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Transition to College: Perspectives of Secondary School Students

Report Only (no appendices)

Transition to College:

Perspectives of Secondary School Students

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Executive Summary

Introduction

This research report represents the first phase of a multi-year collaborative research initiative of the Association of Colleges of Applied Arts and Technology of Ontario.¹ The initiative is designed to develop a cohesive picture of the pathways from secondary school to college. The major purpose of this phase of the research was to identify secondary school students' perceptions of Ontario colleges and of college as a possible post-secondary educational destination for them, and to determine the factors that have shaped these perceptions. A second purpose was to identify secondary school student achievement patterns, graduation rates and course enrolments in order to consider their influence on current and future college enrolments.

The main source of data for the study was a survey of 21,385 Grades 11, 12 and Year 5 students enrolled in 73 Ontario secondary schools. The schools were selected to represent Ontario college regions, school size and school type (i.e., Roman Catholic, public, and serving francophone students). In addition to the survey, the schools were asked to provide school calendars or course option sheets and course enrolments in order to assess the availability of college-destination courses and course sequences that lead to college. Sixty-one schools provided information for this analysis. Data from the *Double Cohort Study, Phase 3* (2004) and *Phase 4* (2005), were also examined in order to conduct a preliminary analysis of the characteristics of college applicants in terms of their secondary school courses taken and marks obtained.

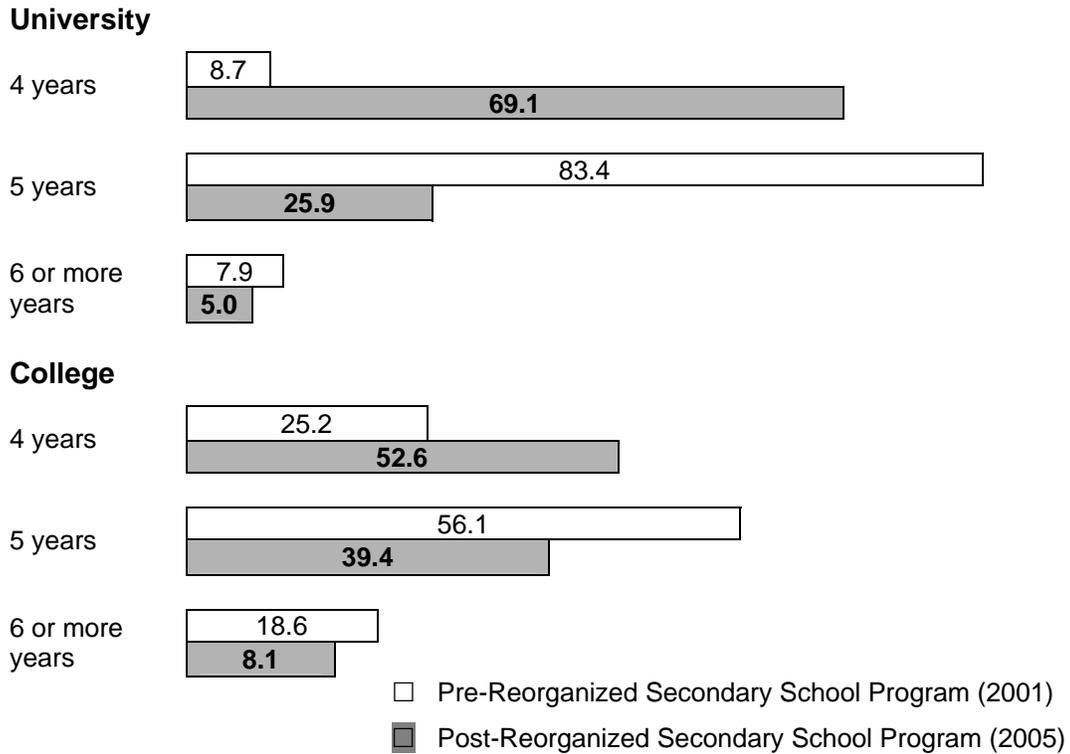
Background

As a result of the introduction of the Reorganized Program in Ontario secondary schools, there have been some fundamental changes in the flow of students to university and college. These changes have had different implications for colleges compared to those for universities. First, the change in the ratio of four- to five-year graduates had much greater impact on universities

¹ The Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) is sponsoring this research, the first phase of which has been funded by the School/College/Work Initiative (SCWI). The project's Steering Committee is comprised of representatives from the following organizations: ACAATO; the College Institutional Research Network; the Ministry of Education; the Ministry of Training, Colleges and Universities, and the secondary school panel through representation from the Association of Educational Researchers of Ontario (AERO), Ontario School Counsellors' Association (OSCA), Ontario Guidance Leadership Association (OGLA), Ontario Catholic Supervisory Officers' Association and Ontario Public Supervisory Officers' Association (OPSOA).

than colleges (see Figure 1), leading to a substantially larger ‘double cohort’ effect at universities.

Figure 1: Direct-from-Secondary-School 1st Year University & College Registrants, by Years in Secondary School (% 4-, 5- and 6-Year Graduates; Pre- (2001) and Post- (2005) Introduction of Reorganized Secondary School Program)

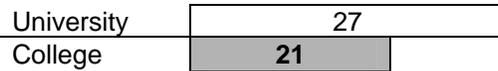


Source: *Double Cohort Study, Phase 4 data files*

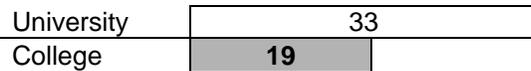
Second, the expansion of the universities to accommodate the ‘double cohort’ in combination with an increase in the proportion of students meeting university admission requirements had the effect of increasing the proportion of students attending university after four or five years in secondary school (from 27% to 33% of the base Grade 9 population; see Figure 2).

Figure 2: Direct-from-Secondary-School 1st Year University & College Registrants Pre- and Post-Introduction of Reorganized Secondary School Program (% 4- & 5-Year Graduates Based on Grade 9 Enrolment)

Pre-Reorganized Secondary School Program (2001-02)



Post- Reorganized Secondary School Program (2004-05)

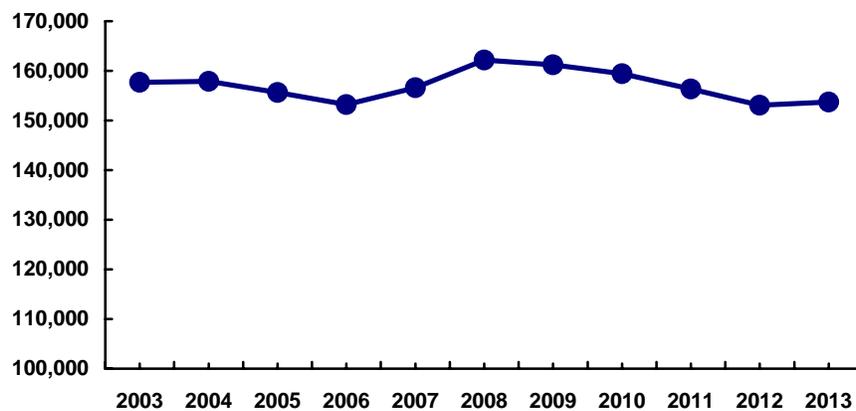


Source: *Double Cohort Study, Phase 4 data files*

Third, the decline in the proportion of secondary school students who graduated in five years or less (from 78% prior to the Reorganized Program to 68% for the first cohort through the new program), along with the increase in university enrollees had the effect of reducing the proportion of students who graduated in four or five years and who went directly to college.

With regard to changing patterns of age groups from which college and university students are drawn, there will be slight growth in the size of the 18- and 19-year-old cohorts over the next few years (see Figure 3) followed by a decline.

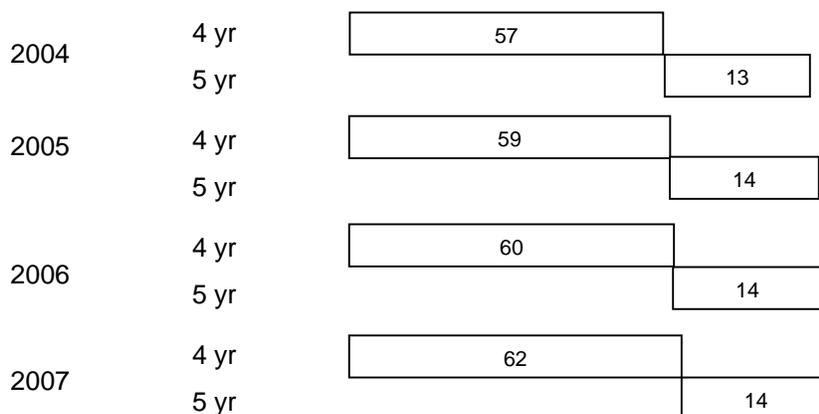
Figure 3: Age 18 Cohort, 2003 to 2013



Source: Adapted from Statistics Canada, 2001 census

College enrolments should also grow in the next few years as a result of major changes to the secondary school system involving the modification of some courses, strong support programs for secondary school students at risk of not graduating, and programs designed to facilitate the school-to-college transition (Figure 4).

Figure 4: Current and Projected Secondary School Graduation Rates (% 4- & 5-Year Graduates; 2004 – 2007)



Source: *Double Cohort Study, Phase 4 (2005)*

Since it is unlikely that the universities' share of the age cohort will decline, if the colleges are to expand to meet the identified needs of Ontario's economy then (1) secondary school graduation rates must increase substantially, (2) a greater proportion of secondary school graduates must choose to attend college, and (3) more young people who have left secondary school without graduating must re-enter the educational system.

Study Findings

1. Student Views of a College Education

Pronounced differences were evident in the proportions of Grade 11 and 12 students who planned on university (Grade 11 – 56.7%, Grade 12 – 54.1%) compared to those who planned on college (Grade 11 – 22.6%, Grade 12 – 27.2%). However, for the Year 5 students, the numbers were similar (college – 37.0%, university – 36.9%). Relatively small numbers of students had an apprenticeship in mind (Grade 11 – 5.7%, Grade 12 – 5.4%, and Year 5 – 7.3%).

Although some students perceived a status difference between universities and colleges and others assumed a greater economic return from a university education, the vast majority of students appear to value a college education. Students commented specifically on the vocational focus of colleges and work opportunities upon graduation. Some students who planned on a university education justified their choices between college and university in terms of their career plans; a typical comment on the survey was, “I would go to college, but I am planning to be a ... (e.g., a teacher)”.

Students offered very few negative comments about status differences between college and university. For some students, to obtain a college diploma was viewed as a first step toward obtaining a university degree.

There was an awareness of the colleges’ Applied Degree and Collaborative Programs as evidenced by the proportion of students who had this route in mind (3.6% Grade 11 students, 4.5% Grade 12 students, and 6.1% Year 5 students).

2. Costs of a College Education

Although similar proportions of students who planned on a College Diploma as those who planned on a university degree indicated that they were concerned about the costs of attending college or university, the college-planning group were more likely to demonstrate serious concern in their comments even though tuition for a College Diploma is substantially less than for a university degree. This view was perhaps related to their perception of the cost-benefit of the value of a college education. This concern may also contribute to the high proportion of college-eligible students who stay out of school a year or two after graduating from secondary school before applying to a college.

3. Teachers and School

For the most part, students tended to view their teachers, guidance counsellors and others in their school as equally supportive of a college as of a university education. Over 70 percent of the college-planning students agreed with ‘Most of my teachers have a positive opinion about a college education’, but fewer of the university-planning, apprenticeship-planning and work-bound groups did so. Over 60 percent of students stated that their schools placed almost equal emphasis upon preparing students for college as for university with college- and university-

planning students having similar perceptions. However, 15.7 percent of the students disagreed with the equal emphasis statement and 21.8 percent were uncertain.

Almost all college-planning students felt as accepted in their schools as their university-planning peers, but they were slightly less likely to be involved in school extracurricular activities (i.e., to participate in intramural activities and school teams).

4. Parent and Peer Expectations

Although the majority of students' parents expected them to go to university, only slightly over one-third of the students were likely to attend a university. Surprisingly high numbers of the college-, apprenticeship- and work-planning students' parents expected them to go to university which likely placed considerable stress on some students (although it is still possible that the college planners could later attend university). Nevertheless, most college-planning students (87%) agreed with 'My parents would encourage me if I applied for a college program'.

5. Secondary School Programs

The instability of the educational plans of those students who ultimately apply to college while they are in secondary school makes the offering of college-preparation course sequences difficult if not impossible in most secondary schools and is reflected in the following findings:

- approximately 40 percent of Ontario's first-year college enrollees were students who attended immediately after four or five years in secondary school compared to nearly 90 percent of first-year university enrollees.
- nearly one-half of first-year college enrollees entering directly from secondary school did so after taking essentially a university-preparation set of courses when in Grades 11 and 12.
- beyond core English, Mathematics, Science college-preparation courses, few Grade 11 and 12 college-preparation courses are offered in Ontario secondary schools. Slightly over one-third of the schools in this 2005/06 sample offered MCT4C Mathematics for College Technology (a required or recommended course for College Technology Programs). Few schools offered Health Care (TPA3C), Hospitality (TFT3C), Child Development & Gerontology (TPO4C), and Medical Technologies (TPT4C).
- many students were unable to take college programs' 'required' or 'recommended' secondary school courses because they were not available in their school.

- the majority of Grade 12 college-planning students took Academic English and Mathematics in Grade 9.
- very few students applied to college directly from secondary school having taken a sequence of college-preparation courses – in 2003-04, 57 percent of college applicants had taken one or no Grade 12 college-preparation courses.

The number of students who were unable to take a secondary school course that they had requested was remarkably high – approximately 30 percent of each of the three grade groups. Course scheduling problems do not appear to have affected college-planning students any more than students planning on other post-secondary destinations. Over- and under-subscription of courses were the greatest problems for all students who were unable to obtain desired courses.

Marks play a major role in students' educational planning. While the majority of university-planning students had average marks over 80 percent, the majority of college-bound students had average marks in the 60s and 70s. Nevertheless, a great deal of overlap still existed between the average marks distributions; that is, some college-planning students appeared to have the necessary marks to consider a university education. Also, many more college-planning students than university-planning students were achieving marks that placed them in the 'at-risk-of-not-graduating-from-secondary-school' category.

6. Information about Post-Secondary Education Plans

Similar proportions of college- and university-planning students (over 75%) indicated that they had access to information about career and educational planning. Their knowledge of post-secondary school programs tended to coincide with their educational plans; that is, college-planning students knew much more about colleges and university-planning students knew much more about universities.

About one-half of the college-planning students agreed that their guidance counsellors were helpful in providing 'career and educational planning information on colleges'. Uncertainty about the delivery of apprenticeship programs is widespread among students.

About one-half of the students had not received information from college representatives and nearly two-thirds had not visited a college. Two-thirds of the students had not visited business or industry sites, and of those who did, few found the visits very helpful.

The internet was viewed as a useful source of career and educational planning information about universities for 57.4 percent of students, and about colleges for 42.8 percent of students.

7. Applying to Post-Secondary Institutions

Nearly one-quarter of the Grade 12 students in the study applied to an Ontario college (e.g., 20.7% applied to Diploma Programs and 8.2%, to Applied or Collaborative Degree Programs) compared to two-fifths of the Year 5 students (e.g., 36.2% applied to Diploma Programs and 12.9%, to Applied or Collaborative Degree Programs). More Year 5 than Grade 12 students (12.3% to 6.9%) applied to both college and university.

Students who applied to a College Degree Program were most likely to have applied to just one institution while those who applied to a Diploma Program, to two or more colleges. Students who applied to university were more likely to have applied to more institutions than those who applied to college.

8. Regional and Language Differences

There were sharp differences from school-to-school in the proportions of students planning on university and college. In schools where a large proportion of students planned on university, fewer students agreed with 'This school places almost equal emphasis upon preparing students for college and university', and very few college-preparation courses were offered.

There were similarly high numbers of students across the regions (between 39.7% and 47.1%) who were uncertain about 'College programs provide a credential that is valued by society'.

The Greater Toronto Area (GTA) schools had far fewer students planning on college and apprenticeship than schools in the other regions; students in the GTA schools were less likely to value a college education.

Students in the French schools were more likely than their counterparts to agree with: (1) 'When I need help about educational and career planning, I can get it at this school', and (2) 'I feel accepted in this school', and were more likely to be involved in the intramural activities of their schools.

Conclusions

1. Information Dissemination

There is a need to provide a clear picture of the variety of programs available at the colleges and the economic and personal benefits associated with them, not only to interested students but also to all students, school guidance counsellors and the general public. In particular, since parental expectations and pressure on students can make a meaningful interface between secondary school and college problematic, it appears necessary to develop strategies to reshape parents' perceptions of the viability and attractiveness of a college education.

2. Secondary School Programs

Since few non-core college-preparation courses are offered in secondary schools, and very few students take college-preparation sequences of courses while there, it would be useful to review the viability and appropriateness of Grades 11 and 12 post-secondary destination programming as it applies to the colleges.

3. College Applicants' Background

College applicants' pattern of course selection and differential achievement while in secondary school ensures that enrollees in most college programs will have a diverse background in terms of secondary school courses and achievement in them. While this finding may not be news for those who teach in Ontario colleges, the factors that contribute to it, that are outlined in this study, may not be well known. Potential college applicants can be unsure of themselves academically and socially. They may have been only moderately successful in secondary school and need assurance that they can be successful in college. A strong support system is required to give them that assurance and increase college retention rates.

4. Apprenticeship

As recommended in the *Ontario, A Leader in Learning, Report & Recommendations* (The Honourable Bob Rae, 2006),

Recognize apprenticeship as a post-secondary destination, and treat the apprenticeship programming delivered by colleges as a core business. Assign to colleges the government's role in administration and outreach to employers (for those apprenticeship programs in which colleges deliver in-school training).

It is necessary to create order out of the current confusion and uncertainty in order to rationalize and effectively deliver apprenticeship programs.

5. Regional Issues

It would be helpful to determine why the Greater Toronto Area (GTA) schools produce so few college registrants (in comparison with university registrants), and develop strategies to increase the flow of students from the GTA to colleges.

Further Research

A number of research questions arise from this study:

1. What are the factors that influence parental perceptions of college and how might parental attitudes be modified?
2. What are the explanations for regional and school differences in the flow of students to college?
3. Can secondary school Grades 11 and 12 destination-based programming be modified to facilitate the school-to-college transition? How effective are the secondary school courses that are currently being piloted?
4. What are the factors that act as disincentives to young people who could be considering college?

Part I. Research Framework

A. Introduction

The Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) is the sponsor of a collaborative study, the first phase of which has been funded by the School/College/Work Initiative (SCWI).¹

A Steering Committee of the ACAATO Collaborative Research Project was set up to guide the project and includes representatives from the following organizations (see Appendix A for a list of members): ACAATO; the College Institutional Research Network; the Ministry of Education; the Ministry of Training, Colleges and Universities, and the secondary school panel through representation from the Association of Educational Researchers of Ontario (AERO), Ontario School Counsellors' Association (OSCA), Ontario Guidance Leadership Association (OGLA), Ontario Catholic Supervisory Officers' Association and Ontario Public Supervisory Officers' Association (OPSOA).

While considerable research and data collection have been conducted by individual school boards, colleges, OCAS, the Ministry of Education, and MTCU on school-to-college transition and student success issues in Ontario, the studies have not been effectively integrated, nor has an in-depth study of student decision making been undertaken. It has become clear that a cohesive picture of pathways from school to college, informed by a comprehensive research base, needs to be developed. This study provides an initial step in developing such a cohesive picture.

1. Multi-Year Research Project

This report represents the completion of the major part of Phase I of the ACAATO multi-year Collaborative Research Project. The focus of the research initiative as a whole is secondary school-to-college transition issues with the emphasis on three populations: secondary school graduates who go to college, secondary school graduates who do not go directly to college or other post-secondary education, and students who drop out of school and do not pursue post-secondary education immediately. The first phase of the project has four elements: the first and major thrust of this phase examines secondary school students' perceptions of college and the factors that influence them to choose a post-secondary destination; the second, a review of existing data in previous research to contribute to a

¹ The School/College/Work Initiative (SCWI) was established through funding from the Ontario Ministries of Education and of Training, Colleges and Universities.

clearer understanding of college applicants and registrants; the third, a study of secondary school student achievement and courses offered and delivered; and the fourth, a secondary analysis of the College Applicant Survey² (completed by ACAATO, under separate cover).

The overall goals of the ACAATO Collaborative Research Project are as follows:

- To identify, gather and conduct research which supports the development of effective pathways from secondary school to college
- To build a better understanding, through the research, of school-to-college transition issues and the multiple pathways that students take to college;
- To identify barriers to and supports for successful transition to college, with particular attention to barriers and possible supports for the large proportion of students leaving high school who do not go directly to post-secondary education;
- To facilitate an increased and smoother flow of students from secondary school to college.

In order to place this study in the context of the larger research initiative, it is necessary to consider the research questions of the project as a whole:

1. *Who applies to college?*
 - a. What are the characteristics of students applying directly from high school? Can a profile or series of profiles of typical college-bound students be developed?
 - b. What are the characteristics of those applying not directly from high school? Do they differ from those applying directly from secondary school? How can those who do not currently apply directly to college or university from high school be assisted to consider further education following high school, either immediately or at a later time?
 - c. What factors influence students to apply to college? What are the factors that influence students not to apply to college? How can a better understanding of college options and the value of a college education be better communicated to students, their parents, and secondary and elementary school educators?

² The College Applicant Survey (CAS; 2004), carried out by Acumen Research Group Inc., was funded by the Canada Millennium Scholarship Foundation.

2. *Who is accepted?*
 - a. What are the factors associated with those accepted versus those not?
 - b. What happens to applicants who apply to very popular, oversubscribed programs and do not get accepted into those programs? Do they choose other college programs? What supports do colleges offer them to make such alternative choices?
3. *Transition issues:*
 - a. What are the factors which predict success in the first semester in the range of college programs? Success in the first semester is seen as an indication of a successful transition to college.
 - b. What is the relationship between courses taken in high school and success in college in general and in specific program clusters?
4. *Implications and future directions – How can this research be used to:*
 - a. inform decisions about future policies and curricula in schools, colleges, and the Ministries, and
 - b. assist students to consider college options and to be more successful in the transition to college?

2. Purpose of This Study (Phase 1)

The major purpose of this phase of the research is to identify secondary school students' perceptions of college, in general, and as a possible post-secondary educational destination for them, and to determine the factors that have shaped these perceptions. A second purpose is to identify students' secondary school achievement patterns, graduation rates and course enrolments in order to determine structural factors that have influenced and will continue to influence college enrolments in the future.

B. Background

As context for the research reported on in this report, we have summarized recent research on college applicants and registrants, university and college enrolment patterns and trends, and secondary school graduation rates with regard to their impact on college enrolments. The Double Cohort Study data files (2004, King & 2005, King, Warren, Boyer & Chin) were used for the analysis.

Who goes to college? is not an easy question to answer because so many different routes are taken to get to college and so many different program types are offered in Ontario Colleges of Applied Arts and Technology. A student planning on taking a Joint Degree Program in Nursing (a Collaborative Program requiring four years shared between college and university), for example, is likely to take a quite different route from someone planning to be a heavy equipment operator (an 18-week program at a college). Entrance requirements can vary dramatically from program to program.

Program types include short-term Certificate Programs, 1-, 2- and 3-year Diploma Programs, Applied Degree Programs, and Joint or Collaborative Degree Programs. The vast majority of students enrolling in college do so in a Diploma Program (Table 1.1).

Table 1.1: College Registrants Direct from Secondary School, by Type of Program (2004)

Program	n	%
Certificate	4,781	15.7
Diploma	24,704	80.8
Applied Degree	1,059	3.5
Total	30,544	100.0

Source: OCAS; data were not available for Joint or Collaborative Degree Programs.

The first set of Applied Degree Programs offered by the Ontario colleges were implemented in the fall of 2003, just in time for the double cohort graduates from secondary school. Students applied to so many post-secondary programs, each one with a different priority for them, that it was difficult to establish a meaningful picture of the viability of the new degree programs. There was little doubt that some of the more attractive diploma programs would be even more attractive as degree programs. The tremendous interest evidenced in the Animation Program at Sheridan and the Flight Program at Seneca illustrates the assured viability of these programs. On the other hand, in the first year, some of the programs generated little interest on the part of prospective students. The second time around, overall numbers increased and Applied Degree Programs appear to have found a real identity in the colleges. By 2004-05, student enrolment in Applied Degree Programs made up 3.5 percent of the college enrolments.

Also, the colleges differ in terms of clientele and programs. Some colleges primarily target eligible applicants in their community while others seek students across the province. Most colleges offer some specialized programs (provincially oriented) and a core of community-serving programs.

The decision that individuals make about when to apply to college – after four, five or more years in secondary school, or having been out of school a year or longer – is much more variable than is the case for universities. A single perspective is not likely to be helpful in planning recruitment strategies for colleges – especially when the greatest proportion of college applicants comes from outside of secondary school.

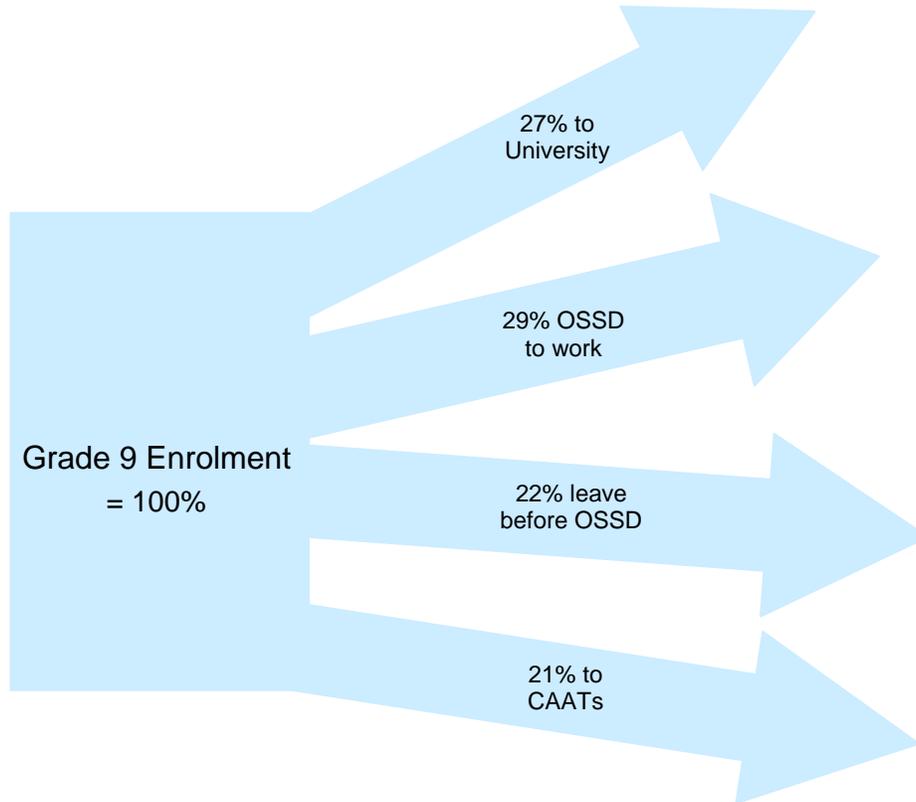
1. Flow of Students from Secondary School to Post-Secondary Destinations – Pre-Double Cohort (2004)

Any depiction of the proportions of students leaving secondary school for post-secondary education destinations over time suggests a tidiness to the process of identifying secondary school leaver's destinations that is not the case. Some students graduate after four or five years and do not apply to university or college until the year after they left secondary school. At a later date, other former students (both graduates and early school leavers) will apply to college (nearly 60% of college applicants have been out of school for one year or longer) and university (approximately 10% of university registrants from Ontario have been out of secondary school for at least one year). Leaving and then re-enrolling in secondary school is an ongoing process for some students. In order to understand current and projected trends in college enrolments, it is necessary to have an accurate picture of the provincial pattern before major changes were made to the structure and content of secondary school programs in Ontario.

Figure 1.1 depicts the transition of students directly from secondary school to post-secondary destinations prior to the introduction of the Reorganized Secondary School Program.

In 2000, approximately 27 percent of the base Grade 9 population, having taken four, five or six years in secondary school, went directly to university, and about 21 percent went directly to an Ontario college. About 22 percent of that base population had not graduated.

Figure 1.1: Year 2000 Ontario Student Flow from Grade 9 to Post-Secondary Destinations (After 4, 5 or 6 Years in Secondary School)



Source: King, Warren, Boyer & Chin, 2005, p.97.

2. Factors Influencing College Enrolments

In this section, we examine four factors that will influence college enrolments in the future:

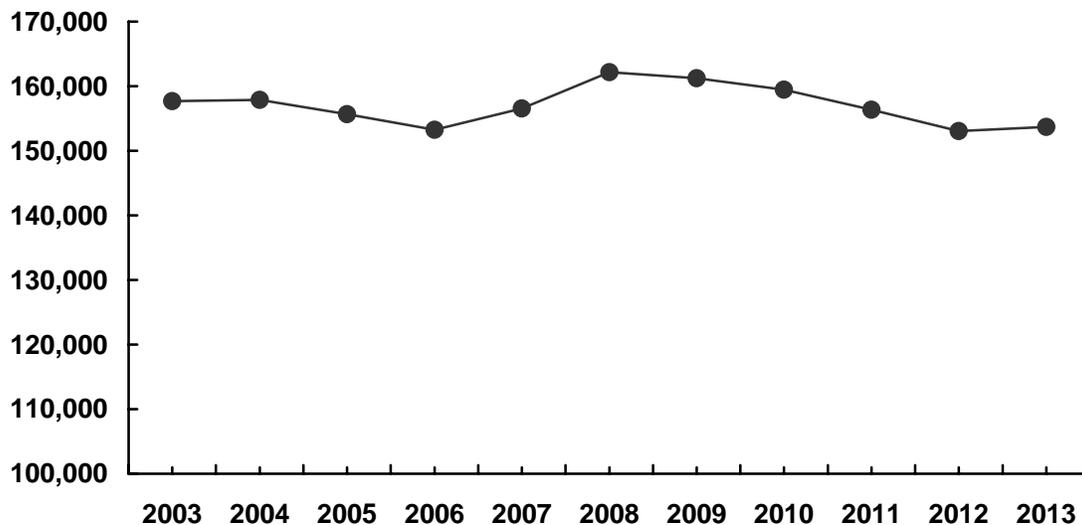
- (1) the size of the age cohort from which college students will be drawn;
- (2) secondary school graduation rate projections;
- (3) post-double cohort college enrolments; and
- (4) post-double cohort university enrolments.

a. The 18-19 Age Cohorts

Will demographic patterns influence the growth or decline in college enrolments in the next ten years? Figure 1.2 illustrates the variability in the age cohorts from which the majority of direct-from-secondary-school university and college enrollees will come, up to 2013. (The age 19 group can be estimated by using the age 18 group numbers for the previous year.)

The last three years of the decade should show some college enrolment increase based on an increase in the numbers of 18 and 19 year olds. However, in the early years of the next decade, the size of the 18-to-19-year-old age group will drop to below what it was in 2003.

Figure 1.2: Age 18 Cohort, 2003 to 2013



Source: Adapted from Statistics Canada, 2001 census (see Table 6.1 in *Double Cohort Study, Phase 4*, p.101).

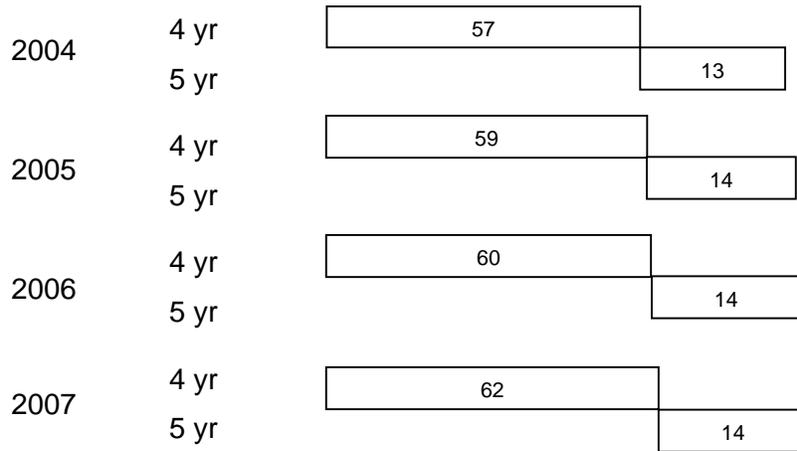
b. Secondary School Graduation Rates

It should follow that the greater the number of students who graduate from secondary school then the greater the number of students who will enroll in Ontario colleges. This has not been the case for universities who typically set program space numbers and closely adhere to them in spite of variations in the number of applicants. However, it should also be noted that direct-from-secondary-school college enrolments were declining around the year 2000 in spite of increasing secondary school graduation rates.

In the years prior to the introduction of the secondary school Reorganized Program, five-year secondary school graduation rates were about 78 percent. The first graduates of the Reorganized Program after four years (2003) represented only 57 percent of the 1999 Grade 9 Cohort (Figure 1.3), another 13 percent of the first Grade 9 cohort graduated after five years in secondary school (i.e., in 2004). The total of 70 percent is far lower than the five-year graduation rate of the previous years. It is not surprising that

declining college enrolments have become an issue. The concern was further aggravated by a smaller double cohort effect than projected by the colleges.

Figure 1.3: Current and Projected Secondary School Graduation Rates 2004 – 2007



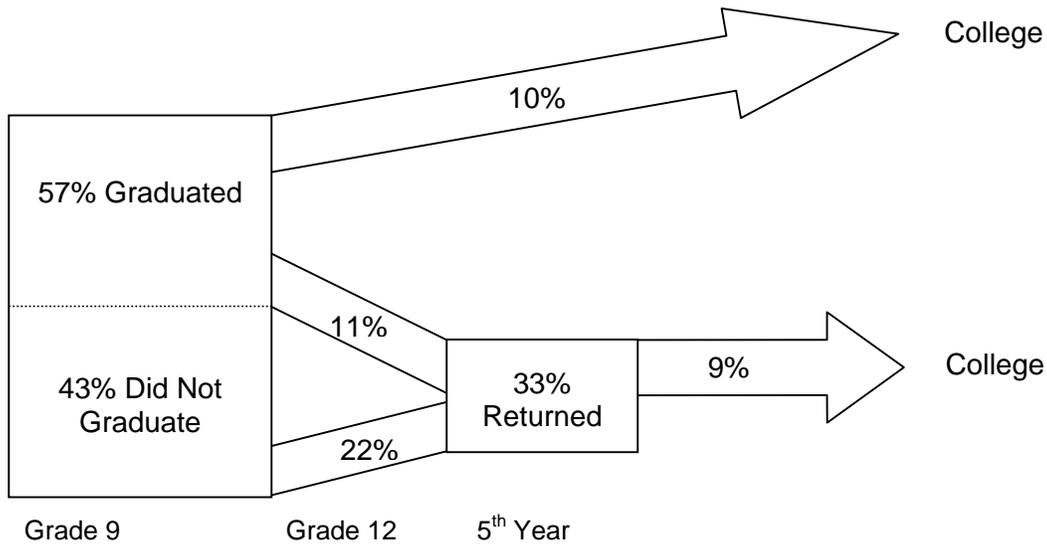
Source: *Double Cohort Study, Phase 4 (2005)*.

The combined four- and five-year graduation rates for the next few years are encouraging, but even by 2007 they are not likely to reach the five-year graduation rates of the previous program. The Ministry of Education has introduced a range of initiatives designed to improve graduation rates and facilitate young peoples' transition from school to work and to college. These programs will inevitably increase college enrolments, but by how much is difficult to determine.

c. Post-Double Cohort College Enrolments

As we noted in Figure 1.1, the direct-from-secondary-school-to-college percentage of the base Grade 9 enrolment prior to the Reorganized Program was approximately 21 percent. This was a loosely defined group of students who had spent four, five and more than five years in secondary school, and who had applied to college from secondary school even though they might have been taking a single secondary school course. The information presented in Figure 1.4 for the first cohort in the new program includes only four- and five-year graduates. There would be a slight increase in the proportion of students going directly from secondary school to college if we added those taking a course or two in a sixth year.

Figure 1.4: Secondary School to College – 1st New Cohort



Source: King, Warren, Boyer, Chin, 2005, p.108.

It is quite clear that the direct-from-secondary-school-to-college group is not growing as a result of the secondary school Reorganized Program. Credit accumulation data for the first four cohorts in the Reorganized Program indicate that a slight improvement over the next few years can be anticipated.

Table 1.2 illustrates the sharp increase in the number of college applicants directly from secondary school in the pre-double cohort and double cohort years. The increase of applicants between 2001 and 2003 was 17.4 percent compared to 59.2 percent for the universities (King, Warren, Boyer & Chin, 2005, p.102).

Table 1.2: Ratio of Fall College Registrants to Applicants Direct from Ontario Secondary Schools (1998-2005)

Years	Registrants	Applicants	Ratio
1998	33,214	55,224	60.1
1999	32,214	55,533	58.0
2000	31,235	51,681	60.4
2001	31,397	51,572	60.9
2002	37,545	60,555	62.0
2003	37,795	65,176	58.0
2004	35,445	56,888	62.3
2005	35,491	55,933	63.4

Source: OCAS data tables and data files.

Although current college applicant numbers are similar to those in the late 1990s, the proportion of applicants registering has increased.

Table 1.3 presents first-year college enrolments of students direct from secondary school with respect to the number of years the students had spent in secondary school. In the past, about one-fifth of this group took four years in secondary school, but as the double cohort year approached, this number increased to almost one-third of the direct-from-secondary-school enrolment. Although the overall number of college applicants in 2005 was about the same as in the pre-2000 years, the proportion of four-year secondary school graduates who enrolled in college has increased. The proportion of four-year registrants should remain stable for the next few years, at just over 50 percent of the direct-from-secondary-school group.

Table 1.3: Fall College Registrants Direct from Ontario Secondary Schools, by Years in Secondary School (% 1998-2005)

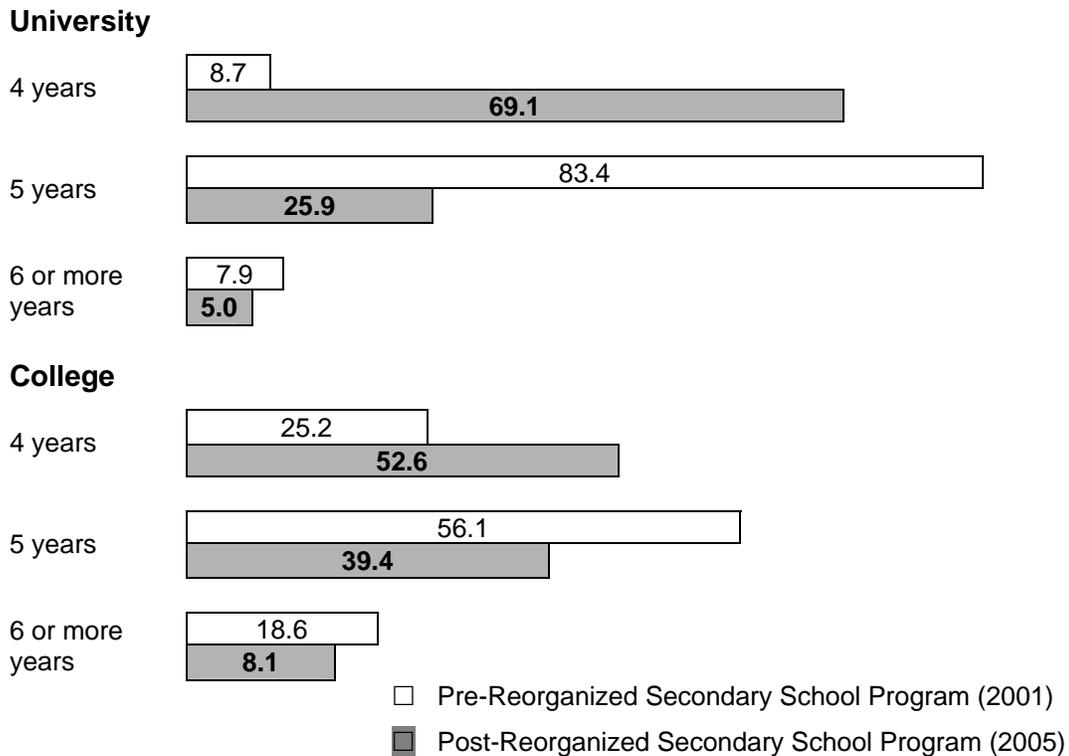
Years	Years in Secondary School*			
	Four	Five	Six	> Six
1998	20.5	52.8	14.6	12.1
1999	22.1	55.1	12.8	10.0
2000	23.0	56.2	12.1	8.7
2001	25.2	56.1	10.4	8.3
2002	32.3	52.1	8.7	6.8
2003	46.0	38.8	7.5	7.8
2004	53.0	39.1	6.3	1.6
2005	52.6	39.4	6.2	1.9

Source: OCAS data files.

It is important to note that the majority of students who left secondary school after six or more years come from adult learning centres and alternative education settings. These students might be better classified as coming to college from out of school as they are typically taking one or two courses and working part or full time.

Changes in the proportion of students graduating in four, five or six or more years from secondary school had quite a different effect on universities in comparison to that on colleges (see Figure 1.5). Prior to 2003, a greater proportion of students went to college after four years in secondary school than went to university. But this pattern has changed. Far more university-bound students graduate and go on after four years in secondary school than is the case for college-bound students.

**Figure 1.5: Direct-from-Secondary-School, by Years in Secondary School
1st Year University & College Registrants (% 4-, 5- and 6-Year Graduates:
Pre- and Post-Introduction of Reorganized Secondary School Program)**



Source: *Double Cohort Study, Phase 4 data files.*

Especially noticeable is the decline in the proportion of six-years-or-more graduates who went to college. The norm of four-year graduation has become more clearly established; it is now less comfortable for students to be in secondary school for six years.

d. Out-of-Secondary-School/Delayed-Entry College Applicants

Except for the marked increase in 2004, the number of applicants who delayed entry into college after secondary school has been about the same for the past five years (see Table 1.4). The ratio of registrants to applicants has been higher for the past two years, and it would be useful to understand why this has occurred. It is difficult to know whether this group will grow or decline as a result of the low secondary school graduation rates anticipated for the next four years. Certainly the number of students who have dropped out has increased; perhaps their lack of success in secondary school will act as a disincentive to consider continuing their education.

Table 1.4: Ratio of Fall College Registrants to Applicants Not Direct from Ontario Secondary Schools (1998 to 2005 – Fall Terms)

Years	Registrants	Applicants	Ratio
1998	41,340	81,308	50.8
1999	41,294	76,669	53.9
2000	40,111	76,951	52.1
2001	42,744	79,407	53.8
2002	41,659	80,164	52.0
2003	42,599	81,969	52.0
2004	45,510	83,408	54.6
2005	44,966	80,337	56.0

Source: OCAS tables.

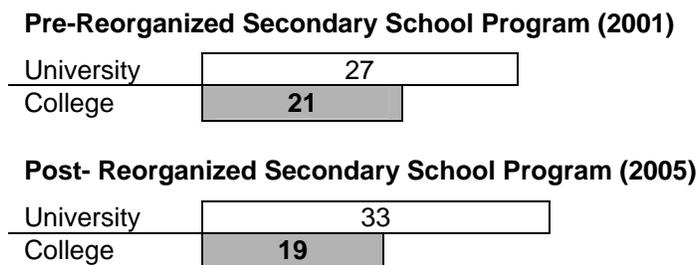
There appears to be a substantial number of students who have been in secondary school for six or seven years, and who apply to college directly from secondary school. We conducted an analysis of the schools from which 2004-05 college applicants came in order to determine whether those students were taking regular classes during the day. It became immediately clear that the majority of these students were taking one or two courses while working in full- or part-time jobs and were enrolled in adult learning centres, night schools or alternative schools directly associated with school boards. Most of the institutions from which the largest numbers of college applicants came fell into this category (e.g., City Adult Learning Centre, G.A. Wheable Centre for Adult Education, Emery Adult Learning Centre, Scarborough Centre for Alternative Education, St. Louis Adult Learning Centre, Burnhamthorpe Adult Learning Center and the Ottawa Adult High School). When we add up the number of direct-from-secondary-school college applicants who attended these schools, it represents 10 to 12 percent of college applicants. Since these students have left regular secondary schools and are typically enrolled only part time, they might best be classified as part of the 'out-of-secondary-school' or delayed-entry college applicant group. This would reduce the direct-from-secondary-school-to-college group to under 40 percent of college applicants.

e. University Enrolments

In the two or three years prior to the introduction of the Reorganized Program, about 27 percent of the baseline Grade 9 population enrolled in university directly from secondary school having been in secondary school for four, five or six years. In response to public and government pressure, the universities expanded facilities and faculty to respond to

the increased applications expected in the double cohort year of 2003-04. In the past, universities had not adjusted their enrolments in relation to the number of applications they received, but in terms of the number of 'spaces' they had available. Not unexpectedly, in light of the increased resources they had available, Ontario universities increased their available 'spaces' after the double cohort year on the incorrect assumption that there would be a second bubble effect after the 2003-04 year. As a result, a greater proportion of secondary school students now attend university than was the case in the past. Currently universities enroll about 33 percent of the Grade 9 baseline population after the students have been four or five years in secondary school. This dramatic increase in the proportion of secondary school graduates attending university has inevitably had the effect of reducing the size of the pool of students eligible to attend college (see Figure 1.6).

Figure 1.6: Direct-from-Secondary-School 1st Year University & College Registrants: Pre- and Post-Introduction of Reorganized Secondary School Program (% 4- & 5-Year Graduates Based on Grade 9 Enrolment)



Source: *Double Cohort Study, Phase 4* data files.

One indication of the uncertainty of students' post-secondary school educational plans is the number of students who applied to both Ontario colleges and universities in relation to the proportion of those who registered in one or the other (Table 1.5).

Table 1.5: Applicants to Colleges & Universities, & Registrants in a College or University in Ontario (2003-05)

Year	Source	Applicants to Both Colleges & Universities	Registrants (%)	
			College	University
2003	From secondary school	20,111	40.7 ^a	33.4
	From out-of-school	4,954		
2004	From secondary school	11,883	39.9	30.3
	From out-of-school	5,615		
2005	From secondary school	10,085	N/A ^b	N/A ^b
	From out-of-school	4,438		

^a The percentage of consecutive and non-consecutive applicants to both college and university that registered in only a college program was 40.7 percent.

^b Data are not available.

Source: OCAS.

During the spring of 2003 when student uncertainty about having access to a post-secondary institution was greatest, the proportion of applicants to both institution types was higher than in the pre-double cohort years. Unlike previous years, more of those applying to both colleges and universities registered in a university in the fall of 2003, but fewer in a college. Since 2003, the numbers applying from secondary school to both university and college have declined by about 50 percent.

3. Projecting College Enrolments

Assuming that (1) the universities will continue to enroll about 33 percent of four- and five-year graduates (based on 100% base Grade 9 enrolment), (2) the numbers of six- (and over) year graduates to college will continue to decline slightly, and (3) secondary school graduation rates could increase to about 78 percent after five years in secondary school by 2009, there should be an approximate 5 percent increase in the proportion of college registrants who applied directly from secondary school. The out-of-school registrant group may continue to grow in part because of the large number of secondary school early leavers (dropouts) during the first four years of the Reorganized Program who might seek further education. The growth followed by a decline in the size of the appropriate age cohort should be taken into consideration when making projections.

Graduation rates (5-year rates) will increase slowly through the latter part of the decade, but are not likely to reach the pre-double cohort figures in the next three years. The decline in the number of students remaining in secondary school for a sixth year will continue as four to five years in secondary school will become the norm for formal secondary school attendance. The proportion of students attending university (about one-third of the base population) should remain about the same. The decline in the age cohort in the latter part of the decade will counterbalance, to some extent, the graduation rate increase.

If the colleges are to expand to meet the identified needs of Ontario's economy then (1) secondary school graduation rates must increase substantially, (2) a greater proportion of secondary school graduates must choose to attend college, and (3) more young people who have left secondary school without graduating must re-enter the educational system.

C. Methodology

The main source of information for the study was a survey of Grade 11, Grade 12 and Year 5 students enrolled in 73 secondary schools. The main themes of the survey included academic achievement, educational plans, views on a college education and factors influencing these views. In order to determine whether course offerings and enrolments influenced student opportunities to enroll in sequences of courses leading to college, the participating schools were asked to provide school calendars or course option sheets and course enrolments. Data and findings from the Double Cohort Studies (Phases 3 and 4) were also used to examine the relationship between student aspirations, achievement and application to college.

1. Student Survey

The research team developed the survey instrument over the course of five months with advice from a sub-committee of the Project Steering Committee (see Appendix A for a list of the Project Steering Committee with sub-committee names noted).

An early version of the instrument was pilot tested in two summer schools – one in a combined Grade 11/12 English course session serving senior public and Roman Catholic secondary school students from a medium-sized city and rural environs, and the other in mathematics and English Grade 11/12 classes in a Toronto public secondary school. For the most part, the students completed the questionnaire with little difficulty. The participants offered useful advice about the format and content of the survey. The survey was modified, as required, based on

students' comments, an analysis of the pilot-study data, and suggestions made by the advisory group.

The five-page survey took students between ten and fifteen minutes to complete and addressed the following topics: (1) course information (courses taken, reasons for taking most courses, reasons for not taking a course requested, Cooperative Education, apprenticeship); (2) achievement (credits attained each year, overall average); (3) post-secondary plans (i.e., university, college, apprenticeship, workforce, time off before post-secondary education, college or university programs expected to be applied to, decision timing); (4) employment (type of permanent work planned, part-time job hours); (4) knowledge of post-secondary options; (5) helpfulness of sources of information about post-secondary destinations; (6) application information for Grade 12 and 5th year students (number of colleges and/or universities applied to, optional plans if not accepted); (7) perceptual questions (e.g., views about going to college, parent expectations and views about post-secondary destinations, help in career planning), involvement in school life, teachers' and friends' attitudes about a college education, concerns about costs of attending college or university, preference of location of college or university attended); and, (8) background (gender, birth date, years in high school and years expected to take to graduate, and parents' level of education). See Appendix B for a copy of the survey instrument.

2. Participant Schools

A sample of 68 schools was selected to represent eight Ontario regions served by the colleges, school size and school type (Roman Catholic, public), as well as five schools with a francophone enrolment.

No school boards declined to have the designated schools approached to participate in the study. In three school boards in which a school was unable to be a part of the study or the numbers of questionnaires returned were so low that the schools (2) could not be included, additional substitute schools with similar characteristics were selected.

Table 1.6 presents the number of schools participating from each college(s)-serving region and the French schools.

Table 1.6: Participant Schools & Students

Ontario Regions	Colleges within Regions	# of Participating Schools	# of Students
Northwest	Confederation	3	667
North Central	Northern Sault Cambrian Canadore	9	1,951
East	Algonquin	4	1,219
Southeast	St. Lawrence Loyalist	5	1,485
Central East	Fleming Georgian Durham	9	3,304
Toronto Area	Centennial Seneca George Brown Humber	13	5,957
Central West	Sheridan Mohawk Niagara Conestoga	16	3,494
Southwest	Fanshawe Lambton St. Clair	9	2,617
French	Boréal (Sudbury) La Cité (Ottawa)	5	691
Total		73	21,385

3. Course Enrolments

All the schools that participated in the student survey were asked to provide school calendars and course enrolment information for the 2005-06 school year. Sixty-one schools provided information used for the analysis of course enrolments. Grades 11 and 12 college-preparation and university/college-preparation course offerings were tabulated for each participating school and summarized in order to determine what courses were available to college-planning students, as well as the extent to which course offerings varied from school to school and from region to region.

4. Student Survey Analyses

Student response rates per school averaged two-thirds of senior year enrolments. The overall return rate in terms of potential student participation was 65 percent. The highest and lowest return rates were 96 percent and 28 percent, respectively (331 and 154 of the eligible students). In 23 percent of the schools in the sample, over 80 percent of the senior students participated in the survey.

Survey respondents were asked what they expected to do in the future. Table 1.7 indicates the responses of the three grade groups divided into the 'post-secondary plans' categories provided on the questionnaire (see also Tables C1 to C4 in Appendix C). For many analyses in this report, responses were analyzed by five categories of students' post-secondary plans: Graduate to Work, College Diploma, College Degree, University and Apprenticeship. The University category included those who planned to take time off and then attend university. The College Diploma category included those who planned to take time off and then attend college. The two college categories were combined because the 'time-off-then-college' respondents were more similar to the College Diploma group on academic achievement measures than to the College Degree group. For some analyses that did not involve cross-tabulations of grade groups by post-secondary plans, the responses of all survey respondents were used.

Some students chose to use 'other' as their response because they did not think that any of the categories provided on the questionnaire quite fit them. However, a review of the written responses to the 'other' category indicated that about two-thirds of the responses could have been worked into the categories provided. Most of those involved time off doing something and then going to university or college. A number of students noted 'college then university'. Even those who wrote in 'professional athlete' or 'artist' could have indicated 'graduate from high school and go directly to work'. In any case, the 'other' category is not large and although those respondents have been excluded from the post-secondary-plans cross-tabulations, they are included in analysis involving all students. Some selected college as their destination, but then chose a work field that required apprenticeship training. These students remained classified as 'college' on the assumption that college was still their priority.

Table 1.7: Post-Secondary Plans: Responses to ‘What do you expect to do in the future?’ (% Grades 11, 12 & Year 5 Students)

Plans After High School	Grade 11		Grade 12		Year 5	
	#	%	#	%	#	%
Graduate from high school and go directly to work	221	2.2	207	2.4	110	4.7
College ^a :						
College Diploma (directly after high school)	790	8.0	1,003	11.5	348	14.8
Time off (before college)	1,090	11.0	974	11.2	378	16.1
Subtotal College Diploma	1,880	19.0	1,977	22.7	726	30.9
College Degree	353	3.6	389	4.5	143	6.1
Total College	2,233	22.6	2,366	27.2	869	37.0
University:						
Directly (after high school)	4,416	44.7	4,024	46.2	662	28.1
Time off (before university)	1,189	12.0	693	7.9	206	8.8
Total University	5,605	56.7	4,717	54.1	868	36.9
Apprenticeship	562	5.7	471	5.4	171	7.3
Total (used for cross-tabs)	8,621	87.2	7,761	89.1	2,018	85.9
Excluded (from cross-tabs):						
Leave before graduation	32	0.3	22	0.3	9	0.4
Private Career College	150	1.5	130	1.5	43	1.8
Other ^b	375	3.8	390	4.5	168	7.1
Uncertain	709	7.2	415	4.8	116	4.9
Subtotal	1,266	12.8	957	11.1	336	14.2
Total Survey Respondents	9,887	100.0	8,718	100.2	2,354	100.1

^a ‘College Diploma’ also refers to a College Certificate; ‘College Degree’ refers to Applied, Joint or Collaborative Degree in affiliation with a university.

^b Examples of the category ‘other’ were: military, travel, professional athlete, return to high school for more courses.

Where possible the survey findings are presented in simple histograms and polygraphs with corresponding tables placed in Appendix C. In some cases, tables are used in the text to facilitate the understanding of relationships.

Two open-ended questions at the end of the questionnaire were designed to provide students with opportunities to comment on college-related issues in their own words. The first question focused on views about colleges (i.e., asking about general impressions of Ontario colleges and reasons students would or would not consider attending one), and the second sought further comments or suggestions about educational and/or career planning (see Appendix B). Comments in response to the both questions were entered on computer, classified by common themes and cross-tabulated with the gender, age, grade and the post-

secondary plans of each respondent. In order to illustrate relevant text in the report, comments that were representative of a theme and student characteristics were cited verbatim (including grammatical and spelling errors in English and French). (Approximately two-thirds of the students offered comments on the first question about colleges, and one-third to the final question.)

5. Organization of the Report

The findings are presented and discussed in this order: characteristics of survey respondents, secondary school college-preparation course offerings and enrolments, students' post-secondary educational and career plans, factors influencing post-secondary plans, further perceptions of a college education, and finally the analysis of differences by school, region and French schools. Summary and conclusions can be found in the final part of the report.

Part II. Characteristics of Survey Respondents

In this part of the report, the student respondents are described in terms of their gender and the education of their parents/guardians. This information is cross tabulated with the students' post-secondary plans. To highlight certain issues, the results of selected items are also presented by gender and by parents/guardians' education.

A. Gender

Although a greater proportion of young women than men attend college and university, and college program enrolments differ markedly by gender, gender is not a major theme of this analysis. However, the issue of gender in decision making regarding college program selection is planned to be incorporated into the next phase of the research program. Table 2.1 indicates the gender of survey respondents within each grade and Year 5 (see Tables C5 to C7 in Appendix C).

Table 2.1: Gender, by Grade (% Survey Respondents)

Gender	Grade 11	Grade 12	Year 5
Male	48.2	47.6	59.9
Female	51.8	52.4	40.1

Males are slightly underrepresented in the Grade 11 and 12 samples (based on actual age cohort data) in part because males are more likely to have withdrawn from school as well as have poorer daily attendance than females. However, as expected, because of lower average achievement than females and, consequently, lower four-year graduation rates (King, Warren, Boyer & Chin, 2005), more males remained for a fifth year (similar to patterns under the former system for six- and seven-year students).

There are notable gender differences in the post-secondary plans of students in each grade/year (see Table 2.2 and Tables C8 to C10 in Appendix C)

Table 2.2: Gender, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

Post-Secondary Plans	Grade 11		Grade 12		Year 5	
	Male	Female	Male	Female	Male	Female
Graduate to work	3.1	1.3	3.5	1.3	5.9	2.9
College (Diploma/Certificate)	18.9	19.2	22.4	22.8	30.4	31.6
College (Degree*)	3.6	3.6	4.7	4.2	5.8	6.6
University	51.3	61.8	47.8	60.1	33.1	42.4
Apprenticeship	9.1	2.5	9.5	1.7	10.2	2.9
Other	14.0	11.6	12.1	9.9	14.6	13.7

* College (Degree) refers to College's Applied Degree or Collaborative/Joint Degree Program.

Consistent with actual university enrolments, females were far more likely than males to plan on a university education, but very similar numbers of males and females planned on a college education. There was very little interest in apprenticeship on the part of the females.

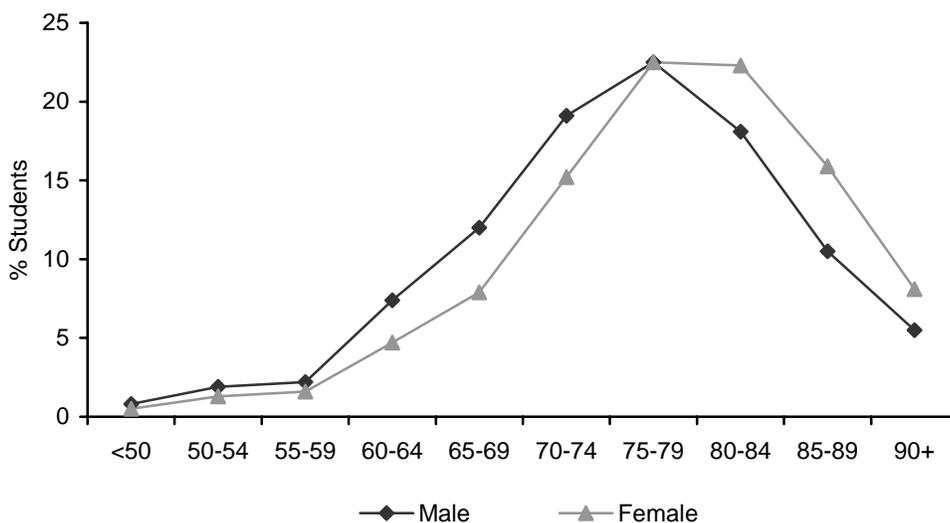
Even in Grade 9, females are more likely than males to take Academic English and Mathematics courses (see Table 2.3 and Tables C11 to C14 in Appendix C; Tables C15 and C16 include those who took Grade 9 Science courses); the differences between males and females academically begin early (research shows that this is so as early as Kindergarten).

Table 2.3: Grade 11 & 12 Students Who Took Grade 9 Academic English & Mathematics, by Gender (% Students)

Course	Male	Female
English	76.3	84.3
Mathematics	76.4	78.6

Acknowledging that females are more likely to be taking Academic and university-preparation courses, their average marks for the year previous to this survey year are more likely to be higher than males (see Figure 2.1 and Tables C17 and C18 in Appendix C). This is especially noticeable in the upper marks ranges which are more likely to qualify students for university admission.

Figure 2.1: Previous Years' Average Marks, by Gender (% Grades 11 & 12 Students)



As expected, the females indicated that more of their parents expected them to go to university (see Table 2.4 and Tables C19 and C20 in Appendix C). With more females than males planning on a university education, we would expect their peers to have a less positive view of a college education, but this was not the case. Interestingly, more males than females would rather remain near home for their post-secondary education. Similar numbers of males and females feel ‘accepted’ in their schools (see Tables C21 to C26 in Appendix C).

Table 2.4: Selected Survey Items, by Gender (% Grades 11 & 12 Students)

Selected Survey Items	Male	Female
My parents/guardians expect me to go to university	55.5	65.0
Most of my friends have a positive opinion about a college education	50.2	56.7
I would prefer to attend a college/university near my home	45.5	41.4
I feel accepted in this school	86.5	87.5

This sampling of gender findings illustrates the need to explore gender differences regarding college in greater depth.

B. Parents’ Education

The educational background of the respondents’ parents/guardian is summarized in Table 2.5 (also see Tables C27 to C32 in Appendix C). References to ‘mother’ and ‘father’ include guardian(s) throughout these analyses.

Table 2.5: Mother and Father’s Education (% Grades 11, 12 & Year 5 Students)

Parents’ Education^a	Grade 11		Grade 12		Year 5	
	Mother	Father	Mother	Father	Mother	Father
Less than High School	7.9	9.8	8.4	11.7	11.3	14.6
High School	19.5	14.9	20.8	15.7	22.8	17.7
Trades Certificate	1.5	7.1	1.4	7.5	1.5	9.4
Some College	9.3	6.8	9.2	6.4	9.6	6.3
College or CEGEP Diploma	15.6	12.7	18.0	14.0	19.7	12.9
Some University	5.7	4.7	4.9	4.2	4.5	3.9
University	20.3	18.0	21.2	18.3	15.2	14.1
Advanced University Degree	7.0	10.4	6.1	9.6	4.6	6.9
Other	1.9	1.5	1.6	1.2	1.6	1.4
Do Not Know	11.4	14.1	8.3	11.4	9.2	13.0

^a References to ‘mother’ and ‘father’ include guardian(s).

It is interesting that more mothers than fathers have a college education. Also, the gap between fathers and mothers with a university education appears to be closing. The parents' education of Grade 11 and 12 students was very similar, but Year 5 students were more likely to have parents with a lower level of education.

When parents' education was broken down by students' post-secondary school plans, it was clear that more students with parents who had a university education also planned on university, but parents who had a college education was not a strong predictor of students' educational plans (Table 2.6 and Tables C33 to C34 in Appendix C).

Table 2.6: Mother and Father's Education, by Post-Secondary Plans (% Students)

Parents' Education ^a	Graduate to work		College Diploma		College Degree		University		Apprenticeship	
	Mo	Fa	Mo	Fa	Mo	Fa	Mo	Fa	Mo	Fa
Less than High School	19.3	24.0	12.7	16.7	11.5	15.1	5.4	7.2	12.1	15.6
High School	31.3	24.4	25.6	20.6	23.5	17.1	16.7	12.5	27.1	17.9
Trades Certificate	1.9	10.1	1.7	9.6	1.7	9.9	1.2	5.4	2.7	15.7
Some College	8.9	4.8	10.7	7.4	11.4	7.2	8.5	6.2	9.8	7.1
College or CEGEP Diploma	10.8	7.4	19.3	14.7	19.9	15.9	16.8	13.0	16.1	12.7
Some University	1.9	1.7	4.0	3.1	3.9	4.0	6.1	5.3	4.8	3.9
University	5.2	4.8	10.1	8.9	12.6	10.7	27.5	24.8	9.7	7.5
Advanced University Degree	2.3	1.7	2.9	3.0	2.9	3.7	9.1	14.7	2.6	2.8
Other	1.5	1.7	2.0	1.3	1.6	1.6	1.4	1.1	2.1	2.1
Do Not Know	16.6	19.3	10.9	14.7	11.1	14.9	7.3	9.7	13.0	14.8

^a References to 'mother' and 'father' include guardians.

In order to simplify the data tabulation for the following analysis, we combined the parents' education categories into three groups: high school or less; trades certificate and at least some college; and, at least some university. We excluded the 'other' and 'do not know' categories.

There is a moderate relationship between parents' education and the percentage of students taking Grade 9 Academic courses (Table 2.7 and Tables C35 to C38 in Appendix C) with more students whose parents had at least some university taking Academic Mathematics and English than those with high school or less. It is interesting that the figures for both mothers and fathers were very close.

Table 2.7: Students Taking Academic English & Mathematics Courses in Grade 9, by Mothers' & Fathers' Education (% Students)

Course/Parent ^a	High School or less	College or Trade	At least some University
English			
Mother	70.7	79.3	89.7
Father	70.6	78.5	90.7
Mathematics			
Mother	66.3	76.4	87.9
Father	66.2	75.1	89.6

^a References to 'mother' and 'father' include guardians.

There were also substantial differences in academic achievement (i.e., previous years' academic average) by parents' education (Figures 2.2, 2.3 and Tables C39 and C40 in Appendix C).

Figure 2.2: Previous Years' Average Marks, by Mothers' Education (% Students)

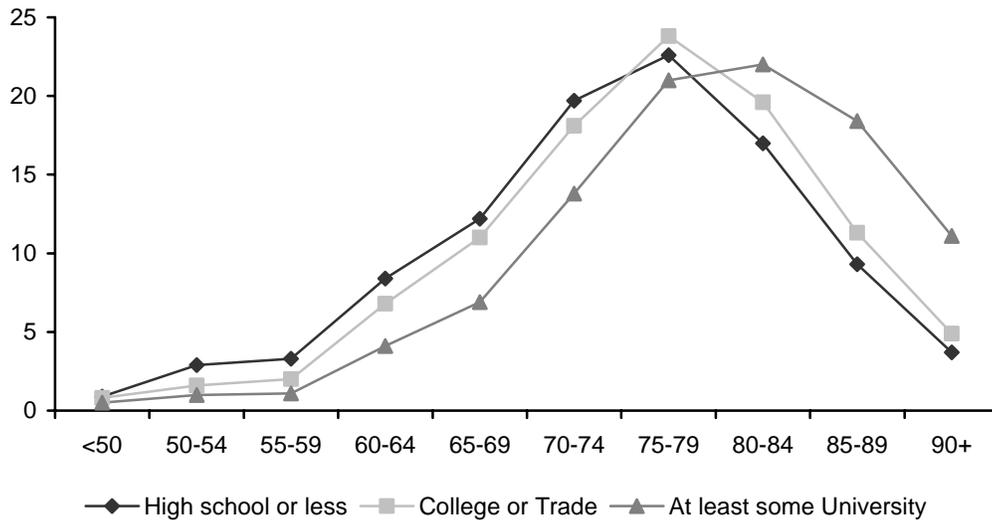
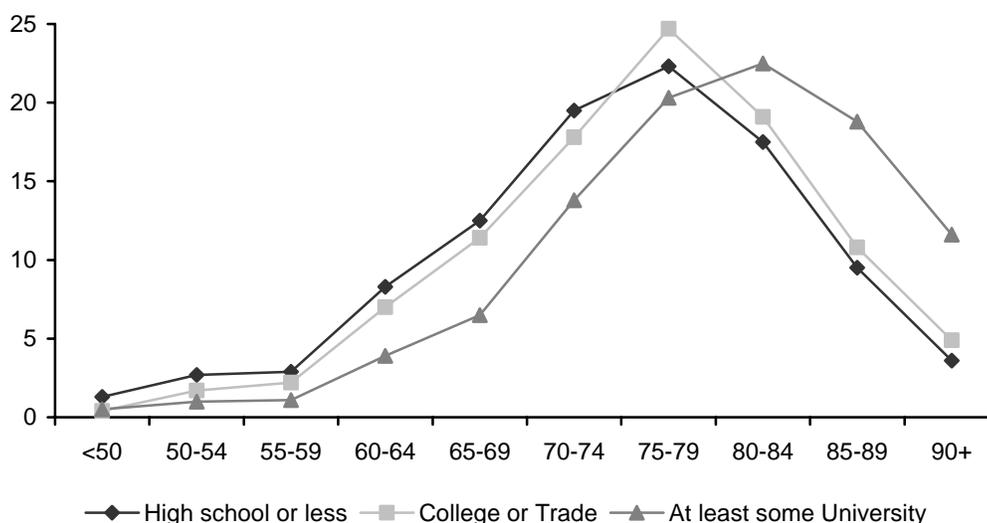


Figure 2.3: Previous Years' Average Marks, by Fathers' Education (% Students)



The marks of students within the 'high school or less' and 'college or trade' categories were similar, but substantially more of the students with parents in the 'at least some university' category had higher marks. It must also be noted that this latter groups of students would more likely have taken Academic courses in Grade 9 or university-preparation courses in Grades 11, 12 or Year 5.

Far more of the students with parents with 'at least some university' expected them to go to university (Table 2.8 and Tables C41 and C42 in Appendix C). Also, it is worth noting that for the 'at least some university' group the fathers had slightly more influence on this issue.

Table 2.8: 'My parents expect me to go to university', by Mothers' & Father's^a Education (% Students)

Parent	High School or less	College or Trade	At least some University
Mother	47.2	54.6	77.2
Father	46.0	52.2	80.1

^a References to 'mother' and 'father' include guardians.

Since friendship groups from the same neighbourhoods typically have similar educational aspirations, one would expect there to be a link between friends and attitudes toward college. As Table 2.9 shows, students with parents who have 'at least some university' are less likely

than those in the other parent groups to have friends who have a positive opinion about a college education (also see Tables C43 and C44 in Appendix C).

Table 2.9: ‘Most of my friends have a positive opinion about a college education’, by Parents’ Education (% Students)

Parent	High School or less	College or Trade	At least some University
Mother	59.7	60.7	46.9
Father	62.6	60.7	44.6

References to ‘mother’ and ‘father’ include guardians.

It could be argued that students who prefer to go away for their post-secondary education are more likely to have parents who are relatively affluent. Since extended education is one indicator of socioeconomic status, we would expect that those students with parents who have ‘high school or less’ education would be most likely to want to remain nearby and those with parents who have ‘at least some university, the least likely, and this proved to be the case (see Table 2.10 and Tables C45 and C46 in Appendix C).

Table 2.10: ‘I would prefer to go to college or university near my home’, by Parents’ Education (% Students)

Parent	High School or less	College or Trade	At least some University
Mother	50.6	44.8	36.3
Father	49.0	46.4	36.5

References to ‘mother’ and ‘father’ include guardians.

It is also worth noting that students with parents who have ‘at least some university’ are more likely to expect to graduate in four years and least likely to take Cooperative Education courses (see Tables C47 to C50 and C84 to C86 in Appendix C).

There is no question that parents’ education plays a major role in student achievement and educational planning – but the pressure placed on students by their parents in this regard can also have negative consequences for a students’ mental health. The issues of financing for post-secondary education and the socioeconomic status of students’ parents requires much further analysis.

Part III. Secondary School Courses

Students' educational plans are shaped in part by the courses available to them in their secondary school. Part III of the report is designed to ascertain what proportion of students select their secondary school programs with college in mind and whether Ontario secondary schools offer the courses that were designed to facilitate the transition of students from secondary school to college.

Course enrolment data were collected from participating schools; the students were asked about the courses they took and those that they wanted to take but could not. The interaction of these factors with their educational plans was the primary framework for analysis in this part of the study. The timing of course delivery is particularly relevant. For example, if a substantial number of students who will later attend a college have not planned on college by Grade 11, the Grade 11 college-preparation courses will likely not be viable.

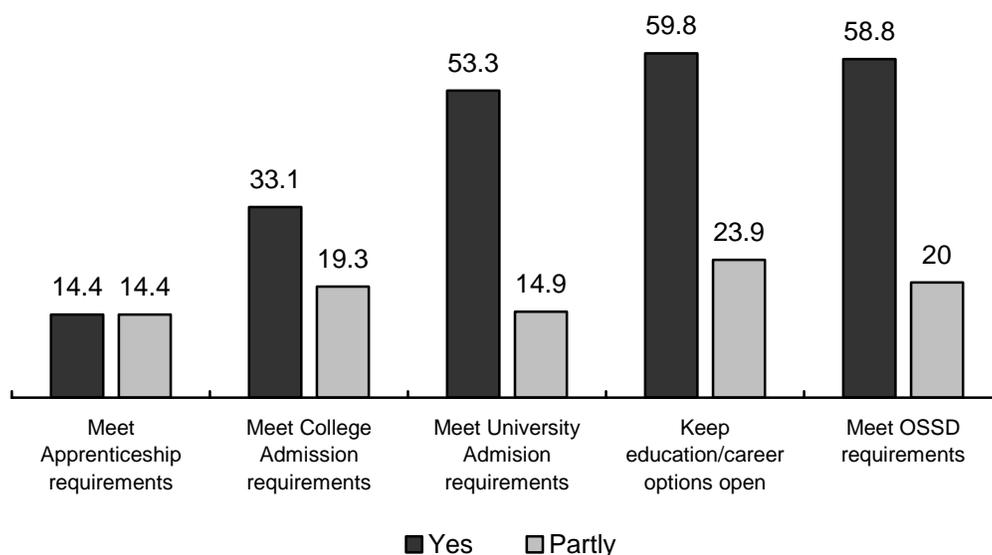
Students' reasons for selecting their courses, their course selection requests, school enrolments in college-preparation courses, college applicant transcripts and enrolments in Cooperative Education and Ontario Youth Apprenticeship Program (OYAP) are the main themes of this part of the report.

A. Reasons for Student Course Selection

In order to determine the factors that students take into consideration when making course selections, the respondents were asked what their motivation was in terms of five alternatives. The response options and overall student responses are summarized in Tables C51 to C55 in Appendix C, and by post-secondary plans in Figure 3.1. See Tables C56 to C70 in Appendix C for responses by grade level.

Students were asked to check as many responses as were relevant to them, but in retrospect, it would have been more helpful if they assigned priorities to their choices. Compared to those who chose courses at least in part to meet apprenticeship and college admission requirements (e.g., Grade 12s: 24.9% and 48.6% respectively), the majority of students stated that 'meeting university admission requirements', 'keeping as many education and career options open as possible', and 'meeting graduation requirements' were their reasons.

Figure 3.1: Reasons for Taking Courses (% Students)



After ‘keeping options open’ and ‘meeting OSSD requirements’, the students tended to indicate ‘yes’ beside the reason that coincided with their educational goals (see Table 3.1). College planners were most likely to select ‘college requirements’, apprenticeship planners to select ‘apprenticeship requirements’, and so on.

Table 3.1: Reasons for Taking Courses, by Post-Secondary Plans (% Students)

Reasons	Graduate to work	College Diploma	College Degree	University	Apprenticeship
Meet apprenticeship requirements	22.9	14.5	16.9	8.6	61.7
Meet college admission requirements	25.1	67.3	74.3	12.6	45.1
Meet university admission requirements	4.9	11.3	21.3	85.5	8.4
Keep as many education/career options open as possible	45.1	56.7	55.9	63.7	48.4
Meet secondary school graduation requirements	71.3	65.8	62.9	53.7	66.9

‘Meeting graduation requirements’ was important for the Grades 11 and 12 students, but less so for the Year 5 students because many of them had already graduated. ‘Keeping options open’ was also considered important and that meant for many of the post-secondary education-planning group that they would continue to take university-preparation courses, even if they might ultimately choose to apply to a college program. Certainly course selection patterns in

Grades 11 and 12 emphasizing university-preparation courses are consistent with the criterion of keeping options open. These priorities do have the effect of decreasing the interest in college-preparation courses since taking university-preparation courses keeps both options open, while taking college courses effectively closes the door on university admissions.

1. Course Selection Requests

We have noted in our previous study that many Grade 11 and 12 college-preparation courses designed for the Reorganized Program of Ontario secondary schools are simply not offered in most schools (King, Warren, Boyer & Chin, 2005, pp,59-76). This is especially true in the case of courses in Business and Technology. Since many of the courses “recommended” for particular college programs are not offered and most required or recommended for university programs are offered, we assumed that college-planning students would be less likely to get the courses they request than university-planning students. However, when students were asked the question on the survey “Were you able to take all the courses you requested”, they tended to respond in terms of the courses their schools listed for consideration, not in terms of all provincial guideline courses that might be made available. Therefore, the responses to that question summarized in Table 3.2 reflect essentially whether they got the courses they asked for based on the course option list that was made available to them at their school (see Tables C71 to C74 in Appendix C).

Table 3.2: ‘Were you able to take the courses you requested?’ (% Grades 11, 12 & Year 5 Students)

Response	Grade 11	Grade 12	Year 5
Yes	71.2	71.6	69.8
No	28.8	28.4	30.2

Overall the proportion of students who did not get a course they requested was remarkably high – approximately 30 percent for all students in the three years. Table 3.3 presents the responses of those students who were unable to take the courses requested, by their post-secondary plans (see Tables C75 to C78 in Appendix C).

Table 3.3: Students Unable to Take Courses Requested, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

Post-Secondary Plans:	Grade 11	Grade 12	Year 5
Graduate to work	30.1	27.3	40.7
College Diploma	28.5	29.9	31.7
College Degree	28.2	30.6	22.5
University	28.4	26.7	27.1
Apprenticeship	29.4	28.2	26.0

Generally speaking, the university-planning students were most likely to get the courses they wanted, but differences across the groups were not great

A summary of the reasons that students could not take the courses they requested is presented in Table 3.4 and Tables C79 to C82 in Appendix C. The particularly high “course conflict” response indicates that there are timetabling scheduling difficulties in many schools related in part to the large number of single section courses that are difficult to schedule. The surprising number of ‘course was full’ responses indicates the lack of flexibility that schools have because of minimum and maximum class size regulations.

Table 3.4: Reason You Could Not Take the One Course (% Grades 11, 12 & Year 5 Students)

Reasons:	Grade 11	Grade 12	Year 5
Course not available	6.0	8.8	14.1
Course conflict	34.1	34.8	23.0
Course cancelled	14.4	17.6	15.1
Already had 8 courses	7.2	3.9	2.5
Course was full	29.4	24.3	33.8
Other	8.8	10.6	11.6

The students were asked to indicate a specific course that they wished to take that they were unable to take. Again it must be noted that students tended to respond to this question in terms of the courses listed on their course selection lists rather than all Ministry of Education guideline courses. We were particularly concerned that if students were not able to access college-preparation courses that might act as a disincentive to attending college.

Except for the core English, Mathematics and Science courses, almost every other course was identified by some students as not being available to them. For the Grade 11 students very few college-preparation courses were identified by more than a few students – Hospitality (TFT3C) was the most common. Even Grade 11 College Mathematics (MBF3C),

a course offered in almost every school in the province, had more mentions than any other college course. The pattern for university/college-preparation courses was similar – few were mentioned and those that were had few references.

Grade 12s referred more to college-preparation Chemistry, Physics and Mathematics (MCT4C) as requested courses that they could not take than any other college courses. In school course calendars, a number of subjects were listed as college-preparation courses, but do not appear in the Ministry of Education guidelines as such – for example, Vocal Music, Photography, Grade 11 Physics and Law.

Most of the courses mentioned by the Year 5 students that they were unable to have scheduled were Grade 12 courses. Year 5 students noted very few college-preparation courses and those that they did note were usually mentioned very few times. Course scheduling issues do not appear to have affected college-planning students any more than other students (Table C83 in Appendix C). It may be that courses they might have selected were not offered on the school's course selection list. Over- and under-subscription of courses is the greatest problem for all students who were unable to obtain desired courses. In interviews with guidance counselors and vice-principals in the course of the double cohort research program, they noted that it was difficult to put a college-destination program together because appropriate courses were not being offered, in part because low enrolments were anticipated.

B. College-Preparation Course Offerings and Enrolments

One of the major purposes of the Reorganized Program in Ontario secondary schools, introduced in Grade 9 in 1999, was to facilitate the transition of students to university, college and the world of work. In order to achieve this goal, destination-oriented courses in Grades 11 and 12 were developed along with a Grade 10 career planning (Guidance) course and a Teacher-Adviser Program was introduced. From previous research, we have learned that a greater proportion of students are now attending university than was the case prior to the Reorganized Program's introduction but that fewer students are graduating from secondary school; we also noted low enrolments in college-preparation courses (King, 2004; King, Warren, Boyer & Chin, 2005). This latter issue is developed in greater depth in this report.

There are over 160 Grade 11 and 12 Ministry of Education courses that schools could offer to their students, and it is unrealistic to expect every school to offer them all. In fact, most Ontario secondary schools offer less than one-half of the available guideline courses. Each school must work within class size minimums and maximums when establishing each course's viability. Some courses can be combined for instructional purposes in order to reach minimum class size requirements. However, the new course outlines make each course so distinctive that this combining of courses is not practical in most instances. It occurs most commonly in Arts and Technology courses.

In this section we are particularly concerned with the number of college courses offered in Ontario secondary schools and enrolments in these courses. More specifically, the purpose of this section is to (1) determine provincial enrolments in Grade 11 and 12 college courses; and (2) identify variability in course offerings from school-to-school and determine the factors that contribute to variability in offerings and enrolments. In the subsequent section, we examine college applicant transcripts from 2004-05 in terms of the incidence and type of college-preparation courses. We examined provincial course enrolment patterns from the Ministry of Education data files, reviewed the course enrolment analysis presented in the *Double Cohort Studies*, and analyzed course offerings and enrolments in Grade 11 and 12 courses in the schools sampled for this study. Sixty-one schools provided us with useable data in time for this analysis. We also examined variability in course offerings and enrolments in twelve schools and attempted to identify the factors that influenced the variability.

Table 3.5 presents the percentage of schools offering college-preparation courses in English, Mathematics and Science in the *Double Cohort Study, Phase 4*, sample of 92 schools (2003-04) and in this study's sample of schools (2005-06), as well as the percentage of students at each grade level across the province taking these courses in 2003-04 and 2004-05. The 97.8 percent figure in the first column means that 90 of 92 schools in the *Double Cohort Study* offered and had an enrolment in ENG3C (Grade 11 college-preparation English). The numbers 34.1 in the third column and 37.3 in the fourth column mean that about one-third of the Grade 11 students in the province were enrolled in ENG3C in 2003-04 and the proportion increased to 37.3 in 2004-05.

In the years following the Reorganized Program, there has been a steady increase in the proportion of Grade 9 and 10 students taking Applied English and Mathematics. This increase has been paralleled by the growth in the proportion of students taking Grade 11 and 12 college-preparation English and Grade 11 college-preparation Mathematics. About 60 percent of students usually enroll in university-preparation courses and the remainder in workplace courses. The continued decline in the Grade 12 Mathematics for College Technology course enrolments is a concern because a number of colleges recommend this course for admission to College Technology Programs.

Table 3.5: Grades 11 and 12 English, Mathematics & Science College-Preparation Courses (% Schools Offering in 2003-04 & 2005-06; Provincial Enrolments, 2003-04 & 2004-05)

College Course Codes	Course Titles	% Schools Offering		Provincial Enrolments	
		2003-04 ^a (92 schools)	2005-06 (61 schools)	2003-04	2004-05
ENG3C	English	97.8	100	34.1	37.3
ENG4C	English	98.9	100	37.2	38.0
ETS4C	Studies in Literature	3.3	0.0	0.3	0.2
EWC4C	The Writer's Craft	17.4	14.8	1.4	1.2
MBF3C	Mathematics of Personal Finance	100.0	100	35.4	39.2
MAP4C	College & Apprenticeship Mathematics	95.7	96.7	19.9	20.7
MCT4C	Mathematics for College Technology	57.6	37.7	4.2	2.7
SBI3C	Biology	96.7	96.7	14.5	15.9
SCH4C	Chemistry	77.2	85.2	7.3	7.5
SPH4C	Physics	87.0	62.3	4.0	4.1

^a Figures for 2003-04 were produced for the *Double Cohort Study, Phase 4*.

All or almost all the schools in both school samples offered Grade 11 and 12 college-preparation English, Grade 11 college-preparation Mathematics, and Grade 11 college-preparation Biology (Table 3.10). Only one-half of the students who took Grade 11 English and Mathematics also took Grade 11 college-preparation Biology. (Students were required to take a third Science or a Technological Education course, but in December 2005 the Minister

announced changes in requirements for an OSSD to allow Cooperative Education and a Guidance course to meet compulsory credit requirements.¹⁾

Most of the schools chose to offer Grade 12 College and Apprenticeship Mathematics (MAP4C). Just over one-third of our school sample had students enrolled in Grade 12 Mathematics for College Technology, and provincial enrolment numbers were quite low (4.2% or 1 in 20 students in 2003-04 and 2.7 or 1 in 37 in 2004/05).

While Grade 12 college-preparation Physics and Chemistry courses were offered in the majority of schools, provincial enrolments were relatively low. For most college applicants, there was no Grade 12 Science on their transcript as confirmed by an analysis of 2004 college applicant transcripts (King, Warren, Boyer & Chin, 2005).

The optional Grade 12 college-preparation English course Studies in Literature (ETS4C) was offered in few schools in 2003-04 and none in our school sample in 2005-06, and The Writer's Craft (EWC4C), in few schools. There were very low provincial enrolments in both (EWC4C usually had to be combined with EWC4U to be made available to students).

Table 3.6 lists all the remaining Grade 11 and 12 college-preparation courses with the number of schools offering them from the *Double Cohort Study, Phase 4*, and this study, as well as provincial enrolments for 2003-04 and 2004-05. There are four college-preparation Business courses in the Ministry guidelines and just under half of the sample schools offered BDI3C – Introduction to Entrepreneurial Studies and just over 60 percent, BMI3C – Introduction to Marketing. Only one in six schools offered Grade 12 Entrepreneurial Studies (BDV4C) and one-quarter offered Grade 12 Information Technology in Business (BTX4C), with a very low provincial enrolment in both. Enrolments are quite low and, not surprisingly, few Business courses appear on college application transcripts (even for students applying to Business Programs). However, there were slight increases in the provincial enrolments in the two Grade 11 college-preparation courses between 2003-04 and 2004-05. It appears that the relationship

¹ Technological Education courses have been 'uncoupled' so that students do not have to sign up for concurrent, multiple Technological Education credits. Now, for example, students could earn up to 6 Cooperative Education credits for a 3-credit Technological Education package. Up to 2 Cooperative Education credits and 1 Guidance course can be used as compulsory credits; there is no limit in the number of co-op credits that a student can earn.

between secondary school Business courses and College Business Programs needs a careful review.

Table 3.6: Grades 11 and 12 College-Preparation Courses (% Schools Offering in 2003-04 & 2005-06; Provincial Enrolments 2003-04 & 2005-06)

College Course Codes	Course Titles	% Schools Offering		Provincial Enrolments	
		2003-04 ^a (92 schools)	2005-06 (61 schools)	2003-04	2004-05
BDI3C	Introduction to Entrepreneurial Studies	53.3	49.2	8.1	9.0
BMI3C	Introduction to Marketing	50.0	63.4	8.1	10.1
BDV4C	Entrepreneurial Studies	5.4	16.4	0.7	0.7
BTX4C	Information Technology in Business	26.1	27.9	1.9	1.7
TCJ3C	Construction Technology	52.2	59.0	7.2	8.2
TFT3C	Hospitality	19.6	23.0	2.8	3.4
TMJ3C	Manufacturing Engineering Technology	34.8	49.2	4.0	4.8
TPA3C	Health Care	9.8	4.9	1.3	1.2
TTJ3C	Transportation Technology	34.8	68.9	7.3	8.7
TCJ4C	Construction Technology	37.0	55.7	3.0	3.6
TFS4C	Tourism	3.3	6.6	0.5	0.6
TMJ4C	Manufacturing Engineering Technology	26.1	45.9	2.0	2.0
TPO4C	Child Development & Gerontology	2.2	0.0	0.5	0.5
TPT4C	Medical Technologies	1.1	0.9	0.5	0.2
TTJ4C	Transportation Technology	34.8	55.7	3.4	3.8
CHH3C	Canadian History & Politics Since 1945	0.0	0.0	0.2	0.3
CHY4C	World History: The West & the World	20.7	18.0	1.7	1.6
CGU4C	World Geography	5.4	11.5	0.7	0.6
HIR3C	Managing Personal & Financial Resources	18.5	23.0	4.0	3.8
HPW3C	Living & Working with Children	31.5	47.5	5.2	5.3
PLF4C	Recreation & Fitness Leadership	34.8	37.7	5.0	4.7

^a Figures for 2003-04 were produced for the *Double Cohort Study, Phase 4*.

Less than one-half of Ontario's secondary schools have the facilities to offer Construction and Transportation Technology courses and even fewer have the facilities to offer Manufacturing Technology courses. By chance, our school sample has a greater proportion of schools offering Technology courses in these areas than the provincial norm. Traditionally, enrolments in Grade 11 and 12 Technology courses have been very low and it has been necessary to combine course types (workplace, college, university/college) and grades in order to offer the courses. Times have not changed. Enrolments in Technology courses are still low and usually linked to a Cooperative Education course for students who will go directly to work from secondary school. There was a slight increase in the Grade 11 and 12 provincial enrolments in the two main Technology areas (Construction Technology and Transportation Technology) over the two years. Overall, the college-preparation Grade 11 and 12 Technology courses had notably low enrolments and in our college transcript analysis very few applicants were found with Grade 12 college-preparation Technology courses.

Few schools offered the Health Care (TPA3C), Hospitality (TFT3C), Child Development and Gerontology (TPO4C), and Medical Technologies (TPT4C) courses. A great deal of effort went into the design of these courses, but student interest appears to be low.

Two of the Grade 11 and 12 college-preparation Canadian and World Studies courses are offered in a few schools but overall have low enrolments. None of the schools in both the Double Cohort Study and this study offered the course CHH3C – Canadian History and Politics Since 1945. Managing Personal and Financial Resources (HIR3C) is offered in about one-quarter of our school sample. However, nearly one-half of the schools offered HPW3C – Living and Working with Children. The Grade 12 college-preparation Recreation and Fitness Leadership course (PLF4C) is quite attractive to college-bound students in the one-third of Ontario schools in which it is offered.

Table 3.7 lists the Grades 11 and 12 university/college-preparation courses with the number of schools offering them in 2003-04 from the Double Cohort Study and in 2004-05 from this study, as well as the provincial enrolments for 2003-04 and 2004-05.

Table 3.7: Grades 11 and 12 University/College Courses (% Schools Offering in 2003-04 & 2005-06; Provincial Enrolments 2003-04 & 2004-05)

U/C Course Codes	Course Titles	% Schools Offering		Provincial Enrolments	
		2003-04 ^a (92 schools)	2005-06 (61 schools)	2003-04	2004-05
MCF3M	Functions	95.7	98.3	26.9	26.6
SNC3M	Science	18.5	31.1	3.2	2.8
SNC4M	Science	9.8	14.8	1.1	0.7
BAF3M	Introduction to Financial Accounting	88.0	90.2	15.8	18.1
BAT4M	Principles of Financial Accounting	64.1	62.3	5.9	6.0
BBB4M	Introduction to International Business	31.5	45.9	7.8	8.1
BOH4M	Organizational Studies: Organizational Behaviour & Human Resources	37.0	44.3	6.5	6.9
ICE3M	Computer Engineering	39.1	50.1	4.7	5.0
ICE4M	Computer Engineering	25.0	36.1	2.2	1.9
ICS3M	Computer & Information Science	80.4	95.1	9.9	9.2
ICS4M	Computer & Information Science	51.1	75.4	4.1	3.6
TDJ3M	Technological Design	58.7	82.0	7.4	8.1
TDJ4M	Technological Design	46.7	62.3	3.1	3.2
TGJ3M	Communication Technology	68.5	78.7	14.3	14.9
TGJ4M	Communication Technology	59.8	77.0	7.1	7.2
CGF3M	Physical Geography: Patterns, Processes & Interactions	44.6	49.2	5.2	4.4
CGO4M	Geomatics: Geotechnologies in Action	7.6	4.9	0.7	0.5
CGR4M	Environment & Resource Management	20.7	39.3	3.2	3.3
CHW3M	World History to the 16th Century	79.3	91.8	15.6	16.9
CIE3M	The Individual & the Economy	8.7	11.4	2.1	2.3
CLU3M	Understanding Canadian Law	93.5	88.5	24.4	25.2
HFA4M	Food & Nutrition Sciences	31.5	32.8	6.7	7.6
HHG4M	Issues in Human Growth & Development	12.0	14.8	2.8	3.2
HHS4M	Individuals & Families in a Diverse Society	70.7	77.0	15.4	15.6

(cont'd)

Table 3.7: Grades 11 and 12 University/College Courses (% Schools Offering in 2003-04 & 2005-06; Provincial Enrolments 2003-04 & 2004-05) (cont'd)

U/C Course Codes	Course Titles	% Schools Offering		Provincial Enrolments	
		2003-04 ^a (92 schools)	2005-06 (61 schools)	2003-04	2004-05
HRT3M	World Religions: Beliefs, Issues & Religious Traditions	31.5	34.4	17.0	17.2
HSB4M	Challenge & Change in Society	44.6	49.2	10.3	10.3
HSP3M	Introduction to Anthropology, Psychology & Sociology	67.4	63.9	22.2	25.7

^a Figures for 2003-04 were produced for the *Double Cohort Study, Phase 4*.

Course offerings by school and enrolments in Grades 11 and 12 university/college-preparation courses presents a different picture than is the pattern for college courses. Many university/college-preparation courses are offered in most secondary schools, for example, Introduction to Financial Accounting (BAF3M), Computer and Information Science (ICS3M), Understanding Canadian Law (CLU3M), and Individuals and Families in a Diverse Society (HHS4M). University/college-preparation courses in Technological Design and Communication Technology are offered in far more schools than other college-preparation technology courses.

The two Science courses (SNC3M and SNC4M) were designed for students not going on in Science but with some interest in the field (and in the case of SCN3M to meet the third Science/Technology requirement). SNC3M is offered in nearly one-third of our school sample but SNC4M, in less than one-fifth of them. The provincial enrolment in SNC4M is particularly low. These courses do not appear to be functional and, not surprisingly, rarely appeared on college applicant transcripts. The Canadian Literature course (ETC3M) was not offered in either sample of schools (2003-04 and 2005).

Both Accounting courses were offered in most of the schools with nearly one in five Grade 11 students taking BAF3M. The other two Business courses (BBB4M and BOH4M) were offered in nearly half of the sample schools. Overall, it is rare to find a full range of Business course offerings available to college-bound students.

One-half of the schools in this study's sample offered the Grade 11 Computer Engineering course (ICE3M), but fewer offered ICE4M. The Computer and Information Science courses (ICS3M and ICS4M) were offered in most of our sample of schools.

In the Canadian and World Studies and Social Sciences and Humanities areas, there were substantial enrolments in Understanding Canadian Law (CLU3M) and Introduction to Anthropology, Psychology & Sociology (HSP3M) and most schools offered the course. As would be expected these courses commonly appeared on college applicant transcripts. The other courses vary in terms of the number of schools offering them, but overall enrolments are of a sufficient magnitude to see them well represented on applicant transcripts for both college and university.

Although course failures are relatively low in university/college-preparation courses (ranging from 5% to 12%), the mix of college and university-bound students in them has the effect of increasing the failure rates for the college-bound (the university-bound students tend to get higher marks in these courses). The lower failure rate for university-planning students in comparison to their achievement in equivalent courses in the previous system has had the effect of making a greater proportion of students eligible for university (*Double Cohort Study, Phase 3, pp.47-51*).

The university/college-preparation Grade 11 Mathematics (Functions) course (MCF3M) was designed as a prerequisite to MCT4C (the college-preparation Grade 12 Mathematics College Technology course) as well as MDM4U (the university-preparation Grade 12 Mathematics Data Management course). However, MCF3M proved to be a very difficult course for those planning to enroll in College Technology Programs and as a result contributed to the low enrolments in MCT4C noted earlier. Almost all schools offered the course and over one-quarter of the Grade 11 students took the course.

Table 3.8 illustrates the variability in the number and type of college-preparation course offered across the sample of schools. School size and community served by the school are the main influences on whether a course will be offered, although student interest is also a factor.

**Table 3.8: Variability in College-Preparation Course Offerings, by School
(12 Ontario Secondary Schools)**

Schools:	A	B	C	D	E	F	G	H	I	J	K	L
BDI3C		X	X		X	X		X	X	X	X	X
BMI3C		X		X	X	X		X	X	X		X
BDV4C			X					X				
BTX4C			X		X							
TCJ3C	X	X			X	X		X				
TFT3C		X	X	X		X				X		
TMJ3C			X	X		X		X			X	
TPA3C												
TTJ3C	X	X	X	X	X			X		X		
TCJ4C	X	X			X	X		X		X		
TFS4C		X										
TMJ4C			X	X		X		X				
TPO4C												
TPT4C												
TTJ4C		X	X	X	X		X	X		X		
CHH3C												
CHY4C		X	X	X					X			
CGU4C												
HIR3C	X				X	X						
HPW3C		X	X			X			X	X		
PLF4C	X	X	X			X			X			

Some schools serve university-oriented communities and their course offerings emphasize this perspective (e.g., School L). Some schools go out of their way to offer as many courses as possible, combining grades and course types to accomplish this (e.g., School C). Schools with an Arts orientation are unlikely to offer college-preparation courses (e.g., School G) in part because no college-preparation Arts courses exist (Arts courses are only offered in U/C [M] and O formats). It is very clear that some students will be able to take courses in their school that will prepare them for college (and meet ‘required’ or ‘recommended’ conditions) and others will not.

School course offerings directly affect student college application transcripts since students can only take what is available to them. Students planning on enrolling in college programs are more restricted in the courses that they can take than those planning on university. College-

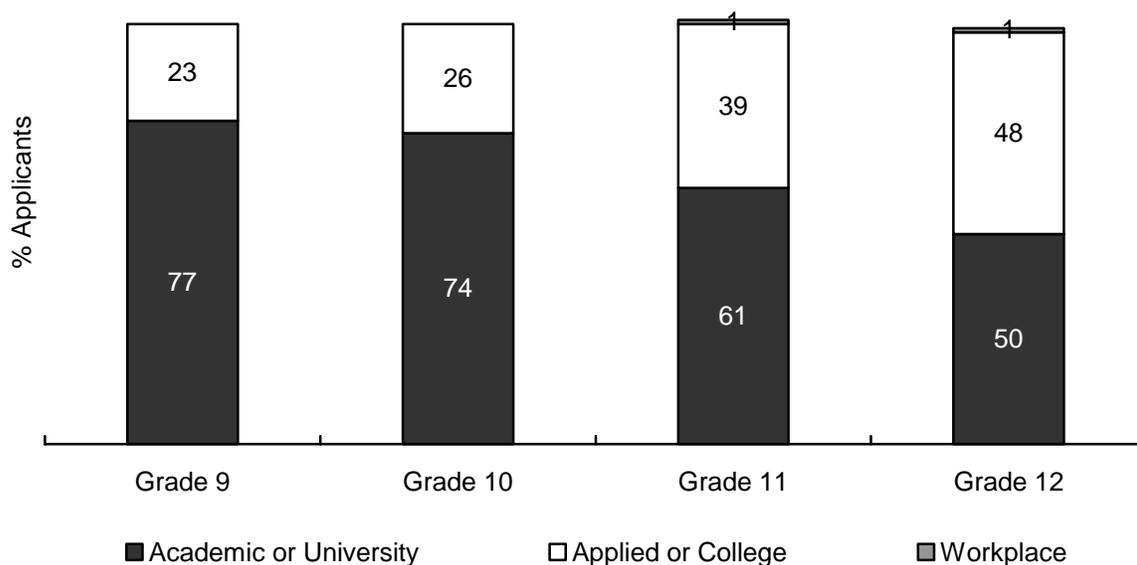
planning students tend to be forced into taking university/college-preparation courses that are not necessarily the most appropriate to meet college program requirements.

C. College Application Transcripts

In 2003, the first group of students who had gone through the secondary school Reorganized Program were eligible to apply to Ontario colleges. These students had completed the program in four years. The analysis that follows was based on their data from Ontario College Application Services (OCAS).

The slowly evolving pattern of the impact of academic achievement on the students' educational plans can be seen in the applicants' type of secondary school English and Mathematics courses. Figure 3.2 presents an analysis of college applicants' secondary school transcripts from 2003-04 in terms of the required English courses they took from Grade 9 to 12. The percentage of college applicants who took Workplace (i.e., Essential Skills) courses in Grades 9 and 10 was negligible and, therefore, is not included.

Figure 3.2: College 2003-04 Applicants' Secondary School English Courses (Grades 9 to 12)

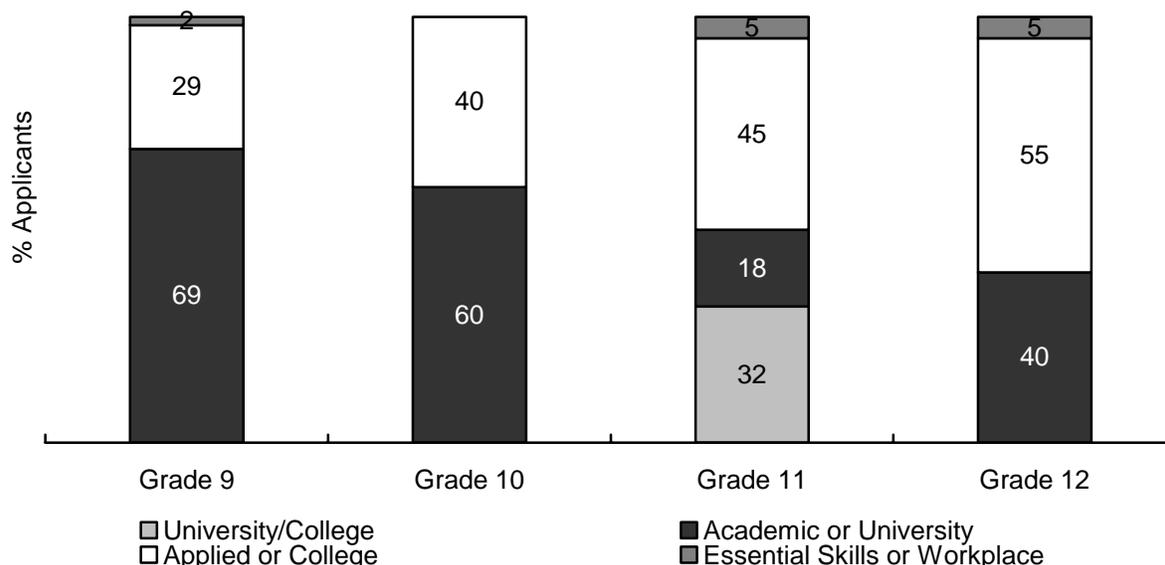


Source: OCAS data files

Seventy-seven percent of the college applicants had taken Grade 9 Academic English. By Grade 12, 50 percent of them had taken university-preparation English. Those taking Grade 12 college-preparation English were not eligible for university (48%), but those taking Grade 12 university-preparation English could still have been contemplating attending university; some of them may have been part of that group that applied to both types of post-secondary institutions.

Figure 3.3 presents similar information on college applicants and their secondary school Mathematics courses.

Figure 3.3: College 2003-04 Applicants' Secondary School Mathematics Courses (Grades 9 to 12)



Source: OCAS data files

Only three Mathematics courses are required to meet secondary school graduation requirements; therefore, the Grade 9, 10 and 11 bars represent essentially 100 percent of students in those grades. However, the Grade 12 bar represents only about 75 percent of the applicants, i.e., those who took Mathematics in Grade 12. Sixty-nine percent of college applicants were taking Academic Mathematics in Grade 9, and, by Grade 12, 40 percent of them were taking a university-preparation Mathematics course. In Grade 11, a university/college-preparation Mathematics course is offered; 32 percent of the college

applicants completed that course successfully. Only 10.3 percent of college applicants who took Grade 12 Mathematics took the Grade 12 Mathematics for College Technology.

Since nearly one-half of the students who applied to college when in Grade 12 had taken a university-oriented program, and even more had done so in Grade 11, the number of students applying to college who had taken a college-preparation courses was relatively small. For example, 30 percent of these college applicants had no Grade 11 college-preparation course on their transcripts and another 22 percent had only one. Also, 38 percent of this group of college applicants had no Grade 12 college-preparation course on their transcripts and 19 percent had only one. Table 3.9 presents the percentages of 2003 college applicants with each of the Grade 11 and 12 college-preparation courses on their transcripts, including English and Mathematics.

Table 3.9: Secondary School College-Preparation Courses Taken By 2003-04 College Applicants (%)

College Courses (Grade 11)	% 2003-04 Applicants	College Courses (Grade 12)	% 2003-04 Applicants
BMI3C Introduction to Marketing	10	BTX4C Information Technology in Business	4
BDI3C Introduction to Entrepreneurial Studies	9	CGU4C World Geography: Urban Patterns & Interactions	1
HIR3C Managing Personal & Family Resources	3	CHY4C World History: The West & World	2
HPW3C Living & Working with Children	6	EWC4C The Writer's Craft	2
CBI3C Biology	20	PLF4C Recreation & Fitness Leadership	5
TCJ3C Construction Technology	6	SCH4C Chemistry	12
TFT3C Hospitality	2	SPH4C Physics	7
TMJ3C Manufacturing Engineering Technology	4	TCJ4C Construction Technology	4
TPA3C Health Care	1	TFS4C Tourism	1
TTJ3C Transportation Technology	7	TMJ4C Manufacturing Engineering Technology	2
		TPO4C Child Development & Gerontology	5
		TPT4C Medical Technologies	2
		TTJ4C Transportation Technology	4

Source: OCAS data files.

As can be seen from Table 3.9, only one college-preparation course offered in Grade 11 was taken by substantial numbers of college-bound students in 2003 – Biology and one in Grade 12 – Chemistry. A significant proportion of college applicants had taken the two Business courses in Grade 11 (10% and 9%), but surprisingly smaller proportions had taken college-preparation Technology courses, considering the fact that they represent a natural sequence to College Technology Programs. On the other hand, there were substantial numbers of college applicants who had taken some of the university/college-preparation courses (see Table 3.10).

Table 3.10: Secondary School University/College-Preparation Courses Taken By 2003-04 College Applicants (%)

U/C Courses (Grade 11)	% 2003-04 Applicants	U/C Courses (Grade 12)	% 2003-04 Applicants
AVI3M Visual Arts	12	AVI4M Visual Arts	11
AMX3M Music	5	AMX4M Music	5
CGF3M Physical Geography: Patterns, Processes, & Interactions	8	CGR4M The Environment & Resource Management	3
CHW3M World History to the Sixteenth Century	16	HFA4M Food & Nutrition Sciences	8
CIE3M The Individual & the Economy	3	HHG4M Issues in Human Growth & Development	3
CLU3M Understanding Canadian Law	28	HHS4M Individuals & Families in a Diverse Society	23
HRE3M Religious Education: Faith & Culture	4	HRE4M Religious Education: Church & Culture	7
HRT3M World Religions: Beliefs, Issues, & Religious Traditions	21	HSB4M Challenge & Change in Society	14
HSP3M Introduction to Anthropology, Psychology, & Sociology	22	ICE4M Computer Engineering	4
ICE3M Computer Engineering	7	ICS4M Computer & Information Science	7
ICS3M Computer & Information Science	17	SNC4M Science	1
SNC3M Science	4	TDJ4M Technological Design	6
TDJ3M Technological Design	10	TGJ4M Communications Technology	13
TGJ3M Communications Technology	20		

Source: OCAS data files.

Understanding Canadian Law (CLU3M), World Religions: Beliefs, Issues and Religious Traditions (HRT3M), Parenting (HPC3O), Introduction to Anthropology, Psychology and Sociology (HSP3M), Challenge and Change in Society (HSB4M) were commonly represented on college applicant transcripts. Students who took Computer and Information Science (ICS3M), Communications Technology and Technological Design (TGJ3M and TDJ4M) appeared to have specific college programs in mind. In summary, very few students took sequences of Business, Health or Technology courses that could be defined as suitable for college preparation.

D. Cooperative Education and OYAP Enrolments

The reduction of the secondary school programs to four years has effectively reduced the opportunity for students to take Cooperative Education² courses (30 credits are required in four years currently versus 30 credits in five years before the Reorganized Program). Recent changes to the graduation requirement regulations to allow Cooperative Education courses to count as required course credits by the Ministry of Education was intended to encourage more student involvement in Cooperative Education. Figure 3.4 illustrates the decline in Grade 11 Cooperative Education enrolments (see *Double Cohort Study, Phase 3*, p.106 for details), but more encouraging numbers in this study's school sample in Grade 12 and Year 5, especially for students planning on college and apprenticeship (see Tables C84 to C86 in Appendix C). A number of new programs have been recently introduced designed to facilitate the transition to college that involve Cooperative Education. If those programs are successful, college enrolments should increase.

² *A cooperative education course must be based on a related course (or courses) from an Ontario curriculum policy document or a ministry-approved locally developed course in which the student is enrolled or which he or she has successfully completed. The cooperative education course and the related course (or courses) together constitute a student's cooperative education program, designed to suit the student's strengths, interests, and needs and to enhance the student's preparation for the future.*

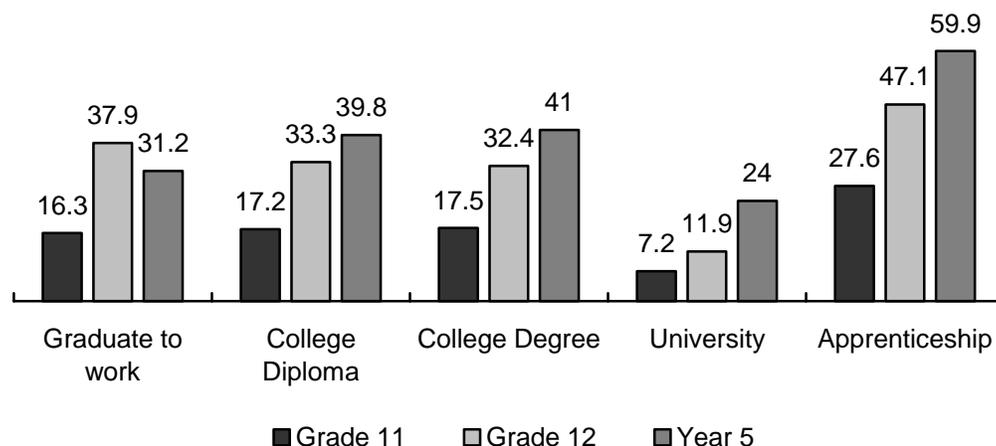
Cooperative education courses include a classroom component, comprising pre-placement and integration activities, and a placement component. Students earn cooperative education credits by integrating classroom theory with planned learning experiences in the community to achieve learning based on the curriculum expectations of the related course....

The student may take the cooperative education course concurrently with the related course or after successful completion of that course....

*A cooperative education course, including both the classroom component and the placement component, must be scheduled for at least the same number of hours as required for any **one** of its related courses (for a minimum of 110 hours) and for at most twice the number of hours required for **each** related course.*

(excerpts from Cooperative Education and Other Forms of Experiential Learning: Policies and Procedures for Ontario Secondary Schools, Ministry of Education)

Figure 3.4: Taking or Have Taken a Course Through Cooperative Education, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)



The Ontario Youth Apprenticeship Program (OYAP) is designed to involve students in apprenticeship programs before they actually graduate from secondary school.³

Relatively small numbers of students from this study participated in OYAP, as evidenced in Tables C87 to C89 in Appendix C. OYAP students take Cooperative Education credits which are most commonly linked to Technology courses. The main difference from other Cooperative Education students is the nature of their work placements and the OYAP designation.

The percentage of students involved in OYAP has increased since 2003-04 (Grade 11: 1.9% and Grade 12: 2.7% in *Double Cohort Study, Phase 4, 2005*). Nevertheless, the percentage of Grade 12 and Year 5 students planning on an apprenticeship and taking OYAP is surprisingly low. (Table 1.7 on p.19 showed that 5.7 percent of Grade 11s, 5.4 percent of Grade 12s, and 7.3 percent of Year 5 students planned on becoming an apprentice and 2.4 percent of Grade

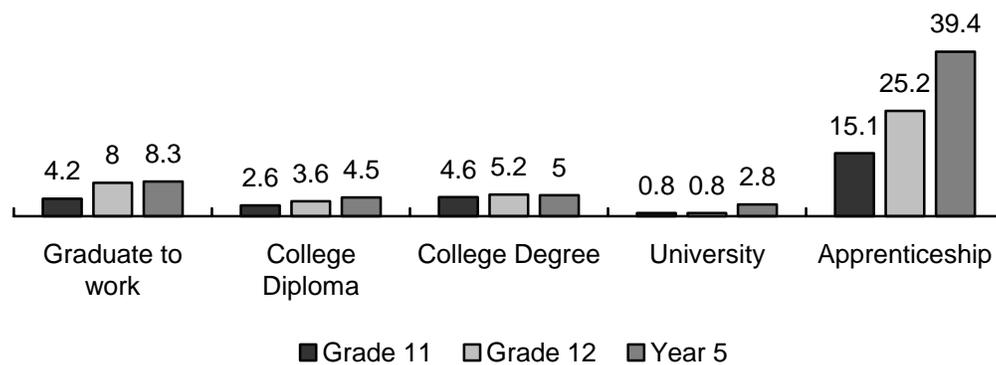
³ The Ontario Youth Apprenticeship Program (OYAP) is: ... a specialized program that enables students who are 16 years of age or older to meet diploma requirements while participating in an occupation that requires apprenticeship. ... An OYAP student is a student who is earning Cooperative Education credits for work experience in an apprenticeship occupation. The student may or may not be formally registered as an apprentice while attending secondary school.

(excerpts from Cooperative Education and Other Forms of Experiential Learning: Policies and Procedures for Ontario Secondary Schools, Ministry of Education)

11s, 3.5 percent of Grade 12s and 6.5 percent of Year 5 students were planning to be OYAP participants.)

Figure 3.5 presents the proportion of students who were participating in OYAP by their post-secondary plans (also see Tables C90 to C92 in Appendix C).

Figure 3.5: Participation in Ontario Youth Apprenticeship Program (OYAP), by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)



Participants in OYAP were mainly apprenticeship-planning students and of those planning on apprenticeship, more OYAP participants were in Year 5.

The linkage between the colleges, the Ministry of Training, Colleges and Universities, apprenticeship and OYAP is unclear for many students.

Part IV. Post-Secondary Plans

One of the major curriculum changes in the Reorganized Program for Ontario secondary schools was the development of destination-based Grade 11 and 12 courses. These courses were designed on the assumption that in the average secondary school there would be sufficient students eligible and interested in taking such courses. As a result, the transition to work, college or university would be facilitated. In the previous section, it was made quite clear that very few Grade 11 and 12 college-preparation courses were available to students in most schools and as a result students rarely took a college-preparation sequence of courses. If we had focused on workplace-preparation courses we would have noted that this situation was even worse. In addition, Ministry of Education officials made the assumption that student aspirations from Grade 10 to Grade 12 would be stable and, therefore, viable program sequences could be developed. In this section, we closely examine the relationship between student aspirations and school achievement with special emphasis on college preparation.

First we look at the courses taken by our sample of students when in Grade 9 in light of their plans in Grades 11 and 12 and Year 5. Then using Double Cohort Study data, we examine changes in students plans between Grades 10 and 12, and using this study's Post-Secondary Plans Survey data, we explore timing of decisions, the relationship between plans and academic achievement, and plans for college program and type of work. Finally, we present the number of post-secondary institutions applied to and alternative plans if not accepted.

A. English and Mathematics Courses Taken in Grade 9

One strong indication of changing educational plans is the relationship between the type of courses (Applied, Academic, Locally Developed) taken by students in Grade 9 and their plans in senior grades. Tables 4.1 and 4.2 present student responses to the question related to the type of English and Mathematics courses taken in Grade 9 and their current educational plans (see also Tables C93 to C98 in Appendix C; Tables C99 to C101 indicate the responses for Science courses).

**Table 4.1: English – Type Taken in Grade 9, by Post-Secondary Plans
(% Grades 11, 12 & Year 5 Students)**

Post-Secondary Plans	Grade 11			Grade 12			Year 5		
	Academic	Applied	LD*	Academic	Applied	LD	Academic	Applied	LD
Graduate to work	29.4	56.5	14.0	35.0	57.6	7.4	34.3	56.5	9.3
College Diploma	60.7	37.0	2.3	62.4	35.9	1.8	52.7	43.7	3.5
College Degree	58.9	39.4	1.7	68.4	30.8	0.8	61.3	37.3	1.4
University	95.7	3.0	1.3	95.5	3.3	1.1	92.3	6.4	1.3
Apprenticeship	52.0	44.8	3.2	51.3	45.1	3.6	50.0	47.6	2.4

*LD = Locally Developed course(s), formerly Essential Skills course(s).

**Table 4.2: Mathematics – Type Taken in Grade 9, by Post-Secondary Plans
(% Grades 11, 12 & Year 5 Students)**

Post-Secondary Plans	Grade 11			Grade 12			Year 5		
	Academic	Applied	LD*	Academic	Applied	LD	Academic	Applied	LD
Graduate to work	26.5	59.2	14.2	34.0	58.1	7.9	34.0	57.5	8.5
College Diploma	53.8	43.2	3.1	55.7	41.7	2.6	49.9	46.3	3.8
College Degree	54.3	42.9	2.9	62.3	36.1	1.6	58.2	39.7	2.1
University	93.9	5.0	1.0	94.0	5.0	1.0	89.6	9.5	0.9
Apprenticeship	51.8	44.8	3.4	51.6	44.8	3.6	48.5	47.3	4.2

*LD = Locally Developed course(s), formerly Essential Skills course(s).

As might be expected, the proportions of Grade 11 and 12 students who took Academic, Applied and Essential Skills courses are similar (the proportion of students who took Essential Skills courses leveled off after the third year of the Reorganized Program implementation); Year 5 students were more likely to have taken Applied courses in Grade 9. Over 80 percent of the Grade 11 and 12 students in our sample had taken Grade 9 Academic English and nearly 80 percent had taken Grade 9 Academic Mathematics. Both numbers were lower for the Year 5 group (67.2 % and 64.9%). See Tables C102 to C110 in Appendix C.

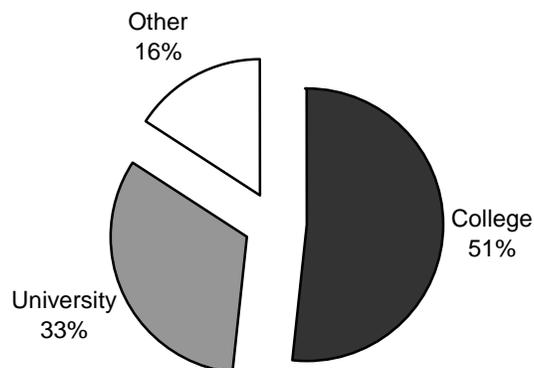
Surprisingly large numbers of our student sample planning on going directly to work or an apprenticeship had also taken Grade 9 Academic English and Mathematics. Well over one-half of the college-planning group had also taken Grade 9 Academic English and Mathematics.

B. Evolution of Post-Secondary Aspirations through Secondary School to College

The Double Cohort Study surveys indicated that 23.6 percent of Ontario students planned to go on to college when in Grade 10 (compared to 54.5% to university; see Appendix C of the Phase 1 Report, King, 2001, p.6). Sixty-two percent of these college-planning students were taking Applied courses or a mix of Applied and Academic courses. An analysis of the achievement of this latter group of students conducted for the Ministry of Education in 2004 indicated that many of this latter group of college-planning students were at risk of failing key courses. The actual proportion of the Grade 10 students planning and eligible to take Grade 11 college-preparation courses was a little smaller. The size of this group would be augmented by those students planning on university when in Grade 10 whose academic achievement indicated that a different direction might be appropriate.

When we look at the educational plans of Grade 12 students interested in attending college when they were in Grade 12 (Figure 4.1), we note that one-third of them planned on university when in Grade 10 and slightly over one-half of them had actually planned on college.

Figure 4.1: Post-Secondary Plans of Grade 12 College-Planning Students When They Were in Grade 10 (%)

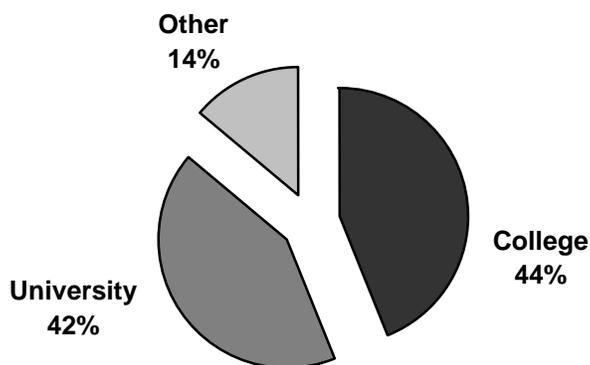


Planned to attend College when in Grade 12; 31.7% of Grade 12 enrolment

Source: Double Cohort Surveys (2001 & 2003), in *Double Cohort Study, Phase 4*, p.112 (2005).

Similarly, when we examined actual 2004 college applicants' educational plans when they were in Grade 10 (Figure 4.2), we noted that nearly as many planned on university as college.

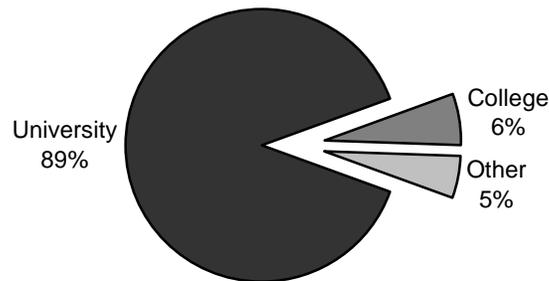
Figure 4.2: Post-Secondary Plans of 2004 College Applicants From Grade 12 When They Were in Grade 10 (n=3020)



Source: *Double Cohort Study, Phase 4 data file (2005)*.

The pattern was quite different for Grade 12 students expecting to attend university (Figure 4.3). Most of them, 89 percent, also planned on university when they were in Grade 10. It is much easier to design destination-based course sequences for Grade 11 and 12 students when their educational plans after Grade 10 are quite stable and when the numbers planning on a particular destination represent over one-half of a school's enrolment. While this is the case for students planning on university, it is not so for those planning on college. Nearly one-half of Grade 12 students who apply to college programs plan on a university education when in Grade 10 making the scheduling of university courses a priority. The decision to attend college is as likely to occur in Grade 12 as Grade 10. Ironically, nearly one-half of the students who attend college have taken what is essentially a university set of courses when in Grade 12.

Figure 4.3: Post-Secondary Plans of Grade 12 University-Planning Students When They Were in Grade 10 (%)



Planning to attend university when in Grade 12 = 48.8% of Grade 12 enrolment

Source: *Double Cohort Study, Phases 2 & 3 (2002 & 2004)*.

In summary, the students who were in Grade 12 or Year 5 applying to college are more likely to have experienced much more uncertainty about their educational plans than those who plan to apply to university.

C. Timing of Post-Secondary Education Decisions

The question When did you make the decision to obtain a post-secondary education? was posed in order to gain some insight into the timing of students' decisions to further their education and the timeliness for students to receive information about post-secondary education options so that they can make appropriate course selection decisions. As previously discussed, it appears that some students tend to make the decision to apply to colleges because they lack the marks that would permit them to apply to university. Responses to this question provide more background to reinforce this finding.

Tables 4.3 to 4.5 present the information about timing of decisions for post-secondary education by the post-secondary plans of Grade 11 students, Grade 12 students and Year 5 students, respectively (see also Tables C111 to C113 in Appendix C).

College-planning students, and those planning on apprenticeship, were far more likely than university-planning students to make the decision about post-secondary education in Grade 10 or afterwards. Those students planning on university were far more likely than those planning on college to make their decision before Grade 10. Many college-planning students did not make their decisions until Grade 11 or 12. The students who indicated that they were planning on graduating and working were most likely to be undecided, and the apprenticeship group were late deciders. Many of the Year 5 students were late decision makers. Over one-half of them decided on college in Grade 11 or later. For some of them, they would have changed a decision that was made earlier.

Table 4.3: ‘When did you make the decision to obtain a post-secondary education?’, by Post-Secondary Plans (% Grade 11 Students)

Post-Secondary Plans	Grade 11				
	Have not decided	Before Grade 9	Grade 9	Grade 10	Grade 11
Graduate to work	70.8	8.0	2.9	7.3	10.9
College Diploma	23.3	22.5	12.2	26.1	16.0
College Degree	14.5	31.4	10.1	28.3	15.7
University	11.8	52.2	12.3	15.5	8.2
Apprenticeship	29.9	17.3	12.6	23.8	16.5

Table 4.4: ‘When did you make the decision to obtain a post-secondary education?’, by Post-Secondary Plans (% Grade 12 Students)

Post-Secondary Plans	Grade 12					
	Have not decided	Before Grade 9	Grade 9	Grade 10	Grade 11	Grade 12
Graduate to work	62.6	7.3	4.9	4.1	5.7	15.4
College Diploma	14.3	22.4	7.7	13.0	24.2	18.4
College Degree	9.3	28.5	10.7	16.0	17.3	18.1
University	4.1	50.8	10.9	9.0	14.0	11.1
Apprenticeship	24.7	14.7	6.2	9.3	25.5	19.6

Table 4.5: ‘When did you make the decision to obtain a post-secondary education?’, by Post-Secondary Plans (% Year 5 Students)

Post-Secondary Plans	Year 5					
	Have not decided	Before Grade 9	Grade 9	Grade 10	Grade 11	Grade 12
Graduate to work	68.5	6.8	4.1	5.5	6.8	8.2
College Diploma	13.5	20.0	7.4	9.1	18.7	31.2
College Degree	8.6	24.3	11.4	11.4	16.4	27.9
University	5.0	39.4	11.4	8.7	13.1	22.4
Apprenticeship	24.6	10.4	6.0	9.0	19.4	30.6

On the basis of the information in these tables, it is easy to see why the uncertainty and late decision making of the college-planning students makes scheduling of college-preparation courses difficult. The tendency for many of these students to try to keep as many doors open as possible sustains enrolments in university- and university/college-preparation courses at the expense of the college-preparation courses.

1. Years Expected to Take to Graduate

When the Reorganized Program in Ontario secondary schools was introduced in 1999, many educators assumed that a substantial proportion of the Grade 9 student population would choose to take five years in secondary school. However, the new course sequencing and a higher rate of student success in university- and university/college-preparation courses than in previous OAC courses has facilitated timetabling and made it easier for students to graduate in four years. Four-year graduation has become the norm. For example, 72 percent of the 2006 university applicants took four years in secondary school (OUAC communication).

Over two-thirds of the Grade 11 and 12 students expected to graduate in four years and well over 80 percent by four and one-half years (see Table 4.6). Over 30 percent of Year 5 students had previously graduated or expected to graduate after spending only one-half of their fifth year in secondary school, a finding which is consistent with the *Double Cohort Study, Phase 4*, finding (King, Warren, Boyer & Chin, 2005). See Tables C114 to C116 in Appendix C.

**Table 4.6: Years Expected to Take to Graduate
(% Grade 11 & 12 Students)**

Years Expected to Graduate	Grade 11	Grade 12
Do not expect to graduate	0.4	0.4
4 years	69.2	68.9
4½ years	14.6	15.3
5 years	10.8	12.4
More than 5 years	0.5	0.5
Uncertain	4.4	2.5

Table 4.7, presenting the same information by post-secondary plans, indicates that a far greater proportion of students planning on university expect to graduate in four years than the other groups. The substantial number of college-planning students who expect to take four and one-half years to graduate suggests that winter term entry to colleges should be emphasized in college advertising (see also Tables C117 and C118 in Appendix C).

**Table 4.7: Years Expected to Take to Graduate, by Post-Secondary Plans
(% Grade 11 & 12 Students)***

Post-Secondary Plans Years:	Grade 11				Grade 12			
	4	4½	5	>5	4	4½	5	>5
Graduate to work	50.0	19.0	15.7	2.3	52.2	22.0	16.1	2.4
College Diploma	55.6	22.5	15.6	0.6	60.6	21.4	14.0	0.7
College Degree	65.7	18.7	11.9	0.6	65.5	16.5	15.5	0.0
University	78.3	10.7	7.9	0.2	78.6	10.2	9.5	0.3
Apprenticeship	62.5	16.3	15.2	1.1	56.9	23.0	14.9	1.1

* Percentages do not add up to 100 percent because students not expecting to graduate (38 in Grade 11 and 32 in Grade 12), and those who responded 'do not know' (434 Grade 11s and 218 Grade 12s) were not included in this table.

D. Relationship between Post-Secondary Aspirations and Secondary School Achievement

To gain an understanding of the relationship between students' educational aspirations and their school achievement, it is useful to examine not only the type of courses taken in Grade 9 but also credits completed in Grades 9 and 10, summer school credits taken, and average marks with respect to educational plans when in Grades 11, 12 and Year 5.

1. Credit Status

The students were asked how many credits they had successfully completed in Grades 9 and 10 (see Tables C119 to C124 in Appendix C). Table 4.8 indicates that similar percentages of Grade 11 and Grade 12 students had gained 8 or more credits in Grade 9 while, as might be expected since they had remained for an additional year, considerably fewer Year 5 students had done so (74.4%).

Table 4.8: Grade 9 Credits Attained (% Grades 11, 12 & Year 5 Students)

# Credits	Grade 11	Grade 12	Year 5
8 or more	84.6	85.6	74.4
7	6.6	7.7	12.1
6	2.4	2.7	5.5
5	0.8	0.6	2.7
4.5 or fewer	5.6	3.3	5.3

A surprisingly large number of these students were at risk of not graduating. Grade 10 success rates were even lower for student respondents, with approximately 10 percent of Grade 11s, 7 percent of Grade 12s and 17 percent of Year 5 students obtaining six or fewer credits. (Tables C125 to C127 show responses with regard to Grades 11 and 12.)

Table 4.9: Grade 10 Credits Attained (% Grades 11, 12 & Year 5 Students)

# Credits	Grade 11	Grade 12	Year 5
8 or more	79.8	81.4	67.2
7	9.8	11.0	16.0
6	3.1	3.3	7.2
5	1.3	0.8	2.8
4.5 or fewer	6.0	3.4	6.8

Table 4.10 presents the proportion of students who had attained 8 credits or more in each of Grades 9 and 10 in terms of their current post-secondary plans (see Tables C128 to C133 in Appendix C).

Table 4.10: Eight or More Credits Attained in Grades 9 & 10, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

Post-Secondary Plans	Grade 11		Grade 12		Year 5	
	In Grade 9	In Grade 10	In Grade 9	In Grade 10	In Grade 9	In Grade 10
Graduate to work	59.0	50.3	59.0	58.9	49.3	34.3
College Diploma	73.4	67.0	75.6	69.7	65.9	60.3
College Degree	75.1	73.8	79.0	76.9	73.7	57.0
University	91.3	87.7	93.5	89.9	87.5	83.1
Apprenticeship	77.7	69.2	71.8	66.0	64.7	50.7

The students planning on university were more likely to have achieved 8 or more credits in each year and those expecting to graduate and go to work the least. The College Degree group were a little more likely to have successfully completed all their Grade 9 and 10 courses than the College Diploma group, with the exception of Year 5 students in their Grade 10 year.

Are students with different post-secondary plans more or less likely to attend summer school? Perhaps most important are those students who have failed courses more or less likely to attend summer school depending on their post-secondary plans? Table 4.11 indicates the percentage of each post-secondary plans group who took a summer school course(s) after each school year.

Table 4.11: Summer School Attendance After Each Grade, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

Post-Secondary Plans	Grades/ Year	After Grade 9	After Grade 10	After Grade 11	After Grade 12
Graduate to work	Grade 11	13.0	9.1		
	Grade 12	10.5	10.8	5.5	
	Year 5	12.9	15.9	15.9	3.6
College Diploma	Grade 11	12.6	10.3		
	Grade 12	11.8	12.6	10.0	
	Year 5	15.6	14.1	11.6	7.1
College Degree	Grade 11	11.6	11.7		
	Grade 12	10.4	11.5	14.1	
	Year 5	14.0	14.9	12.7	9.5
University	Grade 11	8.2	10.8		
	Grade 12	7.9	9.3	13.6	
	Year 5	9.8	11.8	13.8	9.2
Apprenticeship	Grade 11	10.6	10.8		
	Grade 12	14.6	10.6	7.8	
	Year 5	19.1	19.4	10.5	5.7

The Year 5 group was most likely to have taken summer school courses throughout school, especially the apprenticeship-planning group after Grades 9 and 10. Considering their lack of success in Grades 9 and 10, the 'Graduate-to-Work' Grades 11 and 12 group were not much more likely to attend summer school than the university-planning group. Although summer school attendance was correlated with credits lost in Grades 9 and 10, it was also associated with educational plans, especially in Grades 10 and 11; that is, university-planning students were more likely to repeat a failed course in the summer than college-planning or apprenticeship-planning students even though proportionately fewer of them took a summer school course (i.e., the university-planning students had failed fewer

courses, see Table 4.10). Tables C134 to C142 in Appendix C provide student responses to the question on the number of credits successfully completed in summer school after each year, by post-secondary plans.

2. Average Marks

Students were asked to report their approximate overall average for the previous year.

Table 4.12 and Tables C143 to C145 in Appendix C present the responses to that question.

**Table 4.12: Previous Year's Average Marks
(% Grades 11, 12 & Year 5 Students)**

2004-05 Average Marks	Grade 11	Grade 12	Year 5
50% and lower	0.6	0.7	2.0
51 to 54%	1.5	1.6	4.3
55 to 59%	1.9	1.8	4.2
60 to 64%	6.1	5.8	12.3
65 to 69%	9.7	10.1	13.9
70 to 74%	16.7	17.6	21.2
75 to 79%	22.5	22.6	19.2
80 to 84%	20.1	20.4	12.6
85 to 89%	13.8	12.8	7.2
90% and higher	7.1	6.6	3.2

In order to compare the achievement of college-planning students with that of university-planning students, the students were asked to report their previous years' average marks. The responses of college- and university-planning students with regard to their previous year's average marks were categorized by their post-secondary plans and presented in Figures 4.4 to 4.6 and Tables C146 to C148 in Appendix C. (The average marks of the Graduate-to-Work and Apprenticeship groups can be found in those same Appendix C tables.)

Figure 4.4: Previous Years' Average Marks, by Educational Plans (% Grade 11 Students)

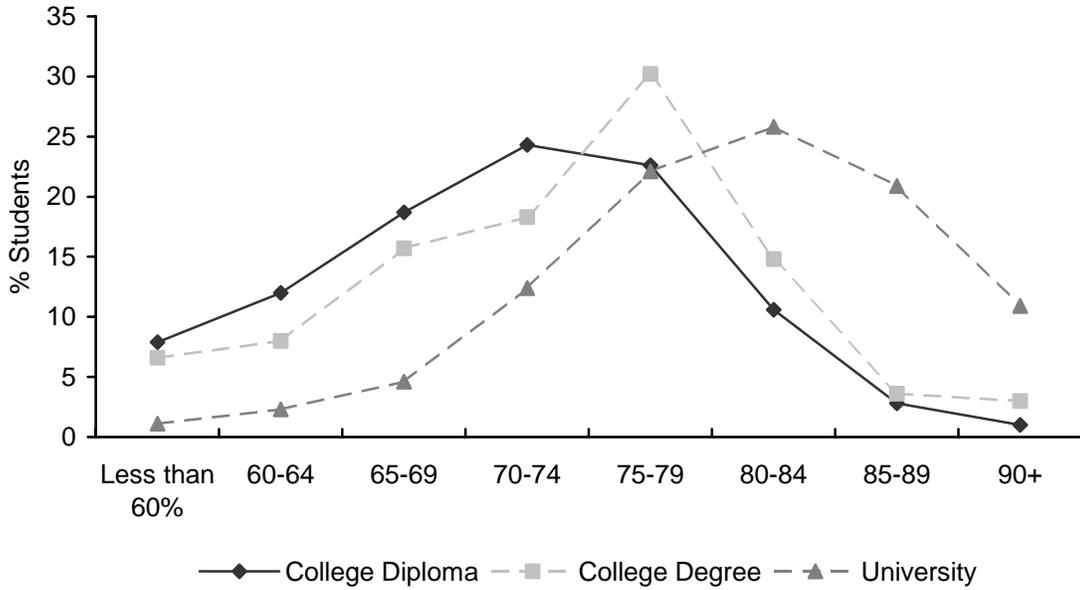


Figure 4.5: Previous Years' Average Marks, by Educational Plans (% Grade 12 Students)

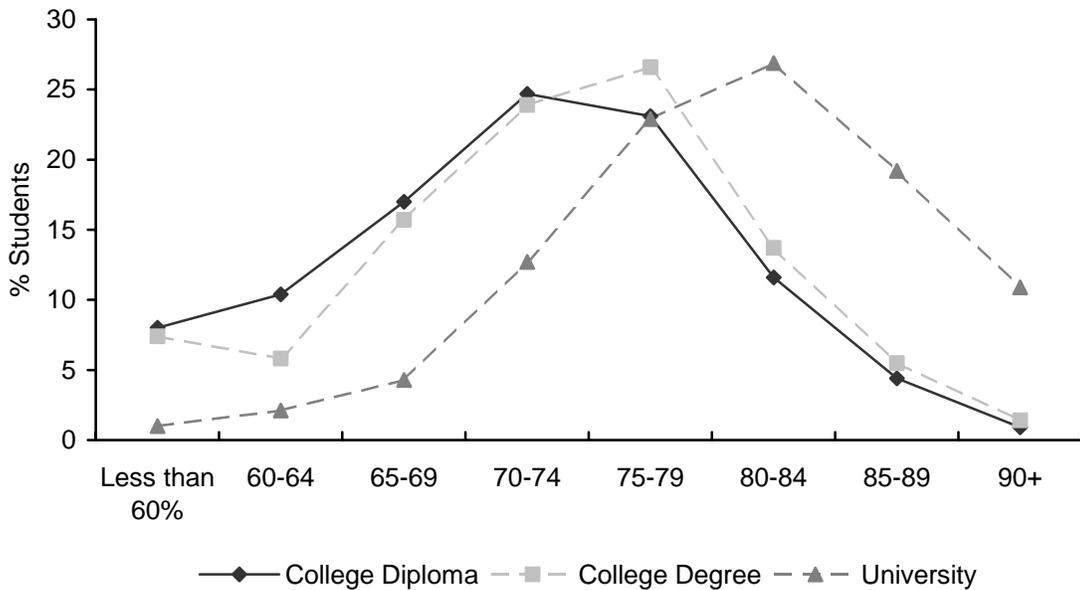
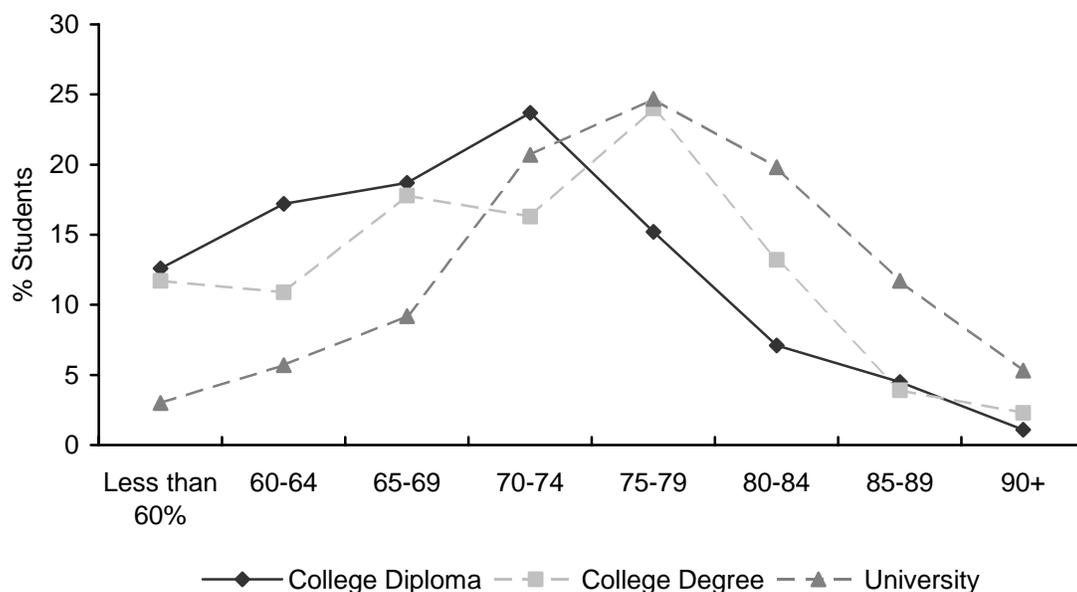


Figure 4.6: Previous Years' Average Marks, by Educational Plans (% Year 5 Students)



The Grade 11 students were referring to their Grade 10 marks, the Grade 12 students to their Grade 11 marks and the Year 5 students to their Grade 12 marks. Grades 11 and 12 students who plan on taking a College Applied Degree Program had slightly higher mark averages than those planning on taking a College Diploma Program. There were sharp differences in achievement between those planning on university and those planning on college. The majority of university-planning Grade 11 and 12 students had marks over 80 percent, while less than one-quarter of the college planners had marks this high. Nevertheless, there was still a great deal of overlap between the average mark distribution; that is, many college-planning students appeared to have the necessary marks to consider a university education. Also, more college-planning students than university-planning students were achieving marks that placed them in the 'at-risk-of-not-graduating' category.

There were more college-planning Grade 11 students with Grade 10 marks in the 'at risk' range than was the case for the Grade 12 equivalent group. These achievement patterns parallel the changing aspirations of college-planning students and re-emphasize the difficulties of designing college-preparation course sequences for Grades 11 and 12 students.

There were notably fewer higher achieving students in the Year 5 university-planning group and more college-planning students with average marks less than 70 percent than was the case for Grades 11 and 12 students.

Not surprisingly, the theme ‘would attend college if unable to qualify for university’ was threaded through students’ comments and illustrates the relationship between academic achievement and educational plans. The following quotes illustrate this perspective:

I would like to go to university, but if my marks are not that great then I will go to college. (Grade 11 female, planning on university after time off)

I am planning to [go to college] because I don't have the grades for university and because what I want to do is at college. (Grade 12 female, planning on college diploma or certificate)

My marks are not university type, they are college. I would take college because its cheaper, not long, and it will be much easier to me. Also, my family is here so I don't have to pay for living costs. (Grade 11 female, other plans)

I would consider attending a college if my marks were lower, however, I plan on attending a university. (Grade 12 male, planning on university)

E. College Program Plans

The students who indicated that they aspired to college were asked what program they were planning on taking and what kind of job they expected to have in the future. This questionnaire item was designed to determine how much they knew about college programs (that is, did they identify programs that were offered in colleges?) and the relationship between college programs and real work opportunities.

It must be noted that each of the students would have gone through an exercise in the Grade 10 half-credit Guidance and Career Education course in which they were required to work through the stages of career planning in some detail. This process was intended for them to be able to set realistic educational and career goals.

The most common college program choices that students made are summarized in Table 4.13. About one-half of the students planning on college were ‘uncertain’ about the program they would take there although their work plans tended to be consistent with available college

programs. The Grade 11 students were most likely to be uncertain and the Year 5 students, the least likely.

Table 4.13: College Programs Selected In Order of Number of Choices (% Students)

College Diploma	
1. Police Foundations	14. Travel and Tourism/Hotel Management
2. Child and Youth Worker	15. Veterinary Technician
3. Business	16. Fashion Design
4. Early Childhood Education	17. Architectural Technology
5. Graphic Design	18. Animation
6. Paramedic	19. Electrical Engineering Technology
7. Dental Hygiene	20. Computer Programming
8. Firefighting	21. Computer Engineering Technology
9. Broadcasting/Journalism/Media Arts	22. Mechanical Engineering Technology
10. Photography	23. Aviation/Flight
11. Interior Design	24. Hairdressing
12. Massage Therapy	25. Advertising
13. Accounting	26. General Arts and Science
Applied or Collaborative Degree	
1. Nursing	
2. Animation	
3. Business	
4. Child and Youth Worker	

In almost every instance, the programs selected were among the range of college offerings. A substantial proportion of students selected apprenticeships which are not offered as college programs but delivered as part (for the in-school requirement) by the colleges and coordinated through the Ministry of Training, Colleges and Universities. This confusion on the part of some students presents some destination classification issues in our analysis since many students planning apprenticeships had designated college as their educational goal.

Police Foundations ranks far ahead of the other college programs in student choices, but significant proportions of students plan on Business, Early Childhood Education and Child and Youth Worker Programs. Over 50 types of college programs were identified as choices by students – a number far short of the available college programs; that is, many programs are offered in colleges that were not identified by the students in the study as their programs of interest.

Nursing was most prominent among the Applied or Collaborative Degree selections, but a surprisingly large proportion of students planning on Nursing had indicated that they were planning on taking Nursing as a Diploma Program. Almost all students planning on obtaining a college degree indicated an area that was offered in degree format.

Generally speaking, those students planning on college had an accurate perception of what programs are available that are consistent with their career goals. Even those who were uncertain about a specific program of interest indicated a ‘type of work’ they planned on doing that is available after completing a college program. Again, the apprenticeship programming structure appears to be confusing to many students.

F. Number of Colleges and Universities Applied To

Since the surveys were administered at about or shortly after the time when the Grade 12 and Year 5 students were applying to colleges and universities, we determined that the survey would provide a good opportunity to link their post-secondary plans with their applications.

First, it is important to determine the percentage of Grade 12 and Year 5 students who did not apply or plan to apply¹ (see Table 4.14). Over one-third of the Grade 12 students and just under 30 percent of the Year 5 students did not apply to a college or university. Far more of those who did apply from Grade 12 applied to a university than did to a college. More of the Year 5 enrolment than Grade 12s applied to a college. See also Tables C149 to C156 in Appendix C.

Table 4.14 also presents the proportions of Grade 12 and Year 5 post-secondary applicants with regard to the types of institutions to which they applied. Over two-fifths of Grade 12 students and fewer Year 5 students applied to university. The percentage of Grade 12 students who applied to at least one College Degree Program and a University Program (1.6%) is in sharp contrast to the percentage who applied to only university (38.8%). The proportion of Grade 12 students who applied to a college program only is less (14%) than the proportion of Year 5 students (23.2%) who did so.

¹ The question referred to ‘have applied or planned to apply to a university or college this year’. To simplify, we refer to ‘applied to’ in the text and tables.

Table 4.14: Types/Combinations of Post-Secondary Educational Institutions Applied to (% Grade 12 & Year 5 Students)

Application Status/Location	Grade 12	Year 5
Did not apply/no plans to apply	35.4	29.1
Applied to an Ontario:		
College Diploma Program only	12.1	20.4
College Degree Program only	1.9	2.8
University only	38.8	27.5
College Diploma & Degree Programs	3.3	5.6
College Diploma Program & University	3.9	7.8
College Degree Program & University	1.6	2.1
College Diploma, College Degree Program & University	1.4	2.4
Applied to a College or University outside of Ontario only	1.6	2.3

Table 4.15 summarizes students' responses to the question related to the number of colleges and universities to which they applied (see also Tables C157 to C168 in Appendix C). Nearly one-quarter of the Grade 12 students applied to an Ontario college. If we assume that the Grade 12 enrolment is about 90 percent of the baseline Grade 9 enrolment and that 10 to 11 percent of this baseline enrolment will actually go to college directly after Grade 12 (Figure 1.4, p.9), then less than one-half of those applicants will actually go directly to college. Some will go to university (about one-half of those who apply to both will go to college). Of course, many will go to either university or college after Year 5 and others, at a later date.

Not all who apply to an Ontario university will actually attend in the fall. Some will attend university outside the province and others will attend a college, others will not be accepted and return for a fifth year, and others will enter the workforce.

Year 5 students are more likely to apply to a college than Grade 12 students and in greater numbers than to university. The percentage of Year 5 students who applied to a College Applied Degree or Collaborative Degree Program was 12.9 percent compared to 8.2 percent of the Grade 12 students.

The number of colleges and universities applied to is less than during the double cohort years, but still higher than in the pre-double cohort years. About one-quarter of those who apply to a College Diploma Program and 40 percent who apply to an Applied or Collaborative Degree Program applied to only one college. The average number of colleges applied to per student

was less than the average number of universities applied to per student. The interest in institutions outside the province encouraged by the pressure of the double cohort has been maintained, especially among university applicants. Nevertheless, a small number of students apply to college outside the province and country. It should be noted that students can apply to several programs at one institution.

Table 4.15: Number of Colleges and Universities Applied to Within Ontario and Outside of Ontario (% Grade 12 & Year 5 Students)

Institutions Applied to	Grade 12						Year 5					
	% Students Applying	One	Two	Three	Four	Five or more	% Students Applying	One	Two	Three	Four	Five or more
Ontario colleges (Diploma Program)	20.7	25.2	21.0	23.9	9.5	20.5	36.2	26.9	16.2	24.1	8.5	24.3
Ontario colleges (Degree Program)	8.2	40.7	26.5	17.5	5.6	9.7	12.9	39.8	26.1	17.4	3.1	13.7
Ontario universities	45.7	6.7	10.5	42.2	20.0	20.6	39.8	7.6	11.1	46.9	15.1	19.3
Colleges outside Ontario, in Canada	3.4	53.6	22.2	13.1	5.2	5.9	5.1	49.0	30.6	10.2	4.1	6.1
Universities outside Ontario, in Canada	11.4	59.8	26.4	8.9	3.3	1.6	8.7	53.2	25.8	12.9	4.0	4.0
Colleges or Universities outside Canada	3.7	40.8	22.0	10.5	13.1	13.6	4.5	43.3	25.0	16.7	3.3	11.7
At least one college and at least one university	6.9						12.3					

NB. In this report, 'college diploma' refers to both College Diploma and Certificate Programs at colleges. 'College degree' refers to Applied Degree Programs and Joint or Collaborative Degree Programs.

Tables 4.16 and 4.17 present the percentages of Grade 12 and Year 5 students who applied to particular types of post-secondary institutions/programs in terms of their post-secondary educational plans (see also Tables C169 to C180 in Appendix C).

**Table 4.16: Post-Secondary Applications, by Educational Plans
(% Grade 12 Students)**

Post-Secondary Educational Plans	Grade 12 Students Applied to:		
	Ontario University	Ontario College Diploma Program	Ontario College Degree Program
University Degree	75.6	6.3	4.0
College Diploma	4.8	47.2	12.1
College Degree	11.1	47.1	38.4

**Table 4.17: Post-Secondary Applications, by Educational Plans
(% Year 5 Students)**

Post-Secondary Educational Plans	Year 5 Students Applied to:		
	Ontario University	Ontario College Diploma Program	Ontario College Degree Program
University Degree	84.9	18.3	7.3
College Diploma	6.1	57.2	14.6
College Degree	17.3	57.5	44.9

Most of the students who applied to a post-secondary institution who said that they planned on university degree actually applied to a university – fewer in Grade 12 than Year 5. Most of those who planned on a college diploma (of those who actually applied) did apply to a College Diploma Program. However, more of those who planned on a College Degree Program actually applied to a College Diploma Program than they did to a College Degree Program. It is useful to note that over three-quarters of Grade 12 students planning on university applied during their Grade 12 year.

1. Plans If Not Accepted at College or University of Choice

Students were asked what they would do if they did not get accepted into any of the college or university programs that they had chosen and their responses have been tabulated in Table 4.18 (see also Tables C181 and C182 in Appendix C).

**Table 4.18: Plans if Not Accepted at Universities or Colleges of Choice
(% Grade 12 & Year 5 Students)**

Plans if Not Accepted	Grade 12	Year 5
Return to high school and reapply next year	37.3	6.6
Take night courses, etc*.and reapply next year	5.9	13.4
Reapply to another college or university program	19.7	24.2
Apply to a college program with the intention to transfer to a university later	5.7	11.7
Obtain a job	11.3	23.0
Other	5.5	7.6
Do not know	14.7	13.4

* Additional courses in the question were: courses at an adult learning centre or online credit courses.

Not unexpectedly, if they did not get accepted, the Grade 12 students were more likely to return to high school and reapply (37.3%), and the Year 5 students were more likely to take non-regular school courses and then reapply (13.4%). Both groups had substantial numbers that said they would reapply to another college or university (19.7% Grade 12s and 24.2% Year 5s). The strategy of applying to a college with the intent of later transferring to a university was mentioned by both groups, but more commonly by the Year 5 students (11.7% to 5.7%). Twice as many of the Year 5 students, as the Grade 12 students, would go to work (23% to 11.3%). The vast majority of these students did appear to have a plan if they were not accepted at a post-secondary institution to which they had applied.

Part V. Factors Influencing Post-Secondary Plans

Findings related to the factors that influence students' post-secondary plans or aspirations are presented in this part of the report. It is generally assumed that school people, involvement in school, and parents have a major influence on student decision making about their aspirations for furthering their education and establishing a career/obtaining a job after high school. The way in which school and parents affect post-secondary-plan decisions was of interest in this study. We first discuss the role of school, parents and peers, then students' knowledge of post-secondary programs and the world of work followed by students' sources of information on career and post-secondary educational planning. Finally, we introduce the topic of post-secondary education costs.

A. Role of School

There are those that feel secondary schools place greater emphasis on the preparation of students for university than for other destinations, including college. In order to shed some light on this issue, students were asked if their school placed equal emphasis on preparing students for college as for university. Nearly two-thirds of the responding students indicated that this was the case: about 63 percent of all students agreed with this item; however, 15.7 percent disagreed and 21.8 percent were uncertain (see Table C183 in Appendix C). The following comments provided by students illustrate the positive impressions of the colleges and universities that many students had.

Les collèges semble comme une bonne place pour faire des études services et profitable.... (11^e année, sexe féminin, prévoyant aller à l'université après une pause)

They (colleges) seem to be good. I have heard of a lot of people going. They say it's challenging, but you learn a lot and have a good time. I would like to go to one and maybe go to university afterwards.

(Grade 12 female, planning on college after time off)

I simply feel that universities open up more doors in the future than colleges do. I personally would love to go to both university (accounting) and college (chef). Unfortunately, I do not have enough money to pay for both.

(Grade 12 male, other plans)

Ontario colleges seem like they would direct anyone into the right direction....

(Grade 11 female, planning on applied or collaborative degree)

My general impression of Ontario colleges is fairly good. They are there to help us succeed in life and they seem like a very friendly environment. I would consider attending a college because the courses will help me with my career choice.

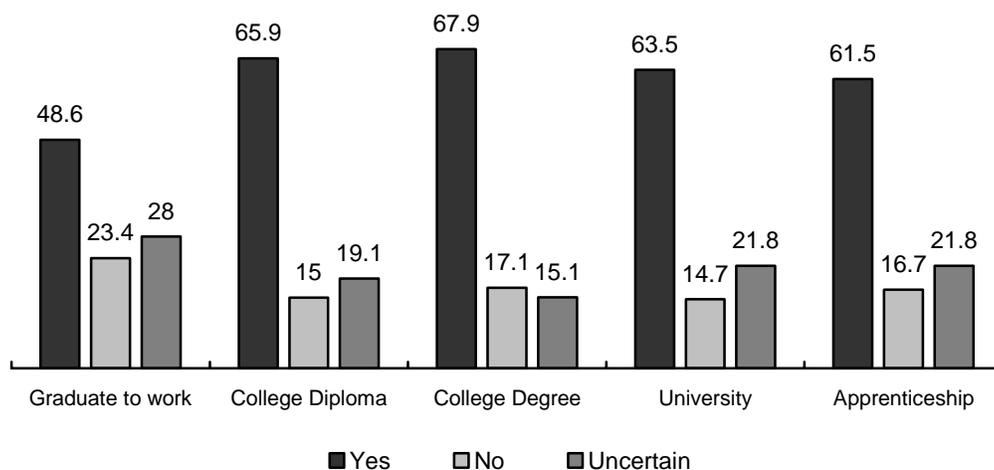
(Grade 12 female, other plans)

Those students who indicated ‘no’ or ‘uncertain’ were more likely to be Grades 11 and 12 students planning to go to work directly from secondary school (see Figure 5.1 and Tables C184 to C187 in Appendix C). The way in which the question was worded made it difficult to interpret the ‘no’ responses, but relatively few students answered ‘no’ in any case and few made negative comments on the issue; for example, comments such as the following were rare.

My general impression is that college is second best. In elementary school they always tell you to be the best that you can be. Judging by the way teachers credit a university with such superiority to a college diploma, I doubt I will ever attempt to get a college diploma. (Grade 12 male, planning on university)

... Just like high school, the university courses overpower college courses. (Grade 12 male, planning on university)

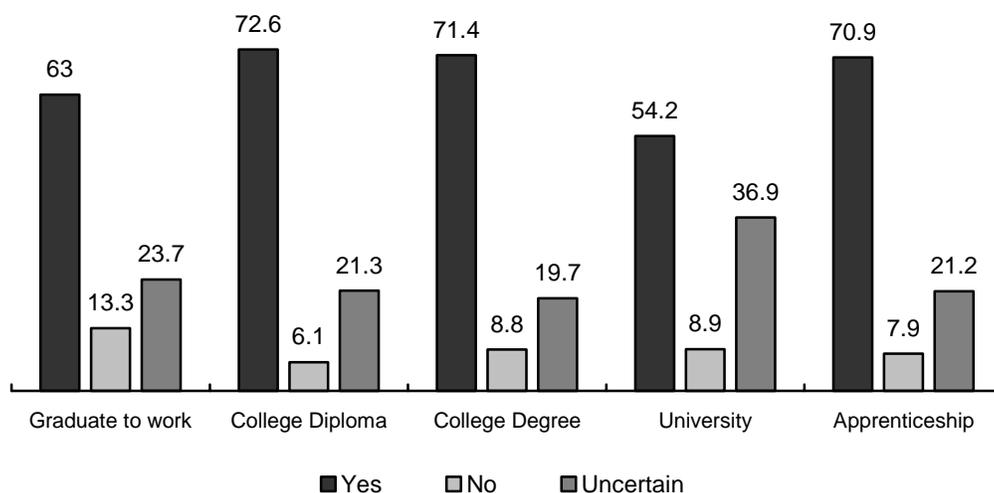
Figure 5.1: 'This school places almost equal emphasis upon preparing students for college and university', by Post-Secondary Plans (% Students)



Interestingly, Figure 5.1 also shows that proportionally more of the college-planning students than their university-planning counterparts agreed with the statement that their school equally emphasizes the preparation of students for both college and university. Differences on this item are pronounced from school to school (see p.122).

Generally speaking, most students saw their teachers having a positive opinion about a college education (Figure 5.2 and Table C188 in Appendix C).

Figure 5.2: 'Most of my teachers have a positive opinion about a college education', by Post-Secondary Plans (% Students)



The university-planning students were least likely to say 'yes' but far more likely to say 'uncertain' than the other groups (see Table C189 in Appendix C). Of course, to some extent the groups were taught by different teachers; that is, the Apprenticeship group was more likely to be taught by those teaching workplace and technology courses and so on. Therefore, the post-secondary plans groups are not necessarily talking about the same teachers. Many students commented quite positively about their teachers' support for college.

... The colleges I am looking at are very highly spoken of by teachers and guidance counsellors.
 (Grade 12 female, planning on applied or collaborative degree)

However, some students did not share this view of their teachers.

... Teachers and/or guidance counsellors don't speak about colleges and universities on the same level. I understand, of course, that both hold different opportunities, however, most teachers that have graced my presence seem to look down on the college institutions. (Year 5 female, planning on university)

... Because teachers are mainly trying to put the pressure on the students to attend university, we don't learn much about colleges.
 (Grade 12 female – planning on college after time off)

1. Involvement in School Life

In this section, we describe the extent of involvement of students with activities in their schools. The research question is: Do students planning on college or an apprenticeship feel as well integrated into their school environment and participate as fully in the life of the school as those planning on university? If students feel that the focus in their school is mainly on university preparation, those considering college might be less involved in other aspects of school life and their achievement could be adversely affected.

How students feel about their school can be influenced by their involvement in secondary school life. A positive feeling of 'inclusion' can sustain their attachment to school, motivation to do well and continue in school. One indication of 'inclusiveness' is the extent to which students are involved in school intramural activities, as well as interschool sports. Table 5.1 presents participation information in terms of students' post-secondary plans (see also Tables C190 to C195 in Appendix C).

Table 5.1: 'This year, I am participating or plan to participate in interschool or intramural activities', by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

Post-Secondary Plans	Grade 11		Grade 12		Year 5	
	Interschool	Intramural	Interschool	Intramural	Interschool	Intramural
Graduate to work	17.1	13.7	25.0	20.5	29.6	17.4
College Diploma	33.9	27.2	28.3	28.2	28.9	25.8
College Degree	37.4	33.8	36.8	34.8	35.7	29.3
University	48.9	50.7	45.3	58.6	39.5	44.9
Apprenticeship	37.0	25.2	36.2	24.6	31.1	23.8

University-planning students are more likely than the other groups to participate both in interschool sports and intramural activities. The work-bound students and the apprenticeship-oriented are least likely to participate in intramurals. Even though substantial numbers of college-planning and apprenticeship-oriented students are participants, they are less likely to be involved than university-planning students.

Most students reported that they felt accepted in their school, although college-planning students were slightly less likely than university-planning students to feel that way (see Table 5.2 and Tables C196 to C199 in Appendix C).

**Table 5.2: 'I Feel Accepted in This School', by Post-Secondary Plans
(% Grades 11, 12 & Year 5 Students)**

Post-Secondary Plans	Grade 11	Grade 12	Year 5
Graduate to work	72.2	72.5	68.5
College Diploma	84.3	83.1	80.5
College Degree	87.9	86.2	77.3
University	90.7	90.0	84.3
Apprenticeship	87.5	86.0	77.5

Work-bound students are the least likely to feel accepted, and this may be related to their low participation in extracurricular activities. The relatively low participation in school activities of the college-planning students, by contrast, appears to have little effect on their comfort level in the school, even in the schools that promote university-preparation goals.

a. Part-Time Work

In our previous research (King, 1986; King & Peart, 1990; King & Peart, 1994), it was found that students who spent over 12 to 15 hours in part-time work were more likely to have lower academic achievement than those who worked less. For this study we were more concerned with part-time work as an indicator of disengagement from school life and perhaps early transition to work. We asked the students if they worked 10 hours a week or more and then examined their responses in terms of their post-secondary plans (see Table 5.3 and Tables C200 to C202 in Appendix C).

Table 5.3: Part-Time Work, 10 Hours or More a Week, by Post-Secondary Plans (% Grades 11, 12 & Year 5 Students)

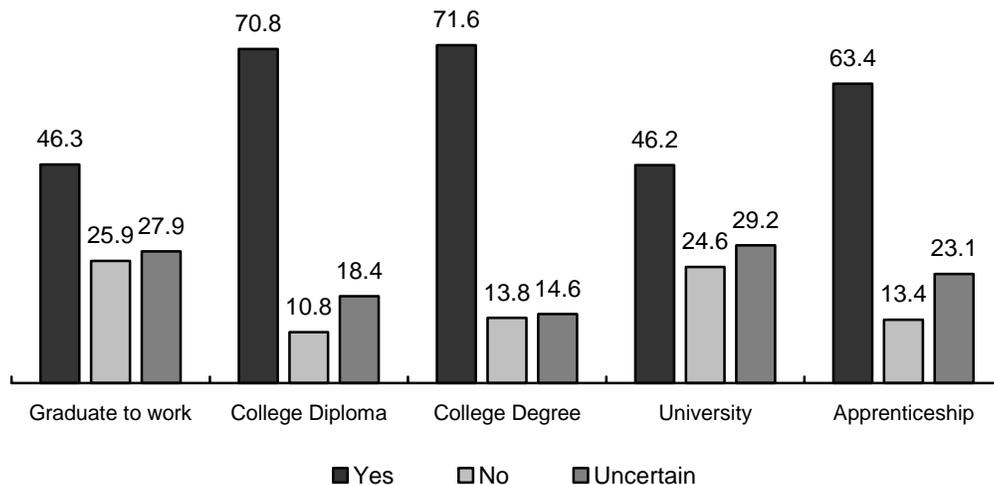
Post-Secondary Plans	Grade 11	Grade 12	Year 5
Graduate to work	35.4	51.0	45.4
College Diploma	46.2	58.7	60.8
College Degree	48.7	62.0	53.2
University	36.0	48.7	58.4
Apprenticeship	49.8	59.1	61.3

Surprisingly, few of the Grade 11 students who planned to go to work after graduating were working 10 or more hours per week; about one-half of the Grade 12 and slightly fewer of the Year 5 students in this group were doing so. Being involved in part-time work does not appear to differentiate between the college-planning and university-planning students in Year 5 but does so in Grades 11 and 12.

B. Role of Peers

Students tend to have friends with similar interests and to some extent similar post-secondary plans. Therefore, it is not surprising to find that students planning to go directly to work and those planning on university are least likely to say that their friends have a positive opinion of a college education (Figure 5.3 and Table C203 in Appendix C).

Figure 5.3: 'Most of my friends have a positive opinion about a college education', by Post-Secondary Plans (% Students)



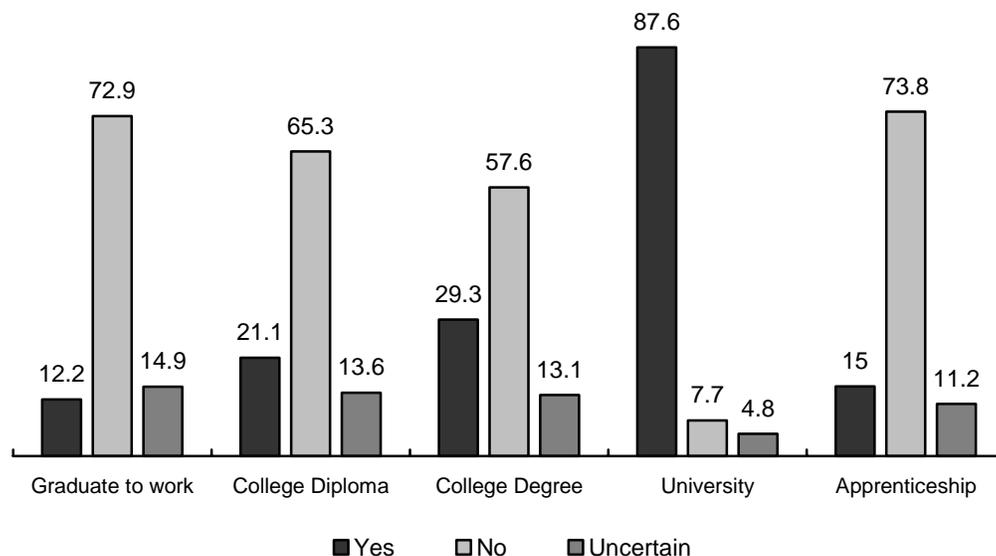
Very few students provided comments about their friends' views on a college education. Although overall, the students saw their teachers and friends as being positively disposed toward a college education, it was clear that students with similar educational plans had friends with similar views about a college education. More students were positive in Grade 12 than Grade 11, and the Year 5 students were especially positive (see Tables C204 to Table C206 in Appendix C).

C. Role of Parents

The expectation that the majority of students' parents encourage their children to obtain a university education was constantly reflected in interviews we have conducted over the years with guidance counsellors and students (e.g., for the *Double Cohort Study, Phase 3, 2004*) and is reinforced in the tendency for some students to plough ahead taking university-preparation courses despite their low achievement in the courses. We asked students to respond to two items about parents' influence in order to assess the importance of this issue and, indirectly, its impact on the decision of a student to attend college.

Far more parents expect their children to go to university than is likely to be the case. Over 60 percent of Grades 11 and 12 students, but only 44.7 percent of Year 5 students stated that their parents expected them to go to university (see Tables C207 to C209 in Appendix C). Figure 5.4 allows us to examine the responses to this item of students planning on particular destinations.

Figure 5.4: 'My parents (guardians) expect me to go to university', by Post-Secondary Plans (% Students)

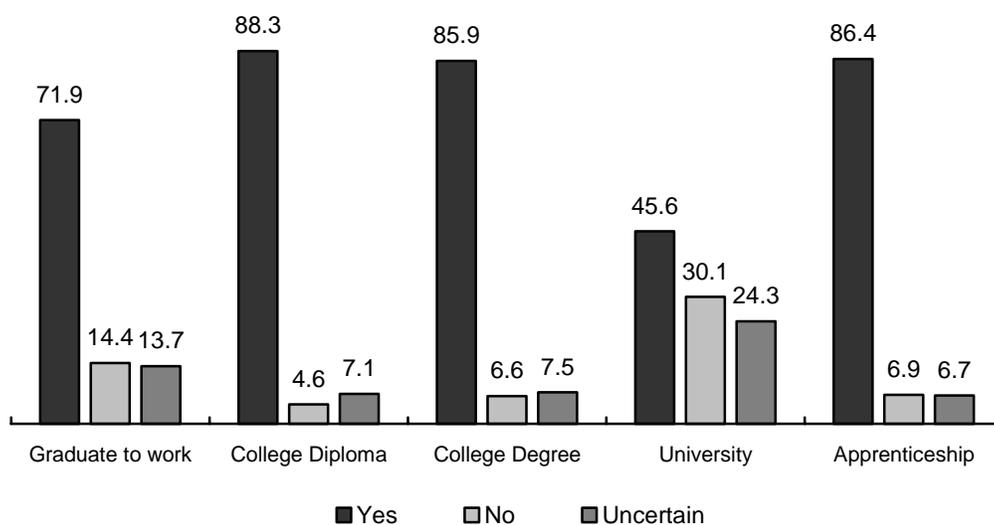


Not surprisingly, most of the students planning on university indicated that their parents expected them to go to university, but substantial numbers of college-planning students also indicated that their parents expected them to go to university. Not only would their parents' expectations result in stress for those students planning on university who would not make it but

also the lack of parental support would make it particularly difficult for those planning on other destinations (see also Table C210 in Appendix C).

On the other hand, the vast majority of college- and apprenticeship-planning students said that their parents would encourage them if they applied to a college program (see Figure 5.5 and Table C211 in Appendix C).

Figure 5.5: 'My parents would encourage me if I applied for a college program', by Post-Secondary Plans (% Students)



Ironically, the stress would appear to be much greater for those students planning on university who may be at risk of not meeting university admission requirements since many were uncertain or indicated 'no' to the question on parents' encouragement to pursue a college education.

The 'selling' of parents on the value of a college education would appear to be a priority not only to enhance college enrolments but also to provide meaning and purpose for the students themselves.

In response to the open-ended question at the end of the questionnaire, some students indicated that their parents felt so strongly about them attending a university that they would not let them go to college.

My parents want me to go to university. They would disown me if I went to college. (Grade 11 male, planning on university)

I would not consider attending college because my parent, to be specific, my mother is strictly against it. (Grade 11 male, planning on university)

.... My family will not let me go to college because they feel that university is a better place to be, even though most of them have never been. (Grade 12 female, planning on university)

The powerful influence of parents on students' choice of university as an educational destination can be seen in the following student comments:

Both of my parents went to university and they expect the same from me. I was never taught to look at going to college. I have always based my academic decision on me wanting to go to university. (Grade 11 female, planning on university)

My parents always believed in a better education, and they are willing to ensure my future by paying for the best university, if necessary, for any career I choose. I would probably, in the future, consider to take a few college courses, but right now my main focus is university. (Grade 12 female – planning on university)

I am not attending college because my parents want me to go to university.... (Grade 11 male, planning on university)

D. Knowledge of Post-Secondary Programs

Figures 5.6 and 5.7 on pages 81 and 82 in this section present the student responses to the survey item on knowledge of post-secondary educational programs. We first present the responses by grade, then of students planning on college, university and apprenticeship. The two college-planning groups have been combined for this analysis (see Tables C212 to C232 in Appendix C).

Grade 11 students tended to judge their knowledge of university programs and their admission requirements as greater than that of college programs (i.e., 44.9% vs 36%, respectively indicated their knowledge level was 'good' and 'very good'). This pattern was similar for Grade 12 students with higher proportions of them stating that their knowledge of university programs and admission requirements was 'good' and 'very good' (i.e., 58.1% vs 40.6%, respectively). For Year 5 students, differences in students' knowledge of college and university programs and requirements were negligible. Students' knowledge of apprenticeship at all year levels was not

great (about three-quarters of the students had 'fair' or 'poor' knowledge (Grade 11 – 78%, Grade 12 – 79.6%, Year 5 – 73.2%).

Slightly less than one-third (30.8%) of those planning on a College Diploma or Degree Program said that they had 'very good' and 'good' knowledge about university programs and admission requirements and about two-thirds (67.1%) had the same knowledge about college programs and their admission requirements. Figure 5.7 shows that more of the group planning on a College Diploma or Degree had knowledge of college programs and their requirements than the other two programs (67.1% vs 30.8% - university programs and 29.5% - apprenticeship). Furthermore, more of the group planning on university had knowledge of university programs and their requirements (68.9%), and the same pattern held for those planning on apprenticeship (70.4%) – a greater proportion of them were knowledgeable about their chosen area.

Of the Grade 11 group planning on university, over one-half stated that their knowledge of their destination program and requirements was 'good' and 'very good' (58.3%; see Tables C212 to C214 in Appendix C). The knowledge of Grade 11 college-planning and apprenticeship-planning groups was greater of their destination program and requirements (59% and 67%, respectively; see Tables C215 to C217 in Appendix C). The pattern for the Grade 12 respondents was similar to that of Grade 11, although for each destination group the proportion saying 'good' or 'very good' knowledge of the destination was higher (see Tables C218 to C223 in Appendix C). For example, 72.9 percent of Grade 12 students planning on a college program said that their knowledge of college programs and admission requirements was 'good' or 'very good'. The pattern for Year 5 students was similar to that for Grade 12 (see Tables C224 to C229 in Appendix C).

Generally speaking, the students appeared to be far more knowledgeable about the field that they were planning to enter and much less so about alternative fields (see Tables C230 to C232 in Appendix C). Given that so many students change or are forced to change their aspirations as they progress through school, it might be advisable for them to have a broader understanding of the full range of educational and work opportunities. As a group, those students planning on college were at least as knowledgeable about the programs they aspired to as the other destination groups were.

Figure 5.6: Knowledge of College, University & Apprenticeship Programs and their Requirements (% Students)

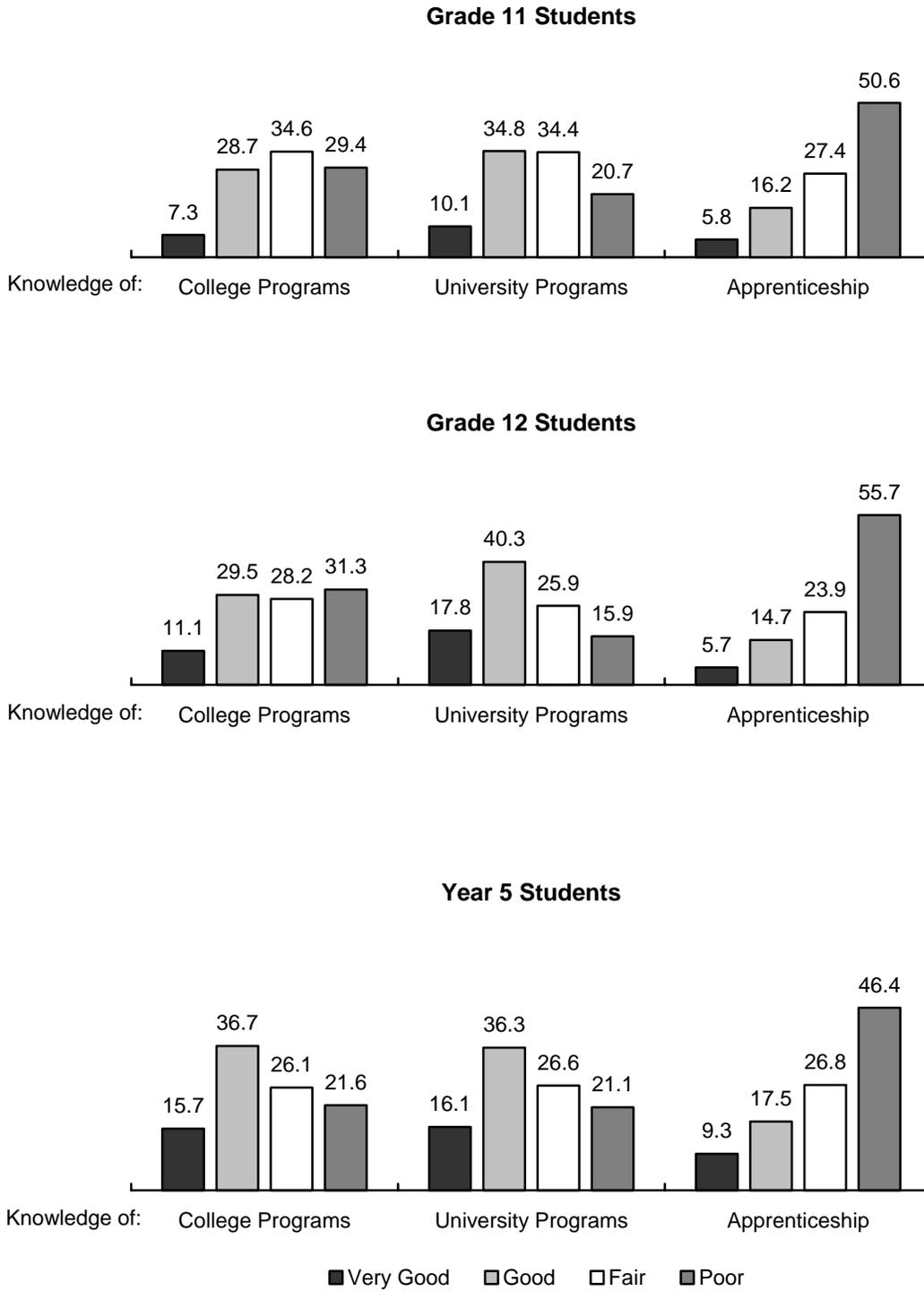
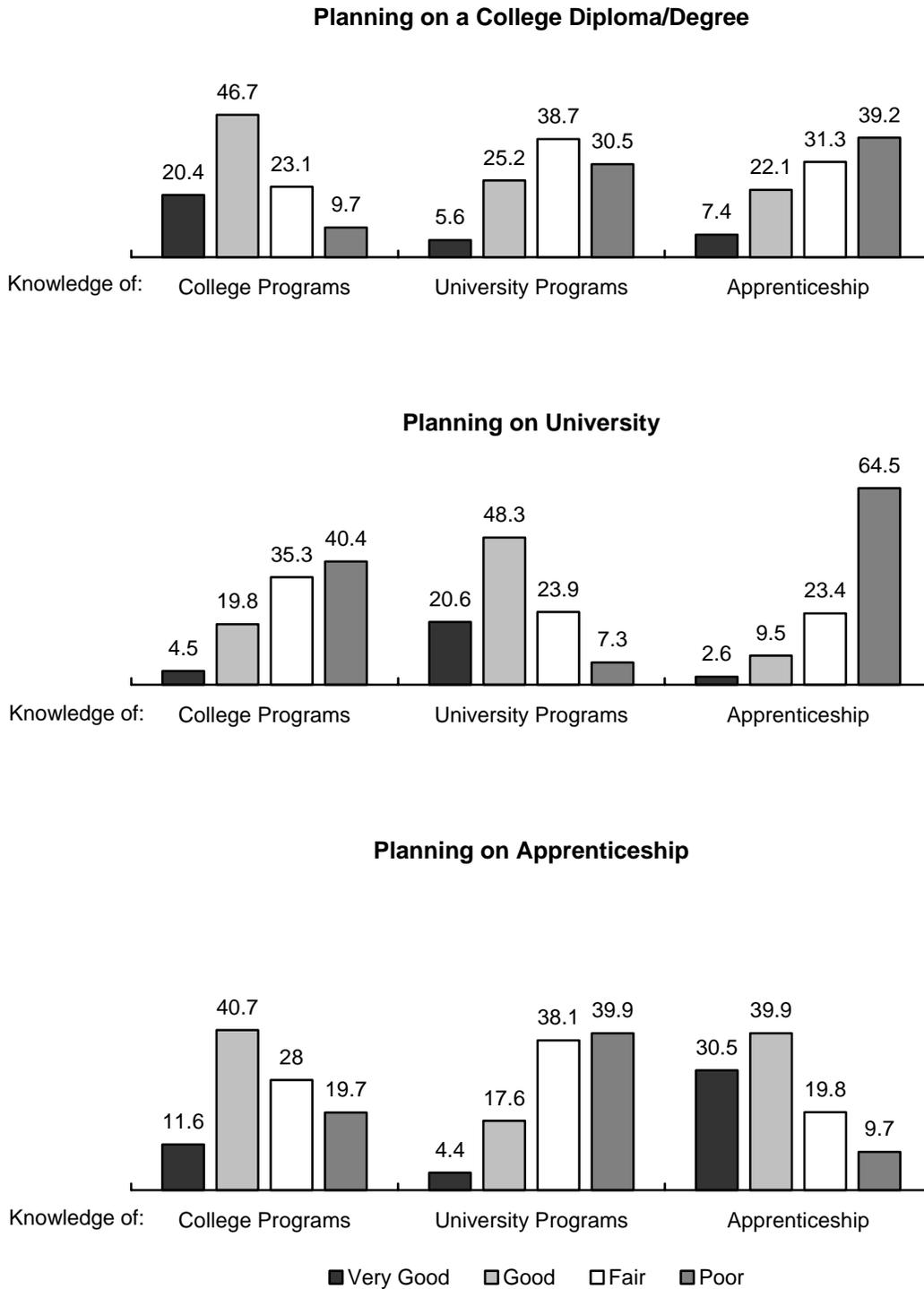


Figure 5.7: Knowledge of College, University & Apprenticeship Programs and their Requirements, by Educational Plans (% Students)



To the open-ended question asking for impressions of Ontario colleges and suggestions about educational and/or career planning, a few students indicated that they lacked knowledge about them or needed more.

I think Ontario colleges are good, but have not learned much about them. Most of my friends are going to college in Ontario and some of my older friends.
(Grade 11 female, planning on applied or collaborative degree)

I am not really thinking of attending a college. I am more directed towards a higher education at university. Then again, I do not really know much about what colleges have to offer.
(Grade 11 female, planning on university)

I will attend college after my 5th year of high school so I can get a better job than working right out of high school. I do not really know anything about the Colleges of Applied Arts and Technologies.
(Grade 11 female, planning on applied or collaborative degree)

A few students made some specific suggestions:

... More advertising for colleges and more information fairs or sessions would help.
(Grade 12 male, planning on college diploma or certificate)

A college is the gateway to the next part of your life. They can help shape your future and show you where you should be going. I feel somewhat frightened about this next step. It would be nice if we could talk to first year students and see how they're doing. I am also hard-of-hearing and I want more information on special education technologies that would help me.
(Grade 12 male, planning on university)

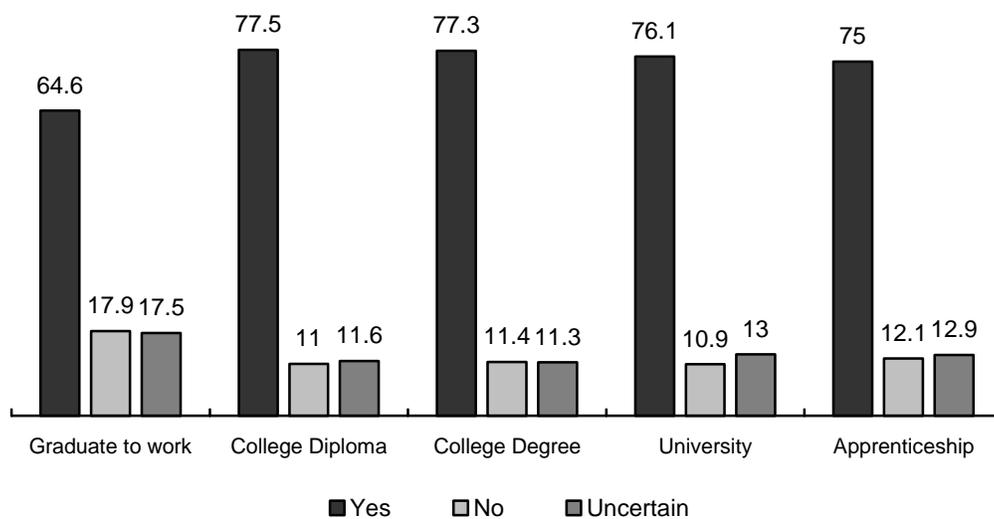
I do not think colleges market their choice of programs available very well.
(Grade 12 male, planning on university)

E. Information Sources on Career and Educational Planning

For students in senior grades, especially preparing for their post-secondary decisions, it is important for them to have access to information to help them in educational and career planning. Student responses to two questionnaire items on this topic are presented and discussed in this section. The first item, a statement about access to help in this regard at their school, is relatively straightforward. The second question was more complex in that it contained a series of items on the extent that information received on educational and career planning was helpful from twelve different sources. More about the complexity of this question is explained below.

Figure 5.8 summarizes the responses of students to the item ‘When I need help about educational and career planning, I can get it at this school’ in terms of their post-secondary plans (see also Table C233 in Appendix C).

Figure 5.8: When I need help about educational and career planning, I can get it at this school', by Post-Secondary Plans (% All Students)

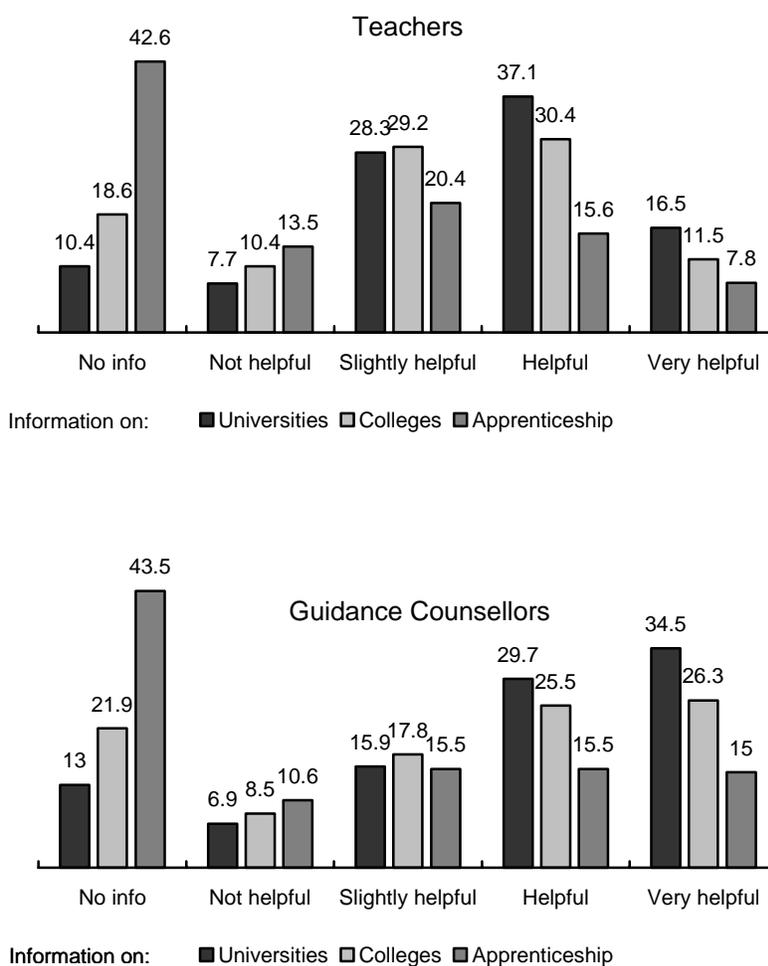


Approximately three-quarters of the students planning on a college diploma or degree, university and apprenticeship agreed that they could obtain help about educational and career planning when they needed it. Those planning to go directly into the workforce were least likely to agree with the statement, although almost two-thirds felt that way and almost one-fifth of them were uncertain; perhaps they had not tried to obtain advice.

The series of questionnaire items developed in order to assess the helpfulness to students of information from various sources with regard to their educational and career planning had as one of the response alternatives ‘no information’. This response option was particularly useful in determining whether students had received any information at all, whether helpful or not, from teachers, teacher-advisers and guidance counsellors. The responses to this question were also used to gauge whether students had had access to (or chose to have access to) university, college and business representatives through visits. The perceived helpfulness of information provided by friends and parents was also examined through these items.

Figure 5.9 presents the responses of students to the item ‘Indicate how helpful career and educational planning information from the following sources has been to you’ – about universities, college and apprenticeship – with regard to teachers and guidance counsellors (see Tables C234 to C238 in Appendix C).

Figure 5.9: Helpfulness of Career and Educational Planning Information on Universities/Colleges/Apprenticeship from Teachers & Guidance Counsellors (% Students)



The vast majority of students had received information from their teachers and guidance counsellors on universities and colleges. For students across years who received career and educational information on colleges, approximately one-half of them (51.8%) found the information they received from guidance counsellors ‘helpful’ and ‘very helpful’, and two-fifths of them (41.9%) found teachers’ information ‘helpful’. A substantial proportion of students had received ‘no information’ about colleges from guidance counsellors (21.9%) and teachers

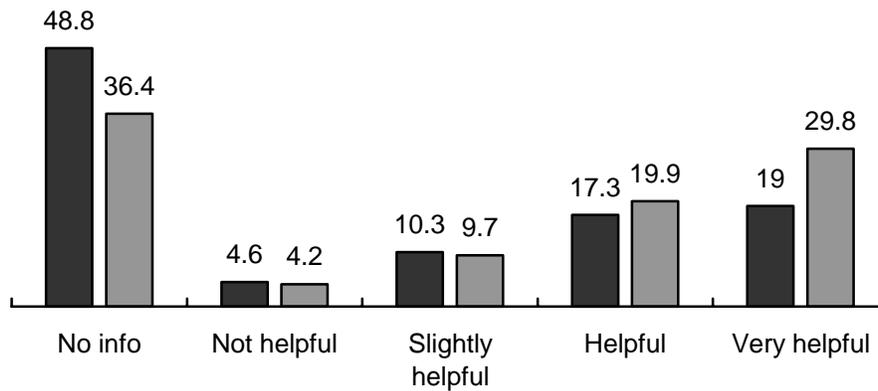
(18.6%). The career and educational planning information that students had received from teachers and guidance counsellors on universities was 'helpful' and 'very helpful' to over one-half (53.6% and 64.2%, respectively). Even including those who stated that career and educational planning information about apprenticeships was 'slightly helpful', teachers' and guidance counsellors' information was helpful to 43.8 and 46 percent of students, respectively. No information about apprenticeships was received by over two-fifths of the students from these sources.

Tables C239 and C240 in Appendix C show the student responses on teacher-advisers: before the Teacher-Adviser Program (TAP) was cancelled in 2005-06, the students in the study would have experienced at least two years of TAP introduced as part of the Reorganized Program in 1999.

Guidance counsellors' information about universities and colleges was viewed as most helpful by the Grade 12 and Year 5 students. Information from guidance counsellors on apprenticeship, however, was scarce, with 39.4 percent of Grade 11 students and 47.9 percent of Grade 12 students having received no information and, only 27.8 percent of Grade 12 students indicating that guidance counsellors had provided 'helpful' or 'very helpful' information. See Tables C241 to C249 in Appendix C.

Figure 5.10 presents the responses of all students on helpfulness of information on career and educational planning about colleges from college representatives and about universities from university representatives (see also Tables C250 to C252 in Appendix C).

Figure 5.10: Helpfulness of Career and Educational Planning Information on College from College Representatives & on Universities from University Representatives (% Students)



Information from: College Reps on College ■ University Reps on University

A greater proportion of students had received ‘no information’ on career and educational planning at all from their respective college representatives than from university representatives (48.8% vs 36.4%). By corollary, a larger proportion of students had found their information about universities to be ‘helpful’ (with 29.8% saying it was ‘very helpful’) compared to those who found the same about the college representatives’ information (49.7% vs 36.3%).

Over one-half of the Grade 11 students, 45.2 percent of the Grade 12 students and 36.5 percent of the Year 5 students had received no information about college from college representatives (see Tables C253 to C255 in Appendix C).

Although over one-half of the Grade 11 students had received no information about universities from university representatives, over 70 percent of the Grade 12 and Year 5 students had received information. More students had information from university representatives about university than from college representatives about colleges, especially Grade 12 and Year 5 students (see Tables C256 to C258 in Appendix C). Most of those who participated in the sessions with university representatives who visited the school were positive about the sessions finding them ‘helpful’ and ‘very helpful’ (two-thirds (65.7%) of Grade 12 students and slightly over one-half (56.5%) of Year 5 students).

The high proportions who had received ‘no information’ more likely reflect that they had not had visits or had chosen not to attend when visits were scheduled. It has been typical of schools’ Student Services Departments (many under-staffed) to focus more on Grade 12 students than Grade 11 students with regard to the preparation of applications for post-secondary institutions.

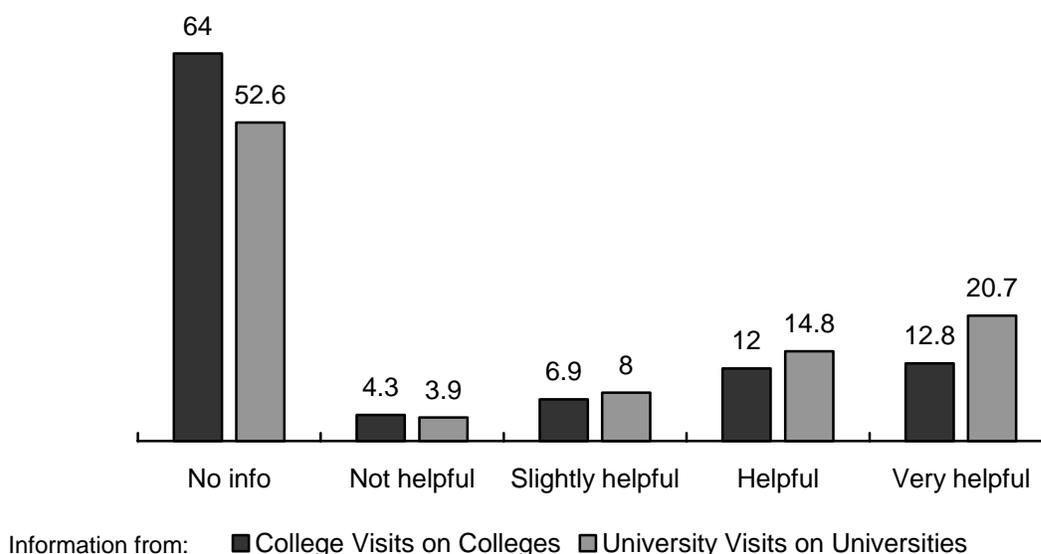
It would be useful for Grade 11 students to have sessions with college and university representatives in order to inform them about relevant course choices at the critical decision-making point for those students.

A student comment illustrates the importance of visits from college representatives.

I would consider attending an Ontario college because representatives from colleges take time to come and encourage us to attend. ...
 (Grade 11 female, planning on university after time off)

Figures 5.11 and 5.12 present student responses on the helpfulness of information received from visits to colleges and universities and to business and/or industry.

Figure 5.11: Helpfulness of Career and Educational Planning Information from Visits to Colleges on Colleges & Visits to Universities on Universities (% Students)

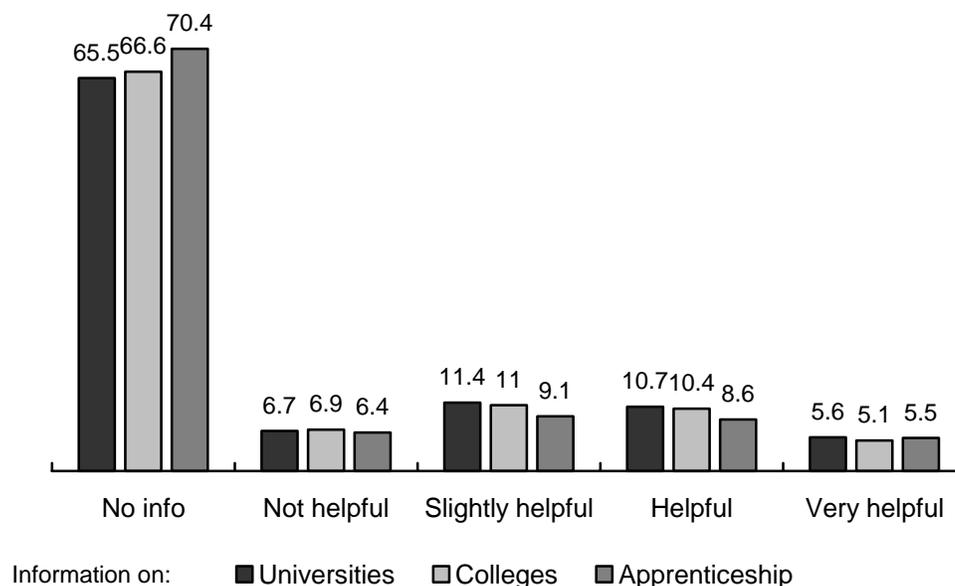


About one-third of the students across grades had visited a college (and less than one-half of the Grade 12 and Year 5 students – see Tables C259 to C263 in Appendix C) and those who had done so had mixed views about the helpfulness of the information about career and education planning.

More of the students had visited at least one university than had visited a college. The visits to universities were viewed as helpful by more students (35.5%) than the visits to colleges (24.8%; see Tables C264 to C267 in Appendix C).

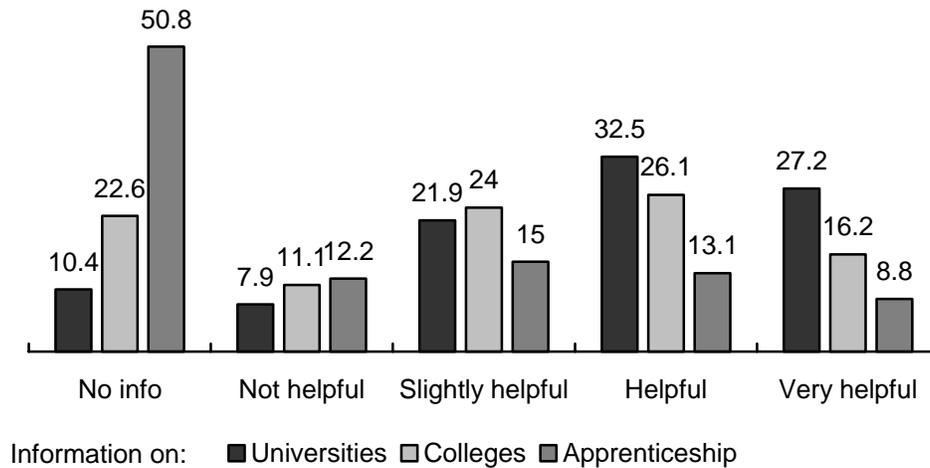
Figure 5.12 shows that only about one-third of the students had had contacts with business or industry and their views with regard to the impact on their understanding of universities, colleges and apprenticeship were quite varied with equally few indicating that they were very helpful. Either the visits did not take place or very little attention was given to information on universities, colleges or apprenticeship (see Tables C268 to C270 in Appendix C).

Figure 5.12: Helpfulness of Career and Educational Planning Information from Visits to Business/Industry on Universities, Colleges & Apprenticeship (% Students)



Figures 5.13 and 5.14 present student responses on the helpfulness of information on universities, colleges and apprenticeship from family and friends. The majority of students across all three years found information on universities and colleges from family members and friends to be helpful to them about career and educational planning, although fewer students had received information from these sources about colleges (77.4% colleges vs 89.6% universities; see Tables C271 to C274 and C275 to C286 in Appendix C).

Figure 5.13: Helpfulness of Career and Educational Planning Information from Parents and/or Other Family Members on Universities, Colleges & Apprenticeship (% Students)



With regard to apprenticeship, it is remarkable that family and friends were so unlikely to provide information in light of their information on colleges and universities: one-half of all students had received no information from family members; slightly more than one-half of students had no information on apprenticeship from friends. By contrast to those who had 'helpful' or 'very helpful' information from family and friends on colleges, for example (42.3% from family, 28% from friends), fewer students had found their information on apprenticeship at least 'helpful' (21.9% from family, 14.7% from friends; see Tables C287 and C288 in Appendix C). This could reflect both a general lack of interest by students and their families in apprenticeship opportunities and a general lack of knowledge among the general public. The responses were similar for students at each year level (see Tables C289 to C294 in Appendix C).

Figure 5.14: Helpfulness of Career and Educational Planning Information from Friends on Universities, Colleges & Apprenticeship (% Students)

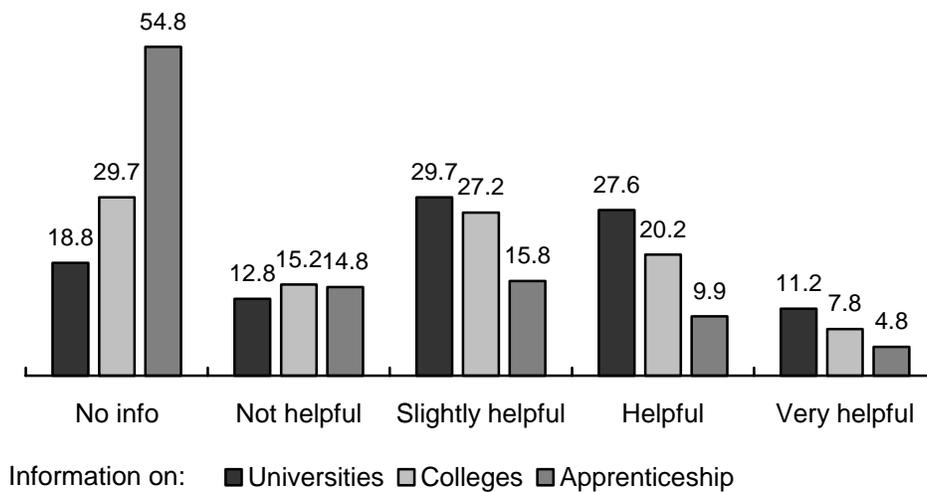
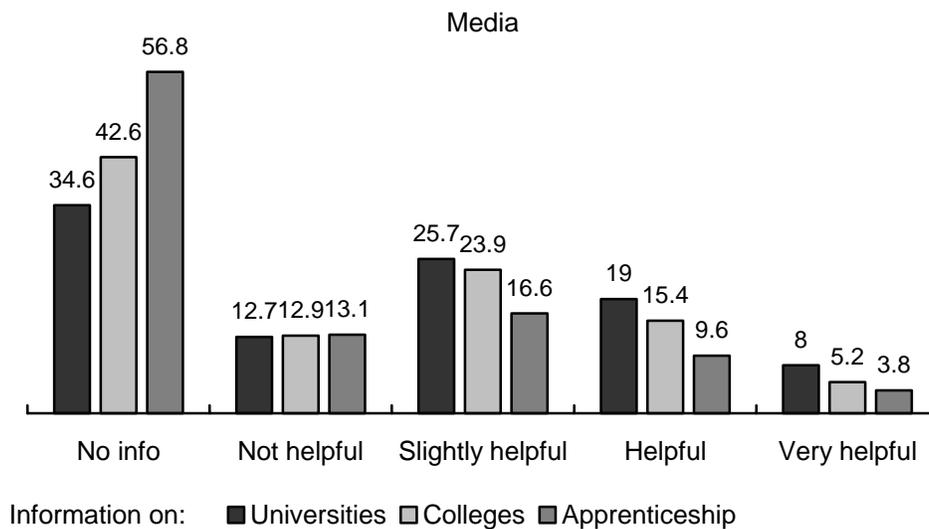
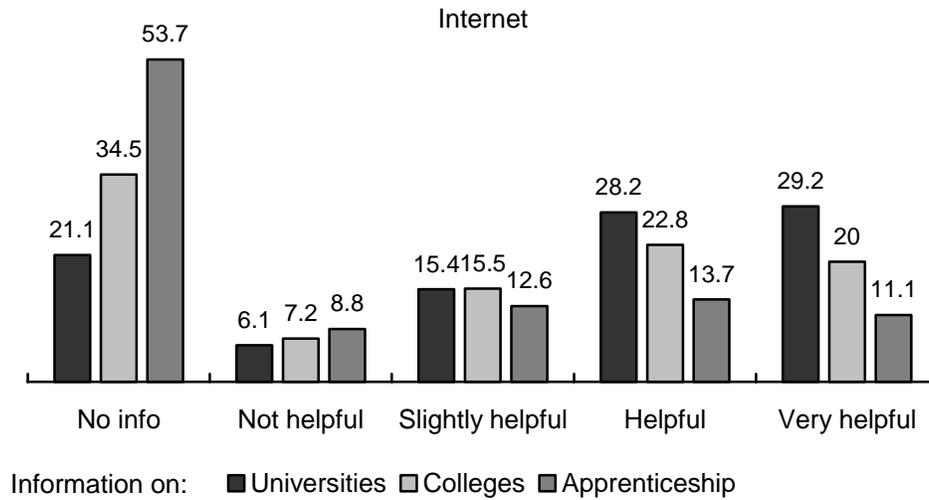


Figure 5.15 presents student responses on the helpfulness of information received from the internet and media (such as newspapers and TV; also see Tables C295 to C300 in Appendix C). For slightly over one-half of the students, the internet had been a ‘helpful’ or ‘very helpful’ source of information on career and educational planning with regard to universities; this was the case for about two-fifths of the students with regard to colleges. Although one-fifth of students did not use this source for university information to help in career and educational planning and about one-third did not do so for college information, the internet, nevertheless, appears to be a major resource about this information. Communication that would encourage students in the future to consult it more for such college information should definitely be considered.

Newspapers, TV and other forms of media were not consulted to the same extent as the internet was, and when they were used as a source for university and college information, they were not viewed nearly as helpful as the internet.

Neither the internet nor media was a major resource for students to gain information about apprenticeship – over one-half received no information from these sources and for those that did consult them for career and educational planning information, relatively few found them to be helpful.

Figure 5.15: Helpfulness of Career and Educational Planning Information from Internet and Media on Universities, Colleges & Apprenticeship (% Students)



F. Post-Secondary Education Costs

The cost of a college education can be viewed as prohibitive by some prospective students. The Canada Millennium Scholarship Foundation report of the results of the Ontario College Applicant Survey provides a useful breakdown of college students' concerns about the cost of a college education and average debt load.

Overall, approximately 50% of applicants are very concerned about the ability to fund a college education in Ontario. Compared to previous years, the concern over the amount of debt incurred has risen, moving in line with the concern reported for having sufficient funding to complete college. ...

The overall average debt load for the first year of college is expected to be around \$6,179, a figure that is just 3% higher than reported for the previous year. The analysis by income reveals that debt load for the first year of college really begins to increase once incomes fall below \$30,000. Just over 40% of applicants have planned for just enough resources (including those received from loans) to cover their first year of college; 40% expect to have surplus funds while 19% will run into a deficit situation. Ignoring those who don't know, only 27% of college applicants expect to incur no debt while completing their intended program of student (compared to 35% in 2004); the majority who do expect to incur debt, estimate that they will have this debt paid off within 7 years. (Acumen Research Group Inc., Ontario College Applicant Survey, 2004)

The Honourable Bob Rae, in *Ontario – A Leader in Learning: Report and Recommendations*, addressed the costs of a college education and recommended changes regarding fee increases.

Traditionally, the Ontario government established tuition fee levels annually, and more recently on a multi-year basis. The previous government established a five-year, 2% per-year increase for most programs beginning in 2000-01. Institutions had flexibility to approve fee increases above this level for a limited number of graduate, professional and college diploma programs. The current government introduced a two-year tuition freeze for all programs for 2004-05 and 2005-06.

Tuition fees do vary today, though most are set within a fairly narrow band. In 2003-04, 86% of full-time college students were enrolled in programs with tuition fees of less than \$2,000

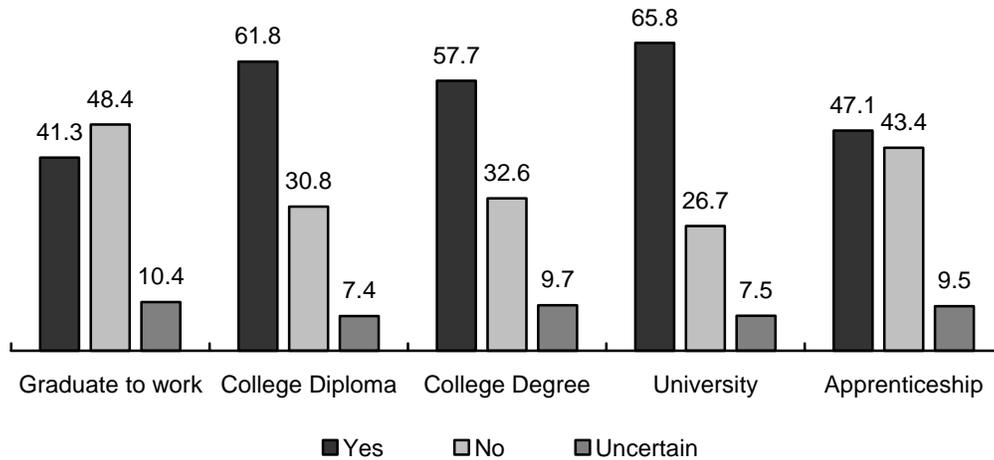
To promote accessibility for lower- and middle-class students, this [fee variation] approach must be balanced with a strong commitment to a robust student assistance program, to which institutions that increase fees directly contribute. These assurances cannot be provided under the current framework....

A ceiling on all tuition fees across all institutions is a blunt and ultimately unsuccessful instrument to promote accessibility. Controlling up-front costs through grants for lower-income students that eliminate or reduce fees, and better loans for middle-class students, is a better approach.

(The Honourable Bob Rae, 2005)

Students' concern about costs was a pervasive issue in their survey responses. This concern is reflected in responses to the questionnaire item on post-secondary education costs (see Figure 5.16 and Table C301 in Appendix C) in which over one-half of students planning on college responded 'yes' that they were concerned about the cost of attending a college or university. Two-thirds of those planning on university had the same concern.

Figure 5.16: 'I am concerned about costs of attending college or university', by Post-Secondary Plans (% Students)



Colleges provide detailed costs per year for prospective students, including tuition and ancillary or incidental fees, most of which are mandatory, such as athletics, building, insurance, health services and information technology costs. Table 5.4 presents the costs of college programs based on information from 2005-06 calendars and college websites.

Table 5.4: College Fees Per Academic Year – 2005-06^a
Full-Time Certificate & Diploma Programs; Graduate Certificate Programs; Applied Degree Programs; Joint/Collaborative Degree Programs

Certificate & Diploma Tuition Fee^b	Graduate Certificate Tuition Fee^c	Applied Degree Program Tuition Fee^d	Joint/Collaborative Degree Program Tuition Fee^e
\$2,126 to \$3,140	\$1,905 to \$14,973	\$5,743 to \$8,493	e.g., \$4,590 Bachelor of Nursing (University of Ottawa); \$7,346 Bachelor of Applied Technology (York University)

- ^a These fees are paid by Canadian citizens & permanent residents; fees are higher for international students.
- ^b Each set of fees is presented in ranges of lowest to highest across all 24 colleges and includes the ancillary or incidental fees, most of which are mandatory. Examples of ancillary/incidental fees are those for athletics, building, insurance, alumni health services, locker use, information technology and convocation. Students in co-op programs are usually charged additional fees, e.g., \$113.75 + \$227.50 each term at Lambton in 2004-05.
- ^c Examples of Graduate Certificate Programs (commonly 1 year programs) are: Registered Practical Nurse-Refresher (\$1,905 at Algonquin), GIS (Geographic Information Systems at Algonquin); Occupational Therapist Assistant/Physiotherapist Assistant (\$2,366 at Mohawk); Scriptwriting (\$3,700 at Algonquin), and Sport Business Management (\$13,048 at Algonquin).
- ^d Sample of Applied Degree Programs are Seneca's Bachelor of Applied Business, Financial Services Management, and Bachelor of Applied Technology Flight Program.
- ^e Examples of Joint/Collaborative Degree Programs are: BScN in Nursing (Seneca, Georgian and Durham with York University); BA in Media, Information & Technoculture (Fanshawe with University of Western Ontario); BSc in Computing & Network Communications, Hons (Sheridan with Brock University).

Tuition fees for College Diploma and Certificate Programs are less than those for university programs. However, the tuition fees for some Graduate Certificates and Applied Degree Programs can be as high if not higher than those for university programs. The costs of Joint or Collaborative Degree Programs are, of course, the same as those of the affiliated university program.

In the open-ended comments about reasons to pursue or not to pursue a college education, some students mentioned costs as a disincentive.

The main reason I would not attend college is money. Ontario college tuition is too high. (Grade 11 female, planning on college after time off)

The cost is outrageous, and if I am not mistaken it is going up. I can't go somewhere I can't afford. (Year 5 male, planning on college diploma or certificate)

Very expensive, I would attend [college] if I had the money.
(Grade 11 male, planning on college diploma or certificate)

I would love to go to college but I don't think my parents or me will have the money for it. (Grade 11 female, planning on college diploma or certificate)

I would not consider attending a college because of the high prices. I would not want to be in debt when I first start out in life and in my new job. ...
(Grade 11 male, planning on college after time off)

The only reason why I would hesitate [to go to college] is because of the cost.
(Grade 11 female, planning on college diploma or certificate)

The only reason I wouldn't consider going to college is that they are simply too expensive for the most part. I feel they are a good place to go and learn, but still too expensive. (Grade 11 male, planning on college diploma or certificate)

... The only reason I would not consider college is the money factor and lack of resources, if any, to get extra help.
(Grade 12 female, planning on applied or collaborative degree)

Les collèges en Ontario sont trop cher, coûte trop pour le cours on vas pour. La plupart du monde qui vont au collège ont reçu des bourses, les seules qui vont pas au collège c'est parce qu'ils/elles ont pas reçue des bourses ou on pas d'argent. Je veux aller au collège pour avoir une carrière.
(12^e année, sexe féminin, prévoyant aller au collège)

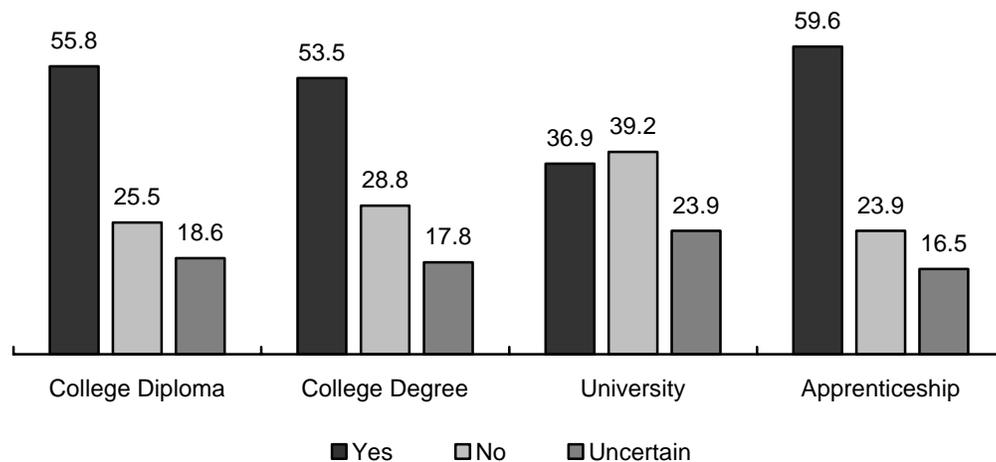
Mes impression générales des collèges de l'Ontario est qu'il sont très compliquer à appliqués et sa la un coût très cher.
(5^e secondaire, sexe masculin, prévoyant aller au collège)

A few students did note the difference between college and university fees.

Ontario colleges are not that different from universities. Although the cost of college is maybe only a third of what you might pay to go to university, you are still getting the education you need to do the job you want to do.
(Grade 11 female, planning on university)

Students were also asked if they would prefer to attend an institution near home (Figure 5.17 and Table C302 in Appendix C). Well over one-half of the college- and apprenticeship-planning students agreed with this statement, while far fewer of the university-planning students did so.

Figure 5.17: 'I would prefer to attend a college/university near my home', by Educational Plans (% Students)



Although prospective students at both universities and colleges were concerned about costs, the financial implications of a post-secondary education and the importance of remaining at home were especially important among the college-planning group. Information on the support of friends and family are reflected in their comments.

Ontario colleges have adequate educational programs. I would attend an Ontario college because I do not want to leave home.
(Grade 12 male, uncertain)

I would not like to be far away from home. Also, I already do my own laundry and can cook meals, but your parents are always there to make sure you can do it.
(Grade 12 female, planning on college after time off)

Ontario colleges seem like a fun place to go to after high school. The reason why I am applying is because many are close to my home or about only a 30 minute drive. I would not apply to the ones that are far, far away because I would not be able to leave friends and family.
(Year 5 female, planning on college diploma or certificate)

I would attend colleges in Ontario because they are close to home and cheaper.
(Grade 12 female, uncertain)

I would like to attend Seneca College because it is close to home and offers the program I need to become a veterinarian technician.
(Grade 12 female, planning on college after time off)

I am planning on attending St. Lawrence College so I could still live at home and drive to school. (Grade 11 female, planning on college diploma or certificate)

Good, I like how Durham College is close to my house and offers the study that I want to take. (Grade 12 female, other plans)

Je veut aller à un collège d'Ontario à cause ses proches de la famille, et collège fournie des environnements familiales.
(11^e année, sexe masculin, prévoyant aller au collège)

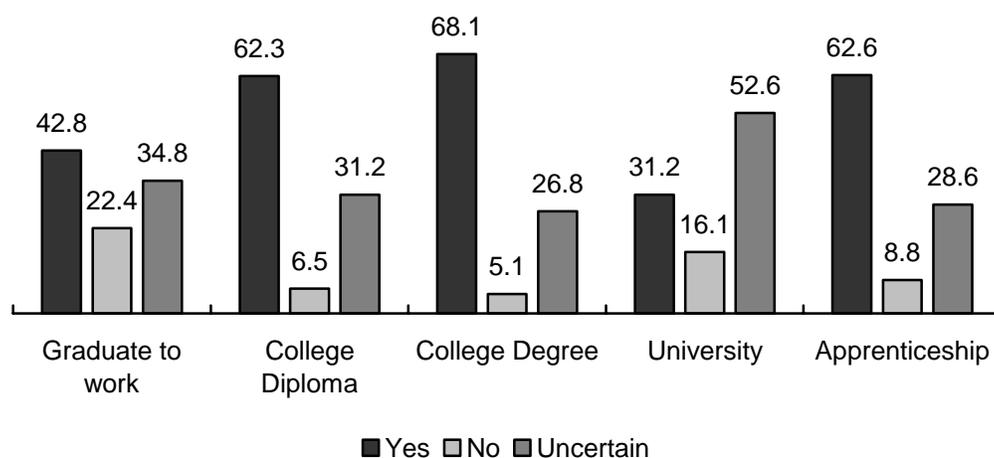
Part VI. Student Perceptions of College

The major purpose of this study was to determine how students perceive the Ontario Colleges of Applied Arts and Technology and how their educational plans are affected by their perceptions. In an open-ended question at the end of the questionnaire, students were asked to give their general impressions of Ontario colleges and the reasons they would or would not consider attending a college. They were also asked to provide further comments or suggestions about education and/or career planning. As explained in Part I, the comments were content analyzed and themes that emerged from them were identified. The two overriding themes – secondary school students’ perceptions of the value of college programs and their views on differences between colleges and universities – are summarized in this part of the report, along with two related closed-response items on aspects of college programs.

A. Value of College Programs

The students were asked if college programs prepare for careers that pay well (see Figure 6.1 and Table C303 in Appendix C for the responses by post-secondary plans). ‘Pay well’ is a rather vague concept, but it was important to determine whether students planning on college viewed the economic returns of attending college as worthwhile for the investment of time and money.

Figure 6.1: 'College programs prepare for careers that pay well', by Post-Secondary Plans (% Students)



Nearly two-thirds of the college-planning students and over 60 percent of the apprenticeship group agreed with the statement. Over one-half of the university-planning group were 'uncertain'. The large proportion of students who were 'uncertain' about the economic implications of a college education may have been influenced by the colleges' wide variety of programs that lead to a wide range of potential incomes. A few of the students planning on college did not agree that 'college programs prepare for careers that pay well', perhaps in reference to college programs such as Early Childhood Education that can provide more job satisfaction than economic benefits.

Notwithstanding, in their comments, many college-planning students noted that a college education would prepare them for lucrative careers or at least meet their economic needs.

.... I am going to college because I know how important it is to be able to support your family as well as yourself as you get older.

(Grade 11 female, planning on applied or collaborative degree)

I want to attend a college to get a well-paid career....

(Grade 11 male, planning on college diploma or certificate)

I would go to a college because most well paid jobs start out with a college degree. I want to be rich.

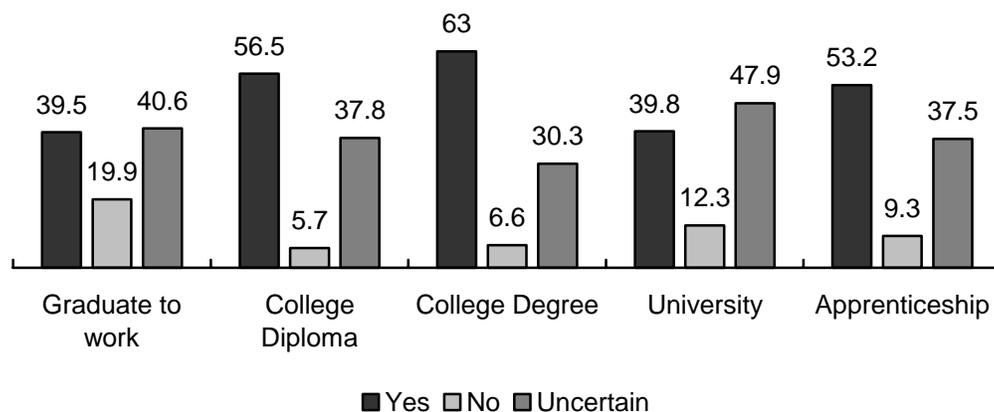
(Grade 12 female, planning on college after time off)

I am going to attend college so I can get a good enough job that I can provide for my family.

(Grade 12 male, planning on college diploma or certificate)

There was considerable uncertainty and some negative views on the part of students with regard to how society values a college credential (see Figure 6.2 and also Table C304 in Appendix C). Nearly one-half of the students planning on a university education checked 'uncertain' to this item while 12.3 percent checked 'no'.

Figure 6.2: 'College programs provide a credential that is valued by society', by Post-Secondary Plans (% Students)



Not surprisingly, the college-planning students were most likely to agree with the item. Between 56.5 and 63 percent of college-planning students, and 53.2 percent of the apprenticeship group believe that college programs are worthwhile in that they provide a credential valued by society. One-half the Grade 11 students were 'uncertain' and only about one-half of all students indicated 'yes' that college programs provide a valued credential (see Tables C305 to C307 in Appendix C). Perhaps an effort should be made to better define the importance and value of college diplomas and degrees to both students and the general public.

Very few students added comments on how society, in general, viewed colleges:

Colleges have now become more accepted to society. One can obtain a good paying job if they went to college. ... (Grade 12 female, planning on university)

B. College vs. University

Many students who expressed their views compared and contrasted the merits of colleges to those of universities. The general themes that emerged on this topic could be categorized as the following: transition from college to university; the economic differences between earning a college diploma or certificate and a university degree; status differences between the two; characterization of types of people who go to each type of post-secondary institution; and choice of program of interest influences choice of university or college.

1. Transition to University

It is important to determine how strong a student's motivation toward a post-secondary education is and how a negative decision might affect his/her educational plans. In order to shed some light on the issue of using college as a stepping stone to university, one of the response choices to the item 'If you do not get accepted into any of the program(s) you have chosen at university or college this year, which of the following will you do? was 'apply to a college program with the intention to transfer to a university later'. Table 4.21 (p.75) indicates that 5.7 percent of the Grade 12 students and 11.7 percent of Year 5 students would do so. The fact that double the proportion of students who have returned to high school for a fifth year responded that they would transfer to a university after enrolling in a college program is not surprising since many may not have the marks to enter university.

College as a functional transition step to university was cited by a surprisingly large number of students.

... I would attend college because I want to prepare myself and get a certificate or diploma to get a good job and then go on to university to fulfill my dream career.
(Grade 11 female, planning on college diploma or certificate)

I think colleges in Canada are great. I am planning on taking a psychology degree program at St. Lawrence College, and then I will take a psychiatry program in university after that.
(Grade 12 female, other plans)

.... I think I would consider attending a college because university is so hard to enter, so I would try to go to the college first and then transfer to the university.
(Year 5 female, planning on college after time off)

I would consider attending a college because I think that I would want to go through college and get a degree and then go to university and get a degree. I think I will have a better chance of finding a better job in the future.
(Grade 11 female, planning on college after time off)

Colleges have the courses I am interested in taking. I think they will prepare me more for university.
(Year 5 female, planning on college diploma or certificate)

Students' decision to go to college after university in order to be more specifically prepared for a career would seem to take place while in university, but a few secondary school students were already contemplating such a sequence.

My general impression of Ontario colleges was that they [offer the] type of education that prepare people for the work force. I have considered college after university because I think that it will help me find a job for my university degree, as well as educate me for the work force.

(Grade 12 female, planning on university)

The program offerings are interested and useful. I would attend a college after post-secondary education. I will choose my permanent career in college.

(Year 5 female, planning on university)

2. Economic Differences

For those students who chose to comment on the differences in economic returns between university and college, university was viewed as producing graduates who attain better paying jobs.

I would not consider attending a college because I feel that you make more jingle after you get out of university, plus the programs I want are located in university, and college is a step down.

(Grade 12 male, planning on university)

Because a university degree would give me a better opportunity to earn a high paying job.

(Grade 11 male, planning on university)

I figure if I get a university education I will be more qualified for a job and make more money in the long run.

(Grade 12 female, planning on university)

3. Status Differences

Status differences between universities and colleges was a recurring theme in the students' comments. The general impression was that universities have more status than college.

I feel that colleges do not have the prestige/reputation of universities, and that I will get a better education and job opportunities at university...

(Grade 11 male, planning on university)

... I would not go to college because I want the best. I have been taught that universities are the more prestigious post-secondary schools. ...

(Grade 12 female, planning on university)

Pros: You get into the work force faster. You can zero in on the courses that you want to take. Cons: You do not have a high status.

(Grade 11 female, planning on university after time off)

Colleges in society are viewed far lower than university, especially with a Chinese background. The only reason you would go to college is because you are not smart enough to attend university.

(Year 5 male, planning on college diploma or certificate)

Most of the students' comments highlighted the job training aspect of college over university. They typically viewed college programs as preparing them for specific careers and they often noted the importance of work satisfaction.

My general impressions of Ontario colleges are that they prepare you for an actual job, with training and everything, instead of just teaching you facts. They prepare you for jobs that you actually will enjoy. I would like to go to college, but I have not decided what career path I'm going to take.

(Grade 11 female, uncertain plans)

... The reason I would attend a college is to further my education so I can have a job I actually enjoy doing.

(Grade 12 male, planning on college diploma or certificate)

I think that my general impression of college is that they do provide students with successful futures and they are great for work opportunities. ...

(Grade 12 female, planning on university)

I would attend a college because it provides a sufficient amount of education that can provide you with a career path and job position in a variety of different fields to choose from.

(Grade 11 male, planning on applied or collaborative degree)

I would consider attending college because I need a good education to broaden my horizons in a job perspective. This way I will be able to obtain a job that I enjoy.

(Year 5 female, planning on applied or collaborative degree)

Others saw universities as providing better job opportunities.

I would like to get my masters. I think I would get better job opportunities going and getting a degree from university rather than college.

(Grade 11 female, planning on university)

I would not go to a college because in the current work field it is getting harder to get a job in business unless you have a Bachelor's degree. Most businesses will hire people with Masters or higher.

(Grade 12 male, planning on university)

4. Who Goes to College and Who Goes to University?

Students had definite views on the characteristics of students headed for a college education in contrast to those headed for university. A common theme among student comments was that 'hands-on' learning and specialized course content were typical in college programs leading directly to a specific career.

My general impression of college is that they provide a hands on learning experience that is directly applicable to the workplace. I would not attend college because I am not a hands on learner at all.

(Grade 12 female, planning on university)

They [colleges] give you hands on experience instead of theory. It prepares you for the real world.

(Year 5 male, planning on applied or collaborative degree)

The impression I get [of going to college] is hands on learning with a career in something directly after completion of course.

(Grade 12 male, planning on university)

I would attend a college for its practical, hands on experience, fast to get into work force, fairly good fees and requirements, friendly environment, and plenty of good resources for my future including education.

(Grade 11 male, planning on college diploma or certificate)

Je ne suis pas très bon dans la construction et dans le bricolage, je préfère donc d'agrandir mes connaissances en Science politique, philosophie et histoire. J'ai la chance unique d'avoir des parents pouvant payer mon université, alors pourquoi aller ou collège? (12^e année, sexe masculin, prévoyant aller à l'université)

A few of the university-planning students viewed colleges as places where students with lower marks go.

My general impression of Ontario colleges is that it is a place for people who cannot get into university to go to. I have heard many stories that colleges will accept almost anyone who applies, something which does not interest me.

(Grade 12 male, planning on university)

I did not get enough information about them, and the general impression is to us that anyone who attends college is someone who could not cut it in university.

(Grade 12 male, planning on university after time off)

Colleges are for people who do not do well in school, or know exactly what they want to do. This is the impression given about college. I would not attend because there are stereotypes when you go to college.

(Grade 12 female, planning on teacher/counseling)

The notion that colleges have the responsibility for the coordination and delivery of the major trades training programs is widespread among students, but that is not the case. While it is true that 90 percent of the in-school part of apprenticeship in Ontario is delivered by the colleges, the Ministry of Training, Colleges and Universities coordinates the trades training programs. Some students viewed college as primarily offering preparation for the trades.

College is a place to gain hands on skills and training, and it prepares you for hands on jobs like plumbing, heating, maintenance, etc.
(Grade 12 male, planning on university)

I am planning on becoming an electrician and that is why I want to go to college.
(Grade 11 male, planning on college after time off)

I would consider going to college because to get my trade in millwright, then I would be able to succeed in life. (Grade 11 male, planning on apprenticeship)

Colleges provide a good learning experience for those who wish to work in the trades. I would attend a college in order to obtain a job.
(Year 5 female, planning on university)

5. Programs of Choice Influence Choice of University over College

Another common theme was the career or program that students wanted was the determining factor in whether they planned on enrolling in a college or university. Some students stated that they were interested only in a career or program found at university.

I would consider attending a college, but I wish to be a teacher and college is not required for that. ... (Grade 11 female, planning on university)

... If they do not hire me after university, I will go to college, but international relations is not something they have in college.
(Grade 12 female, planning on university)

I am not considering attending college because they do not have the courses I want, as well, I am university-bound. I need to go to an arts university like York. I am right brained so this is better for me.
(Grade 11 female, planning on university)

I would not attend a college because you have to go to university to become a lawyer which is what I want to do.
(Grade 11 female, planning on university after time off)

... I have to get a career in sciences or engineering and I don't think college programs will let me achieve my goals. (Grade 11 male, planning on university)

I think college is a good opportunity. I was planning on going to college to get schooling in becoming a welder or a millwright, but I decided to buckle down and go to university for mechanical engineering instead.

(Grade 12 male, planning on university after time off)

Other students cited that the program they wanted is at college.

I would like to go to college because it could further my skills as a chef and it could upgrade my education.

(Year 5 female, planning on college diploma or certificate)

I would like to attend college because I would like to get a diploma in the field of early childhood education so I can open a daycare of my own or work at a public one.

(Grade 12 female, planning on college after time off)

I think I would like to go to college, probably Durham College or George Brown, because they offer drafting courses.

(Grade 11 male, planning on college diploma or certificate)

Ontario colleges seem to have good music programs which is what I am interested in.

(Grade 12 male, planning on college diploma or certificate)

... The colleges in the area do offer animation programs and that is what I want to get into.

(Grade 11 male, planning on college diploma or certificate)

I am going to college somewhere in Ontario for ECE and I plan to do that after high school.

(Grade 11 female, planning on applied or collaborative degree)

Many students stated they were attracted to colleges because they offer such a wide range of programs.

I think that attending an Ontario college would be the experience of a lifetime. The colleges in Ontario are very good and have amazing learning programs. In each school there is a very big variety of what one can study. ...

(Grade 12 female, planning on university)

Ontario colleges offer a wide array of courses that can give foundation toward careers with hands on work ...

(Grade 12 female, planning on university)

I think they [colleges] are good. They have many different programs that can pretty much help anyone with what they want to be.

(Grade 12 female, planning on university)

I get the impression that Ontario colleges are a lot different than what they used to be, and that they offer a lot more courses and programs than they used to. I would consider attending college if I found one that best offered a program I was interested in.

(Grade 11 female, uncertain plans)

I have a good impression of Ontario colleges. I like the variety of courses that are offered and I believe that the admission requirements are fair. I do want to attend college because I believe that the college experience will be a fulfilling one, not only because I will be able to gain employment in my chosen field but also as life experience.

(Year 5 female, planning on college diploma or certificate)

For students planning on college, the decision to go to college appeared to be related to a career choice that primarily involved personally satisfying work.

Part VII. School, Regional and French School Differences

A. Introduction

When the schools were selected for the study, the first criterion was to identify schools that represented size, type of community, public/Roman Catholic, English/French, and availability of technology facilities. The second criterion was to select schools that were representative of the eight regions served by the colleges. Budget restraints made it impossible to represent the full range of school types in each region; therefore, in order to maintain the provincial perspective in the analyses, the number of schools in each region had to be balanced by the requirements of provincial representation. As a result, only three schools were selected to represent the Northwest region in comparison with 14 schools for the Greater Toronto Area.

There are differences from school to school which should be considered in a secondary school-to-college analysis, as well as regional differences that require somewhat different approaches in order to maximize the effectiveness of the school-to-college transition. These differences are summarized in the following sections.

B. School Differences

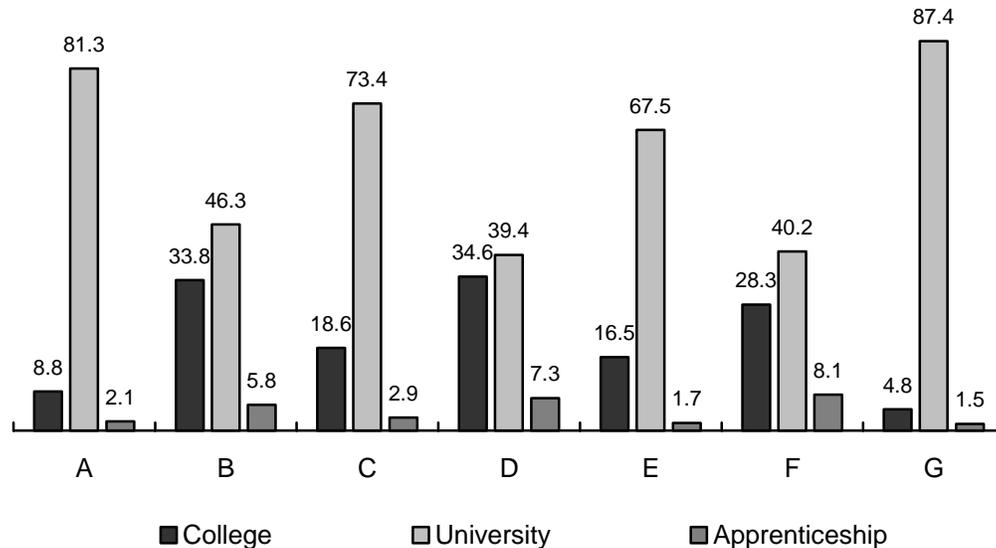
We noted in Part III that some schools do not have the facilities to offer a full range of technology courses. There are few machine shops left in Ontario secondary schools (for Manufacturing Engineering Technology) and less than one-half of the schools have Construction and Transportation Technology facilities. The Roman Catholic schools, in particular, are less likely to have technological education facilities. Many students who might choose technology programs in college do not have access to technology courses in secondary school.

In some parts of the province, there has been a long secondary school tradition of preparation for white-collar careers and many of these schools tend to have an academic orientation. For example, the Ottawa-Carleton, Halton and Toronto District School Boards tend to send more students to university than most other school boards. The former Toronto School Board still retains much of its traditional structure – i.e., academic, technical and commerce schools.

Also, school size influences course offerings – the smaller the school, the narrower the range of courses offered, and coincidentally, the less likelihood that college-preparation courses will be offered.

To illustrate how school characteristics can affect student attitudes, we selected seven schools of similar size that differed in the type of community each served. Figure 7.1 indicates students' educational plans in each of the seven schools. See Table C308 in Appendix C for students' post-secondary plans by region.

**Figure 7.1: Educational Plans, by School
(% Students in 7 Schools)**

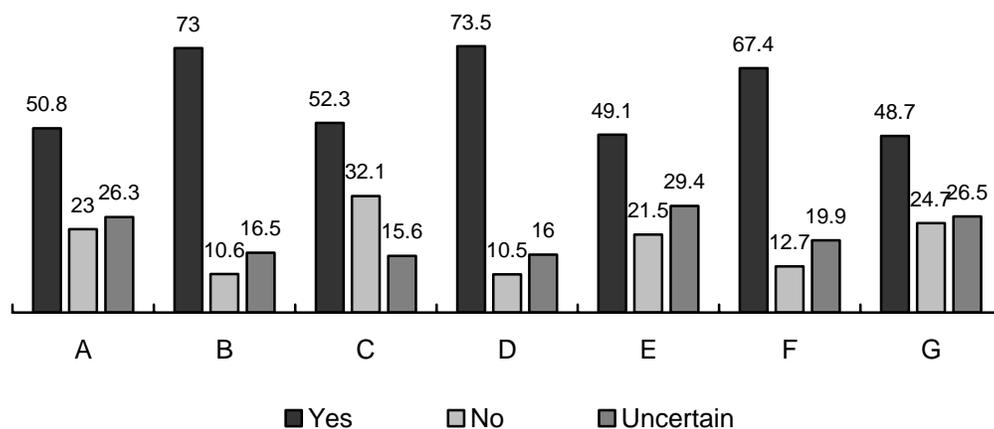


In Schools A, C, E and G, which serve middle to upper-middle class communities, the large majority of students plan on a university education. In Schools B, D and F the communities served represent the full range of socioeconomic backgrounds and more students plan on college. In Schools A, C, E and F the Grade 11 and 12 college-destination offerings are few in number and college-planning students must fill their timetables with university/college-preparation courses. The other schools offer a broader (though not exhaustive) range of college-preparation courses.

The effect on student attitudes of differences in each schools' characteristics with regard to educational plans and course offerings can be seen in Figures 7.2, 7.3 and 7.4.

Students in the schools with a fuller range of college courses and with more students having an interest in attending college (Schools B, D and F) are far more likely to agree with the statement ‘This school placed almost equal emphasis on preparing students for college and university’ than those in the other four schools (see Figure 7.2). In the other schools where students are less likely to plan on college and with few college-preparation courses, it is not surprising that students feel that greater emphasis is given to university preparation.

**Figure 7.2: ‘This school places almost equal emphasis on preparing students for college and university’
(% Students in 7 Schools)**



We see a similar pattern with regard to the survey item ‘Most of my teachers have a positive opinion about a college education’ (Figure 7.3). Students in Schools B, D and F are far more likely to agree with the statement than those in the other four schools. In addition, the other schools are characterized by large percentages of students who are uncertain, indicating that their teachers are probably less likely to deal with the issue.

Figure 7.3: 'Most of my teachers have a positive opinion about a college education' (% Students in 7 Schools)

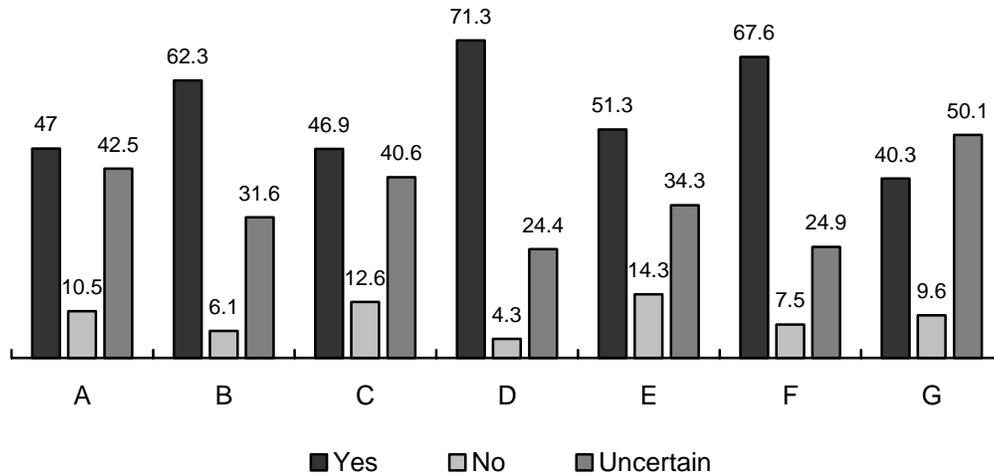
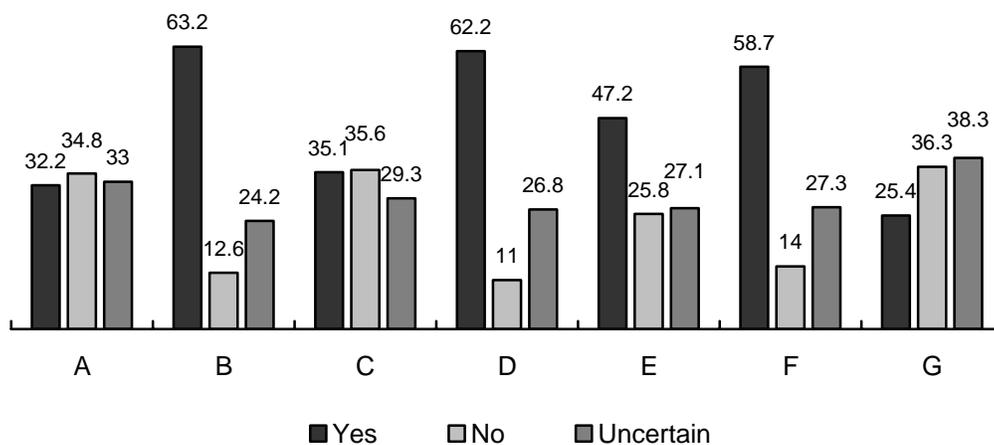


Figure 7.4 shows that the more likely that students are enrolled in a school where a large proportion of students plan on college the greater the likelihood that their friends will have a positive attitude toward college.

Figure 7.4: 'Most of my friends have a positive opinion about a college education' (% Students in 7 Schools)



Variability from school-to-school with regard to students' educational plans has a profound effect on the extent to which the school supports students, particularly those planning on college and apprenticeship.

C. Regional Differences and French Schools

The sample of schools was selected for this study to represent the eight regions served by single colleges (such as Confederation in the Northwest and Algonquin in the East), or groups of colleges (such as George Brown, Humber, Centennial and Seneca in the Greater Toronto Area). This was done in part because it was assumed that not only would those affiliated with each college view the findings as particularly relevant to them if a discussion of regional differences was included, but also because it was anticipated that significant regional differences would be found. In addition, five schools were selected from across the province where the language of instruction was French. In the following section, findings from schools in the eight regions are compared by region with each other along with the findings from the group of five French schools. Although the schools in the sample are from a particular region, they do not necessarily represent all schools in that region; however, the student respondents from a region could focus on the college(s) that they were likely to know most about as well as provide their general views of the Ontario Colleges of Applied Arts and Technology. Grades 11, 12 and Year 5 student responses have been combined in order to simplify and, to some extent, clarify the comparisons.

1. Students' Post-Secondary School Plans

Table 7.1 presents the proportion of students in each region and the French schools who planned on attending university, college, or taking up an apprenticeship.

Table 7.1: Post-Secondary Educational Plans, by College Region & French Schools (% Students)

Region	College Diploma/Degree	University	Apprenticeship
North	30.3	47.5	5.8
Southeast	29.6	49.7	5.8
Southwest	33.5	39.6	8.0
Centre West	27.0	49.6	6.2
Toronto	19.0	66.7	3.9
Centre East	30.0	46.6	6.8
Northwest	28.8	49.1	5.6
East	23.8	57.9	4.5
French	23.5	51.7	9.4

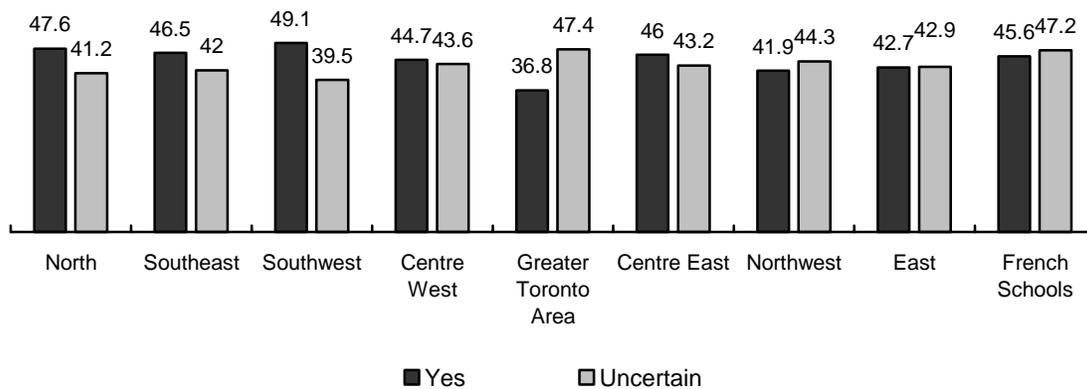
In comparison to the other regions, surprisingly high proportions of students in the Greater Toronto Area region planned on university and lower proportions planned on college. Although these numbers suggest that the sample might not be representative, a very recent study conducted for the Toronto District Board of Education shows a similar pattern (Brown, 2006). It was noticeable that the Greater Toronto Area had proportionately more students going to university and fewer to college than the other Ontario regions.

As anticipated, the Eastern region comprised of mainly Ottawa schools had lower numbers of students planning on college, as did the French schools. In spite of the great need for skilled tradespersons in the Greater Toronto Area region, interest in apprenticeships was quite low. Interest in college and apprenticeships was greatest in the Southwest region.

2. College-Related Issues

The regions and French schools were compared on two items related to the status and financial benefits associated with college programs. Figure 7.5 presents the responses of all students by region and French schools to 'College programs prepare for careers that pay well'.

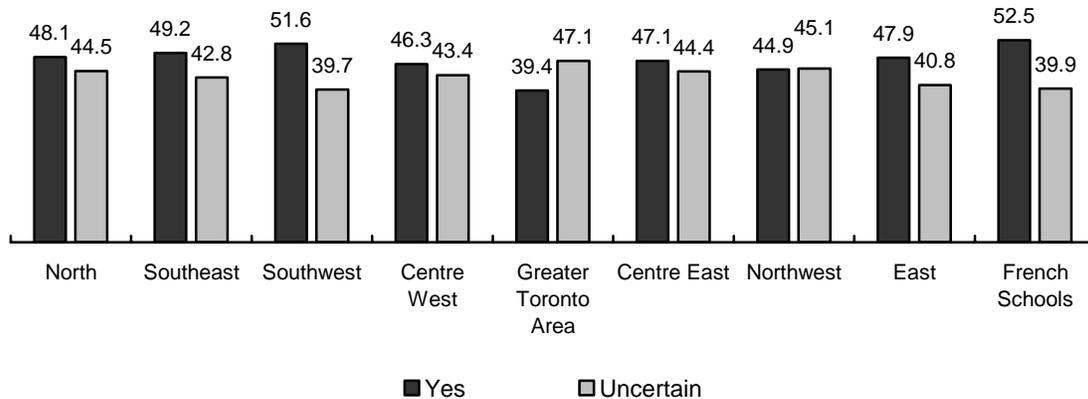
Figure 7.5: 'College programs prepare for careers that pay well', by College Region & French Schools (% All Students)



Perhaps the most remarkable observation about the responses to this item is the large proportion of students in each region who answered 'uncertain'. The proportion of students who said 'yes' was notably low in the Greater Toronto Area. The uncertainty might be related to the great variability in college programs and consequent differences in economic returns, but it is more likely that the students simply did not know.

The student response pattern is very similar for the item 'College programs provide a credential that is valued by society' (Figure 7.6) as for the previous item.

Figure 7.6: 'College programs provide a credential that is valued by society', by College Region & French Schools (% All Students)



Again, the Greater Toronto Area proportion of students indicating 'yes' was lower than that in the other regions, but it is notable that the French schools 'yes' group was the highest. One would think that more students would have an opinion of college credentials based on knowledge of their merits from teachers, guidance counsellors, parents, friends, and the media. Comments from French-speaking students illustrated this point.

Je ne connais pas beaucoup sur les collèges de l'Ontario.
 (11^e année, sexe féminin, prévoyant aller à l'université après une pause)

Je ne sais aucune information à propos des collèges.
 (11^e année, sexe masculin, prévoyant aller à l'université)

Nevertheless, many English-speaking students expressed the same uncertainty about college credentials.

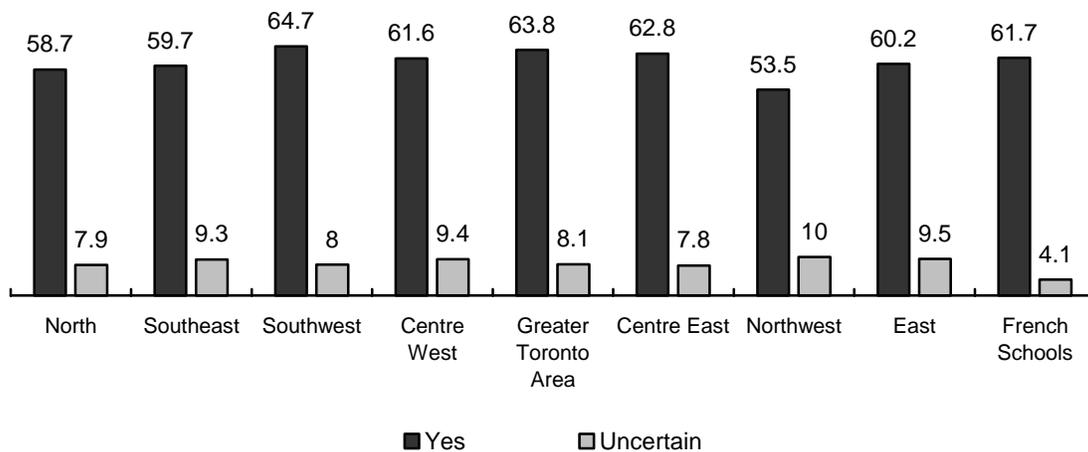
My impressions of Ontario colleges aren't based on much, since I don't know that much about them...
 (Grade 11 female, planning on university)

Have not been informed very much about colleges and what they offer. Always been told they are a step down from university.
 (Grade 11 male, planning on college after time off)

Etant donné mon manque d'information sur les collèges, je ne suis pas en mesure de répondre à la première partie de cette question cependant, le marché de travail offert aux diplômés collégiales ne correspond pas à ce que je veux faire.
 (11^e année, sexe masculin, prévoyant aller à l'université)

The majority of students in each region and the French schools indicated that they were concerned about the costs of attending college or university (Figure 7.7). It is difficult to know why the Northwest region, and to a lesser extent the North region, had the lowest 'concern' percentage.

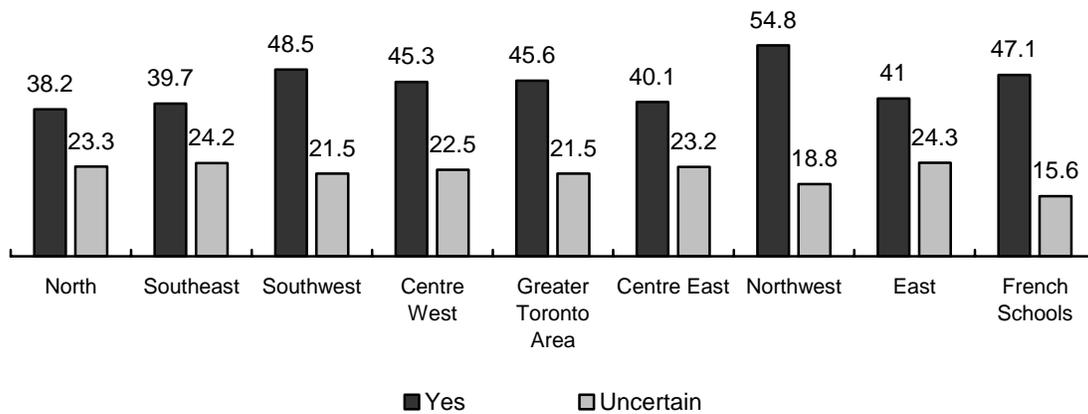
Figure 7.7: 'I am concerned about the costs of attending college or university', by College Region & French Schools (% All Students)



Not surprisingly, students in the Northwest were most likely to 'prefer to attend a college or university near my home' (Figure 7.8) because distances from Thunder Bay to other post-secondary institutions were so great, but on the other hand, fewer in the North preferred to stay near home. Although nearly one-half of the students from the French schools would prefer to attend an institution near home, their opportunities for this would not be as great as for students in the other regions because of the relatively few French language post-secondary institutions that are available to them.

Il devrait y avoir plus d'institutions ayant des programmes francophone en Ontario.
(11^e année, sexe féminin, pas encore décidée)

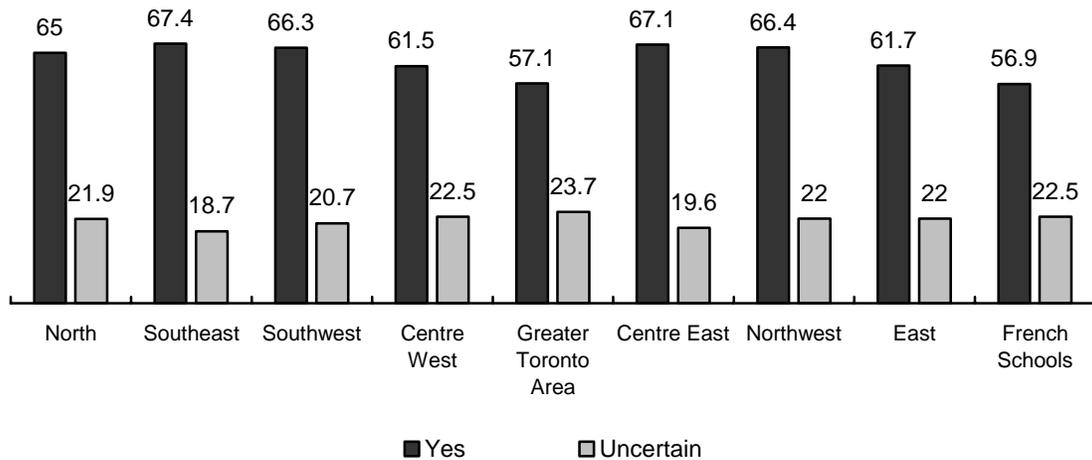
**Figure 7.8: 'I would prefer to attend a college or university near my home', by College Region & French Schools
(% All Students)**



3. The School

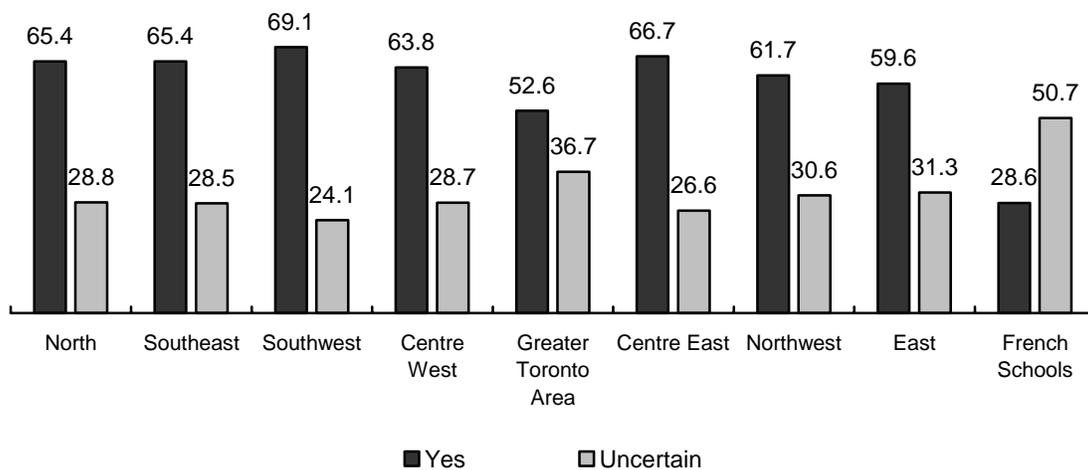
In other parts of the report we have noted that students, for the most part, feel that their 'school places almost equal emphasis upon preparing students for college and university', and this is generally the case in all regions (Figure 7.9). However, consistent with their lower proportion of college-planning students, the Greater Toronto Area and French school students are less likely to feel this way.

Figure 7.9: 'This school places almost equal emphasis upon preparing students for college and university', by College Region & French Schools (% All Students)



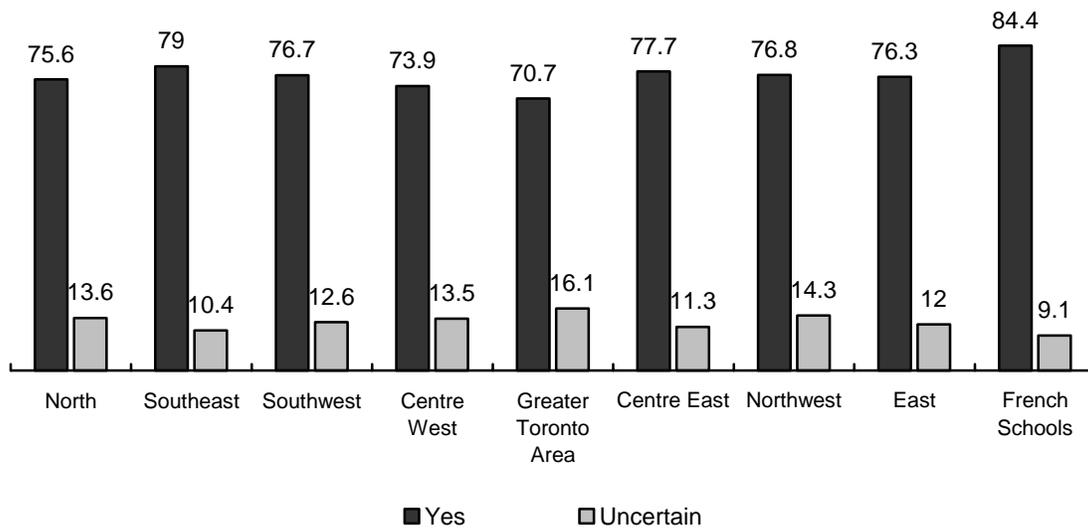
The students' perceptions of teachers' views in the item 'My teachers have a positive opinion about a college education' are very similar across regions, except for the Greater Toronto Area region and especially in the French schools (Figure 7.10) where they are much less positive. 'Uncertainty' was notably high in the French schools.

Figure 7.10: 'Most of my teachers have a positive opinion about a college education', by College Region & French Schools (% All Students)



The vast majority of students in all regions indicated that they could get 'help about educational and career planning' when they wanted it in their school (Figure 7.11), especially students in French schools.

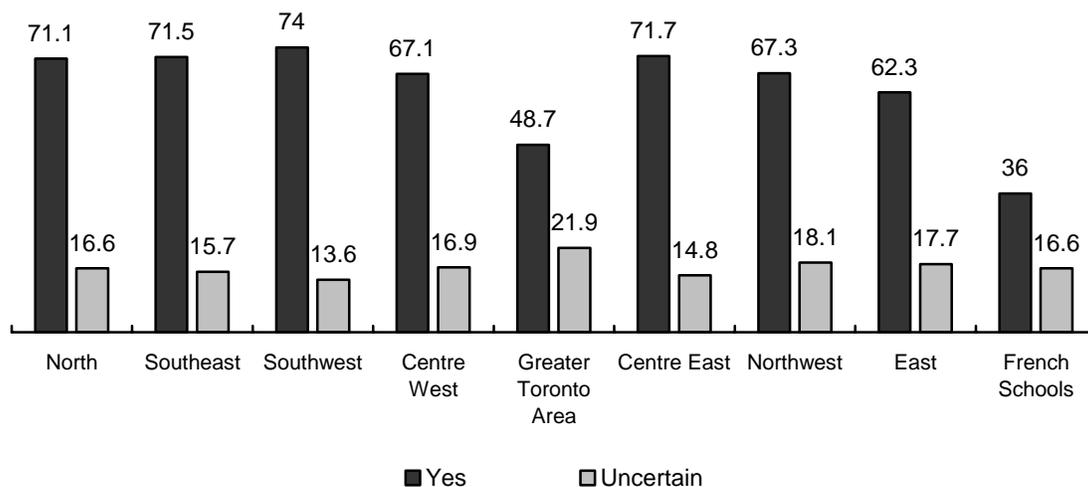
Figure 7.11: 'When I need help about educational and career planning, I can get it at this school', by College Region & French Schools (% All Students)



4. Parents and Friends

There are some sharp differences across the regions and the French schools with regard to students' responses to 'My parents would encourage me if I applied for a college program' (Figure 7.12). Parent encouragement about going to college would be least in the French schools followed by the Greater Toronto Area with the greatest amount of parental support in the Southwest region.

Figure 7.12: 'My parents would encourage me if I applied for a college program', by College Region & French Schools (% All Students)



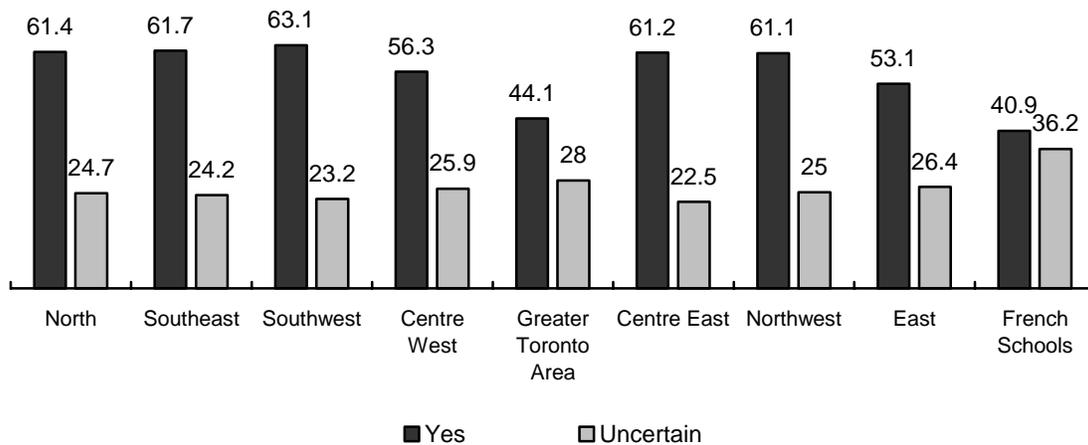
Some francophone students expressed their parents' expectations for them to attend university.

J'ai entendu divers informations sur des collèges mais, puisque mes parents m'encourage d'aller à l'université, j'ai tendance à porter moins d'attention sur les collèges. (11^e année, sexe féminin, prévoyant aller à l'université)

Je ne songe pas aller au collège car mes parents veulent que j'obtienne des cours universitaire et non collégiale et aussi ce que je veux devenir n'ont pas une formation au collège. (11^e année, sexe féminin, prévoyant aller à l'université)

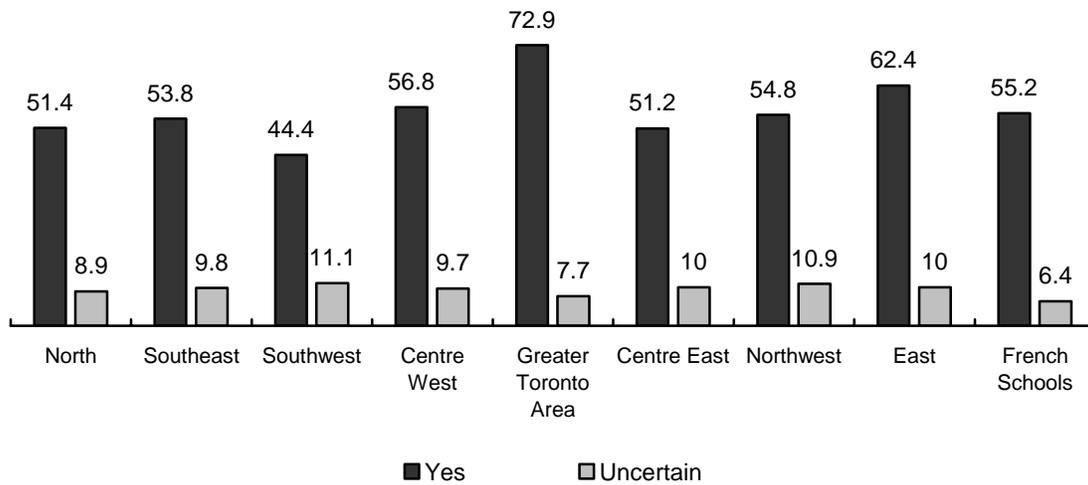
Responses to 'Most of my friends have a positive opinion about a college education' tended to be consistent with the proportion of students planning on college (Figure 7.13); that is, the lower the proportion of college-planning students, the more negative the student perceptions. The least positive view of college held by friends is most likely to be found in the Greater Toronto Area, the French schools and Eastern regions.

Figure 7.13: 'Most of my friends have a positive opinion about a college education', by College Region & French Schools (% All Students)



Not surprisingly, responses to 'My parents or guardians expect me to go to university' are most prominent in the Greater Toronto Area region followed by those in the East (Figure 7.14). In this case, the proportion of responses in the French schools was similar to that in the other regions.

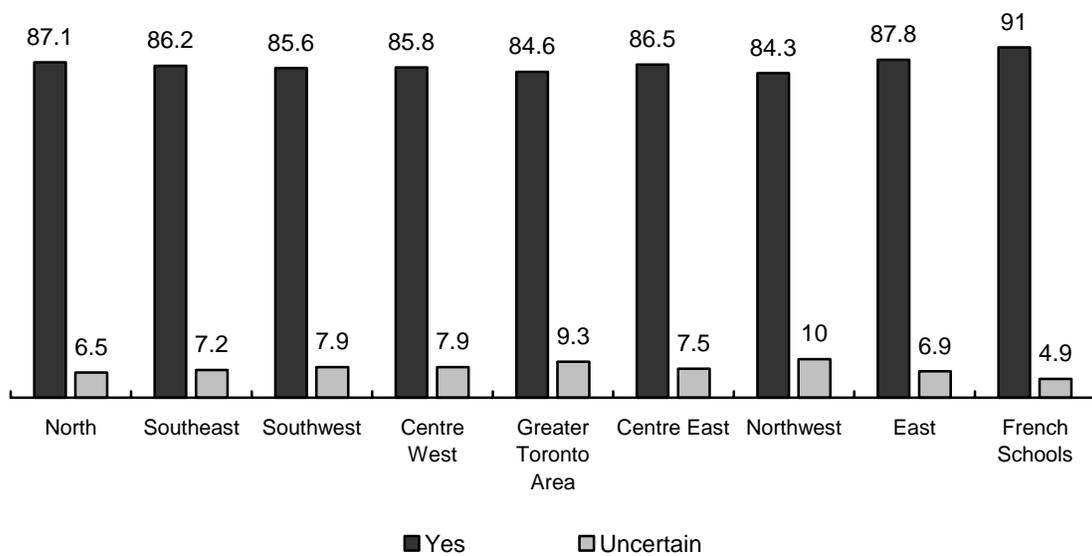
Figure 7.14: 'My parents or guardians expect me to go to university', by College Region & French Schools (% All Students)



5. School Life

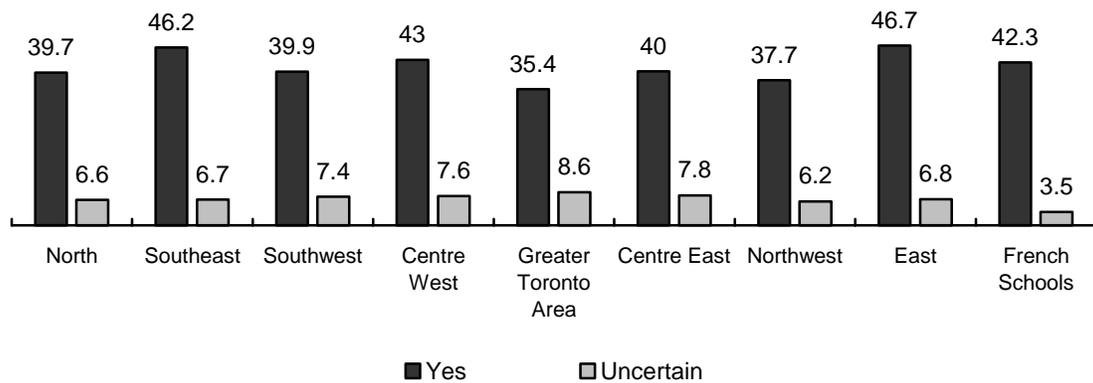
Whatever their educational plans, nearly all students felt accepted in their school (Figure 7.15), and especially students in the French schools. It is remarkable that this pattern is so consistent across the regions and that nearly the same proportion of students in each region said 'no' to the statement (4.1 to 6.6%).

Figure 7.15: 'I feel accepted in this school', by College Region & French Schools (% All Students)



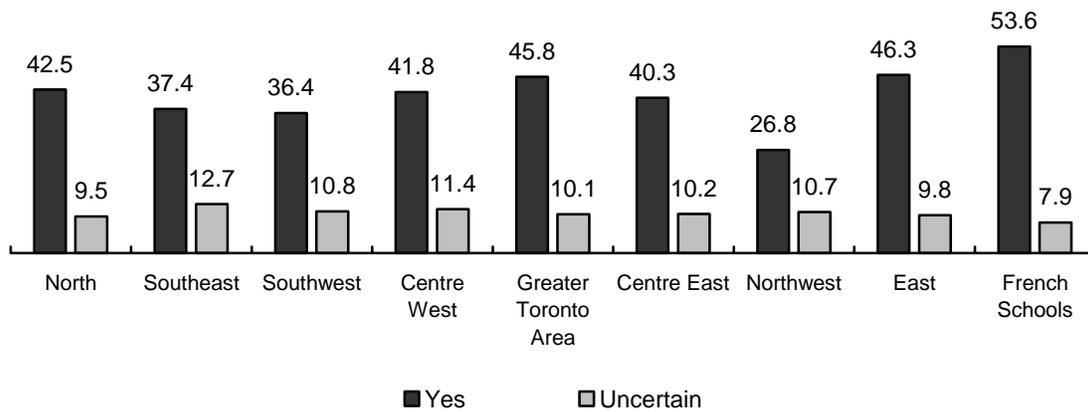
Students have the greatest opportunity to play on school teams when a school offers a wide range of interschool sports and is relatively small, providing more students with an opportunity to play. Even though students planning on university are more likely to ‘play or expect to play on a school team’ and the Greater Toronto Area region has more such students, the proportion playing interschool sports there is less than in all the others (Figure 7.16). Students are more likely to play on school teams in the East and Southeast region and least likely in the Greater Toronto area region. Availability of school teams appears to be more a factor than school size.

Figure 7.16: 'I am playing or expect to play on a school team', by College Region & French Schools (% All Students)



'Participating or planning to participate in intramural activities this year' is greatest in the French schools and least in the Northwest region where it is quite low (Figure 7.17). Although interschool sports participation is relatively low in the Greater Toronto Area region, intramural involvement is relatively high.

Figure 7.17: 'I am participating or plan to participate in intramural activities this year', by College Region & French Schools (% All Students)



Part VIII. Summary and Conclusions

A. Introduction

The major purpose of this research was to identify secondary school students' perceptions of Ontario colleges and of college as a possible post-secondary educational destination for them, and to determine the factors that have shaped these perceptions. A second purpose was to identify secondary school student achievement patterns, graduation rates and course enrolments in order to consider their possible influence on current and future college enrolments.

The main source of data for the study was a survey of 21,385 Grades 11, 12 and Year 5 students enrolled in 73 Ontario secondary schools. The schools were selected to represent Ontario college regions, school size and school type (i.e., Roman Catholic, public, and serving French-speaking students). In addition to the survey, the schools were asked to provide school calendars or course option sheets and course enrolments in order to assess the availability of college-preparation courses and course sequences that lead to college. Sixty-one schools provided data that were used for this analysis. Data from the *Double Cohort Study, Phase 3* (2004) and *Phase 4* (2005), were also examined in order to conduct a preliminary analysis of the characteristics of college applicants in terms of secondary school courses taken and marks obtained.

B. Findings

1. Perceptions of College

- Generally speaking, the large majority of students saw value in a college education, although some were uncertain about the economic benefits. While there was general support for colleges, there was also a general awareness of status and economic benefit differences between colleges and universities. Some students see a stigma associated with colleges, but their numbers appear to be small. A substantial number of students commented that they see college as a useful stepping stone to university, but few mentioned going to college after university, although in practice this pattern is becoming quite common.
- Costs were a concern for most students planning on a post-secondary education. In particular the comments of the college-planning students evidenced considerable concern and indicated that costs vs. perceived benefits was an issue for them.

- Although the majority of students indicated 'yes' to the statement 'This school places almost equal emphasis upon preparing students for college and university', 15.7 percent of students disagreed and 21.8 percent were uncertain.
- Over 70 percent of the college-planning students agreed with 'Most of my teachers have a positive opinion about a college education', but fewer numbers of the university-planning, apprenticeship-planning and work-bound groups did so.

2. Information Regarding College

- About two-thirds of those planning on college said that their knowledge of college programs was 'good' or 'very good', similar to the knowledge of university programs and their requirements of students planning on university. Although two-thirds of those planning on apprenticeship said that their knowledge of apprenticeship programs and requirements was 'good' or 'very good', the other students knew very little about apprenticeship programs.
- Over 75 percent of college-planning students (and students overall) agreed with 'When I need help about educational and career planning, I can get it at this school'. About one-half of the college-planning students agreed that their guidance counsellors were helpful in providing 'career and educational planning information on colleges'.
- About one-half of the students had not received information from college representatives and nearly two-thirds had not visited a college. Two-thirds of the students had not visited business or industry sites, and of those who did, few found the visits very helpful.
- The internet was viewed as a useful source of career and educational planning information about universities for 57.4 percent students, but about colleges for only 42.8 percent of them.
- Almost all students planning on college identified college programs that are currently available and indicated realistic careers following from the programs. This finding suggests that the information they had received and the planning they had done was educationally sound.
- The relationship between apprenticeship programs and colleges is unclear for many students – some students were planning on college to take an apprenticeship and some apprenticeship students did not mention college.

3. Secondary School Programs

- The instability of the educational plans of those students who ultimately apply to college while they are in secondary school makes scheduling of college-preparation course sequences difficult if not impossible in most secondary schools, and is reflected in the following findings:
 - only about 40 percent of Ontario's first-year college enrollees are students who attended immediately after four or five years in secondary school compared to nearly 90 percent of first-year university enrollees.
 - nearly one-half of first-year college enrollees entering directly from secondary school did so after taking essentially a university-preparation set of courses when in Grades 11 and 12.
 - beyond core English, Mathematics and Science college-preparation courses, few Grade 11 and 12 college-preparation courses are offered in Ontario secondary schools. Slightly over one-third of the schools offer MCT4C Mathematics for College Technology (a required or recommended course for College Technology Programs). Few schools offer Health Care (TPA3C), Hospitality (TFT3C), Child Development & Gerontology (TPO4C), and Medical Technologies (TPT4C). Even if they were offered, ensuing low enrolments would not make them viable.
 - many students were unable to take college programs' 'required' or 'recommended' secondary school courses because they were not available in their school.
 - the majority of Grade 12 college-planning students took Academic English and Mathematics in Grade 9.
 - very few students applied to college directly from secondary school having taken a sequence of college-preparation courses – in 2003-04, 57 percent of students had taken one or no Grade 12 college-preparation courses.
- The number of students who were unable to take a secondary school course that they had requested was remarkably high – approximately 30 percent of each of the three grade groups. Course scheduling problems do not appear to have affected college-planning students any more than students planning on other post-secondary destinations. Over- and under- subscription of courses were the greatest problems for all students who were unable to obtain desired courses.

- Marks play a major role in students' educational planning. While the majority of university-planning students had average marks over 80 percent, the majority of college-bound students had average marks in the 60s and 70s. Nevertheless, a great deal of overlap still existed between the average marks distributions; that is, some college-planning students appeared to have the necessary marks to consider a university education. Also, many more college-planning students than university-planning students were achieving marks that placed them in the 'at-risk-of-not-graduating-from-secondary-school' category.

4. College versus University

- College-planning students were more inclined to apply to fewer colleges than university-planning students to universities. About 9 percent of Grade 12 and Year 5 enrollees applied to both university and college. Twenty-one percent of Grade 12 and 36 percent of Year 5 students applied to college, while 46 percent of Grade 12 and 40 percent of Year 5 students applied to university.
- College-planning students are not quite as likely as university-planning students to participate on school teams and intramurals, but over 85 percent agreed with the statement 'I feel accepted in this school'.

5. Parental Expectations

- The majority of all students' parents expect them to go to university; although only one-third are likely to attend university.
- Surprisingly high numbers of the college-, apprenticeship- and work-planning students' parents expect them to go to university which likely places considerable stress on some students (although it is still possible that the college planners could later attend university). Nevertheless, most college-planning students (87%) agreed with 'My parents would encourage me if I applied for a college program'.

6. School/Regional/French School Differences

- There were sharp differences from school-to-school in the proportions of students planning on university and college. In schools where a large proportion of students planned on university, fewer students agreed with 'This school places almost equal emphasis upon preparing students for college and university', and very few college-preparation courses were offered.
- There were similarly high numbers of students across the regions (39.4% to 44.5%) who were uncertain about 'College programs provide a credential that is valued by society'.
- The Greater Toronto Area group of schools had far fewer students planning on college and apprenticeship than the other regions; students in the Greater Toronto Area schools were less likely to value a college education.
- Students in the French schools were more likely to agree with: (1) 'When I need help about educational and career planning, I can get it at this school', and (2) 'I feel accepted in this school', and were more likely to be involved in the intramural activities of these schools.

C. Conclusions

It is early in the research program to make major recommendations, but some conclusions can be derived from the findings to date.

1. Information Dissemination

There is a need to provide a clear picture of the variety of programs available at the colleges and the economic and personal benefits associated with them not only to interested students but also to all students, school guidance counsellors and the general public. The information that is provided in the college calendars, while useful for prospective students, does not appear to be having the effect of developing a general awareness of the importance of Ontario colleges to the Canadian economy and the career satisfaction that college programs can provide.

In particular, since parental expectations and pressure on students can make a meaningful interface between secondary school and college problematic, it appears necessary to develop strategies to reshape parents' perceptions of the viability of a college education.

2. Secondary School Programs

Since few non-core, college-preparation courses are offered in secondary schools, and very few students take college-preparation sequences of courses while there, it would be useful to review the viability and appropriateness of Grades 11 and 12 post-secondary destination programming as it applies to the colleges.

3. Applying to Post-Secondary Institutions

Nearly one-quarter of the Grade 12 students in the study applied to an Ontario college (20.7% to Diploma Programs and 8.2% to Applied or Collaborative Degree Programs) compared to two-fifths of the Year 5 students (36.2% to Diploma Programs and 12.9% to Applied or Collaborative Degree Programs). More Year 5 than Grade 12 students (12.3% to 6.9%) applied to both college and university.

Students who applied to a College Degree Program were most likely to apply to only one institution while those who applied to a Diploma Program, to two or more colleges. Students applying to university were more likely to apply to more institutions than those applying to college.

4. College Applicants' Background

Their pattern of course selection and differential achievement while in secondary school ensures that enrollees in most college programs will have a diverse background in terms of secondary school courses and achievement in them. This diversity will be exacerbated if college enrolments increase. College professors already face a major challenge in bringing students to a common point of preparation. While this implication is not news for those who teach in Ontario colleges, the factors that contribute to it that are outlined in this study may not be well known. In addition, the uncertainty of many first-year college enrollees regarding their choice of program and concern about meeting achievement expectations could contribute to a stressful teaching/learning environment. Many potential college applicants are unsure of themselves academically. They may have been only moderately successful in secondary school and need assurance that they can be successful in college. A strong support system is required to give them that assurance and increase college retention rates.

5. Apprenticeship

As recommended in the *Ontario, A Leader in Learning, Report & Recommendations* (The Honourable Bob Rae, 2006),

Recognize apprenticeship as a post-secondary destination, and treat the apprenticeship programming delivered by colleges as a core business. Assign to colleges the government's role in administration and outreach to employers (for those apprenticeship programs in which colleges deliver in-school training).

It is necessary to create order out of the current confusion and uncertainty in order to rationalize and effectively deliver apprenticeship programs.

6. Regional Issues

It would be helpful to determine why the Greater Toronto Area (GTA) schools produce so few college registrants (in comparison with university registrants), and develop strategies to increase the flow of students from the GTA to colleges.

D. Further Research

Since this study represents only the first phase of a comprehensive research plan, subsequent stages are expected to further explain some of the research issues raised in this study. The next phase of the research is designed to provide a detailed picture of those young people who choose not to go to college in comparison with those who do go.

This phase of the research raises the following questions:

1. What are the factors that influence parental perceptions of college and how might parental attitudes be modified?
2. What are the explanations for regional and school differences in the flow of students to college?
3. Can secondary school Grades 11 and 12 destination-based programming be modified to facilitate the school-to-college transition? How effective are the secondary school courses that are currently being piloted?
4. What are the factors that act as disincentives to young people who could be considering college?

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