

Chapter 4

Skills and Adult Learning

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Summary

This chapter embraces an expanded understanding of adult learning by examining participation in organised forms of adult education and training as well as engagement in informal learning. Findings on adult education and training participation for ALL are presented and compared, where possible, to the results from IALS. Thus one can assess whether the increased importance given to adult learning by policy makers, the business community and other sectors of society has translated into increased readiness by adults to actively engage in various forms of learning. This is followed by an analysis of some key characteristics of participating adults, and whether these have changed in the intervening years. This permits an assessment of whether inequalities in adult learning patterns are shifting. Next, patterns of informal learning are compared, and in particular, an analysis of active versus passive modes of informal learning is presented. Finally, the role of employers, governments and individuals in financially supporting adult learning is considered.

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Skills and Adult Learning

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4.1 Overview and highlights

This chapter embraces an expanded understanding of adult learning by examining participation in organised forms of adult education and training as well as engagement in informal learning. Findings on adult education and training participation for ALL are presented and compared, where possible, to the results from IALS. Thus one can assess whether the increased importance given to adult learning by policy makers, the business community and other sectors of society has translated into increased readiness by adults to actively engage in various forms of learning. This is followed by an analysis of some key characteristics of participating adults, and whether these have changed in the intervening years. This permits an assessment of whether inequalities in adult learning patterns are shifting. Next, patterns of informal learning are compared, and in particular, an analysis of active versus passive modes of informal learning is presented. Finally, the role of employers, governments and individuals in financially supporting adult learning is considered.

The analysis on adult learning presented in this chapter offers some interesting and clear messages, including:

- There is a broad and growing acceptance of the principles of lifelong learning in most countries, as evidenced by a marked increase in the rate of participation in adult education and training between the IALS and ALL survey periods.
- A large proportion of adults with poor foundation skills are still not being reached by organized forms of adult education and training. But there are significant differences in participation patterns among countries, which suggest that differences in adult learning policy do matter.
- Engagement in passive modes of informal learning is an almost universal activity while active modes of adult learning, although frequent, are more unequally distributed both within and between

country populations. This suggests that there are important factors contributing to certain forms of informal learning. In particular, levels of formal education and adult skills of the type measured in ALL are strongly related to the extent of active engagement in informal learning.

- Employer financing plays a central role in supporting opportunities to engage in lifelong learning in all countries but countries differ markedly in the share of the total adult learning effort which is employer supported. Furthermore, the levels of worker engagement in literacy and numeracy practices on the job are strongly associated with the likelihood of benefiting from employer-sponsored adult education and training.

4.2 Participation in organised forms of adult education and training¹

Over the last decade, adult learning has progressed from being a form of policy rhetoric promoted by intergovernmental organisations to a central issue in national policies on education, economy and welfare. In 1996, the OECD conference of ministers of education proposed that member countries adopt the policy of “making lifelong learning a reality for all” and to make it a priority for the ensuing five year period (OECD, 1996). A similar policy was promoted by the European Commission in 2000 when it confirmed lifelong learning as a basic component of the European social model. This is reflected among others in the European employment strategy, the European social agenda, the skills and mobility action plan and the e-learning initiative. More recently, national policy documents are increasingly referring to concrete measures that promote a lifelong learning culture (see EU, 2001; OECD, 2003). Using the ALL and IALS data, this section examines the extent to which these policies have translated into increased participation in adult learning.

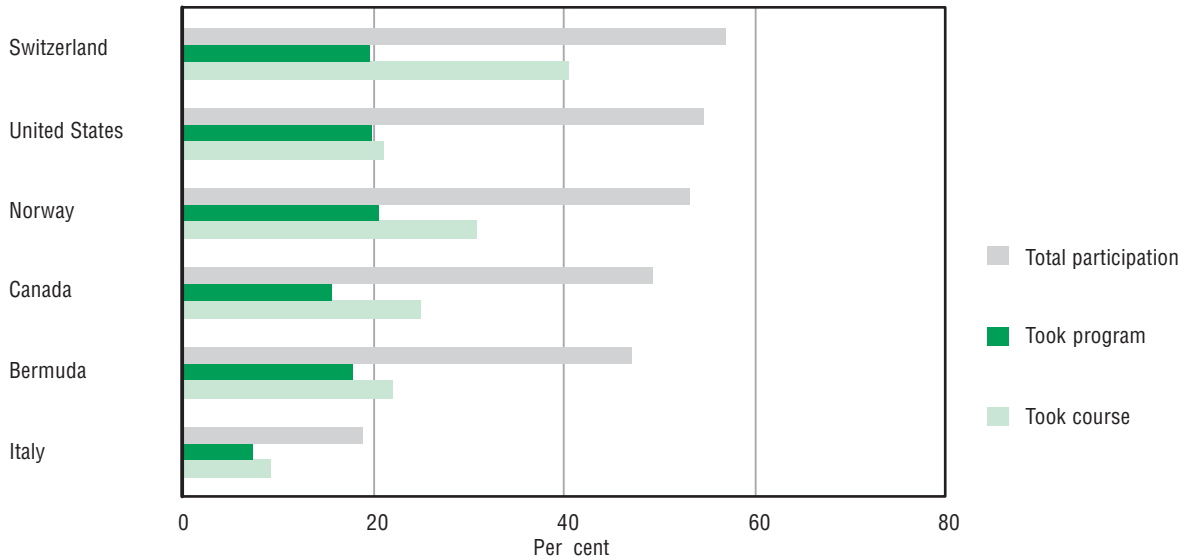
Like IALS, the ALL survey collected data on participation in adult education and training that are representative of populations aged 16 to 65 and comparable across countries. Figure 4.1 shows that, with the exception of Italy, the results reflect a broad acceptance of the principles of lifelong learning. Close to or over half of adult populations are enrolling in some form of organised adult education or training during the year preceding the interview. In Italy, however, less than 20 per cent participate in some form of organized adult education and training.

Figure 4.1 further distinguishes between participation in courses, programs or other forms of training (e.g., workshops). Apart from Italy, the rate of participation in programs varies little among countries – from a low of 16 per cent in Canada to a high of 20 per cent in Norway. Thus, disparities in overall country participation rates appear to be driven by the rate of participation in courses and other forms of training. Course participation varies from a low of about 21 per cent in the United States to a high of 40 per cent in Switzerland. Note that the relatively low rate of participation in courses in the United States may be related to the fact that Americans report a high rate of participation (17 per cent) in other forms of training (e.g., workshops).

FIGURE 4.1

Adult education and training participation rates

Per cent of populations aged 16 to 65 receiving adult education and training during the year preceding the interview, by type of participation, 2003



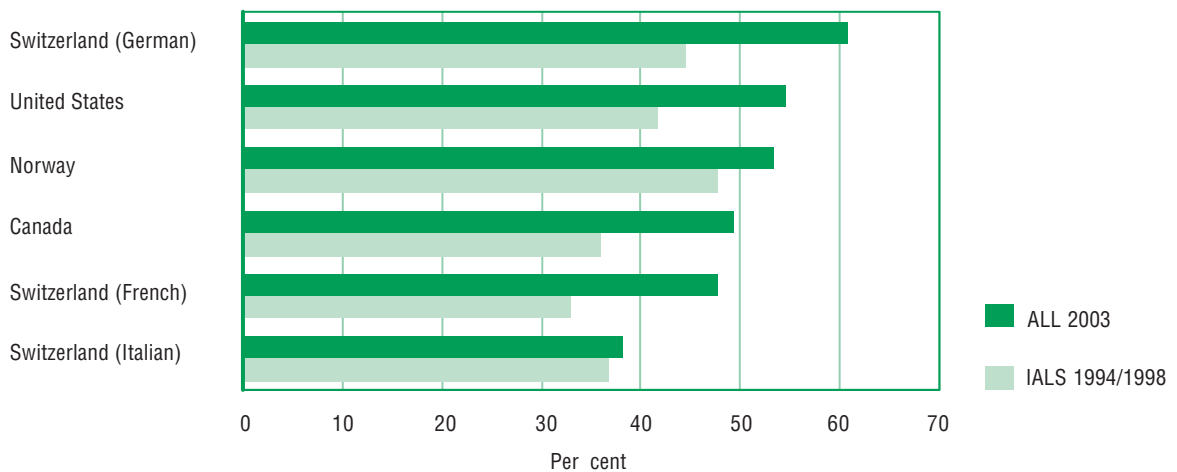
Countries are ranked by the total participation rate.

Source: Adult Literacy and Life Skills Survey, 2003.

FIGURE 4.2

Changes in adult education and training participation rates

Per cent of populations aged 16 to 65 receiving adult education and training during the year preceding the interview, IALS 1994/1998 and ALL 2003



Countries are ranked by the per cent of respondents receiving adult education and training in ALL 2003.

Sources: Adult Literacy and Life Skills Survey, 2003.
International Adult Literacy Survey, 1994-1998.

It is encouraging to note that the increased importance awarded to adult learning in policy circles corresponds to sizeable increases in participation rates. Figure 4.2 compares participation rates derived from IALS² in 1994 (1998 in Norway) and ALL in 2003. In the German and French speaking populations of Switzerland, about 15 per cent more adults participated in some form of organized adult education and training in 2003 compared to 1994. Similarly, Canada and the United States had approximately 13 per cent more persons participating. Norway experienced a slower rate of increase, between the 1998 and 2003 surveys, which accounts for an additional 5.5 per cent of the adult population aged 16 to 65. This might be expected as Norwegian participation rates in IALS were among the highest of the countries studied.

4.3 Who is excluded from adult learning opportunities?

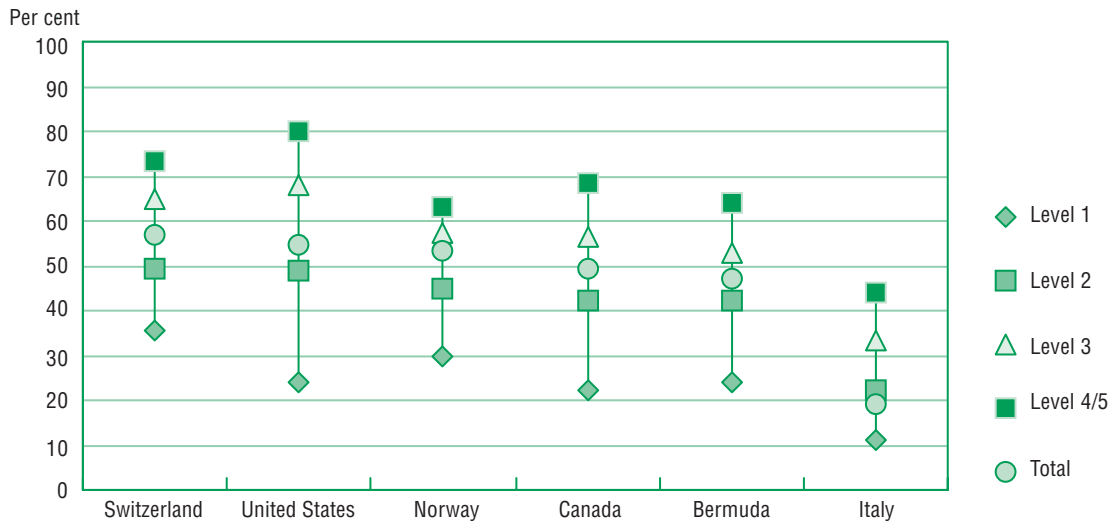
While the “new” economy holds promises of increased productivity and improved standards of living, it also introduces a new set of adjustments and challenges for society, industry and individuals (Gaskell and Rubenson, 2004). In particular, it may increase the exclusion or marginalisation of segments of the population and exacerbate socio-economic divisions (HRDC, 2002; OECD and Statistics Canada, 2000). Consequently, it is important to view adult learning not only as a means to enhance productivity and facilitate labour force participation, but also as a means to assist individuals in their everyday actions (Giddens, 1994: 7) and promote active citizenship (Esping-Andersen, 1996: 260). In this context, it is important to monitor how learning opportunities are distributed across different segments of the population, especially as the promotion of, and investment in, lifelong learning expands.

Adult literacy skills are critical for citizens to function in a learning society (Sen, 1982). Thus, it is particularly important to assess the extent of adult learning among those with limited literacy skills. Figure 4.3 presents participation in adult education and training by document literacy skills. Two findings stand out. First, in all countries there is a substantial difference between the participation rates of those with the lowest and highest levels of literacy. This is accentuated in Italy where only one in 10 of those at Level 1 participated compared to four in 10 among those at Level 4/5. Second, there is a sharp divide between those at Levels 1 and those at Levels 3 or higher.

FIGURE 4.3

Literacy and adult education participation

Per cent of population aged 16 to 65 receiving adult education and training during the year preceding the interview, by document literacy levels, 2003



Countries are ranked by the total participation rate.

Source: Adult Literacy and Life Skills Survey, 2003.

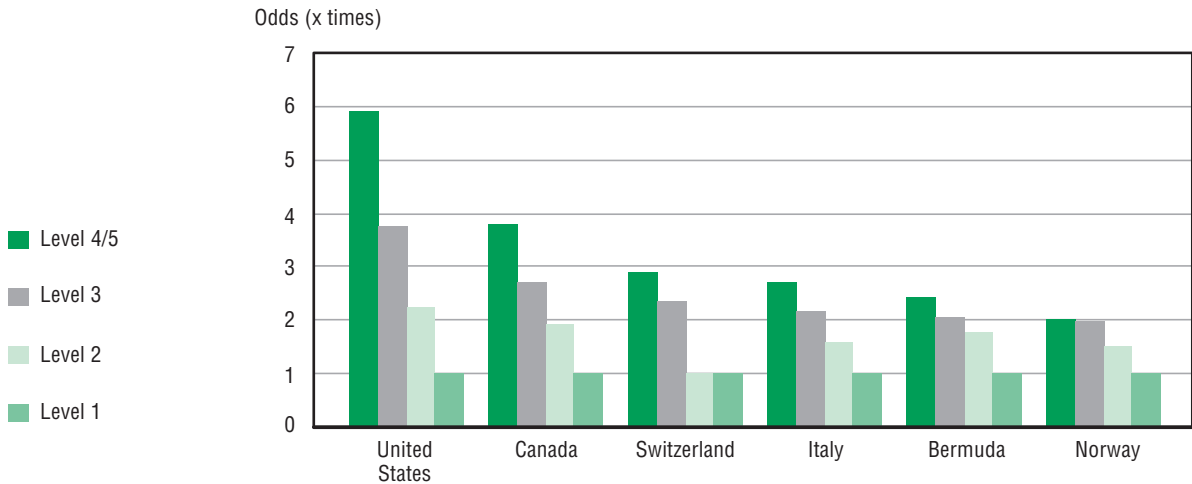
Results in Figure 4.4 extend the analysis of the relationship between document literacy and participation in adult education and training using logistic regression analysis. This method makes it possible to obtain comparable estimates of inequalities even though the actual participation rates vary between countries (see Box 4A). Inequalities are expressed by differences in the likelihood of participating compared to adults scoring at Level 1, while controlling for education, gender and labour force participation. Findings show that Americans at document literacy Level 4/5 are about six times more likely to participate than those at Level 1. Comparable estimates are only two times in Norway. This confirms the existence of sharp differences in inequality between countries. Low inequality in Norway corresponds with a long tradition of adult education including popular adult education, as well as recent reforms that continue to aim efforts toward increasing participation among low skilled adults who are hard to reach (OECD, 2001).

While large differences remain between low and high skilled adults, it is worth noting that in some countries, the most vulnerable have benefited substantially. Figure 4.5 shows that in Norway, Switzerland (German and French speaking populations) and the United States, participation rates have increased more among those with the lowest level of literacy than any other levels. These results are consistent with overall improvements in the lower end of the skills distribution between the ALL and IALS survey period, as presented in Section 2.3.

FIGURE 4.4

Likelihood of participation by literacy levels

Adjusted odds ratios showing the likelihood of adults aged 16 to 65 receiving adult education and training during the year preceding the interview, by document literacy levels, 2003



Countries are ranked according to the odds of persons who score at Level 4/5.

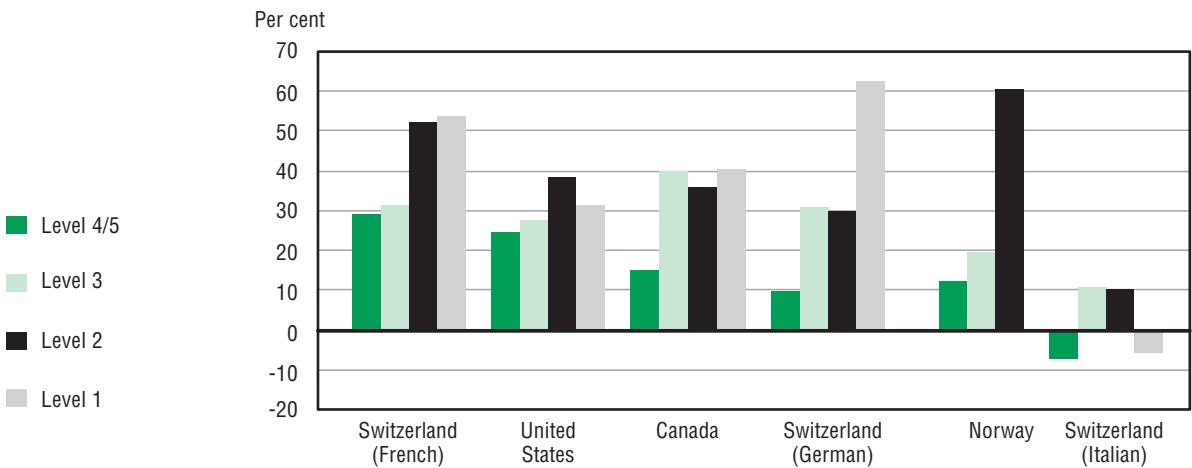
1. Odds estimates that are not statistically different from one at conventional levels of significance are reported as one in the figure. For the actual estimate and its corresponding significance, see Table 4.4 in the annex to this chapter.

Source: Adult Literacy and Life Skills Survey, 2003.

FIGURE 4.5

Changes in participation rates by literacy levels

Changes in the per cent of adults aged 16 to 65 in adult education and training between IALS 1994/1998 and ALL 2003, by document literacy levels



Countries are ranked by the change in the per cent at Level 4/5.

Note: Changes in participation rates are calculated by taking the difference between the ALL and the IALS rates and dividing by the average participation rates of the two periods, i.e., $(ALL\ rate - IALS\ rate) / ((ALL\ rate + IALS\ rate) / 2)$.

Source: Adult Literacy and Life Skills Survey, 2003.

International Adult Literacy Survey, 1994-1998.

Box 4A

Interpreting odds ratios in Figures 4.4 and 4.8

For the purpose of the analyses presented in Figures 4.4 and 4.8, the likelihood or odds of adults scoring at Level 1 was set at one for all countries. Thus, odds greater than one for persons at Levels 2, 3 and 4/5 indicate that those persons have increased chances compared to persons scoring at Level 1 of receiving adult education and training.

4.4 Patterns of informal learning³

According to the underlying philosophy of lifelong learning, participation is not limited to organised forms of adult education and training but also includes informal learning. Interestingly, studies have shown differing patterns of engagement in adult education and training compared to informal learning (e.g., Livingstone, 1999; Statistics Canada, 2001). It is well documented, for example, that opportunities and readiness to engage in organised forms of adult learning are unequally distributed across different segments of the population (see OECD, 1997; OECD 2003; and the previous section). In contrast, some studies suggest that conventional inequalities that exist among social or ethnic groups, or those with differing levels of educational attainment, may not apply to informal learning. This section explores this issue further by analyzing the informal learning data collected in the ALL survey.

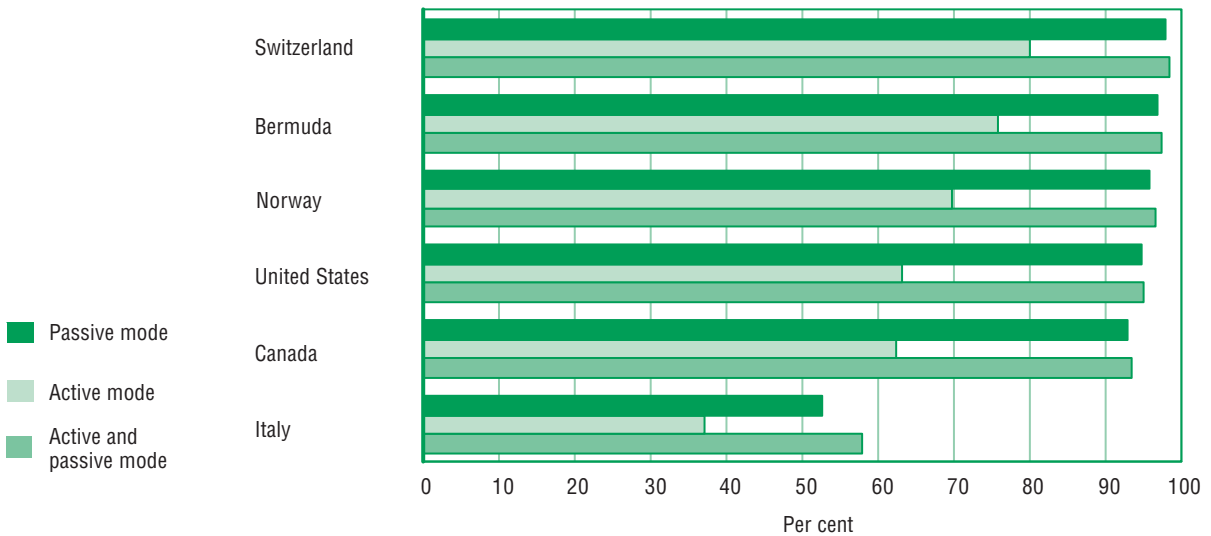
As expected, results presented in Figure 4.6 confirm previous findings (see Livingstone, 1999), which suggest that informal learning is more or less a universal activity. Nearly 95 per cent of the population in five of six countries report that they engaged in some kind of informal learning activity over the cycle of one year. In Italy, however, engagement in activities of the type included in the ALL survey is less common, with fewer than 60 per cent reporting that they participated in some kind of informal learning activity.

Figure 4.6 also introduces the distinction between active and passive modes of informal learning, which reveals some interesting results. The former relates to activities such as learning by oneself, trying things out and learning by watching or getting help, while the latter refers to going on guided tours and learning by being sent to organizations. The results show that engagement in active modes remains frequent, particularly in Bermuda and Switzerland, but it is more variable among countries, with fewer than 40 per cent participating in Italy compared with nearly 80 per cent in Switzerland. Note that engagement in passive modes remains almost universal (i.e., over 90 per cent with the exception of Italy). These findings suggest that inequalities are more prevalent when active forms of informal learning are considered.

FIGURE 4.6

Engagement in informal learning

Per cent of populations aged 16 to 65 participating in informal learning activities during the year preceding the interview, by mode of engagement, 2003



Countries are ranked by the active and passive mode.

Source: Adult Literacy and Life Skills Survey, 2003.

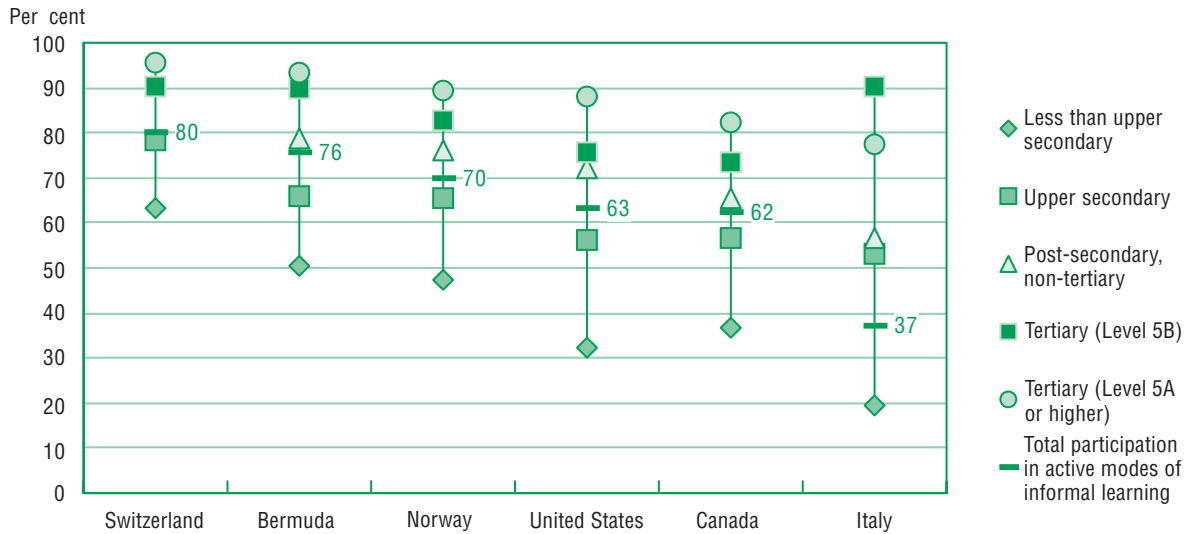
In general, the research literature suggests that well-educated adults benefit the most from organised forms of learning. Findings presented in Figure 4.7 show a similar pattern between educational attainment and participation in active modes of informal learning. In all of the countries, the rate of active engagement in informal learning increases sharply with rising levels of educational attainment. In the United States, only about 30 per cent of those who did not complete upper secondary education report that they engaged in active modes of informal learning compared to more than 80 per cent among those with a university education (tertiary type A or higher). Nevertheless, participation among those with the lowest levels of education is comparatively high in Bermuda, Norway and Switzerland (German and French speaking populations); with around 50 per cent reporting some engagement in active forms of informal learning.

Similarly, Figure 4.8 shows that the likelihood of engaging in active modes of informal learning is closely linked to adult skills, even after controlling for educational attainment, age, labour force participation and gender. Overall, adjusted odds increase markedly by level of skill. Adults scoring at the highest level in Italy and Switzerland are around four times more likely to engage in active modes of informal learning than those scoring at Level 1 on the document scale. In Canada, high skilled adults are nearly five times more likely to be active informal learners than low skilled adults.

FIGURE 4.7

Informal learning by level of education

Per cent of populations aged 16 to 65 participating in active modes of informal learning in the year preceding the interview, by educational attainment, 2003

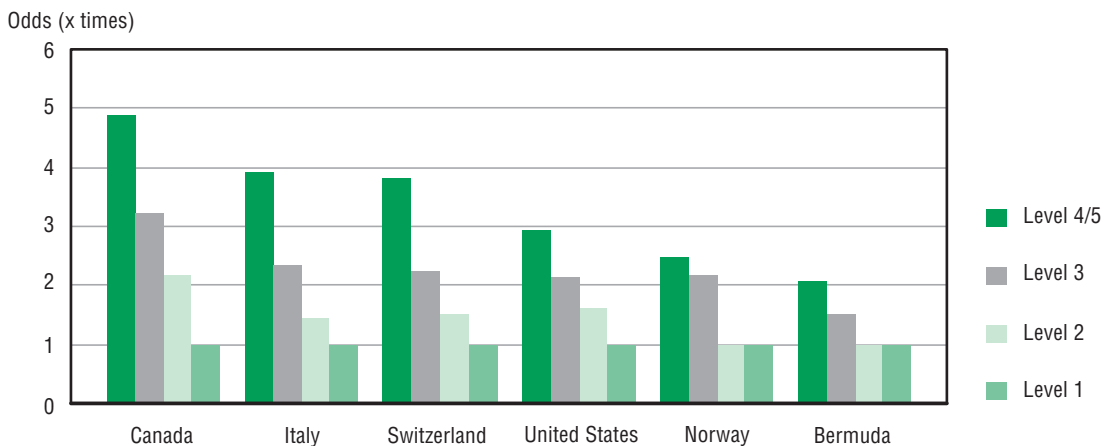


Source: Adult Literacy and Life Skills Survey, 2003.

FIGURE 4.8

Likelihood of participation in active modes of informal learning by literacy levels

Adjusted odds ratios¹ showing the likelihood of adults aged 16 to 65 participating in active modes of informal adult learning during the year preceding the interview, by document literacy levels, 2003



Countries are ranked according to the odds of persons who score at Level 4/5.

1. Odds estimates that are not statistically different from one at conventional levels of significance are reported as one in the figure. For the actual estimate and its corresponding significance, see Table 4.8 in the annex to this chapter.

Source: Adult Literacy and Life Skills Survey, 2003.

These findings suggest that initial formal education and foundation skills are major factors influencing active forms of informal learning, including learning by oneself, trying things out and learning by watching or getting help. It also implies that it may not be wise to rely on informal learning alone to substitute for low levels of initial education, or adult education and training. Merely learning in the course of daily life without some systematic prior reinforcement, such as formal education, may not be sufficient for gaining knowledge and skills. It is probably also more difficult to convert what is learned passively into economic and social value (Svensson, Ellström and Åberg, 2004).

4.5 Financial support for adult learning

Investing in adult learning is important for several reasons including, among others, to enhance productivity, facilitate participation in labour markets, promote active citizenship and democracy, and to assist individuals in their everyday actions. Accordingly, governments, firms and individuals alike have vested interests to financially support adult learning. This section examines the role of each in supporting organised forms of adult education and training.

Figure 4.9 confirms findings from IALS (OECD and HRDC, 1997) that show the important role of employers in providing financial support for adult education and training. This is most prevalent in Norway, where more than half of participating men as well as women receive financial support from their employers. Furthermore, employers are the most common source of financial support among men in Bermuda, Canada, Norway, Switzerland, and the United States, and among women in Norway and the United States. But compared to men, the data show that in all countries self or family financing is a more common source of financing for women.

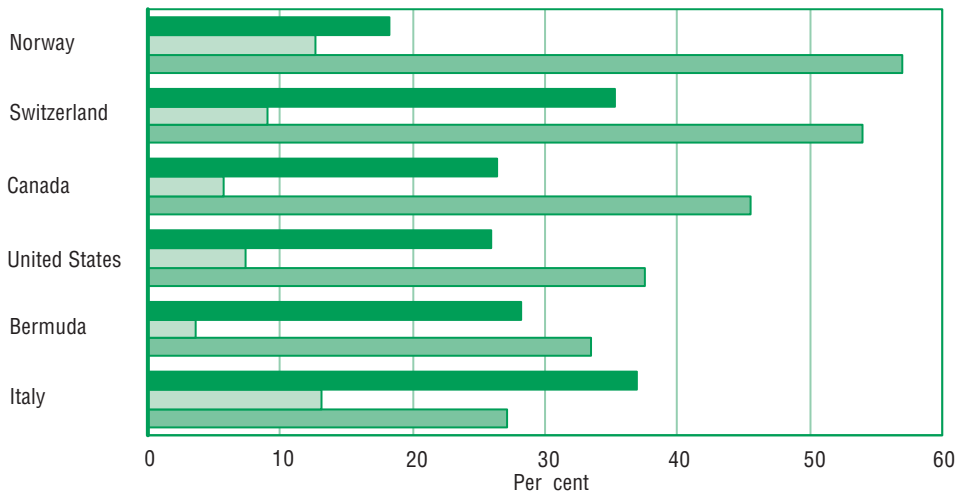
Overall, direct financial support from government sources is less common. In Italy and Norway, governments are able to extend direct support to a larger number of participants compared to other countries, with over 13 per cent of all participants obtaining this type of financial support. In other countries, fewer than 10 per cent of participants are able to support their adult learning through direct government financing.

It is interesting to consider the extent to which government support reaches vulnerable groups such as those with low literacy skills. Figure 4.10 shows the proportion of persons who obtain financial support from different sources by low (Levels 1 and 2) and medium to high levels (Levels 3 and 4/5) of document literacy. Overall, a higher proportion of low skilled adults obtain government financial support. Nearly 16 and 11 per cent, respectively, of low skilled participants in Italy and Norway report that they received financial support from government sources.

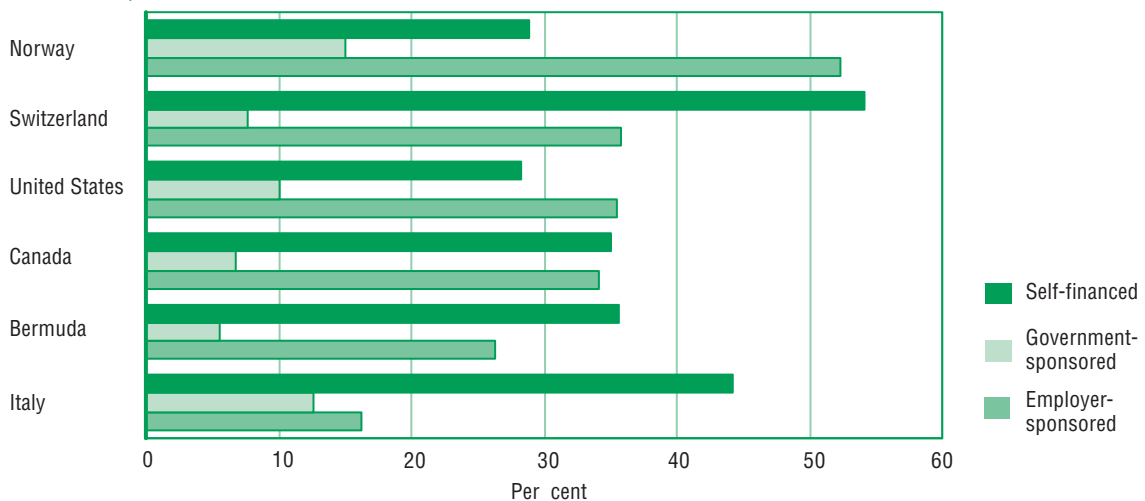
FIGURE 4.9

Sources of financial support for adult education and training

A. Per cent of men participating in adult education and training who receive financial support from various sources, populations aged 16 to 65, 2003



B. Per cent of women participating in adult education and training who receive financial support from various sources, populations aged 16 to 65, 2003



A. Countries are ranked by the per cent of men who received support from their employer.

B. Countries are ranked by the per cent of women who received support from their employer.

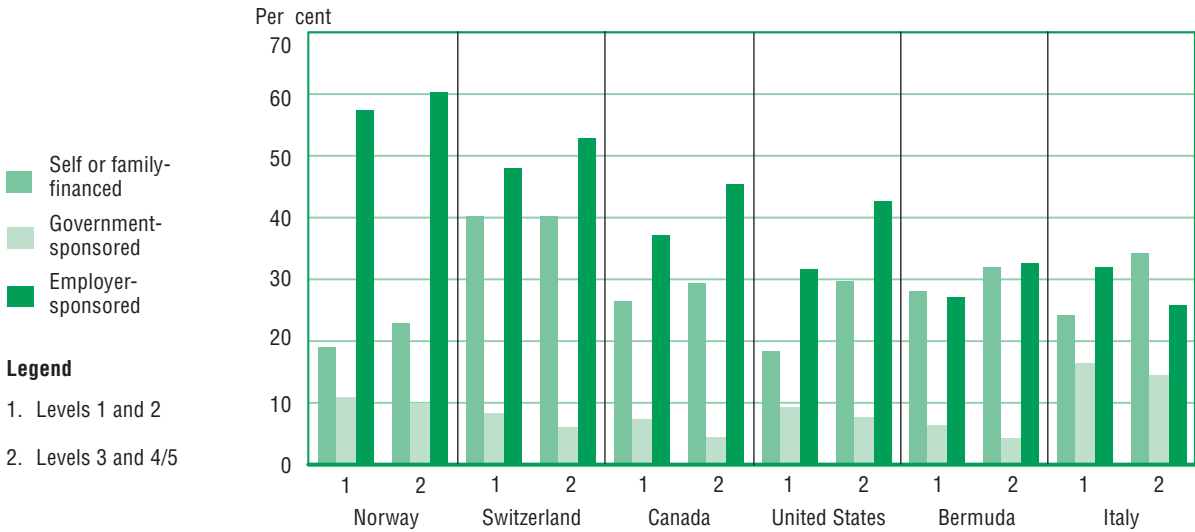
Source: Adult Literacy and Life Skills Survey, 2003.

Figure 4.10 also shows that in Bermuda, Italy, Norway and Switzerland, low skilled adults who participate in adult education and training are nearly as likely to receive employer financing than those who are more skilled. The differences are larger in Canada and the United States, where there are about 8 and 11 per cent more medium to high skilled participants who obtain employer financing. It is noteworthy that in Switzerland about 48 per cent, and in Norway more than 50 per cent of low skilled participants were able to secure financial support from their employers. Finally, in all countries it is slightly more common for medium to high skilled participants to draw on self or family sources of financing.

FIGURE 4.10

Sources of financing by document literacy levels

Per cent of participants in adult education and training who received financial support from various sources, by document literacy, populations aged 16 to 65 who worked in the last 12 months, 2003



Countries are ranked by the per cent of those scoring at Levels 3 and 4/5 who received support from their employer.

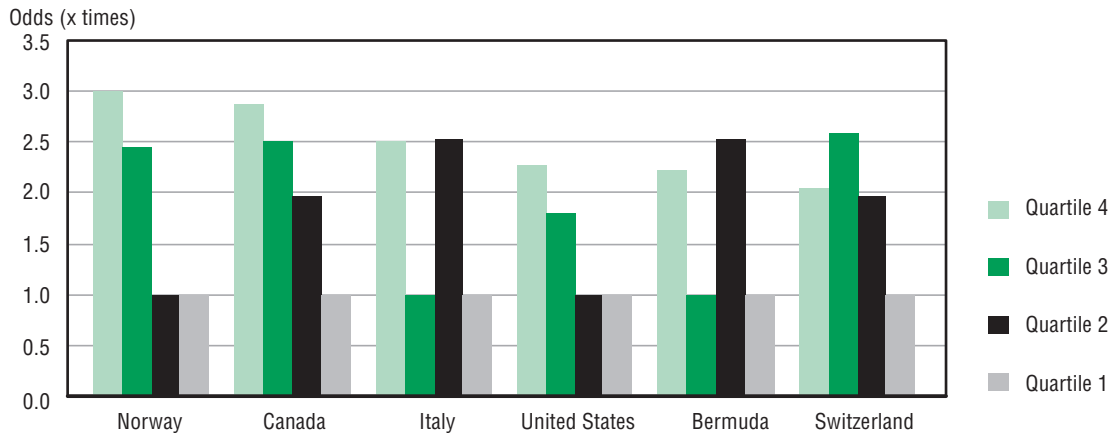
Source: Adult Literacy and Life Skills Survey, 2003.

With nearly over a third of employed participants in Bermuda, Canada, Italy and the United States, and over one half in Norway and Switzerland involved in some form of employer-sponsored adult education and training, it is important to take a closer look at how opportunities vary between different groups of workers. Not surprisingly, an analysis of the impact of various factors on the likelihood of benefiting from employer-sponsored education and training such as engagement in literacy practices at work, firm size, occupation, supervisory position and type of industry, reveals that the combined level of engagement in reading, writing and numeracy practices at work is one of the strongest factors predicting employer support. Firm size is also a strong determinant of participation in employer-sponsored adult education and training (see Table 4.11 in Data Values for the Figures, Annex 4). Larger firms tend to invest in adult learning more than small and medium sized firms.

FIGURE 4.11

Employer-sponsored training by level of practice engagement

Adjusted odds ratios¹ showing the likelihood of receiving employer-sponsored adult education and training during the year preceding the interview, by combined levels of engagement in reading, writing and numeracy practices at work, populations aged 16 to 65, 2003



Countries are ranked by the adjusted odds ratios of those who are in 4th quartile.

1. Odds estimates that are not statistically different from one at conventional levels of significance are reported as one in the figure. For the actual estimate and its corresponding significance, see Table 4.11 in the annex to this chapter.

Source: Adult Literacy and Life Skills Survey, 2003.

Figure 4.11 shows the likelihood of receiving employer-sponsored training by the extent of engagement in literacy and numeracy practices at work. The frequency and variety of engagement in these types of job tasks are considered as good indirect measures of skill requirements at work. The results are obtained while holding variation in gender, age and educational attainment constant. In all countries, employees who engage the most in literacy practices at work (quartile 4) are over two to three times more likely to enrol in employer-sponsored training than those with the lowest engagement (quartile 1). The differences are most pronounced in Norway, with a difference of three times.

Endnotes

1. Measuring participation in adult education and training programs and courses.
 Total participation rates in adult education and training are based on data derived from the following question:
 - During the last 12 months, did you take any education or training? This education or training would include programs, courses, private lessons, correspondence courses, workshops, on-the-job training, apprenticeship training, arts, crafts, recreation courses, or any other training or education?
 Participation rates in programs are based on data derived from the following question:
 - During the last 12 months, did you take any courses as part of a program of studies toward a certificate, diploma or degree? A program of studies is a collection of courses that leads to a specific certificate, diploma or degree.
 Participation rates in courses are based on data derived from the following question:
 - During the last 12 months, did you participate in any courses that were not part of a program of studies?
2. To allow comparisons between participation rates in IALS and ALL the calculations exclude all full-time students under 25 years of age.
3. Measuring participation in active and passive modes of informal learning
 Participation rates in passive forms of informal learning are based on whether sampled adults responded yes to one of the following questions:
 - During the last 12 months, did you learn by going on guided tours such as museums, art galleries, or other locations?
 - During the last 12 months, did you learn by being sent around an organization to learn different aspects of that organization?
 - During the last 12 months, did you visit trade fairs, professional conferences or congresses?
 - During the last 12 months, did you attend short lectures, seminars, workshops or special talks that were not part of a course?
 Participation rates in active forms of informal learning are based on whether sampled adults responded yes to one of the following questions:
 - During the last 12 months, did you learn by watching, getting help from or advice from others but not from course instructors?
 - During the last 12 months, did you learn by yourself by trying things out, doing things for practice, trying different approaches to doing things?
 - During the last 12 months, did you use video, television, tapes to learn but not as part of the course?
 - During the last 12 months, did you use computers or the Internet to learn but not as part of a course?
 - During the last 12 months, did you read manuals, reference books, journals or other written materials but not as part of a course?

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Annex 4

Data Values for the Figures

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TABLE 4.1

Per cent of populations aged 16 to 65 receiving adult education and training during the year preceding the interview, by type of participation, 2003

	Total participation		Took program		Took course	
Bermuda	47.0	(1.4)	18.0	(0.8)	22.1	(1.1)
Canada	49.3	(0.7)	15.8	(0.6)	24.9	(0.6)
Italy	18.9	(0.9)	7.4	(0.4)	9.2	(0.7)
Norway	53.3	(0.9)	20.7	(0.8)	30.9	(0.8)
Switzerland	56.9	(1.1)	19.5	(1.3)	40.5	(0.9)
United States	54.6	(1.4)	19.9	(0.9)	21.0	(0.9)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.2

Per cent of populations aged 16 to 65 receiving adult education and training during the year preceding the interview, IALS 1994/1998 and ALL 2003

	IALS 1994/1998		ALL 2003	
Canada	36.0	(1.4)	49.3	(0.7)
Norway	47.8	(1.4)	53.3	(0.9)
Switzerland (French)	32.9	(1.9)	47.8	(1.4)
Switzerland (German)	44.5	(1.1)	60.8	(1.3)
Switzerland (Italian)	36.8	(1.7)	38.2	(1.7)
United States	41.7	(1.3)	54.6	(1.4)

Sources: Adult Literacy and Life Skills Survey, 2003.
International Adult Literacy Survey, 1994-1998.

TABLE 4.3

**Per cent of populations aged 16 to 65 receiving adult education
and training during the year preceding the interview,
by document literacy levels, 2003**

	Level 1		Level 2		Level 3		Level 4/5		Total	
Bermuda	23.9	(3.0)	42.3	(2.9)	53.0	(2.2)	63.9	(3.1)	47.0	(1.4)
Canada	22.1	(1.8)	42.4	(1.4)	56.3	(1.0)	68.6	(2.4)	49.3	(0.7)
Italy	10.9	(1.0)	22.4	(2.0)	33.5	(2.5)	44.2	(4.1)	18.9	(0.9)
Norway	29.9	(3.7)	44.7	(2.9)	57.5	(2.5)	63.0	(3.1)	53.3	(0.9)
Switzerland	35.6	(3.9)	49.4	(3.1)	64.9	(2.3)	73.2	(3.6)	56.9	(1.1)
United States	24.0	(2.1)	48.7	(2.9)	68.2	(2.4)	79.9	(2.9)	54.6	(1.4)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.4

**Adjusted odds ratios showing the likelihood of adults aged 16 to 65
receiving adult education and training during the year preceding
the interview, by document literacy levels, 2003**

	Level 1	Level 2		Level 3		Level 4/5	
Bermuda	1.00	1.77**	(0.25)	2.04***	(0.22)	2.42**	(0.31)
Canada	1.00	1.93***	(0.12)	2.72***	(0.11)	3.78***	(0.14)
Italy	1.00	1.60***	(0.16)	2.16***	(0.17)	2.69***	(0.25)
Norway	1.00	1.52**	(0.19)	1.97***	(0.18)	2.00**	(0.25)
Switzerland	1.00	1.53	(0.25)	2.37***	(0.22)	2.90***	(0.26)
United States	1.00	2.24***	(0.19)	3.75***	(0.16)	5.91***	(0.23)

* p<0.10, statistically significant at the 10 per cent level.

** p<0.05, statistically significant at the 5 per cent level.

*** p<0.01, statistically significant at the 1 per cent level.

Notes: Odds are adjusted for gender, age, educational attainment and labour force participation status.

Standard errors are of the logarithm of the odds ratios.

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.5

**Changes in the per cent of adults aged 16 to 65 in adult education and training
between IALS 1994/1998 and ALL 2003, by document literacy levels**

	Level 1		Level 2		Level 3		Level 4/5		Total	
Canada										
IALS 1994/1998	14.7	(5.0)	29.5	(2.7)	37.6	(3.7)	58.9	(3.2)	36.0	(1.4)
ALL 2003	22.1	(1.8)	42.4	(1.4)	56.3	(1.0)	68.6	(2.4)	49.3	(0.7)
Norway										
IALS 1994/1998	16.0	(1.9)	36.7	(2.7)	50.8	(1.5)	63.1	(2.3)	47.8	(1.4)
ALL 2003	29.9	(3.7)	44.7	(2.9)	57.5	(2.5)	63.0	(3.1)	53.3	(0.9)
Switzerland (French)										
IALS 1994/1998	19.2	(3.5)	25.5	(3.7)	38.9	(2.0)	47.0	(4.4)	32.9	(1.9)
ALL 2003	33.2	(7.1)	43.5	(3.9)	53.4	(2.3)	63.0	(6.3)	47.8	(1.4)
Switzerland (German)										
IALS 1994/1998	19.7	(3.5)	39.1	(2.9)	50.6	(2.0)	68.4	(3.5)	44.5	(1.1)
ALL 2003	37.7	(4.4)	52.8	(4.3)	69.2	(3.4)	75.5	(3.6)	60.8	(1.3)
Switzerland (Italian)										
IALS 1994/1998	19.8	(4.2)	27.9	(2.8)	46.3	(3.0)	65.0	(3.1)	36.8	(1.7)
ALL 2003	18.7	(5.4)	30.9	(2.3)	51.6	(3.1)	60.4	(5.4)	38.2	(1.7)
United States										
IALS 1994/1998	17.5	(1.7)	33.1	(2.2)	51.8	(1.9)	62.5	(2.7)	41.7	(1.3)
ALL 2003	24.0	(2.1)	48.7	(2.9)	68.2	(2.4)	79.9	(2.9)	54.6	(1.4)

Note: Estimates are based on adult population with full-time students aged 16 to 24 excluded.

Sources: Adult Literacy and Life Skills Survey, 2003.

International Adult Literacy Survey, 1994-1998.

TABLE 4.6

**Per cent of populations aged 16 to 65 participating in informal learning activities
during the year preceding the interview, by mode of engagement, 2003**

	Active and passive mode		Active mode		Passive mode	
Bermuda	97.4	(0.4)	75.8	(1.0)	96.8	(0.5)
Canada	93.4	(0.3)	62.4	(0.6)	92.9	(0.3)
Italy	57.9	(1.4)	37.1	(0.9)	52.7	(1.4)
Norway	96.6	(0.2)	69.8	(1.0)	95.8	(0.3)
Switzerland	98.4	(0.3)	79.9	(1.4)	98.0	(0.3)
United States	95.0	(0.4)	63.2	(1.0)	94.7	(0.4)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.7

**Per cent of populations aged 16 to 65 participating in active modes
of informal learning in the year preceding the interview,
by education attainment, 2003**

	Active mode		Passive mode	
Bermuda				
Less than upper secondary	50.6	(3.6)	89.3	(1.6)
Upper secondary	65.9	(2.2)	95.3	(1.0)
Post-secondary, non-tertiary	78.7	(1.7)	98.4	(0.5)
Tertiary (Level 5B)	89.8	(2.1)	99.5	(0.4)
Tertiary (Level 5A or higher)	93.5	(1.5)	98.7	(0.5)
Total participation in active modes of informal learning	75.8	(1.0)	96.8	(0.5)
Canada				
Less than upper secondary	36.8	(1.8)	84.3	(1.1)
Upper secondary	56.7	(1.2)	91.8	(0.7)
Post-secondary, non-tertiary	65.4	(1.7)	95.6	(0.9)
Tertiary (Level 5B)	73.5	(1.7)	96.7	(0.5)
Tertiary (Level 5A or higher)	82.5	(1.3)	97.7	(0.4)
Total participation in active modes of informal learning	62.4	(0.6)	92.9	(0.3)
Italy				
Less than upper secondary	19.3	(1.1)	35.8	(1.9)
Upper secondary	53.0	(1.7)	69.3	(2.1)
Post-secondary, non-tertiary	56.6	(4.0)	65.8	(6.5)
Tertiary (Level 5B)	90.4	(7.5)	91.7	(7.1)
Tertiary (Level 5A or higher)	77.5	(2.3)	84.5	(2.3)
Total participation in active modes of informal learning	37.1	(0.9)	52.7	(1.4)
Norway				
Less than upper secondary	47.4	(2.4)	88.9	(1.2)
Upper secondary	65.3	(1.7)	95.6	(0.4)
Post-secondary, non-tertiary	76.2	(2.1)	96.5	(1.0)
Tertiary (Level 5B)	82.9	(1.4)	98.5	(0.5)
Tertiary (Level 5A or higher)	89.4	(0.8)	99.7	(0.1)
Total participation in active modes of informal learning	69.8	(1.0)	95.8	(0.3)
Switzerland				
Less than upper secondary	63.1	(4.6)	95.3	(2.2)
Upper secondary	78.3	(2.0)	98.1	(0.3)
Tertiary (Level 5B)	90.1	(1.9)	98.2	(1.1)
Tertiary (Level 5A or higher)	95.4	(1.0)	99.9	(0.1)
Total participation in active modes of informal learning	79.9	(1.4)	98.0	(0.3)
United States				
Less than upper secondary	32.4	(1.9)	82.9	(1.8)
Upper secondary	56.3	(1.7)	95.4	(0.6)
Post-secondary, non-tertiary	72.0	(3.9)	98.4	(1.3)
Tertiary (Level 5B)	75.6	(2.7)	97.3	(1.2)
Tertiary (Level 5A or higher)	87.9	(1.4)	98.7	(0.5)
Total participation in active modes of informal learning	63.2	(1.0)	94.7	(0.4)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.8

Adjusted odds ratios showing the likelihood of adults aged 16 to 65 participating in active modes of informal adult learning during the year preceding the interview, by document literacy levels, 2003

	Level 1	Level 2	Level 3	Level 4/5
Bermuda	1.00	1.16 (0.18)	1.53* (0.21)	2.09** (0.28)
Canada	1.00	2.17*** (0.10)	3.23*** (0.08)	4.88*** (0.12)
Italy	1.00	1.46*** (0.12)	2.34*** (0.17)	3.91*** (0.32)
Norway	1.00	1.45 (0.22)	2.18*** (0.18)	2.47*** (0.20)
Switzerland	1.00	1.53** (0.17)	2.25*** (0.19)	3.82*** (0.37)
United States	1.00	1.60** (0.17)	2.14*** (0.13)	2.95*** (0.19)

* p<0.10, statistically significant at the 10 per cent level.

** p<0.05, statistically significant at the 5 per cent level.

*** p<0.01, statistically significant at the 1 per cent level.

Notes: Odds ratios are adjusted for gender, age, educational attainment and labour force participation status.

Standard errors are of the logarithm of the odds ratios.

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.9

Per cent of men and women participating in adult education and training who receive financial support from various sources, populations aged 16 to 65, 2003

	Employer-sponsored	Government-sponsored	Self-financed
Bermuda			
Women	26.3 (2.3)	5.5 (1.0)	35.7 (2.4)
Men	33.5 (2.1)	3.6 (0.8)	28.2 (1.9)
Canada			
Women	34.1 (1.2)	6.8 (0.7)	35.0 (1.1)
Men	45.5 (1.7)	5.7 (0.6)	26.4 (1.2)
Italy			
Women	16.3 (1.6)	12.6 (1.8)	44.2 (2.3)
Men	27.1 (3.1)	13.1 (2.7)	36.9 (2.7)
Norway			
Women	52.3 (2.3)	15.0 (1.8)	28.8 (1.7)
Men	57.0 (2.1)	12.7 (1.6)	18.2 (1.7)
Switzerland			
Women	35.8 (2.3)	7.6 (1.5)	54.2 (2.1)
Men	54.0 (2.4)	9.1 (1.1)	35.3 (2.4)
United States			
Women	35.5 (1.6)	10.1 (1.4)	28.2 (1.4)
Men	37.6 (1.7)	7.4 (1.2)	26.0 (1.1)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.10

Per cent of participants in adult education and training who received financial support from various sources, by document literacy, populations aged 16 to 65 who worked in the last 12 months, 2003

	Employer-sponsored		Government-sponsored		Self or family-financed	
Bermuda						
Levels 1 and 2	27.1	(2.4)	6.3	(1.7)	28.1	(3.0)
Levels 3 and 4/5	32.7	(2.0)	4.1	(0.8)	31.9	(2.3)
Total	30.7	(1.5)	4.9	(0.7)	30.6	(1.5)
Canada						
Levels 1 and 2	37.2	(2.2)	7.3	(1.1)	26.6	(1.9)
Levels 3 and 4/5	45.5	(1.3)	4.5	(0.7)	29.5	(1.1)
Total	43.0	(1.0)	5.3	(0.5)	28.6	(0.7)
Italy						
Levels 1 and 2	31.8	(3.4)	16.5	(3.8)	24.1	(2.6)
Levels 3 and 4/5	25.7	(4.9)	14.4	(3.4)	34.3	(4.2)
Total	29.5	(2.4)	15.7	(2.1)	27.8	(2.5)
Norway						
Levels 1 and 2	57.4	(3.8)	10.9	(2.0)	18.9	(2.2)
Levels 3 and 4/5	60.3	(1.7)	9.9	(1.1)	22.8	(1.3)
Total	59.6	(1.7)	10.2	(0.8)	21.8	(0.9)
Switzerland						
Levels 1 and 2	48.0	(4.2)	8.3	(2.1)	40.2	(2.4)
Levels 3 and 4/5	53.0	(3.1)	6.2	(1.1)	40.4	(2.4)
Total	51.1	(1.5)	6.9	(0.7)	40.4	(1.7)
United States						
Levels 1 and 2	31.7	(2.3)	9.2	(1.6)	18.3	(2.3)
Levels 3 and 4/5	42.5	(1.7)	7.7	(1.4)	29.8	(1.4)
Total	38.6	(1.3)	8.3	(1.1)	25.6	(0.9)

Source: Adult Literacy and Life Skills Survey, 2003.

TABLE 4.11

Adjusted odds ratios showing the likelihood of receiving employer-sponsored adult education and training during the year preceding the interview, by combined levels of engagement in reading, writing and numeracy practices at work, populations aged 16 to 65, 2003

	Literacy engagement at work							
	Quartile 1		Quartile 2		Quartile 3		Quartile 4	
Bermuda	1.00	2.53*	(0.51)	2.33	(0.50)	2.21*	(0.45)	
Canada	1.00	1.97***	(0.20)	2.51***	(0.18)	2.87***	(0.18)	
Italy	1.00	2.53***	(0.33)	1.10	(0.46)	2.50**	(0.41)	
Norway	1.00	1.69	(0.43)	2.44**	(0.42)	3.01**	(0.41)	
Switzerland	1.00	1.97*	(0.38)	2.59***	(0.33)	2.04**	(0.32)	
United States	1.00	1.45	(0.28)	1.79**	(0.23)	2.27***	(0.24)	

	Firm size								
	Less than 20	20 to 99	100 to 499	500 to 999	1,000 and over				
Bermuda	1.00	2.16***	(0.21)	2.12***	(0.26)	2.66***	(0.35)	2.38**	(0.33)
Canada	1.00	1.58***	(0.13)	2.92***	(0.12)	3.02***	(0.19)	3.09***	(0.12)
Italy	1.00	3.32	(0.87)	9.83***	(0.74)	1.68	(0.85)	4.71**	(0.60)
Norway	1.00	2.42***	(0.32)	2.14**	(0.29)	1.90*	(0.36)	1.86**	(0.28)
Switzerland	1.00	2.93***	(0.30)	4.49***	(0.37)	2.74***	(0.32)	4.15***	(0.21)
United States	1.00	2.62***	(0.24)	3.12***	(0.21)	3.30***	(0.33)	3.19***	(0.17)

* p<0.10, statistically significant at the 10 per cent level.

** p<0.05, statistically significant at the 5 per cent level.

*** p<0.01, statistically significant at the 1 per cent level.

Notes: Odds are adjusted for gender and age, educational attainment, supervisory role, type of occupation, type of industry and firm size. Standard errors are of the logarithm of the odds ratios.

Source: Adult Literacy and Life Skills Survey, 2003.

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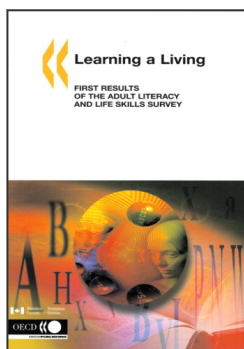
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