin, Günay, 2007	-2,098	0,360	0,129	-2,803	-1,393	-5,834	0,000	23	25
Gürbüz et al. 2013	-4,024	0,519	0,269	-5,040	-3,007	-7,755	0,000	21	24
Fixed	-1,137	0,035	0,001	-1,207	-1,067	-32,030	0,000	2128	2118
Random	-1,569	0,159	0,025	-1,880	-1,258	-9,890	0,000	2128	2118

As observed in the Figure 1, most of the 59 studies included in the research are situated towards the upper part of the shape and in a close position to the combined effect size. In this sense, funnel-shaped scatter plot displays that there is not publication bias (Borenstein *et al.*, 2009) with regard to the studies included in the research. To test publication bias, Orwin's Fail-Safe N calculation is also made. Orwin's Fail-Safe N calculates the number of studies that may be lack in a meta-analysis (Borenstein *et al.*, 2009). As a result of this analysis, Orwin's Fail-Safe N is calculated as 61. For average -1,134 effect size, found as a consequence of meta-analysis, to reach 0,01 level (trivial), which means almost zero effect level, necessary number of studies is 61. 59 studies, specified in accordance with the inclusion criteria, are the entire number of studies (qualitative, quantitative, theoretical etc.) conducted on this subject in Turkey.

Since it is not possible to access another 59 studies apart from these, this result is considered as another indicator, which proves that there is not publication bias in this meta-analysis.

Uncombined Findings of the Effect Size Analysis With Regard to Academic Success Variable

According to standard error and 95% confidence interval, lower and upper limits of effect sizes related to the Effects of Constructivist Learning Approach on Academic Success of Students (ECLAASS) are given in Table 1.

According to Table 1, as a result of the evaluation of 59 studies, a high level of effect size is found out for the benefit of experimental group in accordance with the fixed and random models. While statistically meaningful differences are found in forty-seven studies ($p<0,05$), no significant difference is found in twelve studies.

Forest Plot of the Studies Including Data Related to the Effects of Constructivist Learning Approaches on Academic Success of Students

Forest plot related to 59 studies included in the research that include data about gender is displayed in Figure 2.

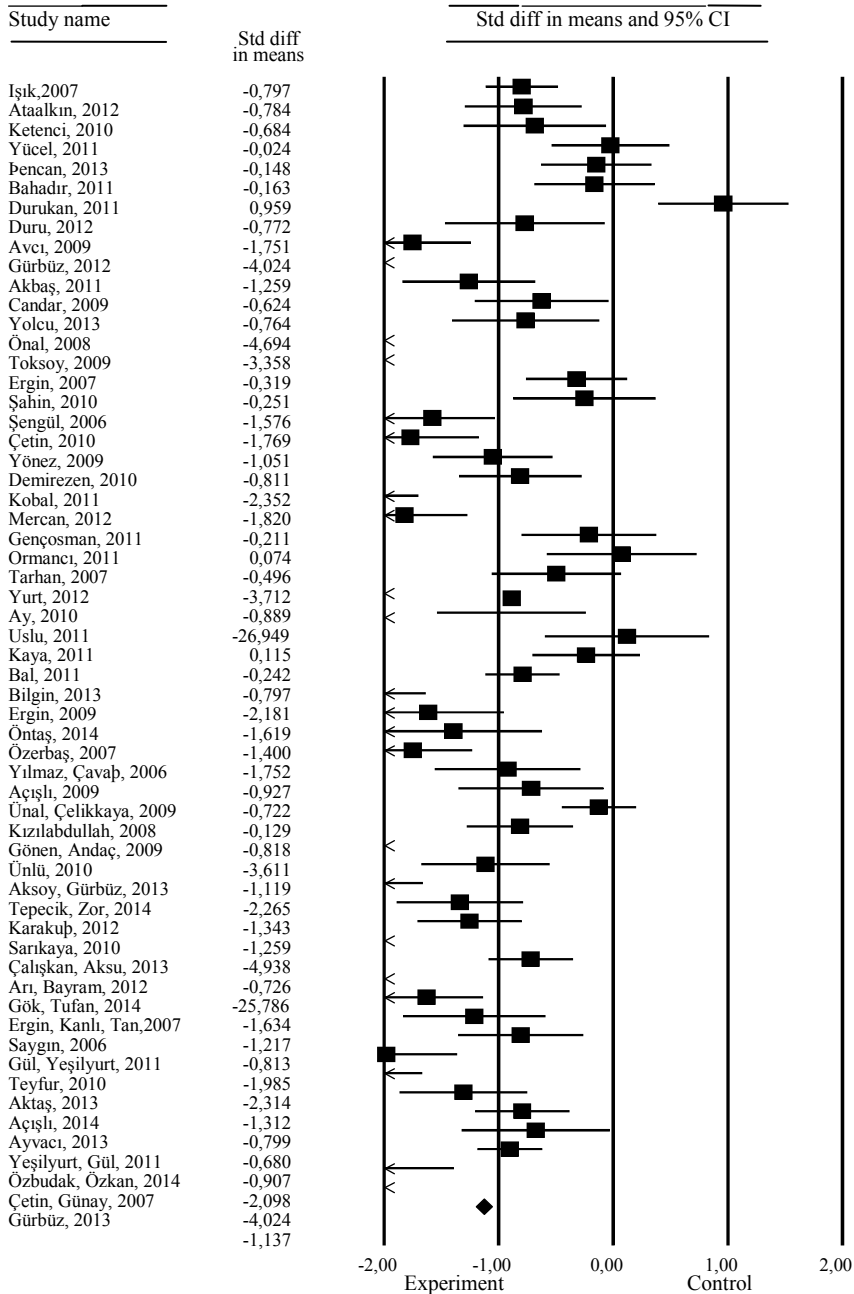


Figure 2: Forest Plo of the Studies

When Figure 2 is analysed, it is observed that according to fixed and random effects model, there is a difference greater than 0 for the benefit of the students in experimental group.

Findings of the Effect Size Meta-Analylsis Related to ECLAASS Which Are Combined In Accordance With Fixed and Random Effects Model

Average effect size (without omitting outliers) of the effect sizes with respect to the academic success of the student in experimental and control groups, which are combined in accordance with fixed and random effects model, is given in Table 2 as being lower and upper limit in compliance with standard error and 95% confidence interval.

Table 2: Findings of Effect Size Meta-Analysis Related to ECLAASS Which Are Combined In Accordance With Fixed and Random Effects Model and Homogeneity Test

Model	Number of Studies	Effect Size and 95% Confidence Interval					Homogeneity			
		Effect Size	SE	Variance	Lower limit	Upper limit	Z-value	Q-value	df (Q)	I ²
Fixed Effects	59	-1,13	0,03	0,00	-1,20	-1,06	-32,03	1108,24	58	94,76
Random Effects	59	-1,56	0,15	0,02	-1,88	-1,25	-9,89			

In Table 2, based on fixed effects model, the average effect size value of the effect size values of the studies included in the research in accordance with the academic success variable of the students in experimental and control groups is calculated as $EB=-1,137$; standard error of the average effect size is calculated as $SH=0,035$; the lower limit of confidence interval of the average effect size is calculated as $-1,207$ and the upper limit is calculated as $-1,067$. Data of the 59 studies included in the meta-analysis in accordance with the calculations, based on fixed and random effects model, demonstrate that the average of the academic success of the students in experimental group is higher than the average of the academic success of the students in control group. According to the classification of Thalheimer and Cook (2002), a much wider level of difference is observed (Cohen's d : 1,10-1.45). When the statistical significance is calculated in accordance with Z test, it is found out that $Z=-32,030$. It is determined that the acquired result has statistical significance with $p=0.001$.

Homogeneity Test and Q and I² Statistic

For homogeneity test, with its other name for Q-statistic, Q is found as 1108,245. From Chi-square table, on 95% meaningfulness level, 58 degrees of freedom value is found as 42,557. Since Q-statistic value ($Q=1108,245$) exceeds the critical value ($\chi^2_{0,95}=77,022$) of 58 degrees of freedom value and Chi-square distribution, hypothesis defending that there is no homogeneity of the distribution of effect sizes is disapproved on the fixed effects model. In other words, it is determined that based on the fixed effects model, distribution of effect sizes has a heterogeneous characteristic. Developed as a complement of Q-statistic, I² puts forward a clearer result with respect to heterogeneity. I² shows the rate of total variance related to effect size. Unlike Q-statistic, I² statistic is not affected by the number of studies. In the interpretation of I², 25% shows the low level of heterogeneity; 50% shows the medium level of

heterogeneity; and, 75% shows the high level of heterogeneity (Cooper *et al.*, 2009). As a consequence of the homogeneity tests (Q and I^2) conducted for academic success variance of experimental and control groups, since a high level of heterogeneity between studies is found, model is transformed into the random model for combining process.

Table 3: Categorical Moderator Results With Regard to ECLAS

Moderator	k	d	SE	%95 CI	Q
Educational Level					0,128
Primary School	38	-1,541	0,199	[-1,700; -0,714]	
Secondary School	12	-1,724	0,267	[-1,932; -7,733]	
Faculty of Education	9	-1,724	0,479	[-2,662; 0,786]	
School Type					14,638
Public	54	-1,650	0,172	[-1,987; -1,313]	
Private	5	-0,821	0,132	[-1,080; -0,563]	
Publication Type					4,097
Postgraduate	24	-1,161	0,249	[-1,649; -0,672]	
Doctorate	6	-2,002	0,777	[-3,525; 0,478]	
Article	29	-1,793	0,211	[-2,207; -1,378]	
Lesson					12,094
Science and Technology	35	-1,397	0,174	[-1,737; -1,056]	
Physics	6	-1,216	0,253	[-1,711; -0,721]	
Mathematics	3	-0,837	0,259	[-1,345; -0,328]	
Social Sciences	6	-1,726	0,284	[-2,282; -1,169]	
Other (Turkish, Sci-Tech and Special Tea. Meth.)	9	-3,338	0,806	[-4,918; -1,757]	
Gender of the Researcher					1,902
Male	27	-1,829	0,272	[-2,361; -1,296]	
Female	21	-1,328	0,279	[-2,012; -0,916]	
Male/Female	11	-1,464	0,253	[-1,824; -0,833]	
Validity Study					7,205
Unexecuted	15	-0,948	0,259	[-1,456; -0,440]	
Executed	44	-1,819	0,195	[-2,202; -1,436]	
Reliability Study					0,038
Unexecuted	7	-1,657	0,458	[-2,554; -0,760]	
Executed	52	-1,561	0,171	[-1,896; -1,226]	

Note: k=number of the studies, d= Cohen's d (SOF), SE=Standard Error, CI=Confidence Interval, Q=Heterogeneity between studies, Comparison analyses were made for the studies of which number of subgroups is 2 and over. * $p<.05$

Findings of Effect Size Meta-Analysis Related to ECLAASS In Accordance With Random Effects Model

According to the random effects model of the data in 59 studies included in meta-analysis, it is observed that with 0,159 standard error and with -1,880 lower level and -1,258 higher level of 95% confidence interval, and with an effect size being $EB=-1,569$, the average academic success of the students in experimental group is higher than the average academic success of the students in control group (Table 2). According to the classification of Thalheimer and Cook (2002), it is observed that there is an excellent level of difference (Cohen's $d \geq 1,45$). When the statistical significance is calculated in accordance with Z test, it is found out that $Z=-9,890$. It is determined that the acquired result has statistical significance with $p=0,01$.

Moderator Analysis In Accordance With Academic Success Variable of the Students in Experimental and Control Group

Results of the moderator analysis, which is carried out to reveal the reasons of heterogeneity in this study, are given in Table 3.

Std diff in means

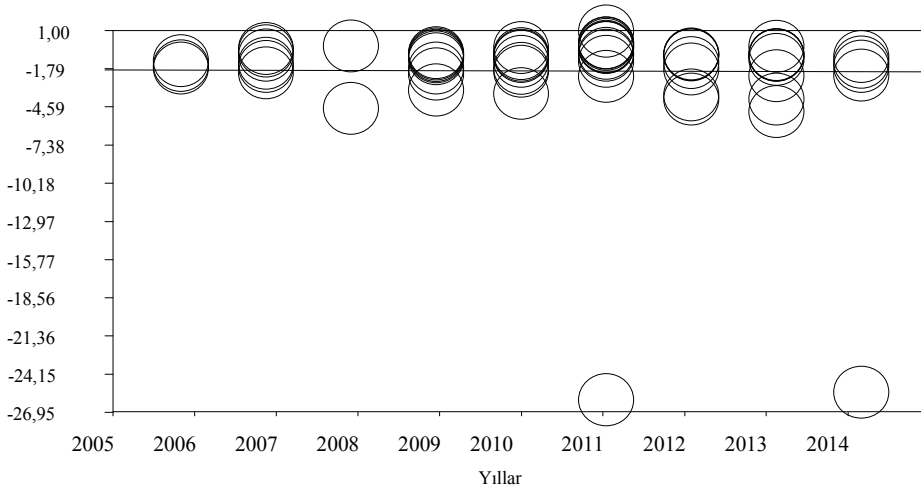


Figure 3: Effect Sizes According to Years

As a result of the moderator analysis (formal and private) ($p=0,000$), it is determined that effect sizes of the studies vary in accordance with the lesson ($p=0,017$) and with the fact that reliability study is carried out or not ($p=0,007$). From the point of school type, the results of the studies, in which private and public schools are handled, show that academic success of the experimental group in public schools is higher ($d=-1,650$).

It is determined that effect sizes of the studies do not vary in accordance with the gender of the researcher ($p=0,386$), educational level ($p=0,938$), publication type ($p=0,129$), and executed/unexecuted reliability studies ($p=0,84$).

It is observed that with regard to the effect sizes of the researches, a difference has continued for years for the benefit of the academic success of students in experimental group.

DISCUSSION AND CONCLUSIONS

In this study, 59 effect sizes of 59 studies, which form a sample of 4246 people, are calculated. As a result of the combining process in the fixed effects model a statistically significant -1,569 effect size is found for the benefit of the academic success of the students in experimental group. Within the context of the results of this meta-analysis study, it can be stated that in the studies conducted to determine the effects of constructivist learning approach on academic success of students, students in experimental group have more academic success than the students in control group. The result that in accordance with the fixed and random effects model, there is a large-scaled difference for the benefit of the students in experimental group, shows

parallelism with the results of the studies conducted by (Özerbaş, 2007; Ünal and Çelikkaya, 2009; Aksoy & Gürbüz, 2013; Bilgin, Ay & Coşkun, 2013; Çalışkan & Aksu, 2013; Gönen & Andaç, 2009; Özbudak & Özkan, 2014; Açıslı, 2014).

As a result of the moderator analysis, it is observed that compared to private schools, in the studies conducted in state schools, academic success of the students are higher. 54 of the 59 studies are carried out in public schools. Such situation can result from the sample difference and lesson type, as well as it can result from the reasons such as the small number of students in private schools; the fact that learning environment is more supported with teaching materials; the idea that there is a more democratic environment; and the fact that students are more active. The fact that studies carried out within the context of constructivism are already applied in private schools and therefore they bring nothing new to the class environment might also cause such situation. It is observed that compared to other lessons, in mathematics, the effects of constructivist learning approach on academic success of students are less. It is an interesting finding that the effect of this learning approach on academic success of students is higher in social sciences and other lessons rather than science and technology, and physics lessons. One of the reasons for this might be the fact that social sciences lesson is predominantly taught with teacher-centred and traditional methods such as lecturing, and questioning-answering. In sciences, by allowing laboratory studies in Biology, Chemistry, and Physics, students are supported to become more active. Since constructivism is based on student-centred, research-based, and cooperative teaching activities, it might not make a difference in social sciences lessons. In the researches, in which validity studies for measurement tool are conducted, it is observed that academic success of the students is higher.

According to the moderator variable of the years in which the research is conducted, continuity of the high success level of the students in experimental group is challenging. Especially when it is considered that constructivist learning approach has been carried out in primary and secondary schools since 2006-2007 academic year, it is thought that all classes should have the characteristics of constructivism. However, as it can be observed, it is understood that traditional teaching methods are continued to be used in public schools and constructivist approach continues to affect academic success.

Within the context of the results of this meta-analysis study, meta-analysis studies can be made through using variables such as characteristics and attitudes of teacher, and learning ways and attitudes of students, which are estimated to be in relation with constructivist learning approach. Also, it can be suggested that to put constructivist learning approach into practice more effectively especially in public schools, training and motivation of teachers should be increased, and learning environments should be organized in accordance with this.

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Chapter 48

In-Service Training and Academics' View of It

Aygül YANIK & Nevzat YÜKSEL

INTRODUCTION

It is necessary to have human resources that are equipped with range of knowledge and skills, highly motivated and harmonized their objectives with those of the institution in order to succeed in today's competitive world. At the same time, it will be possible for these people to maintain their performances with training and development activities. Training in human resources is a set of educational activities which increase knowledge, manners and skills expanding professional horizons and aiming to make positive changes in their thoughts, rational decision-making, behavior and attitudes of employees and the groups they formed in order for them to perform the tasks they undertook or will undertake in the future in their respective institutions more effectively (Özçelik, 2013). In this context, in-service training (IST) is the process for a person who is trying to fulfill a job, to develop himself/herself for his/her profession from the first day of work until the last day of his/her employment and to provide acquisitions to his/her institution (Öztürk & Sancak, 2007; Güneş, 2013). According to another definition, ISTs are continuing scheduled educational events aiming at increasing productivity and efficiency of employees and enhancing their skills and attitudes in the service (Fişek, 2012; Tanrıverdi, 2011; Taymaz, 1981). IST begins after the establishment of individual's work and legal relations.

Incompetence of training and knowledge received prior to service after starting work, employee's plan of pursuing a career, the necessity of adapting oneself to the global world, the fact that some knowledge can be learned in work life and human beings' desire to develop themselves lead institutions to include IST practices. These reasons are as follows (Şahin & Güçlü, 2010): 1) Incompleteness and inadequacy of information given to the employees before starting to work at the institution. 2) The need to benefit from changes and developments in science and technology while carrying out works at universities. 3) The career objectives of employees in addition to their desire to develop themselves and learn. 4) The fact that a great deal of information can only be gained in the process of service. 5) The desire of organizing systematic programs in order to prevent the loss of labor and time due to the increased competition today. 6) The acquisition of some knowledge and skills only in service. For example, Erasmus, Farabi and Mevlana programs at universities, tax office and prosecution tenancies, and district governorship cannot be given in the private sector since they are the tasks of the public sector. Therefore, the learning of changing information and techniques in the tasks related to the public sector can only be provided by IST (Bilgin *et al.*, 2007). In addition, many information, techniques and methods practiced by academicians. For example, information technologies and communication networks with continuous developments and technological changes are becoming more important in work. Individuals, who are unable to adapt to

changes, also prevent the development of institutions. For this reason, it is necessary to train skilled and qualified personnel in order to use new methods (Eryılmaz, 2009; Kayabaş, 2008). IST also helps to eliminate insufficiencies in general culture (Zengin, 2013). It makes significant contributions for institutions to become learning organizations as well. Therefore, its importance was increased in the 1990s (Renner *et al.*, 2014). The importance of IST continues to increase today.

IST has some features as an important educational category. These are (Zengin, 2013): 1) IST is limited to the institution it is given. 2) IST is accepted as a part of individual's work life and employees receive their wages and salaries during their participation to training. 3) IST can be carried out by purchasing service outside the organization as well as by benefiting from the knowledge and experiences of qualified personnel within the organization. 4) IST, for which the necessity is continuously felt in the institution, can be considered as a requirement for employees occurring at different times depending on their status within the institution. 5) IST should be given in a way not to interrupt business setup and operations of the institution.

There are many objectives of IST application which is a featured training. It allows employees to access to information and to use this information and assists in the development of initiatives, commitment and self-confidence in employees. It also increases the effectiveness of management through qualified employees (Bilgin *et al.*, 2007). At the same time, it allows employees to undertake new roles that will development their information and technological skills and to get promotion in their institutions (Mohanty, 2014). In addition, IST makes employees to feel safe in the institution where they work (Pehlivan, 1992). The objectives of IST can be grouped in different ways. The objectives of IST, according to Kaya, are (Kaya, 1977): a) to ensure productivity and effectiveness, b) to shorten the learning process, c) to change negative attitudes and behaviors of the employees, d) to keep up the morale of the employees, e) to create promotion opportunities in the profession and to improve the activities of the management.

According to Taymaz (Demirtaş, 2010): a) to raise organizational gains by increasing the quantity and quality of the goods and services provided in the institution, b) to ensure timely production and to maximize materials and energy savings, c) to adjust technology to the institution by ensuring the correct use of production tools, d) to ensure compliance with developments and to increase productivity by improving production methods, e) to reduce complaints and disputes and to maintain discipline in the organization, f) to ensure the adaptation of the employees to the work environment by following innovations, g) to increase success, respect and value of employees in the institution.

Sergiovanni and Carver (Altınışık, 1996) gathered IST around providing opportunities for employees to develop their professional skills, ensuring the acquisition of knowledge and skills that will assist their professional development, and changing their motivations and attitudes. It is not possible to limit the objectives of IST despite the certain limitations as mentioned.

The motivation factor is quite important among the above items. Motivation emerges as a result of the bond between the employees of the institution among themselves and with the institution. It is a process designed to address a variety of needs. It is necessary for educator to know these needs, to analyze behaviors and to be

aware that all people are not similar. The motivation level of the employee depends on financial and social benefits that he/she gets from the institution to meet with his/her individual needs. Motivational factors are very influential in the promotion of success (Steers *et al.*, 2004; Can *et al.*, 2009; Baron *et al.*, 2010) and increase the effectiveness of IST. It is expected that positive changes occur in the attitudes, behavior and knowledge of the personnel received for IST and a harmonious working environment is provided for the realization of these objectives (Demirtaş, 2010). In this case, many individual and institutional benefits will be obtained from IST. These are (Can *et al.*, 2009): 1) To increase productivity. 2) To ensure the motivation of employees by increasing performances. 3) To supply institution's need of staff by preparing the personnel for top level position within the institution. 4) To reduce occupational accidents and complaints as well as errors caused by the work. 5) To add dynamism and prestige to the institution. 6) To make institution's structure resilient against the changes from the external environment. 7) To contribute to the communication between people and departments. 8) To reduce maintenance and repair costs. 9) To minimize late comings and absences from work. 10) To decrease the supervision and inspection loads of the managers. Even though IST constitutes a cost for institutions, benefits to be obtained from this training will be evident in the long and medium terms. (Öztürk & Sancak, 2007). In addition, a written determination of IST will provide great benefits for the future of the institution (Zengin, 2013). The efficiency levels of IST programs should be increased continuously.

IST can be divided into three groups; on-the-job training, off the job training and training according to levels. On-the-job training is an individual or group training given to the personnel physically started the job during working hours and where the job is actually carried out. Off the job training is training conducted in-house and outer-house places outside the places where individuals actually carry out their jobs. Training according to levels includes supervisor and manager training (Can *et al.*, 2009; Özçelik, 2013; Öztürk & Sancak, 2007). An appropriate program for IST should be prepared.

Academics have an important place on the basis of a country's education system. The profession of academicship can be spoken of as long as academics can transfer professional changes and developments to their respective studies (Saruç, 2013). Therefore, it is necessary to prepare and implement systematic, planned and teaching-oriented works that will ensure the training and development of academics in their respective institutions. In or off university IST program can be effective in this context. In order to give IST, primarily the need for training should be determined through analysis and then the program should be prepared, implemented and evaluated. Need for IST= Necessary (knowledge, skill, attitude) for job – Existing (knowledge, skill, attitude). Ethical principles should be taken as basis in these trainings (William *et al.*, 1994; Zengin, 2013; Kayabaş, 2008; Gökçe, 2000). In this respect, recent studies emphasize the importance of focusing on learning and social learning identity (Amanatidis, 2015).

IST should be considered multifacetedly when assessing IST to be conducted at universities with their aspects. These include programs prepared for staff who currently works in the institution as a type of IST to be implemented. Programs, which will be implemented together, should be carried out as refresher training, training for

adaptation to changes, training for improvement in the profession, reiteration training, training for increasing efficiency and training for adaptation to innovations (Taymaz, 1981). It is recommended that training is implemented in the form of seminars. Because, seminars are occasions that can provide training for more than one person related to issues considering the fact that they include both theory and practice. They should be given by experts while continuing with the training (Beach, 1985).

No comprehensive studies that reveal the assessment of academicians working in Turkey on IST were found. Therefore, the importance of this study is further increased. The study aimed at determining the assessments of academic staff related to IST, the effects of socio-demographic variables on IST, creating IST awareness in university employees and offering suggestions.

MATERIALS AND METHODS

This study, being cross-sectional and descriptive in quality, was conducted on the academic staff of Kırklareli University in Turkey between 01.01 and 03.31.2015. Data was collected by survey method. The survey was prepared by the researcher benefitting from national and international surveys. It consisted of three sections as demographic variables, general information related to IST and IST assessment scale. The lower value was graded as “1” (strongly disagree) and the highest value as “5” (strongly agree) while assessing statements in the scale consisting of 34 items. The scale is scored according to 5 Likert type response categories. The results of the scale were scattered over a wide score of $5.00-1.00=4.00$. This width was divided into five and levels that determine the breakpoint of the scale. The following criteria were taken as basis for the assessment of scale statements and size scores.

Options	Scores	Range of Score	Scale Evaluation
Strongly disagree	1	1.00 – 1.79	Very Low
	2	1.80 – 2.59	Low
	3	2.60 – 3.39	Moderate
	4	3.40 – 4.19	High
Strongly agree	5	4.20 – 5.00	Very High

Cronbach’s alpha coefficient of the scale used is 0.719 and it was found to be highly reliable. Cronbach alpha reliability coefficient was used while assessing the reliability of the scale. It is a measure for internal consistency of items found in the scale. Alpha coefficient is evaluated as follows (Alpar, 2011).

Alfa coefficient	Explanation:
0.00 - 0.39	Scale is not reliable.
0.40 - 0.59	Scale reliability is low.
0.60 - 0.79	Scale is quite reliable.
0.80 - 1.00	Scale’s reliability is at high level.

Permission was taken from the related university administration in order to conduct the study. The entire research population consisting of 600 academicians was aimed to be reached. Academicians were informed about the research and survey was administered to 280 academicians who agreed to participate in the research. SPSS for Windows 15.0 software package was used in the analysis of the data. Since item total correlation values of questions 4, 5, 19, 22, 28, 31, 32, 33 and 34 were less than 0.200

and they would increase Cronbach's alpha value if deleted in Cronbach's alpha analysis applied to the questions of the scale, they were not included in the analysis. Factor load was taken 0.4 in the Varimax rectified factor analysis and since questions 3,11,13 and 14 were in the overlapping feature and question 15 constituted a factor alone, they were not included in the analysis.

Kaiser-Meyer-Olkin (KMO) value was found to be 0.685 and questions were determined to be appropriate to the size analysis. Highly significant result was obtained when analyzing the result of Barlett's test ($X^2=544.609$ $p=0.001$). There is a high correlation between variables. Factors, which are greater than 1 as eigenvalue, were chosen to be significant in determining the number of factors. Accordingly, there are 6 factors that are greater than 1 in the survey. While the first factor explains 9.62% of the total variance, it has an explanatoriness of 57.32% together with 6 factors.

Non-parametric methods are used if the number of subjects in the groups is not sufficient or data could not fulfill parametric test assumptions even though the number of subjects is sufficient (Demirgil, 2010; Sümbüloğlu and Sümbüloğlu, 2007, Büyüköztürk, 2011). Variables were determined to show no normal distribution in the research as a result of Kolmogorov Smirnov test ($p<0.05$). Non-parametric methods were preferred in the analysis of data. Mann Whitney-U test (MW) was used in the determination of difference between two groups in the comparison of quantitative data, Kruskal Wallis H test (KW) in the inter-groups comparisons of parameters in case there were more than two groups, and post hoc Bonferroni rectified Mann Whitney-U test in the determination of the group that caused the discrepancy. Chi-square trend analysis (Büyüköztürk, 2011) which tests whether there is a significant relationship between two-grouped categorical variables or not, was used in categorical data. Results were evaluated within 95% confidence interval and according to the significance level of 5%. The research findings cannot be generalized.

RESULTS

Demographic Variables

35.4% of academicians were determined to be faculty members, 12% of them to be instructors, 52.6% of them to be research assistants, half of them to be female and other half to be male, 51% of them to be married, 46.9% of them to have more than 5 years of professional experience and 38.6% to have institutional experience (Table 1).

Assessments of Academicians Related to Vocational Training and IST

48.4% of academicians were determined to consider basic vocational trainings and 9.4% of them determined the existing IST programs to be adequate or very adequate. Again, 72% of academicians were determined to follow IST programs occasionally and they generally obtained new information by reading publications related to academics. 69% of academicians stated that IST was necessary for academicians in order to follow academic programs, vocational and socio-cultural developments, changes in legislation and vocational technology. The majority of academicians were determined to state that it would be appropriate to provide IST once every 6 months theoretically and practically in the form of symposiums or conferences. In addition, academicians were determined to attend IST programs related to Farabi, Erasmus and Mevlana exchange programs at the rate of 66-67%.

Table 1: Demographic Variables

Variables	Groups	n	%
Title	Faculty members	68	35.4
	Instructor	23	12.0
	Assistant	101	52.6
Gender	Male	96	50.0
	Female	96	50.0
Age	26 and less	30	15.6
	27-33	79	41.1
	34-39	65	33.9
	40 and more	18	9.4
	Ort.±SS, Min-Max.	32.23±6.07	24-52
Marital status	Married	98	51.0
	Single	94	49
Education	Bachelor's degree	11	5.7
	Master's degree	108	56.3
	PhD or specialization in medicine	73	38.0
Professional experience (Year)	Less than one year	26	13.5
	1-5	76	39.6
	6-10	33	17.2
	More than 10 years	57	29.7
Institutional seniority (Year)	Less than one year	20	10.4
	1-5 years	98	51.0
	6-10 years	33	17.2
	More than 10 years	41	21.4
Unit	Colloge of Health	24	12.5
	Faculty of Arts and Sciences	52	27.1
	Faculty of Economics and Administrative Sciences	45	23.4
	Faculty of Engineering	26	13.5
	Faculty of Theology	14	7.3
	Faculty of Tourism	9	4.7
	Faculty of Architecture	9	4.7
	Faculty of Technology	13	6.8

Academics asserted that IST needed to be held on new technological developments, communication, scientific ethics, Erasmus, legislation, Farabi and Mevlana programs respectively. It was determined that academics found their possibility of taking IST during their academic life to be low, 64% of existing IST programs to be appropriate for the needs and the duration of 60% of those programs to be partially sufficient (Table 2).

12% of academics (n:23) were determined to attend an IST program continuously, 55.5% of them (n:106) to attend when they have time and 32.5% of them (n:62) to attend in the subjects that would interest them.

The suggestions of academics related to IST for their academic development are listed below in order of importance:

- 1) To follow periodic publications (n:164, 85.4%).
- 2) To provide trainings in appropriate time and conditions (n:163, 84.95).
- 3) To organize trainings by establishing cooperation and coordination between departments at universities (n:154, 80.2%).
- 4) To organize trainings on the topics of requirement (n:152, 79.2%).

- 5) To ensure participation to in-service training programs (n:126, 65.6%).
- 6) To render in-service trainings mandatory (n:51, 26.6%).
- 7) To develop certification and credit systems (n:51, 26.6%).
- 8) To provide in-service training in the form of distance education (n:16, 8.3%).
- 9) Other reasons (n:1, 0.5%).

Table 2: Assessments of Academicians Related to Basic Vocational Training and IST

Variables	Groups	n	%
Basic Vocational Training	Very Adequate	11	5.7
	Adequate	82	42.7
	Partly adequate	64	33.3
	Inadequate	35	18.2
Existing IST programs	Very Adequate	1	0.5
	Adequate	17	8.9
	Partly adequate	104	54.2
	Inadequate	60	31.3
	Very inadequate	10	5.2
Frequency of following IST programs	Always	6	3.1
	Often	34	17.7
	Sometimes	138	71.9
	Never	14	7.3
Following methods of new information related to Academicianship	Reading academic publications	175	91.1
	Attending In-service training programs	93	48.4
	Attending conferences and seminars	150	78.1
	Speaking with colleagues	147	76.6
	Other	26	13.5
Frequency of following changes in academic legislation	Always	18	9.4
	Often	46	24.0
	Sometimes	125	65.1
	Never	3	1.6
Necessity for IST for academicians	Yes, necessary	192	68.58
	No, not necessary	88	31.42
Reasons for the necessity of IST for academicians	To obtain information academic programs	176	91.7
	To follow vocational technology	161	83.9
	To follow changes in legislation	121	63.0
	To follow vocational and socio-cultural developments	159	82.8
	Other	11	5.8
How often should IST be made for academicians?	Once a week	4	2.1
	Once a month	6	3.1
	Once every three months	33	17.3
	Once every six months	133	69.6
	Once a year	15	7.9
Format and duration of IST for academicians	In the form of seminars of 1-2 hours long	67	34.9
	In the form of distance education (certified, at least one semester)	4	2.1
	In the form of intensive courses (at least once a year)	4	2.1
	In the form of symposiums or conferences (at least twice a year)	117	60.9

Table 2: Continued

How should IST be held for academicians?	Mainly theoretical	25	13.0
	Mainly practical	27	14.1
	Equally theoretical and practical	140	72.9
On which subjects should IST be given to academicians?	Related to Farabi program	123	64.1
	Related to Mevlana program	121	63.0
	Related to Erasmus Program	145	75.5
	Related to Legislation (law, regulations, etc.)	137	71.4
	Related to new technological developments	178	92.7
	Related to scientific ethics	152	79.2
	Related to communication (academicians-student, employee-academician)	158	82.3
	Other	9	4.7
Number of IST programs during his/her academicianship	Related to Farabi program	127	66.1
	Related to Mevlana program	130	67.7
	Related to Erasmus Program	128	66.7
	Related to Legislation (law, regulations, etc.)	81	42.4
	Other	27	14.2
State of receiving IST during his/her academicianship	Never received	18	9.4
	1-2 times	44	22.9
	3-4 times	83	43.2
	5 times and more	47	24.5
Suitability of IST programs to the needs	Very suitable	1	0.5
	Suitable	58	30.2
	Partly suitable	123	64.1
	No suitable	9	4.7
	Not at all suitable	1	0.5
Reasons for unsuitability of IST programs to the needs	Often topics can be dull	29	15.1
	Topics can be simple, and can be prepared below our level.	29	15.1
	Trainers' knowledge of the topic can be inadequate	22	11.5
	Organization of training activities can be not good enough	49	25.7
	Other	10	5.2
Duration of existing IST programs	Very sufficient	1	0.5
	Sufficient	60	31.3
	Partly sufficient	113	58.9
	Insufficient	17	8.9
	Very insufficient	1	0.5

IST Assessment Factors and IST Assessment Levels of Academicians

Usefulness, necessity, success metrics, organization factors, high competence and scope factors were found to be at medium and overall scale to be at high level when examined from the perspective of IST assessment scale factors and overall scale (Table 3). In addition, the average distribution of IST scale factors, sub-variables, factor loads and factor scores were shown in Table 3.

Table 3: Average distribution of IST Scale Factors, factor loads, and factor scores

Factors and sub-variables	Factor Loads	Avg.±SS	Min.-Max.
Factor 1: Usefulness			
20. I willingly attend IST activities	0.674	3.65±0.58	1-5
17. IST programs are useful.	0.649		
16. IST programs I attended meet with my needs	0.620		
29. ISTs facilitate the institutional adaptation of academicians.	0.536		
Factor 2:Competence			
25. Participants’ opinions are taken in IST activities	0.692	3.14±0.57	1.5-4.5
24. ISTs meet with academic expectations.	0.678		
9. Training personnel assigned in ISTs are sufficient.	0.627		
10. Time zone chosen for IST should be appropriate.	0.436		
Factor 3: Necessity			
30. IST completes shortcomings emerging from pre-service training in terms of vocational qualifications.	0.683	3.84±0.61	1-5
23. The number of participants in IST should be kept at appropriate number for the effectiveness of the program.	0.667		
26. Those who participate in IST find the opportunity to implement the things they learn.	0.627		
Factor 4: Success Metrics			
6. Success assessment should be made at the end of IST.	0.712	3.77±0.59	1.67-5
7. Overall assessment of training should be made at the end of IST.	0.600		
18. I have not felt the need for IST in my vocational life.	0.583		
Factor 5: Scope			
2. The selection of participants for IST should be made objectively.	0.768	3.45±0.67	1-5
1. Needs analysis should be made before determining the scope of IST training program.	0.688		
8. Sources related to IST should be easily accessed.	0.542		
Factor 6: Organization			
21. There is no institutional unit for IST.	0.720	3.57±0.65	1-5
27. There is no institutional organization related to IST.	0.631		
Overall Scale		3.55±0.35	2.05-4.84

Impact of Demographic Variables on IST Assessments of Academicians

When examining factor and overall scores of academicians according to demographic variables (Table 4);

A statistically significant difference was found between groups in terms of competence, necessity, success metrics, scope factors and overall scale scores in accordance with the titles of academicians ($p<0.05$). A significant difference was detected between competence, success measuring factors and overall scale scores of faculty members and the scores of instructors ($p=0.0167$). A significant difference was found between the necessity scores of instructors and the scores of faculty members

and research assistants ($p=0.0167$). A significant difference was found between the scope scores of instructors and the scores of research assistants ($p=0.0167$). No significant difference was detected by groups according to titles in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of success measuring factor scores according to gender ($p<0.05$). No significant difference was detected between groups according to groups in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of usefulness, competence, success measurement, scope and organization factors and overall scale scores according to age groups of academicians. ($p<0.05$). A statistically significant difference was found between usefulness, success measuring and organization factor scores of academicians with “27-33 age” groups and the scores of “34-39 age” groups ($p<0.05$). A significant difference was found between competence factor scores of academicians with “34-39 age” groups and the scores of academicians with “27-33 age” and “over 40 years old” as well as between competence factor scores of academicians with “27-33 age” groups and the scores of academicians with “over 40 years old” ($p=0.0083$). A significant difference was found between overall scale scores of academicians with “34-39 age” groups and the scores of academicians with “26 years and below” and “27-33 age” groups 34-39 age” groups ($p<0.0083$). No significant difference was detected between groups according to age in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of competence scores of academicians according to their marital status ($p<0.05$). No significant difference was detected between groups according to marital status in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of usefulness, competence, success measuring, scope and overall scale scores of academicians according to their educational status ($p<0.05$). A significant difference was detected between usefulness factor scores of academicians with “undergraduate” group and scores of academicians with “graduate” group ($p=0.0167$). A significant difference was detected between competence, success measuring factors and overall scale scores of academicians with “PhD or specialization in medicine” group and scores of academicians with “undergraduate” and “graduate” groups ($p=0.0167$). A significant difference was found between scope factor scores of academicians with “PhD or specialization in medicine” and scores of academicians with “graduate” group ($p=0.0167$). No significant difference was detected between groups according to education in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of competence, success measuring, and overall scale scores of academicians according to their professional experience ($p<0.05$). A significant difference was detected between competence factor scores of academicians with “6-10 years” of professional experience and scores of academicians with “less than 1 year” and “1-5 years” of experience; between competence factor scores of academicians with “over 10 years”

Table 4: Impact of Demographic Variables on IST Assessments of Academicians

Factors Demographic Variables	Usefulness	Competence	Necessity	Success Metrics	Scope	Organization	Overall Scale
Title							
Faculty members	3.58±0.48	3.5±0.49	3.9±0.47	4±0.51	3.6±0.71	3.71±0.61	3.7±0.33
Instructor	3.54±0.83	3.09±0.64	3.39±0.65	3.57±0.66	3.45±0.74	3.43±0.73	3.4±0.44
Assistant	3.73±0.57	2.92±0.49	3.91±0.64	3.66±0.58	3.34±0.6	3.51±0.65	3.49±0.31
KW	4.493	47.745	13.793	17.257	8.280	5.389	27.925
p	0.106	0.000*	0.001*	0.000*	0.016*	0.068	0.000*
Gender							
Male	3.66±0.61	3.18±0.58	3.8±0.57	3.86±0.61	3.47±0.64	3.54±0.64	3.57±0.31
Female	3.64±0.56	3.11±0.56	3.89±0.64	3.68±0.56	3.42±0.7	3.6±0.66	3.54±0.39
MW	-0.763	-0.925	-1.415	-2.326	-0.070	-0.706	-0.091
p	0.445	0.355	0.157	0.020*	0.944	0.480	0.927
Age							
26 and less	3.47±0.71	2.97±0.58	3.88±0.66	3.67±0.7	3.29±0.66	3.48±0.64	3.43±0.35
27-33	3.83±0.5	2.9±0.48	3.86±0.65	3.64±0.55	3.36±0.67	3.42±0.72	3.49±0.33
34-39	3.58±0.47	3.52±0.49	3.79±0.52	3.96±0.54	3.64±0.63	3.75±0.54	3.69±0.29
40 and more	3.46±0.85	3.17±0.54	3.91±0.66	3.81±0.59	3.43±0.7	3.72±0.57	3.55±0.5
KW	11.217	51.501	1.949	13.248	9.030	10.401	25.345
p	0.011*	0.000*	0.583	0.004*	0.029*	0.015*	0.000*
Marital status							
Married	3.6±0.54	3.3±0.54	3.84±0.54	3.85±0.54	3.4±0.69	3.58±0.66	3.58±0.33
Single	3.71±0.62	2.98±0.57	3.85±0.67	3.69±0.63	3.5±0.64	3.56±0.64	3.53±0.37
MW	-1.806	-3.910	-0.506	-1.957	-1.082	-0.299	-1.412
p	0.071	0.000*	0.613	0.050	0.279	0.765	0.158

Table 4: continued

Factors Demographic Variables	Usefulness	Competence	Necessity	Success Metrics	Scope	Organization	Overall Scale
Education							
Bachelor's degree	3.25±1.02	3.05±0.65	3.58±0.67	3.27±0.89	3.09±0.76	3.59±0.49	3.27±0.44
Master's degree	3.74±0.57	2.91±0.48	3.87±0.62	3.69±0.54	3.38±0.56	3.53±0.66	3.5±0.29
PhD or specialization in medicine	3.59±0.48	3.5±0.51	3.84±0.58	3.96±0.55	3.6±0.77	3.63±0.66	3.67±0.38
KW	7.207	49.358	2.588	14.869	11.804	1.539	28.195
p	0.027*	0.000*	0.274	0.001*	0.003*	0.463	0.000*
Professional experience (Year)							
Less than one	3.81±0.47	2.9±0.59	3.83±0.65	3.82±0.58	3.4±0.65	3.62±0.62	3.54±0.3
1-5	3.72±0.6	2.94±0.45	3.9±0.62	3.63±0.57	3.4±0.58	3.51±0.66	3.5±0.27
6-10	3.63±0.42	3.45±0.58	3.76±0.66	3.72±0.53	3.57±0.77	3.55±0.64	3.61±0.35
More than 10	3.5±0.66	3.36±0.56	3.82±0.55	3.96±0.61	3.47±0.72	3.65±0.67	3.61±0.45
KW	7.198	34.258	1.604	15.771	4.098	2.318	11.174
p	0.066	0.000*	0.658	0.001*	0.251	0.509	0.011*
Institutional Seniority (Year)							
Less than one	3.61±0.78	3.01±0.73	3.63±0.66	3.75±0.67	3.33±0.74	3.55±0.54	3.46±0.44
1-5	3.73±0.53	2.98±0.5	3.92±0.58	3.68±0.57	3.4±0.64	3.49±0.7	3.52±0.29
6-10	3.61±0.36	3.56±0.41	3.78±0.64	3.84±0.56	3.66±0.68	3.64±0.6	3.67±0.33
More than 10	3.51±0.71	3.27±0.59	3.81±0.61	3.95±0.59	3.45±0.68	3.71±0.6	3.59±0.43
KW	3.803	35.332	4.048	7.775	7.708	4.029	18.774
p	0.284	0.000*	0.256	0.051	0.052	0.258	0.000*

Table 5: Academics' Assessment of Sufficiency of IST

		Assessment of IST						
		Very adequate	Yeterli	Some adequate	Inadequate	Very inadequate	Total	
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	X ²
Title	Faculty members	1 (100)	11 (64.7)	42 (40.4)	12 (20)	2 (20)	68 (35.4)	15.344 0.000*
	Instructor	- (-)	2 (11.8)	12 (11.5)	8 (13.3)	1 (10)	23 (12)	
	Assistant	- (-)	4 (23.5)	50 (48.1)	40 (66.7)	7 (70)	101 (52.6)	
Gender	Male	- (-)	11 (64.7)	45 (43.3)	36 (60)	4 (40)	96 (50)	0.621
	Female	1 (100)	6 (35.3)	59 (56.7)	24 (40)	6 (60)	96 (50)	
Age	26 and less	- (-)	- (-)	14 (13.5)	14 (23.3)	2 (20)	30 (15.6)	0.005*
	27-33	- (-)	4 (23.5)	42 (40.4)	29 (48.3)	4 (40)	79 (41.1)	
	34-39	1 (100)	11 (64.7)	39 (37.5)	11 (18.3)	3 (30)	65 (33.9)	
	40 and more	- (-)	2 (11.8)	9 (8.7)	6 (10)	1 (10)	18 (9.4)	
Education	Bachelor's degree	- (-)	1 (5.9)	5 (4.8)	4 (6.7)	1 (10)	11 (5.7)	0.000*
	Master's degree	- (-)	5 (29.4)	53 (51)	43 (71.7)	7 (70)	108 (56.3)	
	Doctoras's degree	1 (100)	11 (64.7)	46 (44.2)	13 (21.7)	2 (20)	73 (38)	
Professional experience (Year)	Less than one	- (-)	1 (5.9)	14 (13.5)	9 (15)	2 (20)	26 (13.5)	0.010*
	1-5	- (-)	5 (29.4)	35 (33.7)	31 (51.7)	5 (50)	76 (39.6)	
	6-10	- (-)	5 (29.4)	21 (20.2)	6 (10)	1 (10)	33 (17.2)	
	More than 10	1 (100)	6 (35.3)	34 (32.7)	14 (23.3)	2 (20)	57 (29.7)	
Institutional seniority (Year)	Less than one	- (-)	1 (5.9)	12 (11.5)	6 (10)	1 (10)	20 (10.4)	0.089
	1-5	- (-)	5 (29.4)	50 (48.1)	37 (61.7)	6 (60)	98 (51)	
	6-10	1 (100)	5 (29.4)	22 (21.2)	4 (6.7)	1 (10)	33 (17.2)	
	More than 10	- (-)	6 (35.3)	20 (19.2)	13 (21.7)	2 (20)	41 (21.4)	

Table 5. Continued

		Assessment of IST					
Unit		Very adequate	Yeterli	Some adequate	Inadequate	Very inadequate	Total
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Unit	College of Health	- (-)	2 (11.8)	10 (9.6)	11 (18.3)	1 (10)	24 (12.5)
	Faculty of Arts and Sciences	- (-)	6 (35.3)	25 (24)	17 (28.3)	4 (40)	52 (27.1)
	Faculty of Economics and Administrative Sciences	- (-)	4 (23.5)	29 (27.9)	11 (18.3)	1 (10)	45 (23.4)
	Faculty of Engineering	- (-)	3 (17.6)	14 (13.5)	9 (15)	- (-)	26 (13.5)
	Faculty of Theology	1 (100)	1 (5.9)	5 (4.8)	5 (8.3)	2 (20)	14 (7.3)
	Faculty of Tourism	- (-)	- (-)	8 (7.7)	1 (1.7)	- (-)	9 (4.7)
	Faculty of Architecture	- (-)	1 (5.9)	4 (3.8)	2 (3.3)	2 (20)	9 (4.7)
	Faculty of Technology	- (-)	- (-)	9 (8.7)	4 (6.7)	- (-)	13 (6.8)
Total		1 (0.5)	17 (8.9)	104 (54.2)	60 (31.3)	10 (5.2)	192 (100)
		0.092					0.761
							p

of professional experience and scores of academicians “less than 1 year, “1-5 years” and “6-10 years” of professional experience ($p=0.0083$). A significant difference was found between success measuring factor scores of academicians with “over 10 years” of professional experience and scores of academicians with “1-5 years” and “6-10 years” of professional experience ($p=0.0083$). A significant difference was detected between overall scale scores of academicians with “1-5 years” of professional experience and scores of academicians with “6-10 years” and “over 10 years” of professional experience ($p=0.0083$). No significant difference was detected between groups according to education in terms of other variables ($p>0.05$).

A statistically significant difference was found between groups in terms of competence factor and overall scale scores of academicians according to their institutional seniority ($p<0.05$). A significant difference was detected between competence factors of academicians with “6-10 years” of institutional seniority and scores of academicians with “less than 1 year” and “1-5 years” of institutional seniority; between competence factors of academicians with “1-5 years” of institutional seniority and scores of academicians with “over 10 years” of institutional seniority ($p=0.0083$). A significant difference was detected between overall scale scores of academicians with “6-10 years” of institutional seniority and scores of academicians with “less than 1 year” and “1-5 years” of institutional seniority ($p=0.0083$). No significant difference was detected between groups according to education in terms of other variables ($p>0.05$).

Academicians' Assessment of Sufficiency of IST

While a statistically significant difference was found between groups in terms of title, age, education, professional experience of academicians when examining the distribution of IST assessment results according to demographic variables ($p<0.05$), but no significant difference was detected according to their gender, institutional seniority and place of position ($p>0.05$), (Table 5).

While there is a statistically significant difference between groups in terms of only place of positions of academicians when examining the distribution of the frequency of following IST according to demographic variables $X^2=3.856$, $p=0.049$, ($p<0.05$), but no significant difference was detected according to their title, gender, age, education, professional experience and institutional seniority ($p>0.05$).

DISCUSSION

IST is extremely important for employees to adapt to current changes and developments. IST programs are seen to be desired by different professional groups for their own needs through studies conducted. For example, those who are working in police force (Gökçe, 2000), people serving in Ülker groups companies (Şahin & Güçlü, 2010), those who are employed in archives (Kanar, 2011), people at Elementary School Level (Mohanty, 2014), and those who are interested in information and communication technologies (Amanatidis, 2015) would like to have IST training related to their own fields of work. Nurses were discovered to have the lowest satisfaction from activities related to needs analysis in IST process and desire to receive training mostly in professional development (Serbest & Ulupınar Aıcı, 2010).

Even though programs that will be applied to academicians at universities are limited, the preparation and implementation of programs within the regulations

determined by Higher Education Council (YOK) will allow academicians to benefit from new method, techniques and technologies and scientific researches and will enable them to carry out active duties and studies. In this regard, it is suggested by YOK to plan IST practices in 1994 according to the list below (Kayabaş, 2008): 1) IST programs should be organized in accordance with psychological and social needs and expectations of the personnel. 2) IST programs should be prepared and implemented in a way to attain behavior changes or new conducts required by the duties and services. 3) IST practices should allow teachers to develop their skills, to increase their motivation and to be able to get promotion within the institution. Institution's objectives, policies, resources and needs should be taken into consideration while determining the goals of in-service training. 4) Opinions and thoughts of those who attend training should be taken in the assessment of IST programs and it would be beneficial to add them to the results after their interpretation.

While the scores of usefulness, necessity, success measuring factors and overall scale being at high level was regarded as positive, organization factor's being at high level was assessed as negative in the study. Because, it shows that IST units or organizations at universities are not sufficient. In addition, scores of competence and scope factors being at the intermediate level reveals the fact that IST programs should be revised in terms of competence and scope. A statistically significant difference was found between IST factors and title, gender, age, education, professional experience, and institutional experience of academicians in the study ($p < 0.05$). Demographic variables were discovered to be effective on IST assessments in some studies conducted (Eraslan & Şar, 2005; Yanık *et al.*, 2015). In addition, it was discovered in the study that majority of academicians considered basic vocational training and existing IST programs as inadequate or very inadequate.

Academicians were determined to learn academic developments usually by following periodical publications and most of them wish to attend in a newly-organized IST program. This can be regarded as a positive approach. Academicians mostly stated the necessity of IST programs and followed available programs, but it is important that 36% of them stated that these programs were not appropriate to the needs. IST programs should be revised within the context of the negativities expressed. Majority of academicians stated that it would be appropriate for IST programs to be given theoretically and practically. Similar results were also found in some studies (Yanık *et al.*, 2015; Eraslan & Şar, 2005). In addition, academicians were determined to not to attend IST programs organized in relation with Farabi, Erasmus and Mevlana programs at the rate of 34%. Their reasons for not attending should be analyzed and solutions should be produced for their participation.

Titles, competence, necessity, success measuring, scope factors and overall scales in academicians affect their IST assessments. Faculty members were seen to give more importance to competence, success measuring factors and general IST than their teaching duties. Faculty members believe more in the necessity of IST than instructors and research assistants. Again, faculty members assert the need to determine IST scope better than research assistants.

Men pay more importance to measuring success than women.

Age, usefulness, competence, success measuring, scope, organization factors and

overall IST in academicians have an impact on the assessment. Academicians in 27-33 age groups were seen to give more value to usefulness and success measuring and academicians in 34-39 age groups to scope and overall IST.

In addition, education level of academicians affects usefulness, competence, success measuring, scope and overall IST.

Professional experiences of academicians have an impact on competence, success measuring factors and overall IST assessments. They were seen to give more importance to the adequacy of IST when they have more professional experience. Especially academicians with less than 5 year professional experience did not give more importance to IST adequacy compared to those 6 years and more professional experience. Overall IST assessments of academicians with "1-5 years" of professional experience higher than those with "6-10 years" and "11 and more years" of professional experience and this can be considered as positive.

Academicians' institutional seniority affects sufficiency factor and overall IST assessments. Overall IST assessments of academicians with "6-10 years" of institutional seniority are higher than those with "less than one year" and "1-5 years" of institutional seniority and they attach more value to IST. We can say that 6-10 years of seniority is suitable seniority in terms of IST.

A significant relationship was seen between groups in terms of title, age and education and professional experience of academicians when examining distribution of IST assessment results according to demographic variables.

Each type of training requires spending time or money. Therefore, it is important to get maximum benefit from training. For this reason, training appropriate for the needs of employees should be organized and first of all their expectations must be met. An institution's offer of training and development activities shows that it is committed to its employees, develops them for the future and helps them to do better work in this process (Baron *et al.*, 2010). Therefore, institutions should plan and implement appropriate IST by taking the demographics of employees into consideration.

CONCLUSIONS

Demographic variables were determined to influence IST assessments of academicians. It was discovered in that study that academicians feel the need for IST and are willing to attend these trainings. Regular and systematic ISTs should be offered to academicians in line with the findings of the study in necessary topics especially on new technological developments, communication, scientific ethics, academic regulations, Erasmus, Farabi and Mevlana programs. Academicians' voluntary participation to IST programs organized by considering their needs, expectations, interests and requests should be ensured. IST programs should include all academic personnel and carry multi-disciplinary features. These trainings should be organized by different departments of university and even within the framework of the cooperation between universities. IST must be periodically organized in the form of theoretical and practical seminars. The physical environment, where training activities will be organized, should be appropriate for active learning and teaching. Assessments should absolutely be made at the end of training and feedbacks must be utilized. Funds should be allocated for IST in universities. Academicianship requires

continuous improvement. This improvement should be supported by the current IST.

This study, as expected, will increase the IST awareness of administrators and academicians at universities and will provide support for the preparation and implementation of programs with IST organization at universities by determining more effective IST policies.

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Chapter 49

Cooperative Learning Method and Its Relationship with the Views of Students on Achievement, Attitude and Applications

Mehmet Nuri KARDAŞ

INTRODUCTION

Rapid change-transformation experienced in the field of education as in every other field today, significantly expands the expectations on educational-instructional activities. Thus, this rapid change makes it necessary to adapt an individual-oriented educational method. In an ever-changing world, self-knowledge, awareness of one's skills, and as a result self-realization, mostly depends on the individual's participation in the learning process playing an active role. In fact, to learn and to experience the learned knowledge affects the individual's value judgment and beliefs, determining the individual's views on life, events and phenomena in many aspects. Thus, learning had maintained its significant role in every phase of humankind's journey in life. This significant role necessitates our undivided attention and sensitivity in this process that shapes the individual and the society (Kardaş, 2014a, 605).

The most important driving force in educating individuals of the society is the educational-instructional activities that take place in educational institutions. Renewal of educational institutions and system that have an important function in providing identity and success to people, in parallel to the changing requirements, should be an object of anxiety for all stakeholders, especially the related authorities. In fact, being sensitive on the renewal of educational approaches, methods and techniques in parallel to changing requirements, preparation of required conditions for applications, implementation and follow-up of modern methods are of utmost significance to reach the goal of training successful individuals and building prosperous societies (Kardaş, 2014b, 780). To accomplish this goal, important reforms were implemented in educational approaches in the new century. These innovations in education deeply influenced the structure and functioning of the educational system, caused fundamental changes in the process of learning-instructing, and altered the content and presentation of the learning methods and programs considerably (Meral and Şimşek, 2014, 135).

For an instructional method to be used in educational-instructional activities, it must provide significant advantages for the society in training well-equipped individuals. Because, it is obvious that the main purpose of education in modern societies is to train individuals, who are aware of self-learning, perceive and structure it accurately, and who are creative and productive (Kardaş, 2014b, 780). Thus, the students are expected to access ever-increasing knowledge base and to have basic information and skills to structure the knowledge they acquired in this world that changes and advances in an unprecedented pace (Doğan, 2013).

It is a must to make efficient use of educational strategies, methods and

techniques that serve the goals identified to provide sustained success in national and international levels. Thus, it is necessary to participate in PISA research that has been conducted since 2003, and to implement innovations in instruction methods developed as a result of these research and examinations. Turkey participated in PISA examinations/research conducted in 2003 and obtained quite bad rankings in different areas. As a consequence of these ratings, fundamental changes were implemented in 2005 in educational-instructional activities and “behaviorist approach” that has been utilized for many years was replaced by “constructivist educational approach,” which has been used in many developed countries in the world.

This educational approach, brought into the agenda by Bruner in the 1960’s, was popularized in Italy back in the 18th Century (Yaşar, 1998). Constructivist educational approach was tried in many countries in the world following Italy. Since the 18th Century, the popularity of constructivism increased continuously and became the most referred and essential educational strategy in educational-instructional activities.

According to Şimşek (2004), philosophical roots of constructivist educational approach dates back to two thousand years before our time. This educational method that has a long history changed considerably in time and its deficiencies were eliminated. Theoreticians such as Dewey, Piaget and Vygotsky contributed to this process (Yanpar, 2001).

One of the significant features of constructivist educational method is its focus on the access to information, and on learning/structuring by relating the information achieved to preliminary knowledge. According to Demiral (2012), constructivist instruction is a theory, which is based on learning the knowledge and structuring the information learned, in other words it is a theory that explains how the information is learned and serves the structuring of knowledge with activities. According to Güneş (2007a, 32), learning occurs with the active efforts of the individual and is structured in the brain in constructivist approach. Literature review would demonstrate that the main features of constructivist educational method are its guidance in the process of producing different solutions for problems and issues that an individual faces during education and business life, widening the individual’s horizons, prioritization of the benefits to be gained by different experiences and information obtained by the encouragement to cooperate with stakeholders, and enabling the synthesizing and realization of solution proposals via cooperation, research and discussion. Thus, it could be argued that constructivism is an approach that provides significant opportunities for the individual to self-realize in cognitive and social aspects.

Constructivist approach stresses the procurement of the required conditions for an expedient educational activity within the guidance and, counseling and facilitator role of the teacher, and efficient construction of learning based on the experiences of the learner. There are several instruction methods implemented in this approach, which is individual-oriented and prioritizes hands-on learning and learning by experience. One of these methods is “cooperative learning.”

Cooperative learning method is one of the student-oriented modern learning-instruction methods that have been in use in education systems of developed countries since the 1960’s. It is known that this method, which has a long past, is being developed constantly to be applied in diverse fields and is widely accepted by field researchers today.

Initial studies on cooperative learning were conducted by John Dewey, Kurt Kafka, Jean Piaget and Lev Vygotsky during 1990's on characteristics of group members and products of cooperation. Between the years of 1900 and 1960, studies on cooperation gained momentum and studies were conducted on "cooperation and competitiveness among children," "survey on cooperative learning," "right and wrong cases in cooperation," "cooperative learning in the classroom", etc. (Şahin, 2011) It is possible to state that the method, which arrived to its contemporary form through updates conducted due to changing requirements, is one of the most significant methods applied to achieve student-oriented learning in educational activities.

Literature review in Turkish demonstrates that cooperative learning method was referred to using different names by different scholars of the field. Gömleksiz (1993) referred to this method as "workgroup learning" (kubaşık öğrenme) from a folkloric saying in Anatolia "kubaşmak" (work-grouping), while Doymuş *et al.* (2005) called it "cooperative learning." Others referred to the method as "collective learning," "peer learning," and "group study." However, the term "cooperative learning" is the most common usage for this method in the literature.

Doymuş *et al.* (2005) stated that cooperative learning is called primarily "Cooperative Learning," but also as "Work Group, Collaborative Learning, Peer Learning, Peer Teaching, Team Learning, Team Work, Collective Learning, Learning Communities, Reciprocal Learning, Study Circles, and Study Group" outside Turkey.

The initial proponents of cooperative learning that was defined using different terms above were J. Dewey, Vygotsky, Kafka, Slavin, Piaget, Bandura, Kagan and Açıkgöz, but recently several scholars built their studies to develop and implement this method in diverse fields (Kardaş, 2013a). This learning method, which is the subject of increasing interest during the recent years in Turkey, is explained and interpreted as follows by the researchers in the field: Gömleksiz (1993) explained this method as a learning approach where the students help each other to learn academic subjects in mixed groups for a common goal, group achievements are rewarded using different methods. Açıkgöz (2006) defined cooperative learning as a process where small groups of students study together to help each other in learning. According to Şahin (2011, p. 8), cooperative learning activities are "a learning method that attracts the attention of the students, increases their motivation, enables a fun and entertaining learning, meets the requirement of the time, far beyond the traditional learning process, demonstrating the efficiency of achievement through teamwork."

Johnson and Johnson (1992; 1994; 1999) stated that cooperative learning expresses the achievement of a common goal of students with different skills studying in small groups to perform the highest level of learning. According to Goodwin (1999, 29), cooperative learning is a learning method where small, heterogeneous student groups study together to accomplish a common goal, in which the participants study in cooperation. While Artz and Newman (1990) defined the method as an activity that covers small learning groups that come together to solve problems, to accomplish a task given, and to realize a common goal, Slavin (1988) explained it as the instruction approach that includes teaching methods where students study in small groups and group proficiency is awarded using different methods.

It could be stated as a result of all these definitions that cooperative learning is an approach where students study by forming small heterogeneous groups in the

classroom and in other environments, help each other's learning by taking active roles towards a common goal, gain self-confidence and their communication, problem solving and critical thinking skills develop (Kardaş, 2013a, 82).

These definitions developed to explain cooperative learning demonstrate that there are similar activities and efforts in the core of this method. According to Sharan (1980), cooperative learning activities function via the collection of data on subjects of research and discussion by cooperative learning groups, the contribution to the group production by combining the individual work implemented, the interpretation of the results through in-group discussions, and finally presentation of the results as a product.

Field research on cooperative learning method found it necessary to implement this method in educational applications due to its accomplishments in learning and instructional activities. Slavin (1999) argued that cooperative learning is the most efficient product and one of the most successful results of modern educational understanding and the change in educational structure. Today, this method is perceived by researchers and educators alike as a standard part of educational applications. According to Graham (2005), Maloof and White (2005), and Johnson and Johnson (1999), cooperative learning is among the most prevalent approaches in the fields of theory, research and educational applications, in addition to being a concept that continues to attract the attention of teachers, school administrators and educational scientists (Cited by Kardaş, 2013a, 83).

Evans, Gatewood and Green (1993) argued that cooperative learning method should be utilized in educational-instructional activities as a contemporary learning-instruction method for it includes all students in the learning process, it is an effective method for academic achievement, to help gain cooperative skills, and socializing of the students in society.

All these determinations show that students could more easily develop communication and social skills with the aid of this method and would gain thinking, criticizing, discussing, and problem-solving identities.

This method, based on learning by experiencing and teaching, has been intensively researched in Turkey, especially during recent years, and has been discussed concerning its suitability for educational applications and its features.

It is necessary not to confuse cooperative learning applications with other teamwork based study methods. Cooperative learning has several distinctive features that separate it from other group-study based methods. According to Açıkgöz (2006), Cohen (1994), Johnson, Johnson and Smith (1991), Slavin (1980, 1983), Sharan (1980) and Stahl (1996), an application should have the following features/principles to be considered as a cooperative learning application:

Joint product → Group reward

In cooperative learning studies, the performances of individuals and the groups are evaluated separately. The prerequisite for the group members to be considered as successful is the success of the group. To road to this success is paved by the award structure and cooperative work. Cooperative reward structure requires the group members to create a group product within the limits of the goal of the group and thus, they are rewarded as a group. Cooperative work structure is where the joint efforts of the group members are encouraged to accomplish a task. Successful group members

are rewarded. The main point, however, is the group reward to maintain and incentivize the cooperation, in a way the dependency for reward (Açıkgöz, 2006; Kardaş, 2013a, 84).

Positive dependency

Positive dependency is one of the most significant features of cooperative learning. Positive dependency reflects the interdependency of the success of group members. During the group activities implemented in class, group members share the responsibility. The goal is to enable the group members to help each other's learning to attain the common targets determined. Different techniques could be utilized to ensure the cooperation of group members. Materials (worksheets, books, etc.) could be distributed to the groups to ensure teamwork. Also, the tasks could be distributed among the team members in academic work share to create an environment for cooperation. Evaluation tests could be implemented to highlight the group performance, in order to contribute to positive dependency. Group members could be assigned different roles based on their interests, age and gender. Thus, a positive dependency could be created within the group. The groups that reach the predefined goals could be rewarded to enable goal and reward dependency.

According to Johnson and Johnson, positive dependency is the most important provision for cooperation. Positive dependency creates a condition where individuals join their efforts to reach a common goal and reward (Johnson and Johnson, 1989; 1990; Kardaş, 2013a, 84).

Individual responsibility and eligibility for evaluation

The most significant objective of cooperative learning is to ensure each member of the group has strong knowledge, skills and behavior and contributes to the achievement of the group parallel to her or his strength. Thus, each member of the group is supposed to fulfill his or her tasks in his or her best ability. In cooperative group work, each student must realize self-learning and teach her or his newly acquired knowledge to other group members. For a healthy operation within groups, field researches made the following significant recommendations (Doymuş, Şimşek and Şimşek, 2005; Eraslan, 1999; Johnson *et al.*, 1993; Şahin, 2011; Kardaş, 2013a, 85): The number of the students could be limited to avail more responsibility for each group member. Teacher could evaluate each member's performance separately and share the results with all group members to ensure personal responsibility. Teacher could ask verbal questions on the academic subject to the students that refrain from taking responsibility or they could be asked to make a presentation to the group/class on the subject. Students should be made sure that the teacher cares about the study by his or her efforts to follow-up the developments meticulously. Each student in groups could be assigned self-control tasks to make sure that in-classroom or other studies were carried out reliably. To accomplish that goal, different roles could be assigned to students.

Face-to face (supportive) interaction

High individual and group motivation in cooperative learning applications affect the achievements considerably. Thus, it is important that the students carry out their work in square, round or U-shaped desks. Face-to-face interaction and communication between group members would increase the sense of responsibility of the group

members towards each other, their reasoning and inference skills, and social solidarity awareness. As a result of face-to-face interaction, the benefits of non-verbal communications would be introduced to the learning environment (Johnson, Johnson and Smith 1991; Şahin, 2011, Kardaş, 2013a, 86).

Social skills

One of the significant principles that cooperative learning method was based on was social constructivism. In cooperative learning studies, in addition to verbal and non-verbal communication skills between individuals, the students also achieve social skills such as the ability to criticize an idea, self-confidence, empathy, trust in others, establish good relationships, solidarity, taking joint action for common goals, creating alternatives to solve problems, and active listening (Doymuş *et al.*, 2005; Kardaş, 2013a, 86).

Evaluation of the group process

It is one of the most important features of cooperative learning. It is the stage, at the end of the group activity, where it is determined that which behavior of group members contributed to the achievement of the determined goals, and which behavior should continue and which should change (Açıkgöz, 2006). It is important for the productivity of the teamwork to evaluate the work process in the group and the achievements gained in this process. The evaluation process could be conducted using different methods. At the end of the academic study, group member individuals could be tested personally. After the individual tests, a group test could be implemented with the same or similar questions. Such an implementation would increase the responsibilities of the individuals within the group or would cause the individuals to perform their responsibilities more meticulously, and also would increase the solidarity and cooperation within the group by enhancing the group awareness. It could be beneficial to obtain the views of group members on their performances in the study to improve the evaluation process. Learning activities and groups could be modified parallel to the views of group members and teachers' determinations.

Evaluation process would contribute to the groups taking the studies more seriously, encouraging each other to participate actively in the activities, and the increased individual efforts to improve group achievements. Thus, group members should be allowed sufficient time to discuss their responses within the group during the evaluation process (Doymuş *et al.*, 2005; Kardaş, 2013a, 86).

Equal success opportunity

It refers to the equal efforts spent by the students independent from the success rates and the evaluation of the contribution of every single student (Açıkgöz, 2006). One of the important features that separates the cooperative group-work from the group-work in other methods is the expectation of equal achievement from all of the students. Equal tasks and responsibilities were assigned to individuals in the group to achieve the expected achievement from these individuals. In teamwork, the success of the group is stressed as opposed to individual achievements. Thus, the students were enabled to spend effort to learn and to teach within the framework of their own responsibility to achieve success for the group. In individual assessments, the contributions of the individual to the group are identified. Additional tasks or responsibilities could be assigned to these students, who contributed to the group less

than others (Kardaş, 2013a, 87).

THE ROLE OF THE TEACHER IN COOPERATIVE LEARNING

In cooperative group studies, teacher does not relay information and teaches as in traditional methods, but teacher is the one that provides guidance. In this duty, teacher is responsible to perform several important tasks such as preparing the appropriate work environment and the material to enable the active participation of students in the learning process, determination of target achievements and the appropriate leaning-instruction technique for there achievements, forming the groups, assigning tasks and responsibilities to the group members related to the learning subjects and social skills, following up the application processes and intervening whenever required, providing guidance for academic research, evaluating the performances of the groups and group members after the academic tasks and sharing the results with the groups, modification of the groups when necessary, determining and awarding rewards to increase the performances of groups and group members. In other words, teacher is responsible from the declaration of the academic tasks, goals and achievements, concepts and strategies before the implementation, and to initiate, end, and to assess the study (Kardaş, 2013a, 90).

THE ROLE OF STUDENT IN COOPERATIVE LEARNING

Sine qua non of this method is the active contribution of all group members in the group study in learning and teaching activities. Thus, the students are assigned tasks and responsibilities in every stage of the study. Main responsibilities assigned to students are: arrangement of the classroom, creating their own groups whenever deemed appropriate by the teacher, rearrangement of the distribution of tasks within the group whenever necessary, design of a flowchart for the course of studies, preparation and implementation of activity plans, distribution of tasks and cooperation in research-based homework, alteration of studies based on the developments, evaluation and reporting of the findings discovered in studies, discussion and debating of the group members' responses after assessment tests (Kardaş, 2013a, 91). In other words, the most important role of the student in cooperative learning activities is the student's responsibility to self-learn and to teach this learned knowledge to her or his peers in the group.

ADVANTAGES OF COOPERATIVE LEARNING

There are several positive contributions of cooperative learning method in education-instruction activities. The most frequently noted advantages of cooperative learning by the field researchers (Akınoğlu *et al.*, 2007; Doymuş *et al.*, 2005; Efe *et al.*, 2008; Johnson and Johnson, 1992; Web, 1985; Yager, 1985) could be summarized as below:

High academic achievement: It was observed that students achieved better results in research conducted using cooperative learning techniques. Studies demonstrated that cooperative learning methods develops social, cognitive, affective and psychomotor skills of the students better than the traditional methods (Kırbaş, 2010; Güvenç, 2011; Yıldırım, 2010; Uysal, 2009; Maden, 2010, 2011a, 2011b; Sevim and Varışoğlu, 2014; Şahin, 2011; Yağmur Şahin, 2013; Kardaş, 2013a, 2013d, 2014). It was shown that students in groups where cooperative learning was

implemented demonstrated higher study consistency performance, had higher remembering tendencies in assessments conducted on verbal subjects and scored higher success rates in access tests when compared to students in individual instruction groups (Yager, 1985).

Increase in the development of reasoning skills: Subjects are shared and assessed in a social environment with this method, hence cause and effect relation is questioned, students structure the knowledge they learn by establishing reasonable relations between their knowledge base and the subject matters. Thus, it could be argued that cooperative learning improves students' reasoning skills (Kardaş, 2013a, 93).

Developing positive attitudes towards peers and the course: Attitude could be explained as the positive-negative tendencies of an individual towards individuals, events and phenomena. This tendency is a significant factor in individual's achievements. Love and respect of students towards each other increase as they cooperate in educational activities contributing to learning of each other. In other words, the positive tendencies they have towards each other increase. It is obvious that the attitudes of a student, who succeeds as a result of cooperation in educational activities, towards the activities, the teacher and his or her peers would be positive. In a well-guided cooperative learning application, it is observed that the group members cooperate with each other and attempt to eliminate the missing parts together to reach the common targets and to succeed. It could be argued that this situation would contribute to the elimination of the lack of communication between individuals, and to have positive attitudes towards each other and the course (Webb, 1985; Kardaş, 2013a, 93).

Achieving self-confidence: Students are obliged to share their knowledge and ask and discuss whatever they do not know from their peers in the group while studying in cooperative learning groups. Thus, they could explain things without a reserve within the group, and could express themselves. This fact increases the self-confidence in the students.

Widening of the horizons: Since the individuals forming the groups have different experiences and points of view enables the expression of several ideas and opinions on the same subject in group studies. In such an environment, it is inevitable that the individuals, who have the opportunity to listen to different points of view, would commence to look at events and situations from a broader perspective (Kardaş, 2013a, 94).

Cooperation and the development of collaboration skills: Individuals are obliged to cooperate in this method to succeed. Group success is measured by the individuals' success and hence, it necessitates the cooperation of individuals. For the heterogeneous groups formed without respect to desires and priorities of the students to succeed, group members need to continuously communicate with the common goal in mind. With this method, sense of responsibility of the individual and individual's skill to contribute to the group and others are enhanced. It could be argued that the emotional development of the individual, who helps others and enjoys this situation, is increased and the individual is socialized (Doymuş *et al.*, 2005; Kardaş, 2013a, 94).

Concentration on academic tasks and developing disturbing behavior less: One of the leading problems the teachers complain about in traditional, teacher-

centered educational approaches is that they could not motivate the students for learning, thus being unable to realize the desired level of learning. One of the important reasons for that is the fact that students are passive listeners in teacher-centered education. Therefore, students that stay passive for long periods of time get bored and start to disrupt each other and engage in undesired behavior and this becomes prevalent in traditional educational environments. In cooperative group work, every individual that belongs to a group has specific tasks and responsibilities. Therefore, students, which concentrate on academic study, goals and achievements, engage in disruptive behavior than others (Kardaş, 2013a).

High motivation: In cooperative group studies, there is collaboration within the groups, but there is a latent competition between the groups. This competition and hunger for more success provides self-control to group members and motivate them to work harder. It could be argued that the fact that individual scores and group scores are calculated separately in evaluation tests and the importance of the individual achievement for the achievement of the group motivates the individuals to work more selflessly. Furthermore, selection of group rewards from items (grades, books, etc.) that are of interest for the students is effective in motivating the students to study (Kardaş, 2013a, 95).

Development of attachment of respect and love: It was observed that students that know each other well and study collectively to reach the same goals understand each other better and behave civilized and sincere to each other. It was also frequently observed in cooperative study activities that teachers, who keep the same distance with all groups and individuals within the groups, and work with these sincerely to train them, receive more respect. This fact demonstrates that group studies are effective in improvement of self-respect and self-efficacy emotions of the students (Akinoğlu *et al.*, 2007; Kardaş, 2013a, 95).

Development of the sense of responsibility: In cooperative learning studies, students take the responsibility for accessing the information and structuring and teaching the information acquired. Teachers are responsible for guidance and counseling during this process. In group studies, students spend effort to research and to learn to be beneficial for their peers under the guidance of teachers. Thus, it could be stated that the understanding of “one for all, and all for one” is well established in group members. Because, for the group to score higher points, individuals should score higher points in assessment studies by performing better. It could be argued that group studies enable self-control to study right and effective.

Applicability: Cooperative learning method is an instructional method that is applicable to all ages and groups, all class levels, and all course and subject fields. It could be stated that it became the most prevalent instructional method among others due to these advantages. Known features of this method are; it is suitable to include all students in educational activities in crowded classrooms, it provides opportunities for each student to research, examination, access the information, structure the information, ask questions, answer the questions, share the information and ideas without reserve (Jonson and Johnson, 1992). Another important feature of the method is to include students with low abilities and learning disabilities in the learning process and result in high level of learning skills (Kardaş, 2013a).

Understanding and being understood: One of the significant features of

cooperative learning is the fact that it highlights understanding others and being understood by others. Thus, empathy, tolerance, respect to others' opinion, discussing the ideas not the individuals, attempt to explain using appropriate expressions, overcome prejudices if any, gain terminal behavior are cared for in cooperative learning activities. Since sharing and collaboration intensively occurs in cooperative group studies, it is inevitable for the students to communicate with each other. This results in an environment of better understanding and elucidation among the students.

PRINCIPAL TECHNIQUES USED IN COOPERATIVE LEARNING METHOD

Cooperative learning techniques have different modes of utilization based on the number of students, social and physical properties of the class, course and the subject that would be studied in the activities, and structuring of the cooperative studies (Hedeen, 2003; Kagan, 1989; Sucuoğlu, 2003).

Principal modes are; Joint Learning, Academic Controversy, Student Team (Student Team Achievement Divisions Technique, Team Game Tournament, Team Supported Individualization), Cooperative Integrated Reading and Composition (CIRC), Group Research, Cooperation-Collaboration, Jigsaw I, II, III, IV, Invention, Ask Together Learn Together.

Joint learning technique

This technique was developed by Johnson and Johnson during the mid-1960's. Since it is the oldest technique in cooperative learning, it is perceived as identical with cooperative learning.

The significant features of the technique are; it has a group goal, thoughts and materials are shared, there is a division of labor and group rewards in this technique. Implementation steps are as follows:

Determination of instructional targets: Before the study, target achievements (development of academic and cooperative skills) are determined by the teacher and communicated to the group members.

Formation of the groups: Groups of 2 – 6 individuals are formed based on the class size. Heterogeneous groups are formed based on the gender, academic standing, socioeconomic characteristics, skills, etc. of the students.

Design of classroom environment: To provide in-group face-to-face communications, square, round or U-shaped non-mounted desks should be preferred. Classroom should be large enough to support cooperative studies. The classroom could be designed parallel to the requests made by the groups.

Assignment of roles to group members: Positive dependency within the group is aimed by assigning roles such as summarizer, auditor, researcher/rusher, connector, outfitter, writer, motivator, to explain his or her work to group members.

Determination of materials/tools related to the subject of the study: The material (books, worksheets, audio-visual material, etc.) to be used by the groups for the preparation of the determined subjects is determined under the guidance of the teacher and the tasks are delegated.

Distribution of study subjects to the groups: The subjects are distributed to create group dependencies. A subject is divided into sub-titles based on the number of students in the group and group members are excused to study on these. To facilitate

the distribution of subjects and guidance, each individual in a group could be coded based on the names assigned to the groups. For instance, let us assume that we have formed 8 groups with 4 individuals each in a classroom of 32 and have named these groups as A, B, C, D, E, F, G, and H. We could then call the individuals in group A, A1, A2, A3, A4; or the individuals in group B, B1, B2, B3, B4, and so on. The subject of the study is divided equally among the individuals in the group.

Explanation of the academic task: Academic achievements and behavior that are the targets of the group studies are announced to the groups.

Briefing on the evaluation tests: Group success in cooperative learning activities is dependent on individual success. Group members are informed about the evaluation tests that would be conducted at the end of each subject or chapter, and the measurement tools to be used in these tests.

Preparation of groups for the subjects: In this stage, groups prepare their tasks within the scope of the previous steps. Groups study and discuss these subjects independently. Their learning is assessed using subject tests. Students are guided for the desirable behavior. Teachers could assist group work when necessary to teach cooperative skills.

Finalization of the work and assessment: Group and individual achievements are assessed using qualitative and quantitative methods in group studies. At the evaluation stage, groups are tested using general scales on the subject. Results are announced to the groups and rewards are awarded based on factors such as age, class level, etc. (Ün Açıkgöz, 2011, 177; Sharan, 1990; Kardaş, 2013a, 12-14)

Academic Controversy Technique

According to Johnson and Johnson (1987), although the academic controversy technique is one of the most powerful techniques, it is one of the less used due to the facts that people tend to refrain from conflict and the insufficient knowledge of the teachers about this technique. These are the operational steps in this technique:

Formation of the groups: Students are initially divided to groups of four. Then, these groups are divided in two sub-groups to defend one of the conflicting ideas.

Presentation of the controversy: A predetermined controversy is presented to the groups. Controversies are determined on subjects that are open to discussion and that have two defensible sides.

Preparation of proposals: In this stage, students work in dual groups to organize their information to make deductions. They collect data using documents about the view they would defend and get ready for the defense.

Presentation of the views: Students explain the reasons for defending the view they defend; using the data they collected to support their view.

Defense: Here, the sides defend the view they proposed.

Understanding the opposite view: In this step, the sides attempt to understand and explain the opposite view.

Arriving at a conclusion: Finally a decision, which is acceptable to both sides, is made. To arrive at a conclusion, sides stop defending their views; they summarize the best evidence and arrive at a consensus and prepare a group report. Then group members start preparing for the test they would take (Ün Açıkgöz, 2011, 181; Johnson and Johnson, 1987; Kardaş, 2013a, 100).

Student team – achievement divisions (STAD) technique

This technique aims to enable the access of all team members to the instructional targets and to make the team successful. In other words, the students are expected to learn as a team, not to do anything as a team. This technique was developed by Slavin (1980, 1986, 1990). It has five phases.

Presentation: Learning material related to the subject matter is presented to the class by the teacher.

Formation of the groups: After the presentation of the teacher, the class is divided into heterogeneous groups of four. Students commence to work on the material presented to them.

Tests: Students take individual tests after each study session.

Individual progress scores: For a student to receive a score at a given test, he or she must receive a higher point than the study before. When a student receives a score equal to or less than his or her previous score, he or she is not given a new grade, therefore he or she could not contribute to the group.

Team reward: Teams are rewarded as they reach predetermined achievement criteria (Ün Açıkgöz, 2011, 185; Kardaş, 2013a, 101).

Team game tournament technique (TGT)

It was developed by De Vries and Slavin. Team-Game Tournaments (TGT) is a technique based on student groups preparing for the subject and their representatives competing against other representatives in a tournament. These are the operational steps,

Teacher instruction: Teacher makes a theoretical introduction about the subject in the beginning of the application.

Formation of the teams: Students of the class are divided into heterogeneous groups of 4 or 5 based on gender, age, achievement, etc.

Resolving the worksheets: Previously prepared worksheets on the subject and question cards numbered from 1 to 30 are distributed to the students. Groups study and discuss on these material. They compare their answers to the questions.

Organization of the tournaments: Tournaments consisting of games are organized based on the studies conducted. For the first tournament, three most successful students of their teams are invited to the 1st tournament table, the second best three students of their teams are invited to the 2nd tournament table, and the rest are invited to the 3rd and 4th tournament tables in order of their achievements. The purpose is to race the team representatives whose achievements are close to each other and to enable the maximum contribution by all students to their team. After the first implementation, students exchange tables based on their success rates. Those with an increase in success rate proceed to higher tables, those with a decrease proceed to lower tables. Those with the same level of achievement stay at the same table.

Games: Games are played between groups of three individuals representing their teams. One of the students picks a card and attempts to answer the question that corresponds to the number in that card.

Tournament material: Tournament tables are provided with a game sheet, answer sheet, scoring form, a deck of cards containing the numbers of the questions in the game sheet.

Scoring the tournament points: Scoring is conducted based on the number of the cards remaining on team tables.

Teams are rewarded based on their achievements of the predetermined criteria (Açıkgöz, 2011, 192; Kardaş, 2013a, 101; Slavin, 1976, 1994; Şahin, 2011).

Cooperative integrated reading and composition (CIRC)

It is a technique developed for reading-writing instruction. Guidance counselors utilize reading groups in the technique. Students from different reading groups are placed in teams in couples. While the teacher studies with a reading group, students in other groups study in dual teams. During these studies, students perform activities such as reading aloud to each other, predicting the end of the story, summarizing stories and texts, spelling and decoding. Students continue to study in their groups until the central theme is understood and other skills are acquired completely. During the process of achieving language skills, students write certain drafts, review and edit each other's work, and create a team book.

In all activities of this technique, first the students watch the teacher's instruction, then conduct team application and team evaluation, and then take quizzes. Students are not allowed to take the quizzes until they determine their peer is completely ready.

Teams are rewarded based on the mean performance of the members in all reading and writing assignments.

Team rewards are certificates given based on the mean efficiencies of the team members on reading and writing activities (Ün Açıkgöz, 2011, 201; Kardaş, 2013a, 102).

Group research technique

Group research technique was developed by John Dewey. According to Dewey, cooperation in the classroom is the first prerequisite for a democratic lifestyle. The objective of this technique is to ensure the active participation and interaction of the group members by activating their experiences.

These are 6 phases in this technique.

The academic task is determined.

Academic task/subject is divided into sub-titles within the scope of student suggestions. In this phase, group members study to determine how they would research their own sub-titles. They decide which resources they would utilize to prepare for certain titles and on the division of labor.

Each student collects, analyzes and evaluates the information related to his or her subject matter. Then by sharing the information the members collected, they try to solve the research problem given to the group.

In each step of the study, expert groups are formed by the students, who are expert in their subjects, from every group. Individuals in these groups turn the results into a report after the clarification of the information without collecting data themselves.

Research reports from every group are presented to the class. During the presentation, use of audio and visual tools and other creative methods and providing ways for the participation of other students are encouraged.

In this stage, the reports, presentations and students are evaluated. Students

participate in the evaluation process by providing feedback on the presentations of other groups. If there would be tests, they are announced at least two weeks prior to allow for the study-time of the students. Tests consist of the questions prepared by the groups based on their own reports. Students base their studies on these questions while getting ready for the tests and develop their answers by discussing them with other groups (Şahin, Maden, Kardaş and Şahin, 2011; Kardaş, 2013a, 103; Ün Açıkgöz, 2011, 204; Taşpınar, 2005).

Cooperation-collaboration technique

It was developed by Kagan (1989). It is based on creating an environment that reveals the natural curiosity, intelligence and skills of the students. It consists of the following steps:

Class debate: The goal of class debate is to reveal the details the students want to learn on a given subject.

Formation of the teams: If the objective of the teacher is to make students with different skill levels and characteristics teach each other something, he or she should form the teams heterogeneously, however, if the purpose is to only improve the interests of the students, teacher could allow students to form their own groups.

Selection of the team subject: Teams select the subject that they were interested in by discussing about it. Teacher should provide guidance in the selection of subject when necessary. The subject matter selected is then divided into sub-titles to be distributed among team members.

Preparation of short subjects: In this stage, students collect information on their subject matters within the guidelines set by the teacher.

Presentation of short subjects: Students present the information they have collected. During the presentation, activities such as listening, taking notes, asking questions and criticizing are conducted. Under the light of these activities, teams review their subject matters.

Preparation of the teams for the presentation: Teams are allowed a certain period of time to determine the subject of their presentation. In addition to narratives, use of discussions, projections and similar activities are encouraged for the participation of the whole class.

Team presentations: Teams present their presentations in the classroom. A time was allowed at the end for a question and answer session.

Assessment: Individual contributions of the presentations are assessed by the students and the teacher (Ün Açıkgöz, 2011; 2006; Kagan, 1989; Kardaş, 2013a, 105).

Jigsaw I

It was developed by Eliot Aronson and his colleagues. It was based on “group dynamics” and “social interaction.” It is one of the “pure” cooperative learning techniques. Jigsaw technique assigns the responsibility of instruction to the group of a portion of the subject to each student, supporting cooperative learning. In this technique, students are either the member of the “main group” or the “Jigsaw group” (Aronson *et al.*, 1987).

It is implemented via the following processes:

Formation of the groups: The size of the groups could be between 2 and 6 individuals. Heterogeneous groups should be preferred in this technique as well.

Division of the material: The subject is divided into smaller parts to match the number of students in the group and each student was assigned a part. Each student is responsible for studying the assigned part and teaching it to his or her peers in the group.

Expert groups: Students form new groups by leaving their initial groups with other students, who are responsible for studying the same subject. These new groups, which are called expert groups, discuss about the subject to determine how to teach it to their peers in the initial groups, and then return to their initial groups.

Return of expert groups back to the initial groups: Time is allowed for the team members that return to their initial groups to teach the subjects to their peers. At the end of the allotted time, all team members and groups are given a test. The study is terminated after individual and group evaluations are conducted (Ün Açıkgöz, 2011, 210; Kardaş, 2013a, 106).

Jigsaw II (Stahl, 1994), Jigsaw III (Holliday, 2000), Jigsaw IV, Reverse Jigsaw (Hedeem, 2003), Subject Jigsaw, (Doymuş, 2007), Ask Together Learn Together (Açıkgöz, 1990), and Invention techniques are other structured techniques used within the cooperative learning method.

Purpose of the Study

The objective of the study is to introduce the cooperative learning method and to determine the relationship between this method and academic standing, attitude and views of the students.

Answers to the following research questions were sought:

- What is the relationship between the cooperative learning techniques and the academic achievements of the students?
- What are the cooperative learning techniques used in graduate dissertation studies and what is the prevalence of their use?
- What is the relationship between the cooperative learning techniques and the attitudes of the students?
- What are the students' views on the cooperative learning activities conducted?

METHODOLOGY

Meta-analysis method was used in the study. Meta-analysis is a method used to combine the results of similar studies in a field (Ergene, 1999: 34). Meta-analysis is the analysis of other analyses. It combines the results of studies in a consistent and coherent manner (Cohen and Manion, 2001: 24).

In the study, graduate theses conducted between 2000 and 2014 using cooperative learning techniques were scabbed, reviewed, analyzed and the findings obtained were tabulated and interpreted.

Limitations of the study

- The study is limited to the master's theses conducted between 2000 and 2014 in Turkey using cooperative learning techniques.
- Databases included in the study are limited to those registered with the Higher Education Board (YÖK) Center.
- The cooperative learning techniques analyzed in the study are limited to the

structured techniques quoted in Kamile Ün Açıkgöz's (2011) book "Active Learning" and Abdullah Şahin's (2011) book "Cooperative Learning Techniques and Turkish Instruction, Sample Activities for the 2nd Level."

Data collection and analysis

Scanning method applied in meta-analysis was used to access studies conducted using cooperative learning techniques between 2000 and 2014 in Turkey. In the scanning process, YÖK thesis center database was scanned; the studies that met the criteria were recorded and classified. After this process, content of the studies were reviewed and their results were combined and percentage and frequency values were tabulated and interpreted.

FINDINGS AND COMMENTS

In this section, findings on the academic achievements of the students, their attitudes towards the course and the applications and their views in the cooperative learning applications derived from the studies conducted between 2000 and 2014. The types of the studies, results obtained and frequency and percentage data are presented in the tables.

General data, and the design, type, frequency and percentage values for the studies accessed in the study are presented in Table 1.

Table 1: Distribution of Studies Conducted Using Cooperative Learning Techniques

Design	Type of Study	f	%
Descriptive Studies	Dissertation	-	-
	Master's Thesis	3	1,47
Empirical Studies	Dissertation	33	16,17
	Master's Thesis	117	57,33
Mixed Studies	Dissertation	16	7,84
	Master's Thesis	34	16,66
Total		203	99,47

Table 1 demonstrates that 203 graduate level theses were conducted using cooperative learning techniques. It was determined that the most frequently used research design/method was empirical research method (f=150; 73.5%), followed by mixed studies (f=50; 24.5%). Descriptive research method was the least used method in graduate thesis studies (f=3; 1.47%). Learning fields that the cooperative learning techniques were used are displayed in Table 2.

Table 2 demonstrates that cooperative learning techniques were applied in 20 different learning fields in graduate thesis studies. It was observed that the field in which the cooperative learning was applied the most was sciences / scientific technologies education (f=70; 34.3%). Sciences were followed by mathematics (f=22; 10.78%) and Turkish (f=22; 10.78%) learning fields. These were followed by social studies education (f=16; 7.84%), foreign language (English) education (f=12; 5.88%), geography (f=10; 4.9%), chemistry (f=9; 4.9%), physics (f=8; 3.92%), computer (f=7; 3.42%), music education (f=6; 2.94%), other visual arts (f=4; 1.96%), geometry (f=3; 1.47%), biology (f=3; 1.47%), history (f=3; 1.47%), drawing (f=2; 0.98%), educational sciences (f=2; 0.98%), physical education (f=1 0.49%), foreign language (Arabic) education (f=1 0.49%), foreign language (French) education (f=1 0.49%),

and technical education ($f=1$ 0.49%) respectively.

Findings concerning the problem questions of the study are presented below:

Table 2: Frequency and percentage values related to learning fields for studies reviewed

Field	<i>f</i>	%
Science / Scientific Technologies Education	70	34,3
Mathematics	22	10,78
Turkish Education	22	10,78
Social Studies Education	16	7,84
Foreign Language Education (English)	12	5,88
Geography	10	4,9
Chemistry	9	4,41
Physics	8	3,92
Computer	7	3,42
Music Education	6	2,94
Other Visual Arts	4	1,96
Geometry	3	1,47
Biology	3	1,47
History	3	1,47
Drawing	2	0,98
Educational Sciences	2	0,98
Physical Education	1	0,49
Foreign Language Education (Arabic)	1	0,49
Foreign Language Education (French)	1	0,49
Technical Education	1	0,49
TOTAL	203	99,46

Findings on the problem question 1

The relationship between the cooperative learning techniques and the students' academic achievements are displayed in Table 3.

Table 3: The relationship between the cooperative learning techniques and the students' academic achievements

Type	Positive Outcome (<i>f</i>)	%	Negative Outcome (<i>f</i>)	%
Dissertation	44	22,88	4	2,08
Master's Thesis	126	65,52	16	8,32
Total	170	88,4	20	10,4

Table 3 demonstrates that there were a total of 190 dissertation and master's thesis studies on students' academic achievements conducted using cooperative learning techniques. 48 of these 190 studies on academic achievement were dissertations and 142 were master's theses. The findings of the studies that scrutinized the effects of the cooperative learning techniques on the academic achievements of the students ($f = 190$) demonstrated that cooperative learning applications resulted in a

positive outcome in considerable number of studies ($f=170$; 88.4%). It was determined that in 20 studies (10.4%), cooperative learning techniques did not have any effect on academic achievement. Findings showed that cooperative learning techniques were quite effective on the academic achievements of the students.

Findings on the problem question 2

In the analysis conducted, frequency of use was determined for cooperative learning techniques as well. The analysis demonstrated that cooperative learning techniques utilized in the thesis studies did not show a homogenous distribution. The technique adapted the most to acquire academic achievement in the instructional activities with the students was “joint learning” ($f=40$). Joint learning technique was followed by studies where mixed techniques were used ($f=72$); “Jigsaw” techniques ($f=30$); student team achievement divisions (STAD) technique ($f=22$); team game tournament (TGT) technique ($f=9$); group research ($f=8$); twin check ($f=3$); academic controversy ($f=5$); cooperative integrated reading and composition (CIRC) ($f=1$); ask together learn together ($f=1$); cluster supported individualization (CSI) ($f=1$), and others ($f=3$) respectively.

Cooperative learning techniques utilized in thesis studies and their frequency values are presented in figure 1.

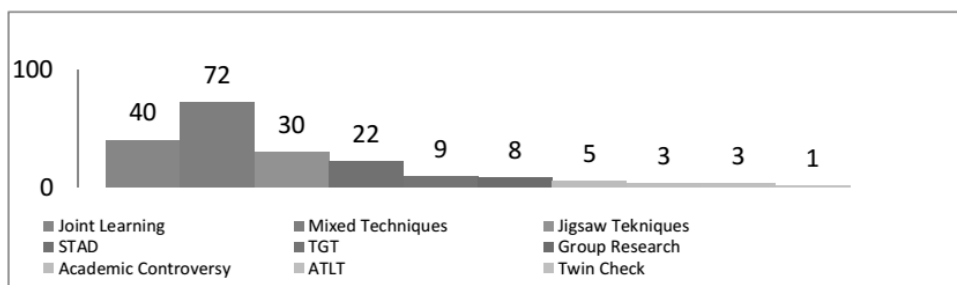


Figure 1: Cooperative learning techniques utilized in thesis studies and their frequency of use

Figure 1 clearly shows that “joint learning” technique was used more than other techniques ($f=40$). Among the reasons for the more frequent utilization of “joint learning” technique in graduate thesis studies qualities such as its support of the general features of cooperative learning, easy applicability, its convenience to develop communication skills, its applicability to several learning fields, and economical nature could be listed. Jigsaw techniques were preferred frequently in the research ($f=30$), since it is a technique that provides capabilities of research, review, analysis-synthesis, evaluation, reporting on the subject with expert groups and presenting when required, and applicability in various fields.

Findings on the problem question 3

Findings on the relationship between the cooperative learning techniques in the graduate thesis studies and student attitudes are presented in Table 4.

Table 4 demonstrates that a total of 77 dissertation and master’s thesis studies were conducted that scrutinized the effects of cooperative learning applications on the student attitudes towards the courses and the cooperative learning applications. 20 of these studies were dissertations and 57 were master’s theses.

The data depicted in the table show that the students had quite positive attitudes towards the classes and applications that utilized cooperative learning techniques ($f=63$; 81.27%). On the contrary, 14 studies (18.06%) showed that students did not have positive attitudes towards courses / cooperative learning applications.

Table 4: Relationship between the cooperative learning techniques and student attitudes

Type	Positive Outcome (f)	%	Negative Outcome (f)	%
Dissertation	16	20,64	4	5,16
Master's Thesis	47	60,63	10	12,9
Total	63	81,27	14	18,06

Overall findings identified that cooperative learning techniques affected the student attitudes positively.

Findings on the problem question 4

Findings on the student views on cooperative learning techniques related to the graduate thesis applications are displayed in Table 5.

Table 5: Relationship between cooperative learning applications and student views

Type	Positive Outcome (f)	%	Negative Outcome (f)	%
Dissertation	15	28,2	1	1,88
Master's Thesis	37	69,56	-	-
Total	52	97,76	1	1,88

Table 5 demonstrates that there were 53 dissertation and master's thesis studies where the views of the students on cooperative learning techniques and activities used in graduate thesis studies.

Out of the 53 thesis studies where the views of the students on cooperative learning techniques and activities were scrutinized, 16 were dissertations and 37 were master's theses.

In 52 of 53 graduate theses reviewed (97.76%), it was reported that students expressed positive views on cooperative learning applications and courses that implemented cooperative learning techniques. Only in 1 study (1.88%), students expressed negative views on cooperative learning applications.

RESULT AND DISCUSSION

Results extrapolated on the problem questions of the study are as follows:

- It was determined that 190 dissertation and master's thesis studies were conducted on academic achievements of the students using cooperative learning techniques. 170 studies (88.4%) concluded that cooperative learning techniques were more effective in improving the academic achievements of the students when compared to other learning methods. On the other hand, 20 studies (10.4%) found that cooperative learning techniques were not significantly effective in improving the academic achievement of the students.

48 of 190 studies conducted on academic achievement were dissertations, 142 were master's theses.

There are several studies conducted to determine the effects of cooperative

learning techniques on the academic achievements of the students in the literature. These studies demonstrated similar results with this study. In a study by Kardaş (2015) titled “The Effect of Academic Controversy Technique on Turkish Teachers candidates’ Success to Effective Speaking Skills and its relation with some variables (gender, multilingualism), Educational Research and Reviews,” it was determined that academic controversy technique, one of the cooperative learning techniques, improved the verbal skills of the students significantly. Blaney, Stephan, Rosenfield, Aranson and Sikes (1977) reported that cooperative learning method was quite effective in effective and permanent learning, achievement of skills and self-confidence of the students. A meta-analysis study on efficiency of cooperative learning techniques by Johnson, Maruyama, Johnson, Nelson and Skon (1981) scrutinized 156 studies. In 108 of these studies, they have reported that cooperative learning techniques provided better results when compared to other learning methods. Yager, Johnson and Johnson (1985) aimed to determine “*the effects of structured cooperative learning and individual learning on the achievement*” in their study. In this comparative study, it was determined that cooperative learning was significantly more effective on the retention of the knowledge that the students learn in the classroom and later on than the two groups that were instructed using other methods. In a study by Yager (1985) titled “*Oral Discussion, Group-to Individual transfer and Achievement in Cooperative Learning Groups*,” cooperative learning instruction and individual instruction were compared based on daily study consistency, achievement, and retention of knowledge. The results demonstrated that the students in cooperative learning instruction groups displayed a higher study consistency performance than the students in the individual instruction group, had a better tendency to retain the knowledge in measurements conducted on verbal subjects, and scored higher points in assessment tests. In the meta-analysis study conducted by Johnson and Johnson titled “*Cooperation and competition: Theory and Research*,” it was determined that the results of 185 empirical studies investigating the effects of cooperative and competitive methods on achievement supported cooperative instruction extensively. Same scholars examined 226 studies, which compared cooperative learning and traditional learning, and deducted that the results supported the cooperative learning method (Cited by Kardaş, 2013a). There are several other studies in the literature that demonstrated similar results (Kardaş, 2014, 2013a, 2013c, 2013e; Şahin, 2010; 2011a; 2011b; 2011c; Maden, 2010; 2011a; Sevim, 2014; Varışoğlu, 2013; Varışoğlu and Sevim, 2014).

- The analysis conducted determined that cooperative learning techniques and the frequency of the use of these techniques in graduate thesis studies did not displayed a homogeneous distribution (Fig. 1). “Joint learning” was the most frequently used cooperative learning technique in graduate thesis studies ($f=40$). Joint learning technique was followed by studies where mixed techniques were used ($f=72$); “Jigsaw” techniques ($f=30$); student team achievement divisions (STAD) technique ($f=22$); team game tournament (TGT) technique ($f=9$); group research ($f=8$); twin check ($f=3$); academic controversy ($f=5$); cooperative integrated reading and composition (CIRC) ($f=1$); ask together learn together ($f=1$); cluster supported individualization (CSI) ($f=1$), and others ($f=3$) respectively.

- 77 graduate theses, which investigated the student attitudes towards cooperative learning applications and courses that utilized cooperative learning

techniques were identified. In 63 of these studies (81.27%), it was determined that students had positive attitude towards courses, where cooperative learning techniques were implemented, and cooperative learning applications. On the other hand, 14 studies (18.06%) determined that students did not have positive attitude towards courses / cooperative learning applications.

20 of the 70 studies, which investigated the student attitudes towards cooperative learning applications and courses that utilized cooperative learning techniques, were dissertations and 57 were master's theses.

Overall findings on the student attitudes identified that cooperative learning techniques affected the student attitudes considerably. This result and the results of related studies in literature support the results of this study.

Çörek (2006) examined the effects of cooperative learning on the attitudes of the students and determined that cooperative learning was effective in the development of positive attitudes in students towards cooperative learning courses. In similar studies (Kılıç, 2004; Güngör, 2005; Güngör and Açıkgöz, 2006; Kardaş, 2013a; Şahin, 2010; 2011a; 2011b; 2011c; Maden, 2010; 2011a), it was determined that cooperative learning was more successful in students developing positive attitudes towards cooperative learning applications and courses that utilize cooperative learning, when compared to other learning methods.

Studies conducted outside Turkey also showed that students developed positive attitudes towards learning activities, which were conducted with cooperative learning method (Blaney, Stephan, Rosenfield, Aranson and Sikes, 1997; Johnson and Johnson, 1983, 2002; Johnson, Maruyama, Johnson, Nelson and Skon, 1981; Matthews, 1992; Prapphal, 1991; Siegel, 2005b; Slavin, 1990).

- It was identified that 53 dissertations and master's theses, which investigated the student views for cooperative learning techniques and activities, were conducted. 16 of these studies were dissertations and 37 were master's theses. In 52 of these graduate theses (97.76%), it was reported that students expressed positive views on cooperative learning applications and courses that implemented cooperative learning techniques. Only in 1 study (1.88%), students expressed negative views on cooperative learning applications.

Thus, the students stated that they considered cooperative learning applications as pleasant, instructive and motivating; the method, by enabling a warm working environment, promoted cooperation, solidarity, acting together in problem solving and exchange of the views; acting together towards the same goal, taking responsibility and working with pleasant techniques increased their motivation, they did not encounter any situations that alienated them from studying; the method implemented made learning more pleasurable and effective when compared to other learning methods; they joined the work voluntarily and with pleasure; and they have understood the courses better (Kardaş, 2013a; Koç, Erdamar and Demirel, 2010; Şahin, 2011a, 2011c; Kayıran Kuşdemir, 2007; Buluç and Gümüş, 2007; Maden, 2010, 2011a, 2013b).

These views were parallel to the findings of similar studies that scrutinized the effects of cooperative learning on the development of social skills (Johnson and Johnson, 1974; Johnson *et al.*, 1991; Johnson and Johnson 1987; Johnson and Johnson 1994; Johnson and Johnson 2000; Slavin, 1995, Slavin, 1980; Slavin 1996; Slavin and

Cooper, 1999).

The findings of this study, as well as the findings of the related studies in the literature demonstrated that cooperative learning applications showed considerably successful results on the academic achievements of the students, their attitudes towards courses, and views on the applications when compared to other learning methods.

Results show that cooperative learning method could be used more frequently in educational-instructional activities.

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Chapter 50

An Investigation of the Effect of a Training Program on Children's Playgrounds on Teachers' Level of Information

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INTRODUCTION

Play sustains an important role in children's life. Children learn many behaviors, knowledge and skills that mark their life in the play environment. Need to play is as important as the need for love, nutrition, and sleep as regards bodily, mental, social, and emotional development of children (Aral *et al.*, 2000). The fact that play contributes in almost all the fields of development is important for the child's development can be continued as a whole in the best possible way (Koçyigit *et al.*, 2007). Froebel (1902), an early childhood education philosopher and thinker, underscored that plays during the early childhood period spread the seeds of the future life (as cited in Brosterman, 1997). In addition to Froebel, such thinkers as J.J. Rousse, Peztaiozzi also emphasized the great importance of play during the early childhood period and pointed out necessity of play in natural environments, i.e. outdoors (Erdiller, 2012). In short, having taken the opportunity of self-expression beginning from early ages, child learns through their own language and ensures one's own development thanks to play.

Children's playgrounds should be established and effectively used in order for play can be maintained as an efficient and continuous process. Children's playgrounds are one of the venues, where children enjoy spending time. Children's playgrounds are where children meet nature within an urban setting marked with buildings and conduct exercises through various elements that develop their physical, psychological, and physiological structure. These outdoor playgrounds meet the active recreation need of children, allow them to spend their spare time, and contribute in psychological, bodily, and mental development of children, in a safe environment that encourage children to play games and follow the order (Cihangiroğlu, 1994). Children tend to use especially the outdoor playgrounds for they can take the opportunity to express themselves. Children convening at playgrounds take the first steps to become a social individual through communication established among them (Yücel, 2005). Children's playgrounds are where children can feel a sense of belonging and naturalize their surrounding along with home (Türkan, 2009). Playgrounds create opportunities for children work in collaboration, organize social plays, and discover physical and symbolic environment (Moore & Marcus, 2008). Giesbrecht (2012) suggested as based on literature that the development of children, who especially played outdoors was positively reinforced. Nevertheless, due to such factors as urbanization, technology use at very early ages, effect of media and TV, concerns of parents, unsafe streets, and inadequacy of teachers in using playgrounds, children cannot make efficient use of the playgrounds. As a matter of fact, playing outdoors or

at streets may promote such skills of children as taking risks, making decisions, and establishing friendships. Well-designed and well-managed playgrounds provide children with the development opportunities such as improvement of motor skills, learning, decision-making, and playing for fun (Tekkaya, 2001). Especially preventing children from playing at street or outdoors may lead them to become bad -tempered. Public streets provide various opportunities for personal development and social communication (Sennet, 1971) and meet a substantial portion of children's need to play (Oldenburg, 1999). Children, who are deprived of the opportunity to consume energy at outdoors, natural sites, and streets, are exposed to an imminent risk of obesity, when they develop unhealthy nutrition habit. A study conducted the USA showed that communication with nature had a therapeutic effect on attention-deficit children (Louv, 2010). In addition, several studies confirmed that indoor activities such as watching TV and non-green outdoor spaces covered with asphalt increased attention deficiency (Palmer, 2010). Children create new plays and new worlds by play elements available in the playgrounds allocated for them. Having conceived the comfort of such places, children also become more sensitive and constructive individuals to protect environment as they grow by adopting it as a principle in their lives (Bektaş, 2003). Children's playgrounds should help children with development of such concepts as shape, size, number, and association between parts etc. besides social development (Alqudah 2003).

It is important that any hurdles that may disrupt children's playing should be removed and children should be allowed to play freely and follow a healthy development process. Due to urbanization, it has become increasingly harder to find natural sites in the vicinity of residential areas and the safest outdoor playgrounds are available outside the city. Although specialists recommend use of natural sites as much as it is possible, safe and nature-like playgrounds established within the settlement areas inside the city may provide children with important opportunities (Louv, 2010; Palmer, 2010). In that context, playgrounds that support child development and observe children's rights should be established in places, where children can have easy access. However, playground establishment is not sufficient for children's development can be supported. The extent of and how such playgrounds are used prove to be as significant as the establishment of playgrounds. Teachers retain an important place in determining the children's playgrounds given that children spend one third of their daily time at school.

Plays are significant supportive elements in the conduct of education activities. Children may play by themselves or need adults to be involved in the play as well. Therefore, the adults, and especially the educated persons should be more sensitive about children's growing by playing. Playgrounds at school provide children with potential opportunities for children can be physically and mentally dynamic during break hours throughout the school day (Zask *et al.*, 2001). Play at school, where a substantial part of the day is spent, is also significant for the fact that peers are involved. Moreover, educational programs are important for ensuring that children do play and that the play is effective.

Zask *et al.*, (2001), assessed the percentages of children engaged in moderate to vigorous physical activity and vigorous physical activity in 18 primary schools (children ages 5-12) in rural Australia. They found that almost half of the children

(51.4% of boys and 41.6% of girls) engaged in moderate to vigorous physical activity, suggesting that school playgrounds and longer break times were necessary for children could engage in physical activity during school hours.

Involvement of the teacher in the play process is as important as the school itself for children. Having realized the importance of play in children's development, educators and authorities have developed various educational programs on children's plays, the number of places, where children can play in public living spaces, and contests are staged with an aim to ensure that children's plays are popularized and not forgotten (Gökşen, 2014). Teachers should spare a lot of time for plays during the educational activities in the first grades (Kılıç, 2007). Saracho (2001) observed that literary skills of children improved in classes with preschool teachers, who made arrangements in playgrounds at educational environment and learning centers (as cited in Erbay *et al.*, 2012). A teacher, who is cognizant of the effect of play on child's development would realize the effective benefits and act accordingly. Equipped with such knowledge and understanding, a teacher would consider the following for the children under her/his responsibility:

- Being cognizant of the types of learning experiences that can be implemented;
- As a knowledgeable observant of play, learning whether to intervene in child's play, and when and how to act in order to make a contribution; and
- Being cognizant of how to make use of play in the process of children's knowledge and skills acquisition, and what kind of a plan and an involvement is required for that purpose (Tüfekçioğlu, 2001).

Therefore, especially the teachers are required to act more consciously as regards the use of playgrounds by recognizing the fact that teachers are effective in children's use of such grounds. In the light of above it was aimed to describe the status of preschool and primary school teachers' use of children's playgrounds and to support the said teachers by training them about the use of children's playgrounds.

1. MATERIAL AND METHOD

It was aimed in the scope of the present study to describe the status of preschool and primary school teachers, who served in Mamak district, about the use of children's playgrounds and to measure the information of the said teachers by training them about the use of children's playgrounds.

1.1. Study Model

One-group pretest-posttest study design without control group, an experimental design, was used in the scope of the present study to describe the status of preschool and primary school teachers as regards the use of children's playgrounds and to measure the information of the said teachers by training them about the use of children's playgrounds. Dependent variable was the level of knowledge of teachers as regards the children's playgrounds, and the independent variable was the "Teachers Training Program on Use of Children's Playgrounds," the effect of which on teachers' knowledge as regards children's playgrounds was investigated.

1.2. Study Population and Sampling

The present study was conducted with teachers serving at public and private nursery schools and 1st grade of primary schools reporting to Ministry of National

Education at Mamak district of Ankara city. All teachers included in the population were invited to training program, where voluntary participation was sought in data collection process. A total of 605 teachers serving at preschool institutions and 1st grade of primary schools at Mamak district, who agreed to participate in the study, were involved in the study. Nevertheless teachers that failed or refused to complete data collection tools used in pretest and posttest and that participated in the training program for only a limited time (about one hour) were excluded from the study. 565 teachers that completed general information form were enrolled in the study. 516 teachers out of the said total completed information test used as pretest and posttest. Data collected from 565 teachers were assessed in order to see the effectiveness of the training program and the sample group was thus comprised of a total of 565 teachers, including 166 preschool teachers and 399 classroom teachers. A review of demographic characteristics of 565 teachers, who filled in the general information form, provided that 46.2% were from 30-39 age group, 84.2% were women, 70.6% were classroom teachers, and 28.7% were preschool teachers.

1.3. Measurement Tools Used in the Study

General Information Form, Information test, and Assessment Survey for Teachers Training Program on Use of Children's Playgrounds were used in the scope of the Teachers Training Program on Use of Children's Playgrounds. A literature review preceded the development of the survey, and after that expert opinion was sought for three measurement tools. Subsequent to the collection of expert opinion, preliminary application of the survey was realized in order to prevent from any setbacks during the actual survey application before the scales were finalized.

- *General Information Form:* This form was developed and used in order to collect information about school of graduation, service years, in-service training status, and through open-ended questions, the views of teachers about the frequency of play activities in educational programs, frequency of outdoor playground use, plays of preference, and how teachers encouraged children to engage plays.

- *Information Test:* Having been used as pretest and posttest, this test was comprised of items as regards place and importance of play in children's development, characteristics of child-friendly playgrounds, types of plays, importance of outdoor plays, and role of the teacher in plays.

- *Teachers Training Program on Use of Children's Playgrounds:* This program was composed of the subjects including the definition of play, effect of play on child's development, role of teacher in plays, and playgrounds. These subjects were shared through such methods and techniques as question and answers, lecturing, brain storming, discussion, and case studies, and by various audio-visual materials including, computer presentation, videos about exemplary playgrounds throughout the world, different stationary materials for teachers can set their own playgrounds. During training, the teachers were provided with activity examples that can be conducted at playgrounds as well as information on different subjects.

- *Assessment Survey for Teachers Training Program on Use of Children's Playgrounds:* This survey was developed in order to assess the effectiveness of the program and included items that would help with assessing the program as regards content adequacy, contribution in the level of information about the importance of

play and playgrounds, and level of information about the role of teacher in plays.

1.4. Study Process

In the scope of the study, first of all, the General Information Form was distributed to the teachers, who were asked to complete them. After the General Information Form, the teachers completed an information test about play and playgrounds as the pretest. Subsequent to completion of the General Information Form and the Information Test, training activity commenced with acquaintance activity, and the training work continued as based on an interactive method. The half-day Teachers Training Program on Use of Children's Playgrounds was conducted with groups of 25-30 participants. This training program continued for a total of eleven weeks with three sessions a week. Teachers were provided with and asked to complete the information test as the posttest and a program assessment survey upon completion of the half-day training program.

1.5. Data Analysis

SPSS-15.0 software was used in the analysis of data. Data from alternative questions were assessed by quantitative research method and the results were provided in frequency tables. Data from Information Test before and after the Teachers Training Program on Use of Children's Playgrounds was assessed by independent *t*-test.

2. FINDINGS AND DISCUSSION

Findings of the study were presented and discussed in two sections.

2.1. Findings based on the views of teachers on playgrounds

In the scope of the study, the views of teachers as regards frequency of play activities included in ongoing educational programs, types of outdoor plays, frequency of outdoor plays, providing children with opportunities to play different types of plays, level of agreement of teachers of the importance of play in child's development, level of recommendation of outdoor plays to colleagues, teachers' demands from school administrators to provide suitable milieu for teachers can introduce outdoor activities, and teachers' demands from parents for outdoor activities intended for their children through the General Information Form.

Table 1 provides that 53.5% of teachers included play in their program every day, 58.4% preferred rule-based games in class and outdoors, 97.7% allowed children to set their own plays, 38.2% allowed children playing outdoors 2-3 times a week, 50.4% took care for developing a play-based program, and 71.3% provided children with opportunity to engage in different types of plays.

The frequency of including plays in programs, types of outdoor plays, providing children with the opportunity to set their own plays, frequency of permission for playing outdoors, and providing children with the opportunity to engage in different plays are the indications of the extent the teachers included play in the learning environment. Findings suggest that a high percentage of teachers include play in the learning environment. Sumsion *et al.* (2014) confirmed in their study on preschool teachers and play-based education that teachers believed play was important in learning.

Table 1: Distribution of the Views of Teachers Participated in Teachers Training Program on Use of Children's Playgrounds as regards Play and Playgrounds

		n	%
Frequency of Play Activities in the Program	Every day	302	53.5
	2-3 times a week	209	37
	Once a week	39	6.9
	Biweekly	3	0.5
	Once a month	3	0.5
	Never	1	0.2
	No reply	8	1.4
	Total	565	100.0
Outdoor Plays	Rule-based	330	58.4
	Free	90	15.9
	Both rule-based and free	134	23.7
	No reply	11	1.9
	Total	565	100.0
Providing Children with the Opportunity to Set their own Plays	Yes	552	97.7
	No	8	1.4
	No reply	5	0.9
	Total	565	100.0
Frequency of Permission for Playing Outdoors	Never	12	2.1
	Once a month	63	11.2
	Biweekly	37	6.5
	Once a week	160	28.3
	2-3 times a week	216	38.2
	Every day	39	6.9
	No reply	38	6.7
	Total	565	100.0
Caring for Developing Play-based Plans	Always	274	48.5
	Sometimes	285	50.4
	Never	1	0.2
	No reply	5	0.9
	Total	565	100
Providing Opportunities for Children can Engage in Different Plays	Always	403	71.3
	Never	159	28.1
	No reply	3	0.5
	Total	565	100.0
Level of Teachers' Agreement with the Importance of Play in Child's Development	Always	553	97.9
	Sometimes	9	1.6
	Never	1	0.2
	No reply	2	0.4
	Total	565	100.0

A study by Güneş & Tuğrul (2012) also revealed that teachers thought lack of play might induce emotional and cognitive controversies in children.

Teachers' agreement with the fact that play is important for child's development was also associated with including plays in their programs. Almost all the teachers (97.9%) stated that they always accepted the importance of play in child's development. Besides, it was seen in addition to above that more than half of the teachers allowed children playing outdoors. A study by Gürsoy & Yıldız Bıçakçı (2007) on play and views of preschool teachers on play found that teachers backed the idea that play supported all the developmental fields of children and majority believed children should play outdoors, and accordingly they encouraged children to do so. Furthermore, studies by Parkinson (1985) and Stefani *et al.* (2014), with a long interval in between, confirmed that even if the content and type of plays changed, children mostly preferred playing outdoors. Taking into consideration the effect of outdoor plays on development, it can be argued that not all children benefit from this opportunity, in other words, from clean air and nature. Unsuitable environmental conditions, inadequate playing facilities might be considered to have accounted for the way the teachers thought about it.

Table 2: Distribution of the Views of Teachers Participated in Teachers Training Program on Use of Children's Playgrounds as regards their conduct about Outdoor Plays

		n	%
Recommending Outdoor Activities to their Colleagues	Always	215	38.1
	Sometimes	316	55.9
	Never	22	3.9
	No reply	12	2.1
	Total	565	100.0
Requesting from School Administrators Introduction of a Suitable Environment for Outdoor Activities	Always	315	55.8
	Sometimes	220	38.9
	Never	23	4.1
	No reply	7	1.2
	Total	565	100.0
Recommending Families to Engage in Outdoor Activities	Always	327	57.9
	Sometimes	219	38.8
	Never	15	2.7
	No reply	4	0.7
	Total	565	100.0

Table 2 provides that 55.9% of teachers sometimes recommended outdoor activities to their colleagues, 55.8% always requested from school administrators to introduce suitable environment for outdoors activities, and 57.9% always recommended outdoor activities to the families of children. Outdoor activities are not generally recommended by teachers on the basis that the same is perceived as a hard-to-control process. Alat *et al.* (2012) found in their study that teachers emphasized that the yard should be safe for the outdoor activities could be conducted.

It is important to recommended outdoor activities to families. A study by Kalburan (2014) found that families did not include their children in outdoor activities due to safety concerns. Therefore teachers' relevant recommendations to families are of great importance.

2.2. Findings as regards Information Level of Teachers Before and After the Training and as to their Assessment of Training Program

Information Test before and after the training and the Assessment Survey on training program were applied to teachers. Pretest and posttest scores from Information test were compared and findings as regards the assessment survey were provided in terms of frequencies.

Tablo 3: *t*-test Results regarding the Pretest and Posttest Information Scores of Teachers Participated in Teachers Training Program on Use of Children's Playgrounds

	N	\bar{X}	t	P
Pretest	516	6.97±2.15	73.59	.00
Posttest	516	7.28±2.17	76.05	

As it is seen in Table 3, there was a significant difference between the pretest and posttest scores of teachers ($p<.05$), and thus the training was associated with a significant difference in the information levels of teachers. The training program was also assessed by the teachers.

Table 4: Distributions as regards Assessment of Teachers Training Program on Use of Children's Playgrounds

		N	%
Adequacy of Program Content	Very adequate	396	70.1
	Moderately adequate	133	23.5
	Less adequate	15	2.7
	Inadequate	2	0.4
	No reply	19	3.4
	Total	565	100.0
Contribution of the Program in Information Level as regards the Importance of Play and Playgrounds	Highly contributed	277	49.0
	Partly contributed	182	32.2
	No change	66	11.7
	No reply	40	7.1
	Total	565	100.0
Contribution of the Program in Information Level as regards the Role of Teacher in Plays	Highly contributed	224	39.6
	Partly contributed	205	36.3
	Not contributed	90	15.9
	No reply	46	8.1
	Total	565	100.0

As it seen in Table 4, 70.1% of teachers considered the content of the training program very adequate, 23.5% moderately adequate, 2.7% less adequate, and 0.4% inadequate. It can be concluded that the participants considered the content of the training program adequate. It was understood that 49% of teachers stated that the training program highly contributed in their level of information as regards play and playgrounds, 36.2% partly contributed, 11.7% not contributed. 39.6% of teachers stated that the training program highly contributed in their level of information as regards the role of teachers in plays, 36.3% partly contributed, 15.9% not contributed at all.

It was understood that the training program supported the improvement of the level of information of teachers as regards the importance of play and playgrounds and the role of teacher in development of playgrounds. Majority (97.9%) of the teachers believed play had positive effects on child's development, and that the program was effective and instructive in changing the views of teachers as regards the subject. Education always requires innovation and learning. Any new information in any field may contribute in enrichment of the educational environments. Therefore, it is considered that the training program included information about play that may be needed by the teachers. Similarly, a study by Shelley (2006) on play perceptions of preschool and 1st grade classroom teachers found that teachers needed more theoretical information and a guide for application in order they could feel themselves adequate in planning and application of plays. Bell *et al.* (2015) demonstrated that play therapy based techniques and activities helped with emergence of self-awareness and supported learning.

3. CONCLUSIONS AND RECOMMENDATIONS

Children's playgrounds are of great importance on the grounds that they support different developmental levels of children. That importance of children's playgrounds urges a more careful review and study of the relevant studies. The present study investigated the frequency of plays in teachers' programs, types of plays, opportunities provided to children in play process, outdoor activities, recommendations to families, and requests from administrators, and the effect of training program on children's playgrounds on teachers' level of information was determined.

The results of the study can be summarized as follows:

- Majority of the teachers enrolled in the study included play in their programs on a daily basis, allowed rule-based games outdoors, provided children with the opportunity to set their own plays, allowed children playing outdoors 2-3 times a week, and encouraged children to engage in different types of plays.
- Almost all of the teachers accepted the importance of play in child's development.
- Teachers sometimes recommended outdoor activities to their colleagues, always requested suitable environment for outdoor activities from the school administrators, and always recommended outdoor activities to families of children.
- It was found that the Teachers Training Program on Use of Children's Playgrounds supported information of teachers as regards the place and importance of play in child's development, characteristics of child-friendly playgrounds, types of plays, importance of outdoor plays, and role of teachers in plays and associated with a significant increase in the level of information of the teachers compared to the pre-training status.
- It was found that the teachers considered the content of the training program very adequate and the training program highly contributed in the level of information as regards the importance of play and playgrounds and the role of teachers in the plays.

A review of the results suggest that teachers were informed about different levels of play and the effect of their role on play, and that they were pleased of the training

process. In the light of the above results the following recommendations can be made to teachers, school administrators, researchers, and families:

- Teachers may participate in long-term activities such as seminars and courses on children's playgrounds and the effect of playgrounds on children's development;
- Teachers may support development of children by developing activities with an aim to help children with effective use of playgrounds;
- School administrators provide support for teachers can use the playgrounds;
- Further studies may be conducted to investigate the reasons of and solutions to the reluctance of teachers and school administrators in preferring outdoor plays.

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Chapter 51

The Development of the Number Concept for Preschoolers

Pelin PEKİNCE & H. Elif DAĞLIOĞLU

Mathematics occupies a significant place in education and daily life, and includes important concepts and skills. Without realizing, children become immersed in mathematics everyday as they become involved in time, place, figures, and numbers. The mathematical activities offered in early childhood education enable children to make sense of these concepts which are naturally present in their daily lives. This stage is critical as the acquisition of basic mathematical information and concepts affects later years (Bulut & Tarım, 2006; Charlesworth & Lind, 2010). Indeed, children in this stage learn mathematical concepts naturally by playing, having fun and living. They enter mathematics education receptively without knowing concepts or having prejudice (Tuğrul, 2000).

For future success in science and mathematics, it is imperative that children are introduced to facilitating educational experiences in early ages (Aktaş-Arnas, 2006). Children's early childhood mathematics experiences and staying focused on success have been associated with getting a thrill from formal mathematics education in later years and developing a positive attitude towards it (Henniger, 1987; Metin, 1994). This is not surprising because early childhood is when the foundations of many mathematical concepts are laid. It is during these years that children acquire the basis of mathematical information, skills and concepts that are essential for the grasp of mathematics and other sciences. Children in this stage learn many mathematical concepts in their daily lives and start to use them (Aktaş-Arnas, 2006).

According to the National Council of Teachers of Mathematics (NCTM) (2000), numbers are the cornerstone of mathematics curricula. They stay a focal point from preschool through the end of high school. The number concept is a key to acquiring other mathematical concepts and mathematical skills (Baroddy, 1987; Önkol, 2012) and is one of the most important skills acquired by children in the field of mathematics (Bryant, 1995; Gersten *et al.*, 2005; Jordan *et al.*, 2007; LeFevre *et al.*, 2010).

The early acquisition of the number concept resembles phonetic sensitivity in the reading process. A lack of the latter in early years predicts future reading problems, just as lack of early number information forecasts mathematical difficulties (Gersten & Chard, 1999). Number sense is one of the most important goals of mathematics education and forms the basis of mathematical concepts (National Research Council-NRC, 1989). Therefore, an early number sense is important for children to meet with mathematics without developing a reaction (Taşkın, 2012: 68).

The skill of counting also lays the foundation for future arithmetic skills. For mastering addition, subtraction, multiplication and division, the number concept needs to have been laid down. Therefore, acquiring the number concept makes children successful in arithmetic skills and all mathematical topics and concepts during their formal mathematics education (Stock *et al.*, 2009). In this chapter, we will focus on how preschoolers acquire the number concept.

THE DEVELOPMENT OF THE NUMBER CONCEPT

Piaget asserts that physical information such as shape, color, size and texture form the basis of children's logical mathematics knowledge. Mathematical thought can only be possible if logical mathematics knowledge has already been constructed (Ünal, 2012:50). Therefore, the following emerge as important concepts in the development of preschoolers' mathematical skills and number concept acquisition: *classification* or grouping similar objects; *ordering* or arranging objects based on their differences; the concept of one-to-one matching or numerical equivalence, and *number protection* or the understanding that the total number of objects will stay the same when their distribution changes (Aktaş-Arnas, 2006:64; Butterworth, 2005; Ünal, 2012:50). The formation of these concepts is critical for the construction of future mathematical knowledge because individuals continue matching, classifying, ordering, and re-constructing their cognitive skills in their development process (Güven, 2005:37).

The acquisition of the number concept is a long process and teachers need to consider three important points to make it healthy. The first is that there are "individual differences" between children in the development of number sense. Secondly, it is necessary to identify and support children that are behind in number concept development at the onset of primary education. Thirdly, the early development of number sense lays the foundation for future mathematics education (Aunio *et al.*, 2005).

If children have problems at primary school regarding the number concept, this will likely continue into the later stages of education (Aunio *et al.*, 2005). It should therefore be remembered that children need time and many experiences to better understand the number system (Curtis *et al.*, 2009). Until the formal education process, children interact with the adults, peers and objects around them and thus discover the number concept (Olkun & Toluk-Uçar, 2006).

Children normally learn to count in the following order: paying attention to numerical differences, recognizing a lot and too little, counting by imitating an adult, counting randomly from memory, rhythmic counting from memory, learning the rules of counting, counting by matching objects and number words. After this, children can count a group of objects and say how many there are (Aktaş-Arnas, 2006; Baroody & Benson, 2001; Dere & Ömeroğlu, 2001; Güven, 1999). Learning the rules for counting is an important step. They first must learn the order of number words accurately, count each object in a group only once, and attach a single number word to each object when counting. It takes time to learn these rules and the long process relies on following the right order for these subskills (Butterworth, 2005). Some children may be able to count up to 10 from memory but fail to recognize that numbers refer to how many objects there are in one group (Gelman & Gallistel, 1986; Sarnecka & Carey, 2008).

Counting may appear verbally around age two but takes years to develop. In order to count objects in a group accurately, consecutive numbers and their fixed order must be known (Taşkın, 2012:71). A child may be able to count at age 2-3 but the order is often wrong. The order changes continuously, and age and experience bring increasingly more accurate counting. At this age, children have not yet acquired number four, for instance, as a concept. Even when they can count accurately, their

counting behavior at age 3-4 will likely be based on imitation and will be from memory rather than counting by understanding (Metin & Dağlıoğlu, 2002; Metin, 2002). Counting from memory is important for the development of vocabulary and counting skills. Counting is good for children but is not proof that they are doing it by understanding (Baroody, 2004). Five-year-olds can count rhythmically from 1 to 100 and if they make a mistake, they go back to the beginning and start over again (Ginsburg, 2009). Griffin (2004b) argues that the association of numbers and amount in five-year-olds leads to number sense and successful learning of arithmetic. Six-year-olds can count accurately from 1 to 10 by associating object groups and numbers (MEB, 2006).

Seen from a developmental view, counting is a skill that starts at early ages as a verbal game and continues in the future by associating with objects and symbolizing in numbers (Baroody, 2004). Counting is not only a developmental advancement but also an important step in making meaning of numbers (Akman, 2002). The first understanding of numbers is an important finding that children have gained experience in counting. It is not right to say “one, three, two” when counting. Therefore, consecutive numbers are important for children at early childhood institutions to form a mental blueprint (Taşkın, 2012:71). Counting, which resembles play in this stage, starts to develop with the gaining of mathematical experiences involving pre-counting schema and operations such as part-whole, increase-decrease, and comparisons (Griffin, 2004a, 2004b).

One-to-one matching skills precede number recognition, naming skills and matching a given number of clusters and the number that denotes that cluster (Aktaş-Arnas, 2006:66). Children’s relations with numbers start with visual recognition and continue with learning their names. Perceiving their meaning takes longer (Taşkın, 2012:77). Therefore, the number learning process should start with matching an object cluster and numbers corresponding to it. This must be repeated for all numbers from one to ten. Children should first use verbal expressions and then match them with written symbols when learning numbers (Reys *et al.*, 1989). For number ordering, one-to-one matching and ordering skills should also have developed. The skill to match two series numerically is the basis of protection skills. It is also associated with numerical judgment (Bryant, 1996; Smith, 2002).

Most educators accept that number protection, or “the understanding that even when the position of elements in a cluster of fewer than 10 items change, their cardinality does not” is an indicator of number perception. Piaget states that children reach this stage around the age of 6, after the stages of recognizing equivalence and non-equivalence in clusters, creating equal clusters, and being sure of equivalence. He argues that these stages are generally mastered at a certain age and in a certain order. However, many studies after Piaget have found that an age limitation for these stages is not possible (Atkinson, 1992; Hughes, 1989; Wood, 1998; Zimmerman & Whitehurst, 1979) and increased facilities may quicken later stages (Diezman & English, 2001; Viadero, 1994).

Even though the development of the number concept may be perceived as a simple process, the concrete experiences of the concept and the network between language, pictures and symbols comprise a complicated structure (Haylock & Cockburn, 2014:32). The construction of this complicated structure necessitates that

young children gain the basics of counting experiences as well as certain skills to develop a network (Haylock & Cockburn, 2014:35). This stage may be divided into two, pre-counting skills and experiences.

Pre-Counting Skills

- *Developing group perception:* As children make preferences about the objects that exist together, their group recognition skills develop.
- *Developing awareness of numerical amount without using numbers:* Children start to become interested in numbers as they use non-numerical expressions such as “more than”, “less than”, “some”, or “many”. If they cannot distinguish the difference between group sizes, counting does not mean much to them.
- *Developing awareness of the order of counting words:* Memorizing counting words without associating them with objects or actions is known as counting from memory.
- *Developing one-to-one matching between two groups of concrete materials:* This skill leads to matching number words with a group of objects.
- *Developing mental organization and following skills:* It makes children count by listing an object in a given group only once (Schwartz, 2005:65).

Pre-Counting Experiences

Pre-counting skills are important but so is integrating them into daily life and offering children chances to experience them. For meaningful counting skills, children need experiences at home until starting school. Three types of preconditional experiences are listed for counting skills.

Firstly, there is the basis of separating objects into clusters, classes and categories. Counting objects with a certain common feature necessitates the skill of distinguishing objects that do not have this feature. This is one of the first experiences in forming equivalences. It may be considered as defining a cluster made of objects sharing a similarity concept (same color, size, or family). Young children’s games include many instances of classification and categorization. They separate blocks, stuffed animals, model cars, or dolls into clusters and categories. At the same time, they use categorization when they distinguish between what their families do and do not have, between children and adults, and between girls and boys. Indeed, categorization lies at the heart of language development and is a basic action that children engage in to attach meaning to their experiences. What is important is that it is the first stage in the learning of counting. Defining and distinguishing the elements in a cluster enables the counting of selected objects and disregard of others.

Secondly, children’s rich speaking experiences at home including expressions such as ‘one more’ and ‘another one’ are important. Counting posits that as one counts, the numbers become bigger. For instance, six is bigger than five. Therefore, learning at an early age how to ask for ‘one more’ forms is the basis of first counting experiences. Parents are often not aware that they are offering their children invaluable experiences by repeating expressions such as ‘not more than one’. However, teachers should be aware when they interact with children.

Thirdly, there is evidence that children can distinguish small numbers (such as one, two, three) before they face real counting. Three year-olds can look at illustrated books and understand which picture shows a single cow and which shows two or three

cows. They thus start to learn that numbers are used to talk about clusters of objects and distinguish between clusters of different sizes. This is true for conversations including small numbers. Even before they learn how to count, children know that they have two legs, two hands, two eyes but only one nose. They also know the story of the three little pigs. All of these experiences prepare them for counting (Haylock & Cockburn, 2014:40-41).

As pre-counting skills and experiences increase, “number sense” emerges. Howden (1989) defines number sense as “a right feeling about numbers and their relationships”. In addition, number sense enables children to make sense of numbers by using physical materials and experiences from the environment, and helps them gain the skills of grouping and ordering numbers (Ktoridou *et al.*, 2005). This stage includes a set of complex skills that require the definition of objects in countable clusters and coordination with number words, using them in the accurate order and being aware that each object in the cluster can only be counted once (Butterworth, 2005).

Counting Principles

Sarnecka and Carey (2008) emphasize that counting has the function of showing the number of objects in an object group and is different from singing a play song or listing the letters in the alphabet. Counting and knowledge of numbers form the cornerstone of future mathematical concepts and arithmetic operations, and are therefore critical.

Gelman and Gallistel (1986) list the following as children’s most frequent mistakes when counting:

- Marking the first object and starting to count with the second one, continuing to count after the last one, skipping the objects in-between,
 - Counting one or more objects more than once,
 - Using the same number word twice,
- Failing to use the number words in the right order (Cited from Kennedy & Tipps in Aktaş-Arnas, 2006).

Based on these errors, Gelman and Gallistel (1986) state that mathematical thought can only develop and accurate counting occur if certain basic principles are acquired. They are as follows:

One-to-One Correspondence Principle: This is referring to each object with one, and only one, number word as a group of objects is being counted. Each number has a unique name.

Children should learn how to coordinate sounds, physical movements of fingers and eye movements between a row of objects in order to match sounds and objects. In this way, they can learn that each number should correspond to an object until no objects are left. This is a critical skill to learn (Haylock & Cockburn, 2014:42). As a result of their imitation skills, children learn that each object should be attached a certain number word (Güven, 2005:122).

Stable Order Principle: This refers to the principle of saying number words in a certain fixed order in counting. For this, the order of number words needs to be known and listed consecutively. Counting always occurs in the same order (1-2-3-4-5...).

When children start to learn counting, they first learn a pattern of memorized sounds that are frequently repeated inside and outside school (one, two, three...). This

sound group may be as meaningless as traditional children's songs largely learned at kindergarten, but at the same time shows that a young child has extraordinary capacity to learn by order (Haylock & Cockburn, 2014:41). Children's verbal counting performance is higher than the performance they display in accurate counting of objects (Ginsburg, 1989; Montague-Smith, 2002). The repetitions teach that the fixed order of numbers is a principle underlying counting (Haylock & Cockburn, 2014: 41)

Cardinality: This is the principle that the last number when counting objects in a cluster refers to the sum of the elements in that cluster. Children who can answer the question "*How many?*" know about cardinal numbers. Knowing matching and consecutive relationships is necessary for their acquisition.

This brings together the counting and ordering features of numbers. When each number is being listed, objects are labelled and ordered as *one, two, three*. However, children somehow discover at the same time that the order of the last object is the same as the number which refers to the sum of the elements in that cluster (Haylock & Cockburn, 2014:42).

Abstraction Principle: This refers to counting each countable object. The elements in a cluster need not be related to each other. The main thing is that the elements are countable.

What is being counted is not important; the operation is the same for children, animals, counting blocks or fingers. They count by using the same number words in the same order and by using the same one-to-one matching skills (Haylock & Cockburn, 2014: 43).

Order Irrelevance Principle: This principle states that when the other principles of counting are not violated, the sum of counting will not change based on the order. In other words, counting can take place even when the objects are not placed in a row and regardless of their order. Gelman states that while three-year-olds cannot understand this rule, four-year-olds are good at doing so (Gelman & Gallistel, 1986).

The first three principles concern the knowledge, skills, and the how of counting, while the latter two concern what can be counted (Gelman & Gallistel, 1986). It may be seen that, together with the conceptual knowledge of counting, these principles form the operational skills needed to count (Nye *et al.*, 2001). This knowledge and the skills are essential for accurate and meaningful counting because even though numbers in their daily use bring along many distinguishing functions, they do not have a numerical function in certain situations (Butterworth, 2005). The principles of one-to-one correspondence and constant-order refer to operational skills about counting, while the cardinal value principle requires conceptual information about the result of counting (Olkun *et al.*, 2013).

Considering these principles of counting, listing number words randomly from memory is not enough for meaningful counting (Olkun *et al.*, 2013). Meaningful counting is a cognitive activity that requires knowledge of number words as well as counting principles. To do so, children need to use hand-eye coordination as well as linguistic and memory skills. Young children have many difficulties in developing this coordination (Young-Loveridge, 2004). When discussing the importance of the principles of one-to-one matching, stable order and cardinality, Treacy and Willis (2003) stated that the principle of cardinality is related to quantity, or the number of

objects in a cluster. In other words, acquiring the principles of one-to-one correspondence and stable order may help the acquisition of the principle of cardinality by enabling meaningful and accurate counting.

In sum, mathematics is a vast field that we mostly learn without realizing in our daily lives. Among its topics, the number concept forms the cornerstone of early childhood mathematics curricula. Counting appears around the age of two but takes years to develop. Seen developmentally, counting starts with verbal games in early childhood and continues by associating with objects and symbolizing in numbers. Young children need certain skills and experiences to pave the way for counting experiences and to develop a network. As pre-counting stage skills and experiences increase, “number sense” emerges. A turning point in this emergence is the acquisition of one-to-one matching, constant-order, cardinal value, abstraction and order-independence principles that were drawn from children’s counting errors. Considering that the number concept is the basis of future arithmetic skills, it is essential that it is acquired accurately in the preschool stage.

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Chapter 52

Analyzing the Works of Levnî and Vanmour in Teaching of the Tulip Era - *Two Faces of the Mirror*

Besime Arzu GÜNGÖR AKINCI

INTRODUCTION

In this study the “Tulip Era” is intended to be elucidated by analyzing the works of Levnî Abdülcelil Çelebi and Jean Baptiste Vanmour who had produced their works during the period known as the “Tulip Era” (1718-1730) in the Ottoman History. The objective of the study is ensuring that the students acquaint with this period and their interest in this subject is enhanced.

Peter Burke (2003: 8-9), by his statement as “It may well be the case that historians still do not take the evidence of images seriously enough, so that a recent discussion speaks of “the invisibility of the visual”. As one art historian puts it, “historians prefer to deal with texts and political or economic facts, not the deeper levels of experience that images probe” draws attention to the fact that the historians do not make use of the “evidence of images” sufficiently. Similarly, also Kıcı (2006: 36), by his statement as “The reaction against the insufficient use of the visuals in teaching being expressed as “the invisibility of the visual” may seem fair when the studies in teaching concerning this field are observed. The importance in what is borne by the visuals has been ignored for too long”, draws attention to the fact that the visual materials are not benefitted from sufficiently in educational activities. In the teaching of “Tulip Era”, making use of the miniatures created by Levnî and Vanmour may enable the visual materials to be utilized more extensively by limiting the text weighted studies.

The Sultan of the “Tulip Era” Sultan Ahmed III (1703-1730) is the 23rd Ottoman Sultan. Ahmed III is the son of Mehmed IV and Rabia Gülnûş Emetullah. The period between 17-18 and 1739 during his era was later named as the “Tulip Era” and he had been dethroned as a result of Patrona Halil Revolt. Ahmed III who was a poet, a calligrapher and a manuscript illuminator paid regard to the artists and served for the rise and development of the Neo-Classic Ottoman art (Sakaoğlu, 2005: 351). In the cultural environment which was developed under the aegis of Sultan Ahmed III and his famous and powerful grand vizier art had been promoted in a broad scope in all fields and as a result considerably creative and productive artists had been delivered (İrepoğlu, 1999: 11). The beginning of the 18th century is a period which the endeavors of the Ottoman Empire intended for westernization and renaissance had started. The cultural relationships with Europe develop and the period called as “Westernization” starts. The Ottoman art preserves its traditional features, yet it gets influenced by the western art.

Ahmed III was an intelligent, sensitive well educated individual who had strong artistic tendencies. Just like his antecessors, he was into poetry, calligraphy and proceeded on the way to being a master of tughra calligrapher. Both himself and his

brother Mustafa II had been trained by Hafiz Osman who was one of the most famous Ottoman calligraphers (Atıl, 1999:17).

In the era of Sultan Ahmed III, Europe had considerably influenced the cultural and public improvements led by Damad Ibrahim Pasha by the virtue of the peaceful environment provided by the Treaty of Passarowitz. Ambassadors had been sent to the important centers of Europe for the first time. In 1720, Said Çelebi who had gone to Paris together with his father Yirmisekiz Çelebi Mehmed Efendi perceived the importance of printing houses and established the first Ottoman printing house in Istanbul together with Ibrahim Muteferrika following his return to Istanbul (Oral, 2004: 119). Mehmet Çelebi, by the order of Grand Vizier, prepared a report by observing and analyzing the developments in France. The report which was prepared by Mehmet Çelebi had become a guidebook for the innovations to be applied in the Ottoman State. The establishment of the first printing house by Ibrahim Muteferrika in 1727 is a result of the inspiring influence of this report (Sander, 2005: 202). Ibrahim Muteferrika is originally a Hungarian from Ardeal. He converted to Islam when he was young and entered into the service of the Ottoman. He had become well-known by the Turkish rule over a short period of time by virtue of his intelligence and hardworking. Ibrahim Muteferrika and Said Mehmed Efendi had faced the reactions of the calligraphers who used to make a living from writing books and of the individuals who were against innovations at the time when they supplied the required materials from Vienna and started preparations. Therefore, they had decided to obtain consent from the Sheikh al-Islam (head religious law officer). The first printing house had been established at Ibrahim Muteferrika's house, provided that every individual will be able to have books and the religious publications should not be printed (Toprak, 2005: 301-302).

Kunt (2005: 58), puts forward as below how the Ottoman administrators stopped despising Europe and started to observe the European diplomats with a particular attention, by the beginning of 18th Century:

European diplomacy stage had been engaged by means of sending ambassadors to Vienna and Paris after the Treaty of Passarowitz. Furthermore, in the instructions given to Çelebi Mehmed Efendi he was suggested not only to provide information about the politics and diplomacy but also to pay attention to the social and cultural life and to report the interesting customs and novelties he would notice. The 12 years of the Ahmed III era following the Passarowitz are being called the "Tulip Era" as the symbol of sophistication and cultural attempts. This name which emphasizes the passion of the Ottoman elite for this flower also represents the curiosity arising towards Europe in the Ottoman capital. In this period which the European figures had started to appear in Ottoman art of decoration and even in architecture, European style novelties had started to appear also in the military and in the cultural life.

Pursuant to the Treaty of Passarowitz, the Ottoman Empire had to make concessions to Austria and Venice in terms of land and commercial privileges. The period between 1718-1730 has been called the "Tulip Era" since tulips were the most popular flowers and the interest in this flower had been on top during this peaceful period of the Ottoman Empire. The first colorful event of this period was the feast given by Ibrahim Pasha in honor of Ahmed III in Kagithane on April 15th, 1719.

Kagithane Festival which was one of the most spectacular Tulip Era amusements organized on May 24th, 1719 by the Grand Vizier Ibrahim Pasha comprising feasts, javelin shows, horse races and wrestling matches had followed that initial event. Sakaoglu (2005: 360), depicts the festivals of the Era as follows:

Spring of 1720 was again enlivened with open air festivals and feasts. These were called as "lalezâr seyranı (tulip garden views)". When Ibrahim Pasha invited Ahmed III together with the people of Harem to Çırağan Palace on April 26th, 1720, hosted them for days, organized various festivals and shows in honor of the royal family was being the start of the "nev-bahar (new spring)" or "tulip" festivals to be organized in the following years; beach and sea leisure were being organized during the summer days called as "eyyam-ı sayf" and the "halva conversations" focused on poetry, literature and music which sometimes used to last a month were being organized when "şita" (winter) came. The festivals which had been the primary feature of the Tulip Era spread throughout four seasons and adopted by the people, furthermore, waterfront residences were being built on both banks of Bosphorus and mansions were being built at the countryside; the most beautiful corners of gardens were being arranged as assertive tulip gardens; boscsages were being arranged as well-cared parks.

In the Tulip Era, it is being understood that various festivals were being organized at the residences, summer resorts and seaside when the gardens of mansions were being decorated with tulips. Along with the Tulip Era festivals, again in this period the public improvement activities can also be observed intensively. Ahmed III Library in Topkapı Palace and Ahmed III fountain in front of the Topkapı Palace are the works remaining from that period.

Ahmed III who had experienced economical and political depressions growing stronger gradually during the last two years of his sultanate bans bringing male and female slaves from Iran and selling these slaves in order to prevent the moral corruption in Istanbul. However the people, rather than such measures, were interested in the facts such as the Grand Vizier Ibrahim Pasha assigning his relatives with important duties and their addiction to luxury and amusement. The fury of the public increases when the Persian ruler Nadir Shah occupies the eastern lands of the Ottoman territory, yet the Sultan and the Grand Vizier declare that they would march upon the Shah but linger for months after establishing a garrison in Uskudar and then call the campaign off. The French Ambassador Villeneuve had reported that the city had been experiencing famines frequently and the unemployment was increasing. Upon all these negativities, Patrona Halil Revolt had been prompted on September 28th, 1730 and this revolt had lasted for three days. The rebels unfurl flags from three sides and call everyone to gather under the flag for the Sharia. Istanbul is seized on September 29th, the rebels organize pillages and raids and kill many upon the orders of Patrona. Ibrahim Pasha and his grooms are strangled by the religious order of the Sharia executives. Sultan Ahmed III withdraws from the sultanate by leaving the throne to his nephew Prince Mahmud (Sakaoglu, 2005: 362-365).

1. LEVNÎ

Making sultan portraits which had been one of the major subjects where the Ottoman art of miniature tends towards had started in Fatih (Mehmed II) Period and

continued until the beginning of 20th century. Mural house of the palace where the masterpieces of the Ottoman art of miniature were being produced at had been an institution which many muralists work at almost in every period. Levnî Abdülcelil Çelebi is the representative of a new period which starts by the beginning of 18th century; this branch of art, in fact, had been refreshed with him. “*Great Illustrated Lineage portraits*” (*Kebir Musavver Silsilename portreleri*) which is available at the Topkapı Palace Museum may be one of the early period studies of the artist. His work which he illustrated twenty three sultans in full portraits matches with the Ottoman Palace’s concept and admiration of art by the beginning of the 18th century; it also reflects the point of view of this period. Levnî, in his innovative compositions within the scope of this work, had illustrated the figures in distances closer than usual. This fact may be interpreted as the reflection – even though it is limited – of the frame of mind of the period, which had become flexible to an extent, to the Ottoman intellectuals. The most striking feature of the sultan portraits by Levnî is the unusually bouncy looks of the sultans. By that way, the artist was able to give them a more personal expression and tried to capture the “person specific” expression which is the basic feature of portrait art. The last portrait of the work by Levnî is the portrait of Sultan Ahmed III (İrepoğlu, 1999: 78).

In the 18th century when the Westerners had started to influence the Ottoman society, book painting represents improvement in the form of combining the old and the new by the support of Sultan Ahmed III and Grand Vizier Ibrahim Pasha. Levnî who applied the western painting concept into traditionalism, added dimensions to the natural details and figures and included toning into painting had brought the art of miniature closer to the western painting. Tanındı (1996: 60-61), introduces “Surnâme” which was enriched with Levnî’s paintings as follows:

Levnî’s masterpiece is the pictures available in Vehbî’s work “Surnâme” which depict the circumcision feast of the princes of Sultan Ahmed III. The festivals in 1720 had lasted for 15 days and nights at Okmeydanı and Golden Horn locations of Istanbul. Levnî has illustrated with 137 pictures the artisans performing their professions as they were passing by the public and the guests, the shows of jugglers, dancers and acrobats, the lightshows during the night, the feasts given due to the circumcision and the given presents. It can be seen that the chief architect was given duties in order to program the shows. The Surnâme illustrations which shows the visual games features represents the way of entertainment of the people of the capital city.

Turani (1997: 662) tells the artistic success of Levnî by saying “Levnî who is a great designator is an important artist who is able to catch the characters of the individuals. His stable patterns prove that he creates his paintings with care and optical view in front of the model. The gestures, the hand drawings matching the correct image indicate the similarity of the Tulip Era with the baroque observations in the West”: Similarly, Başkan (2009: 131) emphasizes that “Levnî was an artist who was able to apply the Western painting concepts which influenced the Ottoman painting into the traditional art of miniature.” Undoubtedly, the most remarkable successes of Levnî are reviving the Ottoman art of miniature as a complete substitute of the classical period two hundred years ago, reflecting the entertainment concept of

the period by depicting the circumcision festival of the princes of Ahmed III and painting the portraits of all Ottoman sultans until Ahmed III.

2. VANMOUR

As of the 17th century, westerner artists who used to come to Istanbul together with delegations and prepare various clothing albums most of the time, had enhanced the mutual cultural interest between Europe and the Ottoman Empire. The most important European painter in Istanbul in the 18th century is Jean Baptiste Vanmour (1671-1737) who worked in Istanbul between 1699-1737 and made a broad circle of friends. Vanmour, who was a Flemish origin painter, had come to Istanbul and prepared an extensive clothing album under the auspices of the French Ambassador Ferriol. He had painted more than one hundred pictures introducing people from various territories of the Ottoman Empire in this album which was printed in Paris in 1714. Vanmour's album had inspired many painters including Antoine Watteau, Antonio Guardi in this century which the interest in the "Orient" was on the peak in Europe. Vanmour had painted many oil paintings and subjected in his paintings the ambassador acceptances of the Sultan and the Grand Vizier which he was allowed to participate in, views of Istanbul and the people of the city from different districts. The artist having a busy atelier in Pera who used to produce observational works and who had become a part of the social life of the city over time also brought a new lease of life into the concept of art of the place he was living in. Vanmour had participated in the acceptance ceremonial at the palace in 1727 as an attendant of the Dutch Ambassador and had the chance to see the Sultan up close. Many European painters, who worked in Istanbul during the 18th century, maintained the style of the artist and produced the works described as the "Vanmour School" (İrepoğlu, 1999: 26-28).

3. THE ACTIVITIES AIMED AT TEACHING THE TULIP ERA

Introduced under this section are, "Circumcision Festival of the Princes of Sultan Ahmed III", Sa'dabad (Kağıthane) Festivals and the Palace Protocol during the "Tulip Era" and the "Tulip Era". Levni and Vanmour had been the two faces of a mirror by producing their works wherein they depicted the social life style and the outstanding personalities of the period they had witnessed. Also, Nedim, the famous poet of this period, introduces the lifestyle of the "Tulip Era" in a poetic way.

3.1. Circumcision Festival of the Princes of Sultan Ahmed III

Key Question: Can you tell the manner of the circumcision festival of the princes of Sultan Ahmed III which was organized in the "Tulip Era" and the entertainments which had taken place during the festival by rendering the texts and miniatures under this section?

Circumcision festival of the princes of Sultan Ahmed III, ten years old Suleiman, three years old Mehmed, and also three years old Mustafa who would reign between 1757-1774 as Sultan Mustafa III and two years old Bayezid in 1720 had lasted for fifteen days and fifteen nights. During the festival which was organized under the supervision of Sur Emini, namely the head of the organization, 150 surgeons were put on charge wherein five thousand poor boys and also the sons of Ibrahim Pasha and the Janissary General had also been circumcised along with the princes. Levni had drawn the miniatures in the book that is registered at the Topkapi Palace Ahmed III Library which was prepared particularly for this festival and which is called as Surname-i

Vehbi since its texts were written by the Poet Seyyid Hüseyin Vehbî. The texts of the book comprising 175 pages and containing 137 miniatures had been written in golden frames with Ta'lik style calligraphy. Ibrahim Pasha, the Grand Vizier of Sultan Ahmed III who had organized the festival had made a significant effort in order to ensure the perfection in everything (İrepoğlu, 1999: 111).



Figure 1: Levnî, “Sultan Ahmed III and his Prince”, Kebir Musavver Silsilename, Topkapı Palace

İrepoğlu (1999: 106) comments of the portrait of Ahmed III in “Great Illustrated Lineage” as follows:

The portrait of Sultan Ahmed III, is the most vivid example of the new portrait conception of the period. The portrait template which is observed on the Sultan portraits in the 17th century in a manner wherein the Sultans sit on a throne with a high backrest had been used by Levnî in an enhanced manner. The prince who clasps his hands on the background accompanies Sultan Ahmed III who sits on a throne which is a substantial example of the taste of decoration in the early 18th century. Even though depicting the Sultan as the crown prince is standing behind the Sultan is a custom of the 17th century, Levnî had improved this by creating a composition with a sense of perspective. This iconography of Levnî had constituted a prototype for the following portraits of Sultan Ahmed III. The Sultan sits uprightly with his almond shaped eyes, slightly long face, slight roman nose, his dark beard

which was worked on with a very fine brush, his concerned look and elegant stance. His pose which may be described as upright and even rigid reflects the self confident personality of the Monarch. When compared to the other available portraits of the Sultan, the work is quite realistic in terms of similarity.

Levnî, in the renovation period of the 18th century, had been the leading representative of the renovations in the art of miniature. Furthermore, his portrait works and perspective applications which reflect the personalities, he had started the process of converting from the art of miniature to the art of painting and inspired other artists with his style.

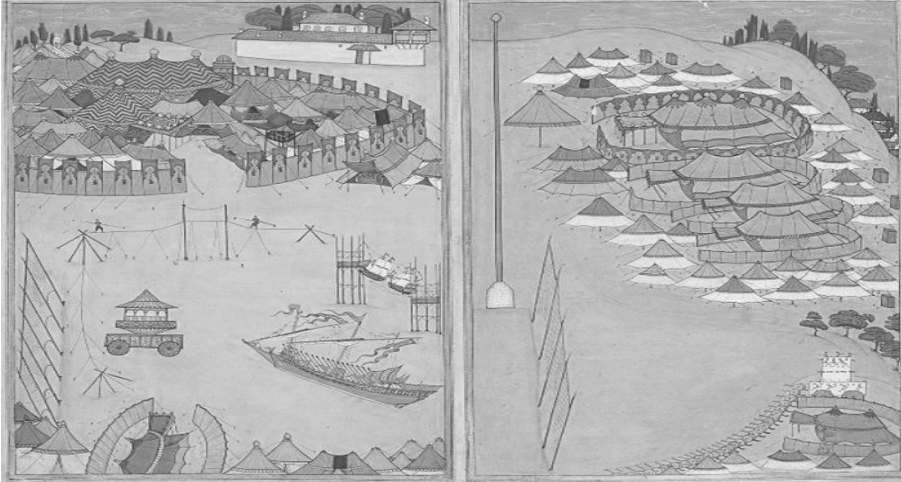


Figure 2: Levnî, “The Royal Tent (Otağ-ı Hümâyûn) and other tents pitched at Okmeydanı where the festival would take place”, Kebir Musavver Silsilename, Topkapı Palace

The festival entertainments, which their preparations had started earlier, staged at Okmeydanı where the tents were pitched for the Sultan, High State Officials and the guests and also at Golden Horn where the Sultan was able to watch the entertainments from Aynalıkavak Summer Palace. The festival which its preparations had started two months earlier and took place between 18th of September and 2nd of October had ended after one week by the great circumcision parade and the circumcision of the princes at Topkapı Palace (İrepoğlu, 1999: 111).

“Nahl”s are the symbols of a kind of power and abundance made of wax decorated with flowers and fruits which exceed a height of 30 meters (Tanındı, 1996: 41). Four “Nahl-ı Kebir”s and four candy gardens prepared for each one of the princes to be circumcised are located in the garden of the Former Palace. Sultan Ahmed III is going to appear at the Former Palace to see the nahls and candy gardens. The Guard Commander holding a censer in his hand, stablemen wearing white headgears around the horse of the Sultan, gardeners and palace officials and three of the princes, Suleiman, Mehmed and Mustafa are waiting in the yard of the Former Palace (Kahraman, 2008: 33). It is told in the book that the Sultan had come to the summer palace by the Bayezid Mosque and took a seat at the balcony to see the nahls and candy gardens, the princes had asked for permission to go into the palace yard when they saw the nahls there, and the Sultan had joined the children to share their joy and

also had a few candies together with them (İrepoğlu, 1999: 115).

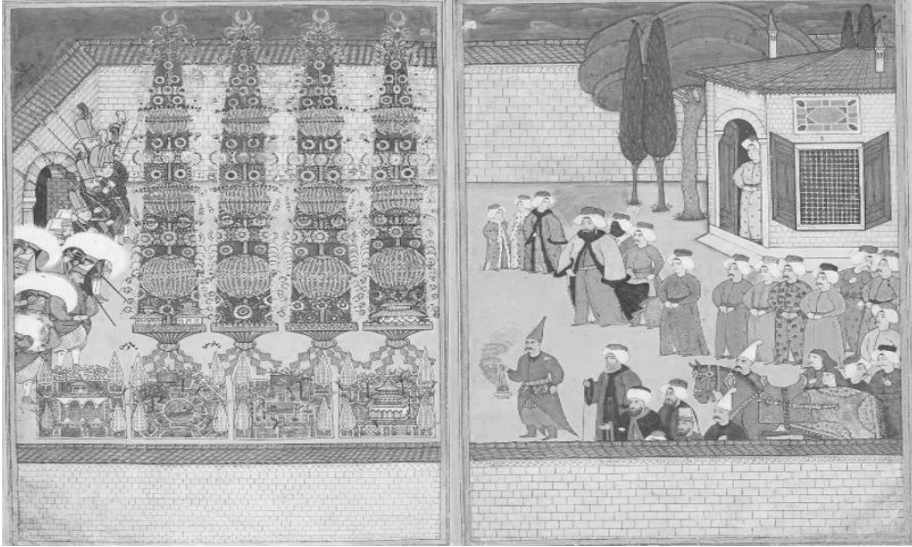


Figure 3: Levnî, “When Sultan Ahmed III and his Princes are watching the Nahıl Parade”, Kebir Musavver Silsilename, Topkapı Palace

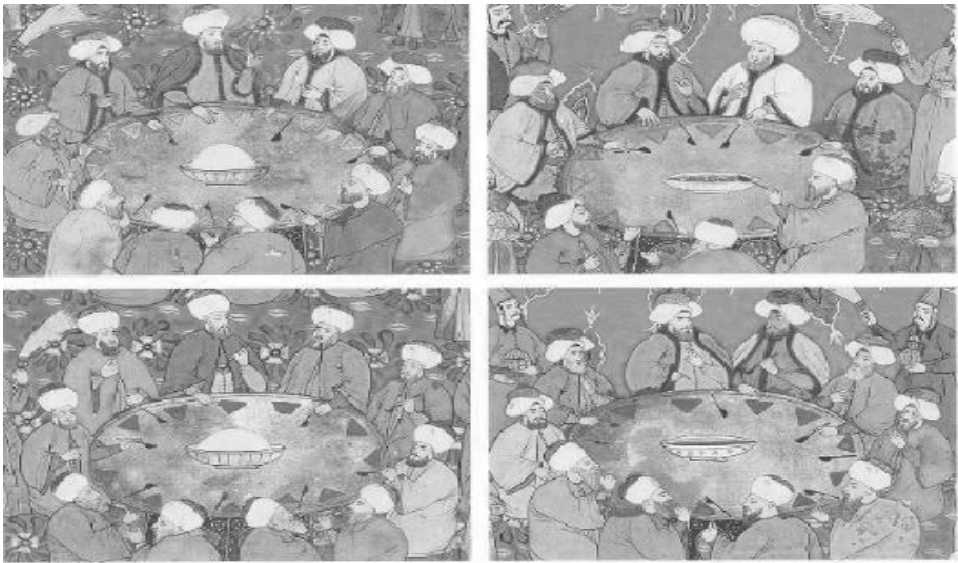


Figure 4: Levnî, “The Feast of the Sixth Day”, Kebir Musavver Silsilename, Topkapı Palace

The guests of this party are the Mullah and the Judges (Kadi) taking care of the legal issues. Seen on the first table are the Grand Vizier Ibrahim Pasha, Sheikh-ul Islam Abdullah Efendi, two Qadi’askers and high-ranked judges (upper right). The view seen on the second table is the head of the treasury hosting other judges (lower right). On the last two tables, other hodjas and mullahs are sitting. Among them, there are seyyids wearing green turbans and one Qadi’asker. Degustators and ear-locked

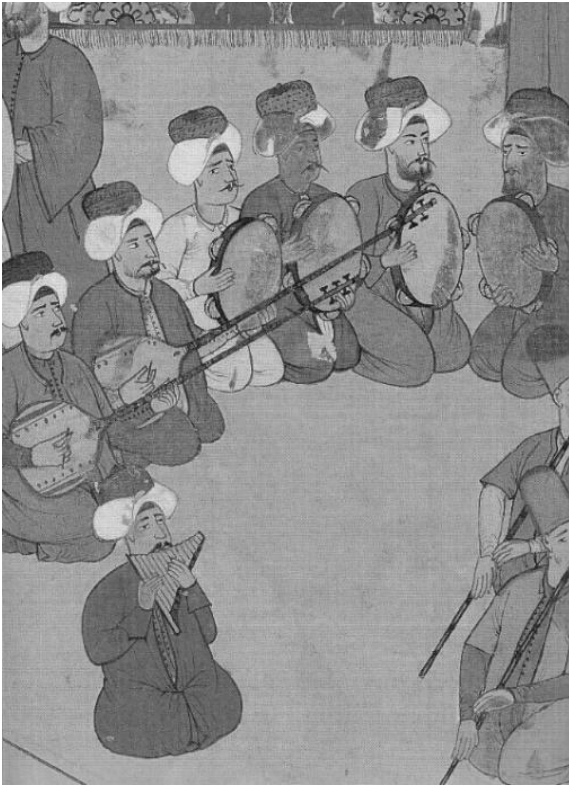


Figure 5: Levnî, “Musicians”, Kebir Musavver Silsilename, Topkapı Palace

Musicians were playing the def, ney, tanbur and miskal, on the other hand dancers were dancing (İrepoğlu, 1999) 146).



Figure 6: Levnî, “Wirewalkers, sword dancers and dancer groups”, Kebir Musavver Silsilename, Topkapı Palace

halberdiers are serving the dishes as a tradition of the official parties (Atıl, 1999: 22).

Depicted are the extraordinary balance shows of the Zurbazs (the entertainers who make shows by using their physical strengths) where they carry glass cups filled with water placed on palanquins or wooden crosses or huge earth urns on top of their heads and where they swing silver tankards from top of the poles they climb (İrepoğlu, 1999: 146).

The European Ambassadors watching the shows by sitting on the chairs prepared particularly for them in front of the tents form a different part of the crowded scene here. The look of the ambassadors being depicted with their translators and guards standing behind them offers a visual document also in terms of diplomacy. The seats reflect the European furniture fashion of the period and the arms of the ambassadors resting on the seats and their legs are depicted in a comfortable pose, furthermore it is obvious that their clothes had been drawn with particular attention by the artist. As narrated by Vehbî, the ambassadors were served with food in golden and silver plates upon the order of the Sultan and the musicians played “Foreigner style” songs and the dancers danced in the tents for the ambassadors during a rainy day (İrepoğlu, 1999: 160).

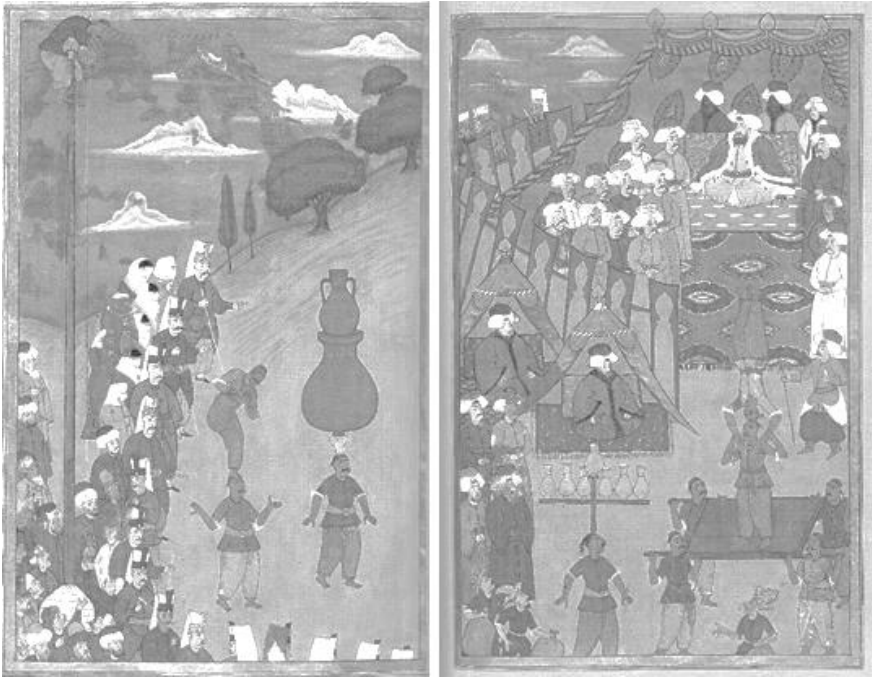


Figure 7: Levnî, “Balance show of the strong men (Zurbaz)”
Kebir Musavver Silsilename, Topkapı Palace

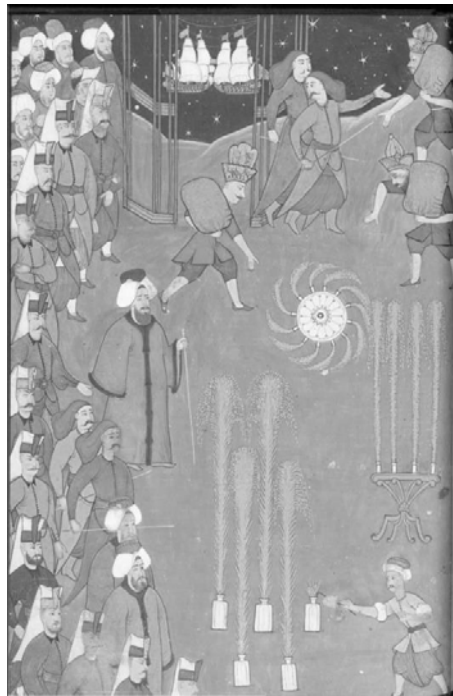


Figure 8: Levnî, “Firework Shows”, Kebir Musavver Silsilename, Topkapı Palace

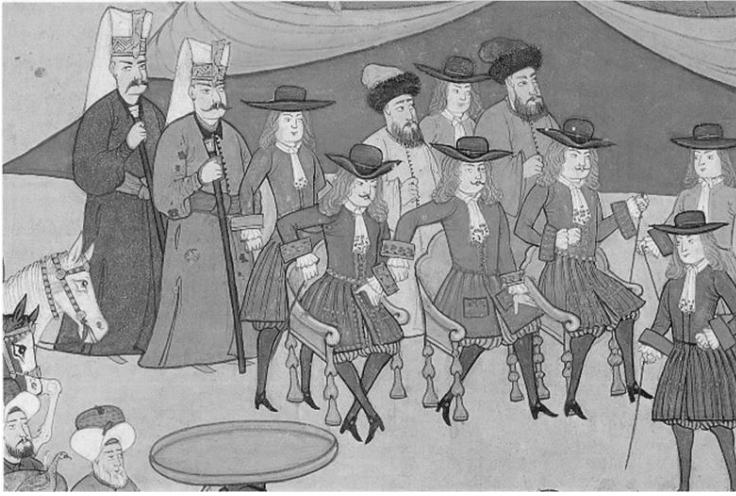


Figure 9: Levnî, “European Ambassadors”, Kebir Musavver Silsilenameame, Topkapı Palace

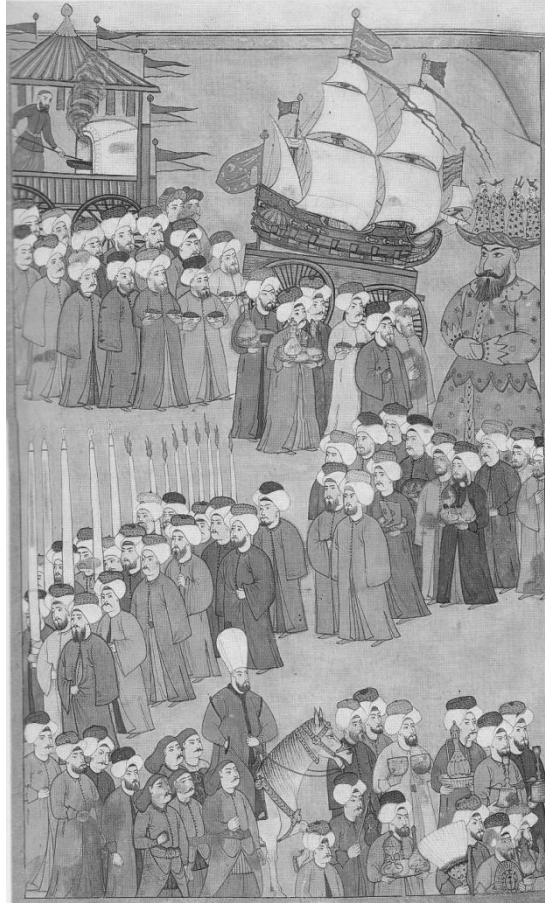


Figure 10: Levnî, “Artisan Parade”, Kebir Musavver Silsilenameame, Topkapı Palace

On the tenth day of the festival, the jeweler approaches on a horse decorated with golden harnesses. Following him the candle sellers and flea market traders. The artisans of the Spice Bazaar passing with a galley follow a giant puppet carrying Chinese dolls on its headgear (Kahraman, 2008: 125).

Esin Atıl (1999: 52-53) notes that there had been shows of musicians, acrobats, wrestlers, illusionists, night festivals at the Golden Horn and Okmeydani, bear dancing shows, parade of the circumcision kids and the artisans, javelin and war games, giving presents and feasts within the scope of the festival.

When the texts under this section and the miniatures by Levnî in Surname-i Vehbi album which depict the festival for the princes of Ahmed III are analyzed; it can be noted that there were *nahıls* which were decorated with flowers and fruits for the princes to be circumcised, music and dance shows were performed by musicians and dancers, there had been amusing shows with fireworks along with the acrobat shows. European ambassadors were also invited to the festival along with the High State Officials and the people. The artisans were allowed to represent their most skilful works by means of the Artisan Parade within the scope of the festival.

3.2. Sa'dabad Festivals

Key Question: What do you think about the Sa'dabad festivals during the Tulip Era? What do you find amusing? What do you think about the view of life of the people of this period?

Bir safa bahşedelim gel şu dil-i nâşâdâ	Let's grant a pleasure to that unpleasant soul
Gidelim serv-i revânım yürü Sâ'dâbâda	Let's go to Sâ'dâbâd my tall love
İşte üç çift kayık iskelede âmâde	Three boats await at the pier there
Gidelim serv-i revânım yürü Sâ'dâbâda	Let's go to Sâ'dâbâd my tall love
Gülelim oynayalım kâm alalım dünyadan	Let's laugh and have our joy from this world
Gidelim serv-i revânım yürü Sâ'dâbâda	Let's go to Sâ'dâbâd my tall love
Nedim	Nedim

The word of literature echoes initially with Nedim in the "Tulip Era". Ibrahim Pasha had taken Nedim under auspices long before his grandviziership. Nedim, who had made an appearance in the palace in terms of his talent and become one of the symbols of the "Tulip Era", brought the sense of sincerity into Ottoman literature by means of his odes and songs he treat with the motives those had been inspired by daily life and nature which made the Istanbul dialect become familiar. The entire joy of Sadabad in the poem by Nedim who was the poet of this Era. (İrepoğlu, 1999: 31).

The projects intended for parks, gardens, mansions and palaces designed 14th and 15th Louis styles those had been brought from Paris by Yirmisekiz Çelebi Mehmed Efendi where he had been as an ambassador of the empire started to be implemented. In the Tulip Era, shore palaces, waterfront residences and garden mansions had been built in Kagithane, Salıpazari, Kurucesme, Ortakoy, Bebek, Uskudar, Cengelkoy, Kandilli, Anadolu Hisari, and Cubuklu. The names such as Sa'dâbâd, Hüsrev-âbad and Bağ-ı Ferah had been given to the new districts, mansions-woods gardens. Without a doubt, the most extensive and careful implementation among these is Sa'dâbâd. A series of small countryside mansions had been built on two banks of the Kagithane creek and hiking bridges over the creek, furthermore the creek had been

taken into a marble channel called “cetvel’i sim” (silver zone) which has artificial waterfalls, pools and fountains. Tulip entertainments and going on tulip views become a fashion, countryside and entertainment sites become open to public. In a short period of time the passion for countryside and entertainment spreads around in Istanbul in unexpectedly. Shows and contests such as concerts were being given at the countryside decorated with flower beds, bear and dog fights were being organized along with oil wrestling matches, artillery and firearm shootings and also group dancing; women in colorful clothes going to the countryside were able to watch the activities behind the screens of the porches built for this purpose (Sakaoğlu; Akbayar, 1999: 98). The reconstruction of the shores of Golden Horn and the valley of Kağıthane, also the development of Bosphorus in an extensive manner had been realized during the period of Ahmed III. For instance, it is a known fact that the district of Bebek was established in 1725 by the construction of Hümayûn-âbâd Summer Palace and mosque, school, Turkish bath, fountain and a small sized marketplace (Sakaoğlu, 2005: 365).

The Grand Vizier Damad Ibrahim Pasha of Nevsehir had started a versatile development in order to enhance the inert life in the Capital, increase the consumption therefore the production, embellish the city and to put the aesthetic values forward. His purpose was acquainting the people of Istanbul with the surrounding natural beauties, and getting them used to living in Bosphorus. “Sa’d-âbâd temaşagâhı” festivals, “çerağan safaları” and “helva sohpeti geceleri” had been the customs which were designed for this purpose and then become a fashion of the period. (Sakaoğlu; Akbayar, 1999: 92).

3.3. Palace Protocol of the Tulip Era

Both Vanmour and Levnî who produced their works in the Ottoman capital had depicted some parts of both Istanbul and the living of Sultan Ahmed III; because they had the chance to personally witness some certain moments of such living (Nicolaas *et al.*, 2003:84).



Figure 11: Vanmour, “Entertainment in the Tent”, Rijksmuseum

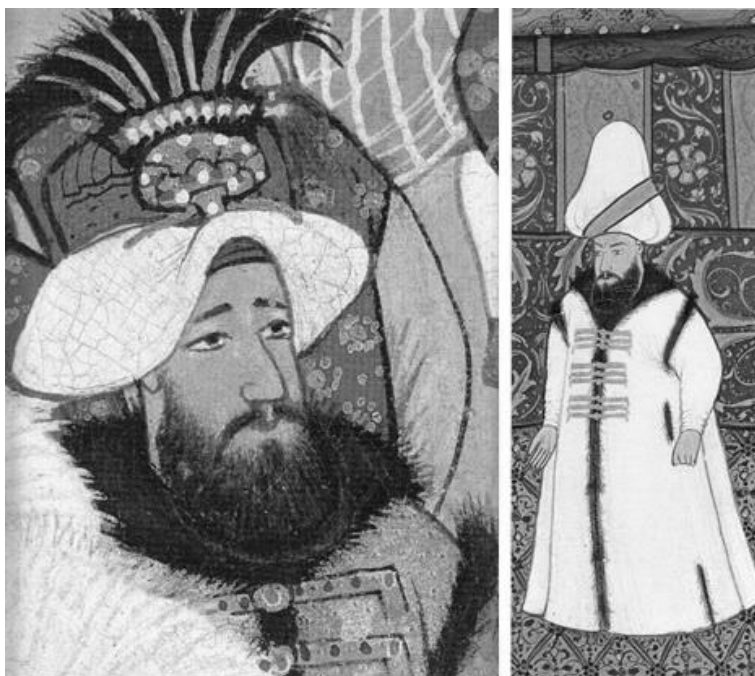


Figure 12: Levnî, “Sultan Ahmed III”, Surname-i Vehbi, Topkapı Palace (left) and Levnî, “Grand Vizier İbrahim Pasha”, Surname-i Vehbi, Topkapı Palace (right).



Figure 13: Vanmour, “Sultan Ahmed III”, Rijksmuseum (left) and Vanmour, “Grand Vizier İbrahim Pasha” (right), Rijksmuseum

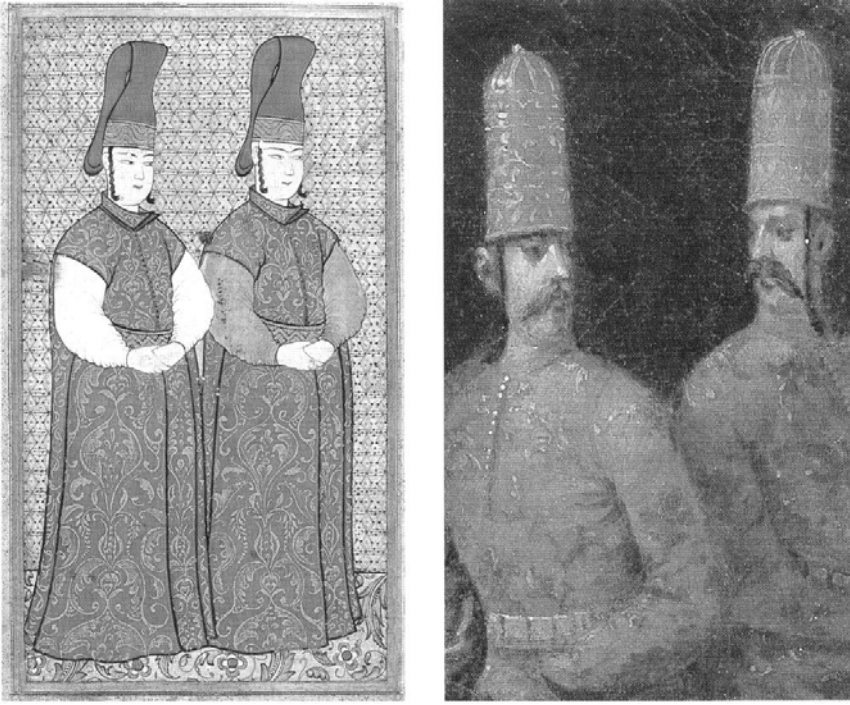


Figure 14: Levnî, “The Armorer and The Treasurer” Album Paintings, Topkapı Palace (Left) and Vanmour, “The Armorer and The Treasurer” (right), Rijksmuseum.



Figure 15: Vanmour, “Acceptance of the Ambassador Calkoen in the Chamber of Submission by Sultan Ahmed III”, Rijksmuseum

Key Question: *What are the similarities and differences you have noticed when you examine the portraits of “the Sultan of the Period Ahmed III and his Grand Vizier Ibrahim Pasha” (Figure 12 and Figure 13) and “the Armorer and the Treasurer” pictures painted by Levnî and Vanmour? What kind of differences do you see between the concepts of depicting of Levnî and Vanmour?*

Key Question: *“In which manner “Acceptance of the Ambassador Calkoen in the Chamber of Submission by Sultan Ahmed III” (Figure 16) is being carried out? What are the facts which drew your attention?*

Nicolaas *et al.* (2003: 86), compares the works of Levnî and Vanmour as follows:

Vanmour and Levnî had taken a look at the same Istanbul and at the same Sultan with different eyes: From East and from West. The difference in their points of view was laying on their roots, educations, trainings and customs, however, it can be said that basically they both took a sincere look from inside. Obviously, both of them –within their own private conditions- had had the chance to observe a sultan up close and feel the surrounding atmosphere.

Vanmour had been present during the acceptance ceremony of the Dutch Ambassador Cornelius Calkoen before Sultan Ahmed III at the Ottoman palace in 1727 and depicted this acceptance scene (Figure 20). Nicolaas *et al.* (2003: 194), conveys the manner of the acceptance ceremony following the dinner which was given by the Grand Vizier in honor of the Ambassador Calkoen:

Every guest had been given a kaftan (hilat). This present was also a sign of hospitality just like the dinner. Kaftan was also covering the Western style clothes of the guests. Calkoen’s kaftan was covered with fur. Acceptance ceremony was being performed in a private chamber in the third yard of the palace where the Sultan lived. Sultan Ahmed III sits on the throne which is located to the corner and his four princes can be seen right beside the throne. Calkoen and his attendants are being hosted by the Ottoman palace officials. The acceptance took place in the following manner: Initially the presents brought by Calkoen were examined and the Ambassador was introduced to the Sultan. Calkoen had given a speech following a bow before the Sultan and then submitted his letter of credence. That document evidencing his authority and his status being assigned by the Republic of Netherlands was passed from hand to hand, and finally left on the pillow by the Sultan. Following the translation of the speech, the Grand Vizier had responded on behalf of the Sultan, and spoke the words verifying the good terms between two states. Finally, Calkoen had bowed before the Sultan for the second time and the ceremony was ended.

Vanmour, had also painted the pictures of many individuals at the palace of Sultan Ahmed III along with depicting the “ambassador acceptance “in details. Such as, Janissary General, Janissary, Qadi’asker, Sheik-ul Islam, Chief Usher, Head of the Eunuchs and Chief of the Royal Gate. Vanmour intends to introduce the major personalities with their characteristics and outfits. Vanmour introduces the palace protocol and the palace individuals closely.



Figure 16: Vanmour, “Janissary General”, Rijksmuseum (left), Vanmour, “Janissary” (right), Rijksmuseum.



Figure 17: Vanmour, “Qadi’asker”, Rijksmuseum (left) and Vanmour, “Sheikh-ul Islam” (right), Rijksmuseum.

CONCLUSION

Akıncı (2011), under the outcome section of her doctorate thesis titled “Improving historical thinking skills by means of utilizing representative images in social sciences during primary education”, emphasizes that making use of images

during the teaching of historical subjects improves the historical thinking skills of the students and enhances the interest of students in the lesson. Similarly, making use of the visual materials such as paintings and miniatures during the teaching of “Tulip Era” in social sciences and history lessons may enhance the interest of the students in the lesson and assist the students to perceive the concept of the period.

Within the “Tulip Era” in the 18th Century waterfront residences were built on both banks of Bosporus and elegant mansions were built in the countryside, and the gardens were arranged with tulips. The Tulip Era enlivened by the countryside entertainments and festivals draws the attention with its concept as an innovative period wherein the Westernization attempts in the Ottoman State had initially started. Hence, “the printing houses” initially appear in the social life of the Ottoman state in this period.

Levnî, who had personally witnessed the “Tulip Era”, is known for his miniatures in the book named “Surname-i Vehbî” which elucidates the circumcision festival organized for the princes of Sultan Ahmed III, also for his work named “Great Illustrated Lineage” wherein he painted the portraits of all Ottoman sultans from Osman Ghazi to Sultan Ahmed III and the album pictures. Portraits of the Sultan Ahmed III of the period and of his ancestors are present in the Lineage.

Vanmour depicted the acceptance ceremonies of the ambassadors he had witnessed during the Tulip Era and also Sultan Ahmed III whom he found the chance to see up close during these ceremonies. Vanmour had elucidated the palace life by means of painting the pictures of the major officials of the Ottoman palace such as the Grand Vizier, Qadi’asker and Sheikh-ul Islam, further he had reflected in his paintings the entertainment life of the people of the period and the daily life scenes in Istanbul.

As Nicolaas *et al.* (2003: 86) stated Vanmour and Levnî had taken a look at the same Istanbul and at the same Sultan with different eyes, one from the East and one from the West. Both Levnî and Vanmour had seen Sultan Ahmed II up close and witnessed the life style during the Tulip Era.

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Chapter 53

Sexual Education in Preschool Period

Utku BEYAZIT & Aynur BÜTÜN AYHAN

INTRODUCTION

Childhood is perceived as a time of presumed sexual innocence with a belief that children do not or should not know anything about sexuality; nor, certain details about their own bodies. But sexual innocence is argued to be a concept where contradictory views both deny and acknowledge childhood sexuality (Stone *et al.*, 2013). However it is argued that, for most children, learning how to deal with their changing bodies and blossoming sexuality happens in their daily environment. They acquire knowledge through a variety of sources, such as peers, parents, teachers, and media, simply by exposure (Chan & John, 2012).

Children are generally curious about sexual matters and that their sexual knowledge increases as they grow older. It is proposed that preschool children exhibit many sexual behaviours, although they rarely simulate sexual intercourse. As children grow older, they tend to become more inhibited and more socially informed about the contexts in which it is appropriate to express such behaviours. Consequently, certain behaviours seem to decrease such as touching own private parts in public and others increase such as talking about sex acts (Vosmer *et al.*, 2009).

It is argued to be normal for children to be curious about and want to know about their growing bodies. Most of the changes that take place during this time make it possible for humans to make and give a birth. Sexuality is suggested to be about many things such as growing up, families, babies, love, caring, curiosity, feelings, respect, responsibility, biology and health. Learning about sexuality is argued to be important because these facts can help children stay healthy, take good care of themselves and make good decisions about themselves as they grow up and for the rest of their lives. Parents are argued to get embarrassed if they do not know the answers their children ask; because sexuality is not a simple matter (Harris & Emberley, 1994).

A broad definition of childhood sexuality is argued to involve, encompassing behaviors like showing, touching, naming, and stimulation of genitals; and the feelings and cognitions accompanying these behaviors (Graaf & Rademakers, 2011). Sexual knowledge is defined as children's ability to determine sex differences, name sexual body parts and functions, and describe what they knew about the birth process, reproduction and adult sexual behaviours (Brilleslijper-Kater and Baartman, 2000). Children have a legitimate need for validation and correction of sexual learning. However, adults often have not been trained to respond consistently to children's behaviors, but are eager to obtain more information (Ryan, 2000).

It is believed that children are first born with a sex, then learn their gender, and finally become sexual. In early childhood classrooms, where play and talk is valued and encouraged, children themselves are argued to constantly create and re-create meanings about gender and sexuality with each other. It is through their talk and

interactions with each other that they constitute what it means to be “girl” or “boy” in that particular place. Sometimes, their talk and actions about what it means to be pretty and sexy reinforce gender stereotypes (Blaise, 2009).

It is stressed out that children become aware of sex and sexuality much earlier than many people realize. They generally learn to disguise their interest rather than risk the disapproval of their elders, but they continue as small scientists—collecting data and performing experiments. Curiosity and sex play is claimed to start as early as age three. When they start interacting with their peers, children begin to explore their bodies together. They may masturbate or play “mommy and daddy” and hug and kiss and lie on top of each other; they may play “doctor” so that they can look at each other’s genitals. It was suggested that we think of children as students rather than voyeurs. It is important for them to know what others look like in order to feel comfortable about themselves (DeLamater & Friedrich, 2002).

Sexual education is argued to start in the family but continue at the school (Tuzcuoğlu & Tuzcuoğlu, 2004) and is proposed to take place both in schools and at the community level, be age appropriate, begin as early as possible, and foster mature decision making (Haberland & Rogow, 2015). Schools are claimed to be in a unique position to provide education that enables children and adolescents to acquire developmentally appropriate knowledge and skills related to sexual and reproductive health as they are the only formal institution to have meaningful contact with nearly all children (McKay *et al.*, 2014).

Pairing sexuality with children makes many parents and mental health counselors uncomfortable. Parents are concerned and often confused about the most appropriate ways to respond to their children's emerging sexuality, and parents often consult mental health counselors to determine whether their children's sexual behaviors are indicative of a problem or merely normal childhood development (Thanasiu, 2004). It is argued that parents who object about giving sexual education the children mostly mix up sexual education with pornography. What the parents should be scared and precautions of should be the dangers caused by unanswered questions, information obtained by inaccurate resources, sexual abuse and other sexual dangers but not the simple questions of an explanatory nature (Tuzcuoğlu & Tuzcuoğlu, 2004). Parents can help to prevent their children’s victimization by talking to their children about sexual abuse and teaching them self-protection strategies. Children need to be educated to identify uncomfortable or inappropriate touching requests, and be effective in stopping the abusive behavior (e.g., say “No!” and try to get away from the abusive situation). It is suggested that it is important to teach children not to keep the abusive incident secret and to tell a trusted adult if an abusive incident occurs. Child-focused education prevention is only one part of child sexual abuse prevention programs (Zhang *et al.*, 2013).

Access to sexuality education at an early age is argued to be considered as controversial. However, strong indications show that early and open communication about sexuality can impact positively in terms of sexual safety and outcomes. Within a developmental perspective, it can be argued that the sexual education in preschool period is necessary. Through sexual education, preschoolers can learn about sex differences, sexual organs and birth as well as their parents may acquire an understanding that their children’s curiosity about sexuality is normal and is a part of

their sexual development. Early exposure to good quality sexuality education has clear implications for improving mental and physical well-being, as well as individuals' ability to develop appropriate skills and to avoid sexual exploitation and abuse. Within this context, in this review, it is aimed to examine the sexual education of preschoolers. Finally, certain proposals will be made to parents and teachers in this matter.

The Development of Sex and Gender

Starting almost after birth, an infant is viewed differently and treated differently depending on its sex. At first parents and family are the strongest influence on gender. As the child grows, peers become more important. Meanwhile, toys, books, movies, and provide highly gendered messages. The child's own concept of gender is suggested to interact with all these influences. These influences from adults, other children, the media, the physical environment, and the child's own cognitive development-construct gender at the interaction level (Crawford, 2012). Biological and psychological factors are also argued to influence gender based behaviors (Parke & Gauvain, 2009).

There are distinct definitions of gender and gender related concepts (Blackwood, 2000). Giddens (2005) argued that the term sex was ambiguous as people use this word in phrase like "having sex". Thus, it needs to be distinguished from sexual activity as well as gender. Sex was defined as biological or anatomical differences between men and women. The sex of a living organism was argued to be based on chromosomes, reproductive organs and hormonal states (Macionis & Plummer, 1998). On the other hand, gender is defined as social expectations about behavior regarded as appropriate for the members of each sex (Giddens, 2005). The term gender identity was defined as a psychological state in which a person says "I am a man" or "I am a woman" (Macionis & Plummer, 1998). Money (1995) argued that gender identity is the sameness, unity, persistence or ambivalence of one's individuality as male or female. Money proposed gender identity as the private experience of gender roles (Money, 1995). Gender exists in both adult's and children's social world, shapes how they think, guides their interactions with others (Giddens, 2005).

For most people, the genetic, hormonal, and anatomical aspects of sex are congruent. At birth, their assigned sex fits these components. As they emerge from infancy, they develop a core gender identity, a fundamental sense of belonging one sex or to the other. Almost always, a child is suggested to develop a core gender identity that corresponds to his or her biological sex. For most children, the core identity is learned by the age of three. The child then becomes gender stereotyped, adhering to the rules of the gender system of her or his culture. For example, girls are expected to engage in whatever behaviors their culture defines as appropriate for girls and to refrain from those defined as out of bounds for girls (Crawford, 2012).

Between three to six years, children are more gender stereotyped than adults. At three years, children understand that they themselves, along with some other children, belong to gender a class. By this time, children are proposed to have developed clear preferences for gender-appropriate toys. Between ages two and three, children begin to tell what they know about gender as they acquire and correctly use such labels as "mommy" and "daddy" and "boy" and "girl". By age two to three almost all children

can accurately label themselves as either boys or girls. Almost all the two year olds had some knowledge of gender role stereotypes. For example, boys and girls agreed that girls talk a lot, never hit, often need help, like to play with dolls, and like to help their mothers with chores such as cooking and cleaning. By contrast, these young children felt that boys like to play with cars, help their fathers, and build things. Over the preschool and early grade school years, children learn more and more about the toys, activities, and achievement domains considered appropriate for boys and for girls (Fabes, Martin, & Hanish, 2003). At four-five years, children begin to understand the concept of gender stability but do not grasp it fully until age of seven. Children four and younger are argued to tend to rely more on gender schemas than do children five and older. Between four and six years, boys are suggested to be more likely than girls to congregate in same gender groups. Children are suggested to normally begin to understand that sex is an unchanging attribute between the ages of five and seven (Parke & Gauvain, 2009).

As with the gender development of children, five principle psychological explanations of argued to exist: Freudian theory of identification, Bandura's social learning theory, Kohlberg's cognitive developmental theory of gender typing, and Bem's gender schema theory (Parke & Gauvain, 2009).

Freud thought that sexuality (the sex instinct) was inborn. However, he believed that one's gender identity and preference for a gender role emerge during the phallic stage as children begin to emulate and to identify with their same sex parent. Specifically, Freud claimed that a three to six year old boy internalizes masculine attributes and behaviors when he is forced to identify with his father as a means of renouncing his incestuous desire for his mother, reducing his castration anxiety, and thus resolving his Oedipus complex. Freud argued several suggestions, one of which was that the object of a girl's affection, her father, was likely to encourage her feminine behavior. So, a girl is claimed to be motivated to incorporate her mother's feminine attributes and eventually becomes gender typed (Köksal Akyol, 2003; Parke & Gauvain, 2009; Shaffer & Kipp, 2010)

The way children acquire many of their gender typed attributes and interests, according to Bandura's social learning theory, is by observing and imitating a variety of same-sex models. The assumption is that boys will see which toys, activities, and behaviors are "for boys" and girls will learn which activities and behaviors are "for girls" by selectively attending to and imitating a variety of same-sex models, including peers, teachers, older siblings, and media personalities, as well as their mothers or their fathers (Fagot, Rodgers, & Leinbach, 2000; Parke & Gauvain, 2009; Crawford, 2012).

Kohlberg's cognitive-developmental theory claims that children are self-socializers and must pass through basic gender identity and gender stability before reaching gender consistency, when they selectively attend to same sex models and become gender typed. However, it is suggested that gender typing begins much earlier than Kohlberg thought and measures of gender consistency do not predict the strength of gender typing (Shaffer & Kipp, 2010).

According to gender schema theory by Bem, gender schematic processing is derived from the sex differentiated practice of the social community. Thus, by observing the distinctions made between women and men in their culture, children are

argued to learn the specific content of sex related behaviors (Doyle & Paludi, 1998; Crawford, 2012).

Sexual Behaviours of Preschool Children

In preschool period behaviours such as exhibiting and touching own genitals, playing sexually explorative games, initiating games with a similarity to adult sexual activity, using sexual words, attempting to touch a woman's breast are common sexual behaviors. Many preschool children masturbate and take part in such other forms of sexual experimentation as kiss games or playing “doctor” that help to groom them for sexual relationships later in life (Shaffer, 2009).

Until three years old, girls and boys are proposed not to differ as with their sexual tendencies, plays and behavioral characteristics. They may not experience feelings of embarrassment. However, parents' and other adults' negative reactions, might be giving messages that sexuality is sinful or shameful (Uçar, 1994). Children's exhibiting interest in their own genitals and those of their parents is suggested to be a normal phase of childhood sexual development. Genital play is argued to be a common sexual behavior in children from infancy to at least six years old. However, it is argued that a child's experience of sexuality is not the same as an adult's. The children's interest in sexuality is suggested to be balanced by their curiosity about the other aspects of their life. Normal sexual experimentation is spontaneous, not something that the child is persistently preoccupied with. Learning about sex and feeling positively about it is proposed to be part of a child's healthy sexual development (Thanasiu, 2004).

Shutting down the play is a strategy for protecting children from hearing or seeing play that might be thought of as too sexual and therefore inappropriate for five year olds to take part in or watch. On the other hand, some adults might not be troubled at all by this play, because they do not regard it as sexual. Instead, they see this play as cute (Blaise, 2009).

Genital touching by infants and toddlers is argued to be often viewed as natural but non-sexual by caregivers, and as exploratory and educational in the preschool years. Nonetheless, caregivers tend to prohibit such behaviors and begin to describe them as unusual or problematic by the early elementary school years (Ryan, 2000). Davies *et al.* (2000) found out that, the commonest behaviors observed in the preschool settings were children touching their own genitalia, attempting to touch a woman's breasts, looking at another child's genitalia, and showing their own genitalia. The behaviors most rarely observed were a child attempting to oral contact with, another child's genitalia. In a study conducted by Gustafsson *et al.* (1995), it was found out that less than two percent of the children attending daycare centers displayed sexual behaviors such as exhibiting own genitals, playing sexually explorative games, initiating games with a similarity to adult sexual activity, using sexual words, attempting to touch a woman's breast. Childhood masturbation, which is defined as self-stimulation of the genitalia, is also common in preschool period. It is argued that an infant starts to explore the world around, as well as his or her own body. Observable childhood masturbation or masturbation in public, can be considered as normal in an infant or toddler, but not for a child at the age of twelve. When the child masturbates when bored, interesting/ educative toys and (related) activities can be offered. When possible, the child should also receive sex

information, appropriate for their age (Mallants & Casteels, 2008).

In a study conducted by Ünal (2000) in which demographical and developmental features associated with childhood masturbation in Turkey was assessed, a total of sixtyone children with childhood masturbation who were referred for the first time to the Department of Child Psychiatry were examined. It was found out that the onset of masturbation was often associated with a genito-urinary disorder or a stressful life event like weaning, the birth of a sibling, or separation from the parents.

Parents generally react negatively to masturbation, regardless of the age and sex of the child. Later, this negative attitude becomes generalized to include the sexual pleasure that accompanies the behavior. Children thus learn to conceal their masturbatory play (Yarber *et al.*, 2009). Yeşilay and Altun (2009) found out that most of the teachers have inadequate knowledge about dealing with masturbation behavior of children in their classrooms. In addition, some of the teachers display shy manners when they talk about masturbation behavior of the children. It was also found out that some teachers apply unsuitable techniques to handle the masturbation behavior of children in their classrooms.

Sexual Education in Preschool Period

Sexual education for children is argued to have attracted significant attention in the schools and community, and sometimes caused controversy and anxiety for parents and teachers. But the controversy is claimed to arise from personal beliefs and values rather than science. The only area of sexual education which was widely available to professionals was related to abuse. It was mostly thought that sexual behaviors of children might be a sign of victimization. During 80s, the curriculum of sexual education for children is argued initially to cover subjects such as the theory behind perpetration prevention efforts, awareness of personal bias in evaluating sexual behaviors of young children (Ryan, 2000).

It is argued that the commitment to promote educational programs and developing information campaigns on sexual-affective education in the media has also been inexistent. However, in schools it remains as a talkable subject by teachers who are more aware, yet poorly supported (Estivalis & Amat, 2014). Preschool teachers are supposed to respond to sex, gender, and sexuality in the early childhood classroom as these concepts should be recognized as important and understood from a developmental perspective (Blaise, 2009).

Formal sex education provided at school is proposed to be the major source of information, hence its central role in providing some of the fundamentals that will assist in achieving greater levels of sexual happiness in later adult life. However, young people's recall of school based sexual health education has been shown to poor for positive areas of sexual health, such as having good relationships, rights and responsibilities and being good parents (Wylie, 2010).

Conventional sexual education curricula are generally based on a theory of behavior change such as social learning or social cognitive theory, which holds that people learn by observing others. Curricula based on these theories is argued to emphasize learning situations such as role-plays or learning what one's peers practice considered more likely to lead to behavior change. It is argued that more efforts and action are needed to convince governments and other stakeholders to invest resources and effort in sexual education (Haberland & Rogow, 2015).

Behaviourally effective sex education in schools is suggested to require adequate time in an already crowded curriculum. There would be a strong emphasis on relationships education in general in which those skills and values engendering self-reliance and mutual respect are promoted. It is claimed that almost all effective programmes have been based in social learning theories. Central to these theory is the idea that in order to understand an individual's behaviour it is necessary to understand their perception of their social environment together with their intentions and motivation (Evans & Tripp, 2006).

Parents are argued to be unsure about the amount of information they should give, what topics to discuss, and how much their child would actually understand. It is important that parents are given the support and education necessary on these issues, because they are believed to be the best sex educators for their children (Chan & John, 2012). Parents might feel embarrassment when they hear questions having sexual nature. But they should avoid cold, refusing and shy language and attitudes whenever they confront with these questions. Children will be deciding about whether what they ask is true or false depending on the answers they receive. Hence, the responses giving the messages that sexuality is sinful or shameful may inhibit child's related questions in the future. On the contrary, parents should be telling the children that it is very acceptable and reasonable to wonder and ask about these subjects (Sevim, 2002).

What and How to Teach?

It is noted that child sexuality is a self exploration of the body in the form of play. However, when the issue is childhood sexuality, adults have difficulties in thinking and talking about the issue. As with the subject of sexuality, it is argued that adults' communication with children should be honest and simple as much as possible. The answers should be clear and the real names of the sexual organs should be used. If ever the young child is asking "where do the babies come from?", rather than talking about flowers, butterflies and insects, the answer should be as clear as possible. The answers given should be convenient to the age and the level of maturation of the child. Parents and teachers should be aware that sexual curiosity is a normal part of the children's development and children should not be blamed, insulted or punished due to their sexual curiosity. The children should be told as much as they ask or they wonder about. Knowledge more than necessary and inconvenient to the age might be causing difficulties for the sexual development but not supporting it. Parents at home and teachers at school are the primary sources of sexual education. However, both the parents and the teachers mostly suggest that talking about sexuality or giving sexual education might trigger their child's interest in sexuality (Uçar, 1994; Chalotte-Perusse, 1999; Sevim, 2002; Erdoğan, S., 2011).

Knowledge does not stimulate inappropriate behaviour, ignorance does. If the children are told more than they can understand, they will ask another question. Parents, caregivers and teachers are suggested to work towards being askable. Most parents and teachers want to educate children, but they are often uncomfortable and don't know how. It is stressed out that, parents who find it difficult to talk their children about any important issue, will not be ready to talk about sexuality. Parents mostly need support in this matter (Gordon & Gordon, 1992). Preschool teachers should assist parents about how and what to teach children about sexuality.

It is argued that mothers and fathers share equal responsibility as with the sexual education of their children. Both mothers' and fathers' guidance is suggested to be important for both daughters and sons. For sure, the parents of the same sex provide a model to the child, but questions of the children should be answered by any parents regardless of sex (Uçar, 1994; Sevim, 2002). Sexual socialisation and sexuality education are the processes by which knowledge, attitudes and values about sexuality are transmitted and acquired. The parents' role as educator is proposed to start the day their child is born in subtle ways through modelling. All too soon, children become active agents in this process, and parents inevitably find themselves facing often very direct questions from toddlers and preschoolers (Stone *et al.*, 2013).

Parents may confront the sexual questions of their preschool aged children and their proposed answers are as follows:

"What is this?" (showing her or his sexual organ)

For girls:

"This is your vagina. All other girls and women have the same in their bodies" (Uçar, 1994; Sevim, 2002).

For boys:

"This your penis. All other boys and men have this in their bodies." (Uçar, 1994; Sevim, 2002).

"Why do not girls have penis?"

"All boys and men have penis whereas girls and women have vagina. Girls are borned with vagina and continue to have vagina during their whole life" (Chalotte-Perusse, 1999).

"Why don't I have a penis?"

"All girls and women are borned with a vagina. When you grow up you will become a woman, as well. In order to have babies, you need to have a vagina" (Uçar, 1994; Sevim, 2002).

"How babies are borned?"

"When a woman is going to have a baby, we say she is pregnant. No child begins all by itself. The baby grows in a special place inside the mother. It is warm and safe there. The food the mother eats helps the baby to grow. It takes a baby about nine months to grow large enough and strong enough to be born. That is almost as long as from your last birthday to your next birthday. Some babies are born at home. But most women would like to go to the hospital for the birth of their baby. When the baby is ready to be born, it comes out through the mothers' vagina. After few days, the mother comes home from the hospital with her new child" (Harris & Emberley, 1994).

"Do men have babies as well?"

"Men have babies as well and they become fathers. But it is the mothers who give birth to the babies, not the fathers. Because, fathers do not have this special hole that the babies can be born out of" (Sevim, 2002).

"Were you hurt when I was born?"

“It is not easy to give birth. But it is not more difficult than mothers can manage, either. When you were born, you were so beautiful and I forgot about everything the time I picked up and hold you in my arms” (Sevim, 2002).

“Will I have babies as well?”

“When you get older, many birthdays from now, you may want to have your own family. If you have a child, your mom and dad will become grandmother and grand father.”

Parents might be also asking questions about the sexual development of their children and/or about how to answer their children’s questions about sexuality:

“When should I start giving education about sexuality to my children?”

“There is not a specific age for the onset of sexual education. However, you may observe that childrens’ questions about sexuality arise around three years old. You may wait till your child starts asking questions. You should be careful if ever your child does not ask any questions, as she or he might be acquiring inconvenient information from inconvenient resources. Another reason for not asking questions might be that, they might have tried asking questions, but could not have received any responses” (Tuzcuoğlu & Tuzcuoğlu, 2004).

“How am I going to decide the most appropriate and the simplest level of education to be given to my child?”

“It is not easy to talk about sexuality. Above all, you need to be conscious about your child’s development. You need to follow the developmental stages, characteristics of the age periods carefully. Being aware of your child’s development will lead you. The fundemantal criteria for determining the limits of the information you are going to give, should be your child’s age” (Chalotte-Perusse, 1999; Tuzcuoğlu & Tuzcuoğlu, 2004).

“What if I don’t give any information about sexuality to my children?”

“Many incidences are probable to occur when you do not talk about sexuality with your children. When you do not give any eductaion about sexuality, do not forget that the similar dangers will be waiting for your child as when you don’t teach them basic health knowledge, traffic rules or to protect themselves” (Tuzcuoğlu & Tuzcuoğlu, 2004).

“Media has a huge affect on our children. There is uncontrollable sexuality and violence. How can protect my children from these? I realize that my child is impersonating and trying to act like.”

“It is true that media has a huge effect on children. It is also true that children rights and welfare is not looked after sufficiently, either. Leaving the TV on during the whole day, might bring certain difficulites. You can choose what to watch and when to watch and may keep TV off the rest of the time” (Tuzcuoğlu & Tuzcuoğlu, 2004).

“What is the ideal age for circumcision?”

“The first six months after birth is a period in which children do not experience the trauma that circumcision might cause. If you want to have your son circumcised, you may wait till seven-eight years old so that you can explain everything about

circumcision. Boys should be given a very simple and relieving information about the procedure. Parents and adults should avoid scaring them” (Uçar, 1994; Tuzcuoğlu & Tuzcuoğlu, 2004).

CONCLUSION

Children are thought of as asexual beings. However, sexual development begins in infancy and progresses with age. Children's interest in their own genitals and those of their parents is a normal phase of childhood sexual development. Sexuality in preschool children is suggested to be about many things such as growing up, families, babies, love, caring, curiosity, feelings, respect, responsibility, biology and health. Children's sexual exploration in these facts is often observed as spontaneous, and playful; and it may result in embarrassment at times. Learning about sexuality is argued to be important because learning about these facts can help children stay healthy, take good care of themselves and make good decisions about themselves as they grow up and for the rest of their lives. Through sexual education, preschoolers can learn about sex differences, sexual organs and birth as well as their parents may acquire an understanding that their children's curiosity about sexuality is normal and is a part of their sexual development. An appropriate sexual education in preschool period has also implications for improving mental and physical well-being, as well as children's ability to develop appropriate skills and to avoid sexual abuse.

Parents, caregivers and teachers should be aware that sexual curiosity is a normal part of the children's development and children should not be blamed, insulted or punished due to their sexual curiosity. Some parents are able to respond to children's emerging sexuality in a caring, healthy manner; yet others feel threatened and react harshly. In order to communicate mature and responsible attitudes, parents must become the primary sex educators of their own children. It is a plausible argument that parents should be the primary sex educators of their children. But the question is that “who is preparing the parents for this role” remains somehow unanswered. No outside group could replace the family. Parents, for sure, cannot be the sole educators. If they wanted to be, they would have to prevent their children from reading books, newspapers and magazines, keep them away from television and movies, and certainly prohibit them from having any friends at all. Parents are the main educators, with schools as partners in a life long process. Sexual education of preschool children seems to be essential rather than being an option. It should not be ignored or denied as sexual curiosity is a normal part of their sexual development. Age appropriate sexual education curricula should be developed and administered in preschool education.

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Chapter 54

Effects of Combining Peer Feedback and Teacher Feedback on Student Attitudes towards Second Language Writing

Elif TOKDEMİR DEMİREL

INTRODUCTION

Second language writing classes pose several challenges for EFL students including getting used to the conventions of a new writing tradition other than their own culture's, expressing themselves in a new language and coping with the multifaceted nature of writing. These challenges make writing skill one of the most difficult to develop for students, causing an overreliance on the teacher for all kinds of corrections and guidance. Peer feedback has the potential for providing additional benefits when combined with teacher feedback. This chapter concerns the effects of providing a combination of peer and teacher feedback for student essay drafts, on the attitudes of students towards writing and various modes of feedback.

Approaches to Second Language Writing

Writing is a multifaceted skill which involves many elements which impinge on each other. Several approaches have been employed in the teaching of L2 writing since it has been recognized as a separate skill worth spending valuable class time on to develop. In fact, writing is seen as important for the development of thinking and organizational skills of writers as well as helping them to test hypotheses about the new language, providing a time to process meaning in a less stressful way compared to oral production (Kern, 2001).

Figure 1 below shows all the elements of writing that writers have to deal with when they set out to produce a text. As can be seen from the diagram, in order to develop a text which clearly, fluently and effectively communicates the writer's ideas, the writer has to pay attention to all aspects of the writing activity from syntax, grammar, word choice and punctuation to content, organization, audience and purpose. Each of the approaches to L2 writing has emphasized one of the many elements involved in the production of a piece of writing.

The Controlled Composition Approach to Teaching Writing

One example of traditional text-oriented approaches to second language writing is the controlled composition approach of the 1950s and 1960s, which focused mostly on the accuracy: grammar, syntax and mechanics rather than fluency or originality (Raimes, 1983; Celce-Murcia & McIntosh, 1991). It was informed by a behavioral, habit-formation theory of learning. Such a view puts form in the center and disregards other elements of writing such as context and the writer because activities do not go beyond sentence level. This traditional view of writing represents a kind of writing activity which is merely an extension of grammar and writing is strictly controlled by using exercises such as combining and substituting sentences which aimed to teach students sentence structures and diminished the probability of making mistakes

(Matsuda, 2003). However, it was soon realized that controlled-composition exercises failed to help students produce original sentences or free-compositions, which led teachers to move away from “rigid structural guidance” (Matsuda, 2003, p.20).

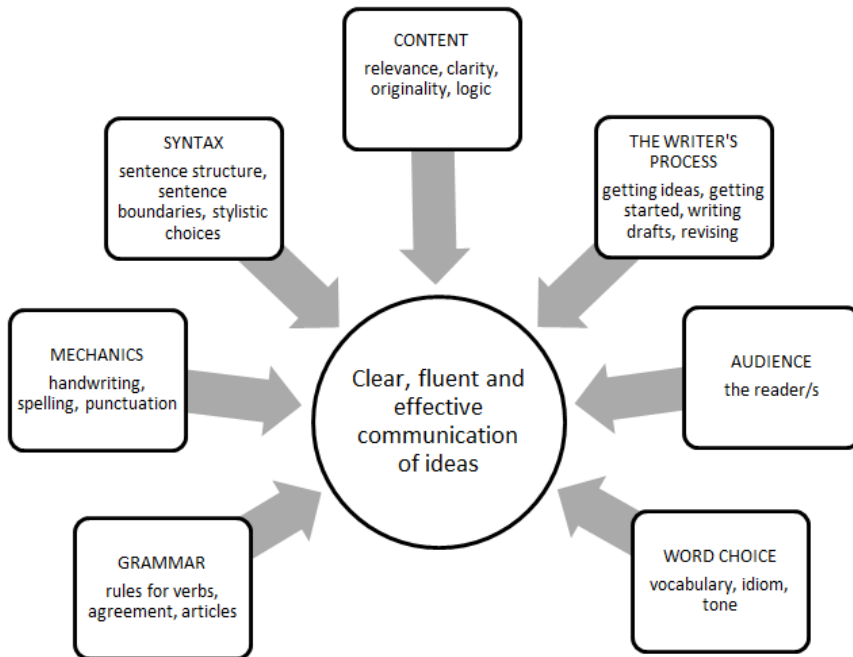


Figure 1: Producing a piece of writing (adapted from Raimes, 1983, p. 6)

The Free-writing Approach to Teaching Writing

Introduced as an extension of existing principles of second language pedagogy which were the oral approach and the audio-lingual approach to the teaching of second language writing, the free-writing approach to second language writing emphasized content and fluency over form (Matsuda, 2003). The practice in writing classes following this approach was to encourage students to produce as much writing as they can without a focus on form because the main purpose was to give as much practice to students as they can so that they will overcome the difficulty of getting started eventually and get over their fear of putting ideas on paper (Raimes, 1983). Reading aloud to class was another common practice which brought the element of audience into the writing activity. Any corrections on grammar, organization or other aspects of writing were to follow the activity of putting ideas down on paper.

The Paragraph Pattern Approach to Teaching Writing

Matsuda (2003) argues that the major weakness of both controlled composition and free composition was their focus on sentence level structures. An alternative to these approaches was to take the composition activity one-step forward, that is, to the paragraph level in line with the developments at the research field where analysis of linguistic structure was extended to the paragraph level by composition specialists such as Francis Christensen in the 1960s (Matsuda, 2003). With this extension, another aspect of writing organization started to be emphasized by the paragraph

pattern approach. The practice was usually analyzing a model passage and imitating its organizational pattern. Paragraph-pattern approach also reflected a traditional approach to writing. Such approaches have also been labeled as “the product approach” (Celce-Murcia 1990, p.246) because although this approach seemed to give importance to the organizational aspect, the main focus was still on the finished product.

The Grammar-Syntax-Organization Approach to Teaching Writing

The Grammar-Syntax-organization approach could be classified as a text oriented approach. It brought together the concerns of form, organization and purpose. Each writing task, depending on its purpose required the use of certain language forms.

The grammar-syntax-organization approach attempted to teach organizational patterns for certain kinds of writing tasks together with the language structures necessary to express the message (Raimes, 1983). However, it can still be argued that this kind of approach to writing is mechanical and restricted and gives too much importance to form.

The Communicative Approach to Teaching Writing

The communicative approach to teaching writing can be regarded as a reader-oriented approach. This approach emphasizes the interaction between writers and readers. The importance of interaction in the production of a text emerges from the idea put forward by Nystrand (cited in Hyland, 2002) that: “the success of any text is the writer’s ability to satisfy the rhetorical demands of readers by embedding his or her writing in a non-local discourse world”(p.34).

In the communicative approach other than the only audience as the teacher, the student writers have to produce for different groups of readers such as their classmates who “...respond, make comments, rewrite in another form, summarize, or make comments – but not correct.”(Raimes, 1983, p. 9) or readers specified by the teacher outside the classroom. The presence of an audience other than the teacher creates a context for students according to Raimes (1983) in which: “to select appropriate content, language, and levels of formality.” (p. 9)

The Process Approach to Teaching Writing

Until the 1970s, most writing approaches were text-oriented and focused mostly on characteristics of the written text. The concept of process writing in L2 was first introduced by Zamel (1976) who believed that an emphasis on the process of writing would be beneficial for L2 writers as well as L1 writers. In her pioneering article, Zamel (1976) argued that the writing practices at that time were far from promoting “the expression of genuine thoughts and ideas” (p 70). She criticized the writing classes of her period because of being mechanistic and reductionist and because of the overemphasis they placed on grammatical accuracy and their use of drills as a form of practice. Instead, she proposed an approach to the teaching of writing which entails not grammar but composing, that is, an approach taking into account the learner’s desire to communicate through the written mode in English but not using the writing activity as a tool for teaching English. In a later study, Zamel (1983) discusses the act of writing as such:

... Through the act of writing itself, ideas are explored, clarified, and reformulated and, as this process continues, new ideas suggest themselves and become assimilated into the developmental pattern of thought. Understanding that writing may be recursive, non-linear, and convoluted, writers are able to modify or even discard chunks of discourse or original plans as they review their writing, reconsider its function, and distance themselves from it in order to meet their readers' expectations.

Emig (1983) one of the contemporaries of Zamel also argued that writing should be seen as recursive rather than uninterrupted and left-to right (cited in Hyland 2002). By putting forward these revolutionary ideas, Emig, Zamel and others with similar views on the nature of writing paved the way for the process approach to teaching writing and the cognitive aspect of writing started to be taken into consideration.

This view approached writing as a developmental activity in which there is a process of development in both organization and meaning. Elements of writing such as invention strategies, writing multiple drafts and receiving formative feedback from various sources became important (Matsuda, 2003). Hyland (2002) provides an evaluative summary of the process approach to writing and argues that the process approach has affected the teaching of writing in both L1 and L2 contexts, taken individual differences more seriously and provided a "useful corrective to earlier preoccupation with the accuracy of product outcomes" (p. 29). As Hyland also points out, the process approach differs from traditional text-oriented approaches to teaching writing with its assumptions about the nature of the writing activity. White & Arndt (1991) argue that "Writing is far from being a simple matter of transcribing language into written symbols: it is a thinking process in its own right" (p. 3) They also believe that for the development of writing, attention to meaning is more important than attention to form.

In an approach such as the process approach to writing, writers especially have to realize that whatever they put on paper initially is not the finished product and that they need to follow certain steps of drafting and revising in order to complete the process of writing. Although it has been criticized for overemphasizing psychological factors, (Hyland, 2002) the process approach has provided an opportunity for a new understanding of writing which would not be possible through traditional product oriented approaches. Figure 2 is a representation of "the complex and recursive nature of writing" (p.3) as White and Arndt (1991) put it.

The writing process which has been defined earlier in the discussion as recursive is no easy task, and sometimes it can be a boring one on part of the students due to lack of ideas. Students may report on their experience as not rewarding at the beginning but at the end because they find it difficult to start (White & Arndt, 1991, p.11). As one of the initial stages, idea generation is a crucial step in the writing process because during this step, the writer is still trying to discover a topic and identify a purpose. Depending on the type of activity, the writers have to tap their long-term memory. Activities that can aid this step are brainstorming, answering questions, using visuals and taking notes. As seen on Figure 2, after generating ideas, the writer has to focus, that is, decide upon a main idea or a viewpoint that will unify the text. The central idea, however, may not be clear at the beginning but may develop as the task of writing continues. For this reason, the writer can go back and forth

between the two steps of generating ideas and focusing as indicated with a double sided arrow.

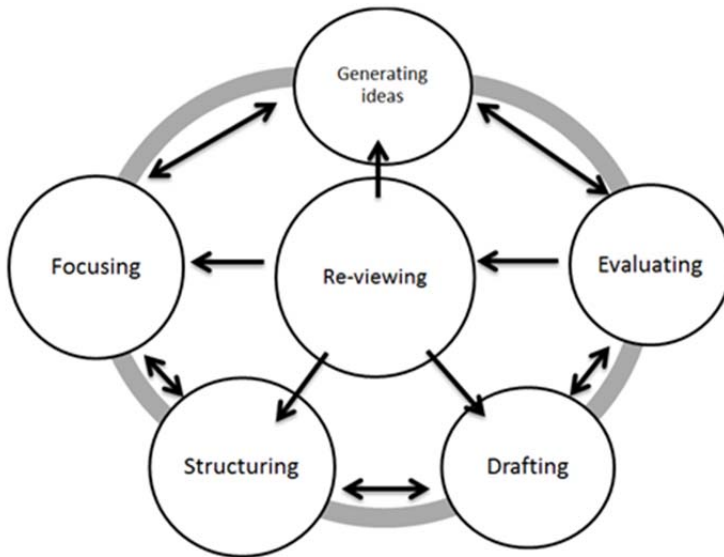


Figure 2: A model of writing. (adapted from White & Arndt, 1992, p. 4)

Structuring the ideas follows the step of focusing. White & Arndt (1991) describe structuring ideas as a crucial step because the remoteness of the reader from the writer forces the writer to make the message as clear as possible. That the writer has structured ideas once does not mean that the text has reached its final organizational pattern. Similar to other stages in the writing process, the structuring step is also an on-going one, which means the writer can change initial decisions and continue by re-organizing content.

The drafting stage is when the writer moves from the so called pre-writing stages of generating ideas, focusing and structuring to actually writing a first draft. White & Arndt (1991) suggest that at the drafting stage readers should go through at least one 'write-revise-rewrite' cycle and produce three drafts, the last of which is the final draft. Although this may seem time consuming, with the increased utilization of the word processor in writing, the drafting stage has been considerably eased.

The last two stages in the writing process are those of re-writing and evaluating. Contrary to the belief of most students, the role of the student is not only to produce a text and then leave all the evaluation and critiquing to the teacher. In the process approach, students have to be made conscious that they need to evaluate and re-view their own product and be their self-critic. After an initial evaluation if the writer and teacher reach the decision that there is room for improvement, they can go to the re-viewing stage and as required backwards in the process towards other steps. If the writer has to write an additional draft, he/she may go back to the drafting stage. If the writer has to reconsider the main idea, he/she may go back to the focusing stage. If the writer has to reconsider the ordering of ideas, he/she may go back to the structuring stage. Thus, the cycle will be completed when the text reaches a satisfactory state.

In conclusion, a close examination of Figure 2 shows that what makes the process approach different from traditional approaches to teaching writing is its realization that writing is a cognitive activity which involves critical thinking and that it is not linear but includes many steps which are recursive. These steps include discussion, writing multiple drafts and carrying out multiple sessions of both self-evaluation and peer evaluation of the text. Although it may seem time consuming at first these activities contribute greatly to the development of critical thinking of the students as well as their writing skills development. The steps of writing summarized above in Figure 2 are indispensable features of the process in which a text develops. Typically, the activities in the process approach writing class would be sequences as follows:



Figure 3: Sequence of Activities in Process Writing (White & Arndt, 1991, p.7)

Feedback in Process approach

In general educational terms feedback has been defined as “the monitoring of a person’s or group’s performance, in which progress or non-progress, etc., are noted and adjustments made appropriately in techniques and tactics.” (McArthur, 1992, p.400). In the field of language teaching, Roberts (1998) defines feedback as “a response or reaction providing useful information or guidelines for further development” (p.154) and Richards *et.al.*, (1985) define it as “any information which provides a report on the result of behavior” (p.104). In second language teaching, feedback has been defined by Keh (1990) as “input from a reader to a writer with the effect of providing information to the writer for revision” (p.284).

With the introduction of the process approach to second language writing classrooms along with other components of writing such as using invention strategies, producing multiple drafts, formative feedback coming from peers and teachers became an important component in teaching writing (Matsuda, 2003). According to Raimes (1983), in the process of writing, the most important help for the students comes in the form of time and feedback. Without feedback, no matter from which

source, it would be very difficult for writers to decide how and what to revise in their texts. Ferris (2003) highlights the importance of feedback for students by saying that it is “the most significant component in their successful development as writers” (p. 119).

In second language writing classes, feedback on student writing can be offered in various forms and it can come from various sources. In addition to the traditional teacher feedback in today’s writing classes, the practices of feedback have become richer. Writing specialists (Hyland, 2000; Ferris, 2003; Ferris & Roberts, 2001) attribute the emergence of different feedback kinds such as peer feedback and feedback through writing conferences to the developments in writing research and pedagogy and the popularity of the process approach.

Teacher Feedback in the Process Approach

Traditionally in writing classes the most commonly utilized type of feedback is teacher feedback. Most of the time the teacher acts as the expert of the writing classroom, and usually takes all the burden of providing feedback for student work. The ways teachers choose to give feedback to their students vary widely from one classroom to another. While some teachers view the text as something which needs to be perfected and approach giving feedback as merely an activity of correcting mistakes, others especially with the development of the process approach see feedback as an opportunity to guide students towards developing their overall writing ability.

Despite its high significance, responding to a text and providing feedback is both a time-consuming and a complex task because it requires the teacher to make a number of critical decisions. Some of these decisions include knowing the general and specific goals for providing feedback, the stage when feedback should be offered, the form of feedback, the source of feedback and the students’ task after receiving the feedback (Kroll, 2003). In order for teacher feedback to be worth the time spent for it, certain strategies have been proposed by the advocates of the process writing approach. For example, White and Arndt (1991) suggest that the student text must be approached with the role of a “reader” rather than simply as a “marker” (p.124) and that at the preliminary drafts feedback should concern content and on later drafts the focus should be shifted to form. In this way, it is hoped that students will be encouraged to make large-scale changes to content on earlier drafts before turning their attention to edition on the later drafts. Also there is a reservation that focusing on form at the initial stages of writing can discourage students from revising their texts (Ashwell, 2000).

Another important issue to be considered for feedback to be fruitful is the students’ awareness of feedback. About raising students’ awareness of feedback, Ashwell (2000) suggests that teachers should make sure students understand “how the feedback is intended to affect their writing and why it is given in the way it is” (pp. 245-246). Otherwise, students may fail to utilize feedback they receive in the intended way.

Peer Feedback in the Process Approach

One of the differences of the process approach from traditional approaches to teaching writing is the utilization of peer feedback. The proponents of the process

approach to teaching writing believe that giving and receiving feedback is highly beneficial for the development of student writers. White & Arndt (1991) discuss the benefit of peer feedback as such:

By learning to evaluate others' writing, and responding in turn to evaluation of their own, students will gradually build up that capacity for self-assessment which is such a vital element in the process of writing (p.117)

The necessity of peer feedback has been highlighted by researchers as filling the gap that is caused by a lack of a sense of an audience. With peer feedback, there is an external demand for students to clarify content, amplify and defend a topic (Kinsler, 1990). The presence of a peer reviewer, that is, another reader not as experienced as the teacher in reading a text, would force the reader to reconsider content, which is discussed by Scardamalia *et al.* (1984) as a requirement for reflective thought in writing:

For instance, recognition that a key term will not be understood by many readers gets translated into a call for definition; search within the content space for semantic specifications leads to a realization by the writer that he or she doesn't actually have a clear concept associated with the term, and this realization sets off a major reanalysis of the point being made (p. 178).

In addition to acquiring a sense of audience, Kinsler (1990) argues that peers can communicate with each other with a language which is more understandable for each other and their feedback to each other may be "less emotionally threatening than that of adults' corrective advice" (p. 305). Mendonca and Johnson (1994) discuss additional benefits of peer feedback and argue that using peer feedback means giving more control to the students because they can actively decide whether or not to use their peers' comments. In case of teacher comments, the student shows a passive reliance and feels compelled to use any comment coming from the teacher without thinking about it. Freedman and Sperling (cited in Hyland 2000) even consider peer feedback as "more authentic and honest than teacher feedback" (p.35). Also, reading a peers' work and encountering similar problems of their own faced by their peers in expressing ideas may increase students' confidence and reduce their inhibition (Chaudron cited in Hyland 2000). By giving peer feedback students can become critical readers of others' work and eventually more critical readers and revisers of their own work (Rollinson, 2005). Another advantage according to Rollinson is that peers can spend more time with a fellow student's paper and provide more specific comments than the overworked teacher.

Although research on second language writing lends theoretical and empirical support about the benefits of peer feedback in writing classes, there are still issues to be considered about peer feedback. The main reservation about peer feedback stems from the fact that the students who are learning to write in a second language are not only learning how to write but they are also still learning the language itself. This somewhat reduces the value of the comments of learners on each other's work and it is debated whether students would be able to produce a text as qualified as one produced with teacher's comments (Villamil & Guerrero, 1998).

Another concern is about the resulting revisions, that is, whether peer revision would result in only surface level linguistic changes or also motivate students to make deeper level revisions concerning the content. The results of empirical studies on

these questions are varied. The empirical studies investigating issues on peer feedback are reviewed in the following sections.

Significance of Peer Feedback in L2 Writing

Although not generally valued as much as teacher feedback, peer feedback has many benefits for EFL students. The use of peer feedback in a process writing class has several benefits such as making students more critical towards their own work as well as other students' work, creating a sense of audience other than the teacher, contributing to the development of students as independent learners in addition to relieving the teacher from the tremendous task of providing all kinds of feedback for the learners by sharing the responsibility with the students. Instead of creating teacher dependent learners, incorporating peer feedback into the writing class helps students become independent learners and thinkers and equips them with the capacity of self-assessment.

Peer feedback in L2 writing has attracted considerable attention in the research field in the past decades and has started to find a place in writing classrooms. However, due to fact that students usually prefer teacher feedback activities over peer feedback activities, the incorporation of peer feedback into writing classes is not at the desired level. One obstacle in the way of effective implementation of peer feedback according to Lee (2011) is lack of teacher training and attitudes of teachers towards peer feedback. In a recent study, Zhao (2014) draws attention to the limited use of peer feedback in Chinese EFL context and suggests a teacher support approach to peer assessment in writing. This is also the case at Turkish university setting. Although most teacher feedback tends to be focused on overt correction, a body of research exists which lends support to the idea that corrective feedback does not improve students' writing over time (Fazio, 2001).

Although students trust and value teacher feedback, they still have some expectations from their teacher regarding the nature of feedback they receive such as more systematic practice in writing and revision as well as more personalized and explicit written feedback. McGarrell & Verbeem (2007) suggest the use of formative feedback which they define as: "... feedback that takes an inquiring stance towards the text and addresses the particular needs of individual writers, consisting of questions intended to raise awareness of the reader's understanding of the meaning of the text as a means to encourage substantial revision on the next draft" (p.228). This kind of feedback, according to them takes the students' writing beyond the assignment level and gives it a communicative purpose, thus motivating revision and improvement.

When giving feedback, teacher's attitude is a key component which affects results considerably. For example out of different types of feedback if only one is used in excess, e.g. if a student is continuously criticized, it may lead to frustration and demotivation Muncie (2000) questions the roles of teachers and students in writing classes saying: The fact that teachers occupy the roles of 'expert' and 'evaluator' means that the learners have a much reduced level of choice in deciding whether or not to use that feedback' (p. 47). Therefore including students in the process more would make them more active in the writing process. Additionally, when teacher feedback and student ideas contradict, students may feel as if they were pressured to accept the ideas of the teacher or may change their topic, which leads to appropriation

by the teacher (Goldstein, 2004) or ‘overriding student decisions’ (Hyland, 2000, p.33). Although most L2 writing teachers may have an idea about the most effective feedback they should use in their classes, research indicates that their self-assessment of own feedback and students’ perceptions of teacher feedback may not match (Montgomery & Baker, 2007). Another issue related with teacher feedback is the nature of the feedback itself.

In order to make up for the deficiencies of teacher feedback, using peer feedback in conjunction with teacher feedback could be a solution. Backing up teacher feedback with peer feedback may provide additional benefits. Studies on peer feedback suggest that peers can provide useful and valid feedback which benefits not only the receiver but also the provider of feedback (Tsui & Ng, 2000; Lundstrom & Baker, 2009). Peer feedback has proven to make students more confident in their abilities to make decisions about their own writing and revision choices and can decrease writing anxiety of students in addition to its benefit in improving writing ability. As teachers realize the benefits of peer review, their attitude towards peer review is also improving in a positive direction. The teacher’s view that peer review would be helpful, useful and effective as students become more familiar with the activity corroborates with the findings of similar studies that suggest inclusion of training in peer response for effective peer review (Ming, 2005; Falchikov & Goldfinch, 2000).

However, the benefits of peer feedback are largely dependent upon the way in which peer feedback is implemented in the writing classroom. If not carried out in an effective way, peer feedback can fail; however, this would not prove that peer feedback is not a useful activity. Berg *et al.* (2006) outline several optimal design features for peer assessment and feedback found to be to be successful, which are a manageable length requirement– at the longest five to eight pages - and enough time for the peer review task. Studies show that students need training on how to give feedback and with the use of training, peer feedback can be made more effective (Min, 2006).

Most of the studies, then, indicate that if used properly and if training is provided, students can benefit from the use of peer feedback. However when offered as the only source of feedback, peer feedback is not preferred over teacher feedback. A study by Jacobs *et al.* (1998) investigating students’ preferences for peer feedback showed that students generally value peer feedback as one but not the only type of feedback. This finding supports the idea that students want to receive different types of feedback in response to their writing and that teacher and peer feedback is best seen as complementary of each other but rather than as separate from each other.

Research Questions

The small scale experiment described in this paper aimed to answer the following research questions:

- i) Which type of feedback: full teacher feedback or complementary peer-teacher feedback creates more positive attitudes towards writing in general?
- ii) Which type of feedback: full teacher feedback or complementary peer-teacher feedback creates more positive attitudes towards peer feedback?

MATERIAL AND METHODS

Participants

The sample was comprised of 57 Preparatory Class students at upper intermediate and advanced levels of English studying at KTU-DELL which were randomly divided into two classes. Two separate t-tests, one using the screening test results and the other using the university entrance exam scores, were performed between the two classes in order to investigate whether the groups were identical with respect to language proficiency. Since no significant differences were yielded by the t-tests, the groups could be considered identical in terms of students' language abilities. The results of the t-tests are presented on Table 1 below.

Table 1: Results of the Paired Sample t-tests

		t	df	Sig. (2-tailed)
Pair 1	screena - screenb	-0,66	27	0,52
Pair 2	OSSa - OSSb	-1,67	27	0,11

Materials

Prior to the study, the students were given the pre-study questionnaire in order to collect data on students' background in writing and their preferences of various modes of feedback. Student reflections were another source of data which provided information about students' attitude towards writing and peer or teacher feedback in general. The questionnaires and reflections were compared between the groups in order to find out if there were any changes in attitude towards feedback and writing after the study.

Procedures

Throughout the study, the students participating in the study wrote 7 expository essays and for each essay they wrote three drafts including a final draft. They received two rounds of feedback between the drafts. The complementary feedback model which was developed for this study was a combination of teacher feedback and peer feedback in which the areas of writing that each party focuses on was predetermined by identifying the weaknesses of students in terms of feedback through a pilot peer feedback session in which students were asked to give peer feedback to their peers freely. In each peer editing session, students were paired with different peer editors so that they could benefit from different points of view. The pilot feedback session helped the researcher identify which areas of writing the students ignore while giving feedback. It was observed that in accordance with the literature on peer feedback, the students regarded giving feedback as detecting mistakes of grammar and punctuation and were reluctant to make content specific comments or comments on the organization of ideas. These ignored areas then were assigned to students in the complementary feedback model in order to help students become aware of these areas of writing and to develop their peer editing skills.

Table 2: Feedback conditions in the experimental and control groups

Experimental Group	Control Group
<p>1. Training session: Students receive training on how to give feedback on content and organization. They are trained in using peer feedback checklists by means of demonstrations and practice. Students receive a list of correction symbols for teacher feedback and are trained about their meaning.</p> <p>2. Pre-writing stage: Brainstorming Planning</p> <p>3. Writing stage Writing the 1st draft</p> <p>4. First feedback session: Students receive feedback from two sources on different areas of writing: a) Teacher feedback on form b) Peer feedback on content and organization</p> <p>5. Second draft: Using the feedback from peers and teacher, students write their second draft.</p> <p>6. Second feedback session: Students receive feedback from two sources on different areas of writing: a) Teacher feedback on form. b) Peer feedback on content and organization</p> <p>7. Final draft and reflection: Using feedback from peers and the teacher, students write their final draft and a reflection on the writing process.</p>	<p>1. Pre-writing stage Brainstorming Planning</p> <p>2. Writing stage Writing the 1st draft</p> <p>3. First feedback session: Students receive feedback from one source on all areas of their writing: a) Teacher feedback on form, content and organization.</p> <p>4. Second draft: Using the feedback from the teacher, students write their second draft.</p> <p>5. Second feedback session: Students receive feedback from one source on all areas of their writing: a) Teacher feedback on form, content and organization.</p> <p>6. Final draft and reflection: Using feedback from the teacher, students write their final draft and a reflection on the writing process.</p>

Peer Feedback Training

Although peer feedback is a somewhat problematic component of L2 writing because there is lack of student self-reliance, studies have shown that with proper training, students can provide quality feedback for each other and their attitudes towards feedback can change (Min, 2006). Accordingly, in the present study, students were encouraged to employ peer feedback after being provided training through teacher conferences and peer feedback practice sessions.

They were specifically trained on how to give helpful and specialized feedback rather than very general comments. In order to train the students, first a task for peer feedback was done in class with the participation of students (for the task instructions

see Appendix A). Next the teacher held a pilot training session and practiced using checklists with students. Students used essays written by their peers to practice using the checklists. During the pilot session, the teacher monitored students and provided clarification on issues on which students had questions. The pilot session also helped the researcher to improve questions on the checklist to make them more effective.

After the training session, students provided feedback for their peers by using checklists containing guiding questions provided by the teacher. For various writing assignments, different checklists were designed by the researcher according to the requirements of the writing task. (For a sample checklist for a description essay, see Appendix B). The students guided their peers but they did not provide corrections themselves.

This study employed the strategy of marking surface level errors with symbols by teachers. The teacher feedback provided to the experimental group students in the present study was kept limited to structure and mechanics in order to decrease the reliance of students on the teacher (see Table 2 above). The teacher provided feedback on structure and mechanics by underlining and correction symbols but no overt correction. The peer feedback in the experimental group was systematized by using checklists designed for each assignment (see Appendix B). All feedback was provided by the teacher in the control group treatment by using the same feedback techniques as in the experimental group.

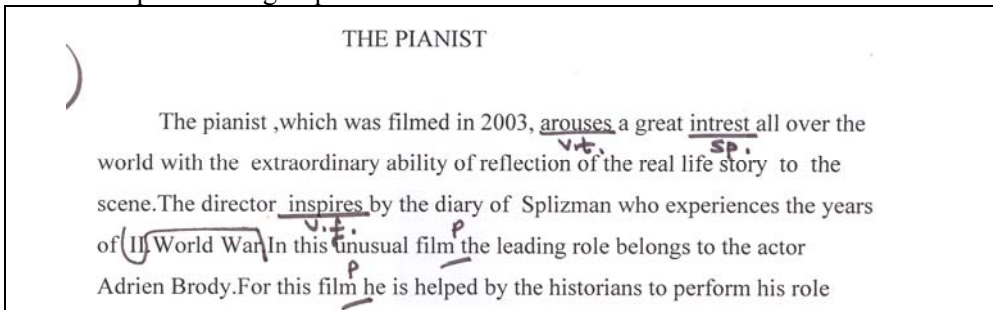


Figure 4: Sample student text with teacher feedback using underlining and correction symbols

RESULTS AND DISCUSSION

Student Attitudes towards Writing

Research Question 1 which read: ‘Which type of feedback: full teacher feedback or complementary peer-teacher feedback creates more positive attitudes towards writing in general?’ was the first issue of concern in the study. This question was investigated by means of qualitative data obtained through questionnaires and student reflections.

The first part of the questionnaire intended to find out about students’ prior experiences with English writing classes. The responses to the questions in this section showed the following results. With regard to English writing classes, a majority of students in both groups reported not having received a class solely dedicated to English writing but carried out some writing activities.

Table 3: Comparison or reflections about writing as an activity

Experimental Group: sample responses	%	Control Group: sample responses	%
ExSt#18: 'There was not any difficult part.'	20	No similar response	0
ExSt#7: 'The most difficult thing for me is to start the essay. To make a good introduction is difficult. When you do it is easier to continue the essay.'	17	ContSt#2: 'To begin the writing because I always had difficulty in deciding in what way I should start to write.'	33
No similar response	0	ContS#11: 'Trying to obey the rules of essay rather than importing the thoughts.'	16
ExSt#1: 'To prepare the content while writing.'	17	ContS#7: 'To decide what I will write.'	11
ExSt#14: 'The body part was the most difficult.'	17	No similar response	
ExSt#12: 'To organize the ideas.'	13	ContS#10: 'The most difficult thing is not to know how to combine our thoughts.'	11
ExSd#20: 'Finding suitable words to explain situations. You can find words in your own language but cannot translate them.'	8	ContS#3: 'The most difficult thing is to select correct words.'	17
No similar response		ContS#17: 'To produce ideas and support them in a logical way.'	6
No similar response		ContS#5 'To think in the opinion of an English.'	6
No similar response		No similar response	
ExSt#19: 'The conclusion part was the most difficult.'	8	No similar response	

In this respect, it can be concluded that students in both the experimental and the control groups had limited experience with English writing instruction which did not follow a structured approach but was done solely to provide writing practice and additionally did not have a very positive idea about the usefulness of writing activities carried out.

The reflections provided ideas about students' attitude towards writing as an activity. To begin with students in both groups stated that they found writing difficult in general. Regarding the difficulties they faced with writing, students in both groups stated similar ideas in that they found the initial stages of the writing activity as the most challenging. Once they thought they got over the difficulty of starting out an essay, the remaining parts were perceived as easier. Although most of the students in both groups found writing as a difficult activity, in the experimental group 20% of the students wrote that they did not find writing difficult. Thus, for the experimental group, the treatment seems to have created some effect on changing student attitudes towards the positive. In the control group, however, none of the students gave a

similar response. The comparison of reflections also shows that the control group students raised more challenges regarding writing compared to the experimental group students. Table 3 shows the comparison of reflection question: ‘What was most difficult for you while writing your essay?’

Student Attitudes towards Peer Feedback

To find an answer to the second research question: ‘Which type of feedback: full teacher feedback or complementary peer-teacher feedback creates more positive attitudes towards peer feedback?’, the pre-study and post-study questionnaires were used.

In the second part of the questionnaire, the students were asked to rate three feedback types, peer feedback, teacher feedback and self-correction, on a five-point Likert scale from 1:least useful to 5: most useful both before and after the study. The results obtained from the pre-study questionnaire showed that before the study the students both in the experimental group and in the control group had a very positive attitude towards teacher feedback, and a moderately positive attitude towards peer feedback and self correction prior to the study. The results also showed that the study did not cause the same effect in student attitudes towards these three types of feedback in both groups. To illustrate, in the experimental group, the average ratings provided by the students showed some changes for all of the three feedback types.

Table 4: Experimental group students’ attitudes towards feedback types before and after the study

	<i>Peer feedback</i>	<i>Self-correction</i>	<i>Teacher feedback</i>
Pre-study questionnaire	3,46	3,83	4,83
After-study questionnaire	3,63	3,58	4,73

Table 5: Control Group Students’ Attitudes towards Feedback Types before and after the Study

	<i>Peer feedback</i>	<i>Self-correction</i>	<i>Teacher feedback</i>
Pre-study questionnaire	4,00	3,79	4,42
After-study questionnaire	3,15	2,79	4,89

As can be seen in Table 4 above, minor decreases were observed in the average ratings of the three feedback types: peer feedback rating slightly increased and the ratings for teacher feedback and self-correction slightly decreased. On the other hand, the changes in the average ratings obtained from the control group students through the questionnaire were more substantial since they not only rated teacher feedback as more useful than they had done previously but also rated peer feedback and self-correction as less useful than they had done in the initial questionnaire as can be seen in Table 5.

These results indicate that receiving full teacher feedback changed the control group students’ initial positive ideas about peer feedback and self-correction towards the negative direction. After having received full teacher feedback, the control group

students started to value teacher feedback more than both peer feedback and self-correction. However, for the experimental group students, receiving limited feedback from the teacher on form and systematic peer feedback on content and organization affected their ideas about peer feedback and self-correction positively. This result can be seen as an additional advantage of the complementary peer-teacher feedback model because our model of feedback affected students' attitudes about peer feedback and self-correction positively.

Students were also asked to give their reasons for each of their choices. According to students, generally, peer feedback was found useful for having mistakes detected by peers, hearing peers' ideas about one's text, and for sharing ideas, but not as useful as teacher feedback according to a small group of students since they think peers may fail to identify some of the mistakes. Opinions for the usefulness of teacher feedback from both groups emphasized the expertise of the teacher and students stated that the teacher knows more and would help students develop their writing by showing them their mistakes. Additionally, students wanted to know what the teacher thinks about their work. Generally, the opinions of both groups about teacher feedback were very positive.

Students generally found self-correction useful for the following reasons: it could help them think twice about their work; it could help them gain self-confidence; it would show them that they are capable of criticizing their own work. Few students who found self-correction only 'somewhat useful' expressed concern with the fact that they had limited English capacity for this task and that they may not have been objective while criticizing their own work.

The comments that the students made about the usefulness of various types of feedback lend support to the idea that especially the experimental group students developed a more conscious and realistic attitude towards peer feedback and self-correction after the study whereas the control group students maintained their initial prejudices towards peer feedback and self-correction and grew away from these alternative methods of feedback.

Student reflections written by both groups reflect similar benefits of feedback; however, the comments also differ in some aspects. For the experimental group students who received their feedback through the complementary peer-teacher feedback model, the most important benefit of peer feedback was seen as sharing ideas with peers. On the other hand, the control group students who received full teacher feedback emphasized surface level issues more such as learning new structures and vocabulary as benefits. This can be caused by the fact that the control group students did not have a chance to benefit from multiple perspectives of the peers and were limited to the teacher's opinions.

It could be concluded as a result of the study that students generally value teacher feedback more although they may develop positive attitudes towards peer feedback. The dependence of students on teacher feedback stems from their lack of experience with peer feedback and their general reliance on the teacher. However, when students are provided systematic peer feedback together with teacher feedback, their attitude towards peer feedback tends to improve. On the other hand, if students are only given teacher feedback in the writing class, their initial positive attitude towards peer feedback may deteriorate and they may start to value teacher feedback even more.

As a result, it would be highly recommendable to include peer feedback in writing classes as a natural and systematic component since it increases students' confidence and critical thinking ability as well as decreasing their dependence on the teacher.

Appendix A: Peer Feedback Training Task for Students

Step 1

What is feedback?

Feedback is the response you get for your written work on various aspects. You will receive written feedback from your teacher in this writing course. Let's see an example of written feedback you can get from your teacher and review the correction symbols that will be used by the teacher.

Step 2

Instructions:

The teacher will consider the following aspects of your work and give you feedback accordingly. She will not make direct corrections but give clues to you so that you can make your own revisions.

Sample Checklist

(a) Type of writing

- a. What type of writing is this text intended to be?
- b. Does it conform to the conventions usually expected of this type?

(b) Purpose and ideas:

- a. Is the writer's purpose clear?
- b. Do we understand the main idea(s)?

(c) Structure of text

- a. Is it easy to follow the development of the ideas/argument?
- b. Would it help to rearrange the sequence of ideas?
- c. Do the relations between the ideas need to be changed?
- d. Do the connections between the ideas need to be made more explicit?
- e. Are the ideas grouped together in a suitable way?
- f. Is the text segmented into appropriate paragraphs?
- g. Should any of the paragraphs be joined together?
- h. Should any of the paragraphs be broken down into smaller units?

(d) Response as readers:

- a. Does the opening make us want to read on?
- b. Do we feel satisfied with the way the text comes to an end?
- c. Are there any points which are not necessary?
- d. Are there any points which we don't understand?
- e. Are there any points on which we would like more information?

Step 3

You read a text given to you by your teacher, this text would receive the following feedback from the teacher.

- The writer's purpose is not clear.
- The piece lacks a focus.
- There are many options for regrouping ideas and restructuring the text.

- The text is not segmented at all, and rather poorly signposted.
- There are many places where elaboration and clarification is required; for example, the writer never actually tells us what a roundhouse is, not why it was important to save it.
- There is some information which may not be felt to be absolutely essential; for instance, the exact dimensions of the wall, or the folk wisdom about the birds.

Step 4

Now let's look at the text which has been revised in relation to the feedback. Some examples of correction symbols, the following text has various problems in terms of spelling, punctuation and grammar. The problems have been marked with correction symbols.

The cats are useless

The cats are useless as domestic animal. Specially in cities where.. is no problem
of rate and mices, In my life, the kept a cat in the house, I think, this decision
came from... that of my life is full of hard work. Perhaps, you might say, It is a
nice thing to find a game for your children, as... domestic animal. I reply, OK,
My brother has a son, and he had a cat, later on, the cat was died. However The
boy was in deep sorrow and still of this feeling for a long time.

Appendix B: Sample peer feedback checklist

PEER FEEDBACK CHECKLIST FOR DESCRIPTION OF A PLACE			
WRITER'S NAME: READER'S NAME: Draft No:	PEER COMMENTS:		
1. INTRODUCTION		Yes	No
a. How effective is the introduction? What is missing? How could it be improved?			
b. Is the introduction separated from the rest of the essay? If not where should the introduction end?			
2. BODY			
a. Is the body separated from the introduction of the essay? If not, mark on the essay where the body should start?			

b. Is the body organized in itself into paragraphs? Does the writer use transitional phrases at the beginning of paragraphs? If not suggest which transitional phrases can be used.			
3. CONCLUSION			
a. How effective is the conclusion of the description? What is missing? How can it be improved?			
b. Is the conclusion separated from the rest of the essay? If not, mark on the essay where the conclusion should start?			
4. GENERAL COMMENTS			
a. Does the description have a general focus? Is there a main point unifying the content? If not what would you suggest as a main point?			
b. Are the words carefully chosen for accuracy and specificity? How could these be improved?			
c. How informative is the description? What has to be added to make it more informative? Suggest.			
d. Provide any general suggestions or comments that you have about the description.			

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Chapter 55

Ethics and Ethical Decision Making in Early Childhood Education

Şafak Öztürk AYNAL

INTRODUCTION

In many countries, the importance of the early childhood period is emphasized and numerous studies have been conducted for a pre-school education that is of high quality especially in the last 50 years. An issue among these is essential for children's educational lives and teachers' professional lives. It is the issue of teacher ethics in early childhood education. With whichever age group teachers work, the educators encounter many different ethical or moral problems during their professional lives. A general classification of these problems is as follows: Class management issues are the first to be faced as the most well-known ethical or moral problems and often involve unethical directives. Another problem is related to the education program used in the classroom, which has problems associated with the teacher's ability to prepare a teaching plan, provide supplies, and use the equipment. Another problem is related to troubles with cultural and environmental factors. Other common problems teachers encounter at school are difficulty communicating with colleagues, staff, children, and the children's families; physical or emotional abuse of children; creative thinking skills that run into some ethical conflicts; and difficulties using teaching codes of ethics and teaching ideologies (Bibby, 1998). Hence, a teacher's ability to behave ethically in his/her communication with children, or in other words his/her ethical decision making skill is extremely important for the teacher's professional performance. However, while teachers sometimes are able to be ethical, their ethical decision-making processes can sometimes be influenced by various factors. For example, since cultural and moral values may differ from one society to another, cultural and moral differences may influence the degree of ethicalness of teachers' classroom decisions. In connection with the current study, Tirri (1999) found that teachers rank very high in their moral reasoning. Also, teachers' level of moral development (Kohlberg's moral development theory (1980)) was measured, and more than half scored as being at the post-conventional level in their judgments. Departing from this finding, according to Kohlberg's (1980) theory of moral development, teachers' high moral levels become an important factor in the degree of ethicalness of the decisions they make in circumstances they face in the classroom. This is definitely dependent on the teacher's professional behaviours in his/her job.

Ethics usually consists of "responsibility held in common." "Responsibility held in common" (as cited in Hill, 2004, p. 132), one of the ethical codes of American Counseling Association (ACA) (1995) (as cited in Hill, 2004, p. 132) is included in some authors' definition of ethics (Corey, Corey, & Callahan, 1998; Erwin, 2000; Levy, 1972; Pope & Vasquez, 1998; Swenson, 1997; Van Hoose & Paradise, 1979). More meaningful for the current study is the concrete form of laws or rules about

professional behavior. At the same time, ethics can be understood as a personal point-of-view. It helps us in making decisions about subjects when there are no guides for planning and justification. In addition to not only is there the ethical development process of the behavior that results, which researchers primarily target but there is also the most important benefit of ethics, the formation of the ideals of human behavior. The most important element for the ideal human behavior is objectivity in front of events and circumstances. Campbell (2000) says to be objective as well. Otherwise, personal interpretations and beliefs or the individual's own point-of-view will be included. All of these are elements connected to the moral or ethical decision-making mechanism. Important matters that should be discussed include the ethical role of the teacher, how the teacher should make decisions, and how ethical or moral professionalism would be affected by the decision (Campbell, 2000; Campbell, 2003).

In fact, Campbell (2000) states that there is relativism in ethical or moral decision-making. He explains that sense about values could change from person to person, asking the question of “whose values?” He expresses this idea using the concepts of objectivism and subjectivism (Campbell, 2000, p. 207):

In her interesting book, *The Ethical School*, Hynes (1998) defines objectivism as “the theory that there are moral truths that hold regardless of how anyone feels about them. The concepts of ethics, which can be shown as honesty, promise-keeping, goodness, justice” (p. 184); and then “relativism as ‘ethical beliefs’ are relative to a particular person, group or time rather than absolute” (p. 185). The fact is that we do frequently raise the question of “whose values?” However, writers in the field of ethics in education have been arguing that “ethical subjectivism and moral relativism have no place in serious discussions of professional ethics” (Campbell, 1997b, p. 258). As Campbell points out, they “observe relativism’s paralyzing effects on the pursuit of ethical professional conduct in education...” (p. 207).

According to Husu (2001), professional ethics are related to social norms, values, and principles that are the provenance of educational professionals. Because teachers generally work in public schools, they likely need professional skills to enhance their decision-making. Also, Husu (2001) again expresses that there appears to be no definite answer for how to handle these professional tasks because the answers always can be challenged. When a teacher makes a decision, the teacher must apply standards and evaluate what they are doing at every step of their practice. Therefore, teachers must know how to analyze events, evaluate them, and make comments. Some approaches to this moral or ethical decision-making process have been brought together under the following four headings (Andolsen, 2006; Brock, 1998):

1. Rules (rules-based) approach: This approach, modified from the idea of the German philosopher Immanuel Kant (as cited in Brock, 1998, p. 53), is known as deontological (Greek: study of duty) ethics. Kant designated this as the *categorical imperative*. This approach works for discovering the rules or principles that guide moral actions. When principles at a place of employment are decided, from that point, individuals are expected to make decisions according to those principles.

2. Results (end-based) approach: This approach, also known as *utilitarianism*, analyzes moral actions from the viewpoint of the results that flow from ethical decisions. The earliest proponents of utilitarianism were John Stuart Mill and Jeremy Bentham (as cited in Brock, 1998, p. 53). The key idea required for the solution is “to

do whatever produces the greatest good for the greatest number,” and the most important factor is an assessment of consequences or outcomes.

3. Character approach: This is also known as *virtue ethics*, and has its origins Plato and Aristotle (as cited in Andolsen, 2006, p. 48). This idea differs from that of the results or rules approaches because of its focus on the individual. In other words, it reflects on the habits that people have developed to direct their actions. Through repeated action, a person learns to act morally, for example, to be honest or to be trustworthy.

4. Empathy (care-based) approach: The key for this approach is the ability to consider conditions empathically. As Brock cited, “It asks you to test your actions by putting yourself in another’s shoes and imagining how it would feel if you were the recipient, rather than the perpetrator, of your actions” (in Brock, 1998, p. 54) (Andolsen, 2006; Brock, 1998).

A teacher should keep in mind the following two conditions during a process of moral or ethical decision-making, according to Mahony (1989) (as cited in Brock, 1998, p. 61). The first condition to keep in consideration is which action is most likely to result in the “principal, primary ‘social good’”; in other words, which decision will help each student “achieve personal excellence in the intellectual, personal, social, cultural, physical, moral, and other aspects of human development?” The second condition that should be kept in mind is acting according to—and being assured by—the philosophical principle of the *double effect*: this is the realistic acceptance that most ethical actions will have some undesirable side effects, requiring some effort to determine when those undesirable outcomes become ethically unacceptable, or at least trying to mitigate them. Moreover, Rest and Narvacz (1994) (as cited in Hill, 2004, p. 133) even emphasized that ethics should be both behavioral and attitudinal, and they suggest the appropriateness of fitting ethics into a setting of four psychological criteria. These criteria are described as follows. The first is moral sensitivity, or interpreting the situation; second is moral judgment, or judging which action is morally right or wrong; the third is moral motivation, involving the ability to prioritize moral values relative to other values; and last is moral character, exemplified by “having courage, persisting, overcoming distractions, and implementing skills.” (p. 133). Hill (2004) has emphasized that moral sensitivity has a connection with empathy and social role-taking skills, particularly dwelling on moral sensitivity. In addition, he explains that many authors have observed a connection between these two skills, emphasizing that improvement of moral sensitivity was the first and most crucial factor for moral decision-making. Even in straightforward scenarios, people can experience difficulties, affecting their judgment and decision-making. Of course, these actions and responses require a “moral vision” (Hill, 2004, p. 144). In connection with this, Christopher (1996) (as cited in Hill, 2004) clarifies that what a counselor ought to do is to develop a moral vision in accordance with the values of the society and his or her responsibilities in realizing them. Briefly, teachers undoubtedly should be aware of their responsibilities in his/her class, should determine their ethical principles using cases and circumstances and finally when making decisions, teachers should be aware of ethical principles. So, what should early childhood educators do in their classroom? We can sum up as below:

As known, teaching requires teachers to make ethical choices. An early

childhood educator must be honest, trustworthy, caring, and fair, providing both educational instruction and an appropriate role model for the young children in their class. In being a role model, the teacher demonstrates the standards by which conduct can be judged. Moreover, teachers' task involves the provision of an environment and experiences which are conducive to learning, so that students can achieve their potential and become responsible citizens who will be able to contribute positively to the community in which they live. Thus, the attributes required of teachers are many and varied which have included: tolerance, patience, maturity, integrity and sensitivity. Those are already very important practition factors in early childhood education. Also, many early childhood teachers deal with this situation in different ways and sometimes teachers can have conflicting emotions and beliefs. But, as you know, schooling and education are concerned with helping students discern the difference between good or morally appropriate behaviour and wrong or inappropriate behaviour. Although some personal interaction must exist within the classroom context, contamination of this by emotion between the teacher and their student is not always of benefit to the pupil, and may even be dangerous as personal attachment obscures the objectivity necessary to be an effective teacher. Thus educators not only need to balance their commitment to their professional practice against an ethos of caring but also need to develop a classroom climate based on fairness, equity, honesty and trust. Of these, fairness is one of the essential virtues. It extends into issues of equity and discrimination, because children need to experience fairness and equity in schools. In showing fairness and equity to children in their class, and equal distribution of teacher time, teachers model expectations to which students can aspire. Another issue in teaching is that professional and personal relationships in school. Professional roles, however, should be objective, continuous, hierarchical and public. In other words, teachers have moral and ethical values. Because showing a moral and ethical behaviour example for a teacher is the heart of a school's influence on its pupils and community. If a teacher fails to be just or equitable they are espousing a poor moral example to the children in the school (Forster, 1998; McKenzie & Clark, 2003).

We can add lots of different things teacher should do in their classroom. But if we sum up, the professional aim of the teacher is the welfare and development of the children. That is why teachers are required to be of good moral and ethical character.

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Chapter 56

Tests and Programs in Turkey and the World for Assessment of School Readiness

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INTRODUCTION

1. School Readiness

Education systems focus on human qualities that countries wish to develop. There are several factors that shape expectations from education, which might be summarized in simple questions: Is education centralized or local? Are they opened by private enterprises, municipalities, foundations or the government itself? Are they governed by central ministry or states/municipalities? What are the problems (immigration, literacy rate, difficulty in acquiring writing skills etc.) and needs of the country? Who is able to establish foundations? How is education financed? How is the education program of the state/municipality? Structure of education system is influenced by several factors such as philosophy, goals, flexibility of education programs and presence of schools adopting various philosophies in different education models.

There are differences between countries and even between different states within a country with regards their programs, program goals, features of institutions, persons authorized to open institutions and program(s) they apply. That causes differences in expectations of countries and children from early childhood education and judgments of skills that must be possessed by a child who is ready for school.

It is possible to find a great number of definitions of school readiness with a data base search. When these definitions reviewed, you will observe that readiness was the basic component of previous definition while it has been recognized as a socially structured concept in time. Meissels (1999; from NSW Parenting Centre, 2003) explained four theoretical approaches to school readiness of children. These are nativist/maturationist view which sees readiness as a “within the child” phenomenon with little or no impact from the environment, environmentalist approach which argues that there are a set of skills that must be acquired by the child before beginning school, social constructivist approach which argues that the community and environment which the child lives need to be considered in order to obtain a fair assessment of the child’s readiness to learn and interactionist approach which combines information about the child with the community in which the child is reared and focuses on the “children’s current skills, knowledge and abilities and on the conditions in which the children are reared and taught” (Anonymous, 2003).

A 2012 report published by UNICEF defined school readiness with two basic characteristics. These are “transition” to primary school and “proficiency”. Aspects of school readiness are children’s readiness for school, schools’ readiness for children and families’ and communities’ readiness for schools (UNICEF, 2012)

As school readiness requires an interaction among individuals, families and

systems, it is important and necessary that three aspects of school readiness work together. Culture and politics are important factors on three aspects of school readiness. While culture and values of a community impact education process, each country's own social and educational policies are influential on assessing readiness of individuals, schools and communities (UNICEF, 2012).

1.1. Assessment of School Readiness

There are standard tests and alternative observation-registry forms and portfolios in order to assess school readiness. More than one assessment method must be used together for a proper assessment.

Assessments must serve the goals. It is important that evaluator know the child well but be objective during assessments (anecdote records, development reports, observation forms, game assessments, portfolios etc.) Validity and reliability of standard tests must be checked. Assessments must suit real life and culture.

Rhode Island Kids Count (Anonymous 2005) conducted a study in 2005 with the participation of 17 American states. When study results reviewed, it is possible to see that measurement tools are practical to the extent that they allow practice according to the results they yield. For an effective school readiness, political content of countries must be considered and importance of communication must not be ignored. "Literacy" and "social-emotional development" seem to be two fields regarded most important by the states. School readiness is possible not only with children's but also community's, schools' and other service institutions' (e.g. health services) readiness. In order to enhance children's readiness, preschool education is not enough and they must be supported from the earliest age possible. Team work with correlations between various sectors is thought to increase support to children. These sectors may include deputies, governors, researchers, teachers, statisticians and prominent people of the community (Anonymous, 2005).

Long-term follow-up of the works is important in determining the effects of the work. Processing and following up current data on each state will be helpful in observing educational quality and acquisitions. Politics effects of education could be seen in the long term, so we must not only focus on its negative aspects but also assess and even celebrate the achievement at the end of the process (Anonymous, 2005).

2. Assessment of School Readiness in Turkey

Turkish Republic education system has a centralized structure. Ministry of National Education has a hierarchical structure involving Directorate of Early Childhood Education affiliated with General Directorate of Basic Education, Provincial Directorates of National Education in provinces and District Directorates of National Education in districts (URL-1).

According to this structure, "Preschool Education Program" was designed and updated as a frame program in 2013 and is implemented in the whole country now.

Enabling children's school readiness is one of the objectives of preschool education developed and practiced the Ministry. On the other hand, the program involves various assessment methods. Teachers keep records according to such assessment methods, preschool education and general assessment data flows from bottom to the top. This makes it possible to collect the data in a centralized system and review innovations that the program requires.

There are no compulsory tests or standard measurement tools for early childhood education and school readiness in our country. Alternatively, assessments are based on observation and preschool education program. However, it does not mean that there are no standard tests to assess school readiness in our country.

2.1. Tests

Standard tests used in Turkey include Metropolitan School Readiness Test, Marmara Primary School Readiness Test, Ankara Development Scanning Inventory, Gazi Early Childhood Assessment Tool (GEÇDA), School Readiness Assessment Test, BRACKEN School Readiness Scale, Peabody Picture-Word Test, Phonologic Sensitivity Test, Frostig Developmental Visual Perception Test, Denver Development Scanning Test and Gesell (URL-2)

2.1.1. Marmara Primary School Readiness Scale

Marmara Primary School Readiness Scale is a school readiness scale designed and standardized by Polat Unutkan (2003) for 60-78 months Turkish children. It measures children's school readiness level in all developmental fields.

The scale consists of two separate forms. Development form comprises subscales of mental-linguistic development, social-emotional development, physical development and self-care skills and is filled by the child's family or teacher. This part includes 153 questions (Polat Unutkan, 2003).

Practice form is applied to children individually and measures basic academic skills. It has 74 questions and 5 subscales including math skills, science skills, sound exercises, line exercises and labyrinths (Polat Unutkan, 2003).

2.1.2. Metropolitan School Readiness Test

Metropolitan School Readiness Test was developed by Nurss and McGauvran in 1995 in order to assess school readiness of 6-year-old children (by Erkan, 2011); it was first adapted to Turkish Oktay (1980) (by Yazıcı, 2002). The version of Oktay comprises 6 separate tests and 100 questions. Its validity and reliability were tested by Erkan and Kırca. It is a measurement tool comprising 70 items under three sections named "Reading Readiness Skill", "Story Comprehension" and "Math Skills" (quantity concepts and logic) and five sub-tests. When sections and content reviewed (Erkan, 2011); Reading Readiness Skill Section comprises three sub-tests and 30 questions focused on visual and auditory discrimination. Each of Visual Discrimination Sub-Test, Initial Sound Discrimination Test and Sound-Letter Relation Test comprises 10 items. In Story Comprehension Section, a story about a little girl named Emel and her teddy bear Yumoş and the section includes 20 items on remembering details of the story, establishing cause-effect relationship and understanding concepts. Finally, Math Section has 20 items on numbers representing the pictures of objects.

2.1.3. Ankara Development Scanning Inventory

Ankara Development Scanning Inventory (AGTE) evaluates children's development and skills according to data received from mothers. It may also be responded by fathers or caregivers who follow the child's development closely and knows him/her well. It includes 154 questions arranged for various age groups and responded by mothers in three ways; "Yes", "No" and "I don't know". Ankara Development Scanning Test (AGTE) comprises four development fields, which are

Linguistic-Cognitive (L-C), Fine Motor (FM), Gross Motor (GM) and Social Skill-Self Care (SS-SC) (Savaşır, Sezgin & Erol, 1995; by Büyüктаşkapu, 2012).

2.1.4. Gazi Early Childhood Assessment Tool (GEÇDA)

Gazi Early Childhood Assessment Tool (GEÇDA) is a development measurement tool that may assess Turkish children's development in detail and help organization of their education lives and early detection of developmental retardations.

GEÇDA comprises four sub-tests, which are Psycho-motor (73 items), Cognitive (60 items), Linguistic (60 items) and Social-Emotional (56 items) and 249 items. Items related to self-care are in the social-emotional development sub-test. In determining age intervals of GEÇDA, different paces of development periods were taken into account and 21 age intervals were used. It was designed as one-month periods for 1-12 months, three-month periods for 13-24 months, six-month periods for 25-36 months and twelve-month periods for 37-72 months. GEÇDA is applied with a standard Material Set, Manual, GEÇDA Form and Information Form (Baykan, Temel, Ersoy, Avcı, Turla, 2002; by Sazak-Pınar, 2006).

2.1.5. School Readiness Test

Brainline School Readiness Test was designed by Africa Brainline Distance Learning Center in 2003 in order to help families and teachers to determine children's school readiness. The tool comprises 25 sub-tests and 281 items. Some parts of social, emotional and general development sections are based on teachers'/families' observations while others are based on individual practices. Some of the items are scored with yes (1) or no (2) and others are scored according to the numbers beside them and scores added are written on the score sheet as ready-very good/ready-enough or not ready. High scores indicate that the child is ready for primary education while low score means he/she is not ready (Bağçeli Kahraman and Başal, 2013). Turkish version and validity-reliability of the test were done by Bağçeli Kahraman and Başal (2013) and Turkish version contains 201 items.

2.1.6. BRACKEN School Readiness Scale

Bracken School Readiness Scale Form was developed by Bracken (2002) in order to measure school readiness levels of children between 3 years and 6 years 11 months (6:11) and adapted to Turkish by Tunçeli in 2012. The scale comprises five sub-tests, which are Colors, Letters, Numbers/Counting, Sized/Comparison and Shapes and 85 items. When sub-test content of the scale reviewed (Tunçeli, 2014);

Colors Sub-Test comprises 10 items involving primary colors and intermediate colors which show basic color concepts.

Letters Sub-Test comprises 15 items involving upper and lower cases.

Numbers/Counting Sub-Test has two parts. Numbers sub-test focuses on recognition of one and two digit numbers while counting sub-test comprises number-object matching. There are 18 items.

Size/Comparison Sub-Test involves recognition of one dimension (short), two dimensions (short) and three dimensions (small). It measures children's ability to match, discriminate or compare one or more striking features of objects. It includes 22 items.

Shapes Sub-Test: It includes objects with one, two and three dimensions. Shapes

with one dimension include concepts such as curve, angle, diagonal while the ones with two dimensions include circle, square, triangle and the ones with three dimensions include cubes and pyramids. Sub-test comprises 20 items.

Total score of these six sub-tests is called School Readiness Composite-SRC (Tunçeli, 2014).

2.2. Programs

Education system of Turkish Republic is governed centrally by laws and regulations determined by the Ministry of National Education. Institutions in the country carry out activity according to relevant regulations and implement education content determined by the Ministry of National Education.

When goals of preschool education in the country reviewed, preparing children for primary education is one of the basic goals. Principles of preschool education also include the following statement: “Preschool education must support children’s motor, social and emotional, linguistic and cognitive development, help them acquire self-care skills and prepare them for primary education (MEB, 2013).

Strengthening Preschool Education project was initiated with Ministry of National Education and UNICEF’s partnership in 2010 and is being implemented by MEB (Turkish Ministry of National Education) with EU’s financial aid and UNESCO’s technical support.

The goal of the project is to strengthen capacities of MEB foundations, public institutions and NGOs in order to enhance their services and provide high quality, institutional and community-based Early Childhood Education for disadvantaged children and their families. Target of the project are 36-66 month-old children. A communication and public cooperation campaign was initiated for the project with the slogan “3-4-5 Choose Early Education” (URL-3).

Academicians, teachers, administrators and supervisors reviewed preschool education program and gave its final form.

The goal of the program is to help preschool students grow healthily, maximize their motor, social, emotional, linguistic and cognitive development, acquire self-care skills and get ready for primary education through rich learning experiences. It is a “developmental” program as it is based on development levels and features of children and focuses on improving all developmental fields. It has a “spiral” approach and “eclectic” model (MEB, 2013).

Based on “acquisitions” and “indicators”, a frame was set for the program to make it flexible enough for the teachers to consider their students’ needs and do arrangements while making daily and yearly plans (MEB, 2013).

The program defines preparation for primary education as “All the works during preschool education where children are supported equally in all development fields including social and emotional, motor, cognitive, linguistic and self-care skills. It also states that preparation for primary education must begin on the first day of preschool education institution and be designed to cover a long process and all development fields (MEB, 2013).

There are no activities in the program like reading and writing, letter teaching and letter writing. Activities must include skills that form the basis of reading and writing. Ministry of National Education suggest that following activities be done in order to support basic skills in preschool education (MEB, 2013)

- Visual perception activities
- Auditory perception/phonological awareness activities
- Attention and memory activities
- Basic concepts
- Problem solving and guessing activities
- Using pencil and manual skills
- Developing self-care skills
- Confidence and independent behavior
- Developing social and emotional readiness
- Literacy awareness and motivation
- Training senses
- Breathing and rhythm activities

Program assessment was considered from multiple perspectives. Assessment is made through the whole year by “development observation forms”, “development portfolios” where activities are kept, charts where frequency and number of “acquisitions-indicators” and “concept lists” and monthly plans with regards the child, teacher and program.

Besides, “daily education flow” comprises “day end assessments with children” and “assessment of daily flow with regards the child, teacher and program”. In activity plans where we can find the plans of each activity, assessment is made through “descriptive questions, affective questions and others related to acquisitions and experiences (MEB, 2013).

The program is based on multidimensional assessment and it may resort to standard tests in the country in addition to anecdote records, socio-metric tests, observations, interviews, games, surveys, pictures, development portfolios. However, assessment methods prescribed by the ministry are the ones based on development portfolios and observations rather than standard tests (MEB, 2013). However, when the family or teacher doubts a development retardation in a child, he/she and the family are directed to “Guidance Research Centers” by classroom teacher or counselor and teachers and psychological counselors here use various standard tests and assessment methods.

The program aims to inform families about children’s development and involve family-community into primary education readiness process through family participation activities. The family becomes a part of education process in this process that includes family and community readiness component of school readiness (MEB, 2013).

When it comes to school readiness, there are standards determined by the Ministry of National Education on physical conditions and materials of the institution and inner-service training given to teachers and administrators. There are written and visual material on classroom order, quality of environment and written and visual sources which are explained in detail by Ministry of National Education program book. A seminary is held for teachers and administrators every June in addition to inner-service trainings and sources for academicians (MEB, 2013).

In addition to the services of the Ministry, universities give various courses and seminars for parents at distance learning centers. Again, universities carry out training programs on child development, school readiness and parenting. Foundation

for Mother Child Education and Foundation for Children with Leukemia carry out their activities based on equality in education and community's readiness.

2.2.1 Mother Child Education Foundation

Mother Child Education Foundation is non-governmental organization that was established in 1993 with the purpose of supporting children, parents. Its services include information, support and defensive activities, publications, research and education books, distance learning models (tv or web-based, mobile applications etc), short-term education programs, face to face, long-term education programs (URL-4)

The goal of the foundation is to provide equal opportunities for children's development and readiness and some of its projects are preschool mother child education program, AÇEV summer schools, fun learning program, Would You Play with me? for 3-6 age group. Universities and academicians in cooperation with AÇEV give educators various training under AÇEV organization. Other programs are Mother support program for mothers, "You're my Dad" campaign and "It's Nice Being a Father" television program, parenting seminars, family letters and a support program for women in rural area. It also carries out programs for literacy and informing the community (URL-4). AÇEV stands with financial sponsorship of various organizations and personal-institutional donations and realizes its projects everywhere around Turkey with support from academicians and AÇEV Volunteers (URL-4).

The foundation's 2015 project "The First 6 Years" mobile application provides families with information about 0-6 age period. Application is free and 1200 items of information are shared with families. Parents who download the program receive information on their mobile phones through photos, educative videos and animations. The application also offers space to take notes of important days for parents and child, a calendar to follow the child's height and weight and a section to save and share the child's photos and videos (URL-4)

2.2.2. Foundation for Children with Leukemia

The foundation was established in Ankara in 1998 with the purpose of supporting children with leukemia and providing equality in education when they have to be away from school during treatment. A hospital was opened in 2000 for children with leukemia, followed by school, village and city for children with leukemia (URL-5).

Hospitals and schools are opened with sponsors, donation and product sales and aim not only to support these children's health and education but also support their families, inform schools and community. More than one million volunteers support the foundation with their works (URL-5).

3. Assessment of School Readiness in the World

This section deals with tests and programs in various countries for assessment of school readiness.

3.1. Tests

Tests used in the world include Peabody Picture Vocabulary Test, Social Skills Rating System, Battelle Developmental Inventory, Creative Curriculum Developmental Continuum for Ages 3 – 5 Assessment, High/Scope Preschool Child Observation Record, Work Sampling System (WSS), Woodcock-Johnson III, Early Screening Inventory – Kindergarten, Bracken Basic Concepts Scale, Preschool Comprehensive Test of Phonological Processing, Metropolitan Readiness Tests-Sixth

Edition (MRT6), Comprehensive Identification Process (CIP), Preschool Language Scale, Lollipop Test, Learning Accomplishments Profile – Revised (LAP-R), Gesell School Readiness Test (GSRT), Galileo System for the Electronic Management of Learning (Galileo), Early Screening Inventory – Kindergarten (ESIK), Brigance Diagnostic Inventory of Early Development –II, Teaching Strategies GOLD, Hawaii State School Readiness Assessment (HSSRA) (Anonymous, 2007; Anonymous 2014d, URL-6, URL-7).

3.1.1. School Readiness to Learn (SRL) Project-Early Development Instrument

Early Development Instrument was developed and is used in the project which started in order to assess readiness of children to learn while beginning school. Measurement tool was developed by Janus, Offord, Walsh, Racine and Mustard in 1999 and its shorter version was designed by Janus and Duku in 2005 (URL-8). It was revised by Janus, Brinkman, Duku, Hertzman, Santos, Sayers, Schroeder and Walsh in 2007 and involves five sections to detect children's strengths and weaknesses and assess primary school readiness. These sections are physical health and well-being, social competence, emotional maturity, language and cognitive development, communication skills and general knowledge. Physical health and well-being involve gross and fine muscle skills, holding pencil, running, motor coordination, having energy for classroom activities, satisfying their own needs and daily life skills. Social competence include wondering about the world, being eager to try new things, being aware of socially acceptable behavior standards, respecting adult authority, cooperation with others, obeying rules, playing and working with other children (URL-8).

Emotional maturity includes reflecting before acting, a balance between too fearful and too impulsive, ability to deal with feelings at age-appropriate level and emphatic responses to others' feelings. Language and cognitive development includes reading awareness, age-appropriate reading and writing skills, age-appropriate numeracy skills, board games, ability to understand similarities and differences and ability to recite back specific pieces of information from memory. Communication skills and general knowledge include skills to communicate needs and wants in socially appropriate ways, symbolic use of language, story-telling and age appropriate knowledge about life and environment (world). Two additional indicators are special skills including literacy, numeracy, dance music etc and special problems including health problems, learning problems and behavior problems (URL-8).

3.1.2. Desired Results Developmental Profile- School Readiness (DRDP-SR©)

DRDP-SR was designed as a valid and reliable assessment tool to support teachers in observing, documenting and reflecting their students' development, as part of assessment of education program in California. The DRDP-SR was created with four primary purposes:

- as a psychometric measurement of children's development in key domains of school readiness (English Language Development, Self & Social Development, Self-regulation, Language and Literacy Development, and Mathematical Development);
- to support the transition between preschool and TK, and between TK and K;

- as a research tool; and
- as a professional development resource for teachers.

The DRDP-SR is an observation tool; it is not a “test.” Teachers observe students as they participate in routine classroom activities and complete the DRDP-SR for each child within the first eight weeks of school. The assessment can be repeated again in the spring in order to gauge students’ progress throughout the year and support their transition to the next grade level (URL-9).

3.1.3. Galileo System for the Electronic Management of Learning

The software was developed by Technology Partnered Assessment Company and enables follow-up of children from birth to the age of 5. It is a research-based program and reporting system. It was developed with Head Start Child Development and Learning Framework and uses various teaching methods such as story telling (URL-10).

Early math skills from Galileo School Readiness Scale Cognitive Development and General Knowledge include the titles of logic and reasoning, nature and science and social skills. Language and Literacy is another sub-dimension and includes language skills and literacy skills. Learning Approaches assess learning approaches and creative arts. Finally, Physical Development and Health section assess children’s physical development and health. The program is designed for simple, helping teachers both to assess children’s school readiness and draft relevant documents. The program is also updated continuously under guidance of branch specialists (URL-10).

3.2. Programs

In this section, there are a number of examples to various education programs in different parts of the world.

3.2.1. Accelerated School Readiness (ASR)

Accelerated School Readiness (ASR) is a school readiness support program initiated by UNICEF in Ethiopia in 2013. The program offers 150-hour support for 2 months to children who will begin primary school without getting preschool education. The program mainly focuses on preparation to reading-writing and arithmetic. Its first assessment will be done in May, 2015 (URL-11).

3.2.2. Danbury School Readiness Program

The program aims to give high quality preschool education to 3-5 aged children. It is an accessible program with reasonable prices for families with low income. Program training was given in 24 classes in 2010-2011 academic season. Data analysis of 391 children regarding school readiness was performed by Margaret Oliveira (URL-12).

The measurement tool used was the Preschool Assessment Framework (PAF). The PAF is a tool developed by the CT State Department of education that allows teachers to track the progress of 3- and 4-year-old children. It assesses children in 4 domains—social/emotional, creative, physical, and cognitive, across 30 standards. We chose to track 7 standards. The PAF indicates the level of progress developed in a domain. These levels are: Basic (Early Skills Development, Chronological Age, 2.5 Years) Proficient (Early Preschool Skills) Goal (Kindergarten Developmental Skills) Advanced (Kindergarten Level, Chronological Age 6). Children with low income came to the same level as the children with high income particularly in literacy and math fields. In all fields, differences between groups disappeared and children with

low income showed very rapid improvement. According to another study result, two years education is better than one year (URL-12)

3.2.3. Maryland Model for School Readiness

The Maryland Model for School Readiness (MMSR) is an assessment and instructional system designed to provide parents, teachers, and early childhood providers with a common understanding of what children know and are able to do upon entering school. Under the MMSR system, all children entering kindergarten are assessed for level of mastery across several learning domains. It uses an exemplar system based on kindergarten checklist in order to assess children's readiness levels (URL-13). Using exemplars, teacher systematically observes students, document their learning and measure their competency. The system involves seven of the fields from skills, behaviors and cognitive competencies which define the child's school readiness. These fields are (Anonymous, 2014a) social and personal, language and literature, mathematical thinking, scientific thinking, social fields, art and physical development and health.

3.2.4. The Creative Curriculum for Preschool

"Creative Curriculum" is a program that balances teacher-based and student-initiated learning, emphasized children's attention and considers their needs and learning styles. The program focuses on five components in preschool child education. These are; how the child develops and learns, learning environment, what they learn, care and teaching and cooperation with families. Teachers can create appropriate teaching experiences no matter what students' level and characteristics are (Dodge, Colker, Heroman, 2010).

The program goes beyond developmental continuity and shows how children relate to knowledge and learn reading, writing, science, social science, art and technology. It sets development and learning goals in each of these fields. Thus, it relates children's experiences at outdoor activities and favorite fields to general developmental, literacy and math goals. Assessment system of the program has four components. Records are kept, portfolios are formed, assessment cards and instant observation tools are used for every child during the year. (Dodge, Colker, Heroman, 2010).

3.2.5. Great Start Readiness Program

"Great Start Readiness Program" is a program applied in Michigan state and designed for children whose academic achievement is under risk. Target population of the program are children who receive financial support from government. Michigan State Department sponsors the program and families pay no fee for their children's education. However, the family must fulfill the conditions stated on the education program as part of the agreement between the family and institution. In whole-day education program the day starts with big or small group activities and goes on with planning time, working time, cleaning time, remembering time, music and outdoor activity, lunch, rest and then again planning, working and remembering time, outdoor time and finishes with music and action (Anonymous, 2014c).

3.2.6. Begin Bright

"Begin Bright" is a primary school readiness program developed for Australia's education system. The program is designed with fun and inter-related activities. This

makes students join in without realizing that they learn. It is an entertaining and educative program that makes children feel well. Thanks to the program, children will feel happy, wise and secure when they begin school. An ant is the main character of the program (orange program) predominated by literacy and arithmetic exercises (URL-14).

4. Schools Ready for Children

School readiness for children is another aspect of school readiness. “Programs That Assess School Readiness in Turkey (2.2.)” deals with programs in Turkey. Programs based on children’s school readiness are listed in this section.

4.1. SAEP Early Childhood Development Program

“South African Education and Environment Project Early Childhood Development Program” aims to train, guide and support early childhood educators and administrators. In addition to supporting administrators, teachers and families, high quality is targeted with equipment-material support (URL-15).

Minimum 10 school teachers and administrators attend training every year in early childhood development centers. South African Education and Environment Project staff visit institutions in the program at least once a week and provide support in infrastructure and sustainability, administration and leadership, child-centered development, health and security, family and social relations. It is a program that focuses on enhancing quality of early childhood care centers and therefore is related to school aspect of school readiness (URL-15).

4.2. Chicago School Readiness Program

The Chicago School Readiness Program (CSRP) is an intervention that is intended to improve low-income preschool children’s school readiness by increasing their emotional and behavioral adjustment. The study outlined below found that the intervention was effective in reducing externalizing and internalizing behaviors. The Chicago School Readiness Program consists primarily of supports for Head Start classroom teachers and classroom assistants. A mental health consultant (MHC) is contracted to work at each site. The MHC coaches teachers and classroom assistants in establishing shared goals, observing teacher-child interactions, sharing and discussing feedback, collaborative problem-solving and supporting the use of specific techniques. A 30-hour practice training is also given to the teachers (URL-16).

4.3. Get Set For School-Pre-K

The program aims to raise children’s kindergarten readiness and support early education and has various components. Due to its structural diversity, the program is designed for use at school with its pen and paper exercises, technologic activities, special characters and assessment-support system. Basic components of the program are readiness and writing, language and literacy, numbers and math (URL-17).

After signing up as practicing school, it is possible to access family support modules, teacher support modules, online applications, pen and paper exercises and all the activities in the program. Assessment tools designed specifically for the program are used. The program aims to support children through all activity types and different teaching methods (URL-17).

4.4. The Early Childhood Environment Rating Scale- Revised (ECERS-R)

“The Early Childhood Environment Rating Scale- Revised (ECERS-R)” is a tool that assesses institutions where 2,5-5 year old children are educated. It is complimentary to “The Infant Toddler Environment Rating Scale- Revised (ITERS-R)” that assesses institutions for 0-2,5 year old children. Both tools were developed by Thelma Harms, Richard Clifford and Debby Cryer (URL-18).

It is important that the environment have rich stimuli in early childhood education. The Early Childhood Environment Rating Scale – Revised form assesses the environment with regards to seven comprehensive aspects, which are (URL-18).

Space and furnishings (e.g. room layout, accessibility of resources, display)

Personal care routines (e.g. welfare requirements such as health & safety and provision for sleeping)

Language and reasoning (e.g. supporting children’s communication, language and literacy development; critical thinking)

Activities (e.g. provision of an exciting and accessible learning environment, resources to support specific types of play)

Interaction (e.g. supervision, support for social interactions)

Program structure (e.g. opportunities for children to access their own curriculum, planning schedules/routines to meet children’s needs)

Provision for parents and staff (e.g. partnership with parents, staff training and development)

4.5. ECERS-Extension (ECERS-E)

An extension to the ECERS-R (the ECERS-E) was designed by Professor Kathy Sylva, Professor Iram Siraj-Blatchford and Brenda Taggart as part of the EPPE Project. It provides greater depth and additional items in four educational aspects of provision: (URL-18).

Literacy (e.g. opportunities for emergent writing, letters and sounds)

Mathematics (e.g. number, reasoning)

Science and Environment (e.g. supporting children’s creative and critical thinking and understanding of the natural and physical world)

Diversity (e.g. planning for children’s individual learning needs, valuing and respecting other cultures, gender diversity).

5. Readiness of Family and Community

This section explains several programs that deal with school readiness in different countries with regard to readiness of family and community. Programs that are not involved here but yield positive outcomes are The Family and Child Education Program FACE, The Early On and Curiosity Corner 2nd Edition (URL-19, 20, 21). The section titled “School Readiness Assessment in Turkey-Programs (2.2.) gives further details on supporting school readiness in Turkey with regards to family and community.

5.1. Jumpstart: Children First

“Jumpstart” is an institution that has served as a foundation in the U.S.A. since 1993 believing that giving equal opportunity to children will break the vicious cycle created by poverty. Jumpstart is the only national support program that benefits from

power of community and adult-child relationship in building basic language and literacy skills which are vital for survival (URL-22). Jumpstart is a national early education organization that recruits and trains college students and community Corps members to serve preschool children in low-income neighborhoods. Our proven curriculum helps children develop the language and literacy skills they need to be ready for kindergarten, setting them on a path to close the achievement gap before it is too late (Anonymous, 2014b).

The program suggests offering children rich learning experiences in kindergarten, training well-equipped preschool educators and involving the community in early education and receiving public support. Success of the program is assessed with different measurement tools and a checklist developed for the program (Anonymous, 2015).

The foundation cooperates with several colleges and universities and receives financial support from sponsors. 36000 university students and community Corps have supported 76000 children since 1993 (URL-22).

5.2. School Success from the Start - A School Readiness Program

“School Success from the Start” provides parents of preschool children with an overview of what is important for young children to be able to do before they begin kindergarten. Then, it teaches parents very specific games and activities they can use at home to help their children develop the skills and attitudes that are needed to be successful in kindergarten. The topic areas that are addressed in this program are (URL-23):

- What schools will expect from your child (and from you and your family)
- How to enhance your effective parenting
- How to communicate positively and often with your children
- How to help your children learn to use their senses
- How to help your children develop speaking and listening skills
- How to help your children learn the alphabet, colors, and numbers
- How to help your children learn creative thinking, reasoning, and mathematical skills
- How to help your children gain awareness of words and word sounds
- How to help your children learn how to use books and tell stories
- How to help your children build physical movement skills

5.3. Strabane Family Centre- School Readiness Program

It is implemented in Northern Ireland and includes a 4 week process designed to help families support children's school readiness. It has 2 key themes; child directed play and interactive reading. Its contributions to the families are (URL-24);

- Helping them to make friends
- Helping them to label their feelings and express them.
- Giving them more confidence about their ability.
- Improving their speech and language skills.
- Promoting understanding of numbers, colours and shapes.
- Encouraging an interest in books.

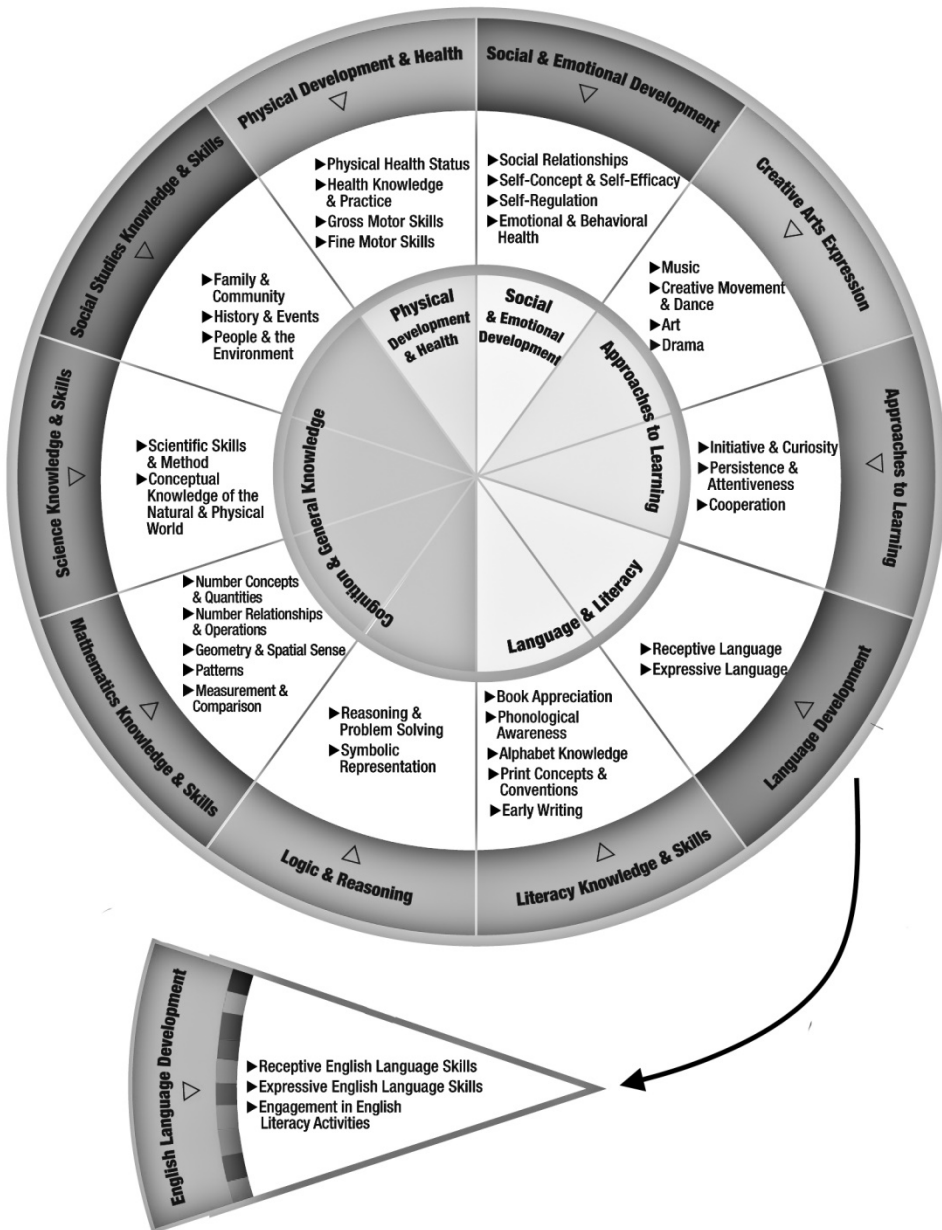


Figure 1: Head Start Approach framework for early learning skills of 3-5 age group children in school readiness (URL-27).

5.4. First Steps to School Readiness

The program has been implemented in South Carolina, the U.S.A. since 1999 and aims to support families and caregivers in early child education and therefore increase children's school readiness and achievement. The program comprises different educational models. These models are called nurse-family partnership after birth,

parents as teachers and parent-child home program for school success. An assessment by High Scope educational research foundation in 2010 showed that care quality of children in the program increased significantly (Anonymous, 2013).

5.5. Strategies for Enhancing Early Developmental Success (SEEDS) Program

It is a free program designed for parents, foster parents, adopters and caregivers of 3-4 and 5-aged children who were exposed to alcohol or drugs before birth. Families attend 3-hour trainings twice a week for 15 weeks. The program comprises practices guided by teachers and educators and materials, books and games they can use at home.

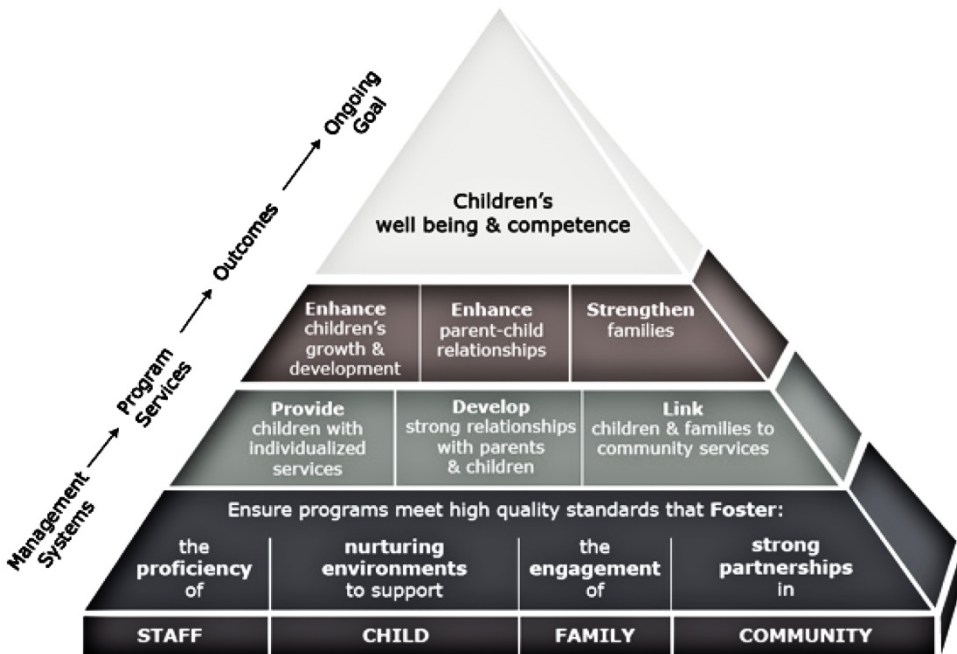


Figure 2: Pyramid modeling in assessing and supporting school readiness

While the families are at the training session, children join in activities designed for them. Parents and educators of children learn about the way children learn, develop, manage their feelings and behaviors. They learn how to make more positive relations with their children, cope with stress as busy parents and prioritize their self-care (URL-25).

5.6. Columbus Kids

Columbus Kids is a new partnership involving more than 150 community organizations that was created to champion the need for kindergarten readiness and school success. It tries to reach and inform families and parents through early learning professionals, human services organizations, government, and neighborhood associations (URL-26).

Families with basic knowledge on development and learning will detect children's learning difficulties and other problems earlier and increase their school

readiness and school achievement with early intervention. For two years from its establishment to 2012, it has checked for 5000 children and informed their families on how to contribute to children's school readiness (Anonymous, 2012).

5.7. Head Start Approach to School Readiness

Head Start approach assesses children's school readiness with regard to children's school readiness, schools' child readiness and family-community readiness. Accordingly, it assesses the child's development in terms of language and literacy development, cognitive development and general knowledge, approach to learning, physical health and well-being, motor development and social and emotional development. Head Start Approach established early learning skills of 3-5 age group children in school readiness as below (Fig. 1) (URL-27).

Head Start approach includes a four-step working model in assessing and supporting school readiness. Therefore, goals are set, plan and practice are realized, assessment and data collection is done and priorities are determined for each child (URL-28). They have shown this structure on pyramid modeling (Fig. 2) (URL-27).

RESULTS AND DISCUSSION

Education programs of countries change as their administration types, problems and needs change. School readiness is considered as an important starting criterion in early childhood development in all over the world. Today, there are even preparation programs for kindergarten in several countries.

Success of the programs are analyzed and assessed through appropriate assessment methods. However, there are many and various measurement tools and methods based on different purposes.

These education systems, diversity of programs and assessment methods lay the seeds for different opinions and they are replaced by new opinions, development and educational approaches in the future. A method that brings success to a country may not fit another one. Here, it is considered that children's school or kindergarten readiness will be an important factor in starting life strongly and doing well at school. Therefore, there will be always be need for new programs and assessment methods for different countries and conditions. School readiness is a field open to research and trying new models.

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Chapter 57

Decreasing Undesired Attitudes of Students in Classroom: Use of Awards

Gönül ONUR SEZER

Education is generally process of changing attitude. It is expected that there is positive change in attitudes of an individual who passed through education process (Akar, 2002). The process of changing by correcting negative attitudes and gaining positive attitudes lies at the bottom of education. Teacher is obliged to maintain role of instructiveness and management simultaneously in the class. Way for maintaining the role of instructiveness of teacher with success is an effective management of class. Primary duty of the teacher for class management is to set up a suitable class order (Başar, 2001). Class management can be defined as all of activities for transforming the class by making an efficient coordination between teacher, student, program, content, time, place, technology and method into a suitable environment (Saritaş, 2003). With another approach, class management is determining class rules, providing a suitable class order, managing education and time effectively and developing a positive learning climate by auditing student attitudes (Çelik, 2003).

Correct and proper definition of the attitudes that are undesired in the class is important for changing these attitudes with proper strategies and removing them consequently (Aydın, 2000). Purposes of the class management can be defined as forming a regular and safe learning environment that will increase student motivation (Karip, 2002), developing sense of responsibility in students and learning to be able to organize attitudes, maintaining positive attitudes and changing negative attitudes (Çelik, 2003).

When undesired attitudes are not prevented, this situation may cause that other negative attitudes arise and increase (Türnüklü & Yıldız, 2002). Some of the negative attitudes that may occur with undesired attitudes can be defined as follows: it is prevented that teacher does his/her work, uses his/her right to teach and inform, and that students benefit from their rights to learn, inform and develop, atmosphere of the class is affected negatively, there may be verbal or physical conflicts in the class, teacher may become tense, other classes are affected by confusion and noise negatively, belongings of the students, teacher, class, and school may be damaged, discipline problems increase in the school and guardians are disturbed and etc. (Saritaş, 2003).

One of the main requirements of an effective class management is to decrease and minimize negative attitudes, and reinforce positive attitudes. Children act differently from each other. While some of these attitudes especially attract attention of the teachers, and some of them can be seen as an undesired attitude as occasions requires (Bull & Solity, 1996). This situation may be depended on different discipline understandings. For instance, a teacher thinks that when teacher asks student a question, the student should answer it by standing up. Another teacher thinks that it is

not important for the student to stand up but to give a correct answer for the question (Tertemiz, 2000). Besides, a child showing generally positive attitudes may act negatively in some cases. A child considered to show undesired attitudes beforehand may show demanded attitudes in some cases (Bull & Solity, 1996). In general, students not participating in class activities cause negative attitudes. These students cause that other students do not participate in class activities and they want them to keep up with themselves. In such cases, solution is to remove reason of the undesired attitude and to organize regulations providing that students behaving in this way participate in class activities. It is natural that a student who thinks that he/she has not any work to do or who does not find the work he/she does interesting directs towards undesired attitudes. In this case, it will be beneficial to give this student a work that attracts his/her attention or change the work he/she does with more interesting one (Başar, 2001).

Findings revealed that it was observed that students performing duty in urban schools spend 75% of their time for order and discipline, 25% for education and training (Wragg & Dooley, 1996), 54% of the teachers think that attitude problem observed in students hinders education in the class and that approximately 60% of primary education students has at least one attitude problem (Ataman, 2000). Extracurricular attitudes of the students may arise from a difficulty that they encountered relating to course or subject. In such cases, teacher may redirect student to class without attracting attention to extracurricular attitude of a child and by providing necessary assistance (Bull & Solity, 1996). Opinions of the teachers in the class relating to attitudes that they demand students to perform mostly start with indefinite expressions: such as “Work hard” or “Do not disturb others”. This causes uncertainties about the fact that what desired and undesired attitudes are. Teachers and students should have agreement on what negative attitude is and is not.

Moreover, this creates an opportunity to know what desired attitudes are and for the award. Study on desired attitudes can be defined in the form of a list including these attitudes. For instance, these attitudes can be sorted as listening to teacher, looking at the teacher, answering questions of the teacher, not disturbing others, not tearing, falling or removing books of other children, not misusing tools and equipment, not speaking loudly, not scraping or kicking desks and similarly (Smith & Laslett, 1996).

It is alleged that negative attitudes of the students may arise from three reasons. Accordingly, student acts negatively because he/she does not know how to act, and in this case it is necessary to teach this student correct attitude. Secondly, student knows attitude but cannot estimate the time, in this case it is necessary to show him/her appropriate time. Lastly, student knows attitude and time but sometimes forgets. Thus, the student is not usually aware of mistake that he/she made. In this case, it is necessary to teach him/her how to direct himself/herself (Başar, 2001).

TYPES OF NEGATIVE ATTITUDES IN THE CLASS

In general, attitude can be defined as good-bad, correct-wrong, useful-useless, necessary-unnecessary, physical or mental movements exhibited by people. Negative or undesired attitudes are the attitudes that are not suitable for situation or environment but are shown consciously.

Accordingly, all of the attitudes preventing educational efforts in the school and class are considered as undesired/negative attitudes (Sağlam, Adıgüzel & Güngör, 2007). Research results reveal that there is an increase on discipline problems in the recent years in the world and our country. A research made in USA in 1993 highlighted existence of 11 important negative attitudes in class environment. These attitudes were ordered as absenteeism, coming to class late, alcohol use, verbal swearing, physical conflict, brutality (vandalism), drug use, theft, conception, interrupting lesson and carrying a gun according to significance level (Çelik, 2003).

Celep (2002) cites that negative attitudes of the students as individual and those relating to their friends and to teacher. Accordingly, while attitudes shown by the students individually at the most were ordered as speaking without taking the floor in the class, coming to class without being prepared, not obeying courtesy rules and producing excuse continuously on their failure, it was determined that attitudes shown by them most frequently on undesired attitudes relating to their friends were complaining their friends to the teacher.

It was observed that negative attitude put forward at the most relating to teacher was attitude of not being able to make healthy communication with the teacher. In-class negative attitudes include similar characteristics on affecting learning process negatively even in different place, time and frequency. For instance, while continuous argument occurs among some children occasionally due to stimulating insults, speaking loudly or interrupting class order are among undesired attitudes shown by the students frequently (Smith & Laslett, 1996)

According to findings of research made by Wragg and Dooley (1996), most frequent negative attitude types were ordered as loud speaking, exhibiting behaviors apart from duty, insensitive speaking, exception eating-drinking and acting at the wrong time, it was determined that attitudes occurring with least frequent as physical intervention, damaging tools-equipment, disobedience for the teacher, cheat and insult. A research made by Aksoy (1999) revealed that most frequent negative attitude types are speaking without permission, not performing given duty, discussion, excessively spoiling speaking and rejecting to comply with demands of the teacher. Undesired attitudes within this frame generally arise from demand for attracting attention, letting up or covering inadequacy (Smith & Laslett, 1996). On the other hand, approached followed by the teachers relating to preventing negative attitudes vary from type of the attitude, and teachers stated that they generally use techniques of speaking individually with the student after class, warning the student with body language, redirecting attention of the student, demanding for stopping his/her attitude, and warning the student verbally (Aksoy, 1999; Celep, 2002). Results of another research that was made on this subject revealed that teachers mostly use techniques of reminding rules, verbal warning and asking questions against undesired attitudes in the class, and they use approaches of approaching them, touching, warning quietly, making eye contact and ignoring less than the said techniques (Girmen et al., 2006).

IMPORTANCE OF AWARD IN EDUCATION

Award is a pleasant and enjoyable financial possibility or right so that an attitude is performed (Navaro, 2001). As stated by Binbaşıoğlu (2000), award should be response of performing a valuable or beneficial work not of success because success

finds its award in it. It is necessary that award has a modest value and it should be considered not as response of performed work but as an indication of satisfaction of awarder for the performed work. Reaction given by the teacher on attitudes shown by the students in the class and effect of this reaction on the student are very important. In case attitudes to be shown by the teacher such as smiling, touching, caressing student's hair, approving with words and giving responsibility (Aydın, 2000) relieve the students and give happiness, it is expected that the attitude is repeated (Erden, 2005).

In this sense, award is generally defined as stimulants given from outside to increase rate of positive attitudes of the students. Awards are accepted as important recognition tools, and can be given to appreciate an activity or attitude of a student or reveal value of someone. Within this scope, award should be given within neutrality in a way not to cause conflict in the school or class. Awarding people who do not deserve the award can be perceived as a punishment by those who really deserve the award (Saritaş, 2003). The award should be given right after desired attitude occurs so that the award is effective. An external intervention may be necessary in some cases in education process. In case this intervention is made to incite, award occurs as a punishment if it is made to prevent undesired attitude, however, status of the student should be evaluated carefully while giving award or punishment. In case the award address the person to whom it was given, it functions as an efficient motivation tool, otherwise it may not be useful. Thus, teachers should consider level of the class, concern, gender, age, socio-cultural structure, economic condition of the student, and environment where the school is located (Marshall, 2009; McLoyd, 1979). In other words, teacher who will use award method should know his/her students well and also know that what kind of award is attractive for which student.

The award is for reinforcing desired attitudes and punishment is for removing undesired attitudes. Main purpose of the award and punishment system is to gain emotional and intellectual competence necessary for the student to manage his/her attitudes. The student develops his/her own auditing competence according to reinforcements given to attitudes evaluated positively or negatively by the teacher. Thus, award and punishment system should be used according to educational purposes. In other words, award and punishment system should be structured as main reference source directing attitudes of the student and applied in a consistent integrity.

Award includes reinforcement given to feel pleasure due to a desirable attitude of the student. All praises such as smiling, touching, caressing student's hair, approving with words and giving responsibility can be evaluated as an award. Punishment includes all limitations and prohibitions defining divestment from desired thing. Thus, punishment is definition of sanctions providing that students feel sorry and regret due to undesired attitudes.

Award and punishment should be absolutely for a purpose. In other words, no award and punishment is given for any reason. Besides, student should have preliminary information as a result of which attitudes he/she will be awarded or punished. In other words, this situation requires that award and punishment are intentional and meaningful. Award and punishment should comply with psychological, mental and moral development so that they are significant. For instance, let's handle status of a student who made an attempt to cheat during exam. In case student has a positive sense of self and identity pattern approved by society,

he/she will not consider cheating suitable for him/her because he/she will lose prestige and honor in case it is understood that he/she cheats. In case such student has a weak sense of self and problematic personality structure, he/she will be more inclined to cheat. If we want to increase samples, many attitudes such as lying or hiding the truth can be counted. Conclusion we draw from here is that the fact that student has a positive personality structure evaluating himself/herself is an important effect. Thus, teacher should emphasize positive attitude samples and follow an approach monitoring moral developments of the students. However, development of ethical standards has not been completed yet in students at young ages. Moral development is mainly a result of mental development and psychological maturation. Thus, it should be avoided to impose punishment in especially first classes of primary education.

Another important point is that award and punishment applications that are disproportionate to attitude and applied without measure do not give expected results but give a backlash. For instance, it is very wrong to award each attitude. In the same way, it is very wrong to reach to each attitude of a student. However, the fact that award is used wrongly and unjustifiably does not cause destructive results as much as in punishment. Here I want to mean that we should be very careful while imposing punishment to a student. In other words, we should make feel the reason we imposed this punishment to the student while imposing punishment so that such student will not do this thing. Personal rights of the student should not be damaged and humiliated and insulted while imposing punishment. Otherwise student will have psychological problems. For instance, neurotic trends such as learned helplessness, insensitivity and regression are observed in a student who was continuously punished and humiliated within society. Mainly, each ridicule and prevention is a kind of punishment.

Researches show that award is more effective and permanent than the punishment. As a result of researches that were made, following conclusions were drawn relating to award and punishment:

1. Deciding why and how attitudes will be awarded or punished with the students will be more effective in terms of education.
2. Award and punishment applications should be performed in a decisive and consistent way. In case same attitude is awarded once, is not awarded in another time or is punished once and not punished in another time, educational effect decreases.
3. Award and punishment should be given when attitude occurs and conclusions should be absolutely monitored.
4. Teacher should not be emotional while giving award and punishment. Especially punishment should not be a result of anger and revenge.
5. Reasons of the attitude that was shown should be researched before giving award and punishment. Especially, it should be ensured that to what extent student is personally defective in undesired attitude before imposing punishment.
6. Award and punishment should be only for undesired attitude not for the entire of personality.
7. Award and punishment should be constructive, creative and most importantly should have qualification that will develop the student.
8. Teacher should be neutral and fair in use of award and punishment.
9. Award and punishment should not be given at density and frequency that affect emotional atmosphere of the class negatively. Students should be especially protected

from punishment concern.

10. Homework and lessons should not be used as a punishment.

11. Award and punishment should be given according to rational and understandable criteria. For instance, imposing a light punishment against a felony will not be sufficient for removing undesired attitude.

Benefits of giving award:

1. Award facilitates that student is encouraged and motivated for positive attitudes of the student.

2. Award is beneficial so that student gives importance to subject to be learnt and to increase morale motivation.

3. Approval of the attitudes with award facilitates that an individual develops a positive sense of self and proper identity pattern.

As stated by Plato, intelligence is necessary to distinguish between good and bad, however, adults should facilitate that children are calm on this process because children have the said intelligence after a definite period. Duty of teacher in such environment is to encourage students on beneficial and ethical attitudes and actions. Teacher should use positive methods to limit negative attitudes of student and raise the awareness of the students to see results of attitudes and actions. Responsible adults, teachers and managers should develop and use positive standards in this sense for the students. They should be an example via ethical and efficient learning attitudes for their students and assist students so that they take responsibility of their own attitudes in the long term. Here, educators should not be friend with students but should be moral leaders and model people. Parents should not play friend role but play parents role. In this environment, there is no place for common award and punishment, there are logical results, rules, choices and real life opportunities. In brief, there is study and work. In such environment, figuring environments in which attitudes that prevent requirement for punishment and are proper socially (Özyürek, 1998) should be preferred. It was observed as a result of studies performed to determine importance of award and punishment in education that are applied commonly in education system that award and punishment applications have important limitations (Deci, Koestner & Ryan, 2001; Brandt, 1995; LTC, 2009; Swanson, 2001; Hall, 2009; Gordon, 2000; Özyürek, 1998). Reactions given by children against award and punishment are different from each other. Some students give importance to extrinsic motivation tools and others are inclined to intrinsic motivation (Evans, Galyer & Smith, 2001).

Within this scope, status of the student should be evaluated while giving award and punishment. Primary school student may show undesired attitudes because he/he does not know how to act. Child sometimes knows the attitude but may act wrongly because he/she does not know when to do. Consequently, child knows attitude and when to do, however may show negative attitudes because he/she sometimes forgets. In most of these situations, student may repeat wrong attitude apart from his/her will (Başar, 2001). Ataman (2000) states this situation as student does not have proper attitude in his/her attitude repertory.

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