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**Adult Learning Trends in Canada:**

**Basic Findings of the WALL 1998, 2004 and 2010 Surveys**

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Adult Learning Trends in Canada

# Summary

On the basis of national surveys conducted in 1998, 2004 and 2010, about half of Canadian adults were found to participate in further education courses annually. The vast majority of adults were participating in informal learning related to paid employment, housework and general interests. About 20 percent express unmet demand for further education. Older and working class people may have somewhat lower rates of participation in further education courses but not in informal learning. There are also suggestions of a trend toward increasing underutilization of educational qualifications and continuing underuse of computer skills in paid workplaces.

# Introduction

The Work and Lifelong Learning (WALL) research network, mainly funded by the Social Sciences and Humanities Research Council (SSHRC), conducted national surveys on work and lifelong learning in Canada in 1998, 2004 and 2010. These surveys provide profiles of paid employment and unpaid household work and community volunteer work as well as the array of adult learning activities. The relations between work and learning are summarized in a number of reports available on the [www.wallnetwork.ca](http://www.wallnetwork.ca/) website and several published books (see the Related WALL Reports section). The purpose of this report is to provide a brief summary of the basic findings on trends in adult participation in further education courses and informal learning activities. This information may be of general global interest because, in spite of widespread concern about the importance of lifelong learning, there are no other available national-level estimates of trends in the array of adults’ formal and informal learning activities during this period. In the United Kingdom, NIACE**1** has undertaken a series of annual surveys during this period to measure some aspects of adult participation in learning. Such efforts have begun

1Aldridge, F., & Hughes, D. (2012).*2012 NIACE adult participation in learning survey*. Leicester: National Institute of Adult Continuing Education.

across the European Union.**2** But the WALL surveys can provide useful benchmarks for more inclusive tracking of trends in adult learning both in Canada and abroad.

The basic forms of learning distinguished in these surveys are: formal schooling, further education, informal education, and self-directed informal learning. This report focuses on further education and self-directed informal learning. When adult learners opt to acquire further knowledge or skill by using an organized curriculum, the form of learning is further education. When we engage in intentional learning, either individually or collectively, without direct reliance on a teacher/ mentor or an externally organized curriculum, this is self-directed or collective informal learning. We assume that formal and informal learning are best understood as a continuum with interplay and overlap between different learning activities.**3**

This report first provides profiles of participation of Canadian adults over 17 years of age in further education and self-directed informal learning, relations between further education and informal learning, and unmet need for further education. Then the associations of further education with social background factors, namely age and economic class, are summarized. Finally, the pertinent issue of employment use of adult learning is addressed.

Basic Profiles of Participation

## Further Education

In 1960, according to the first government survey,**4** only about 4% of all Canadians over 17 years of age were enrolled in any sort of adult education course. As Figure 1 shows, by the next survey in the early 1980s, about 20% were enrolled annually.**5** By 1998, according to the WALL survey, the participation rate in further education had grown to around half of the 25- to 64-year-old population. Taken together with the few other partly comparable surveys from the 1980s to the 2000s, these figures indicate a rapid intergenerational increase in the extent of engagement in this form of formal learning, in conjunction with increases in post-secondary completion.

2European Commission. (2011). *Adults in formal education: Policies and practice in Europe*. Brussels: Education, Audiovisual and Culture Executive Agency.

3Colley, S., Hodkinson, P., & Malcom, J. (2003). *Informality and formality in learning.* London: Learning and Skills Research Centre.

4Dominion Bureau of Statistics. (1963). *Participants in further education in Canada*. Ottawa: DBS.

5Devereaux, M. (1985). *One in every five: A survey of adult education in Canada*. Ottawa, Statistics Canada and Education Support Section, Secretary of State.

According to the most recent roughly comparable data, Canada is now in the middle of the pack among OECD countries on several indicators of participation in further education.**6**The series of WALL surveys also suggest a possible stalling of increases in Canadian participation in further education since 1998 as post- secondary completion continued to grow. Canada’s further education participation rates remain significantly lower than the Nordic countries that have more fully developed institutional provisions for adults.**7**

### Figure 1

Post-secondary Completion and Further Education Participation Rates, 25-64 years Population, Canada, 1976-2010, (%)

80

60

60

53

49

44

39

49

40

36

48

47

23

38

20

28

20

0

**1975 1980 1985 1990 1995 2000 2005 2010**

**Post-secondary completion Further education**

Sources: Post-secondary completion: Custom tabulations from Canadian Census public use microdata on individual files, 1976-2006, 25-64 Population. Further education: 1983, Devereaux (1985); 1991, Statistics Canada and Human Resources

**2015**

**1970**

Canada (2001); 1998, NALL 1998 (N=1,117); 2004, WALL 2004 Survey (N=6,310); 2010, WALL 2010 Survey (N=1,407).

Percentages in further education in 1981 and 1991 refer to the larger population over 17,butexcluding full-time students.

6Organisation for Economic Co-operation and Development. (2011). *Education at a glance 2011*. Paris: OECD. 7Desjardins, R., Rubenson, K., &Milana, M. (2006). *Unequal chances to participate in adult learning: International perspectives*. Paris: UNESCO Institute for Educational Planning

## Self-Directed Informal Learning

Respondents to the WALL surveys were asked if they learned informally over the past year about several topics in relation to respective types of work or general interests. The comparative findings for general participation rates in these different areas of informal learning in the three surveys are summarized in Figure 2. As Figure 2 shows, the vast majority of adults who engage in any of these basic activities consistently report related intentional learning activities, ranging from around 80% of those involved in household work to around 90% in other basic activities. Other recent international surveys, without explicitly addressing unpaid work, have also found that intentional informal learning “is more or less a universal activity”.**8**Intentional informal learning is such an inherent part of the human condition that we tend to naturalize and ignore it, especially beyond paid workplaces. But in purportedly knowledge-based economies, the recognition of such knowledge assumes more value. In any case, informal learning remains the most massive and hidden part of the “iceberg” of adult learning.

### Figure 2

Participation Rates in Informal Learning Related to Paid and Unpaid Activities, 1998–2010 (%)

100

80

60

40

20

**86 87 90**

**81 76 90**

**79 82 82**

**83 82 88**

**92 91 95**

0

Paid work Volunteer Household

work work

**1998 2004**

General Any informal

interest learning

**2010**

Sources: NALL 1998 Survey; WALL 2004 Survey; WALL 2010 Survey.

8Rubenson, K., Desjardins, R., & Yoon, E.S. (2007). *Adult learning in Canada: A comparative perspective results from the adult literacy and life skills survey.* Ottawa: Statistics Canada.

## Schooling and Further Education

Virtually all prior studies have found a strong association between formal schooling and participation in further education. Figure 3 shows the incidence of participation in further education by those with different levels of school attainment in all three surveys. In 1998, 2004, and 2010, the higher the educational attainment, the more likely respondents have been to participate in further education courses. However, as advanced formal schooling has become more common, Figure 3 also suggests some increase in participation in further education among those with little schooling along with some recent decline among those with more schooling.

Further education in Canada remains beset by accessibility barriers such as high costs, inconvenient times and places of courses.**9** In any case, further education still tends to reproduce prior differences in educational attainments, with university and college graduates remaining twice as likely to participate as high school dropouts.

### Figure 3

Participation in Further Education by Level of Schooling, 1998–2010 (%)

**80**

**60**

**40**

**20**

**18 23 25**

**53 48 41**

**58 52 50**

**70 63 59**

**0**

No Diploma

1998

High School College Certificate University Degree

2004 2010

Sources: NALL 1998 Survey (N=1,548); WALL 2004 Survey, (N=8,861); WALL 2010 Survey (N=1,966).

9Knighton, T., Hujaleh, F., Iacampo, J. &Werkneh, G. (2009). *Lifelong learning among Canadians aged 18 to 64 years: First results from the 2008 access and support to education and training survey*. Ottawa: Human Resources and Skills Development Canada; Myers, K. & de Broucker, P. (2006).*Too Many Left Behind: Canada’s Adult Education and Training System*. Ottawa: Canadian Policy Research Networks;Livingstone, D.W., Raykov, M., & Stowe, S. (2002). *Interest in and factors related to participation in adult education and informal learning. AETS 1991, 1993 and 1997 and the 1998 NALL survey*. Hull: Applied Research Branch, Strategic Policy. Human Resources Development Canada.

## Schooling and Informal Learning

No significant relationship has yet been found between levels of schooling and the general incidence of self-directed informal learning. As Figure 4 shows, the WALL surveys have found that respondents at all levels of schooling report 80% or greater participation in (and similar amounts of time devoted to) intentional informal learning. This might be expected, considering that humans inherently cope with their changing environment by learning and that informal learning can be done anytime, anywhere, whereas formal schooling and further education both require sustained effort and present substantial access barriers.

### Figure 4

Incidence of Informal Learning by Level of Schooling, 1998–2010 (%)

100

80

60

40

20

**81 80 88**

**97 94 95**

**97 96 98**

**99 96 98**

0

No Diploma

High School College Certificate University Degree

**1998**

**2004**

**2010**

Sources: NALL 1998 Survey (N=1,548); WALL 2004 Survey, (N=8,861); WALL 2010 Survey (N=1,966).

The huge hidden, informal part of the iceberg of adult learning likely has some connections with the visible pyramid of formal education that appears to float above it. Figure 4 suggests that early school leavers may be slightly less involved in general self-reported informal learning. Recent surveys have found an association between higher school attainment and a few specific job-related informal learning activities over a month-long period (Peters, 2004, pp. 17, 44). But lower levels of formal schooling do not appear to be barriers to many areas of quite complex learning. Many workers with limited schooling have achieved high levels of

competency through informal education/mentoring and their own informal learning efforts.**10**

## Unmet Demand for Further Education

Figure 5 shows the proportions of those who took a further education course in the prior year, those who did not but wanted to, and those who did not take one and did not want to do so. The nearly 20 percent who did not take a course but wanted to do so translates into over 4 million adults with an unmet need for further education courses.

### Figure 5

Participation Status in Further Education, 2004 and 2010 (%),

60

40

20

**45**

**17**

**37**

**47**

**19**

**34**

0

2004

**Enrolled past year**

**Not enrolled, not wanted**

2010

**Not enrolled, wanted course**

Sources: WALL 2004 Survey, (N=9,026); WALL 2010 Survey (N=1,966).

There is also a widespread interest in enrolling in courses if formal recognition were given for prior learning experiences. In Canada, the process is termed prior learning assessment and recognition (PLAR). In these surveys, majorities of adults in general have indicated that they would be more likely to enroll in an educational program if they could get formal acknowledgement for their past learning experiences.As

10Livingstone, D. W., & Sawchuk, P. (2004). *Hidden knowledge: Organized labour in the information age.* Toronto: Garamond Press and Lanham, MA: Rowman & Littlefield.

Figure 6 shows, of those who did not take a course but wanted to do so, two-thirds indicatedinterest in recognition of their prior informal learning. These people, over two and a half million Canadian adults, may be seen as expressing both an unmet need and the greatest potential for growth of further education through integration with informal learning.Figure 6 also shows that over 60 percent of those who did take a course in the prior year would be interested in prior learning recognition; those currently enrolled are the only ones who have taken much advantage of PLAR to date.**11** But even among those who did not participate in further education and did not want to in the prior year, there were significant numbers, about a third, who would probably enroll if prior learning experience were recognized. Further analysis shows that interest in credit for prior learning is even stronger among those who faced the most barriers to participating in further education courses (e.g. too costly, unavailable, family responsibilities, lack of time).**12**

### Figure 6

Participation Status in Further Education and Interest in PLAR, 2004 and 2010 (%)

Interest in PLAR

80

60

40

20

**64**

**66**

**34**

**62**

**65**

**33**

0

2004

**Enrolled past year Not enrolled, wanted course**

2010

**Not enrolled, not wanted**

Sources: WALL 2004 Survey, (N=9,026); WALL 2010 Survey (N=1,966).

11See Aarts, S., Blower, D., Burke, R., Conlin, E., Lamarre, G., McCrossan, W., Van Kleef, J. (2003). *Feedback from learners: Cross -Canada study of prior learning assessment and recognition*. Toronto: Cross-Canada Partnership on PLAR.

12Livingstone, D.W. (2010) Trends in Public Support for Prior Learning Recognition: Basic National Survey Findings, 1998- 2010. Presentation to Canadian Association for Prior Learning Assessment International Recognition for Prior Learning Conference, Ottawa, November 7-9, 2010. Available at [www.wallnetwork.ca.](http://www.wallnetwork.ca/)

There is clearly a large unmet demand for further education courses in Canada and also a strong interest among those with unmet demands to use provisions for prior learning assessment and recognition (PLAR).**13**

In summary, in this increasingly highly schooled society, around half of adults are now participating in further education courses annually and virtually all adults are involved in active informal learning. But many without credentials who would most like to participate in further education face substantial barriers, while some with credentials may face increasing disincentives to continue to participate.**14**

13For further information on prior learning assessment and recognition practices in Canada, see [www.capla.ca.](http://www.capla.ca/)

14Livingstone, D. W., & Myers, D. (2007). ‘I might be overqualified’: Personal perspectives and national survey findings on prior learning assessment and recognition in Canada. *Journal of Adult and Continuing Education,13*(1), 27–52.

Social Background and Adult Learning

## Age and Learning

With regard to age, the basic tendency has been for younger workers to have higher participation rates in further education than older workers. Older adults have been more likely to rely on their cumulative experience than to take courses to learn new things. In addition, most further education has been job-oriented and as people approach retirement there has been less motivation to seek further job-oriented education. Numerous earlier studies have found a fairly linear decline in further education with age. However, as a higher proportion of the population has completed post-secondary education, more middle-aged people have opted to participate in further education. As Figure 7 shows for 2010, a majority or near majority up to age 55 are now participating.

### Figure 7

Age by Participation in Further Education and Any Informal Learning, 2010 (%)

100

97 97 98 98

97

95

94

98

92

96

94

90

75

Participation in Informal Learning

82

50

56

49

51

52

59

51

43

49

39

25

Participation in Further Education

24

17

0

6

9

**18-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-80 80+**

Source: WALL 2010 Survey (N=1,965).

A recent Canadian national survey of participation in job-related education or training has found a similar narrowing of the difference between younger and middle-aged groups.**15** However, most further education remains job-oriented, so as adults leave the active labour force, further education drops off rapidly, to around 15% or less of those over 65.

As Figure 7 also shows, the basic pattern of participation in informal learning by age is much different. The participation rate remains over 90% until the mid-50s and then only gradually begins to drop. A more detailed analysis of older age groups with the larger 2004 sample has found that two-thirds of those over 80 years of age are actively engaged in informal learning activities for an average of around 10 hours per week.**16** Aging is not very significantly associated with a decline in the incidence of adult learning activity. Older adults spend nearly as much time on informal learning activities as middle-aged adults. More highly schooled people may continue to rely on further education longer, but the older we are, the more we rely on our own prior learning experiences rather than courses.

## Economic Class and Learning

Economic class positions**17** have become increasingly based on formal educational attainments. Figure 8 illustrates trends in relations between post-secondary education completion and further education in different classes using professional employees and industrial workers. Professional employees are highly dependent on certification of specialized knowledge for their jobs, industrial workers less so. As Figure 8 shows, the vast majority of professional employees now have completed post-secondary education and about three-quarters took a further education course in the prior year. In comparison, around 40 percent of industrial workers have now completed a post-secondary education and similar proportions took a further education course in the prior year. The further education participation rates of most economic classes are similar to their post-secondary completion rates. However, as this figure also suggests, the lower economic classes have been

15Knighton, T., Hujaleh, F., Iacampo, J. &Werkneh, G. (2009). *Lifelong learning among Canadians aged 18 to 64 years: First results from the 2008 access and support to education and training survey*. Ottawa: Human Resources and Skills Development Canada.

16Livingstone, D. W. (2009). Age, Occupational Class and Lifelong Learning: Findings of a 2004 Canadian Survey of Formal and Informal Learning through the Life Course. In P. Sawchuk and A. Taylor (eds.).*Challenging Transitions in Learning and Work: Reflections on Policy and Practice*. (pp.21-35). Rotterdam: Sense Publishers.

17Economic classes in the employed labour force include large employers, small employers, self-employed, professional employees, managerial and supervisory employees, service workers, and industrial workers (see Livingstone 2009).

increasing their post-secondary completion rates significantly. Those relegated to the lower ranks of the labour force are becoming increasingly highly educated.

### Figure 8

Economic Class by Post-secondary Completion and Participation in Further Education, Professional Employees and Industrial Workers, 1998–2010(%)

**Post-secondary**

**completion (%)**

**Taken further education**

**course in past year (%)**

**100**

**75**

**50**

**25**

73 23 83 34 91 39

75 45 67 41 72 44

**0**

1998

2004

2010

1998

2004

2010

**Professional employees Industrial workers**

Sources: NALL Survey, 1998; WALL Survey, 2004; WALL Survey, 2010.

There are other important social background factors that serve as barriers to equitable participation in formal schooling and further education, including race**18** and family income.**19** But we conclude this report with suggestive findings about the extent to which the acquired knowledge of the existing labour force may be underutilized in paid workplaces even as barriers to further education persist.

18See Canadian Council on Learning. (2009). *Post-secondary education in Canada: Who is missing out?* Ottawa: CCL, especially re aboriginal peoples.

19Macdonald, D. & Shaker, E. (2011). *Under pressure: The impact of rising tuition fees on Ontario families*. Ottawa: Canadian Centre for Policy Alternatives.

Employment Use of Adult Learning

## Education-Job Match

In all of these surveys, employed respondents have been asked to assess the correspondence between their educational qualifications and the education required for their jobs. The general findings are summarized in Figure 9.

Figure 9

Subjective Estimates of Match between Qualifications and Job Requirements, Wage and Salary Earners, 1998-2010 (%)

100%

75%

50%

25%

0%

1998

Under-employed

2004

Match

2010

Under-qualified

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **5** |  | **6** |  | **4** |  |
| **74** | **67** | **65** |
|  |  |  |  |
|  |  |  |  |
| **30** |
|  |  | **27** |  |  |
| **22** |

Sources: NALL 1998 Survey (N=747); WALL 2004 Survey (N=4,179); WALL 2010 Survey (N=966).

The majority of the employed labour force continue to perceive a match between their education and the qualifications required for their jobs. But a growing proportion, now around 30 percent, consider themselves to be overqualified for their jobs, while only about 5 percent see themselves as underqualified.There is considerable evidence that growing proportions of industrial and service workers in particular are becoming underemployed in the sense that their qualifications are not being recognized or rewarded effectively in their jobs.**20**Multiple dimensions of the relations between education and jobs as well as social background issues are analyzed in detail in other WALL reports.

20Livingstone, D. W. (Ed.). (2009). *Education and jobs: Exploring the gaps*. Toronto: University of Toronto Press.

## Use of Computer Literacy

The proportion of the Canadian labour force that is required to use a computer in the job has jumped from under 40 percent in 1989 to well over 90 percent in the 2010 WALL survey. A pertinent question is to what extent workers have been able to cope with this rapid increase. Figure 10 offers an answer, based on workers’ own estimates. About half of all workers in both the 2004 and 2010 surveys report that they have higher computer skills than they are able to use in their current jobs. In spite of the quick diffusion of computer literacy requirements, popular demand for knowledge may have exceeded requirements. In this area that is deemed to be strategic to the development of a knowledge-based economy, Canadian adults’ learning activities in formal schooling and further education, to say nothing of their informal learning, generally appear to be keeping ahead of employers’ job requirements. While self-reports have their limits, perhaps job reforms rather than exhortations to greater learning efforts are a more relevant response to current economic problems**.21**

### Figure 10

Computer Skill Compared to Job Requirements, Employed Canadian Labour Force, 2004-2010

60

40

20

**51**

**39**

**10**

**51**

**42**

**7**

0

2004

**Higher (%)**

**Matched (%)**

2010

**Lower (%)**

Sources: WALL 2004 Survey, (N=8,861); WALL 2010 Survey (N=1,966).

**21**SeeLivingstone, D. W. (Ed.). (2009). *Education and jobs: Exploring the gaps*. Toronto: University of Toronto Press.

Information on the WALL National Samples

The survey data reported here were gathered through a series of three research projects funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) and the Canada Research Chair in Lifelong Learning and Work, (CRC). The survey is based at the Centre for the Study of Education and Work (CSEW) at the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT). An extensive annotated bibliography of a much wider array of recent studies on work and learning, titled Work and Lifelong Learning Resource Base (see [www.wallnetwork.ca/wallrb),](http://www.wallnetwork.ca/wallrb%29) has been produced with the aid of the Canadian Foundation for Innovation (CFI). For further information on the related case studies, the WALLRB and other WALL and NALL papers, please see the current website [www.wallnetwork.ca,](http://www.wallnetwork.ca/) as well as the linked [www.nall.ca.](http://www.nall.ca/)

## Samples

The surveys are random cross-sectional national samples of persons 18 years or older who live in Canada. These surveys include respondents selected through a random digital dialing (RDD) sampling method. The sample universe is the general Canadian, non-institutionalized population. Data were collected by computer assisted telephone interviews (CATI) method by the York University-affiliated Institute for Social Research (ISR). Complete information on the sample design is available on the WALL Network Website at [www.wallnetwork.ca.](http://www.wallnetwork.ca/)

## Weighting

All survey variables are weighted using population distribution data from the Canada Census to compensate for the under- or over-representation of respondents on sex, age and educational attainment. It is standard procedure to weight surveys by age and sex; however, because education is one of the key foci in these surveys, the samples havealso been weighted by educational attainment. Since the RDD procedure uses household phone and an adult participant was selected from a household, the sample has also been weighted by household size.

Related WALL Reports

Livingstone, D.W., & Raykov, M. (**2010**).***WALL papers: Resources from the SSHRC collaborative research initiative on the changing nature of work and lifelong learning in the new economy***.Toronto: Centre for the Study of Education and Work. (Available at https://tspace.library.utoronto.ca/bitstream/1807/24562/1/Livingsto ne\_Raykov\_WALLPapers\_2010.pdf

Livingstone, D.W., Raykov, M., Pollock, K., Antonelli, F., Scholtz, A., & Bird, A. (**2008**). ***Work and lifelong learning resource base (WALLRB): Materials for teaching, research and policy making.*** Toronto: Centre for the Study of Education and Work, Ontario Institute for Studies in Education of the University of Toronto. (Available at [www.wallnetwork.ca/!wallrb/wallrb2006.pdf](http://www.wallnetwork.ca/%21wallrb/wallrb2006.pdf)

Livingstone, D.W. (**2007**). (Ed.). ***NALL working papers: Annotated bibliography of studies based on data from the research network on new approaches to lifelong learning****.* Toronto: Centre for the Study of Education and Work. (Available at [www.nall.ca/nallwp.pdf).](http://www.nall.ca/nallwp.pdf%29)

Livingstone, D.W. (Ed.). (**2010**). ***Lifelong learning in paid and unpaid work: Survey and case study findings***. London: Routledge. (Available at [www.routledge.com/books/details/9780415565646/).](http://www.routledge.com/books/details/9780415565646/%29)

Livingstone, D.W. (**2010**) **Job requirements and workers' learning**: Formal gaps, informal closure, systemic limits**.***Journal of Education and Work*, 23(3), 207-231. (Available at [www.tandfonline.com/doi/abs/10.1080/13639081003785732?journal](http://www.tandfonline.com/doi/abs/10.1080/13639081003785732?journal) Code=cjew20

Livingstone.D.W. (**2012**). **Probing the icebergs of adult learning**: Comparative findings and implications of the 1998, 2004 and 2010 Canadian surveys of formal and informal learning practices. *Canadian Journal for the Study of Adult Education, 25*(1), 47-71.

Livingstone, D.W. (Ed.). (**2009**). ***Education and jobs: Exploring the gaps***. Toronto: University of Toronto Press.(Available at utppublishing.com/Education-and-Jobs-Exploring-the-Gaps.html).

Livingstone, D.W. (**2004**). ***The education-jobs gap: Underemployment or economic democracy***. (2ndEd.). Toronto: Garamond Press.

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