



The Conference Board of Canada  
Insights You Can Count On

# BRAIN GAIN

## *The Economic Benefits of Recognizing Learning and Learning Credentials in Canada*

323-01 Detailed Findings • By Michael Bloom and Michael Grant

### HIGHLIGHTS

- There is a major learning recognition gap in Canada today. If eliminated, it would give Canadians an additional \$4.1 billion–\$5.9 billion in income annually.
- More than 540,000 Canadians stand to gain an average of \$8,000–\$12,000 each year from improved learning recognition.
- Three groups stand to gain the most: immigrants, people with prior learning gained through work and training, and transferees between post-secondary institutions or, in the case of licensed occupations, between provinces.
  - An improved system for recognizing the learning of immigrants would result in a *brain gain* to offset the *brain drain* to the United States.
  - Governments, employers and credential-granting institutions have options for action that can significantly improve learning recognition in Canada.

Understanding the Strategic Environment  Economic Analysis  Business and Society  Policy Analysis

Organizational Response  Improving Organizational Effectiveness  Managing Human Resources  Managing Innovation and Technology



The Conference Board of Canada  
**Insights You Can Count On**

## About The Conference Board of Canada

The Conference Board of Canada is an independent, not-for-profit research organization with affiliates in the United States and Europe. Our mission is to help our members anticipate and respond to the increasingly changing global economy. We do this through the development and exchange of knowledge about organizational strategies and practices, emerging economic and social trends and key public policy issues. Since 1954, the Board has been committed to researching innovative practices, designing new strategies and providing our members with the most up-to-date information, analysis and expertise to help them excel in Canada and around the world.

## About the Education and Lifelong Learning Practice

The Education and Lifelong Learning practice is a part of the Conference Board's Policy, Business and Society Division. Its mission is to help business, government and education leaders work collaboratively to promote the development of a learning society that prepares Canada's people for a changing world. The practice conducts research on issues of strategic concern to business, government and education; facilitates dialogue among business, government, education, community and labour leaders; and recognizes excellence in partnerships and programs that develop people in workplaces, education institutions and communities.

### ***This research project was undertaken with financial support from:***

Learning and Literacy Directorate, Human Resources Development Canada  
Ontario Ministry of Training, Colleges and Universities  
Saskatchewan Post-Secondary Education and Skills Training  
Members of the National Business and Education Centre

---

**A Conference Board of Canada publication from the Policy, Business and Society Division**

**Vice-President** Gilles Rhéaume **Associate Director, Project Development** Michael R. Bloom

#### **Education and Lifelong Learning Practice**

**Director** MaryAnn McLaughlin **Senior Research Associates** Kurtis G. Kitagawa • Douglas Watt

**Research Associates** Alison Campbell • Debbie Murray **Awards Manager** Linda Scott

**Senior Program Administrator** Jean Smith **Administrative Assistants** Nicole Sampson • Marta Stelmaschuk

**Editing** Laurie Bowes • **Layout** Holly W. Michael

©2001 **The Conference Board of Canada\***

323-01 Detailed Findings

Printed in Canada • All rights reserved

Agreement No. 1626922 • ISSN 0827-1070 • ISBN 0-88763-505-9

\*Incorporated as AERIC Inc.



Recycled paper

# Contents

---

<b>Executive Summary</b> .....	i	Summarizing the Potential Gains	21
<b>Chapter 1—The Big Picture</b> .....	1	Opportunities Forgone by Respondents	21
Defining the Issue.....	2	Potential Gains from Improving Learning Recognition	23
Why Recognizing Learning Matters .....	3	Estimating Gains in Human Capital .....	27
Opportunities for Improvement .....	4	<b>Chapter 5—Conclusion and Call to Action</b> .....	29
Six Criteria for Valuing Learning and Credentials .....	5	Gains from Improving Learning Recognition .....	29
<b>Chapter 2—Mechanisms for Recognizing Learning</b> ....	7	Problems .....	29
Overview .....	7	Options for Action.....	31
The Key Players .....	7	Securing Prosperity .....	34
The Processes of Credential-awarding Organizations .....	8	<b>Appendix A: Methodology for the</b>	
Impact of Key Barriers .....	11	<b>Household Survey</b> .....	35
Confidence in the System.....	12	<b>Appendix B: Methodology for Estimating Potential</b>	
Recognition of Learning and the World of Work .....	13	<b>Gains to Recognition</b> .....	39
Summary .....	16	<b>Appendix C: Methodology for Generating Human</b>	
<b>Chapter 3—Amount of Unrecognized Learning</b> .....	17	<b>Capital Gains</b> .....	41
Three Types of Unrecognized Learning .....	18	<b>Appendix D: Valuing Immigrants: Foreign Credentials</b>	
Actions Taken by the Unrecognized Learners .....	20	<b>Assessment and Recognition</b> .....	43
<b>Chapter 4—Brain Gains to Canada from Improving</b>		<b>Appendix E: Prior Learning Assessment and</b>	
<b>Learning Recognition</b> .....	21	<b>Recognition (PLAR)</b> .....	47
		<b>Bibliography</b> .....	49

## Acknowledgements

The authors gratefully acknowledge the contribution of John Corbett, who oversaw completion of the Household Survey and prepared Appendix A. They are grateful, as well, to Douglas Watt, who helped to prepare Appendices D and E and who co-authored the earlier Phase 1 report of the Recognizing Learning project, which provided information for this study.

Thanks are due to the National Council on Education of The Conference Board of Canada, whose members from business, government and education first suggested work in this area and who provided advice and encouragement throughout the course of our research. Thanks also to the Recognizing Learning Advisory Committee, whose members, drawn from across the country, shared their expertise and insights on the issues, policies and programs that affect learning recognition in Canada.

## BRAIN GAIN

*The Economic Benefits of Recognizing Learning and Learning Credentials in Canada*

323-01 Detailed Findings • By Michael Bloom and Michael Grant

There is a major learning recognition gap in Canada today. If eliminated, it would give Canadians an additional \$4.1 billion to \$5.9 billion in income annually. More than 540,000 Canadians stand to gain an average of \$8,000–\$12,000 each year from improved learning recognition. The income they forgo today is due to the gap between the amount of their learning that *is* recognized, credentialed, accepted and rewarded through work and the amount that *could be* recognized and rewarded in the workplace.

The Conference Board’s Household Survey of nearly 12,000 individuals across Canada found that three groups would gain the most, because they suffer the most serious problems in getting their learning recognized and rewarded. They are:

- immigrants;
- people with prior learning gained through work and training; and
- transferees between post-secondary learning institutions or, in the case of licensed professions, between provinces.

For them, the learning recognition gap is a major economic burden that significantly limits their income and employment prospects.

**Potential for Improvement**

This gap in learning recognition presents obstacles to career advancement for the unrecognized learners. Without the right credentials from educational, professional and trades regulatory bodies, they often lack the mobility to move across national and provincial borders to find work in their chosen profession or trade. As a result, they earn less, are more likely to be unemployed or underemployed, and are less likely to be promoted.

Eliminating the learning recognition gap in Canada would also benefit the nation as a whole. Canadians hear much about the loss of talent through the emigration of skilled Canadians, mostly to the United States—the so-called *brain drain*. An improved system for recognizing the learning of immigrants and other Canadians would go a long way to genuinely offsetting the effects of the brain drain and creating a *brain gain*.

One measure of the impact of better learning recognition is the potential gain to Canada’s stock of “human capital” from increasing the number of post-secondary education (PSE) credential holders in the labour market. Closing the learning recognition gap would add a brain gain of between 33,000 and 83,000 individuals to the ranks of Canada’s skilled workers.

With costs and potential benefits like these, Canadians have strong incentives to take action. However, despite some notable recent improvements, we have failed as a nation to get to the heart of the problem. This is not so surprising, given the number and size of the barriers we face. Yet there is a compelling logic to increasing our efforts, because success has important economic consequences for our country. Learning recognition improves employment fit, which enhances business performance and yields personal rewards, in turn creating additional demand for accreditation. More accreditation encourages more people to undertake higher education, which stimulates further development of the education and training systems that build workplace capacity for innovation and productivity. Ultimately, by helping all its people to reach their full personal potential and receive full recognition for their learning, Canada enhances the economic base that supports a high quality of life, the hallmark of Canadian society.

The potential gains are high today, and they are likely to be higher in the future. Canada, like its competitors, faces rising challenges in maintaining an adequate supply of people with the right kinds of learning and credentials to compete successfully in global markets. Canada needs to attract skilled people, nurture them, recognize their abilities and reward them in the labour market. The unacceptable alternative is direct losses in the productivity and innovation that generate wealth to support our high standard of living.

**Options for Action**

How can the goal of better and more comprehensive learning recognition in Canada be achieved? Many options for action that can help overcome the barriers and obstacles

are available to governments, educators, regulators and employers. These options include policy development, structural and institutional reform, program development and new funding mechanisms. Many of them have already been tried in parts of Canada or in other countries, so they can be evaluated on the basis of current best practice before they are adopted for widespread implementation.

The options for action represent gradations of reform, from improvement to large-scale innovation, that respond to the problems and needs identified in the analysis in the report. The intent of the reforms would be to draw in greater and greater numbers of the non-recognized, especially the immigrant and other target populations that are currently most affected. These reforms can be broadly grouped into four areas: improving existing institutions; creating new institutions, techniques and tools; creating consumer demand; and engaging employers.

Actions that could help improve the functioning of existing institutions include:

- Creating a common framework for valuing learning
- Establishing national standards
- Improving transfer mechanisms
- Improving institutional linkages in Canada
- Increasing recognition of foreign credentials and experiential learning
- Improving institutional linkages internationally

Actions to support the creation of new institutions, techniques and tools include:

- Creating national training credentials
- Creating national learning recognition institutions
- Developing techniques and tools for learning recognition
- Providing financial incentives and assistance for learning recognition and credentialing
- Licensing alternative PSE credential and credit granting in the workplace
- Establishing a national learning recognition system

Actions that could create consumer demand and institutional change through communications include:

- Creating consumer demand through communications initiative
- Creating institutional change through communications initiative

Actions to engage employers in recognizing learning initiatives include:

- Engaging employers in partnerships with public education
- Engaging employers in developing private credentials

## **Securing Prosperity**

Globalization, demographic change, competition among nations for skilled people, and the emergence of large-scale knowledge-based industries have made it more important than ever for Canada to make the most of the knowledge and skills of its people. Non-recognition of learning is a major cost to Canada and Canadians today; tomorrow, recognition of learning can be a major economic gain—if we get it right. If we succeed, our businesses can become more productive and competitive and our people will earn more and enjoy a higher standard of living. Failure will mean a significant long-term drain on our capacity to compete with the United States and other major economic powers.

In these circumstances, governments, education institutions, regulatory bodies and employers will want to consider their options for action carefully. If they choose to take concerted action, they will not be alone in the world. Large-scale and coordinated action by Canadian governments and organizations would simply bring us to a state closer to what is already being achieved by other nations.

Given the costs calculated in this study and the clear economic benefits that are possible, leaders in government, education and business may well decide that they cannot afford to delay any longer. If they do choose to act, their investment in learning recognition can benefit all Canadians.

## The Big Picture

There is a major learning recognition gap in Canada today. If eliminated, it would result in Canadians having an additional \$4.1 billion–\$5.9 billion in income annually (see Table 1). More than 540,000 Canadians stand to benefit, for an average personal gain of \$8,000–\$12,000 each year. The income they forgo today is due to the gap between the amount of their learning that *is* recognized, credentialed, accepted and rewarded through work and the amount that *could be* recognized and rewarded.

Three groups would gain the most, because they suffer the most serious problems in having their learning recognized and rewarded: immigrants, people with prior learning gained through work and training, and transferees between post-secondary education (PSE) institutions or, in the case of licensed occupations, between provinces. For them, the learning recognition gap is a major economic burden that significantly limits their income and employment prospects.

This gap in learning recognition presents obstacles to career advancement for the unrecognized learners. Without the right credentials from educational, professional and trades regulatory bodies, they often lack mobility across national and provincial borders that might enable them to find work in their chosen profession or trade. As

a result, they earn less, are more likely to be unemployed or underemployed, and are less likely to be promoted.

Eliminating the learning recognition gap in Canada would also benefit the nation as a whole. Canadians hear much about the loss of talent through the emigration of skilled Canadians, mostly to the United States—the so-called *brain drain*. A typical response to concerns about the brain drain is that Canada imports talent through immigration and this ameliorates the effects of the brain drain. It is less common to hear that better recognition of untapped talents within Canada can also offset the brain drain. An improved system for recognizing the learning of immigrants and other Canadians would go a long way towards genuinely offsetting the effects of the brain drain, resulting in a *brain gain*.

One measure of the impact of better learning recognition is the potential gain to Canada's stock of human capital from increasing the number of post-secondary education credential holders in the labour market. As Table 1 shows, closing the learning recognition gap can add a brain gain of between 33,000 and 83,000 PSE credential holders to the ranks of Canada's skilled workers.

Learning has many types of value in our society.<sup>1</sup> This study focuses on one dimension of learning: its economic,

**Table 1**  
**Estimates of Gains Associated with Improving Learning Recognition**

Potential brain gains	Annual gain (in \$ billions)
<b>A—Gains realized by reducing unemployment</b>	
<i>Scenario A1</i> : Gains based on earnings estimates by unemployed respondents.....	2.2
<i>Scenario A2</i> : Gains associated with economic returns to education .....	2.5
<b>B—Gains realized by reducing underemployment</b>	
<i>Scenario B1</i> : Gains derived from multiple linear regression .....	1.9
<i>Scenario B2</i> : Gains based on earnings estimates by respondents.....	3.2
<i>Scenario B3</i> : Gains associated with economic returns to education .....	3.4
<b>A + B—Total gains through employment effects</b> (Amount from scenario A1 or A2 plus amount from scenario B1 or B2 or B3) .....	<b>4.1 billion to 5.9 billion</b>
<b>Gains in human capital</b>	
<i>Scenario 1</i> : Only those pursuing recognition are successful .....	33,686
<i>Scenario 2</i> : Scenario 1 + those who have faced process barriers.....	65,127
<i>Scenario 3</i> : All those who indicated a desire to be recognized.....	83,093

Source: The Conference Board of Canada, 2001.



or “market,” value to individuals, employers and the country as a whole. It demonstrates that many individuals, employers and, ultimately, Canadian society pay a price when learning and learning credentials are not recognized. In doing so, it sheds light on the overall importance of learning recognition to Canada’s economic performance.<sup>2</sup>

In attaching an economic value to learning, *Brain Gain* assigns a value that is determined by the *formal* labour market. In this sense, it is particularly concerned with Canadians who are interested in having their learning recognized so as to improve the value of their labour in the formal labour market. For this reason, the estimate of additional income includes only people who benefit directly from having their learning recognized in the labour market through paid work. There are, of course, other ways of valuing labour (in the household, for instance) and valuing education (such as personal development), but these are not the primary concern of this study.

Table 1 summarizes the various aspects of brain gain estimated by this study. Our calculations are intentionally conservative in estimating economic impacts. It would be possible to expand this estimate to include other forms of income due to the multiplier effect. The *multiplier effect* occurs when the additional income earned by people after their learning is recognized causes them to spend more. Their additional spending, in turn, generates more jobs and profits, leading to a cycle of yet more income and spending.<sup>3</sup>

## Defining the Issue

The term “credential” in its broadest meaning refers to “evidence of achievement or trustworthiness.”<sup>4</sup> This includes credentials in the form of *formal* documents, such as degrees or diplomas, transcripts of university and college credits, training certificates, apprenticeship papers and professional certifications, as well as *informal* credentials, such as work experience and other kinds of experiential learning, employer performance evaluations, and in-house and on-the-job training. In Canada, however, the term “credential” commonly refers to a degree, diploma or other formal recognition of academic achievement (or academic credits that comprise part of a complete credential), and even these formal credentials are not always widely recognized. Yet, informal credentials can be equally important in determining a person’s competency. This is why advocates of Prior Learning Assessment and Recognition (PLAR) seek better ways to recognize experiential learning in all forms.

In one sense, the recognition of learning credentials is a subset of the larger issue of recognizing learning. In practice, however, it looms large in the minds of Canadians, for whom recognition of learning is inevitably tied to recognizing learning credentials: at the end of the day, Canada is a credentialing society. Canadians and Canadian organizations

## Four Definitions

### For the purposes of this study:

- *Learning* includes both knowledge and skills, along with the attitudes and behaviours that are developed and expressed as a result of having knowledge and skills.
- *Learning credentials* are the formal documents certifying completion of courses or programs of learning that are issued by elementary, secondary or post-secondary education institutions, professional or trades supervisory and licensing bodies, or other publicly sanctioned education or training entities, in Canada or another country.
- *Unrecognized learning* consists of skills, learning and education possessed by Canadians that are not formally recognized in the workplace, by degree and diploma granting educational institutions or by licensing bodies that issue certificates and other kinds of credentials in the province where they live or in Canada as a whole.
- *Prior learning* is the knowledge and skills that people already possess, acquired through workplace experience or some other non-traditional means, that are not recognized in a credential.

Source: The Conference Board of Canada, 2001.

have a deep-seated respect for credentials, which they readily use as a proxy for knowledge, skills and attitudes when educating, hiring and training people and deciding what kind of work they can perform. For this reason, much of the discussion of recognizing learning is framed in the language of credentials. Moreover, many of the most serious learning recognition problems faced by Canadians, especially immigrant Canadians, relate to credential recognition difficulties.

## Research Hypothesis

Our research hypothesis was that some Canadians hold skills and knowledge that are valuable but underused and under-rewarded because they are not formally recognized and credentialed by credential-granting organizations and employers. Since recognition through learning credentials is key to success in the labour market, these people earn less and experience other costs due to non-recognition of their learning. In addition, their employers do not gain the full benefit of their abilities, and Canada loses their productivity and also incurs costs in delivering education and training that they do not need. If the learning recognition gap were eliminated, these individuals and Canada would gain corresponding economic benefits.

To test this hypothesis, we undertook three surveys. First, we surveyed a national sample of educational and professional institutions involved in credentialing and received 55 responses. Second, we surveyed a national sample of employers and received 45 responses. Third, we carried out a national random sample telephone survey of nearly 12,000 households, interviewing individuals who are affected by non-recognition of their learning, and identified 487 who had learning recognition problems. We used the data from these surveys to estimate the economic impact on individuals and on the country as a whole using economic modelling techniques. Our findings are discussed below. (For further details on methodology, see Appendix A.)

## Why Recognizing Learning Matters

Recognizing learning became an important economic issue in the 1990s when the demand for people with advanced knowledge and skills increased. Then, as now, Canada's ability to remain competitive in the global economy depended on how effective it was in developing, attracting and maintaining a world-class labour force. Its ability to recognize the full range of peoples' learning and to transfer credentials among educational institutions and workplaces was—and remains—central to success in the face of global competition. Globalization continues to be a major economic force in Canada. It means that Canadian businesses are facing increasing competition at home and abroad. As our economy experiences more international competition, it is driven to become more knowledge-based in order to prosper. More than ever, employers depend on knowledgeable, skilful and innovative employees to create value-added products and services so that they can compete successfully. Increasing use of technology in Canadian workplaces is further raising the skills and knowledge requirement for the average Canadian worker.

Increasing demands for skills and knowledge are the norm, even when over three million Canadians change jobs annually and hundreds of thousands of secondary school, college and university graduates enter the labour force each year.<sup>5</sup> National economic success depends on recognizing people's skills and knowledge, cutting out unnecessary duplication of learning and stimulating lifelong learning while providing mechanisms that make it easy to move from education to work and to move within the workplace. The demographics of our ageing population further reinforce the need to make the most of the employees who are already in the nation's workplaces.

The other demographic reality affecting Canada is the growing importance of immigration as a source of skilled working-age people who can replenish the labour force to compensate for the low replacement rate from within the domestic-born population. Many of the 1.5 million immigrants to Canada during the 1986–96 period had post-secondary

Recognizing learning became an important economic issue in the 1990s when the demand for people with advanced knowledge and skills grew.

credentials, and the proportion continues to rise (see Table 2). Yet their entry into the Canadian labour market and educational system has not been easy. The scale of the problem is well illustrated by the example of foreign-trained engineers. From 1991 to 1994, 10,279 immigrants arrived

listing engineering as their intended occupation, yet only 56 per cent of them are practising this profession in Canada.<sup>6</sup> As we will see, the non-accreditation of foreign-born professionals and tradespeople is a problem rooted in multiple barriers that cut across a wide range of institutional layers.

Immigrants are also important to us because they help us compensate for the ongoing loss of highly skilled emigrants who leave Canada every year to work internationally, especially in the United States. This phenomenon has become especially significant in recent years, as the number of highly skilled emigrant workers, such as engineers, computer scientists, physicians,

professors, nurses, teachers and managerial personnel, who leave annually has exploded upward from 17,000 in 1986 to 98,000 in 1997.<sup>7</sup> The great majority are non-permanent emigrants, but we lose their capacity to contribute to our domestic economy for the time that they are absent from Canada. Currently, the annual total is probably in excess of 100,000. So the brain drain is real, and it needs to be offset by a brain gain that can only be realized through a better learning recognition system.

## Human Capital

Employers today are more aware of the value of learning. Technological and demographic changes are causing them to place greater value on knowledge and skills when hiring, transferring and promoting people.<sup>8</sup> The compelling economic incentives for individuals, economies and nations to raise their skills has driven increased participation in

**Table 2**  
*Recent Immigration Rates to Canada—Immigration & Education Levels (Aged 15+)*

Highest level of schooling	Immigrated 1986–91	%	Immigrated 1991–96	%
Total population 15+	651,530	100	845,705	100
University completed	137,165	21.1	213,030	25.2
Some post-secondary	79,400	12.2	96,175	11.4
Completed non-university	123,295	18.9	152,405	18.0
Secondary school graduate	96,395	14.8	121,950	14.4

Source: Statistics Canada, 2000.



learning activities by people of all ages. Lifelong learning becomes more important as individuals move from school to work and back. Today, university students are older and more mobile; many full-time students are employed, and most part-time students combine studies and work. In 1999, provincial ministers of education and training acknowledged this when they affirmed that the country's future depends on informed and educated citizens.<sup>9</sup>

Canada's productivity, innovative capacity and quality of life have always been closely linked with the learning of its people. Our population is one of the most highly educated in the world. We have traditionally invested heavily in education: in 1994, Canada spent 7.2 per cent of its gross domestic product (GDP) on education, more than any of the world's other leading economic powers, including the United States, Japan and Germany. Half of all Canadian adults are post-secondary school graduates, by far the highest proportion in the world. And more than two-thirds of all Canadians aged 5–29 are enrolled in an education program.<sup>10</sup> These trends are likely to continue. As Canada's economy evolves, more emphasis will be placed on people's knowledge and skills and their capacity to learn continuously and apply their learning on the job.<sup>11</sup> The challenge in this era of expanding, deepening and diversifying demand for learning is how best to meet the volume of demand for the widely varying types of learning that our economy needs in order to grow. A key strategy for drawing on the national talent pool created through continuous learning by adults is to recognize learning in its various forms.

Recognizing the full range and extent of knowledge and skills is becoming more vital as Canada's population and workforce age. As this occurs, proportionally fewer graduates of the Canadian education system are entering the workforce, while skill requirements for new and existing jobs are rising.<sup>12</sup> This makes it even more important for employers to identify, recognize and value the knowledge and skills that their current workers already have and that established workers who change jobs bring with them.<sup>13</sup> For the same reason, we will benefit if we can transfer among institutions and employers every kind of learning credential and improve recognition systems to create new credentials that accurately capture previously uncredentialed learning. Accurate recognition means that employers can place employees in jobs where they make the maximum contribution and money and resources are not wasted on training them in knowledge and skills they already have.

Accurate recognition  
means employers can  
place their employees  
in jobs where they  
make the maximum  
contribution.

New conditions underlie success. In this high-velocity, knowledge-intensive era, human capital is fundamental to improving the performance of organizations—which are more likely to thrive when their rate of learning exceeds the rate of change in their competitive environment. To achieve this, organizations need to do two things better. First, they need to improve the skills of new hires and current workers. Second, they need to recognize learning and learning credentials. Some businesses already realize the importance of improving recognition to secure their future. They are trying to create a skilled, adaptable workforce today that has ample capacity for continuous learning on the job that can generate valuable products and services tomorrow.<sup>14</sup>

### Opportunities for Improvement

There are opportunities for improving learning recognition processes that can yield future benefits to everyone and reduce the costs we incur in future. This study briefly highlights the major barriers to improvement and points out some of the policies and actions that could help individuals and institutions overcome those barriers. Many of them are in use today on a limited scale. These models of excellence and best practice warrant further study as the basis for potential large-scale improvements in learning recognition processes and practices throughout Canada. They may be the basis for the solutions needed to bring about systemic change.

Policies and practices to expand prior learning recognition (PLAR) and facilitate the transfer and mobility of learners could help. Concerted efforts are already under way to better assess and recognize prior learning and credentials so as to reduce Canada's costly restrictions on its pool of human resources. The easier it is for people to obtain learning, and the more mobility education institutions and workplaces give them, the more likely they are to keep upgrading their knowledge and skills.<sup>15</sup>

### Benefits

Although this report focuses on the economic dimensions of the learning recognition issue, recognizing learning is much more than a money issue. As Table 3 indicates, people and organizations gain a broad range of benefits from recognizing and rewarding the full range of learning that individuals possess, wherever and whenever they may have gained them.

**Table 3**  
**Benefits of Recognizing Learning**

Educators & trainers (Learning suppliers)	Employees & students (Learning users)	Employers (Learning consumers)
<ol style="list-style-type: none"> <li>1. Meet societal needs</li> <li>2. Provide more lifelong learning opportunities</li> <li>3. Make better use of resources</li> <li>4. Provide access to a wider range of potential learners</li> <li>5. Attract more learners to learning programs in aggregate</li> <li>6. Enable institutional growth</li> </ol>	<ol style="list-style-type: none"> <li>1. Earn higher income</li> <li>2. Enhance quality of life</li> <li>3. Increase access to employment opportunities and promotion</li> <li>4. Enhance personal development</li> <li>5. Gain greater lifelong learning opportunities</li> <li>6. Reduce repetition of education and training</li> <li>7. Increase job mobility, access to employment, and enhanced careers</li> <li>8. Obtain more equal access to learning for disadvantaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase profitability</li> <li>2. Maximize employees' productivity and innovation</li> <li>3. Develop employees more fully as resources for organization</li> <li>4. Reduce training &amp; development repetition</li> <li>5. Match skills more reliably to workplace needs</li> <li>6. Create a framework for setting employees' career goals and training needs</li> </ol>

Source: The Conference Board of Canada, 2000.

### Costs

On the flip side of benefits are the tangible costs of not recognizing learning. These costs result when people are underemployed in the workplace and underdeveloped due to lack of workplace training and education because part of their learning is not recognized by their employers. Costs due to the learning recognition gap arise in many ways. Sometimes, people who seek formal learning credentials find that they have to pay the costs in money and time to repeat learning and undergo additional testing in a formal setting. The costs of this unnecessary duplication of learning tend to discourage people from “upgrading.” This duplication also creates unnecessary costs for those employers who support employee learning through partial or entire subsidy of tuition and paid time off for courses.<sup>16</sup> The same costs apply, for the same reasons, when individuals hold foreign learning credentials that are not recognized within Canada and are expected to go through similar recognition processes to obtain whole or partial recognition for these credentials.

When these up-front costs are too high, people are discouraged from taking any action to gain recognition. When that happens, they incur a second major set of costs. Lack of recognition of learning presents obstacles to career advancement, causing people to do lower paid work than they are capable of doing. Without the right credentials from educational, professional and trades regulatory institutions, they often lack the ability to move across national and provincial borders to find work in their chosen profession or trade. As a result, they earn less, are more likely to lose their jobs, and are less likely to be promoted.

### Six Criteria for Valuing Learning and Credentials

Recognizing learning is a real-world issue for employers. For recognition to be meaningful for them, it has to be based on the demonstrated authenticity, currency, quality, relevancy, trustworthiness and transferability of the learning.<sup>17</sup> Recognition processes that explicitly address these criteria can be used to place a value on both credentialed learning and prior learning so that they are more transferable between workplaces. When individuals can demonstrate that their skills and knowledge meet standards for these criteria, then employers will feel comfortable in recognizing them (see Exhibit 1).

#### Exhibit 1 Six Criteria for Valuing Learning and Credentials

- |                        |   |
|------------------------|---|
| 1. <i>Authentic</i>    | Learner can demonstrate the learning or learning credential claimed                         |
| 2. <i>Current</i>      | Learning or credential is valid, up to date, and performable at work                        |
| 3. <i>High quality</i> | Learning or credential has reached the acceptable level                                     |
| 4. <i>Relevant</i>     | Learning or credential is applicable to the area claimed                                    |
| 5. <i>Trustworthy</i>  | Learning or credential is worthy of confidence and can be depended on                       |
| 6. <i>Transferable</i> | Learning or credential can be applied outside the specific context in which it was obtained |

Sources: The University of South Australia, 2000; The Conference Board of Canada, 2000.

- 1 Important learning objectives of Canada's public education system include development of citizenship and life skills, culture and creativity, as well as employability skills and subject knowledge and expertise.
- 2 It is important to note that the benefits calculated in this study represent a conservative measure of the value to individuals and the country. Other research has calculated even higher total benefits. For instance, studies using 1996 Canadian census data tend to produce higher forgone benefits, primarily because they impute these benefits across the entire at-risk groups as opposed to those who are self-identified as having unrecognized learning. See, for instance: Jeffrey G. Reitz, "Immigrant Skill Utilization in the Canadian Labour Market: Implications of Human Capital Research," *Journal of International Migration and Integration* (forthcoming).
- 3 See also Methodological Issues and Approach, page 24, and Appendix B.
- 4 *Oxford English Dictionary*, 6th ed., p. 240.
- 5 Thomas Townsend, *Transferability of Learning: A Federal Perspective*, presentation to the National Council on Education, The Conference Board of Canada, Toronto: October 5, 1999.
- 6 Andrew Brouwer, *Immigrants Need Not Apply*, [http://www.maytree.com/publications\\_APT-1.html](http://www.maytree.com/publications_APT-1.html), p. 2.
- 7 Mahmood Iqbal, *Are We Losing Our Minds? Trends, Determinants and the Role of Taxation in Brain Drain to the United States* (Ottawa: The Conference Board of Canada, 1999), pp. 9–10.
- 8 *Performance and Potential 1999* (Ottawa: The Conference Board of Canada, 1999), pp. 9–10, 32–33, 36–38.
- 9 *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 1999* (Ottawa: Centre for Education Statistics, 2000), p. 1.
- 10 *Ibid.*
- 11 *Investing in Education: Analysis of the 1999 World Education Indicators* (UNESCO/OECD World Education Indicators Programme, 2000), p. 9.
- 12 Jean-Pascal Souque, *Managing Scarce Skills for Competitiveness and Growth: A Review of the Issue* (Ottawa: The Conference Board of Canada, 1998).
- 13 *Performance and Potential 1999*, pp. 54–63.
- 14 Graham S. Lowe and H. Krahn, *Job-Related Education and Training Among Younger Workers*, *Canadian Public Policy*, XXI: 3: 362–378.
- 15 Association of Canadian Community Colleges, *Pan-Canadian Protocol for the Transferability of Learning—Background Paper* (ACCC: April 26, 1999), <http://www.accc.ca/english/advocacy/priorities/mt-background.htm>
- 16 Michael Bloom and Brenda Lafleur, *Turning Skills into Profit: The Economic Benefits of Workplace Education Programs* (New York: The Conference Board, Inc., 1999).
- 17 University of South Australia, "Guidelines for the Implementation of Recognition of Prior Learning," <http://www.unisa.edu.au/adminfo/codes/rrior.htm>, March 2000.

## Mechanisms for Recognizing Learning

### Overview

The research methodology for this study involved three perspectives on the recognition of learning: those of potential employees, companies and credentialing organizations. This approach allowed for a comparison of these perspectives and also facilitated the identification of gaps in the current system.

As this study is primarily concerned with the labour market value of recognition, it was important to understand how formal credentials are perceived by employers and what impact they have on recruitment and pay. Likewise, we were interested in Canadians' views on how their labour market experiences have been shaped by the formal recognition of their learning.

The use of credentials as labour market "currency" is key to determining the demand for various types of credentials. Employers rely on credentials as a means of sorting applications for jobs and attach value according to the "denomination" of the credential. In turn, the success of credentialing organizations is directly related to their ability to supply credentials. Each of the key stakeholders—Canadians who demand credentials, credential-awarding organizations and employers—has its own motivations and constraints, and it is this confluence of interests that ultimately determines the success of Canada's learning recognition system.

This section will explore issues pertaining to Canada's existing system for recognizing learning. For the majority of Canadians, this system works very well indeed, as indicated by the growing demand for post-secondary credentials and the fact that these credentials do, in fact, translate into labour market success. However, many Canadians have not gone through the "normal" course of a smooth progression from higher credentialed learning into work. It is these people who are often disadvantaged. This section will explore some of the systemic issues facing them.

### The Key Players

#### *Credential-awarding Organizations*

Post-secondary credential-awarding organizations, including universities and colleges, see themselves first and foremost as education developers and deliverers. Their main goal is to advance and disseminate knowledge while preserving their academic standing and attracting more

learners. Credentials are merely one tool to help them achieve their primary goal. They want to deliver high-quality programs and award reputable credentials that other credentialing organizations, employers and the community accept. To achieve this, they place great value on providing reliable learning opportunities that they feel confident about credentialing.

By comparison, they feel less certain about the quality of learning gained at other institutions of higher learning, especially those in other countries, and so they are cautious about accepting their credentials and credits. They are also rather uncertain about the value of learning that people gain in non-traditional learning environments, such as workplaces, and find it difficult to determine what credit to grant for these prior learning experiences. Better techniques for evaluating workplace and other forms of prior learning experience would help educators, who tend to be cautious in awarding credit towards the credentials they award, which they instinctively wish to protect.<sup>1</sup>

Many of the issues that affect the behaviour of post-secondary credential granters also affect professional and trades licensing bodies and credential assessment services, whose perspectives and behaviours are partly shaped by their relationship to the post-secondary education system. In many occupations, including law, medicine, engineering and accounting, occupation-specific learning is legally recognized through professional licences. These provide confidence to employers and the community that the licensed individual is, in fact, able to perform the functions of the occupation to a recognized standard that is acceptable to all. Although licensing protects the public interest, it can sometimes cause barriers to the recognition of bona fide learning and related credentials.

#### *Employers*

Employers are chiefly interested in learning and credentials for the help they can give them in determining how to turn their employees' capabilities into productive work. They do not view learning delivery or development as the exclusive responsibility or right of any one institution or system but tend instead to recognize and credit learning that they deem to be authentic, relevant, and trustworthy if it provides employees with the skills, attitudes and behaviours needed to function in their workplace. On the other hand, they tend not to have any special expertise themselves in learning delivery or the credentialing that

goes with it in the public education system. They generally take credentials as proxies for capacity and rarely look closely at grades. Often, they adopt a pragmatic approach that sees them focusing on the most cost-effective and reliable evaluation and selection techniques in an effort to avoid costly mistakes. This can make them disinclined to take up new methods for recognizing learning even if these have the potential to be very accurate.

### **Employees/Students**

Individual learners tend to see learning as a means to achieve personal gain, self-sufficiency and self-fulfilment. They value their own learning and learning experiences highly and place great importance on having their prior learning recognized and credentialed. This is wise, because acquiring formal credentials correlates closely with career success, including improved prospects for employment, on-the-job responsibility, promotion and transfer. Completing an education program is a key to securing employment: post-secondary graduates have much lower unemployment rates than non-graduates. As jobs become more highly skilled, qualifications become even more important to finding work and staying employed.

Skills that are gained through education also translate into higher earnings. A 1997 study (Bloom et al.) identified a strong link between literacy skills and earnings in Canada and found that average annual income for high-literacy individuals is about double the low-literacy individuals' income.<sup>2</sup> This is due to increased employment earnings and a higher likelihood of being employed, finding full-time work and receiving training. However, for opportunities to be realized, learning must first be recognized; for learners, the alternative is perennial underemployment or unemployment.

### **The Processes of the Credential-awarding Organizations**

#### ***Institutions of Higher Learning***

Provincially chartered institutions of higher learning are the main granters of learning credentials in Canada. Credential awarding is only one aspect of the multifaceted nature of these institutions, whose main focus is on knowledge generation and dissemination through research and teaching. They tend to organize their knowledge generation and dissemination by knowledge area, and the

credential-awarding part of the organization is linked with the teaching component as a means of verifying the quality of learning and communicating this to others in society.

In the current system, the authority for awarding learning credentials is delegated to an institution by the provincial government, which also grants that authority to competing institutions. Any one institution will attempt to distinguish itself (its "brand") by attracting excellent staff and students so that its credential will have a cachet in the market above and beyond the learning it represents. This process develops the institution's brand and helps it attract staff and students.

Indeed, the Conference Board's Institution Survey found that the primary interest of post-secondary education (PSE) institutions in recognizing and awarding cre-

ditionals is the benefit to *their* organizations as opposed to the external benefits of meeting the needs or demands of employers and the community.<sup>3</sup> Although institutions of higher learning are primarily responsible for the recognition and awarding of credentials for learning, the main "line of business" is most likely to be defined, for universities, in terms of knowledge generation and dissemination and, for community colleges, in terms of teaching. The recognition of learning is merely a sub-process designed to ensure that the institution gets the best (preferably full-time) students possible for

the maximum number of places funded by government grant and that it maintains its brand reputation.

#### ***Methods of Entry***

The vast majority of students entering institutions of higher learning do so in the "normal" manner; that is, they arrive with a diploma from a provincial secondary school and are admitted on the basis of that diploma. They usually enter full-time studies. The institution receives an operating grant from the provincial ministry of education based on full-time equivalent enrolment. As revealed by the Conference Board's Institution Survey, those seeking recognition outside of these channels are a small fraction of those who go through the usual application process. Although the numbers are significant for Canada as a whole, on an institution-by-institution basis, the number of "abnormal" entrants today is still small.

The difference in numbers makes it easy to identify the mainstream of the enrolment and recognition system. The recognition of learning for entry into post-secondary

The vast majority  
of students entering  
institutions of higher  
learning arrive with a  
diploma from a provincial  
secondary school and are  
admitted on the basis  
of that diploma.



studies is heavily based on this mainstream. PSE institutions have developed sophisticated systems for handling the largest volume of their admissions, which are either from secondary school graduates from within their province or students from previous years who have completed prerequisite learning to qualify for admission.

“Abnormal” entrants, such as people who come with credentials from unfamiliar institutions or those with no credential associated with their learning, create management challenges for admission policies and procedures in many PSE institutions. To begin, the institution may have difficulty assessing students transferring from other institutions within Canada. The main issues are compatibility of various courses of study and therefore the awarding of credits or advanced standing to these applicants. As indicated, the institutions will assess that value in terms of both the degree itself (e.g., BA) and the institution (e.g., Wilfrid Laurier University).

Although there has been some progress in recent years in improving joint recognition of credentials, there are still individuals in Canada, especially those transferring from out of province, who face problems having their learning recognized prior to the awarding of a credential. This issue arises because institutions of higher learning generally place a higher value on learning at their own institution compared to other institutions, even when this learning is very similar. This particularly affects students who seek to transfer

between institutions in the later stages of their degree. The institution being applied to is concerned that it will award a full degree with its brand name to a student who has attended the institution for only part of the degree and so might not have a fully reliable set of learnings.

An even bigger issue emerges when an applicant possesses an unfamiliar credential from a foreign institution with which the institution has no mutual recognition arrangement. Yet another issue arises when an individual possesses learning obtained through work and life (also known as prior learning or experiential learning) that has not been formally recognized in a credential document. In these situations, the applicant is well and truly outside of the mainstream of admission. Many PSE institutions have developed their own unique, at times idiosyncratic, mechanisms for dealing with these special circumstances.

The impact of these barriers, summarized in Exhibit 2, is to make the transferability and mobility of learning a major issue for many learners. *Transferability* is the ability to get credits from one education or training organization accepted by another; *mobility* is the ability to get credentials accepted in jurisdictions, such as provinces or countries, where they were not issued.

The barriers are so high that they alter some people’s behaviour, causing them to abandon attempts to apply their learning in new work and education contexts through transfer.

## Exhibit 2

### **Barriers to Transfer of Learning**

#### 1. *Administrative barriers*

- Administrative process delays, including delays in generating transcripts, assigning grades, registering receipt of transcripts, and assigning transfer credit, act as barriers to transfers.

#### 2. *Lack of centralized regulatory structure*

- No centralized regulation, no central transfer organization, and the use of multiple models of transfer in Canada have led to a disconnect between employers, learners and educators.
- This barrier also makes it more difficult to develop widely accepted transfer standards and practices.

#### 3. *Miscommunication and lack of coordination*

- Miscommunication and lack of coordination in conducting transfer agreements among institutions create inefficiencies and ineffectiveness.
- Program regulations are changed without sufficient advance notice to institutions.
- Significant drops in learners’ GPAs are sometimes caused by a receiving institution recalculating a student’s average to fit their own scale.

#### 4. *Incompatibility and lack of universal standards*

- Multiplicity of provincial, national and international standards makes transfer more complex.
- Incompatibility between learning institutions, workplaces and occupations creates significant practical problems such as courses that do not match by number of credits or are out of semester sequence between institutions or branches of the same institution.

#### 5. *Conflicting institutional interests*

- Institutions may have widely diverging interests that cause conflicts and reduce their capacity to recognize learning and credentials in a timely fashion.

#### 6. *Lack of learner awareness*

- Learners do not know or understand the transfer systems available to them and so do not take full advantage of them.

Source: The Conference Board of Canada, 2000.



## ***Inconsistent Processes***

The processes put in place for recognizing learning in these special circumstances vary considerably from institution to institution. Forty of the 55 institutions responding to the Conference Board's Institution Survey indicated that they have a "formal" process for recognizing learning. Generally, this means that the institution (specifically, the registrar's office) has a written policy for recognizing learning in unusual circumstances. However, the actual process of recognition is usually devolved to the department level where the technical knowledge of the learning resides.

At the department level, practices vary considerably. In some cases, applicants sit a challenge exam, in others, an oral test. Applicants are usually provided with very little information on the nature of the test and no preparatory materials. If the recognition of their learning is denied, there is often very little communication with the applicant as to why it is denied and what areas need improvement, and often there is no appeal. In general, this organization of the recognition of learning by higher learning institutions has resulted in a lack of consistency and transparency in the process. In addition, a focus on written challenge exams may be biased against those who have subject knowledge but lack good writing skills. Finally, in the words of one college admissions administrator, "any systemic bias at the departmental level will be reflected in their choice and administration of the assessment system."

The resulting system creates problems for those with foreign credentials, partial degrees from other Canadian institutions, and informal prior learning that has not been credentialed. Yet these department assessments are very important in the awarding of either course credits or advanced standing. This, in turn, has key implications for individuals' ability and incentive to continue their education and secure credential documents to verify their learning.

Finally, the assessment of credentials may not necessarily accord with the actual recognition of learning. This is because institutions have other rules pertaining to residency and the minimum number of credits that have to be taken at the institution, whatever the state of a person's learning. This may involve learners, whether they have a foreign credential or partial learning towards a credential from within Canada, in having to repeat learning (in other words, effectively having their learning unrecognized).

## ***Funding Issues***

A funding system geared to full-time equivalent enrolments further exacerbates the problems of the learning recognition system. This system can provide disincentives for an institution to recognize and admit a student part-way through a course of study. Given that the institution has a semi-fixed capacity, the admission of an advanced-standing student has the effect of taking the place of a full-time student who is likely to spend his/her entire post-secondary time at that institution. Full-time resident students are the most valuable to the institution; therefore, any enrolments that compete with these students are discouraged.<sup>4</sup>

Moreover, the institution either does not receive separate funding for assessments or is funded at below cost. In the case of Ontario, separate funding for prior learning assessments has been reduced to \$30 per student, which is less than the institution's cost to perform the assessment. Thus, the institution has to fund the assessment either out of existing resources or through additional fees. At the community college level, it now costs a student \$95 to take an assessment and \$180 to take a course.<sup>5</sup> This funding structure is not necessarily a problem in itself, but a lack of transparency and preparatory materials may make the unrecognized learner unwilling to take the chance of losing the assessment fee.

## ***Professional Licensing Bodies***

Many of the same arguments that apply to PSE institutions can be applied to professional licensing bodies. However, licensing bodies see their mandate in terms of the maintenance of professional standards, consumer protection and public safety. They are also interested in protecting the interests of existing members, which, arguably, may inhibit special efforts to admit those from unfamiliar backgrounds.

As with institutions of higher learning, many professional licensing bodies have relatively little incentive to focus on recognizing learning that has not been formally credentialed within Canada. For this reason, they suffer from some of the same shortcomings as the PSE institutions when it comes to recognizing learning not attained through normal channels. This is especially true pertaining to the consistency and transparency of their processes for recognizing learning.

The processes for recognizing learning create problems for those with foreign credentials, partial degrees from other Canadian institutions, and informal prior learning.

There are a number of foreign credential assessment services in Canada. Some of them, such as the services associated with the Open Learning Agency in British Columbia, are now performing a wide range of experiential learning and other types of assessment on a fairly large scale. However, many are essentially information centres designed to direct those with foreign credentials to the appropriate PSE institution or professional licensing body for assessment of their credentials. In this sense, they are an appendage to the credentialing system, not necessarily a great improvement on it. Independent credential assessment services are a relatively recent innovation in many provinces. Although they are a step in the right direction, it remains to be seen whether they will have a major impact on the problems of learning recognition in Canada. The Conference Board's Employer Survey indicated a relatively low level of employer awareness of these institutions and of confidence in them, especially when compared with existing PSE institutions and professional licensing bodies.<sup>6</sup>

In addition to the above, there are numerous other structural, institutional and organizational culture barriers that may limit the amount and type of learning recognition that is taking place in Canada today. Some of these barriers are summarized in Exhibit 3.

The collective impact of these barriers is that many Canadians have trouble getting their learning recognized and credentialed. Some barriers are based on structures and methods of recognizing learning that create a conflict between the formal recognition of learning and other organizational imperatives. However, these organizational issues merely reflect a broader attitudinal problem: the Canadian learning recognition system tends to ignore those who do not fit easily into the existing system. This problem is further reflected in the fact that there is little active promotion of recognition of learning in Canada and no serious attempt at outreach to unrecognized learners. Today, unrecognized learners are largely left to their own devices to sort through the organizational maze that is Canada's learning recognition system.

### Exhibit 3

#### **Barriers to Recognizing Learning**

1. PSE institutions do not see learning recognition as a key line of business except as it pertains to the main body of full-time non-transferees educated within their province.
2. PSE learning institutions have financial disincentives to recognize foreign education credentials, credentials from other institutions or jurisdictions in Canada, prior learning from workplaces, "real-life" experience, and "alternative" education such as non-traditional schools and learning systems.
3. Responsibility for credentialing is divided among several organizations whose primary interest is their own specific trade, profession or jurisdiction.
4. Decentralized credentialing systems have led to practices that reduce the incentive for a learner to have his/her learning recognized.
5. There is a lack of universal, comparable standards for relating international credentials to Canadian credentials and for creating experiential learning credits.
6. Incompatible recognition systems that use different definitions and unconnected evaluation methods make transferability of learning and credentials more difficult.
7. Provincial licensing and standards bodies have disincentives to recognize competencies gained in other jurisdictions and workplaces or granted by other non-government organizations.
8. Sectoral and national licensing and standards bodies often do not recognize competencies gained in other countries and workplaces or granted by other non-government organizations.
9. Lack of mechanisms and agreements to transfer licences between provinces limits interprovincial portability of credentials.
10. Employers are unfamiliar with and tend not to recognize foreign education, professional and trades credentials, prior learning from other workplaces, "real-life" experience, and alternative education.
11. Firm-specific training delivered by firms is not recognized by other firms, professional licensing and standards bodies, or colleges and universities.
12. Lack of universal workplace training credentials, because employers do not support them, means that employers do not recognize other employers' credentials and instead invest in firm-specific training that has a low probability of being transferred to rivals.
13. Value differences about learning between institutions cause some organizations to resist transfers.
14. An umbrella national recognition board or agency to create new, widely accepted learning credentials is lacking in Canada.
15. Learning in the workplace, home study or life experience is relatively ignored, as learning is seen as exclusively a product of public education.

Source: The Conference Board of Canada, 2001.

## Confidence in the System

Notwithstanding the shortcomings of the recognition system, there is a reasonably high level of confidence in the system. Consider, for example, the recognition institutions. These institutions indicated high levels of confidence in their ability to both assess and recognize learning, as indicated in Table 4.

Not surprisingly, this confidence was especially high when assessing existing academic qualifications. Overall, there was a somewhat lower level of confidence in the assessment of prior learning, with colleges exhibiting higher confidence than universities. These confidence levels are mirrored by employers' confidence in the learning recognition system (Chart 1).

Employers typically have substantial regard for credentials awarded by Canadian education institutions, especially those within their province. Although employers do have independent means of verifying learning, credentials play an important role in helping the employer focus on relatively few applications from the many they may receive. Employers are not about to "reinvent the wheel" of learning recognition. As with the PSE institutions, the main issue is the verification of learning, and employers are much less likely to verify learning that has come from an unfamiliar source.

Why are confidence levels reasonably high? Institutions have confidence in their understanding of what constitutes significant subject knowledge and technical expertise. Similarly, employers have always had some success in sorting applicants on the basis of educational institutions' assessments of subject knowledge and technical expertise as embodied in the credential document. Employers then use their own human resource systems to assess job-specific expertise and other employability skills. This system works well for the vast majority of Canadians who go through the usual school-to-work transition.

But reasonably high levels of confidence with the existing system may overlook those who are not well served by that system. Confidence by the institutions in their ability to assess knowledge and technical expertise is different

**Table 4**  
**How Confident Are You of Your Process for...?**  
(n=55)

	University	University/ college	College	Prof. ass'n.	Prof. body	Bus.	Other	Total
<i>... recognizing and credentialing prior learning?</i>								
Very confident	3	1	5		1			10
Confident	10	3	11	1			1	26
Somewhat confident	2		3		1	1		7
Not at all confident	4							4
<i>... recognizing existing formal learning credentials?</i>								
Very confident	10	3	9	1	1		2	26
Confident	8	1	8	1		1	1	20
Somewhat confident	1		2		1			4
Not at all confident	0	0	0	0	0	0	0	0

Source: Institution Survey, The Conference Board of Canada, 2000.

**Chart 1**

### Employer Confidence in Various Aspects of Credentialing Learning

(Average score on scale of 1 to 5, n=45)



Source: Employer Survey, The Conference Board of Canada, 2000.

from the overall effectiveness of the system for recognizing learning. This effectiveness depends on transparency, consistency, appropriate funding, adequate preparation of recognition seekers and public promotion of this option to increase its usage. In addition, the confidence of employers may speak only to those who have come through the system, not those the system has missed. On these counts, many recognition-seekers who are outside the normal channels may be poorly served. This is why it was important in the survey process to obtain the opinions of those who feel left out of the current system.

### Recognition of Learning and the World of Work

This study is especially interested in the economic implications to Canada of recognizing learning and the costs of non-recognition. These economic impacts are best measured in relationship to the labour market. Here, it is possible to observe the benefits, or return in the form of earnings, for different levels of recognized learning. This return should reflect the higher level of skill associated with higher learning credentials. It is relatively straightforward to impute unemployment and underemployment effects when learning is recognized in a subgroup of the population.

Before presenting estimates of these benefits and costs, it is helpful to gain a better understanding of the process by which the recognition of learning in a formal credential document relates to employers' human resource processes. This section draws on findings from a survey of Canadian employers to elaborate on these processes. Forty-five employers responded to the survey, which asked

them questions about their criteria for hiring, experience with non-recognized learning, actions when faced with non-recognized learning, and how they continue to develop people through training.

### Recruitment Process

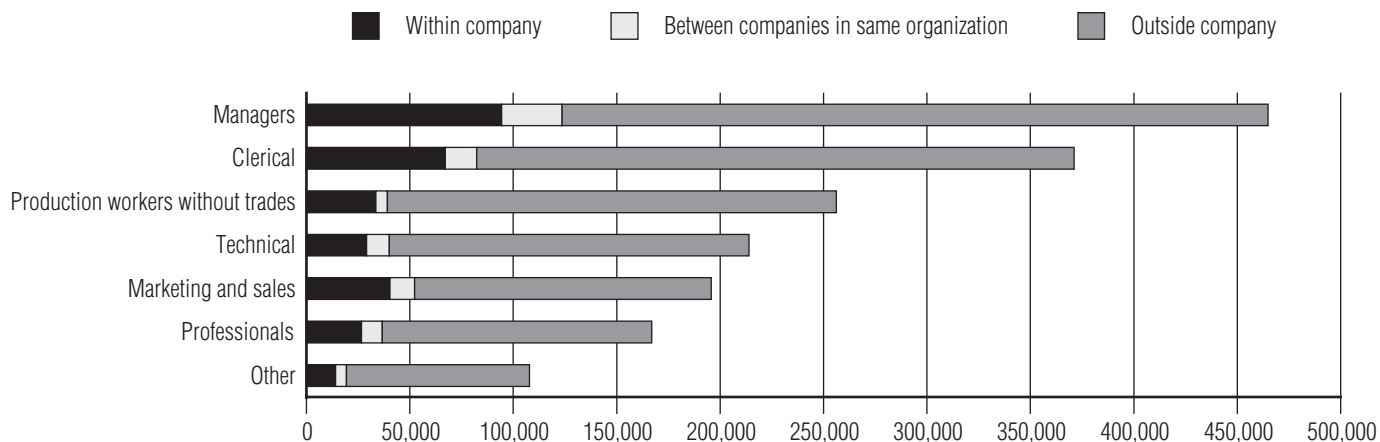
For employers, the process of matching people with jobs is usually a matter of selecting a subset of applicants, doing further investigation of these, and then hiring on the basis of the perceived match between the vacant position and the best applicant's skills. Applications are typically many times more numerous than the positions available, and therefore sorting processes are key. In fact, surveyed employers indicated that in 2000 they reviewed six times as many applicants as they actually hired.

On average, over 700,000 Canadians move into or out of a job every month.<sup>7</sup> According to Statistics Canada's Workplace and Employee Survey (WES), the vast majority of new recruitment tends to take place outside the organization. Over 70 per cent of jobs are recruited in this way, and there is very little variation among job categories (Chart 2). In other words, about 500,000 jobs per month, or about six million annually, are filled from outside the organization.

Employers do not rely solely on formal educational credentials; work experience also plays a key role. The respective weights attached to formal education and work experience vary with the age of the applicant and the type of position. In fact, employers are generally inclined to attach more importance to work experience than to formal education credentials (Chart 3).

**Chart 2**  
**Sources of Recruitment**

(By job category, total recruitment from responding companies, 1999)

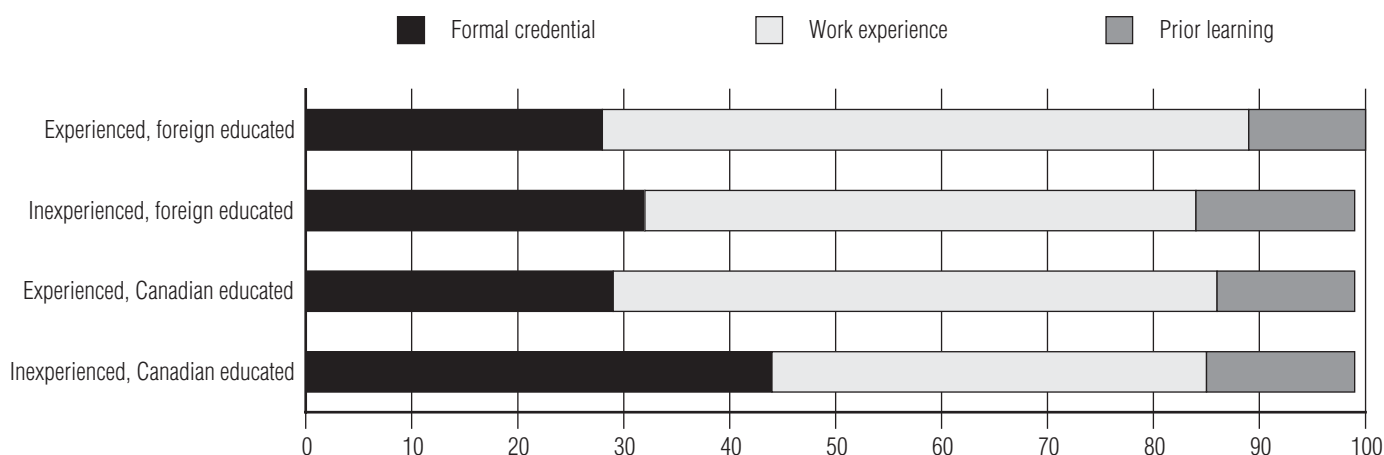


Source: Custom Run of Statistics Canada's 1999 Workplace and Employee Survey (WES).

**Chart 3**

**Relative Weights Attached to Formal Education and Work in Recruiting for Different Candidates**

(Average score on 0–100 scale, n=44)



Source: Employer Survey, The Conference Board of Canada, 2000.

None the less, no amount of work experience can compensate for lack of credentials in the many professional and licensed positions where credentials are mandatory. For instance, someone may be a very hard-working and competent bookkeeper, with all the knowledge and skills to perform the function of a chartered accountant, yet this person cannot become a chartered accountant until recognized by the Institute of Chartered Accountants. Up to that point, the person will remain a good bookkeeper with no opportunity for advancement into the more financially rewarding profession of chartered accountancy.

It is interesting to note how formal recognition of learning fits into this process. The recruitment process for positions that require less technical expertise is more likely to place emphasis on employability skills that have been applied in a work setting. Moreover, recruitment for senior positions will often rely on the demonstration of responsibility in a work setting that is not directly related to the level of formal education. The recognition of learning is key in instances where a position requires a relatively high level of technical expertise or involves responsibility at a mid-level position in an organization.

The main concern for employers is the verification of learning, as hiring errors are costly. Moreover, independent employer verification can also be expensive. Employers are risk-averse in their hiring decisions and are reluctant to invest heavily of their own resources to verify learning independently, especially in the early stages of their recruitment process. Consequently, employers are prone to leverage existing systems of recognition. In addition, there is a relationship between proximity, or familiarity, and confidence. This is demonstrated in the survey findings, as all types of foreign learning rank lower than

Canadian learning, even when the foreign learning is supported by a credential document and the Canadian learning is not.

Also of interest is the fact that employers place more emphasis on the field of study and the type of credential than on the institution of learning in the case of Canadian PSE institutions (Table 5). Although individual institutions may wish to distinguish themselves from competing institutions, the main market value of their activities relates to their power to award credentials in particular fields of study. This may explain the drive of some non-degree-granting institutions to transform themselves into degree-granting institutions. In essence, it is the government sanction to the institution to grant

**Table 5**  
**What Are the Factors That Contribute to Employer Confidence in Credentials?**

(on a scale of 1–5, n=45)

	Average score
The applicant's major field of study .....	3.6
Your familiarity with the type of credential that the applicant presents .....	3.4
Your familiarity with the applicant's educational institution .....	3.3
Your familiarity with the specific program of that institution .....	3.0
The applicant's grades .....	3.0
Your organization's experience with other graduates of that institution .....	3.0
Professors' letters of recommendation .....	2.4

Source: Employer Survey, The Conference Board of Canada, 2000.



credentials that is at the heart of the market value. Herein lies an opportunity: since a government sanction is at the heart of learning recognition, that same sanction can be used to improve the recognition system.

### Lack of Confidence—Hiring Implications

A lack of confidence in learning credentials has important implications for hiring decisions (Table 6). Most commonly, employers will simply ignore applications that come with credentials in which they do not have confidence. In fact, this behaviour is further encouraged by the second most popular response in the survey: a lack of confidence leads to hiring mistakes. In addition, employers are very aware that mistakes often come even when they are trying hard to screen credentials accurately. Many of them noted that their lack of confidence led to costs in time and resources as they tried to verify applicants' learning. These findings are important to keep in mind later when considering the experiences of individuals who claim their learning is not recognized.

Although employers will take further steps to verify learning, they will generally do so after the initial screening process is completed. There is reluctance to take exceptional measures to verify learning, as indicated by the fact that the employers give these measures an average score of less than 2.5 out of 5. When they do take exceptional measures, employers are more likely to target these steps towards people with learning experience in Canada, even when this is not credentialed. As might be expected, such steps are most likely to be taken if the employer finds relatively few qualified applicants for a position.<sup>8</sup>

Employers also report relatively few problems with unrecognized learning—perhaps a case of “out of sight,

Those who do not have their learning recognized in a *Canadian* credential document are at a disadvantage.

out of mind.” For instance, the 45 employers surveyed employ over 33,000 people. Yet only seven of these respondents, small and medium-sized enterprises (SMEs) with fewer than 200 employees, indicated that the recognition of foreign credentials was a major issue for their employees, and only six employers, with about 300 employees, indicated significant problems in recognizing prior learning.

### Additional Learning on the Job

Clearly, those who do not have their learning recognized in a *Canadian* credential document are at a disadvantage in the recruiting process. As indicated, Canada has one of the most credentialed workforces in the world.

In some instances, employers are spoiled for choice in terms of credentialed learning within Canada. They are also likely not to trust applicants who do not have credentialed learning in Canada and are even less likely to take steps on their own account to verify learning.

This means that those with foreign credentialed learning, prior (experiential) learning and, to a lesser extent,

partial or out-of-province credentials are at a disadvantage in the hiring process. But it is equally significant, given the role of workplace experience in the recruitment process, that unrecognized learners are less likely to gain the experience that might advance their careers over time.

Also of note is the fact that the non-recognition of learning will affect further investments in education through the workplace. Canadians with higher levels of recognized learning are much more likely to have further education that is employment-related and supported by the employer.<sup>9</sup>

The surveyed employers spend, on average, \$425 annually on training per participating employee. These expenditures apply to about half of all their employees. Training expenditures are job-specific and reflect organizational priorities. For the most part, this training does not result in any credential document. In the few cases where it does result in a credential, it is one that tends to be recognized narrowly within a specific industry as opposed to across industries.

Interestingly, when asked about their own practices in recognizing training obtained in other companies, respondents were most likely to indicate that they recognize training when it is associated with a credential that is widely recognized across all industries (Table 7). When contrasted with the findings on employer-sponsored training, this would appear to lend credence to a theoretical

**Table 6**  
**How Does Lack of Confidence Affect the Screening Process?**

(n=45)

	Total mentions
We do not hire people with qualifications in which we do not have confidence .....	24
It leads to hiring mistakes.....	20
It costs us time and resources to verify learning.....	19
We end up not considering applicants who may be qualified .....	13

Source: Employer Survey, The Conference Board of Canada, 2000.



market imperfection in company-sponsored training: companies have the greatest incentive to invest in firm-specific training that is not easily transferred to other firms. At any rate, this finding is immaterial to those who do not have their learning recognized, as they are unlikely to participate in any company training. Of greater importance, perhaps, is the fact that unrecognized learners will fail to accumulate the job-specific experience that employers say is a critical factor in their hiring decisions.

## Summary

The state of the current learning recognition system can be summarized as follows. People with foreign credentials, experiential learning and partial or out-of-province credentials may or may not be successful in getting their learning recognized by one of Canada's credentialing institutions. This depends on the institution and its process for assessing the learning. Some people will be put off at this point if the institution in question has explicitly or implicitly dissuaded them from getting their learning recognized. This could occur because the process is flawed in ways detailed earlier or because the person truly does not have the learning claimed.

People may then enter the labour force with lower level credentials or no credentials. If the credentialing organizations in Canada do not recognize their learning, employers are even less likely to recognize it. Consequently, these people are most likely to compete in the labour market against those with lower level credentials. If they do, in fact, have learning that is unrecognized, this will see them either doing jobs beneath their actual skill level or, alternatively, being unemployed. In addition, unrecognized learners are less likely to continue to develop themselves, whether through continuing education or through company-sponsored training. This means that Canada will have lower levels of "human capital" than would be the case with a better system of recognizing learning. The next chapter explores how many people are experiencing these problems in Canada today.

**Table 7**  
**Do You Recognize Training Done by Other Organizations When . . . ?**

(Total mentions, n=45)

	Training recognized?	
	No	Yes
No formal credential is associated with the training	10	21
Formal credential is associated with the training and is . . .		
Widely recognized across all industries	1	34
Recognized only within our industry	4	33
Recognized within the company doing the training	24	12

Source: Employer Survey, The Conference Board of Canada, 2000.

- 1 Tom Norton, "The Learning Highway Runs Through Here," *College Canada Newsmagazine*, 1996–97, vol. 2, issue 4, p. 3; see Kathryn Barker and C. Bélanger, *The Status of PLA/PLAR in Professional Programs in Ontario Universities*, May 1999, p. 82.
- 2 Michael Bloom, Marie Burrows, Brenda Lafleur and Robert Squires, *The Economic Benefits of Improving Literacy Skills in the Workplace* (Ottawa: The Conference Board of Canada, 1997), pp. 10–15.
- 3 When asked why they recognize existing learning, 27 of 55 responding PSE institutions indicated "benefit to our organization" compared to 17 who indicated "demand by employers" and 16 who indicated "demand from the community."
- 4 A further indication of this phenomenon is the trend in part-time enrolments at post-secondary institutions. While full-time enrolments have been expanding rapidly, part-time enrolments have actually been declining. Between 1992 and 1998, part-time enrolments at Canadian universities and colleges declined by about 100,000, despite demographic factors that should have supported an increase. See: Torben Drewes and Herb O'Heron, "Part Time Enrolments: Where Have All the Students Gone?" *Research File*, vol. 3, no. 2, May 1999, p. 1.
- 5 According to interviews with those in the community college sector in Ontario.
- 6 Credentials verified by a Canadian assessment service averaged only 2.6 out of 5 in our survey of 45 Canadian employers, compared with PSE scores of 3.8. Several employers commented that they were unsure of the reliability of these assessments.
- 7 Statistics Canada, *Labour Force Update*, Catalogue No. 75-005XPB, Summer 2000.
- 8 On a scale of 1 to 5, employers indicated the greatest likelihood of taking further steps for an applicant with experiential learning within Canada (2.8) applying for a job with few applicants, followed by a foreign-trained applicant in the same situation (2.7), a Canadian with experiential learning applying for a job with many applicants (2.4) and a foreign-trained applicant in the same situation (1.9).
- 9 Statistics Canada, Custom Runs from the 1998 Adult Education and Training Survey, 1998. This is true, as well, for countries across the OECD. See: Organization for Economic Co-operation and Development, *Lifelong Learning for All* (Paris: OECD, 1996), Chart 8–2, p. 233.

## Amount of Unrecognized Learning

There are about 550,000 unrecognized learners in Canada today. This figure is derived from the results of the Conference Board's large-scale Household Survey of individuals across the country. Who are these individuals, what kinds of unrecognized learning do they have, and what actions are they taking to rectify their personal learning recognition gaps?

### How Many Unrecognized Learners?

In total, 487 individuals out of 11,766 surveyed responded in the affirmative when asked questions about their unrecognized learning. This amounts to a gross incidence rate for the survey of 4.14 per cent. After adjusting for the convenience nature of the sampling

methodology, the net estimate of unrecognized learning among the entire adult population of Canada is 2.17 per cent. Statistics Canada estimates the adult population (15+) of Canada in 2001 to be 25.2 million, so the estimate of unrecognized learners in Canada is 546,840.<sup>1</sup>

### What Are Their Demographic Characteristics?

Table 8 presents a snapshot of various characteristics of the unrecognized learners as identified by the Household Survey. In terms of age and gender, these respondents mirror the overall adult population of Canada. However, unrecognized learners tend to be found disproportionately among the foreign-born and visible minorities.

### Methodology

The analysis in chapters 1 and 2 is based on surveys of 55 credentialing organizations and 45 employers. It is supported by anecdotal evidence that initially suggested this research. It is also consistent with findings from a number of studies in Canada and internationally of aspects of the learning recognition issue that were reported in *Exploring the Learning Recognition Gap*, the phase 1 report of this study. To test its validity and to estimate the amount of unrecognized learning in Canada, the Conference Board undertook a representative survey of individuals in Canadian households.

The Household Survey was focused on individuals because:

- a) the benefits and costs of recognition are most likely to be experienced by individuals; and
- b) a representative survey of institutions or hiring organizations would not reveal insights about the unrecognized learning because these people are not in their "line of sight."

In the first instance, the challenge was to get a good estimate of the number of Canadians who have unrecognized learning. Based on the institution and employer surveys and a review of previous literature, it was likely that the overall incidence rate for non-recognized learning in the adult population would be about 5 per cent. It was hypothesized that there would be three types of people who might have learning that is unrecognized: those with foreign credentials, with out-of-province credentials or with experiential learning. The best existing evidence pertained to those with foreign credentials. According to the 1996 Census, about 18 per cent of the population are immigrants or non-permanent residents. But in a typical year, only about 20 per cent of the flow of immigrants will be "skilled." So the probability of non-recognized learning among immigrants was reckoned, in terms of the total adult population of Canada, to be less than 5 per cent. Thus, there was a good possibility that a purely random household survey would not contact those who had experienced the problem.

In these circumstances, it is common practice to use a cluster (or convenience) sampling methodology. The pre-existing evidence pointed to skilled immigrants, interprovincial migrants and females in administrative positions as key target groups. According to Citizenship and Immigration Canada and the 1996 Census, the majority of these groups have settled in the four metropolitan areas of Toronto, Montreal, Vancouver and Calgary.<sup>1</sup> Over 80 per cent of skilled immigrants are in these metropolitan areas. In addition, these metropolitan areas account for 35 per cent of the Canadian population. A random household survey of these metropolitan areas was undertaken, and the results were adjusted to account for the fact that not all Canadian households were included in the sampling frame.

Corbett•Communications, a Toronto-based research house, conducted a telephone survey of these metropolitan areas during December 2000 and January 2001, using an instrument based on questions developed by The Conference Board of Canada. In total, 11,766 households in Toronto, Montreal, Vancouver and Calgary responded to a qualifying question about whether there were any adults (aged 15 and over) with unrecognized learning in the household. When a contact was made with someone with unrecognized learning, a number of questions were asked about the type of unrecognized learning and how it had affected the person's employment and continuing education. These answers form the basis for estimates of the total numbers of unrecognized learners, the distribution of unrecognized learning and cost estimates to Canada.

A detailed description of the sampling methodology and the margins of errors of the findings are presented in Appendix A.

<sup>1</sup> Citizenship and Immigration Canada, *Immigration Overview: Facts and Figures 1999* (Ottawa: Public Works and Government Services Canada, 2000) p. 87.

Source: The Conference Board of Canada, 2001.

**Table 8**  
**Characteristics of the Unrecognized Learners**  
(n=487)

Age distribution	Number	Per cent	Estimated Canadians	Mother tongue	Number	Per cent
Under 25	29	6.0	32,563	English	203	41.7
25 to 29	33	6.8	37,055	Mandarin & Cantonese	41	8.4
30 to 34	77	15.8	86,461	Spanish	34	7.0
35 to 39	80	16.4	89,830	Filipino	28	5.7
40 to 44	72	14.8	80,847	French	14	2.9
45 to 49	69	14.2	77,478	Portuguese	13	2.7
50 to 54	49	10.1	55,021	Punjabi	13	2.7
55 to 59	23	4.7	25,826	Tamil	12	2.5
60 to 64	22	4.5	24,703	Arabic	12	2.5
65 and over	17	3.5	19,089	Italian	8	1.6
Unidentified age	16	3.3	17,966	Other	109	22.4
<i>Total</i>	<i>487</i>	<i>100</i>	<i>546,840</i>		<i>487</i>	<i>100.0</i>

Visible minority status	Number	Per cent	Est. Cdns	Place of birth	Number	Per cent	Est. Cdns
Yes	230	47.2	258,261	Canada	117	24.0	131,376
No	215	44.1	241,418	Other	361	74.2	405,358
Unidentified	42	8.6	47,161	Unidentified	9	1.8	10,106
<i>Total</i>	<i>487</i>	<i>100</i>	<i>546,840</i>		<i>487</i>	<i>100</i>	<i>546,840</i>

Gender	Number	Per cent	Est. Cdns	Self-confidence level	Number
Male	245	50.3	275,104	No confidence	4
Female	242	49.7	271,736	Somewhat confident	37
<i>Total</i>	<i>487</i>	<i>100</i>	<i>546,840</i>	Confident	170
				Very confident	156
				Totally confident	105

Source: Household Survey, The Conference Board of Canada, 2001.

### Three Types of Unrecognized Learning

Tables 9 to 11 review the survey findings on the various types of unrecognized learning. Respondents were asked to indicate whether their non-recognized learning was in the form of:

- a foreign credential document;
- Canadian credentialed learning (e.g., out-of-province credential);
- experiential learning not captured in a credential document; or
- any other learning.

Respondents were allowed to indicate more than one type of non-recognized learning. Table 9 presents the raw results for all types of unrecognized learning. The complexity of the issue is indicated by the fact that those with unrecognized foreign credentials are also likely to have unrecognized experiential learning. The inter-relationship between unrecognized credentials and unrecognized experiential learning has implications that policy makers and planners need to take into account when they

are designing improvements to learning recognition processes in Canada.

For ease of presentation, Table 10 shows the first and main type of unrecognized learning and recodes the “other” into the main categories.<sup>2</sup> This was done on the basis of the first-mentioned type of unrecognized learning listed by survey respondents. The reallocation provides the

**Table 9**  
**Unrecognized Learning, by Type**  
(Multiple responses allowed, n=487)

Type	Times mentioned	Per cent
Unrecognized foreign credential	307	63.0
Unrecognized experiential learning	221	45.4
Unrecognized Canadian credentials	66	13.6
Other unrecognized learning	71	14.6

Source: Household Survey, The Conference Board of Canada, 2001.

**Table 10**  
**Unrecognized Learning, by Main Category**  
(Single responses only, n=487)

Category	Number	Per cent	Estimated Canadians
Unrecognized foreign credential	307	63.0	344,723
Unrecognized experiential learning	115	23.6	129,131
Unrecognized Canadian credentials	65	13.3	72,987
<i>Total</i>	<i>487</i>	<i>100.0</i>	<i>546,841</i>

Source: Household Survey, The Conference Board of Canada, 2001.

basis for analysis according to how the respondents themselves chose to identify their main type of unrecognized learning.

### Type 1: Foreign Credentialed Learning

Not surprisingly, given the demographic profile of the unrecognized learners and the findings from the institution and employer surveys, the main type of unrecognized learning in Canada is foreign credentialed learning. More than 340,000 Canadians possess unrecognized foreign credentials. These people are most likely to come from China, India, the Philippines and Guyana.

### Type 2: Prior Experiential Learning

There are also significant numbers of Canadians with prior experiential learning that is not formally recognized in a credential. Nearly 130,000 Canadians identified this as their main recognition issue. Combining these with another 100,000 who have unrecognized experiential learning in conjunction with another type of unrecognized learning gives a total of almost a quarter of a million Canadians with unrecognized experiential learning.

### Type 3: Canadian Credentials

The third significant group comprises people with unrecognized Canadian credentials—about 73,000 Canadians. Some of these people are part-way through their post-secondary education and have difficulty getting advanced standing if they transfer to a different institution. Others are in provincially licensed professions and trades and have to re-license if they move to another province. The relatively small number of people facing this issue results partly from the fact that educational institutions and employers are more likely to recognize Canadian credentials. But it may also be because Canadians understand the difficulties associated with

transferring credentials and gaining provincial licences elsewhere and may choose not even to attempt to move. In other words, they have organized their lives around existing interprovincial barriers to recognizing learning. Thus, if the barriers weaken or are eliminated, we can expect much more interprovincial mobility, which will help to meet changing regional and provincial labour market needs.

Respondents were asked to be more specific about the type of learning that was unrecognized (Table 11). More than 95 per cent of those reporting specific unrecognized formal learning credentials possess post-secondary degrees and diplomas; the rest are secondary school graduates. Typically, “unrecognized foreign credentials” were most likely to be university degrees that were unrecognized in Canada; this category accounted for 118 of the 149 respondents who indicated a non-recognized university degree (BA or Masters). Experiential learners were most likely to have acquired their learning within Canada. This does not mean that immigrants have no unrecognized experiential learning. It is more likely to indicate that they consider their credentialed learning, especially if it is a degree, to “trump” any uncredentialed learning they might have because it will be easier for them to get it recognized by an employer or licensing body.

There are almost  
a quarter of a  
million Canadians  
with unrecognized  
experiential  
learning.

**Table 11**  
**Unrecognized Learning Categories, by Specific Type of Learning**  
(Times mentioned, n=487)

Specific type of learning	Number responding
High-school diploma	7
College diploma	50
University degree	139
Master's degree	10
Experiential learning	115
Not indicated	166

Source: Household Survey, The Conference Board of Canada, 2001.

## Actions Taken by the Unrecognized Learners

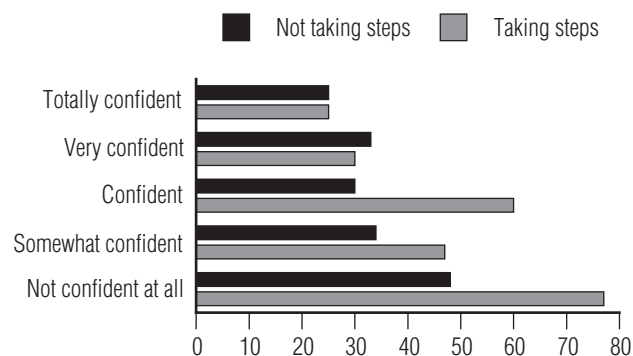
For the reason that foreign credentials are easier to have evaluated and recognized than foreign experiential learning, those with foreign credentials are most likely to have taken steps to get their learning recognized (Table 12).

When seeking recognition, it is common for these respondents to go to an educational institution. Those who are not taking steps to get their learning recognized tend to indicate process reasons (such as complexity, time and cost) as opposed to scepticism about whether their learning would be recognized if they actually went through the procedure. This supports the notion that improvements in the learning recognition process may very well see more learners coming forth to have their learning recognized if the message about systemic process improvements is effectively communicated to them.

The relationship between confidence in having learning recognized and steps taken is also intriguing (Chart 4). Some people feel that they will have their learning recognized even though they are not taking steps. Reflecting on the employer survey, perhaps these people believe their employer will recognize their learning when it is demonstrated in the workplace.

People who are not taking steps are more likely to say they are not confident of having their learning recognized. Perhaps more significant is that many people are

**Chart 4**  
**Confidence That Learning Will Be Recognized, by Steps Taken to Pursue Recognition**  
(n=409)



Source: Household Survey, The Conference Board of Canada, 2001.

taking steps even though they are not confident they will have their learning recognized. This suggests the importance they attach to this recognition and their awareness of the economic benefits they will gain if they are somehow successful. How right they are in their judgement that the value of recognition is worth the risk of incurring failure is shown by the estimates of benefits and costs presented in Chapter 4.

**Table 12**  
**Steps Taken to Get Learning Recognized**  
(n=487)

	<i>Main category</i>			<b>Total</b> (487)
	<b>Foreign</b> (307)	<b>Experiential</b> (115)	<b>Canadian</b> (65)	
Have taken steps to get learning recognized	151	23	20	194
Have not taken steps to get learning recognized	156	92	45	293
Indicated steps taken	121	23	18	162
Credential assessment service	26	2	1	29
Educational institution	96	17	10	123
Provincial licensing	9	1	1	11
Indicated why they did not take steps	84	44	14	142
Takes too much time	26	11	4	41
Too costly to go through process	25	7	4	36
Do not understand process	16	13	3	32
Sceptical about prospects for recognition	13	13	3	29

Source: Household Survey, The Conference Board of Canada, 2001.

1 Population estimate based on Statistics Canada Web site: <http://www.statcan.ca:80/english/Pgdb/People/Population/demo23a.htm>. The estimate of unrecognized learners has a margin of error of 0.4 per cent, meaning that the actual number of unrecognized learners will lie between 536,760 and 556,920, 19 times out of 20.

2 All the "other" responses could be captured by the three main categories.



## Brain Gains to Canada from Improving Learning Recognition

### Summarizing the Potential Gains

Canada stands to gain \$4.1 billion to \$5.9 billion annually from improving its system of learning recognition and promoting learning recognition.<sup>1</sup> In addition, Canada would add between 33,600 and 83,100 post-secondary degree holders to the existing total if it addressed some of the key barriers to learning recognition. This would constitute an important increase in the pool of highly skilled individuals who can contribute to innovation, improved productivity and the creation of the additional value-added products and services that are the basis of our nation's prosperity.

### Opportunities Forgone by Respondents

The Household Survey explored the costs to respondents of forgone opportunities through the labour market and through continuing education. First, the survey findings about these costs will be reviewed; then they will be used to generate estimates of the costs to Canada and calculate the financial benefits of eliminating the costs.

### Forgone Employment Opportunities

The current labour market activity of Household Survey respondents is highlighted in Table 13. These respondents have a slightly higher rate of labour force participation and employment than the overall Canadian population. However, they are more likely than the typical Canadian to be working on a part-time basis.

Three hundred and seven (307) respondents pointed to various employment effects associated with unrecognized learning (Table 14). The main issue for respondents was finding a job commensurate with their level of education. (Their difficulty is consistent with the employers' responses as to how they sort applicants with unrecognized learning.) Unrecognized learners are typically either working at a job below their skill or not working. About 60 per cent of all those with unrecognized

learning reported these types of employment effects. Of those who are currently not employed and would like to work, 41 had foreign credentials and 11 had non-credentialed experiential learning.

Of the 53 Household Survey respondents who indicated that they could not practise their desired profession, 43 responded to questions pertaining to their current and desired profession (Table 15). The most common case was the person who would like to work in a professional occupation (e.g., accountant, engineer, doctor) but, even though in possession of full or partial credentials that would qualify the individual for the position sought, was presently employed as a manager or in a low-skilled sales, clerical or production job.

### Forgone Earnings Opportunities

The respondents were asked to comment on their current income from employment and how this might change if their learning was recognized. The income distribution

**Table 13**  
**Current Employment Status, by Non-recognized Learning**  
(n=482)

	Main category			Total (482)
	Foreign (305)	Experiential (114)	Canadian (63)	
Full time	183	65	33	281
Part time	50	18	8	76
Not currently employed	72	31	22	125

Source: Household Survey, The Conference Board of Canada, 2001.

**Table 14**  
**How Has Non-recognized Learning Affected Your Employment Experience?**  
(n=449)

	Main category			Total (449)
	Foreign (284)	Experiential (111)	Canadian (54)	
Affected ability to gain employment	118	30	10	158
Cannot practise desired occupation	42	9	5	56
Missed opportunities for promotion	22	13	4	39
Missed opportunities for training	9	4	7	20
None of these	71	45	26	142
All of these	22	10	2	34

Source: Household Survey, The Conference Board of Canada, 2001.



**Table 15**  
**Current and Desired Occupation for Those Indicating That They Cannot Practise Their Desired Occupation**  
 (n=43)

	Current occupation	Desired occupation
Professional	3	24
Manager	4	1
Technical	17	15
Sales	6	2
Clerical	4	1
Production worker	9	0
<i>Total respondents</i>	<i>43</i>	<i>43</i>

Source: Household Survey, The Conference Board of Canada, 2001.

of the group is fairly dispersed (Table 16), with a few respondents rising above their unrecognized learning to earn very high incomes.

For this reason, the table presents a number of measures of distribution, including the average response (the mean), the most common response (the mode) and the halfway point of the distribution (the median). The median earnings from employment for full-time employees were \$35,000; earnings of part-time employed people were about half that figure. Both are more or less consistent with the earnings of the Canadian labour force.

Respondents expected significant changes in their income if their learning was recognized. On average, respondents expected more than a 100 per cent increase in their annual earnings, and the median response was 69 per cent. These anticipated changes might result from some combination of:

- changing occupations;
- promotions or salary increases;

- increased numbers of hours worked (e.g., part-time people becoming employed full time);
- currently unemployed people becoming employed.

### Forgone Opportunities to Continue Education

The Household Survey questionnaire also delved into the forgone continuing education opportunities associated with unrecognized learning. In other words, what education opportunities did respondents miss out on as a result of not qualifying because their credentials or prior learning were not recognized? Although 194 respondents said that they would take steps to get their learning formally recognized, only 74 respondents indicated that they had specific formal education goals. The main goal was to complete a Canadian BA degree (Table 17).

Most of these people have foreign baccalaureate degrees and have not been given, in their view, adequate credit towards a Canadian degree. Most of those who identified a specific formal educational goal anticipated accomplishing their goal within four years, and the average was two years (Chart 5). The implication is that improved recognition processes enabling the excluded to enter the degree-granting process will significantly increase the flow of university and college graduates into the labour market rather quickly. Thus, learning recognition may meet labour force needs for qualified employees more rapidly than has been imagined.

Improved recognition systems will significantly increase the flow of qualified graduates into the labour force.

**Table 16**  
**Current Annual Income and Anticipated Increases if Learning Is Recognized**  
 (\$, five measures)

Current income	Mean	Median	Mode	Minimum	Maximum
Full time (n=185)	40,243	35,000	30,000	10,400	150,000
Part time (n=49)	22,308	18,200	20,800	2,400	78,000
<b>Anticipated increase in income</b>					
Full time (n=122)	29,277	20,000	20,000	4,500	160,000
Part time (n=38)	30,973	26,000	20,000	3,000	80,000
Not currently employed (n=38)	37,558	32,500	30,000	5,000	10,000
All respondents (n=198)	31,192	23,700	20,000	3,000	160,000

Source: Household Survey, The Conference Board of Canada, 2001.

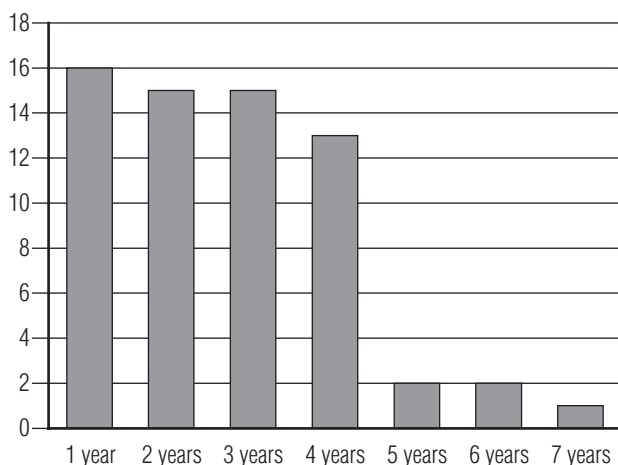
**Table 17**  
**Unrecognized Learning and Educational Goals**

Unrecognized Learning	Desired Level of Education—Canadian Credential				Total
	College diploma	Baccalaureate degree	Master's degree	Doctorate	
Non-recognized foreign credential	14	33	7	5	59
Non-recognized prior learning	4	6		2	12
Non-recognized Canadian credential	1	2			3
<i>Total</i>	<i>19</i>	<i>41</i>	<i>7</i>	<i>7</i>	<i>74</i>

Source: Household Survey, The Conference Board of Canada, 2001.

**Chart 5**  
**If Your Learning Is Recognized, How Long Will It Take to Achieve Your Desired Level of Education?**

(n=64)



Source: Household Survey, The Conference Board of Canada, 2001.

At the same time, fewer than half of the unrecognized had actually taken steps to get their learning recognized. The mean income of this group was \$33,200 per year, and the anticipated mean increase in their annual earnings was \$22,800. Even allowing for the cost of post-secondary education, forgone earnings, and a high discount rate, this investment would pay off in less than five years. The average age of this group is 40 years, so they may still have 20 to 25 years to work. In some senses, therefore, the inaction of these people is surprising.

A possible reason for inaction is that they resent having to go through a time-consuming process to get their learning recognized (although this was not directly tested by the survey). A more likely explanation is that they are simply too busy or have other responsibilities. More than half hold full-time jobs. In addition, they may have difficulty financing their continuing education on this scale. For most, the opportunity cost in forgone

earnings is the largest single component of the costs of getting their learning recognized. Finally, existing government financing programs are primarily targeted at young full-time students.<sup>2</sup>

Even if loans are made available to these learners, it is not clear that they use these to finance the recognition of their learning. The lack of consistency and transparency

in the recognition system is likely to make them risk-averse. In other words, they may well feel that the risk of failing to gain a credential is too high to warrant the substantial investment of time and money they would have to make upfront to qualify for credentials in Canada. They may prefer, instead, to prove themselves in an employment environment. But for many of the professional positions to which the unrecognized learners aspire, no amount of work experience will substitute for a lack of credentials. The unrecognized learners will typically migrate towards occupations that do not require credentials and then settle into a lifestyle commensurate with their position. In these situations, the loss to Canada, as well as to the individuals themselves, may well be permanent.

### Potential Gains from Improving Learning Recognition

#### Potential Gains from Reducing Unemployment

One hundred and twenty-five (125) respondents indicated that they had unrecognized learning and were not currently working. Since some of these people may simply not be in the labour force, estimates were generated only for those who indicated both that they faced barriers to working attributable to their non-recognition and were presently not working.

From this, it was estimated that over 67,000 unrecognized learners might be unemployed because of the non-recognition of their learning. Two methodologies were used to impute the costs to these people and to Canada.

#### Scenario A1: Unemployed Respondents' Estimates

The first methodology is based on respondents own estimates of their forgone earnings from being unemployed. The median estimate of forgone earnings was \$32,500. Applying this to estimated numbers of unemployed results in an overall estimate of potential gains from reducing unemployment of \$2.2 billion (Table 18).

## Methodological Issues and Approach

The Household Survey findings provide the basis for making projections about the potential gains to Canada of improving its learning recognition system. Using survey findings to estimate current costs and potential gains in this way presents a number of challenges. To begin, the respondents may be biased in their estimate of the quality of their learning and therefore the potential outcomes in terms of educational achievement and labour force performance. Further, the number of respondents who identified education and employment effects is generally lower than those who identified non-recognized learning.

The main assumption governing the cost estimates is that the Household Survey findings can reliably be used to estimate forgone employment and educational opportunities. This is a not unreasonable assumption, as it is commonplace in economic studies to assume rational expectations. In such models, participants are well informed of labour market and educational trends and therefore should be in a position to comment on forgone benefits. This approach is further supported by the fact that the majority of respondents are highly confident and well-educated individuals. Not only are these people intelligent enough to understand the potential costs, but the major costs to Canada are likely to be concentrated in these very people.

Nevertheless, the study is intentionally conservative when projecting from individual costs to costs for Canada. Cost projections and associated potential gains are based only on the numbers of those who have actually indicated those effects, even though non-respondents may very well have also experienced the same effects. Several scenarios were run to check the sensitivity of cost estimates to different assumptions. Where possible, the reliability of responses was checked against Statistics Canada data for the entire population, and projections were based on general labour market data that were collected at the same time as the Household Survey. The results are cost and potential gains findings that probably underestimate the scope and scale of the problem and the opportunity: they are likely to be minimums; the maximum impacts may well be higher.

The best data for generating costs are from the overall Household Survey, as the top-line survey results are based on a very large sample (over 11,000 households), have generated substantial total responses (487) and have a low margin of error. The estimates of those respondents facing economic costs are always grounded in this survey and based on the percentage of respondents indicating an effect. Then these respondents are compared to the overall adult population to determine the nature and extent of possible costs and related economic gains.

Source: The Conference Board of Canada, 2001.

**Table 18**  
**Gains Realized by Reducing Unemployment**

	Sample	Estimate of Canadians	Forgone earnings*
<b>Scenario A1: Estimates of respondents of forgone earnings</b>			
Total not working and indicating employment effects	60	67,372	
Median estimate by respondents of lost earnings			\$32,500
Total estimate due to unemployment (67,372 x \$32,500)			\$2,189,590,000
<b>Scenario A2: Estimates based on specific unrecognized learning and estimates for others</b>			
Total not working and indicating employment effects	60	67,372	
Those who indicated specific formal credentials unrecognized	30	33,686	
College diplomas		10,106	\$356,333,000
University baccalaureate		23,580	\$1,063,003,000
<i>Subtotal</i>			<i>\$1,419,336,000</i>
Others	30	33,686	
Their median estimate of forgone annual earnings			\$35,000
<i>Subtotal</i>			<i>\$1,100,417,000</i>
<b>Potential gain</b>			<b>\$2,519,753,000</b>

\* Assumes either respondents' median estimate of forgone earnings or the level of hourly wages for full-time work for specific unrecognized learning. For post-secondary diplomas, the hourly rate is \$17.63, and for a university baccalaureate, the hourly wage is \$22.54. Based on special run of Statistics Canada Labour Force Survey, January 2001.  
Source: The Conference Board of Canada, 2001.

### Scenario A2: Returns to Education Estimates

The second methodology for estimating the potential gains to Canada from reducing unemployment is based on Statistics Canada's hourly earnings data associated with various levels of formal education. These earnings data were applied to full-time hours for those respondents

who indicated a specific formal credential that was unrecognized. For those who did not indicate a formal credential, respondents' estimates of forgone earnings were used. This methodology generates an estimate of potential gains to Canada from reducing unemployment of \$2.5 billion.

## *Potential Gains from Reducing Underemployment*

The underemployment costs associated with non-recognized learning arise from people being employed in positions beneath their skill. As shown earlier, when learning is not recognized in a credential, employers will tend to overlook this learning and employ people in jobs that are typically filled by those with lower level credentials. This has the effect of lowering the productivity of these individuals, creating costs to them and to the Canadian economy.

Many factors have a bearing on employment earnings. Consequently, various scenarios were run to test the sensitivity of various estimates of underemployment. The scenarios attempted to:

- define reasonably large groups of unrecognized learners from the Household Survey;
- focus on those who were already employed in the labour force (who were likely to be aware of earnings) and who actually indicated employment effects; and
- use Statistics Canada Labour Force Survey data that were collected at the same time as the Household Survey (January 2001) to drive estimates.

### ***Scenario B1: Multiple Linear Regression Analysis***

A multiple linear regression was run to elucidate the relationship between hourly wages and various factors that contribute to their variation (see page 39). This approach allowed for the simultaneous consideration of factors such as age, gender and experience with current employer. Unfortunately, Statistics Canada does not collect data on total years in education or total years in employment, both of which proved to be robust determinants of hourly wages for the Household Survey respondents. None the less, both Statistics Canada and the Household Survey regressions produced results that are roughly similar to those of other studies using similar specifications on cross-sectional data.<sup>3</sup>

The regression was run for the Household Survey respondents, and Statistics Canada used Labour Force Survey data for January 2001. These regression results were then compared, and the earnings profile of the general labour force was projected onto labour force participants from the Household Survey.

This had the effect of giving each unrecognized learner a “raise,” with the size of the raise being determined by the difference between the regression for the general labour force and for the Household Survey respondents for those characteristics covered by the regression. The average wage increase was \$2.44 per hour. This was applied to each of the Household Survey participants who answered questions on both their labour force activity and their

wages (n=310) and applied to their annual hours worked to come up with an annual wage increase. The average annual wage increase was \$5,318. This was then projected out to the broader population represented by the survey respondents. This approach generated an estimate of potential gain of \$1.9 billion annually.

### ***Scenario B2: Earnings Estimates from Respondents***

Respondents were asked directly if they believed that their earnings suffered because of their unrecognized learning (Table 19). This approach assumes that respondents are well informed about the earnings associated with various types of learning in their workplace. More than 140 employed respondents indicated that they either had difficulty finding employment or could not practise their desired profession. This translates into an estimate of 160,571 Canadians who face this type of problem. These respondents’ median estimate of their increased annual earnings if their learning was recognized and they were able to pursue higher level jobs was \$20,000. The potential gain to Canada from reducing underemployment using this approach is estimated at \$3.2 billion annually.

### ***Scenario B3: Economic Returns to Education***

Statistics Canada’s Labour Force Survey collects information on the earnings associated with various levels of educational attainment. A special data run of this survey for January 2001 was used to project the potential earnings of unrecognized learners.

The Household Survey asked respondents what specific learning they had that was unrecognized, as well as their current employment status. In total, 122 respondents were employed full time and 34 part time. Using data on their annual hours worked and Statistics Canada data on hourly earnings associated with educational attainment, a projection was undertaken that simulated the higher earnings that would accrue to these people if they had their learning recognized and earned the average hourly wage of Canadians with that level of accreditation.

It was estimated that about 138,000 full-time employees and 38,000 part-time employees face this issue in Canada. If their specific learning was recognized and they had hourly wages in line with that recognition, they would gain an additional \$2.3 billion.

But this estimate applies only to those with formal learning that is unrecognized. There are over 129,000 employed Canadians with unrecognized prior experiential learning who also need to be taken into consideration for underemployment costs. Forty-nine (49) of 115 who reported unrecognized experiential learning were employed and were able to provide an estimate of their forgone earnings

**Table 19**  
**Gains Realized by Reducing Underemployment**

**Scenario B2: Survey Respondents' Estimates**

A. Total working and indicating employment effects .....	143
B. Per cent of sample (A / total respondents [487]) .....	29.36%
C. Total Canadians (B x total estimate of Canadians [546,840]).....	160,571
D. Median estimate by respondents of lost earnings .....	\$20,000
E. Total estimate due to underemployment (C x D).....	\$3,211,422,000

**Scenario B3: Returns to education approach**

<b>Step 1: Specific types of learning not recognized</b>	<i>Full time</i>	<i>Part time</i>
High school diploma	5	2
College diploma	27	8
University degree	83	21
Master's degree	7	3

**Step 2:** Compute higher wages. Assumed that person is being employed at wage associated with current recognition. If learning was recognized, the person would earn the wage associated with that level as opposed to the next lowest level (as defined by Statistics Canada).

*Differences in hourly earnings associated with higher recognition (Custom Run: Statistics Canada Labour Force Survey)*

High school diploma .....	\$2.98
College diploma .....	\$3.24
University degree .....	\$9.08
Masters degree .....	\$3.14

	<i>Full-time hours</i>	<i>Part-time hours</i>
<b>Step 3: These earnings would be applied to their annual median working hours</b>	2,000	1,150
<b>Step 4: Apply according to population affected (share of survey x total estimate)</b>	<i>Full time</i>	<i>Part time</i>
High school diploma	5,614	2,246
College diploma	30,318	8,983
University degree	93,199	23,580
Master's degree	7,860	3,369
<b>Step 5: Apply across differences in salaries and working hours</b>	<i>Full time</i>	<i>Part time</i>
High school diploma	\$33,462,000	\$7,696,000
College diploma	\$196,458,000	\$33,471,000
University degree	\$1,692,487,000	\$246,226,000
Master's degree	\$49,362,000	\$12,164,000
Total	\$1,971,768,000	\$299,557,000

Total formally unrecognized (full time + part time) \$2,271,325,000

**Step 6:** Add median estimate for those with prior learning who are employed

Employed prior learning reporting salary increases.....	49
Median increase in salary reported .....	\$20,000.00
Total estimate (49 /487 x 546,840 x \$20,000) .....	\$1,100,417,000
<b>Total potential gain from reducing underemployment in this scenario .....</b>	<b>\$3,371,742,000</b>

Source: The Conference Board of Canada, 2001.



due to unrecognized learning. This provided the basis for estimating an additional \$1.1 billion in potential gains through eliminating the underemployment of those with unrecognized experiential learning. The combined total from those identifying unrecognized formal learning and unrecognized prior learning is an estimated \$3.4 billion of potential gains from reducing underemployment.

### Estimating Gains in Human Capital

The study also estimated gains to Canada in terms of achieving higher levels of so-called human capital (see page 41). This part of the study was interested in exploring how barriers to recognition manifest themselves in lower levels of educational attainment in the general population. While improvements resulting in higher overall levels of educational attainment have already been demonstrated to have implications for gains in reducing underemployment and unemployment, there is also considerable evidence that higher levels of educational attainment are related to other desirable outcomes, such as self-esteem and social cohesion. For instance, those with higher levels of educational attainment tend to demonstrate higher levels of trust and civic engagement.<sup>4</sup>

Three estimates are generated, based on:

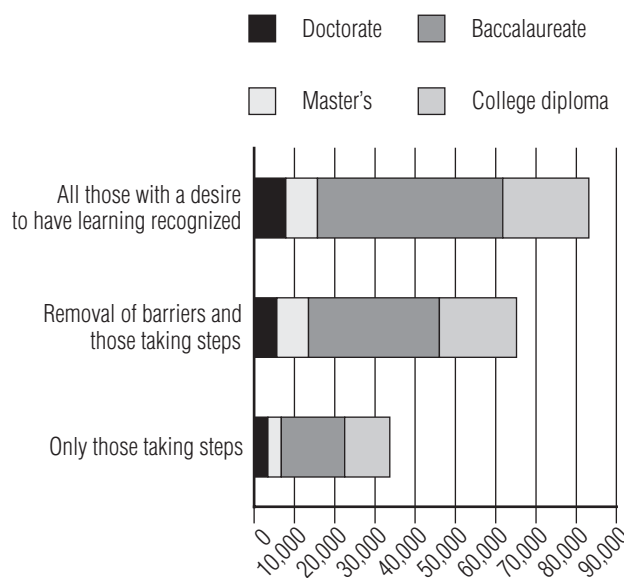
1. exclusively those who indicated that they were pursuing the recognition of their learning;
2. those who indicated that they desired to be formally recognized but who did not take steps due to barriers such as time, costs, or confusion about the process, plus those who were pursuing this option; this scenario assumes that if these barriers were eliminated, these people might come forward to have their learning recognized;
3. all those who indicated a desire to have their learning formally recognized, regardless of whether they were actually pursuing this option (the additional people generated by this scenario might require further inducements and encouragement to have their learning recognized beyond merely reducing existing barriers).

Chart 6 summarizes the findings in potential gains in human capital.

Over 33,000 Canadians have unrecognized learning and are currently pursuing recognition through various means. An additional 31,000 Canadians might have their learning recognized if process barriers were reduced. Finally, if all those who indicated a desire to have their learning recognized were able to do so, some 83,000 Canadians would obtain higher educational credentials than they currently possess.

For all groups, the most desirable credential is the baccalaureate degree. Fully half of the desired educational credentials for all scenarios fall into this category. The number of those actually seeking recognition is less than half of all those who indicated a desire to attain a higher formal educational credential. This suggests that some combination of the elimination of existing barriers and the promotion of recognition options may be successful in generating significant gains in human capital in Canada. These gains could translate into significant advances in productivity and innovation in the economy.

**Chart 6**  
**Forgone Human Capital from Unrecognized Learning**  
(estimates for Canada, total numbers)



Source: Household Survey, The Conference Board of Canada, 2001.

1 Based on five scenarios for calculating the costs, summarized in Table 1.

2 For a discussion of the funding issues, see: Michael Grant, *Funding Lifelong Learning: Exploring the Potential for Learning Accounts in Canada*, discussion paper, November 1999 (available from [www.grantinsights.com/Learning.pdf](http://www.grantinsights.com/Learning.pdf)).

3 See, for example, Shaun P. Vahey, "The Great Canadian Training Robbery: Evidence on the Returns to Educational Mismatch," *Economics of Education Review*, vol. 19, no. 2 (2000), pp. 219–227; also Bruce Chapman and Robyn Iredale, "Immigration Qualifications: Recognition and Relative Wage Outcomes," *International Migration*

*Review* (1991), pp. 349–386; and David A. Green and W. Craig Riddell, *Literacy, Numeracy and Labour Market Outcomes in Canada*, Statistics Canada, Cat. no. 89-552-MIE, no. 8, March 2001.

4 There is a considerable body of literature on social cohesion and social capital. For its relationship to formal educational attainment, see Edward L. Glaser, "The Formation of Social Capital," paper prepared for an HRDC/OECD symposium on the contribution of human and social capital to sustained economic growth and well-being, Quebec City, March 19–21, 2000.



## Conclusion and Call to Action

### Gains from Improving Learning Recognition

As this study demonstrates, comprehensive learning recognition in Canada would benefit more than 540,000 Canadians, providing them with a total of more than \$4 billion and perhaps as much as \$6 billion annually, for an average personal gain of \$8,000 to \$12,000 per year. An enhanced system of learning recognition would allow Canada to put its human resources to better use by improving the initial matching between vacancies and job applicants and by ensuring that many Canadians are not locked into low-value jobs.

With costs and potential benefits like these, Canadians have strong incentives to take action. However, despite some notable recent improvements, we have failed as a nation to get to the heart of the problem. This is not surprising, given the number and size of the barriers we face. Yet there is a compelling logic to increasing our efforts, because success has important economic consequences for our country.

Learning recognition improves employment fit, which enhances business performance and yields personal rewards, in turn creating additional demand for accreditation. More accreditation encourages more people to undertake higher education, which then stimulates further development of the education and training systems that build workplace capacity to be innovative, productive and profitable. Ultimately, by helping all its people to reach their full personal development and receive full recognition for their learning, Canada enhances the economic base that supports a high quality of life, the hallmark of Canadian society today.

The potential gains are high today, and they are likely to be higher in the future. Canada, like its competitors, faces rising challenges in maintaining an adequate supply of highly skilled and knowledgeable people with the right kinds of learning and credentials in its labour force so that it can compete successfully in global markets. Canada needs to attract skilled people, nurture them, recognize their abilities and reward them in the labour market. The unacceptable alternative is direct losses in the productivity and innovation that generate wealth to support our high standard of living.

Comprehensive  
learning recognition  
would benefit  
more than 540,000  
Canadians, providing  
them with as much as  
\$6 billion annually.

### Problems

#### *Immigrants' Foreign Credentials*

Foreign-trained individuals are the key target group. Non-recognition of immigrants' foreign credentials is the biggest single learning recognition problem in Canada today. The non-accreditation of immigrant professionals costs Canada and other developed countries through forgone income and taxes and through income support given to unemployed or underemployed professionals. Canada also spends considerable sums on the education and retraining of immigrants, some of it unnecessary or redundant.<sup>1</sup> Finally, there are increased costs to the welfare system, social services and the justice system.

Now that skilled immigrants are in competitive demand in every developed country, improving recognition of their qualifications has become a major policy issue. How can Canada attract more immigrants and make the best use of their skills so that the country becomes more competitive in international markets?<sup>2</sup> Today's complex entry procedures to trades and professions are significant obstacles to the free flow of skilful workers and thus diminish our competitiveness.

Nearly half of the immigrants accepted into Canada enter as "independents" or "skilled workers," yet many cannot gain entry into the profession or trade for which they hold foreign credentials. Beyond the challenges of adapting, they face the difficulty of getting their credentials recognized by Canadian employers and professional organizations.<sup>3</sup> Gaining accreditation in Canada often means dealing with no fewer than four major institutional stakeholders: post-secondary education institutions, provincial governments, professional self-regulating bodies and employers. Too often, accreditation assessments are made on the basis of imperfect information regarding the market value of professional credentials and involve unstandardized methods of evaluation.<sup>4</sup>

The magnitude of the immigrant accreditation problem has compelled European countries, Australia and the United States to legislate new standards for occupational regulation, to review policy guidelines on certification,

licensing processes and professional training programs, and to create policies to deal with international accreditation. Their policies have led to new bilateral and multi-

Canada has not yet fully integrated its learning recognition strategies with its overall strategy for immigration.

lateral national agreements, rules for recognizing diplomas, and establishment of information networks on the international standards for certification.<sup>5</sup> Canada has made some progress in these areas but still lags in the scale and breadth of its

solutions. Nor has it yet fully integrated its learning recognition strategies with its overall strategy for immigration into Canada.

### Prior Learning

Non-recognition of prior learning is the second biggest learning recognition problem in Canada today. Canadian and foreign-born individuals with prior learning face many of the challenges that confront immigrants with foreign credentials. There are no national standards for evaluating, creating and transferring prior learning credentials between jurisdictions, education institutions and workplaces. There is a shortage of resources, time and expertise within the post-secondary education community for carrying out prior learning assessment and recognition (PLAR).

Some universities and colleges refuse to implement PLAR because of concerns over quality of assessment techniques and reliability of the credentials they produce. Others feel that it is unnecessary because programs that might accept PLAR are already oversubscribed and that it might actually cause a net decline in the number of registrations as learners are exempted from courses due to recognition of prior learning. There are few formal policies in place to provide for PLAR, and many of those are not strategic. Often, they give authority to departments to act without supervision from senior managers. Finally, PLAR credentials are not necessarily transferable among PSE institutions and businesses and across provincial boundaries.

Despite the urgency of overcoming the learning recognition barriers, they are still so powerful that they cause many immigrants and individuals with prior learning to give up hope for advancement through recognition and credentialing. Faced with relearning for credit or repeating the studies they have already completed because their credentials and work experiences are not accepted, many of them decide to abandon their efforts through frustration

or the desire to avoid education and training costs and the risk of losing income. Collectively, their decision causes significant productivity loss for Canada.

### Transferability of Credentials and Credits

The non-transferability of credentials and partial credentials in the form of academic credits is the third biggest learning recognition problem in Canada today. Transfers are particularly prone to problems due to lack of centralization, miscommunication, and lack of coordination. The lack of a central transfer organization and centralized regulation and the use of multiple models of transfer have led to major disconnects among employers, learners and educators. These also make it more difficult to develop widely accepted transfer standards and practices. Miscommunication and lack of coordination in transferring among institutions create inefficiencies and ineffectiveness, including such problems as inadequate notice of changes to program regulations and drops in learners' grade point averages (GPAs) when receiving institutions recalculate to fit their own scales. Lack of universal standards further compounds problems and makes transfer more complex. Incompatibility among learning institutions, workplaces and occupations creates significant practical problems, such as courses that do not match by number of credits or are out of semester sequence between institutions or branches of the same institution.

Behind these structural and process barriers lie more complex and profound problems that are largely self-inflicted. At the heart of the issue, institutions have widely diverging views on the nature and value of learning and widely different strategic interests in recognizing learning or not, as the case may be, which cause conflicts and reduce their capacity to recognize learning and credentials in a timely fashion.

Institutions have widely diverging views on the nature and value of learning and widely different strategic interests in recognizing learning or not.

Employers, too, face problems that are self-inflicted and stem from lack of awareness of the benefits of improved learning recognition in the workplace. Although they tend not to know it, employers faced with the pressing need to upgrade their workforces' skills stand to gain a great deal from better recognition of foreign credentials and

prior learning in the workplace. Better recognition of a broad range of learning and credentials would allow them to make more accurate hiring choices by identifying recruits with the full range of knowledge and skills they seek. It would also allow them to cut spending on unneeded training and build on the full range of their employees' actual knowledge and skills. This could be critical to a company's ability to remain competitive and productive.

## Options for Action

How can the goal of better and more comprehensive learning recognition in Canada be achieved? Many options for action are available for governments, educators and employers that can help overcome the barriers and obstacles. They include policy development, structural and institutional reform, program development and new funding mechanisms. Many of them have already been tried in parts of Canada or in other countries, so they can be evaluated on the basis of current best practice before they are adopted for widespread implementation.

The options for action for governments, educators, regulators and employers represent gradations of reform, from improvement to large-scale innovation, that respond to the problems and needs identified in the analysis of the preceding chapters. The intent of these reforms would be to draw in greater numbers of the non-recognized, especially immigrant and other target populations that are currently most affected. The options for reform can be broadly grouped into four areas: improving existing institutions; creating new institutions, techniques and tools; creating demand; and engaging employers.

### 1. Improve Functioning of Existing Institutions

- *Create a Common Framework for Valuing Learning*

Governments could coordinate efforts to create and gain widespread institutional agreement on a *common framework for valuing learning*. Possible criteria for inclusion are authenticity, currency, quality, relevancy, trustworthiness and transferability of learning. This initiative could involve a national consultative process that would identify significant current differences in valuation and explore the underlying reasons for the differences as part of the process of finding common ground for enunciating a framework. The framework could serve as a building block for constructing national standards and recognition systems.

- *Establish National Standards*

Today, the lack of universality of standards, in Canada and internationally, can lead to inconsistency in establishing the value of some types of learning and learning credentials. Governments could promote and support the

development of *national standards* supported by standardized evaluation mechanisms and systems. Nationally developed and accepted standards could be used to assess the value of post-secondary credentials and professional and trades qualifications as well as certification in regulated and non-regulated occupations from other countries and jurisdictions. Standards could also be used to identify outcomes from prior learning experiences that would be the basis for awarding credits towards post-secondary credentials. This would build support among educators, who tend to be wary of awarding credits for both foreign qualifications and prior learning because they want to protect the value of their current credentials against possible debasement.

Although legitimate factors such as distinct policies and funding mechanisms will continue to distinguish provincial education systems from one another, national standards would allow for more comprehensive and cost-effective interprovincial and inter-institutional cooperation, which would encourage more people to seek learning recognition. National standards would also help ensure the accuracy, consistency and fairness of learning recognition and the public perception of its fairness. As such, they might motivate more unrecognized learners to take action for the first time to get their learning recognized and credentialed.

- *Improve Transfer Mechanisms*

Governments and education institutions have available several options for action that would improve credential transfers between institutions and across provincial boundaries. Some are new; others are already in use in some provinces. All could be implemented on a national scale.

The first option is to implement more *block transfer systems* to give students blocks of credits for clusters of courses that have academic wholeness and relate to a degree program. This could be done in conjunction with establishing university-to-university transfers through individual agreements between universities. Universities and colleges could also create consortia to develop courses and share recognition processes for transfers.

One large-scale option is to expand the *Pan-Canadian Mobility and Transferability Protocol* for credit transfer among colleges to further facilitate access to colleges and mobility among colleges and into the labour market.<sup>6</sup> A second large-scale option is to expand the *Pan-Canadian*

Governments could help develop national standards supported by standardized evaluation mechanisms and systems.

*Protocol on the Transferability of University Credits*,<sup>7</sup> whereby all Canadian universities could accept transfer credits for the first two years of university. A related effort would be to extend implementation of the federal–provincial Agreement on Internal Trade (AIT) to increase mobility of credentials.<sup>8</sup>

Beyond this, governments could set up more transfer councils to act as clearinghouses to create opportunities and encourage transfers among PSE institutions. They could work in partnership with the private sector to set up transfer partnerships for non-education organizations to recognize learning and credentials between such organizations as businesses, associations and unions.

- *Improve Institutional Linkages in Canada*

Build formalized agreements on transfer credits between universities, colleges and other education and learning institutions. Start by examining Canada’s systems for awarding credentials, including chartered institutions and regulatory bodies under provincial jurisdiction. One important option would be to establish more *college–university transfer programs* to enable colleges to offer the first two years of university locally at lower tuition fees.

- *Increase Recognition of Foreign Credentials and Experiential Learning*

Governments and education institutions could partner to increase the scale of recognition of foreign learning credentials and experiential learning. In developing new recognition approaches, it would be helpful to consider the significance of province of residence, plans for work or education, needs of education institutions, and the type of occupation (regulated, trade or Red Seal trade) desired. Given the scale of the problem today and the rising significance of immigrants in countering the brain drain, the importance of specifically increasing recognition for immigrants may warrant placing priority on action in this area before all others. Governments are the most likely candidates to take the lead.

- *Improve Institutional Linkages Internationally*

As an important further step in increasing recognition of foreign credentials, governments and education institutions in Canada could partner to develop formal agreements with post-secondary institutions and regulatory bodies in other countries to mutually recognize credentials and credits. Countries to target include India, China and other nations where large numbers of immigrants come from today. The agreements and process to develop them might be modelled on successful existing agreements with institutions in France and the United Kingdom.

## 2. Create New Institutions, Techniques and Tools

- *Create National Training Credentials*

*National training credentials* that are widely recognized by employers, education institutions and professional and trades bodies would significantly move experiential learning and training in the workplace from the margin to the mainstream of learning and learning recognition. They would make training more portable and help ensure employees receive the same quality of training across the country. *National training credentials* could be a significant bulwark in a strategy to turn lifelong learning from a concept to a real-life practice with important economic benefits. These credentials could be developed cooperatively by the federal government, the Forum of Labour Market Ministers (FLMM) and employers.

One possibility  
is to create  
widely recognized  
national training  
credentials.

- *Create National Learning Recognition Institutions*

Another option is to create a set of institutions and networks across Canada to recognize, credential and accredit a wide range of formal and informal learning. One possibility is to create parallel national institutions for domestic and international credential. The national institutions would be well positioned to create new, widely accepted learning credentials as needed. Their expanded authority to credential learning would go a long way to overcome current limitations in scope, which impede effectiveness and responsiveness to changes in work and in the educational and learning profile of immigrants, experiential learners and interprovincial migrants.

- *Develop Techniques and Tools for Learning Recognition*

Develop techniques and tools that employers and PSE institutions can use to evaluate workplace learning and other forms of prior learning experience. This would make it easier for employers to take action themselves that would stimulate more workplace-based assessments. It would also raise the level of comfort felt by PSE educators who are concerned that their lack of expertise and reliable tools for assessment makes it risky to undertake prior learning recognition in order to award credits and credentials.

- *Provide Financial Incentives and Assistance for Learning Recognition and Credentialing*

Governments could consider offering financial incentives and assistance to PSE institutions to carry out evaluation of prior learning and implement recognition processes for credentials and academic credits. This would tend to stimulate a greater engagement in recognition



activities, which would make it easier for individuals to access recognition opportunities in PSE institutions.

- *License Alternative PSE Credential and Credit Granting in the Workplace*

Government, with the agreement and cooperation of employers, could consider licensing alternative PSE credential and credit granting in the workplace by highly qualified individuals with recognized expertise in their field, profession or occupation. These individuals could develop processes, possibly with assistance from professional educators, that they would then implement to assess, recognize and credential employees' learning as demonstrated in their work. Through agreements with PSE institutions, sector councils and other organizations, these employer-granted credentials and credits could be transferred to other institutions and work environments. Ideally, alternative licensing would be incorporated into a holistic national learning recognition system. This would have the effect of moving workplace learning from the margin to the mainstream of recognized learning in Canada.

- *Establish a National Learning Recognition System*

Perhaps the most ambitious option would be to establish a *national learning recognition system*. This would entail a commitment of substantially more people and financing to administer and evaluate the full range of formal and informal learning and learning credentials. Such a system would coordinate the setting of frameworks for valuing learning and the creation of standards, tools and mechanisms for evaluating learning, granting credits and credentials, and transferring credentials between provinces and institutions.

There are many potential advantages to investing in such a system. It could help to make more efficient use of resources by reducing repetition of learning, making better use of the time and resources of individuals and institutions, and improving the match of available jobs with potential employees. It could contribute to the development of a lifelong learning culture by ensuring that learning from a wide variety of non-traditional settings is recognized. Significantly for employers, it could generate more opportunities to bring learning and work together. It could provide a holistic basis for improving the efficiency of labour market adjustment and coordinating labour force development by providing better assessment of education and training from other countries and consistent standards for skills needed in specific occupations, as well as better information for training, career and employment counselling.

To be truly effective, the system would have to be able to integrate its strategy and activities with those of other education and learning coordinating bodies and with federal and provincial departments responsible for overseeing immigration, education, training and labour market transitions. To achieve a comprehensive system of learning recognition on a large scale might require a pan-Canadian strategy involving federal and provincial governments, public and private education, organizational training systems and lifelong learning programs.

### *3. Create Consumer Demand and Institutional Change Through Communications*

- *Create Consumer Demand Through Communications Initiative*

A government-funded and -led communications initiative to increase consumer awareness of the human capital benefits from learning recognition would prompt more unrecognized learners to take action. The large-scale campaign of information could be targeted at immigrants, experiential learners and current or potential interprovincial migrants, who form the largest groups of non-recognized learners. Added to this, greater public awareness of the recognition and transfer systems available to them would increase the likelihood they would seek out recognition and find the best possible institution to approach.

Awareness stimulates demand. Greater consumer demand and expectations for systematic, seamless, easy-to-access learning recognition processes and institutions could be achieved by this large-scale campaign to raise awareness of the economic value of credentialing, including PLAR.

- *Create Institutional Change Through Communications Initiative*

Greater consumer demand would, in turn, be likely to stimulate education institutions and governments to act in unison and provide strong incentive for taking immediate action. Greater public demand and expectations for systematic, seamless, easy-to-access learning recognition processes would stimulate PSE institutions to be more proactive in developing and implementing large-scale, coordinated learning recognition processes to meet the needs of at-risk populations.

### *4. Engage Employers*

- *Engage Employers in Partnerships with Public Education*  
Employers could enter into partnerships with PSE institutions and professional licensing bodies to deliver training

Perhaps the most ambitious option would be to establish a national learning recognition system.



that is recognized as credit towards publicly granted PSE degrees and diplomas. Formal agreements between businesses and PSE institutions could ensure that time and effort invested by employees, as well as resources invested by employers, would have a wider utility and improve the transferability of valuable skills between jobs and workplaces.

- *Engage Employers in Developing Private Credentials*

Employers could use their links to their own industry associations and to professional licensing bodies that certify many of their highly skilled employees to bring into being private credentials that are recognized widely within the employer community at either the sectoral or national level. Microsoft Certification is an example of a credential created by one company that has become widely accepted and recognized as a genuine credential, signalling trustworthy competence for many employers.

Ideally, such private credentials could be linked into public education and professional and regulatory bodies to create more holistic learning systems that would recognize the full range of education, training and experiential learning of Canadians.

## Securing Prosperity

Globalization, demographic changes, competition among nations for skilled people, and the emergence of large-scale knowledge-based industries have made it more important than ever for Canada to make the most of the knowledge and skills of its people. Non-recognition of learning is a major cost to Canada and Canadians today; tomorrow, recognition of learning can be a major economic gain—if we get it right. If we succeed, our businesses can become more productive and competitive, and our people will earn more and enjoy a higher standard of living. Failure will mean a significant long-term drain on our capacity to compete with the United States and other major economic powers.

In these circumstances, governments, education institutions, regulatory bodies and employers will want to consider their options for action carefully. If they choose to take concerted action, they will not be alone in the world. Large-scale and coordinated action by Canadian governments and organizations will simply bring us closer to what is already being achieved by other nations.

Given the costs calculated in this study and the clear economic benefits that are possible, leaders in government, education and business may well decide that they cannot afford to delay any longer. If they choose to act, their investment in learning recognition can benefit all Canadians.

---

1 Brouwer, p. 3. The Canadian Labour Force Development Board reported in 1999 that the cost to Canada of educating the immigrants who arrived between 1992 and 1997 was more than a billion dollars.

2 Fernando Mata, *The Non-Accreditation of Immigrant Professionals in Canada: Societal Dimensions of the Problem* (Department of Canadian Heritage, September 1999), [http://www.pch.gc.ca/multi/Societeal/content\\_e.htm](http://www.pch.gc.ca/multi/Societeal/content_e.htm)

3 Jane Badets, *Report of the Expert Panel on Skills: Background Papers—Immigration and Educational Levels in Canada* (Statistics Canada, 1999), pp. 1–4.

4 McDade, *Barriers to Recognition of the Credentials of Immigrants in Canada, Studies in Social Policy* (Ottawa: Institute for Research in Public Policy, 1998), p. viii.

5 The Australian system is relatively centralized in a National Office of Skills Recognition, while European countries give more autonomy to professional licensing bodies. See Jasmin and Boivin, *International Recognition of Qualifications in the*

*European Community: Overview of Current Situation* (Ottawa: Department of the Secretary of State), 1992.

6 <http://www.accc.ca/english/advocacy/priorities/mt-protocol.htm>. Signatories to the Protocol, developed by the Association of Canadian Community Colleges, also agreed to maximize the recognition and transfer of learning from education, workplace training, and work and life experience.

7 <http://www.cmec.ca/postsec/transferability.stm>. It was developed by the Council of Ministers of Education, Canada.

8 One model is the Red Seal Program, which enables apprentices to move among jurisdictions.

# Methodology for the Household Survey<sup>1</sup>

The Conference Board of Canada set out to learn more about the scope and impact of unrecognized learning in Canada. It defined unrecognized learning as skills, learning or education possessed by Canadians that is not formally recognized in the workplace, by degree- or diploma-granting educational institutions or by licensing bodies that issue certificates in a province or in Canada as a whole.

The initial hypothesis was that unrecognized learning has the greatest impact among the following three groups:

- Recent (past five-year) immigrants to Canada with professional degrees, diplomas or certificates gained outside this country that are not recognized here
- Recent interprovincial migrants with licensed trade skills or certificates that are not recognized in the province where they now live
- People (especially women) in administrative and secretarial categories with unrecognized life skills and experience

Furthermore, it was hypothesized that unrecognized learning is primarily an urban, rather than a rural, phenomenon.

A random telephone survey of Canadians in urban centres was conducted on behalf of The Conference Board of Canada by Corbett•Communications, using a questionnaire developed by the Conference Board and modified for telephone use by Corbett•Communications. The survey was conducted between December 6, 2000, and January 22, 2001. This appendix outlines the technical details of the survey.

## 1. Research Method

### A. Overall Design

To limit response and selection bias, a telephone interview methodology was adopted. Disproportionate random sampling was employed to cope with the possibility of a low incidence of unrecognized learning in the general population.

Key incidence data were weighted back to the general population to provide a reliable estimate (within strictly defined margins of error) of the number of Canadians with unrecognized learning.

### B. Sample Size

In total, 20,814 attempts were made to secure a completed interview.

Of these, 11,766 resulted in live contacts with qualified respondents. This is the total sample size for the survey.

Of these, 487 respondents reported unrecognized learning as defined by the terms of reference for the survey (see Incidence/Volume of Unrecognized Learning, section 2). This is the total sample size for the study.

Weighted back to the general population, this is equivalent to 255 respondents with unrecognized learning in the population surveyed.

### C. Sampling Method

A disproportionate random sampling plan was used, where live telephone numbers were selected from Statistics Canada enumeration areas (EAs) with higher than average characteristics related to:

- speaking a language other than English or French at home;
- having moved recently to the area (past year); and
- being a female in administrative, business or financial occupation categories.

These cells (within census metropolitan area, or CMA) form the basis of the sampling and weighting plan.

Numbers were selected from the Infodirect® database of all working telephone numbers in each EA, using an “every nth interval” selection method. Numbers were also selected from the sample provided by Infodirect® using an “every nth interval” method. Once the required number of completions was achieved, data were weighted back to the general population so that detailed volumetric estimates could be made.

The sample was distributed across Toronto, Montreal (English and French), Calgary and Vancouver metropolitan areas.

### D. Contact Record

Following is the disposition of the 20,814 calls required to achieve 11,766 completed interviews:

Total	CALL RECORD	
	(20,814) #	(20,814) %
Not in service	395	1.9
No answer	1,126	5.4
Wrong number	115	0.6
Vacation	83	0.4
Busy	75	0.4
Answering machine/modem/fax	1,749	8.4
Language difficulty	990	4.8
Refused	4,008	19.3
Respondents not available/other	507	2.4
COMPLETED INTERVIEWS	11,766	56.5
(# with unrecognized learning)	(487)	(2.3)

It should be pointed out that the refusal rate for this survey is less than the industry average, indicating the high level of respondent interest the issue of unrecognized learning generates.

### E. Sample Distribution

Interviews for the survey were distributed across four urban CMAs as follows:

Total	DISTRIBUTION OF SAMPLE	
	(11,766) #	(11,766) %
Toronto	9,021	77
Montreal	1,144	10
Calgary	850	7
Vancouver	751	6

This convenience sampling approach was used to obtain the maximum amount of data. See section H., Weighting, for an explanation of how the results were adjusted and weighted to match the characteristics of the overall Canadian population.

### F. Qualified Respondents

Respondents who qualified for the survey were adults 15 years and older in households contacted from randomly selected telephone numbers in selected EAs.

### G. Interviewing Protocols

All interviewing was conducted by professional research interviewers from fully monitored and supervised central location telephone (CLT) facilities, using state of the art computer-assisted telephone interviewing (CATI) software and the latest predictive “autodialer” technology. All interviewers were briefed on the objectives of the survey. All interviewing in Montreal was conducted by fully bilingual interviewers in the language of the respondent’s choice from equivalent English- and French-language questionnaires.

The surveying process resulted in 4.17 per cent of respondents reporting that they had one or more learning recognition problems. These results were subsequently weighted to match the characteristics of the overall Canadian population.

### H. Weighting

Completed interviews were weighted back to their correct proportion in the total population by applying a two-stage weighting sequence to each sample cell (see section C., Sampling Method) within CMA (see section E., Sample Distribution).

Weights were derived by having the percentage each cell represented in selected EAs divided by the percentage in the CMAs as a whole from which the EAs were drawn:

$$\frac{\text{\# in each cell in selected EAs in each CMA}}{\text{\# in each cell in CMAs in total}} = \text{Weight}$$

Unweighted and weighted data are shown below:

	Total #	Tor #	Mtl #	Van #	Calg #
Total contacts	11,766	9,021	1,144	751	850
Qualified respondents	487	389	26	33	39
Weights by cell					
Non-official language	0.41	0.48	0.28	0.49	0.35
Recent movers	0.77	0.60	1.66	0.76	0.72
Administration	0.77	0.75	0.77	0.82	0.85
Weighted respondents	255.2	206.2	12.2	20.7	16.1
	%	%	%	%	%
Incidence of unrecognized learning	2.17	2.29	1.07	2.76	1.89

### I. Margins of Error

Margins of error at the 95 per cent confidence level on various sample sizes, on a range of observed percentages, are shown below:

	Margin of Error
<b>TOTAL SAMPLE (n = 11,766)</b>	
Observed percentage of 50%	±0.9%
Observed percentages of 25%/75%	±0.8%
Observed percentages of 10%/90%	±0.6%
Observed percentages of 5%/95%	±0.4%
<b>TORONTO SAMPLE (n = 9,021)</b>	
Observed percentage of 50%	±1.0%
Observed percentages of 25%/75%	±0.8%
Observed percentages of 10%/90%	±0.6%
Observed percentages of 5%/95%	±0.4%
<b>MONTREAL SAMPLE (n = 1,144)</b>	
Observed percentage of 50%	±3.0%
Observed percentages of 25%/75%	±2.5%
Observed percentages of 10%/90%	±1.7%
Observed percentages of 5%/95%	±1.3%
<b>CALGARY SAMPLE (n = 850)</b>	
Observed percentage of 50%	±3.5%
Observed percentages of 25%/75%	±3.0%
Observed percentages of 10%/90%	±2.1%
Observed percentages of 5%/95%	±1.5%
<b>VANCOUVER SAMPLE (n = 751)</b>	
Observed percentage of 50%	±3.7%
Observed percentages of 25%/75%	±3.1%
Observed percentages of 10%/90%	±2.2%
Observed percentages of 5%/95%	±1.6%

**UNRECOGNIZED LEARNING (n = 487)**

Observed percentage of 50%	±4.5%
Observed percentages of 25%/75%	±3.9%
Observed percentages of 10%/90%	±2.7%
Observed percentages of 5%/95%	±2.0%

**LEARNING GAINED OUTSIDE CANADA (n = 307)**

Observed percentage of 50%	±5.8%
Observed percentages of 25%/75%	±5.0%
Observed percentages of 10%/90%	±3.5%
Observed percentages of 5%/95%	±2.5%

**UNRECOGNIZED EXPERIENTIAL (n = 221)**

Observed percentage of 50%	±6.7%
Observed percentages of 25%/75%	±5.8%
Observed percentages of 10%/90%	±4.1%
Observed percentages of 5%/95%	±2.9%

**LEARNING WITHIN CANADA (n = 66)**

Observed percentage of 50%	±12.5%
Observed percentages of 25%/75%	±11.0%
Observed percentages of 10%/90%	±7.5%
Observed percentages of 5%/95%	±5.5%

**Example #1**

Of the total sample, 2.17 per cent say they have unrecognized learning. If the entire sampling universe were polled, they would give the same answer, within six-tenths of 1 per cent, either up or down, 19 times out of 20, when asked the same question. The range of probability in this case is 1.6 per cent to 2.8 per cent.

**Example #2**

If 25 per cent of those with unrecognized learning provide a response, all Canadian adults with unrecognized learning in the four urban centres will make the same response, within 3.9 per cent, either up or down, 19 times out of 20, if the question is the same. The range of probability in this case is 21.1 per cent to 28.9 per cent.

**2. Incidence/Volume of Unrecognized Learning**

Respondents were asked:

*“Today, we are interviewing people whose education or work skills are not formally recognized. Do you or does anyone in your household have education, knowledge or skills that are not recognized in the*

*workplace or by educational institutions or licensing bodies in Canada or in your province?”*

If the respondent was unclear on the question, the interviewer prompted with:

*“This includes people whose education was received in another country or province, as well as those who have skills not learned in school.”*

Below are shown incidence levels and volumetric projections for adults with unrecognized learning in Canadian urban centres:

	<b>Total</b> (11,766)	<b>Tor</b> (9,021)	<b>Mtl</b> (1,144)	<b>Van</b> (751)	<b>Calg</b> (850)
	<b>#</b>	<b>#</b>	<b>#</b>	<b>#</b>	<b>#</b>
Total contacts	11,766	9,021	1,144	751	850
Qualified respondents	487	389	26	33	39
Weighted respondents	255.2	206.2	12.2	20.7	16.1
	%	%	%	%	%
Incidence of unrecognized learning	2.17	2.29	1.07	2.76	1.89
	#	#	#	#	#
Population of CMAs (in 000s)	10,322.2	4,338.4	3,328.3	1,826.8	828.5
Number with unrecognized learning (in 000s)	223.3 to 224.7	99.0 to 99.8	35.3 to 36.0	49.8 to 51.0	15.5 to 15.8

The weighted data indicate that one in 50 adults (or 2.17 per cent) in urban centres in Canada have unrecognized learning or skills.

If incidence figures for urban centres are applied to the population of Canada as a whole (2001 StatsCan projection, Canadian population 15 years and older—25.2 million), this would indicate that between 446,040 and 647,640 adults have unrecognized learning as described by the terms of reference of this study. The mean estimate of 546,840 has a margin of error of 0.4 per cent, which means that the actual number of Canadians with unrecognized learning will fall between 446,040 and 647,640, 19 times out of 20.

1 This section was drafted by Corbett•Communications, the market research firm that carried out the Household Survey. For more information on Corbett•Communications, see: [www.corbettcommunications.com](http://www.corbettcommunications.com)

## Methodology for Estimating Potential Gains to Recognition

### Potential Gains from Reducing Underemployment

#### Scenario B1: Multiple Regression Analysis Approach

Using a standard wage estimation equation of the form:

$$\text{Log wage}_i = a + f(x_i) + \epsilon$$

Where

$a$  is a constant term

$x_i$  is a vector of variables that have an influence on the variation in hourly wages including:

Age

Length of time spent with current employer

Gender (a dummy variable where males = 1 and females = 0)

And  $\epsilon$  is the error term.

This equation was estimated for  $j$  =:

- a) A special run for Statistics Canada Labour Force Survey for January 2001 and
- b) Conference Board of Canada Household Survey (eliminating outliers)

These estimates produced the following results:

A transformation was completed to calculate the difference in hourly wages between the Statistics Canada sample and the Household Survey sample. These hourly wage differences were then applied to the 310 respondents who

#### Summary of Regression Findings

	Statistics Canada (n=48,144)	The Conference Board of Canada (n=193)
<b>Summary of models</b>		
R	.43	.41
R squared	.23	.17
Adjusted R squared	.23	.16
<b>Analysis of variance</b>		
Regression sum of squares	2765.55	1.18
Residual sum of squares	9272.81	5.81
Total	12038.36	6.982
<b>Coefficients (t statistics)</b>		
Intercept	2.09 (287.35)	0.93 (15.98)
Age	.011 (55.18)	.0052 (3.69)
Years spent with current employer	.013 (48.04)	.0053 (2.14)
Gender (male =1)	.20 (49.97)	.05 (2.75)

Source: The Conference Board of Canada, 2001.

answered questions pertaining to their employment status and annual hours spent in work. These, in turn, were projected out to the broader population based on the relationship between the overall estimate of Canadians with unrecognized learning and the number of respondents. This methodology produces an estimate of potential gain from reducing underemployment of **\$1.94 billion** annually for Canada.



## Methodology for Generating Human Capital Gains

As per earlier estimates, human capital estimates were generated by imputing from shares of the total sample. This was limited to those who indicated specific unrecognized learning and indicated that they were interested in having their learning recognized.

### Human Capital Scenarios Methodology

	Type of unrecognized learning	Desired level of education				Total
		Doctorate	Masters	Baccalaureate degree	College diploma	
<b>Step 1: Findings from survey question, "Have you taken steps to get your learning recognized?"</b>						
Yes	Non-recognized foreign credential	2	3	13	7	25
	Non-recognized prior learning	1			3	4
	Within Canada			1		1
Total		3	3	14	10	30
No	Non-recognized foreign credential	3	4	20	7	34
	Non-recognized prior learning	1		6	1	8
	Within Canada			1	1	2
Total		4	4	27	9	44
Above indicating process barriers to learning recognition		2	4	15	7	28
<b>Step 2: Estimated numbers of Canadians for each, based on share of respondents (each cell / 487 x 546,840)</b>						
Yes	Non-recognized foreign credential	2,246	3,369	14,597	7,860	28,072
	Non-recognized prior learning	1,123	0	0	3,369	4,491
	Within Canada	0	0	1,123	0	1,123
A. Total taking steps		3,369	3,369	15,720	11,229	33,686
No	Non-recognized foreign credential	3,369	4,491	22,457	7,860	38,178
	Non-recognized prior learning	1,123	0	6,737	1,123	8,983
	Within Canada	0	0	1,123	1,123	2,246
B. Total not taking steps		4,491	4,491	30,318	10,106	49,406
C. Numbers indicating process reasons		2,246	4,491	16,843	7,860	31,440
<b>Various Scenarios</b>						
		Doctorate	Master's degree	Baccalaureate degree	College diploma	Total post-secondary
D. Scenario 1: Only those who are taking steps get recognized		3,369	3,369	15,720	11,229	33,686
E. Scenario 2: Remove process barriers + taking steps (A + C)		5,614	7,860	32,563	19,089	65,127
F. Scenario 3: All those indicating a desire to be formally recognized (A + B)		7,860	7,860	46,038	21,335	83,093

Source: The Conference Board of Canada, 2001.

# Valuing Immigrants: Foreign Credentials Assessment and Recognition<sup>1</sup>

## Canadian Initiatives to Recognize Immigrants' Learning

In recent years, there have been a number of initiatives to recognize the foreign credentials held by immigrants. Collectively, these initiatives are improving the effectiveness of recognition processes for immigrants. However, much remains to be done to achieve the goal of comprehensive recognition of foreign credentials and experiential learning.

### Entering Regulated and Non-regulated Occupations

Regulated occupations are typically governed by a provincial regulatory body; for non-regulated occupations, recognition is normally at the discretion of the employer.<sup>2</sup> Even then, employers may require that an applicant for a job be registered, licensed, or certified with a professional association. For new Canadians considering a regulated occupation, the recognition process varies between provinces and among professions or trades—with the exception of Red Seal trades. Obtaining recognition can be a costly and time-consuming process. Immigrants who make contact with a professional association in Canada through their home country's professional association before coming to Canada can use these links to gain quicker and fuller recognition of their foreign credentials. They can also contact the Canadian National Occupational Classification publication at Canadian diplomatic missions to find out about employment requirements.

### Entering Higher Education

For new Canadians thinking of studying at a Canadian college or university, the normal process is to contact the office of admissions of the institution and ask about the procedure for assessing credentials. In most cases, the university or college has the sole authority to make decisions about recognizing credentials for purposes of admission. The often piecemeal current practices for recognizing international credentials have numerous limitations. Recent actions in Ontario, for example, recognize this and illustrate new provincial government efforts to move further by offering a more holistic provincial approach to recognizing international credentials and learning.<sup>3</sup>

### International Best Practice: European Approaches to Recognizing Foreign Credentials

In Europe, transferability issues relate especially to concerns about improving academic and labour mobility

within the European Union (EU). The EU is developing policy in this area out of a conviction that assuring quality and improving transferability are essential to the flow of knowledge and human capital, which drives economic gains. The EU efforts include a drive to create a European area of qualifications. While the EU does not support full harmonization of systems, it is promoting quality, transparency and mobility of credentials.

One significant European initiative to improve transfers of credentials through accreditation and equivalency is the European Credit Transfer System (ECTS). The ECTS has been developed by 145 EU universities and is being implemented by over 1,000 institutions. Also important is NARIC, the network of National Academic Recognition Information Centres, created by the EU in 1984 to improve the academic recognition of diplomas and periods of study. A very broad approach to academic recognition is favoured over equivalency of credentials and credits. This approach improves labour mobility by accrediting the full range of achievements and experiences of people with both formal and informal educational experiences.

These EU initiatives generally seek a more global approach to evaluation that takes into account the whole of a student's education. The EU approach also fits with a lifelong learning model that transcends formal academic training to encompass all the knowledge and skills gained by individuals over their lifetime. Several dimensions of the recognition issue lend weight to the view that Canada needs additional approaches to international recognition and transferability as part of a larger strategic approach to recognizing learning and learning credentials.

### International Best Practice: Canadian Participation

In April 1997, the countries of the Council of Europe and the UNESCO Europe Region, along with Canada, signed an agreement that updates a 1979 UNESCO convention on the recognition of studies, diplomas and degrees concerning higher education in the states belonging to the European Region.<sup>4</sup> Although the convention has no enforcement mechanism and does not require a university or college to grant admission to applicants claiming equivalent qualifications, it does require that the institution apply fair and non-discriminatory procedures in its assessment of the applicants' qualifications. Other non-European Union countries, including Australia, Israel, Turkey and the United States, have been invited to sign and ratify

## **Canadian Initiatives to Recognize Immigrants' Learning**

### **Canadian Information Centre for International Credentials (CICIC) (1991)**

- Helps immigrants gain recognition and improve the transfer of credentials into Canada
- Collects, organizes and distributes information and acts as a national clearing house and referral service
- Supports recognition and portability of Canadian and international educational and occupational qualifications
- Links assessment services, professional regulatory bodies, institutions of higher education, individuals and organizations to enhance fair, consistent, and transparent practices in assessing and recognizing qualifications

### **A recent CICIC study stated guiding principles for assessing foreign credentials:**

- Fair, credible and standardized assessment methods
- Consistency among the jurisdictions
- Portability of educational evaluations across jurisdictions
- A conceptual framework for assessing foreign credentials to promote consistency
- Collaborative work to address issues related to the assessment

### **Provincially Based International Evaluation Services**

- Three provincially mandated international credential evaluation services in Canada help immigrants get work and education experiences recognized: the International Credential Evaluation Service (ICES) in British Columbia, the International Qualifications Assessment Service (IQAS) in Alberta, and Service des équivalences d'études in Quebec.

### **Alliance of Credential Evaluation Services of Canada (ACESC)**

- The Alliance of Credential Evaluation Services of Canada (ACESC) is a national initiative to ensure fairer and more comprehensive recognition and accreditation of foreign and domestic learning and learning credentials.
- ACESC was founded to help employers, regulators and educators with assessment by providing accurate and comprehensive information on the comparability of foreign and Canadian qualifications.
- In 1999 the Alliance established a Quality Assurance Framework to help members establish quality criteria and standards and implement consistent standards of good practice to the assessment of educational credentials.

### **Maytree Foundation's Refugee and Immigrant Program (1998)**

- A Canadian charitable foundation in support of social justice initiatives launched the Refugee and Immigrant Program to assist immigrants in accessing suitable employment and to promote the fair recognition of the skills, education and experience they bring with them.

### **Looking Ahead Project (1999)**

- A community-based organization, it implements recognition measures to enhance the labour force participation of immigrants.
- It operates in the Lower Mainland and the Fraser Valley regions of British Columbia, where over 300,000 immigrants settled, 1986–96.
- It was initiated by Human Resources Development Canada, the Ministry of Social Development and Economic Security, and other government and non-government partners.

### **Ontario Academic Credential Service (2000)**

- Ontario's Ministry of Training, Colleges and Universities contracted with a not-for-profit agency to provide a service to assess the academic credentials of immigrant job seekers to help speed their entry into the workforce.
- The service is intended to help qualified immigrants quickly find work to match their educational achievement and help employers hire immigrants with the credentials they seek.
- It can provide employers, regulators and educators with high-quality assessments of foreign secondary and post-secondary educational credentials against Ontario standards.

Source: The Conference Board of Canada, 2001.

the convention. The convention is designed to improve mobility by encouraging fair and consistent practices in assessment and recognition of qualifications.

In June 1999, Canada, along with the other G-8 nations, formally acknowledged the importance of international education by adopting the Cologne Charter, part of which

calls for "the promotion of the study of foreign languages and an increase in faculty and student international exchanges to increase the understanding of different cultures and enhance mobility in a globalized world."<sup>5</sup>

Canada has also recently joined a 26-country organization called UMAP, University Mobility in Asia and the

Pacific. Created in 1991, UMAP promotes faculty and student mobility through exchanges and institutional cooperation and identifies and reduces barriers to academic mobility. Under UMAP, universities are encouraged to negotiate bilateral agreements that detail the conditions under which student exchanges take place. In an effort to facilitate credit recognition and transfer resulting from student exchanges, UMAP adopted the ECTS model for its own University Credit Transfer System (UCTS). Like the ECTS model, the objective of UCTS is to make UMAP more

effective by ensuring that credit is granted by students' home institutions for study undertaken on exchange and to facilitate greater mobility.<sup>6</sup>

The significance of these international initiatives is clear. There is a trend in Europe and elsewhere towards more holistic and comprehensive approaches to recognizing learning and learning credentials in support of the better development and employment of people as they move within and between countries. Canada's efforts need to be informed by these trends and assessed in their light.

---

1 This appendix was prepared in part by Douglas Watt, The Conference Board of Canada. For more information, see D. Watt and M. Bloom, *Exploring the Learning Recognition Gap in Canada* (Ottawa: The Conference Board of Canada, 2001), available from [www.conferenceboard.ca](http://www.conferenceboard.ca)

2 From: Canadian Information Centre for International Credentials, *Fact Sheet No. 2: Assessment and Recognition of Credentials for the Purpose of Employment in Canada*, 1999, <http://www.cicic.ca/factsheets/factsheet2eng.stm>. About 20 per cent of Canadians work in regulated occupations.

3 Ontario Ministry of Training, Colleges and Universities, *News Release—Ontario Government Service to Help Qualified Immigrants Find Jobs*, March 2000, <http://www.edu.gov.on.ca/eng/document/nr/00.03/jobsnr.html>

4 Canadian Information Centre for International Credentials (CICIC), "Fact Sheet No 3: The Council of Europe/UNESCO Convention on the Recognition of Qualifications Concerning Higher Education in the European Region—What It Means for Canada," <http://www.cicic.ca/factsheets/factsheet3eng.stm>.

5 Association of Universities and Colleges of Canada, *Credit Where Credit Is Due—Canadian Universities and the European and Asian Credit Transfer Systems*, June 2000, p. 1.

6 *Ibid.*, pp. 2–3, 9–10.

# Prior Learning Assessment and Recognition (PLAR)<sup>1</sup>

## Definition

PLAR gives people recognition for the skills and knowledge acquired from workplace experiences, community work, on-the-job training, or the equivalent from public education. PLAR has several aspects. The term is used to refer to:

- receiving recognition for learning from workplaces and other life experience;
- receiving credit for a certain level of education or vocational training;
- receiving recognition for education or training from another country leading to a relevant skills-related job in Canada;
- recognizing that a person has all the skills for a job but not the required education.

## Benefits

PLAR offers a number of benefits:

- Adult learners get their educationally relevant, college-level prior learning assessed and recognized within post-secondary educational settings.
- Adult learners' confidence in their own capacities to learn is strengthened, and they are motivated to pursue further education.
- Completion time for education programs is shortened, and course loads and costs are reduced for part-time adult learners. This particularly benefits part-time students seeking employment-related training and occupational credentials.
- PLAR can be used as a marketing tool to attract learners to education requiring training for employment or occupational certification.

## Barriers

Building a wider acceptance of PLAR in Canada remains a challenge. Most PLAR efforts are still based on formal

partnerships and agreements between educational institutions, businesses and professional regulatory bodies. Individual learners in need of recognition for their

### **Barriers to PLAR**

1. There are no national standards.
2. PLAR requires time, expertise and resources in short supply in many universities and colleges.
3. Some universities refuse to implement because of concerns over quality of assessment techniques.
4. Most professional programs do not need PLAR to attract students because they are oversubscribed.
5. There is limited interest in and willingness to use PLAR specifically or primarily for foreign-trained professionals.
6. Lack of rigorous assessment practices makes quality assurance difficult.
7. Education institutions lack information about processes and benefits.
8. Formal policies in support of prior learning assessment are lacking.
9. Few institutional policies are strategic; many give all authority to departments to act without supervision.
10. Recognition awarded through PLAR is not necessarily transferable between or among organizations, institutions, businesses, provinces and territories.
11. There are concerns about anticipated costs and amount of time required.

Source: The Conference Board of Canada, 2001.

knowledge and skills in these jurisdictions find difficulty in receiving prior learning credit when their previous supplier of learning is not recognized. Since PLAR is not yet widely used by universities, many education avenues are still closed. Individual learners wanting to get recognition for their knowledge and skills in jurisdictions or institutions not part of a consortium are generally out of luck.



## ***PLAR Success Stories***

### ***British Columbia—Credit Review Service (CRS)***

- CRS reviews workplace-based training programs.
- It was developed in response to demand from employers and employees for formal recognition and accreditation of high-quality workplace training programs.
- Many institutions are developing descriptions of what learners should be expected to know and do at the end of a course or program.
- These have streamlined PLAR processes and enabled learners to generate more suitable evidence for their assessment.
- CRS awards credit for programs that are found to be comparable to those offered at colleges and universities.
- Recognizing B.C. adults' prior learning has enabled people to enter colleges and universities and earn credentials in shorter times and sometimes less expensive ways.

### ***Ontario—Student Equivalency Program (STEP)***

- Ontario Universities' Application Centre provides STEP, an interactive system that now includes 18 universities.
- STEP shows Ontario university undergraduate courses and highlights courses considered equivalent among these institutions.
- Equivalencies can lead to transfer credits and "letter of permission" opportunities.
- The limit to STEP is that credit transfer is subject to the individual transfer regulations of each institution and that it operates only within Ontario.

### ***Alberta—National Credit Bank***

- Alberta Society of Engineering Technologists prepared a policy document in 1997 to look at the development of a national technology credit bank and career portfolio.
- It is designed to provide information regarding the technical competency of Canadian and foreign-trained workers.
- It would minimize uncertainty regarding the national standards for applied science and engineering technologists and technicians. It awaits the act of creation.

Source: The Conference Board of Canada, 2001.

---

<sup>1</sup> This appendix was prepared in part by Douglas Watt. For more information, see Watt and Bloom, *Exploring the Learning Recognition Gap in Canada*.

## Bibliography

- Aarts, Sandra, et al., *A Slice of the Iceberg: Cross-Canada Study on Prior Learning Assessment and Recognition*, November 1999.
- Advocates for Community-Based Training and Education for Women, *Skills and Knowledge Profile*, March 1999.
- Alberta Society of Engineering Technologists, "Policy for Identifying Acceptable Prior Learning Assessment and Recognition Policy Models for the National Technology Career Credit Bank," draft policy document, Nov. 15, 1997.
- Altoniji, Joseph G., and Charles R. Pierret, "Employer Learning and Statistical Discrimination," NBER working paper 6279, November 1997.
- Association of Canadian Community Colleges, *Pan-Canadian Protocol for the Transferability of Learning—Background Paper* (ACCC: April 26, 1999), <http://www.accc.ca/english/advocacy/priorities/mt-background.htm>
- Association of Canadian Community Colleges, *Pan-Canadian Protocol for the Transferability of Learning Update*, October 20, 1999.
- Association of Universities and Colleges of Canada, *Credit Where Credit Is Due—Canadian Universities and the European and Asian Credit Transfer Systems*, June 2000, p. 1.
- Badets, Jane, *Report of the Expert Panel on Skills: Background Papers—Immigration and Educational Levels in Canada* (Statistics Canada, 1999), pp. 1–4.
- Badets, Jane, and T. Chui, *Canada's Changing Immigrant Population*, Statistics Canada, Catalogue No. 96-311E, 1994.
- Bar-Or, Y., J. Burbidge, L. Magee and L. Robb, "The Wage Premium to a University Education in Canada, 1971–1991," *Journal of Labour Economics* 13(4), 1995, 762–794.
- Barker, Kathryn, *The Electronic Learning Record: Assessment and Management of Skills and Knowledge* (Literacy BC and the National Literacy Secretariat: January 2000).
- Barker, Kathryn, and Charles Belanger, *The Status of PLA/PLAR in Professional Programs in Ontario Universities* (Toronto: Council of Ontario Universities and Ontario Ministry of Citizenship, Culture and Recreation, spring 1999).
- Bauslaugh, Gary, *Learning Quarterly*, vol. 1, issue 3, September 1997.
- Beaudry, P., and D. Green, "Cohort Patterns in Canadian Earnings: Assessing the Role of Skill Premia in Inequality Trends," NBER working paper, 1997.
- Blinder, A. "Wage Discrimination: Reduced Form and Structural Estimates," *Journal of Human Resources*, 7, 1973, pp. 436–55.
- Bloom, Michael, Marie Burrows, Brenda Lafleur and Robert Squires, *The Economic Benefits of Improving Literacy Skills in the Workplace* (Ottawa: The Conference Board of Canada, 1997), pp. 10–15.
- Bloom, Michael, and Brenda Lafleur, *Turning Skills into Profit: The Economic Benefits of Workplace Education Programs* (New York: The Conference Board, Inc., 1999).
- Boyd, Monica, "At a Disadvantage: The Occupational Attainment of Foreign Born Women in Canada," *International Migration Review* 18(4), 1994, 1091–1119.
- The Bristol [Aerospace] PLAR Project.
- British Columbia Council on Admissions and Transfer, *An Assessment of British Columbia's Post-Secondary Education Transfer Issues: the Student Perspective*, prepared by GDA Research & Information Systems, Inc., under contract to Centre for Education Information (CEISS), March 1998, [http://www.bccat.bc.ca/pubs/GDA\\_BCCAT97.pdf](http://www.bccat.bc.ca/pubs/GDA_BCCAT97.pdf)

- British Columbia Council on Admissions and Transfer, *BC College Transfer Credit Evaluation: An Analysis of Students Entering the University of Victoria, Winter 1998/99 Session* (Victoria: Office of Institutional Analysis—University of Victoria, June 1999).
- British Columbia Council on Admissions and Transfer, *British Columbia Transfer Tips* (Vancouver, 2000).
- British Columbia Council on Admissions and Transfer, *Newsletter* (November 1999), [http://www.bccat.bc.ca/pubs/nl\\_nov99.pdf](http://www.bccat.bc.ca/pubs/nl_nov99.pdf)
- British Columbia Council on Admissions and Transfer, A Special Report from the Transfer Innovations Committee, *Transfer: What's the Problem?* (Victoria: April 1999), [http://www.bccat.bc.ca/pubs/sr\\_apr99.pdf](http://www.bccat.bc.ca/pubs/sr_apr99.pdf)
- British Columbia Council on Admissions and Transfer, *Survey of Advising and Admissions Personnel on Administrative Systems Related to Transfer: Results*, summer 1997.
- British Columbia Council on Admissions and Transfer, *Task Force on Standards & Processes*, December 12, 1997.
- Brouwer, Andrew, *Immigrants Need Not Apply* (Ottawa: The Caledon Institute of Social Policy, 1999).
- Camfield, Bob, "Charting a New Course—a View from the Trenches," *Learning Quarterly* (Centre for Curriculum Transfer and Technology), vol. 3, issue 2, summer 1999, pp. 6–10.
- Canada's Institute of Chartered Accountants, PLAR 97 Sponsors.
- Canadian Information Centre for International Credentials, *Current Practices in Accreditation and Recognition of Post-Secondary Institutions and Programs in Canada, 1995–96*, [www.cicic.ca/postsec/accreditation.en.stm](http://www.cicic.ca/postsec/accreditation.en.stm)
- Canadian Information Centre for International Credentials, *Fact Sheet No. 2: Assessment and Recognition of Credentials for the Purpose of Employment in Canada*, 1999, <http://www.cicic.ca/factsheets/factsheet2en.stm>.
- Canadian Information Centre for International Credentials (CICIC), *Fact Sheet No 3: The Council of Europe/UNESCO Convention on the Recognition of Qualifications Concerning Higher Education in the European Region—What It Means for Canada*, <http://www.cicic.ca/factsheets/factsheet3eng.stm>.
- Canadian Information Centre for International Credentials *Report on Federal, Provincial and Territorial Activities Related to the Assessment of Credentials, 1995–96*. [www.cicic.ca/pubs/assessen.htm](http://www.cicic.ca/pubs/assessen.htm)
- Canadian Labour Force Development Board, *Prior Learning Assessment and Recognition, Making Connections: PLAR and Sector Councils*, August 1996.
- Canadian Labour Force Development Board, *Prior Learning Assessment and Recognition*, 1997.
- Canadian Labour Force Development Board, *Reaching Our Full Potential: Prior Learning Assessment and Recognition for Foreign-Trained Canadians*, report prepared for PLAR Working Group, by Training and Development Associates with John Samuel & Associates Inc. and Le Group Standford Inc., July 1999.
- Canadian Learning Bank Credit Review Service, *Invitation to Post-Secondary Institutions* (Open Learning Agency, 2000).
- Chapman, B.J., and R.R. Iredale, "Immigrant Qualifications: Recognition and Relative Wage Output," *International Migration Review*, 27(2), 1993.
- Chiswick, B.R., "The Effect of Americanization on the Earnings of Foreign-born Men," *Journal of Political Economy*, 86, 1978, 897–921.
- Drewes, Torben and Herb O'Heron, "Part Time Enrolments: Where Have All the Students Gone?" *Research File*, vol. 3, no. 2, May 1999, p. 1.
- Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 1999* (Ottawa: Centre for Education Statistics, 2000), p. 1.
- Ellery, Roberto, "Learning by Doing and Schooling," Instituto de Pesquisa em Economia Aplicada, discussion paper, March 1999.
- Ferguson, Faye, *Prior Learning Assessment in Health and Human Services Programs in British Columbia*, Centre for Curriculum, Transfer and Technology, March 1998.
- Finlay, Finola, *The Block Transfer Project*, British Columbia Council on Admissions and Transfer, December 1997.

- Finlay, Finola, *The Block Transfer Project: Update*, (British Columbia Council on Admission and Transfer, February 1998), <http://www.bccat.bc.ca/pubs/blockup.pdf>
- Finlay, Finola, *Block Transfer Handbook: Constructing and Negotiating Block Transfer Agreements* (British Columbia Council on Admissions and Transfer, 2000); see also Special Report, *Transfer: Some Solutions*, 2000.
- Finlay, Finola, Special Report, *The Block Transfer Project: Update* (British Columbia Council on Admissions and Transfer, February 1998), <http://www.bccat.bc.ca/pubs/blockup.pdf>
- Finnie, Ross, *Interprovincial Mobility in Canada: The Effects of Interprovincial Mobility on Individual Earnings: Panel Model Estimates*, HRDC Applied Research Branch, strategic policy paper W-98-5E.c, November 1998.
- Finnie, Ross, and Charles Beach, "Earnings Mobility Benchmarks and Longitudinal Polarization in Canada, 1982-94," *Canadian Business Economics*, 1998.
- Foreign Education Credentials Assessment*, Public Service Commission, [www.pcs-cfp.gc.ca/menu/help\\_foreign\\_education\\_e.htm](http://www.pcs-cfp.gc.ca/menu/help_foreign_education_e.htm)
- Glaser, Edward L., "The Formation of Social Capital," paper prepared for an HRDC/OECD symposium on the contribution of human and social capital to sustained economic growth and well-being, Quebec City, March 19-21, 2000.
- Grant, Michael, "Funding Lifelong Learning: Exploring the Potential for Learning Accounts in Canada," discussion paper, November 1999 (available from [www.grantinsights.com/Learning.pdf](http://www.grantinsights.com/Learning.pdf)).
- Green, David A., and W. Craig Riddell, *Literacy, Numeracy and Labour Market Outcomes in Canada*, Statistics Canada, Cat. no. 89-552-MIE. no. 8, March 2001.
- Harknett, Pam, "Giving Credit Where Credit Is Due: BC Graduation Program PLAR," presentation at the PLAR Conference, November 1999.
- Heslop, Joanne, Office of Analytical Studies, Simon Fraser University, *Profile of BC College Transfer Students Admitted to Simon Fraser University 1994/95 to 1998/99* (British Columbia Council on Admissions and Transfer, December 1999), <http://www.bccat.bc.ca/pubs/sfuprofile4.pdf>
- Humphries, Carol, "The Iceberg of Informal Learning," *Canadian Lifelong Learning* (June 1999), vol. 2, issue 1, p. 15.
- Investing in Education: Analysis of the 1999 World Education Indicators* (UNESCO/OECD World Education Indicators Programme, 2000), p. 9.
- Iqbal, Mahmood, *Are We Losing Our Minds? Trends, Determinants and the Role of Taxation in Brain Drain to the United States* (Ottawa: The Conference Board of Canada, 1999), pp. 9-10.
- Jasmin and Boivin, *International Recognition of Qualifications in the European Community: Overview of Current Situation* (Ottawa: Department of the Secretary of State), 1992.
- Kane, Thomas J., Cecelia Elena Rouse and Douglas Staiger, "Estimating Returns to Schooling When Schooling Is Misreported," NBER working paper # 7235, July 1999.
- Kapsalis, C., R. Morissette and Garnett Picot, "The Returns to Education and the Increasing Wage Gap Between Younger and Older Workers," Statistics Canada, discussion paper no. 131, March 1999.
- Learner Pathways and Transitions: An Overview of the CMEC Project*, Council of Ministers of Education, Canada, January 1999.
- Lowe, Graham S., and H. Krahn, "Job-Related Education and Training Among Younger Workers," *Canadian Public Policy*, XXI: 3: 362-378.
- Mata, Fernando, "Intergenerational Transmission of Education and Socio-Economic Status: A Look at Immigrants, Visible Minorities and Aboriginals," Statistics Canada, discussion paper 75F0002M, March 1997.
- Mata, Fernando, *The Non-Accreditation of Immigrant Professionals in Canada: Societal Dimensions of the Problem* (Ottawa: Department of Canadian Heritage, September 1999), [http://www.pch.gc.ca/multi/Societal/content\\_e.htm](http://www.pch.gc.ca/multi/Societal/content_e.htm)
- McDade, *Barriers to Recognition of the Credentials of Immigrants in Canada, Studies in Social Policy* (Ottawa: Institute for Research in Public Policy, 1998), p. viii.
- Meng, R., "The Earnings of Canadian Immigrant and Native-born Males," *Applied Economics*, 19(3), 1987, 1107-1119.
- Michelson, Elana, "Expanding the Logic of Portfolio-Assisted Assessment: Lessons from South Africa," *CAEL Forum and News*, vol. 23, no. 1, fall 1999, pp. 17-18, 33-35.

Miller, Marilyn, Bonnie D. DuPont, Vince Fera, Richard Jeffrey, Bruce Mahon, Barbara M. Payer and Allan Starr, "Measuring and Reporting Intellectual Capital from a Diverse Canadian Industry Perspective," paper presented to the OECD Symposium on Intellectual Capital, Amsterdam, June 1999.

Nakamura, Alice, Masao Nakamura, Christopher Nicol and W. Erwin Diewert, "Labour Market Outcomes and the Recruitment Information Needs of Immigrants and Other Job Seekers," CareerOwl discussion paper, October 12, 1999, ([http://www.careerowl.ca/research\\_papers.asp](http://www.careerowl.ca/research_papers.asp)).

Norton, Tom, "The Learning Highway Runs Through Here," *College Canada Newsmagazine*, 1996-97, vol. 2, issue 4, p. 3.

Office of Institutional Analysis, University of Victoria, *BC Colleges Transfer Credit Evaluation: An Analysis of Students Entering the University of Victoria Winter 1998/99 Session*, funded by the British Columbia Council on Admissions and Transfer, June 1999, <http://www.bccat.bc.ca/pubs/uvicjun99>

Ontario Ministry of Training, Colleges and Universities, Access to Professions and Trades Unit, *Access to Professions and Trades for Foreign-Trained Immigrants*, September 1999.

Ontario Ministry of Training, Colleges and Universities, News Release, Background and Speech, "Ontario Government Service to Help Qualified Immigrants Find Jobs," March 21, 2000.

Organization for Economic Co-operation and Development, *Lifelong Learning for All* (Paris: OECD, 1996), Chart 8-2, p. 233.

Osberg, Lars, Daniel Gordon and Zhengxi Lin, "Interregional Migration and Inter-industry Labour Mobility in Canada: A Simultaneous Approach," *Canadian Journal of Economics*, V. XXVII, N. 1 (February 1994), pp. 58-80.

Osberg, L., and S. Phipps, "Labour Supply with Quantity Constraints: Estimates from a Large Sample of Canadian Workers," *Oxford Economic Papers*, 45, 1993, 269-291.

PLAR 97 Forum Steering Committee, Meeting Notes, December 9, 1997, Ottawa.

"A Partnership Dissolves," *Over the Fence: Newsletter of the National Women's Reference Group on Labour Market Issues*, fall 1999.

*Performance and Potential 1998* (Ottawa: The Conference Board of Canada, 1998).

*Performance and Potential 1999* (Ottawa: The Conference Board of Canada, 1999), pp. 9-10, 32-33, 36-38.

Price Waterhouse, *Foreign Academic Credential Assessment Services Business Assessment, Final Report*, [Ontario] Ministry of Citizenship, Culture and Recreation, May 26, 1998.

Quickcert Software "Portfolio-less PLA Electronic Certification," Quick Test International Inc., Calgary AB, [www.qti.ab.ca](http://www.qti.ab.ca)

Reitz, Jeffrey G., "Immigrant Skill Utilization in the Canadian Labour Market: Implications of Human Capital Research," *Journal of International Migration and Integration* (forthcoming).

Riddell, W. Craig, and Arthur Sweetman, "Human Capital Formation in a Period of Rapid Change," UBC Department of Economics, discussion paper, 2000, <http://www.arts.ubc.ca/econ/discpapers/DP0006.pdf>

Robinson, Chris, and Nigel Tomes, "Self-Selection and Interprovincial Migration in Canada," *Canadian Journal of Economics*, vol. XV, no. 3 (August 1982), pp. 474-502.

*Secondary Education in Canada: A Student Transfer Guide 1998: Process for Assessing Foreign Studies*, <http://www.cmec.ca/tguide/1998/english/18.stm>

Sheckley, Barry G., and Maryanne LeGrow, "The Educational Benefits: Completing a Portfolio of Prior Experiential Learning," *LET News*, issue 1, June 1999, Learning from Experience Trust (United Kingdom)

Sjaastad, Larry, "The Costs and Returns of Human Migration," *Journal of Political Economy* (Supplement), vol. 70, 1962, pp. 80-93.

Souque, Jean-Pascal, *Managing Scarce Skills for Competitiveness and Growth: A Review of the Issue* (Ottawa: The Conference Board of Canada, 1998).

Statistics Canada, Custom Runs from the 1998 Adult Education and Training Survey, 1998.  
Statistics Canada, *Labour Force Update*, Catalogue No. 75-005XPB, summer 2000.

Student Equivalency Program (STEP), <http://step.ouac.on.ca/>



Thomas, Derrick, and J. Peter Rappak, "Employment Stability and the Adjustment of Immigrants: An Examination of Data from the Survey of Labour and Income Dynamics," Statistics Canada, discussion paper 98-01, January 1998.

Townsend, Thomas, "Transferability of Learning: A Federal Perspective," presentation to the National Council on Education, The Conference Board of Canada, Toronto: October 5, 1999.

University of South Australia, *Guidelines for the Implementation of Recognition of Prior Learning*, <http://www.unisa.edu.au/adminfo/codes/rior.htm>, March 2000.

Vahey, Shaun P., "The Great Canadian Training Robbery: Evidence on the Returns to Educational Mismatch," *Economics of Education Review*, vol. 19, no. 2 (2000), pp. 219–227

Watt, Douglas, and Michael Bloom, *Exploring the Learning Recognition Gap in Canada* (Ottawa: The Conference Board of Canada, 2001), available from [www.conferenceboard.ca](http://www.conferenceboard.ca)

Wälde, Klaus, "Lifetime Learning, Biased Technological Change and the Evolution of Wages in the U.S. 1960–1990," Tinbergen Institute discussion paper, January 1996.

Wong, Angelina T., *Assessment and Recognition of Experiential Learning in Higher Education: Impact of Government Policy, Institutional Innovation, and Information Technology* (Saskatoon: University of Saskatchewan, 2000).

Wong, Angelina T., *Prior Learning Assessment & Recognition: A Guide for University Faculty & Administrators* (Saskatoon: University Extension Press, University of Saskatchewan, 1999).

Zhengxi Lin, "Foreign-Born vs Native-Born Canadians: A Comparison of Their Inter-Provincial Labour Mobility," Statistics Canada discussion paper No. 114, September 1998.



The Conference Board of Canada  
**Insights You Can Count On**

255 Smyth Road, Ottawa, ON, K1H 8M7 Canada • *Tel.* (613) 526-3280 *Fax* (613) 526-4857  
*Internet* <http://www.conferenceboard.ca>