

**UNLOCKING CANADA'S POTENTIAL**  
The State of Workplace and Adult Learning in Canada



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# INTRODUCTION: WHY REPORT ON ADULT LEARNING?

Recent polls on attitudes toward learning have demonstrated that the majority of Canadians strongly believe learning is critical to success in life.<sup>1</sup>

Despite this widely held belief, rates of adult participation in education and training activities have stagnated over the last decade.<sup>2</sup> There are still segments of Canadian society with unmet learning needs, and those with the most to gain are least likely to get further education and training.

Canada's current approach to adult learning, which emphasizes education and training for young adults, limits our capacity to develop a learning culture and to engage the full potential of our labour market, particularly with existing workers. With the labour-force supply projected to grow by less than 5% over the next five decades,<sup>3</sup> the standard of living that Canadians enjoy today is not sustainable.

Why is Canada lagging behind other countries in providing employment-sponsored training opportunities?<sup>4</sup> Why have 2.2 million workers not trained or pursued learning in the last four years?<sup>5</sup> How are we to explain why adults most in need of skills upgrading have the least amount of interest and often do not see the benefits of participating in any type of structured learning activity?<sup>6,7,8,9</sup>

As this report indicates, the prevalence of barriers to adult participation in learning and training is among the most important issues confronting adult and labour-force development.

Lack of engagement in learning, combined with low levels of literacy in low- and medium-skilled jobs, limits Canadians' capacity to participate in the labour force.<sup>10</sup> Projections for adult levels of literacy and participation in learning activities indicate there is no improvement in sight.

The long-term consequences for complacency are potentially far-reaching. As pollster Allan Gregg recently observed, "Canada has a productivity gap. Yet the issue refuses to capture the public's imagination or take a higher priority on the country's political agenda."<sup>11</sup>

Low productivity is merely the tip of the iceberg. A host of social and economic challenges looms large. These include lack of innovation, labour-force shortages, and inadequate skills, which can all work to compromise our quality of life.

## Early childhood education: the foundation for lifelong learning

We can begin to reverse this worrisome trend by re-examining our commitments to early childhood learning, which might not seem related to adult learning, but is.

Positive initial experiences—such as being read to—strongly influence a child's attitude toward future participation in learning activities. Research has also demonstrated that skills acquired early in life, such as literacy, make later learning easier.

Parents play a key role in shaping children's abilities and fostering their desire to learn. They provide the earliest and most lasting learning experiences in their children's lives and create a learning environment that will influence how well their children perform at school, in the community and in the workplace.

As their children's first teachers, adults are models of lifelong learning. By upgrading their skills and acquiring new knowledge, adults not only demonstrate their own ability to make informed decisions and lead successful lives, they also improve the likelihood, through example, that their children will become successful lifelong learners.

However, Canadians today are working harder and longer to maintain their standard of living. We participate in fewer learning and training activities than necessary to maintain our quality of life. Because of increased work demands, we have less time to spend with our children, which means fewer opportunities to read to them and engage them in discussions and learning activities.

While a debate continues over where learning investments are best placed—young children, youth or adults—we must consider making investments across all ages if we are to foster a healthy learning society. In this deliberation, we must not forget the parents and adults who play a profound role in the learning lives of our children.

Clearly, lifelong learning strengthens individuals, families and society. Its cumulative benefits are passed from one generation to the next, enabling individuals to contribute more fully as parents, workers, community members and citizens. An informed and engaged adult citizenry that continues to learn across the life cycle is essential to Canada's economic, social and cultural well-being—and is a key ingredient of a vibrant democracy.

# INTRODUCTION: WHY REPORT ON ADULT LEARNING?

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## A commitment to adult learning

Canada must focus its attention on what matters most: its people.

As economist Richard Florida argued in 2006, the key to productivity lies in human capital, not investment in technology, taxation levels or equipment.<sup>12</sup>

Similarly, participants at a recent CanWin<sup>13</sup> conference stressed the importance of educating and training employees and fostering behavioural and attitudinal changes within the business community. Employers need to see human resource development as an investment in productivity and prosperity, not as a burdensome cost. Research from many countries has established the link between increased adult learning and training, and concrete improvements in business productivity.<sup>14</sup>

Countries around the world are devising ambitious plans to reverse decades of inaction and complacency. The United Kingdom is implementing a scheme to double literacy rates to more than 90% by the year 2020. Sweden has a comprehensive plan to reduce dropout rates in high school and a program to use welfare reform to integrate the marginalized into the economic mainstream.<sup>15</sup>

We should take heed. Despite adult Canadians' high educational attainment, almost half lack the skills they need to participate fully in today's complex society. There is much to be gained in addressing this problem.

We need a plan to unlock Canada's potential—and it is within our grasp. To achieve this potential requires Canadians to understand the challenges and opportunities of building a learning society, and to commit to a vision of lifelong learning for all.<sup>16</sup>

## Chapter 1: The state of adult learning in Canada

The importance of lifelong learning cannot be overstated. Through learning, adults achieve goals, live a more fulfilling life and play a more dynamic and confident role in society. Advancements in new technologies and rapid globalization continually transform the way we work and live. To keep pace with these changes, adults must continue to learn throughout their lives.

Education and training are now part of the everyday work and home lives of nearly one-third of Canadian adults.<sup>17</sup> There are a number of reasons why Canadians engage in adult learning and training. Some return to school to complete or pursue formal education, others invest in skills upgrading for better career prospects, while still others choose to pursue learning for personal interest.

Despite the fact that Canada has one of the most highly educated citizenries in the world,<sup>18</sup> nearly half (42%) of all Canadians do not have the literacy skills required to adjust to the rapidly changing demands of the workplace.

Recent U.S. projections suggest that the literacy situation is destined to worsen even as demand continues for increased skills and education.<sup>19</sup> With stagnating rates of adult participation in learning and training activities, and a rapidly changing economy, there is simply no room for complacency.

### 1.1 NEW ECONOMY, NEW WORKPLACE DEMANDS

Shifting workforce demographics, rapid advancements in technology and increased competitive pressures that stem from the global economy are transforming the Canadian workplace.<sup>20</sup>

Increasingly, employers and firms are seeking skilled workers who possess a more sophisticated array of capabilities including: learning and decision-making, team-work, entrepreneurship and leadership skills, and transferable generic skills such as communication, interpersonal and problem-solving competencies. Workers with these skills are highly sought-after because of the adaptability of their skills within the labour market.<sup>21</sup>

Demand for highly skilled workers is expected to intensify as employers strive to develop niche markets, refine their business needs, improve their innovative capacity and replace workers ready for retirement. Increasingly, workers

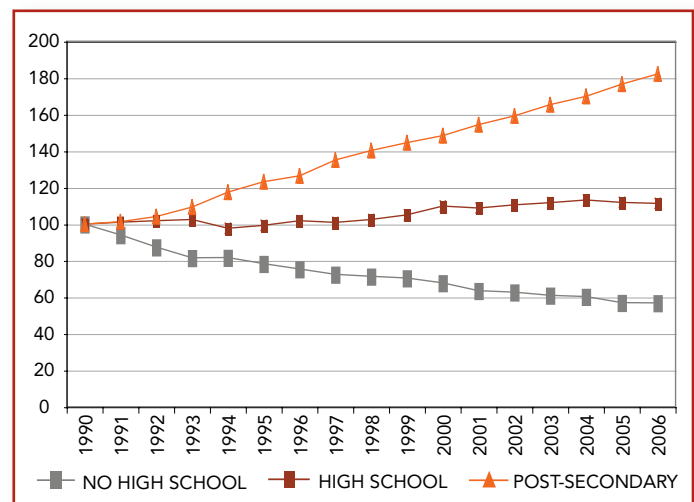
with low skills and qualifications are expected to make use of complex materials such as large documentation manuals and to extract relevant information under time constraints.<sup>22</sup> Security procedures in certain sectors, for example, require workers need to make use of more complicated materials and advanced technological skills.

Most forms of work today use some aspect of technology. As new technologies are introduced in the workplace, workers are required to keep pace with the change. Those who do not or can not continue to upgrade their skills run the risk of becoming outdated.

The demand for post-secondary education is also increasing. From 2004 to 2013, two-thirds of new and replacement jobs will require some type of post-secondary education qualification. Between 2004 and 2008, 1.48 million workers are projected to retire; economic growth is expected to increase labour market demand at an annual average of 1.5%, creating 1.26 million jobs.<sup>23</sup>

THE HIGHEST RATE OF EMPLOYMENT GROWTH OCCURS AMONG WORKERS WITH POST-SECONDARY EDUCATION.

Figure 1: **Employment growth by level of education (1990=100)**



Source: Statistics Canada, Labour Force Survey: Historical Review, 2006

# THE STATE OF ADULT LEARNING IN CANADA

## 1.2 CANADA'S COMPETITIVE DISADVANTAGE

The introduction of human capital theory in the 1960s<sup>24</sup> proposed the idea that greater investments in learning activities would lead to greater individual, societal and economic benefits. Governments around the world have since called for increased participation in adult learning and training.

While Canada's investments in training and educating its population have yielded a number of positive outcomes, signs of emerging systemic weakness threaten our continued success.

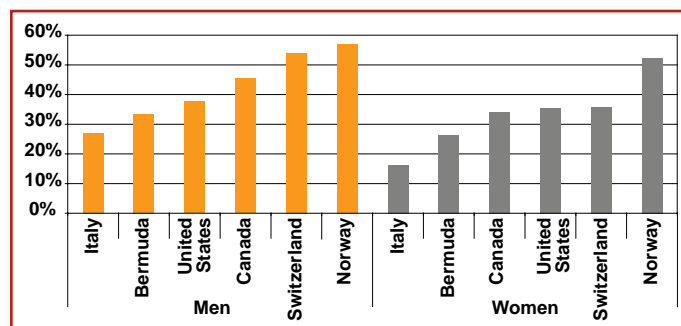
International comparisons indicate that Canada's economic performance may be slipping behind that of other developed countries. In 2005, Canada ranked 13<sup>th</sup> on the Global Competitiveness Index published annually by the World Economic Forum, which ranks countries on indicators such as health, primary education, higher education, training, technological readiness, and innovation.

In 2006, Canada slipped to 16<sup>th</sup> place. Canada's international ranking in technological readiness dropped from 15<sup>th</sup> in 2005 to 17<sup>th</sup> in 2006. Our international standing for the priority organizations place on employee training slipped from 12<sup>th</sup> place in 2002 to 20<sup>th</sup> in 2004.<sup>25</sup>

Internationally, Canada lags in employer-sponsored training. As the chart below illustrates, businesses in Norway and Switzerland are more likely to offer training to their employees (57% and 54%) than Canada at 45.5%.

COMPARED TO FIRMS IN OTHER COUNTRIES, CANADIAN COMPANIES OFFER LESS EMPLOYEE TRAINING.

Figure 2: **Employer-sponsored training, ALLS, 2003**



Source: Statistics Canada and OECD, *Learning a Living: The First Results of the Adult Literacy and Life Skills Survey*, Ottawa and Paris, 2005.

## 1.3 LAGGING PRODUCTIVITY

Over the long term, Canada must educate its workforce to achieve economic growth and reduce inequities in earnings and wealth among different segments of the population.<sup>26</sup> Today, Canada's productivity, which lags behind that of other industrialized countries, is at its lowest level in almost a decade.

Compared to the U.S., Canada lags in productivity by 18%. This largely accounts for our lower standard of living, compared to our U.S. neighbour, as measured by GDP per capita (a gap of 15.3%) or personal income per capita (a gap of 21.3%) in 2001.

Real incomes in Canada have been falling relative to those in the U.S. for more than two decades. Canada also had the third-lowest rate of growth in real GDP per capita among OECD countries from 1950 to 2000.<sup>27</sup>

These trends have important implications as there are indications that Canadian productivity may continue to slow as our workforce ages.<sup>28</sup>

## 1.4 SKILLS PLAY AN IMPORTANT ROLE IN PRODUCTIVITY

Rapid and significant changes in technology and intensifying international competition have substantially increased the importance of innovation for economic growth. However, the adoption of a new technology typically requires substantial investments to upgrade workers' skills.<sup>29</sup>

Most developed countries face demographic trends over the next few decades that will restrict the supply of skills through initial education, making a trained workforce all the more important as a source of new skills. Training within the firm helps workers to acquire new knowledge and to renew or adapt previously acquired skills, enabling them to contribute fully to enhanced productivity and innovation.

Innovation plays a key role in productivity. But to be innovative, countries must invest in the continuous learning, skills updating, and training of their populations. Such countries, studies suggest, will reap enormous benefits in terms of growth. Increased labour productivity has been the most important driver of economic growth among most industrialized countries over the past decade.<sup>30</sup> Studies have found that higher levels of productivity in firms are closely related to the knowledge and skills of their workforce.<sup>31</sup>

# THE STATE OF ADULT LEARNING IN CANADA

*Innovation is a process through which value is extracted from skills and knowledge by generating, developing and implementing ideas. Reaching the full potential of innovation means leveraging ideas and knowledge to enhance quality of life and economic development.<sup>32</sup>*

Similarly, research indicates that the equivalent of an extra year of schooling can raise productivity by between 4.9% and 8.5% in the manufacturing sector and between 5.9% and 12.7% in the services sector.<sup>33</sup>

## 1.5 ADULT LEARNING IMPROVES BUSINESS PERFORMANCE AND PRODUCTIVITY

Such investments ultimately reap benefits at the firm level. Research has established the link between increased adult learning and training and concrete improvements in business performance and productivity.<sup>34</sup>

Employer-supported training also fosters innovation at all business levels, including the application of new technologies or software.<sup>35</sup> Training significantly strengthens corporate culture, morale and the potential to attract and retain high-quality staff.<sup>36</sup>

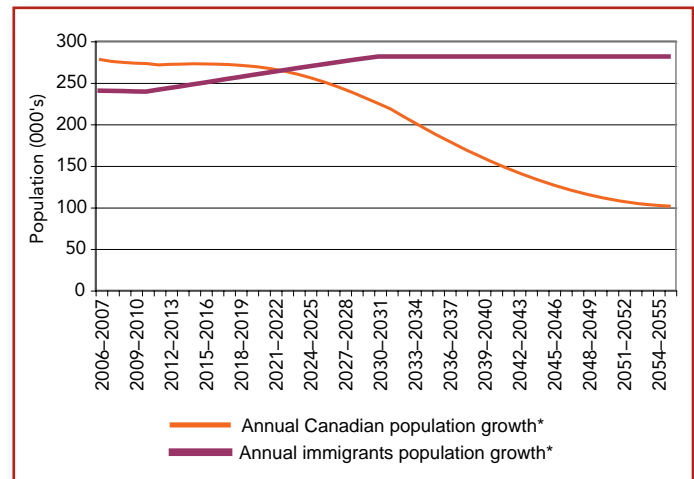
## 1.6 LOOMING DEMOGRAPHIC SHIFTS

Adult learning and training has become more critical than ever in light of several factors: future workforce and skills shortages, retirement of the baby-boom generation, low fertility levels and decreasing numbers of youth entering the labour market.<sup>37</sup> Canada's labour-force supply is projected to grow by less than 5% over the next five decades, making improvements in living standards unsustainable.<sup>38</sup>

Canada's relatively small labour-force growth of 2% between 1955 and 1989 is projected to further dwindle by the year 2020.<sup>39</sup> From 1991 to 2001, immigrants accounted for 70% of net labour force growth in Canada; after 2011, immigrants will account for all labour force growth (Figure 3).<sup>40</sup>

WITHIN THE NEXT TWO DECADES, IMMIGRANTS WILL ACCOUNT FOR MOST OF CANADA'S POPULATION GROWTH.

Figure 3: **Population growth, 2006-2055: Canadian and immigrant**



Source: Statistics Canada, *Population Projections for Canada, Provinces and Territories 2005-2031*, Ottawa, 2005, catalogue no. 91-520-XIE. Based on Scenario 3 projection.

Clearly, immigrant workers are critical to Canada's future prosperity. Immigration also plays a key role in providing replacements for workers ready for retirement. However, many newcomers to Canada find it difficult to integrate into the Canadian labour market because of language barriers or a lack of recognition of previously acquired learning and skills.

## 1.7 STAGNANT PARTICIPATION RATES IN ADULT LEARNING AND TRAINING

The rate of adult participation in learning and training has not changed in more than a decade. In 2003, approximately 50% of Canadian adults (aged 16 to 65) were involved in some type of adult education and training course or program—a 14% increase from 1994. Despite this slight improvement, internationally, Canada still lags behind Switzerland (57%), the U.S. (54.6%), and Norway (53%).

Similarly, participation in formal job-related training increased only slightly between 1997 (29%) and 2002 (35%). Roughly, 4.8 million workers (aged 25 to 64), or one-third of Canadian workers, participated in formal job-related training in 2002.<sup>41</sup>



Many Canadians are unable to participate in learning and training. A typical weekday is spent balancing the demands of work and family life, leaving little time for anything else. Juggling these responsibilities with the demand for increased learning and skills can be daunting, particularly when financial resources are limited.

Canadians work longer, handle more job demands, have less job security and experience more stress than in the past.<sup>42</sup> Today's families earn less income in real dollars than families earned a generation ago, making it more difficult to make ends meet.<sup>43</sup>

For many Canadians, family responsibilities and money issues are very real barriers to participation in learning and training. Lack of interest and motivation for learning among individuals and employers is another important factor that inhibits participation. Individuals most in need of skills upgrading—such as those with the lowest levels of literacy or education—have the least amount of interest and often do not see the benefit of participating in any type of structured learning activity.<sup>44,45,46,47</sup>

### 1.8 STAGNANT LITERACY LEVELS

Literacy involves skills ranging from *basic literacy*—knowing how to read and write—to *multiple literacies*—the ability to decode, identify, communicate and evaluate information in many forms, delivered through various media. According to the Adult Literacy and Life Skills Survey (ALLS), literacy is divided into four main skill sets:<sup>48</sup> prose literacy, document literacy, numeracy and problem solving. A minimum level of performance in all of them is necessary for success in an increasingly knowledge-based economy.

#### FIVE LEVELS OF LITERACY

*The Organisation for Economic Co-operation and Development (OECD) defines the following five levels of literacy:<sup>49</sup>*

**Level 1:** *Very poor literacy skills. An individual at this level may, for example, be unable to determine from a package label the correct amount of medicine to give a child.*

**Level 2:** *A capacity to deal only with simple, clear material involving uncomplicated tasks. Individuals at this level may develop everyday coping skills, but their poor literacy makes it hard to conquer challenges such as learning new job skills.*

**Level 3:** *Adequate to cope with the demands of everyday life and work in an advanced society. This roughly denotes the skill level required for successful secondary school completion and college entry.*

**Levels 4 and 5:** *Strong skills. An individual at these levels can process information of a complex and demanding nature.*

Despite the known impact of literacy on the economy and society, data collected over the past decade indicate no improvement in the literacy levels of Canadians.<sup>50</sup> On the prose and document literacy scales, 42% of Canadian adults—about 9 million Canadians—performed below Level 3, the minimum considered necessary to succeed in today's economy and society.<sup>51</sup> On the numeracy scale, 55% of Canadian adults scored below level 3.<sup>52</sup>

As recent U.S. projections suggest, the literacy situation will worsen, even as the demand for increased skills and education continues.<sup>53</sup> Given the number of similarities between the two countries, improvements in the literacy skills of Canadians are also unlikely to occur without significant interventions.

According to the ALLS, countries fall into three main groups with respect to literacy performance: high, middle and low.<sup>54</sup> The first group, high performance, includes Nordic countries, where a large segment of the population is engaged in lifelong learning. Denmark, Finland and Sweden have overall participation rates over 50%.

The second group, middle performance—which represented the majority of countries surveyed—had about a 40% participation rate in adult education and training, and included Canada (37%), the United States (40%) and the United Kingdom (43%).

The third group consisted of countries where lifelong learning is a less common activity. Chile, Hungary, Poland and Portugal have rates below 20%; Belgium (Flanders), the Czech Republic, Ireland and Slovenia are in the 10% to 20% range.

Improving the quality of Canada’s literacy skills could have a profound effect on the national economy. A 1% rise in literacy levels would result in a 1.5% increase in GDP per capita and a 2.5% improvement in labour productivity.<sup>55</sup> Differences in average skill levels among OECD countries account for 55% of differences in economic growth within these countries over the last 40 years.<sup>56</sup>

A 1991 study conducted by O’Neill and Sharpe<sup>57</sup> suggests that Canadian industries and occupations that recorded the strongest employment growth were also those with the lowest proportion of employees with low literacy skills.

There is widespread agreement that knowledge and skills, including literacy, are vital to Canada’s economy and to the social well-being of individuals. Yet almost one-third (28%) of Canadian adults has reported that they were unable to take job-related training that they wanted or needed because they faced a number of barriers.<sup>58</sup>

### 1.9 THE STATE OF JOB-RELATED TRAINING

The OECD indicates that job-related training dominates adult education. In almost all countries surveyed, job-related training accounted for more than 70% of all education and training courses taken by adults.<sup>59</sup>

In Canada, the industrial sector provided more training to employees than did other sectors.<sup>60</sup> Structured training is more common in finance and insurance, information and cultural industries, communication and other utilities, and the education and health-services sectors.

Workplace training is more prevalent among workers in larger firms and among younger workers with higher education and skill levels.<sup>61</sup>

Surveys consistently show that distribution of training is uneven;<sup>62</sup> managers and professionals tend to receive more training than blue-collar workers. The *International Adult Literacy Survey* (IALS) indicates that workers in Canada, the U.K. and the U.S. with the highest use literacy skills at work are six to eight times more likely to receive education and training from their employers than those who least use workplace literacy skills.<sup>63</sup>

Research conducted in Canada and the U.S. confirms that employers finance a significant proportion of adult education, even non-job related training.<sup>64</sup> Employers are the main external source of financial support for adult education. In contrast, governments play a minor role, contributing only 10% in all countries except Denmark, New Zealand, and Norway.

### 1.10 THE BENEFITS OF ADULT LEARNING— BEYOND THE ECONOMIC

The benefits of adult learning extend well beyond the economic; adult learning plays a key role in sustaining social and personal well-being.<sup>65</sup> In addition to better job opportunities and higher incomes, continued learning throughout life translates into better health and greater civic engagement and personal fulfilment.

Research has shown that individuals with higher levels of educational attainment tend to lead longer and healthier lives, be more engaged in their community and express greater personal satisfaction with their lives.<sup>66,67</sup> Community activities also provide reciprocal benefits by broadening personal knowledge, promoting teamwork and enhancing professional skills.<sup>68</sup>

Although education is positively associated with civic and social engagement, voter participation has been on a steady downward trend in Canada since the 1950s.<sup>69</sup>

While voting patterns are declining across all ages, and are among the lowest in the industrialized world,<sup>70</sup> some evidence suggests that younger Canadians are more likely than older Canadians to participate in other political activities. Statistics Canada's 2003 *General Social Survey*, for instance, reveals that youth are more likely to engage in at least one form of political activity other than voting, such as taking part in a boycott or protest march.<sup>71</sup>

The impact of education on civic and social engagement is complex and not easily understood. Given the importance of these two issues, it is critical that we understand the underlying factors that define their relationship.

### 1.11 LEARNING FOR PERSONAL DEVELOPMENT, AT HOME AND IN THE COMMUNITY

Beyond their initial education, many adults engage in learning activities that foster social engagement and social cohesion and occur across many different contexts, including participation in interest courses, using the Internet to gain useful information, or volunteering in the community.

#### Volunteering

Volunteers are vital to the life of a community, helping to strengthen services for children, seniors and individuals in need. Volunteers acquire new skills and broaden their social networks.<sup>72</sup>

The 2004 *Canada Survey of Giving, Volunteering and Participating*, which measures the extent to which Canadians engage in unpaid activities as part of a group or organization and how engaged they are in the community, indicates that 45% of Canadians aged 15 years and older volunteered their time in 2004.<sup>73</sup>

These 11.8 million Canadians donated nearly 2 billion hours—the equivalent of 1 million full-time jobs. The volunteer rate, averaging 168 hours per person, was highest among younger Canadians (55%), those with university degrees (59%), the employed (50%), and those who were living in households with incomes of \$100,000 or more (60%).<sup>74</sup>

While younger and more financially stable individuals were more likely to volunteer, seniors and lower-income earners put in the greatest number of volunteer hours.<sup>75</sup>

#### Participation in clubs and organizations

Canadians join clubs, community organizations and associations for a variety of reasons, including personal learning and growth, networking and companionship. These organizations gain dedicated teams of individuals working together toward specific projects and goals.<sup>76</sup> The most common types of voluntary organizations are sports and recreation groups, professional associations and unions, religious organizations and cultural, educational or hobby groups.

In 2004, two-thirds (66%) of Canadians 15 years of age or older belonged to at least one formal voluntary group. Participation rates were highest among those aged 45 to 54 years old (69%), who had a university degree (82%), were employed (71%), and earned \$100,000 or more (80%).<sup>77</sup>

#### Internet use

Canadian adults use the Internet for a variety of purposes, including e-mail, travel planning, and gathering news, weather and sports highlights. Increasingly, Canadians are also using the Internet to locate health, government services and data, and consumer warnings and advice. Job searches now occur predominantly online.

Computers and information technology are also enabling Canadians to engage in e-learning and distance education. This opens new opportunities for lifelong learning for adults and, more importantly, for groups at risk of not receiving training, such as the disabled persons, recent immigrants, or individuals living in geographically isolated areas.<sup>78</sup>

The 2005 *Canadian Internet Use Survey* found that more than two-thirds (68%) of Canadian adults—16.8 million individuals—had used the Internet for personal activities over the previous year, often on a daily basis.<sup>79</sup>

Internet access rises with educational level: 80% of adults with at least some post-secondary education used the Internet in the year prior to the survey, compared with just half (49%) of adults with only a high school education.<sup>80</sup>

Computer and Internet usage is strongly associated with improved literacy skills and higher earnings.<sup>81</sup> Individuals most in need of skills upgrading are the least likely to use computers and the Internet.

## Chapter 2: Types of adult learning and training

### 2.1 THE COMPLEXITY OF LEARNING APPROACHES

Adult learning and training can take many forms, including returning to formal education, taking courses for work or for pleasure, volunteering or participating in community activities, and pursuing interests and hobbies. It can be self-directed, incidental or structured learning.

This combination of formal and informal learning enables Canadians to maintain the skills and knowledge they need to make informed decisions and lead successful lives as workers, citizens, and members of families and communities.

*Learning is the process of acquiring knowledge and skills through study, experience and teaching, which underlines the importance of either self-directed, incidental, or formal structured learning. Learning also implies that a change in behaviour or skills will occur after the acquisition of new knowledge.*

*The purpose of training is to improve job performance, to meet work challenges and tasks in a creative way, and develop the ability to learn and develop continuously on the job. The learning process could be achieved individually, within a group, in and out of the workplace.<sup>82</sup>*

### 2.2 FORMAL, NON-FORMAL AND INFORMAL LEARNING

The Organisation for Economic Co-operation and Development (OECD) distinguishes between three internationally recognized types of adult learning: formal learning, non-formal learning and informal learning.<sup>83,84</sup>

*Formal learning* is any clearly identified learning activity that takes place in an organized, structured setting and leads to a recognized credential. This includes formal instruction—primary, secondary and higher education—and vocational training. In 2003, an estimated 49% of Canadian adults between 16 and 65 were involved in some form of adult education and training course or program.<sup>85</sup>

*Non-formal learning* refers to learning that takes place alongside the mainstream systems of education and training and does not typically lead to formalized certificates. This type of learning may be provided in the workplace and through the activities of civil society organizations and groups such as youth organizations, trades unions and political parties. It can also be provided through organizations or services that have been set up to complement formal approaches, such as arts, music and sports classes or private tutoring to prepare for examinations.<sup>86</sup>

*Informal learning* can also be referred to as experiential learning. It can be unplanned or unintentional learning that occurs during everyday activities: work, family life, leisure, etc. It can also be planned or intentional learning, as when individuals participate in short lectures or read books or journals. Individuals using information technology and communications tools are considered informal learners if these activities are not part of an organized degree-related program.

Along this formal-informal continuum are: learning activities based in or related to the workplace, such as on-the-job training, and learning activities not necessarily based in or related to the workplace, such as literacy and non-credit courses—although they may affect employment. Directed at individuals and groups, they involve areas such as professional and personal development, literacy, post-secondary education for late-entry learners, community-based learning circles, seniors' learning, and citizenship programs.<sup>87</sup>

The umbrella of adult learning also includes community development initiatives. Based on shared social values and organized around geographic, cultural, demographic, and other identities, they are designed to create learning opportunities for communities and individuals within communities. They often involve participatory action projects and other initiatives designed to nurture partnerships among researchers, practitioners, and learners.<sup>88</sup>

# TYPES OF ADULT LEARNING AND TRAINING

## 2.3 THE DOMINANCE OF JOB-RELATED ADULT LEARNING

Most adult learning and education in Canada consists of job-related training. On average, Canadian adults spend about 115 hours per year on continuing education and training. But almost all of it (98 hours or 85%) is job-related. Similarly, in almost all other countries surveyed by the OECD, job-related training accounted for more than 70% of all education and training courses taken by adults.<sup>89</sup>

Job-related training has many objectives: to improve job performance, address work challenges more creatively, and to develop the ability to learn continuously on the job.

## 2.4 WORKPLACE LEARNING

Workplace learning and training refers to learning that takes place in the workplace, usually on the job. It includes training under normal operational conditions, and off-site training, which is conducted away from the workplace.<sup>90</sup> Workplace learning and training include a range of learning: union-supported learning, formal learning, and self-directed, informal learning.

## 2.5 FORMAL WORKPLACE LEARNING AND TRAINING

Participation in formal job-related training in Canada increased between 1997 (29%) and 2002 (35%). An estimated 4.8 million workers aged 25 to 64 years participated in formal job-related training in 2002, representing slightly more than one-third of the Canadian workers of that age.<sup>91</sup> One-quarter of Canada's adult workforce benefitted from their employers' support in 2002.<sup>92</sup> However, participation in employer-sponsored training changed little between 1997 and 2002.

### PARTICIPATION LEVELS

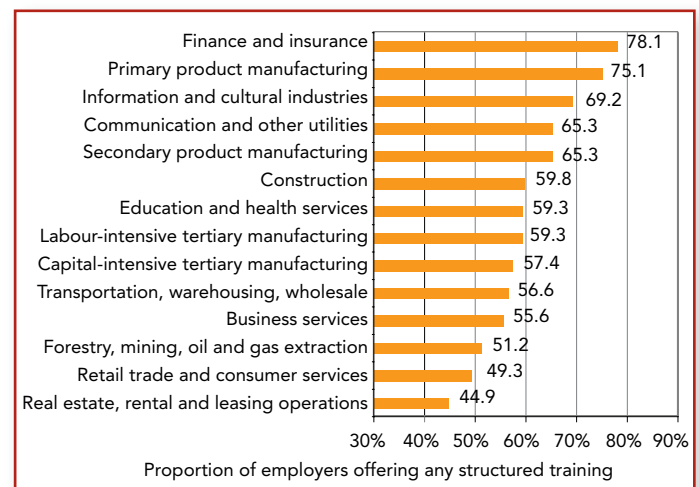
The Adult Education Training Survey (AETS) showed that in 2002, 52% of the adult workforce<sup>93</sup> with a post-secondary degree participated in training, while only 18% of high-school degree holders did. Participation in training was more than three times (29%) more likely to take place in households with an income of \$80,000 or more than in households with less than \$15,000 (5%). Further, the changing nature of many workplaces requires constant upgrading of workers' skills. The AETS stated that 46% of managerial and professional occupations workers undertook job-related training compared to 22.5% of blue-collar workers.<sup>94</sup>

Job-related training is referred to as employer-sponsored training when employers provide and pay for the training. In some situations, employers may also accommodate training by allowing the trainee to work a flexible schedule or by providing transportation to or from the training location.<sup>95</sup>

The highest proportion of employers providing structured employee training was in the finance and insurance sector: 78.1% of their employees participated in training. Employer-sponsored training was also high in manufacturing (75.1%) and in information and cultural industries (69.2%). The retail and real-estate sectors were among the least likely to offer their workers sponsored training.<sup>96</sup>

THE EXTENT TO WHICH INDUSTRY SECTORS PROVIDE TRAINING TO EMPLOYEES VARIES CONSIDERABLY—FROM 44.9% TO 78.1%

Figure 4: **Proportion of employers providing any structured training, by industry, Canada, 2003**



Source: Statistics Canada and Human Resources Development Canada, *Workplace and Employee Survey, 2003*

## 2.6 INFORMAL WORKPLACE LEARNING AND TRAINING

Statistics Canada describes informal workplace learning and training as an activity that involves little or no reliance on pre-determined guidelines for its organization, delivery or assessment. Participants pursue this type of training with the intent of developing job-related skills or knowledge.<sup>97</sup> The training is self-directed and self-initiated, and involves such activities as seeking advice from someone knowledgeable, using the Internet or computer software, observing someone performing a task and consulting books and manuals.<sup>98</sup>

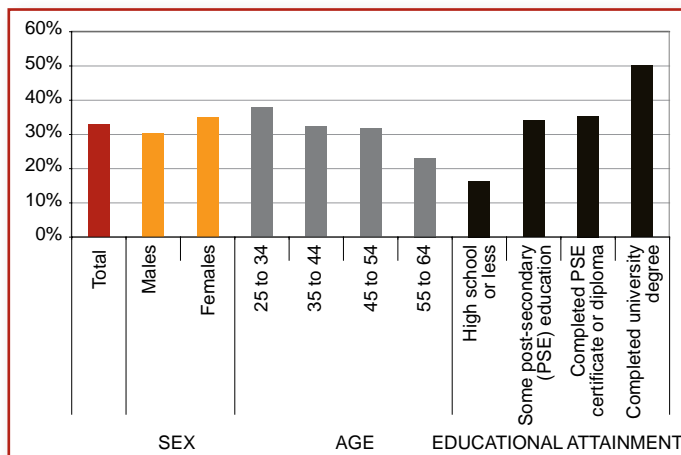
As this type of learning does not lead to any formal qualification or certification and often goes unrecognized, many employers are unaware of the added value it brings to the workplace and to the individual's skill-set. Such knowledge is assumed to be part of the general competency of the employee rather than an outcome of concrete skills that were learned.<sup>99</sup>

Informal workplace learning is not explicitly recognized or well understood, partly because there is no consensus about what constitutes informal learning and the role that it plays in skills development. As a result, little data exist.

One-third (33%) of employed adults between 25 and 64 were engaged in informal, self-initiated, job-related learning activities, according to the most recent *Adult Education and Training Survey*.<sup>100</sup> The rate of engagement is influenced by the level of educational attainment; the highest rate is among workers with a university degree (50%) and the lowest among those with a high-school diploma or less (16%).

ADULT WORKERS WITH A UNIVERSITY DEGREE ARE MORE LIKELY TO PARTICIPATE IN SELF-DIRECTED, INFORMAL LEARNING.

Figure 5: **Participation rate in self-directed informal learning for the adult workforce, by gender, age and level of education, Canada, 2002**



Source: Peters, Valerie, *Working and Training: First Results of the 2003 Adult Education and Training Survey* (Ottawa: Statistics Canada, 2004), catalogue no. 81-595-MIE

# BARRIERS TO PARTICIPATION

## CHAPTER 3: Barriers to participation

Many Canadians engage in a range of informal and formal learning activities to improve their personal lives and work productivity. Their participation may be partial or full-time, sporadic or sustained, and can change over the life cycle. Yet multiple, complex barriers—beyond what is typically reported, such as “no money, no time”—limit the type and degree of participation.

### 3.1 UNDERSTANDING BARRIERS TO PARTICIPATION

Successful participation in learning and training activities requires a commitment to the educative process, a high level of discipline and organization and, importantly, motivation and interest. Despite best intentions, some individuals and employers encounter barriers that inhibit or limit their participation. These barriers are varied, complex, and can be understood across four main contexts: situational, institutional, dispositional or academic.<sup>101</sup>

*Situational barriers* include those arising from a current situation at any given time. Barriers for individuals may include financial and time restrictions or family and work responsibilities. For employers, the size of a firm may pose situational barriers. Smaller firms face greater challenges such as cash flow problems or the inability to maintain services while staff members are away on training.

*Institutional barriers* are practices or policies that prohibit participation, such as high tuition fees, entrance requirements, limited course offerings, or courses offered at inconvenient times or locations.<sup>102</sup> Lack of recognition of previous skills and experience is a barrier that prevents many competent adults—particularly immigrants—from finding work commensurate with their skills and knowledge. It also undermines Canada’s ability to attract and maintain a world-class workforce.

*Dispositional or attitudinal barriers* are attitudes and perceptions that can negatively influence decisions about learning. The value that individuals place on learning, their previous negative learning experiences and their lack of awareness about return on investment can undermine their attitudes about the value of workplace training activities.

*Academic abilities*<sup>103</sup> can be a barrier when certain skills and knowledge required to learn are lacking or are underdeveloped. These include literacy skills, technological skills (such as computer skills), attention and memory skills, and

the organizational and problem-solving/critical-thinking skills required to complete assignments and tests.

### 3.2 THE COMPLEXITY OF BARRIERS FOR INDIVIDUALS

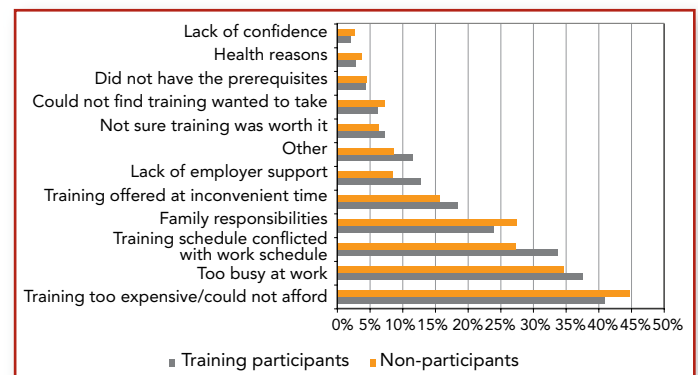
Barriers can differ at varying points across the lifespan and are not mutually exclusive. The time constraints posed by the demands of work and life, including care of dependants, limited financial resources, or a general lack of interest can influence the capacity of adults to participate in learning activities at any given time.

For example, time-related barriers prevented 37.6% of Canadian adults from accessing training opportunities in 2003.<sup>104</sup> Similarly, in 1997, time barriers prevented one million Canadians from participating in learning and training activities.<sup>105</sup>

The time barrier is complex and can refer to more than just a lack of time. When examined in detail, it can reflect an individual’s current circumstances or it can indicate other factors that are not reported, such as the respondent’s lack of interest or motivation, their inability to find suitable training, the lack of employer support, uncertainty about the value of training, health-related issues and lack of confidence.

TRAINING PARTICIPANTS AND NON-PARTICIPANTS ENCOUNTER SIMILAR BARRIERS TO WORK-RELATED TRAINING.

Figure 6: **Reasons for unmet work-related training needs or wants, training participants and non-participants, 25-64 years old, Canada, 2003**



Source: Peters, Valerie, *Working and Training: First Results of the 2003 Adult Education and Training Survey* (Ottawa: Statistics Canada, 2004), catalogue no. 81-595-MIE

# BARRIERS TO PARTICIPATION

Individuals most often in need of skills upgrading can face multiple barriers. Immigrants, for example, may find it difficult to integrate into the labour market and to assess their prior learning and credentials, and may require language training. Aboriginal Peoples, low-income learners, disabled persons and individuals who leave school early also face multiple barriers to participation, making it less likely they will obtain the training they need.

## 3.3 UNDERSTANDING NON-PARTICIPANTS

Non-participants are Canada's most vulnerable group of adults—and the least understood.

There are two types of non-participants: those with no interest and those who have interest but are prevented from participating because of barriers.

Non-participants who express no interest in learning and training activities may be unaware of the need to upgrade their skills, of the opportunities available to them or of the positive return that could accrue from their investment.<sup>106</sup>

Of particular concern is a group of individuals described as *long-term non-trainees*—those who have not participated in any formal job-related training for a period of four years and have little intention of participating in the coming three years.<sup>107</sup> Although more detailed data are needed on this group, we do know that in 2002, 2.2 million Canadian adult workers (16% of the adult workforce) were considered long-term non-trainees,<sup>108</sup> of which males comprised a larger proportion (54%) than females (46%). More than half (56%) of this group had no education above the secondary school level.<sup>109</sup>

At the other end of the continuum, approximately the same number of Canadian adults (2.3 million or 16%) were considered to be long-term trainees.<sup>110</sup>

Although a number of factors may influence long-term non-trainees' desire not to train—such as the nature of their work, the availability of employer support and previous experiences with formal education and training—the future does not bode well for this group of non-participants.<sup>111</sup>

We know that individuals who regularly update their skills become more valuable to their employers and to the

labour market.<sup>112</sup> The opposite holds true for individuals who do not participate in training over an extended period, and who have no intentions to train in the future. In such instances, research suggests, their skills and knowledge are more likely to depreciate and become outdated.<sup>113</sup>

## 3.4 BARRIERS FOR EMPLOYERS

The workplace is an important site where learning and training can occur and be utilized. However, employer-supported training in Canada is stagnant and lags behind that of other countries.

For example, employers in Norway and Switzerland are more likely to invest in training for their employees.<sup>114</sup> As a recent report by the Canadian Policy Research Networks (CPRN) suggests, Canadian employer investment is insufficient and needs to be significantly increased.<sup>115</sup> Firm spending per employee in 2003 was lower in Canada (approximately CAN\$824 per employee) than in the U.S., where spending was roughly US\$1,135 per employee.<sup>116</sup>

Although more employer investment in training may be needed, employers face numerous challenges. They are deterred by the possibility that other companies will poach their employees following costly training investment. They may face time limitations, they may lack information about needs assessment and available programs, and they may experience employee disinterest and lack of government support.<sup>117</sup>

The employer's decision to train can also be affected by the condition of the labour market, the firm's adoption of new production technologies, organizational change within the company, and awareness of the return on investment. The employer's decision to invest in training is not often a simple "yes" or "no". In the face of barriers, it may devolve into revised or reduced efforts at implementing a training strategy because of perceived and actual barriers.

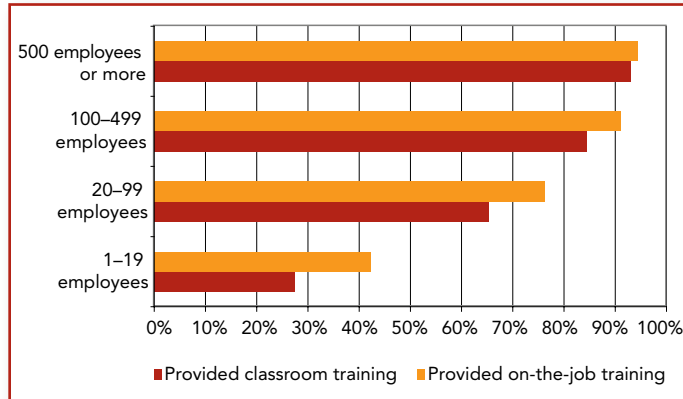
Other issues, such as the quality of skills within an organization, influence whether training activities are made available. Firms with a higher educated and literate labour force are more likely to build competitive training strategies.<sup>118</sup> As well, firm size can impact the provision of training activities. Larger companies are far more likely than smaller companies to offer training to their staff.



# BARRIERS TO PARTICIPATION

COMPARED TO SMALL- AND MEDIUM-SIZED ENTERPRISES (SMEs), LARGE FIRMS PROVIDE MORE EMPLOYEE TRAINING.

Figure 7: **Proportion of employers providing training, by size of business, Canada 2003**



Source: Statistics Canada and Human Resources Development Canada, *Workplace and Employee Survey, 2003*

*The size of a firm affects the type of learning that occurs. Smaller companies are far more likely than larger organizations to rely on or provide informal training opportunities. The Canadian Federation of Independent Business<sup>119</sup> estimates that around 88% of small- to medium-sized businesses provide some type of training; 43% do so through on-the-job training, tutoring and mentoring.<sup>120</sup>*

## Lack of interest: a major barrier for individuals and employers

Dispositional barriers can prevent individuals from participating in skills development and training. In 1997, approximately 40% of the group that reported barriers—most of whom were lower skilled—expressed no need and no interest in undertaking further education and training.<sup>121</sup>

Those most in need of training are often unaware of the importance of skills upgrading. A recent study by the Conference Board of Canada (2006) found that many workers with insufficient literacy skills were overly confident about their own abilities and felt that literacy skills had little impact on their job or on future employment prospects.<sup>122</sup> Other studies have found that individuals with low literacy skills often express no interest in pursuing training and see little reason to do so, regardless of the financial incentives available.<sup>123,124</sup>

Some employers lack interest in providing training. In some instances, they do not recognize the benefits; in others they are disinclined to provide training because of their employees' apparent lack of interest.<sup>125</sup>

## Chapter 4: ENGAGEMENT IN LEARNING

Increasingly, there is evidence that adult learning benefits individuals and society by improving job prospects and the well-being of adults, and by fostering greater civic engagement.

Yet, as earlier discussed, many Canadians do not pursue adult learning or skills upgrading. This is particularly true for lower skilled and older adults for whom lack of training and skills upgrading can result in low wages, job instability and lower quality of life.

Many Canadian employers lack the motivation to train their employees. As a result, many under-invest in learning and training or concentrate training among or limit training efforts to higher-educated employees. Yet studies demonstrate that an equal distribution of skills across the entire population has a strong impact on overall economic performance.<sup>126</sup>

Adult Canadians' lack of engagement in learning may suggest barriers of all types or reflect their perceived lack of return on investment for a particular learning activity. As the OECD suggests, lack of motivation may be due to low awareness of the benefits and need for learning and training, and linked to structural impediments that inhibit participation.<sup>127</sup>

Furthermore, under-investment in adult learning and training might stem from a lack of demand for training programs and initiatives, rather than supply constraints.<sup>128</sup>

There is no "one size fits all" solution to reducing barriers to learning and training for Canadian adults. Regardless, individuals and employers need to address this issue and its underlying causes. As global economic change continues, employee skills will be the cornerstone for firms and employees to remain competitive and to adapt to new contexts.<sup>129</sup>

As a recent British study suggests, the need for employees to improve their skills—and the importance of skills for employers to be competitive—must be a shared national mission.<sup>130</sup>

### 4.1 MOTIVATION AND ENGAGEMENT

Motivation plays a key role in engaging adults to learn and employers to train.

Most theories of motivation focus on understanding the interplay of several factors: self-evaluation of needs; desire for change; expectations about the outcome of a certain behaviour or action and an assessment of the benefits, risks, cost, and usefulness of the task.<sup>131</sup>

Two types of motivation—intrinsic and extrinsic—influence an individual's decision to participate in learning and an employer's decision to provide workplace training.<sup>132</sup>

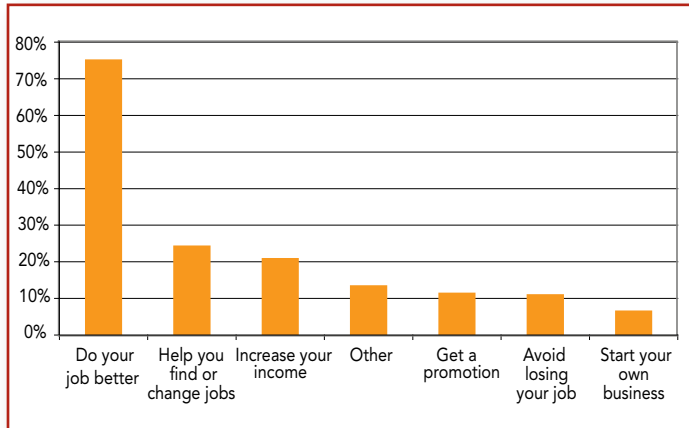
Individuals are extrinsically motivated to learn if external rewards, such as payments, promotions, praise or public recognition are the driving force.<sup>133</sup>

Individuals who are intrinsically motivated to participate in learning do so because they enjoy the process and the subject matter.<sup>134</sup> For instance, employees' intrinsic motivation to participate in learning and training activities develop when employers give them more responsibilities and decision-making control in job-related activities.

Data from the 2003 *Adult Education and Training Survey* (AETS) demonstrate the mix of intrinsic and extrinsic motivation.<sup>135</sup> Clearly, finances do not always influence employees' decisions to learn and train. As the chart below shows, 75% of the adult workforce goes through training to improve their job performance and 24.5% do so to find another job. Only one in five adults trains to increase income.<sup>136</sup>

MOST INDIVIDUALS PURSUE FORMAL JOB-RELATED TRAINING IN CANADA BECAUSE THEY WANT TO IMPROVE THEIR JOB PERFORMANCE.

Figure 8: **Reasons for formal job-related training, Canada, 2002**



Source: Peters, Valerie, *Working and Training: First Results of the 2003 Adult Education and Training Survey* (Ottawa: Statistics Canada, 2004), catalogue no. 81-595-MIE

These results are in line with the Canadian Council on Learning’s *Survey on Canadian Attitudes toward Learning* which tracked eight reasons why individuals undertake training.<sup>137</sup> The most frequently cited motive was self-improvement in terms of learning something new (73.4%), followed by the desire to perform better at work (69%).

CANADIANS PURSUE WORK-RELATED EDUCATION AND TRAINING FOR A VARIETY OF REASONS.

Table 1: **Why Canadians take work-related training**

DID YOU PARTICIPATE IN WORK-RELATED EDUCATION AND TRAINING....	PROPORTION WHO ANSWERED “YES”
To learn something new?	73.4
To perform more effectively in your current job?	68.8
To earn more money?	32.5
Because your employer required you to?	30.9
To get a better job?	30.8
To get or keep a certificate or license	30.7
To complete a diploma or a degree	25.1
To get a job	17.6
To pursue an advanced degree	16.1
For none of these reasons	3.0
To meet a requirement for social assistance	1.2

Source: Canadian Council on Learning, *Survey of Canadian Attitudes toward Learning*, 2006

Intrinsic and extrinsic motivation are not two extremes on a continuum and are not mutually exclusive. For any given learning activity, an individual may be personally and financially motivated to undertake training.<sup>138</sup>

Consequently, programs and initiatives aimed at motivating adults to learn must consider the intrinsic and extrinsic needs of the learner at any given time. This would suggest that offering a mixed portfolio of incentives—such as flexible work hours, wage schemes and learner-centred training options—would meet the varied needs of adult learners.

### 4.2 ENCOURAGING INDIVIDUALS TO LEARN: SOME KEY APPROACHES

#### Clarify and promote the benefits of learning

Individuals who may not be aware of the benefits of learning—such as economic returns—may be less likely to participate in training activities. Similarly, individuals’ perceptions about the availability of training programs or support—“there’s nothing out there”—can also influence their attitudes about the relevance of learning in their lives.

Furthermore, research<sup>139</sup> on workplace training motivation suggests that the employee’s desire to undertake training influences the likelihood of receiving employer-sponsored training. The incidence of employer-sponsored training was higher by one-third among employees who expressed the need for and who initiated training.

Individuals need relevant, accessible information that clarifies and promotes the benefits of learning and training, such as the availability of financial supports to help them improve their skills and competencies. They might be more inclined to pursue training if they were aware of the returns specific to the field of study or program they wish to pursue.

As the 2006 Leitch Review of Skills confirms, employees need information and advice to help them recognize their skills needs and identify appropriate training and development opportunities.<sup>140</sup>

#### CAREER GUIDANCE

There are in Canada about 10,000 career guidance services in community-based organizations. Career Circuit, a partnership of three non-profit organizations, offers online networking among more than 5,000 agencies specially focused on youth and disadvantaged persons. The Province of Saskatchewan has a network of 20 career and employment centres providing information related to finding or changing jobs and careers, as well as information on courses and programs.

# ENGAGEMENT IN LEARNING

## Provide incentives

Structural impediments—institutional, financial, situational and academic—can inhibit adult participation in learning and training. Incentives can be used to help dismantle these barriers, including:

- financial support
- flexible programs and delivery system
- meaningful, relevant content
- a learning workplace environment
- recognition of prior learning and experience, including informal learning
- acquired basic skills and literacy, and
- support of unions as learning advocates.

## Offer financial support

The cost of learning and training is a recurrent barrier for Canadian adults of all ages, but it is particularly acute for lower skilled and older adults.

In Canada, as in many other OECD countries, numerous financial supports and policies are in place to ease the learner's financial burden.<sup>141</sup> These include Individual Learning Accounts (ILAs), allowances and vouchers, training-leave policies, wage schemes and income tax deductions that substantially reduce the cost of participating in adult education, particularly for lower skilled learners.

Co-financing mechanisms<sup>142</sup> secure resources for learning and training from at least two parties among employers, employees and governments. They stimulate investment in human capital for employers, for individuals, or both, and compensate for government budget constraints. Co-financing schemes that tackle demand-side problems have become the most important financing strategy of adult learning among OECD countries.<sup>143</sup>

ILAs, for example, are tax-sheltered savings accounts used for adult learning activities. Their main purpose is to secure financial involvement of the various partners in the learning and training process through the contributions of adults, firms, institutions and the government.<sup>144</sup> Countries that use ILAs include Canada, the Netherlands, Spain, the United Kingdom and the U.S.

### PILOT ILAS IN CANADA

*Learn\$ave is a nationwide research project designed to test whether financial incentives can help low-income people improve their long-term economic prospects.*

*Learn\$ave works in partnership with Social and Enterprise Development Innovations (SEDI) and Social Research and Demonstration Corporation (SRDC). From 2001, SEDI has offered more than 3,600 low-income earners the chance to boost their savings so that they could go back to school, obtain skills training, or start a small business.*

*Learn\$ave matches the savings that each participant puts aside in an Individual Development Account (IDA), usually at a rate of \$3 matched for every \$1 saved, to a maximum of \$1,500. As of May 2006, participants had saved over \$3.7 million and leveraged more than \$10 million in matched contributions. For the goal of education, skills training, and education support, participants had used more than \$6 million in matched credits.*

Source: Information adapted from the websites of SEDI and the Family Service Association of Toronto

[www.sedi.org/html/splash/index.asp](http://www.sedi.org/html/splash/index.asp)

[www.fsatoronto.com/programs/learnsave.html](http://www.fsatoronto.com/programs/learnsave.html)

Vouchers and allowances are subsidies for direct and indirect costs, covering course fees and foregone earnings. Other countries, such as Austria, Germany, Italy and Switzerland, use vouchers and allowances to target those who need learning and training most and to stimulate competition among providers by giving learners a greater choice.

Training leave schemes<sup>145</sup> respond to the needs of individuals who require time off or reduced work hours to carry out a learning activity. They ensure compensation for employees for lost income, protect employment once the training is done and often guarantee financial support during training.

Wage schemes include *pay-for-knowledge*, a compensation system in which the employee's pay is contingent on the ability to demonstrate skills acquired through training.

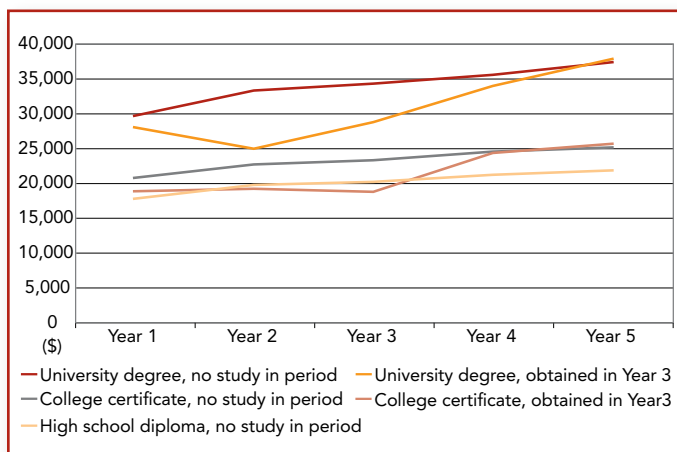
Research confirms the inherent value of these wage increases. When Canadian adults obtained formal qualifications later in their adulthood, their wages increased.<sup>146</sup> In the mid-1990s, individuals between 30 and 49 years of age experienced a 32% wage increase within two years of obtaining a university degree and a

# ENGAGEMENT IN LEARNING

increase after obtaining a college certificate. In contrast, the wage increase for high-school graduates who did not upgrade their qualifications was less than 10%.<sup>147</sup>

WITHIN TWO YEARS OF OBTAINING A UNIVERSITY DEGREE OR COLLEGE CERTIFICATE, ADULTS AGED 30-49 YEARS EXPERIENCE SIGNIFICANT WAGE INCREASES, UNLIKE THOSE WITH ONLY A HIGH SCHOOL DIPLOMA.

Figure 9: **Average annual earnings by educational attainment and whether obtained highest qualification in the mid-1990s period, 30-49 year olds, Canada**



Data Source: OECD Secretariat analysis of data from the Canadian Survey of Labour and Income Dynamics, 1993-1998 panel

Figure Source: OECD, *Education Policy Analysis*, 2003 (Paris: 2003).

Income tax deductions are another means to reduce the financial burden on adult learners.

*The Government of Canada now offers various forms of tax relief to students:*

- A 17% tax credit on the interest portion of the amount paid on student loan payments each year and tax-free RRSP withdrawals for the purposes of lifelong learning;
- Full-time students may claim an education amount of \$400 per month;
- A non-refundable textbook credit amount of \$65 for each month, available to students enrolled in a course that entitles them to a full-time education tax credit;
- A full tax exemption from all post-secondary scholarship and bursary income.

## Offer flexible delivery mechanisms

Financial support is often not a sufficient incentive. The OECD highlights the importance of flexible learning arrangements targeted to the specific needs of learners.<sup>148</sup>

In Canada, and in almost all OECD countries, non-profit associations, volunteer groups, and non-governmental organizations attempt to fill existing gaps in the supply of adult learning, especially for lower skilled adults. Adult high schools, community colleges, one-stop employment and training shops, community centres, enterprise-based training centres and regular education institutions are alternatives for reaching adult learners.<sup>149</sup>

A number of OECD countries are moving toward a more flexible learning model that combines different modes and purposes of learning. *Second chance* education enables adults to upgrade their skills and change careers. It targets groups with lower skill levels and covers a range of needs from basic literacy and vocational training to learning the local language as a second language. .

A flexible delivery system could also accommodate learners' varied work and family schedules, thereby addressing an often-cited barrier to participation in learning: lack of time.<sup>150</sup> For example, a flexible delivery system could enable the employee to participate in learning activities while working part-time.

Open universities and distance education offer adults—particularly those who are hard-to-reach and have lower skills—the flexibility to choose when and where they will learn. Distance education has made great use of information-technology tools. In almost all OECD countries, computerized learning technologies are being adopted and are reaching a wide array of adult learners.

## Provide meaningful and relevant content

For many adults, the financial investment is worthwhile if the learning activity provides new career opportunities, improves their daily lives or simply enables them to develop new personal interests and ventures.

As a Danish study about workplace learning suggests, positive outcomes can occur when a company's training strategies are aligned with employee needs and aspirations. A learner-centred approach fosters employee attachment to the workplace, a desire to implement the acquired knowledge and a willingness to take on more responsibility in daily work.<sup>151</sup>

# ENGAGEMENT IN LEARNING

The same study demonstrates that where employees experienced training that was not based on their needs and desires, inertia and lack of interest resulted. This was reflected in discontinued courses, knowledge that was not subsequently implemented in daily work functions and instances of disillusion and frustration.<sup>152</sup>

## DEVELOPING RELEVANT LEARNING ACTIVITIES FOR IMMIGRANTS IN THE NETHERLANDS, NORWAY, AND SWEDEN<sup>153</sup>

*Norway and Sweden have developed an Introduction Program for Immigrants, featuring intensive language training and social integration courses. In the Netherlands, where they represent almost 20% of the population, immigrants who have arrived within a year are compelled to participate in social integration programs—primarily language courses—unless they prove their command of Dutch upon entry. Immigrants who have been in the country for more than a year are also required to take language courses until they reach a minimum level of proficiency. To provide stronger incentives for immigrants to participate, the Regional Education Centres and other training providers have been using curricula that cover everyday subjects such as childcare, legal advice and financial management. In addition, these regional centres use a generational learning strategy: parents are taught not only the Dutch language but also other useful life skills. Learning takes place at the schools their children most likely attend.*

## Foster a learning workplace environment

The OECD notes that the workplace remains the principle location of learning for most adults of working age. The workplace provides adults with an environment in which to learn and to maintain their skills. Building a learning workplace is less about investing in expensive and innovative training programs and more about organizing the work in a way that amplifies and leads to learning.

An organization's learning environment—the extent to which its culture facilitates access to knowledge and information for its employees—influences the level of employee engagement in formal and informal learning.

Many firms recognize the necessity of continuous learning and skills upgrading and strive to create a learning environment for their employees. They are described as “learning organizations”.

By definition, a learning organization is one that facilitates the learning of its members.<sup>154</sup> It is skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insight.<sup>155</sup>

Learning organizations encourage continuous acquisition, processing, and dissemination of knowledge about markets, products, technologies and business processes. At the same time, the learning organization is market-oriented, with an entrepreneurial culture, a flexible and dynamic structure and a facilitative leadership.<sup>156, 157</sup>

The learning organization provides opportunities for employees to practise and develop new skills, participate in decision-making, share knowledge and cooperate with each other—while engaging in a collaborative problem-solving climate.<sup>158</sup> The organization also rewards and grants effective support for employee learning.<sup>159</sup>

In a learning organization, employee satisfaction with the work environment, as research suggests, has a positive impact on their initiation of and engagement in training.<sup>160</sup>

Employees who are integrated in a workplace committed to valuing and creating a learning environment are more likely to feel a need for training.

## Recognize informal and previous learning

Adults whose informal and previous learning is unrecognized may not be able to access employment opportunities for which they may have the required skills. While formal learning is well recognized in Canada, it can be difficult to measure skills acquired either informally or in a foreign country.

For example, immigrants to Canada often face barriers such as lack of recognition of their foreign credentials and previously acquired experiences, including professional qualifications and trades skills. Prior learning recognition would reduce potential barriers such as learning time and costs and would therefore be a significant incentive for many Canadians.

The United Kingdom, for example, allows for recognition of informal learning through its National Vocational Qualifications system. NVQs do not distinguish between informal, non-formal and formal learning. Candidates must meet performance criteria and the employer, school, college or other individual organization is responsible for assessment.

### INTERNATIONAL REPRESENTATION OF RECOGNITION OF PRIOR LEARNING SCHEMES<sup>161</sup>

<p><b>Canada</b></p>	<p>Considerable variation by province; some provincial education departments have partial recognizing prior learning (RPL) systems based on prior schooling rather than on informal learning or experience, such as the Centre for Curriculum, Transfer and Technology in British Columbia.</p>
<p><b>Germany</b></p>	<p>A qualification passport for 10 occupations, including carpenter, medical assistant and office clerk, has been developed under contract with the Berlin Land government. The informally acquired vocational skills of participants are assessed, the ensuing qualification takes place in modules, and the knowledge and skills established in the assessment procedure are certified and set out in a qualification passport. External examinations take place in a recognized training program.</p>
<p><b>Netherlands</b></p>	<p>A Knowledge Centre for the Accreditation of Prior Learning (EVC) was created to develop and disseminate knowledge about RPL in industrial sectors (2001). Other pilot projects for recognition of prior learning:</p> <ul style="list-style-type: none"> <li>– Individuals may acquire a start qualification through a sectoral training organization.</li> <li>– A company-based scheme includes validation of work experience and development of individualized learning routes. Certificates are recognized by the EVC.</li> </ul>
<p><b>Sweden</b></p>	<p>The right to individual examination has been formally regulated. A Swedish National Commission on Validation (2004-07) has been appointed to promote and advance the development of methods and systems for valuation and to work towards national equivalence. Since fall 2003, all higher education institutions are under the obligation to assess prior and experience-based learning of applicants that demand an assessment and lack formal qualifications (or the documentation of such qualifications).</p>
<p><b>United States</b></p>	<p>The General Educational Development (GED) exams include norm-referenced tests in writing, social studies, science, reading and mathematics. Individuals who successfully pass all five exams earn a GED credential, which is generally considered the equivalent of a high-school diploma.</p>

### Target basic skills and literacy

The foundation for all adult learning begins in early childhood, a critical period when attitudes toward continuous or lifelong learning are shaped. Investments to improve adult literacy and basic skills can directly influence parents' ability to enhance their children's initial learning experiences and attitudes about education and lifelong learning.

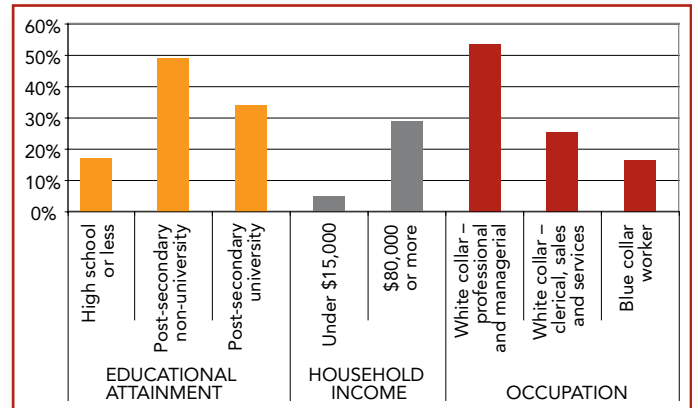
Recent findings suggest that the satisfaction of individuals' learning needs may generate more demand for learning and training.<sup>162</sup> Raising adult literacy levels, therefore, has the potential to facilitate learning and training.

However, there has been little progress in adult literacy performance in Canada in the past decade: 42% of Canadian adults do not have sufficient literacy to succeed in today's knowledge-based economy.<sup>163</sup> Canada's high immigration rate brings in a growing number of people without the literacy skills necessary to integrate into the Canadian labour market.

"Learning begets learning," notes the OECD: the highly educated generally recognize the benefits of learning and therefore have much higher participation rates than those with lower skills and education attainment levels.<sup>164</sup> Studies suggest that motivation to undergo training increases if the job demands knowledge.<sup>165</sup> As literacy skills are among the tools individuals use to build the solid foundation required to learn, they are a key factor in motivating adults to learn.

UNIVERSITY EDUCATED AND WHITE-COLLAR WORKERS TEND TO PARTICIPATE MORE IN FORMAL JOB-RELATED TRAINING THAN INDIVIDUALS WITH LESS EDUCATION.

Figure 10: **Distribution of adult population aged 25-64 participating in formal job-related training by level of education, income and occupation, Canada, 2002**



Source: Peters, Valerie, *Working and Training: First Results of the 2003 Adult Education and Training Survey* (Ottawa: Statistics Canada, 2004), catalogue no. 81-595-MIE

Some countries have set literacy targets to help raise the overall skills base of their populations. The U.K., for example, is committed to doubling attainment at most levels for 2020; 95% of adults will achieve basic literacy skills and numeracy for 95% of adults—an increase to levels of 85% literacy and 79% numeracy in 2005.<sup>166</sup>

### SOME COUNTRIES SET PARTICIPATION TARGETS

**Sweden:** *The Adult Education Initiative (1997-2002) provided free upper-secondary education to all those who had not attained that level, with an annual target of 100,000 places.*

**United Kingdom (England):** *The joint Skills for Life Strategy and Skills Strategy aim to increase the number of adults with the skills required for employability and progression to higher levels of training through: i) improving the basic skills levels of 2.25 million adults (from 2001 to 2010, with a milestone of 1.5 million in 2007); and ii) reducing by at least 40% the number of adults in the workforce who lack National Vocational Qualifications Level 2 or equivalent qualifications by 2010. Working towards this, an interim target is to have 1 million adults in the workforce achieve level 2 between 2003 and 2006.*

**European Union:** *The E.U. has defined that at least 12.5% of adults should participate monthly in further education and training in member countries.*



# ENGAGEMENT IN LEARNING

## Enlist the support of unions

AETS data collected in 1993 and 1997 show that unionized workers participate more in general and job-related adult education and training activities, and are more likely to benefit from employer sponsorship of their training.

We know that unions play a key role in promoting work-related learning formally and informally through courses, events and workshops. Many unions advocate lifelong learning to improve the circumstances and everyday work lives of their members. Some unions have highly developed training facilities, while others have merged with college programs to broaden the scope of available programming and the extent of credentialing.<sup>167</sup>

We also know that unionized workers are more likely to get formal training about new work technologies, technical or professional upgrading, and various kinds of team work and problem solving. They also get more courses on employee rights and benefits and occupational health and safety. Most of the above findings refer to participation in any type of adult education course. The majority of courses taken by workers are at least somewhat job-related.

## Motivate employers to train

A 2002 COMPAS survey conducted in Canada found that employers do not view training and skills development as an important issue. Only 10% of respondents said that it was the most important employee-related issue.<sup>168</sup>

As the OECD suggests, employers may be under-investing in training and learning because they lack awareness of the various benefits that training brings. Training fosters innovation in products, services and processes,<sup>169</sup> improves corporate culture and morale, and affects employers' ability to attract and retain high-quality staff.<sup>170</sup> As a study from the U.S. demonstrates, on-the-job training can have a greater effect on productivity growth than on wage growth.<sup>171</sup>

Research also suggests that where employer-supported training occurs, it tends to facilitate innovation in the workplace—whether technological, organizational or process-oriented.<sup>172</sup>

## Clarify and promote the benefits of learning

Employers need to be more aware of the link between innovation/change, and training. In 1999, almost half of Canadian business locations introduced a new product or process innovation, 29% adopted some form of new technology and more than 40% implemented an organizational change.<sup>173</sup>

Some employers forgo the perceived risks associated with the provision of training by buying talent rather than developing it from within. Employers may need a broader vision of who constitutes a potential trainee. Many employers assume that they profit more from training the more highly educated workers and do not see the value in providing basic skills instruction for their lower skilled employees.<sup>174</sup> Yet we know that improvements to skills and literacy of lower skilled employees bring improvements to the firm and to the overall labour market.

Employers need information to help them assess several key issues, such as their workers' needs and skills—including non-certified skills—the quality of the training providers, the effectiveness of offering training and the potential return on investment. Small- and medium-sized enterprises need information about how to reconcile production time with training time and how to set up skills-based training plans.

Employers also need information about the following areas to help them make informed decisions about implementing workplace training and learning:<sup>175</sup>

- the mix of training options, including e-learning
- options for needs assessment and post-training evaluation
- pooling resources through partnerships with other institutions and
- the potential contributions of unions in employment training and learning.

# ENGAGEMENT IN LEARNING

## IT PAYS OFF

*The latest publication of CCL's Work and Learning Knowledge Centre, Connecting the Dots, provides evidence that investing in learning and training pays off.<sup>176</sup>*

## INDUSTRY-LEVEL EVIDENCE FOR POSITIVE TRAINING RETURNS

*A World Bank study examined the return on investment in formal job training to 1,500 firms in Portugal over five years.<sup>172</sup> The study found that the average return was 24% for enterprises that provided training and 7% for those that did not. An increase of 10 hours in training per year yielded a 6% increase in productivity. The study concluded that "formal job training is a good investment for many firms and the economy, possibly yielding higher returns than other investments in physical capital or schooling."*

*A 2004 Canadian government study explored the impact on productivity of investment in new workplace technologies and in education and training.<sup>177</sup> The Department of Finance study showed that providing training in computer skills yielded productivity gains: a 10% increase in the share of workers who received computer skills training yielded a 4.5% increase in productivity.*

## Provide incentives, reduce barriers

There are several incentives that can help motivate employers, including SMEs, to provide or support employee training. These include the provision of:

- financial support
- tax incentives and
- improved linkages between governments and employers.

## TRAIN TO GAIN (UK)

*In 2004, the UK government announced the rollout across England of Train to Gain. Train to Gain is designed to offer support for employers in sourcing the full range of their training needs, while retaining a core of fully funded training up to literacy level 2. Reforms include focusing brokers on employers less likely to engage in skills development in order to reduce deadweight. Around 60% of employers engaged in the scheme were classified as "hard-to-reach." Train to Gain will be up to full capacity by 2007–2008, when it is forecast to deliver around 175,000 first, full Level 2 qualifications each year. Three Level 3 Train to Gain trials have also been launched, which will test the willingness of employers to contribute to the cost of training at literacy level 3.<sup>178</sup>*

## SECTOR COUNCILS IN CANADA

*The Government of Canada's Sector Council Program (SCP) works to address skills and human-resource issues by establishing, developing and supporting national partnerships. [www.hrsdc.gc.ca/en/gateways/nav/top\\_nav/program/spi.shtml](http://www.hrsdc.gc.ca/en/gateways/nav/top_nav/program/spi.shtml)*

### HOW GOVERNMENTS CAN MOTIVATE EMPLOYERS

Office for Standards in Education, Children's Services and Skills (Ofsted)—formerly, the Adult Learning Inspectorate (UK):  
 From 1 April 2007, a new, single inspectorate—also to be known as Ofsted—will be responsible for regulating and inspecting a wider range of public services—from childcare and children's social care to education in schools and colleges and adult and work-based learning.

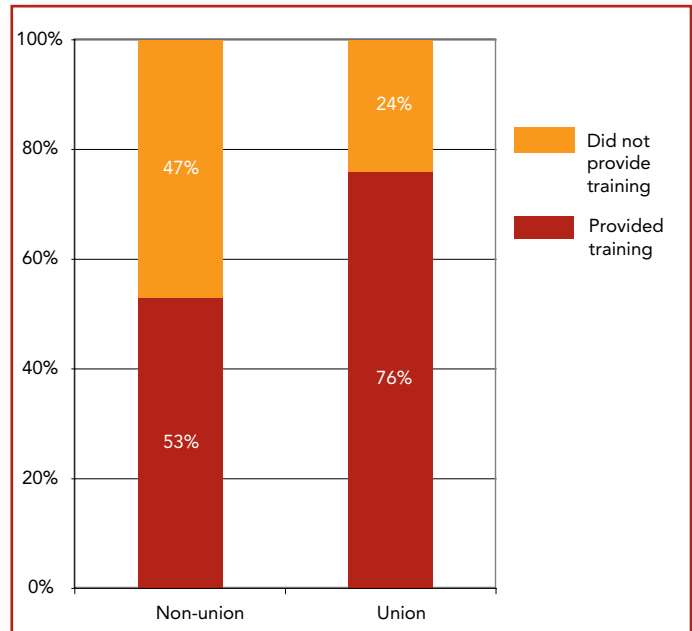
### Encourage unions to work with employers

Unions can play a key role in adult learning by encouraging employers to train their employees. By developing strong working relationships, unions and employers can effectively identify particular training needs and find effective strategies to deal with workplace issues. Working together also allows employers to respond effectively to transition issues during times of workplace change.

According to the *Workplace and Employee Survey (WES)*, unionized firms are more likely to provide employer-sponsored training (76%) than firms that are non-unionized (53%).<sup>179</sup>

UNIONIZED FIRMS ARE MORE LIKELY TO PROVIDE EMPLOYER-SPONSORED TRAINING.

Figure 11: **Proportion of employers offering job-related training, by union status**



Source: Statistics Canada and Human Resources Development Canada, *Workplace and Employee Survey, 2003*

# SUMMARY AND FUTURE DIRECTIONS

## Chapter 5: Summary and Future Directions

### 5.1 SUMMARY

Canadians recognize the value of adult learning and training to their personal, social and economic lives. Lifelong learning is an essential ingredient of a vibrant democracy.

It is also our greatest safeguard against an uncertain future as we face the challenges of increased globalization, including rapid advancements in new technologies and demand for innovation and higher productivity.

Despite a high level of educational attainment in Canada, nearly half of Canadians lack the skills they need to participate fully in today's complex society. In 2002, only one-third of Canadian adults participated in some form of learning or training activity—and over the last decade their rate of participation has stagnated.

Meanwhile, Canadian employers are increasingly seeking workers with sophisticated and adaptable skills. Even individuals with low qualifications increasingly need to learn about new technologies and upgrade their skills or risk becoming marginalized.

The workplace is where most adult learning and training occurs. In 2002, one-quarter of Canada's adult workforce benefitted from their employers' training support. Yet provision of employer-sponsored training opportunities in Canada is uneven at best, lagging well behind that of other countries.

Multiple barriers—institutional, situational, attitudinal, and academic—inhibit Canadian individuals and employers from participating fully in learning and training. About one-third of Canadians have reported they were unable to take job-related training that they wanted or needed because they faced barriers. Although most reported lack of time and money, and family responsibilities, these factors can mask underlying reasons, such as low literacy or lack of recognition of prior learning.

Lack of engagement appears to be a significant barrier for 2.2 million Canadians—many of whom are male, 45 years and older. More than half (56%) of this group had no education above the secondary school level. These *long-term non-trainees* have not participated in any formal job-related training for a period of four years and do not plan to do so in the coming three. Many have expressed no interest in participating in learning and training activities, either now or in the future.

There are insufficient data about the learning and training needs of this group. But we know that their lack of motivation or interest, combined with low levels of literacy in low- and medium-skilled jobs, reduces the likelihood they will ever pursue formal learning activities.

Lack of interest can also be a barrier for many employers, particularly SMEs, who may not recognize the economic benefits of training—such as increased productivity and innovation—and lack information about available programs, delivery options and financial incentives.

If we are to avoid a host of social and economic ills, we must act now. Declining productivity, lack of innovation, labour-force shortages, deteriorating prosperity and compromised quality of life pose very real threats to our future as a nation.

There is simply no room for complacency. We need to instil a culture of learning in Canada that will unlock the potential of all Canadians.

### 5.2 FUTURE DIRECTIONS

Clearly, Canada's current approach to adult learning, which emphasizes education and training for young adults, limits our capacity to develop a learning culture and to engage the full potential of our labour market.

Research from many countries has established the link between increased adult learning and training and concrete improvements in business productivity<sup>180</sup> and social and personal well-being. Removing barriers to adult participation in learning and training is, therefore, a shared responsibility.

Based on the findings of this report, CCL recommends that Canada meet this challenge by pursuing five broad initiatives, each of which represents a cluster of related recommendations:

1. Create a pan-Canadian vision of what constitutes adult learning and training
2. Encourage collaboration among partners
3. Foster a culture of learning within the workplace, especially for SMEs
4. Motivate and target the lower skilled population
5. Develop a data strategy to address gaps in knowledge

# SUMMARY AND FUTURE DIRECTIONS

## 1. Create a pan-Canadian vision of what constitutes adult learning and training

Canada's current system of adult learning and training is fragmented across jurisdictions and unsustainable in the long-term. We need a comprehensive adult learning and training approach that builds on best practices and removes the barriers that prevent individuals and employers from engaging more fully in learning and training. Below are several measures that may expand our vision of learning and enhance learning opportunities for Canadians.

### 1.1 Recognize informal learning

Adult learning includes a combination of formal and informal learning, and it is this mix that ultimately enables Canadians to maintain the skills and knowledge they need to make informed decisions and lead successful lives. Yet the benefits of informal learning are not recognized.

- We must learn more about the nature of informal learning and its role within the workplace, home and community.

### 1.2 Promote a flexible, accessible delivery system

In a robust learning culture, adults will have the freedom to choose how, when and where they will participate in learning activities that meet their own work and personal needs.

- We need policies that will accommodate adults' work and family responsibilities, allowing for time off for learning, fully or partial sponsored training, income support during training and greater choice of learning approaches.

### 1.3 Assess and recognize prior learning

Canada does not have a cohesive system to assess and recognize competencies, skills and knowledge gained from prior learning, informal learning and/or international credentials (professional and academic).

- We must develop a system of certification that provides assessment and recognition of individuals' prior learning (including informal), skills, knowledge, competencies, and experience.

## 2. Encourage cooperation among partners

We have a solid basis of stakeholder cooperation from which to proceed, but improvements are needed.

- Canada needs a national forum in which all Canadians can participate in a dialogue about adult learning and training—its appropriate level and its composition<sup>181</sup>
- Canada must build on its experience fostering cooperation between governments, training institutions, individuals, businesses, unions and organizations to deliver competencies that match employers' needs<sup>182</sup> and foster a culture of learning
- Partners must share the cost of learning and training through the financial participation of employers, individuals, governments and unions in the supply of financial supports such as ILAs
- We must bring learning and training providers into a network of information exchange with all partners.
- To ensure quality control of learning and training programs, Canada must foster a "culture of outcome evaluation"<sup>183</sup> among all partners through the regular monitoring and assessment of programs.

## 3. Foster a culture of learning within the workplace, especially for SMEs

Employers under-invest in workplace training and learning. Many are not aware of the economic benefits. As well, employers face time and financial constraints and lack information about training needs assessment, prior learning and informal learning, programs and delivery mechanisms.

- We must promote the benefits of adult and workplace training by providing transparent and easily understandable information on training outcomes and returns on investments for all learning and training partners.
- We must provide employers with information and guidance on programs and courses, available incentives, the benefits of a flexible program delivery, the merits of prior learning assessment and recognition, and the importance informal learning.

Many employers do not see the value of providing basic skills instruction for their lower skilled employees.<sup>184</sup>

- We must inform employers of the economic and social benefits of training lower skilled workers.
- We must develop a system to help employers assess employee skills and needs, and their integration with job requirements.
- We must provide employers with incentives to increase workplace learning, through shared financing arrangements and collaboration with learning institutions.

# SUMMARY AND FUTURE DIRECTIONS

## 3.1 Target SMEs

Compared to large firms, SMEs face more barriers to providing workplace learning and training opportunities. Collaboration with large firms can help SMEs reduce the costs of learning and training programs.

- We must develop training consortia in Canada that pool resources.

## 4. Motivate and target the lower skilled population

Unfortunately, those most in need of skills upgrading are least likely to receive it. Skills upgrading not only improves performance in the workplace, but also contributes to the learning environment of workers' children. It is an investment in the next generation of workers.

- We must inform adults who do not participate in training of the economic, social and family benefits of learning.
- Canada should significantly invest in both early childhood education and in raising the rates of literacy, numeracy and IT competencies in lower skilled adults and youth.

## 5. Develop a data strategy to address gaps in knowledge

We need more information to deepen our understanding of the barriers to adult learning and training.

- We must collect data on:
  - » informal and "alternative" learning methods
  - » non-trainees
  - » barriers to learning and training on a pan-Canadian level
  - » training outcomes and returns on investment
  - » outcomes of basic skills training on those most at risk
  - » successful collaboration between large and small firms
  - » collaborative approaches involving sector councils
  - » successful models of work-life balance
  - » personal and social outcomes of learning and training, and
  - » learner satisfaction with learning and training.

### PROPOSED ACTIONS

*The following suggestions are based on the Canadian Policy Research Networks' and the Adult Learning Knowledge Centre's recent roundtable policy discussion on adult and lifelong learning. The roundtable was held in Halifax, N.S. in November 2006.<sup>185</sup>*

#### GOVERNMENTS:

- *develop, in collaboration with all partners, a policy framework for adult learning*
- *promote long-term, stable funding for employers who train and for individual learners*
- *coordinate labour market policy across government departments within provinces and across provinces*
- *use the media and community advocates to help promote a culture of lifelong learning*
- *foster collaboration among service providers*

#### SCHOOLS, COLLEGES, AND UNIVERSITIES:

- *increase access to and flexibility of individual courses*
- *intensify prior learning assessment and recognition*
- *provide more support for distance education establish satellite operations in rural*
- *work with employers and employer-organizations to customize skills assessment tools and curricula to meet the needs of particular industries*

#### EMPLOYERS AND EMPLOYER ASSOCIATIONS:

- *increase investment in structured learning for employees*
- *share success stories*

## Chapter 6: What CCL will do

The Canadian Council on Learning is mandated to improve learning outcomes for Canadians and foster the growth of a pan-Canadian learning culture by:

- informing Canadians about the state of learning in Canada through all stages of life
- facilitating evidence-based decision making about learning through knowledge exchange, and
- fostering high-quality research on learning.

Given this important role, CCL will advance its understanding of adult learning by continuing to provide up-to-date monitoring and reporting activities on the various issues related to learning and training. CCL will continue to provide relevant and timely information on the state of learning and training in Canada through its annual reports, *State of Learning in Canada* and *Canadian Post-Secondary Education*.

Also underway is a series of thematic reports that focus on five critical learning challenges: Aboriginal Learning, Adult Learning, Early Childhood Learning, Health and Learning, and Work and Learning.

CCL will ensure that it has data to improve its understanding of the factors that affect access to and participation in education, training activities and the labour market.

And CCL will continue to work with partners to develop better indicators to monitor our progress and work toward the establishment of clear benchmarks and objectives.

CCL will also continue to collaborate with the Adult Learning Knowledge Centre—a consortium of 40 organizations and individuals active in the research, delivery and assessment of adult learning in Canada—and the Work and Learning Knowledge Centre, a consortium of more than 150 organizations that addresses several issues, including barriers to workplace learning, school-to-work transitions and accessibility for immigrants and other vulnerable groups.

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