ESTABLISHING THE NEED FOR A TARGETED APPROACH TO ADULT EDUCATION POLICY

by

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Abstract

This study assesses the need for a more targeted policy approach towards adult learning. Using evidence based on the 1994 International Adult Literacy Survey (IALS '94), it demonstrates that a substantial number of working age Canadians do not have the necessary education and literacy skills needed to succeed in the knowledge economy. Because of this, many Canadians in the low skill category are economically disadvantaged as they are poorly equipped for the complex economy of the 21st century.

This paper argues for a targeted approach to identify those who are most in need of additional education and skills training and to provide them with the necessary opportunities for skills upgrading. To achieve this objective, this paper calls for a national strategy, whereby in partnership with the provinces and territories, employers and unions, communities, and other stakeholders, supplemental education and training opportunities are made available to those most in need.

Executive Summary

This study relies on evidence from the International Adult Literacy Survey (IALS '94) to show that not all Canadians have benefited from the broad three-pronged education policies geared towards early childhood development, K-12 education, and Post Secondary Education. As we transition to the 'knowledge' economy, whereby most jobs will require higher levels of education and skill, the evidence shows that a substantial proportion of the Canadian labour force does not have the necessary skills to succeed in the knowledge economy.

IALS '94 provides evidence, which essentially supports the human capital theory. Even though not everyone in the low skill categories is necessarily economically disadvantaged, we do observe a positive correlation between skill level and economic well being from the data, which further supports the human capital theory prevalent in economic literature. However, what makes this study relatively unique is the fact that it allows us to identify the low skilled and economically disadvantaged by certain characteristics such as age, gender, region of origin, and industry in which they are employed. This enables policymakers to devise policies, which would narrowly focus on the target group rather than implementing broad initiatives. In other words, this study does not call for any significant changes in current policy, but rather, a *supplemental* national strategy to help those who are most in need (i.e., the low skilled and low income).

Given the failure of the current and broad educational policies to capture all members of the labour force, a national strategy to help provide the necessary education and skills training to those who could benefit from it the most (i.e., low skilled and low income workers) becomes more important. A national strategy, in partnership with the various stakeholders, will help to develop a unified vision, provide a mechanism for greater coordination among various stakeholders, and create a degree of uniformity across the various jurisdictions. The initial focus of the national strategy will begin with

immigrants. As a first step, the recognition of a number of professional qualifications will be made so that immigrants can engage in gainful employment rather then being ghettoized in dead-end jobs in. As well, language testing and certification centers will be ready to test the language competency of recent arrivals such that there is no undue bias against recent arrivals who meet the language requirements of the Canadian labour market, while at the same time, individuals can seek the necessary language training skills which they need. While other policy alternatives are also being considered, the complexity of each increases as we engage the different levels of government. Weighed against the various criteria, while there is scope for further policy alternatives, the initial focus of the national strategy will be focused on the education and literacy skills of immigrants to Canada.

Dedication

To my parents.

Acknowledgements

I would like to thank Professor Nancy Olewiler and Professor Kennedy Stewart for reading through several drafts of this work and for their numerous suggestions to help improve this report.

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I. Introduction

Evidence shows that there is a strong positive correlation between one's level of education and earning potential.[1] While it is also intuitive to expect that the more educated, skilled or literate a person is, the greater the chances of success in today's economy, there is also the implication that the less skilled will fall further behind. This is expressed in Green and Riddell (2002) where they state:

> The precise nature of the change [technological] varies from description to description but all have in common the central claim that the newer technologies and forms of organization favour more-skilled over less-skilled workers. Moreover, there is general agreement that the types of skills that are required with this new technology are cognitive skills rather than, say, craft skills. It is often argued that workers within an economy who do not possess these cognitive skills will be left behind and that economies that do not have enough skilled workers of this type will not acquire the new technology fast enough and will also be left behind.[2]

Realizing the detrimental effects on the national economy of a poorly skilled labour force, policymakers are challenged with the task of ensuring that "all citizens have access to literacy- and learning-rich environments in their homes, their communities and at work."[3] What this statement potentially implies is that we should be willing to consider other forms of education and literacy training and not just simply equate education with formal schooling. It is time to now assess the merits of a lifelong approach to learning whereby homes, schools, communities, and the workplace all provide for an environment that is not only conducive to learning but more importantly, encourages it.

With this objective in mind, numerous policy domains become available which in one way or another, impact literacy. Even though on a macro-scale heavy emphasis continues to be placed on the more traditional approaches that stress early childhood

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[1] Lemieux, Thomas "The Causal Effect of Education on Earnings in Canada" in *Towards Evidence-Based Policy for Canadian Education,* edited by De Broucker, Patrice and Sweetman, Arthur, McGill-Queen's University Press, 2002

[2] Green, David A. and Riddell Craig W. "Literacy Skills, Non-Cognitive Skills and Earnings: An Economist's Perspectives" in *Towards Evidence-Based Policy for Canadian Education,* edited by De Broucker, Patrice and Sweetman, Arthur, McGill-Queen's University Press, 2002 p. 123

[3] Tuijnman, Albert, "International Adult Literacy Survey: Benchmarking Adult Literacy in North America: An International Comparative Study", Institute of International Education, Stockholm University Statistics Canada, January 2001, Catalogue no. 89-572-XPE

development, Kindergarden to Grade 12 (K-12), and Post Secondary Education (PSE) accessibility, other domains should also be taken into consideration especially since this broad three-pronged approach is not necessarily complete and fails to capture a sizeable proportion of the Canadian population that would otherwise benefit from literacy training.

This report uses evidence obtained from the 1994 International Adult Literacy Survey to show that a substantial proportion of the Canadian adult population essentially lacks the literacy skills to succeed in a complex economy that is relying more and more on human capital and literacy skills. There is a real transition towards a 'knowledge and skills economy' such that anyone who lacks the fundamental basics of literacy skills is going to find it very difficult to remain economically viable. The consequence of this on a national scale would be twofold: firstly, Canadians who lack fundamental literacy skills will find it more and more difficult to find gainful employment, and secondly, there will be a greater burden on the Canadian economy to not only support people who are below the poverty line, but also and perhaps more importantly, the losses to the Canadian economy from not being able to tap into a sizeable proportion of its labour force.

The results of the survey show that there are approximately 10.1 million adult Canadians who lack sufficient literacy skills. This is a sizeable proportion of the Canadian population, which inevitably draws attention to the failures of the 3-pronged education policies of early child-hood development, K-12, and Post Secondary Education (PSE) accessibility.[4] Furthermore, and as noted above, the literature on human capital shows that there is a positive correlation between education and literacy skills and income. With 10.1 million adult Canadians lacking sufficient literacy skills, the question remains as to whether we can expect a significant number of Canadians to be living in financial difficulty with little chance of escaping the poverty gap?

[4] It should be noted that the 10.1 million figure includes both immigrants and Canadian born. The analysis of the data will show that in fact immigrants form a sizeable proportion of adults with low literacy skills. However, despite the presence of a large number of immigrants with low literacy skills, which inevitably highlights the failures of the education policies of their countries of origin, the fact that a large number of Canadian born adults also have low literacy skills illustrates the failures of our own educational policies.

The importance of this study is on several levels. Firstly, it highlights the literacy gap that exists in Canada. Secondly, based on various characteristics such as age, gender, employment status, and income levels, it identifies who these people are and whether or not there are similarities in this large group of 10.1 million. Finally, recognizing that a target group of 10.1 million for policy purposes is simply impractical in terms of available resources, the bigger questions is, how can we narrow the target group further so that we can assist those most in need and to achieve tangible results.

The report first presents a brief discussion of the importance of literacy skills in today's evolving labour market. Section II, the 'background' sets the argument as to why there should be continuous emphasis on learning, while at the same time suggesting that there should be some alternative policies to complement the broader education policy initiatives already in place. The core of the argument hinges on the importance of helping those with the lowest levels of literacy skills, who also happen to be the ones most in need of such assistance if they are to improve their economic well-being.

Section III explains the methodology used in preparing this report, and section IV presents the evidence used in proposing the alternative policies. This section is a key component of the report as it provides the foundation for the alternative policies that are proposed in the final section. The evidence is used to suggest two propositions: First, a significant proportion of the Canadian labour force is desperately lacking in literacy skills. Second, by properly identifying those within this larger group who are most in need of literacy training, it becomes more practical to devise policies that could produce tangible results given that the intended "target" of the policies has been significantly reduced. This is what sets the proposed policy alternatives apart from the universal policies of early childhood development, K-12, and PSE accessibility.

II. Background

For individuals, having sufficient literacy skills is a crucial component of remaining economically competitive and viable as we transition to the knowledge economy.[5] This is reflected in the literature on human capital theory.

> The literature on income and earnings differentials had been dominated by human capital theory. It postulates that individuals receive unequal rewards from the labour market because of different investments they make in their own human capital. By bringing to the labour market different levels of education, skills, training, and experience, individuals achieve substantially different levels of pay, benefits, job security and occupational status. An impressive body of research presents strong evidence demonstrating that better-educated and higher-skilled labour market participants are more likely to hold well-paying, higher-status jobs and less likely to be unemployed or hold a low-paying job. [6]

Therefore, with the transition to the knowledge economy, there remains a need for a continuous upgrading of skills just to keep up with the changing demands of the labor market, not to mention moving ahead. As such, the need for adult literacy and education is becoming an important policy area. Human capital theory supports the notion that education and investment in human capital raises an individual's earning capacity. Numerous studies have attempted to measure the rate of return to various levels of schooling (i.e. high school, college, university), and there seems to be a consensus, that while there is a positive rate of return to education, the greatest seems to come after the completion of high school. According to Francois Vaillancort "The highest rates of returns, private and public, for both men and women result from the completion high school."[7] Therefore, adult education and the issue of what to do with those who have failed early on to make this investment has created the need for adult education policy. Consider Vignoles et al. "Education boosts individuals' productivity and wages. Yet many individuals leave school with minimal skills and qualification. One way for these

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[5] "Economic growth is increasingly driven by knowledge and no country can remain competitive without applying knowledge...[the] knowledge economy provides efficient ways to produce goods and services and deliver them more effectively, and at lower costs, to a greater number of people". *Lifelong Learning and the Knowledge Economy,* Stuttgart-Germany, October 2002.

[6] Shalla, Vivian and Schellenberg, Grant "The Values of Words: Literacy and Economic Security in Canada" Statistics Canada (Catalogue no. 89-552-MIE, no.3), May 1998.

[7] Vaillancourt, Francois "The Private and Total Returns to Education in Canada, 1985", *The Canadian Journal of Economics,* Vol. 28, No. 3 (Aug., 1995), 532-554

workers to catch up might be lifelong learning."[8] The good news for Canada is that a significant proportion of Canadian adults either participate in adult education or express a desire to participate in some form of adult training and education. However, there is also troubling news in that at least a similar proportion have indicated that they have not participated in, and have no desire to participate in any form of such training.[9]

> On the one hand, adult education is a factor in social inclusion; it represents a means of acquiring the knowledge, skills and experiences that help people adjust and cope with change, including finding a new balance, whether in work, culture or family life. But at the same time adult education is also a factor in exclusion. With the transition towards learning societies and knowledge economies, the cumulative costs of persistent non-participation to individuals, firms and whole communities might increase.[10]

Therefore, it is well recognized that with the transition to a knowledge economy, there will also be a need for a culture that encourages continued learning and adult training and consequently policies that facilitate this by making it easier for those who need additional training to seek and receive it. Despite recognizing the importance of lifelong learning, the evidence in this study points to the fact that as of yet, there are ***too few targeted policies that are designed to actually help those with both low literacy skill levels and low incomes to improve their literacy skills.*** This is especially troubling given that this group of people is the one most in need of help to improve its literacy skills, and also, on the margin, the individuals in this group have the most to gain if appropriate policies were implemented. This is substantiated by evidence from another survey, the 1998 Adult Education and Training Survey (AETS), that current policies are not sufficient to meet the needs of adult learners.

> The 1998 AETS [Adult Education and Training Survey], like the surveys that preceded it, finds that low-skilled adults and people with relatively little initial education have a lower probability of participating in adult education training or training than do adults with a good initial education and well-developed skills.

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[8] Vignoles, Anna, Galindo-Rueda, Fernando, and Feinstein, Leon "The labour Market Impact of Adult Education and Training: A Cohort Analysis" Scottish *Journal of Political Economy,* Vol. 51, N0. 2, May 2004.,

[9] Tuijnman, Albert and Boudard, Emmanual "International Adult Literacy Survey: Adult Education Participation in North America" *Institute of International Education, Stockholm, University*, March 2001.

[10] Ibid. p.29

> There is no evidence to suggest that the degree of inequality has lessened over the years.[11]

As such, emphasis continues to be placed on the significance of post-secondary training as a means of improving literacy skills and helping Canadians succeed in the knowledge economy, while ignoring other options. This comes at the expense of properly identifying and targeting policy towards certain groups within society who would likely benefit more and have a chance at also succeeding in the knowledge economy. Continually emphasizing PSE and implementing a rather broad education and literacy skills development policy will leave behind a significant proportion of the working age population who typically do not benefit from PSE training. This will have a serious negative impact, as this group may become a burden on the Canadian economy as consequence of poor literacy skills. Those who are left behind are the ones most in need of support to help improve their literacy skills and consequently economic well being in a rapidly changing labour market. Figure 1 in Appendix D illustrates the gap between those with a university degree and those with just some secondary training (or less) when it comes to pursuing further education.

II a. Broad Initiatives:

Currently, there is a movement in government policy towards making fundamental changes to public attitudes regarding education and literacy training. However, the rhetoric remains broad such that little thought is given to implementing micro-polices that would help a significant proportion of the population improve their literacy skills and subsequently their earning potential. We hear things like "promoting cultures of life-long learning and life wide learning"[12]. Within this framework of promoting the culture of life-long learning are more practical policies of promoting early childhood learning, improving the quality of education, reducing the inequalities in the outcomes of schooling, promoting access to adult education, promoting literacy-rich environments at

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[11] Learning a Living: A Report on Adult Education and Training in Canada, Statistics Canada and Human Resources Development Canada, Catalogue no. 81-586-XIE, May 2001.

[12] Tuijnman, Albert and Boudard, Emmanual "International Adult Literacy Survey: Adult Education Participation in North America" *Institute of International Education, Stockholm, University*, March 2001.

home, at work, and in the community, and to promote access to information. However, the question remains whether these measures are sufficient. Such broad policies are certainly necessary, but whether they are sufficient can be questioned.

Perhaps the best way to assess whether or not current policies are effective is to look at the evidence and to see who benefits, who are the intended targets, and whether any group within our society falls between the proverbial "cracks" in the system and gets left behind. If it can be shown, based on evidence, that certain sectors of society do not benefit from the grand policy of the promotion of a culture of lifelong learning, then it is time to look for some alternatives that will also meet the needs of those who will otherwise be 'left behind' in the transition to a knowledge economy.

III. IALS '94: The Survey

III a. Overview

This survey was conducted in the fall of 1994 and established the means by which literacy skills of the adult population could be measured. "The results enable us for the first time to profile the literacy and numeracy of adults in different countries as to make international comparisons of particular subpopulations of interest – for example, adults in the labour force."[13] The results of the study were jointly published by the Organization for Economic Co-operation and Development (OECD) and Statistics Canada. The survey was a seven-country initiative with the aim of creating "comparable literacy profiles across national, linguistic and cultural boundaries. The survey also offers the world's only source of comparative data on participation in adult education and training."[14]

There are several Canadian objectives to the survey. Firstly, adult literacy abilities in Canada, as measured in the IALS can be compared to the 1989 Survey of Literacy Skills Used in Daily Activities (LSUDA). Secondly, the IALS allows development of a literacy profile for Franco-Ontarians, seniors, social assistance recipients, unemployment insurance recipients, and out-of-school youth to profile their skill levels. Thirdly, it provides the data to assess whether or not there is a relationship between literacy skill levels and performance, educational attainment, labour market participation and employment. And finally, Canadian literacy levels can be compared to other countries in the survey.[15]

III b. The Survey

In total, 22 countries have participated in IALS. Initially, however, IALS was a seven-country initiative whereby each participating country would draw a probability sample

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[13] National Center for Education Statistics Adult Literacy in OECD Countries: Technical Report on the First International Adult Literacy Survey, U.S. Department of Education, Office of Education Research and Improvement

[14] About the survey, Statistics Canada No. 89-588-XIE, available from: http://www.statcan.ca/english/freepub/89-588-XIE/about.htm

[15] International Adult Literacy Survey, Statistics Canada, available from: http://www.statcan.ca/english/Dli/Data/Ftp/ials.htm

that would be an accurate representation of its adult "civilian, non-institutionalized population". Table 1, below, lists these countries and the representative sample sizes.

Table 1: Survey coverage, language of survey, and sample yields

Country	Population aged 16 to 65 covered by the survey	Language of survey	Sample Yield
Canada	13,676,612 4,773,648	English French	3,130 1,370
France	36,432,474	French	2,996
Germany	53,826,289	German	2,062
Ireland	2,174,000	English	2,423
Netherlands	10,460,359	Dutch	2,837
Poland	24,475,649	Polish	3,000
Sweden	5,361,942	Swedish	2,645
Switzerland	1,002,275 3,144,912	French German	1,435 1,393
United States	161,121,972	English	3,053

Source: Statistics Canada and Educational Testing Service, International Adult Literacy Survey, 1994

In the case of Canada, the target population consisted of "all household residents aged 16 and over. Excluded from the population were residents of the Yukon and Northwest Territories, residents of institutions, persons living on Indian reserves, and members of the armed forces." These exclusions amounted to 2% of the Canadian population aged 16 and over. The total Canadian population represented was 21,307,893. See Appendix A for descriptive statistics of the survey including actual sample size by selected categories and corresponding weighted values.

IV. IALS '94: What the Evidence Shows

IV a. Are we competitive internationally?

Typically, as a first measure to assess whether or not there are any serious shortcomings in our literacy skill level, an international comparison is a good starting point, especially since 'falling behind' our international competitors is always a concern. Based on the results of the 1994 International Adult Literacy Survey several important observations can be made from Figures 1 and 2 below. First, the following should be noted:

- *Prose literacy* – the knowledge and skills needed to understand and use information from texts including editorials, news stories, poems and fiction.

- To be able to participate in the knowledge economy, it is anticipated that individuals should be able to achieve at least a level 3 on the literacy rating. Achieving above level 3 represents high performance and below level 3 indicates low performance.

Figure 1: Percentage of Adult Population (16-65) at levels 4 & 5 of prose scale

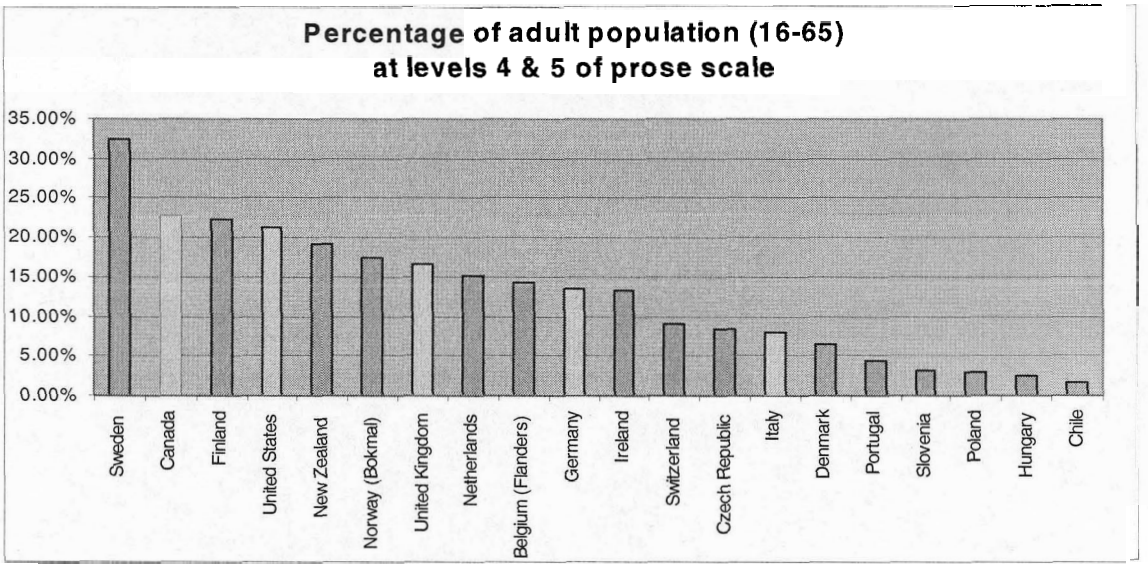


Figure 1 indicates that Canada is second only to Sweden when it comes to having the highest proportion of its adult population in levels 4 and 5, with almost a quarter of adult Canadians achieving a level 4/5 skill level. Furthermore, Canada leads the participating G8 countries (The United States, United Kingdom, Germany, and Italy).

Figure 2: Percentage of Adult Population (16-65) at levels 1 and 2 of prose scale

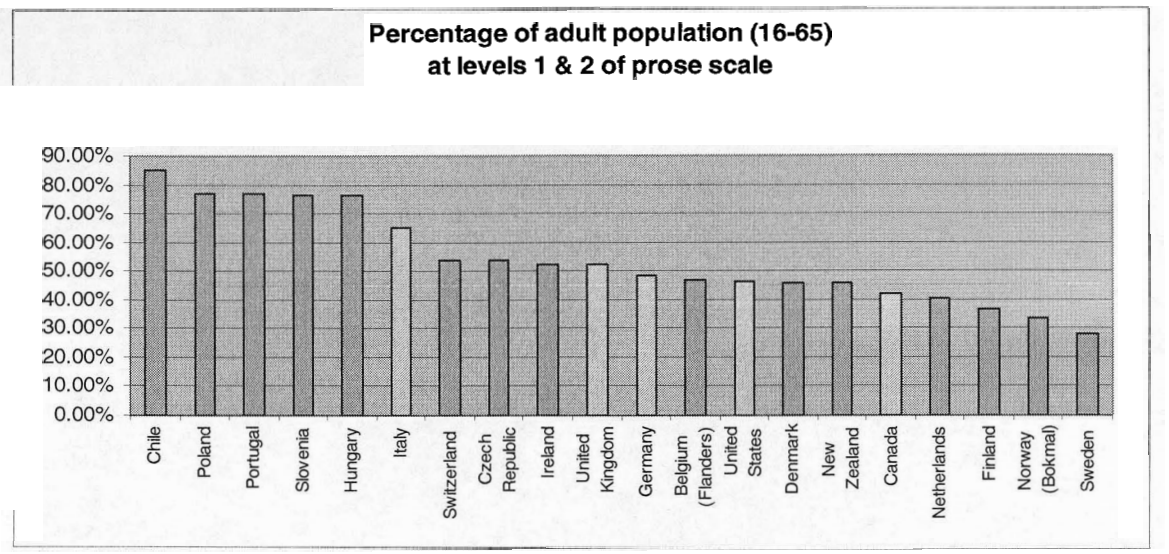


Figure 2 shows the proportion of adult Canadians at levels 1 and 2. Even though relatively high at approximately 40%, Canada occupies the 5th spot behind the Scandinavian, and 1st among participating G8 countries for having the smallest proportion of its adult population at this low skill level.

Therefore, Canada continues to do well when measured against other advanced industrial nations. Canada's relative position in an international comparison of course depends as much on our own policies and the resource we devote to education and adult literacy as it does on the performance of other countries and their policies. However, based on these findings, it is obvious that Canada ranks highly in terms of literacy skill level. Figure 1 in Appendix B illustrates the public and private expenditures on educational institutions per student at the university level by country while figure 2 in the appendix shows the proportion of GDP spent on all levels of education. Both of these tables show that Canada ranks second behind the United States in terms of actual expenditures on educational institutions per student and also as a proportion of GDP spent on all levels of education in 2000. In fact, mean expenditures per student in Canada were almost US $7,500 higher than the average OECD countries' expenditures. This difference will have implications for post secondary education quality and accessibility in Canada.

There is some good news in this snapshot and the broader picture seems to show that internationally Canada is very competitive with other advanced industrialized countries. As per figure 1 in Appendix C, Canada has the highest proportion of college and university educated workforce between the ages of 25 to 64 among the top ten OECD countries.

However, while it may be tempting to look at this international comparison and suggest that maintaining the status quo is the best way forward, the fact of the matter is Canada's relative position to other countries depends on two separate variables. Firstly, what other countries are doing in terms of their education policies and overall investments in education and training, and secondly, what we are doing in terms of allocating resources and seeking alternative policies to continually improve the education and literacy levels of Canadians.

Even though figures 1 and 2 convey a very positive message in terms Canada's overall successes in the realm of literacy skill levels, we certainly should not become complacent and rely on this as reason for not seeking new and more innovative ways of improving the literacy skill levels of Canadians. Further, the international comparisons shown in figures 1 and 2 should also alert policy makers that even though we rank highly, the separation between Canada and other countries is rather slim, such that the slightest improvement in the literacy levels of other countries could easily supplant Canada from its number two spot. Note that Germany, in tenth position for percentage of adult population in levels 4 and 5, is separated from Canada by approximately 10%, with all the other countries somewhere in between separated. What this indicates is the ease with which Canada can slip from its position and could fall from second to tenth unless we are ready to continually seek new and innovative ways to improve our literacy levels.

The same is also true on the other end as shown in figure 2. Canada is separated from Ireland (in 12th position with highest levels of adult population in skill levels 1 and 2) by approximately 10% with a number of other countries falling in between. While we should see the positive as illustrated in both of these figures, the warning against

complacency should be more obvious. Consider Table 2 below, which highlights some of the policies implemented by other advanced industrialized countries as they move forward in improving the literacy levels in their countries. Unless we also find ways of identifying and targeting Canadians who do not have sufficient literacy skills levels, our advantage over other advanced industrial states would soon disappear. Furthermore, our economic competitiveness and productivity would also be adversely affected.

Table 2: Literacy Policies of Other Advanced Industrialized Countries

Australia	Implementing the *Workplace English Language and Literacy Program,* which provides the necessary funding to allow for employer-sponsored workplace-based projects to upgrade the literacy skills of employed adults Implementing the *Language, Literacy and Numeracy Program* which is designed to provide up to 400 hours of training to job seekers. The target groups for this program include immigrants and refugees. Implementing the *Basic IT Enabling Skills Program for Older Workers.* This program is designed to provide those aged 45 and over the opportunity to access a nationally accredited training program in information technology.
New Zealand	Implementation of the *More than Words* (2001-2005), which aims to provide additional opportunities for "remedial and preventative" skills development programs for adults in the labour force.
Sweden	Implementation of the *Adult Education Initiative* (1997 – 2002). This policy involved the creation of additional space for adults in the labour who had not yet completed their secondary school training. It also provided both financial assistance and/or income support so that lack of funds would not be an impediment to additional training.
United States	Implementation of the *Workplace Investment Act, Title II: Adult Education and Family Literacy (1998 – 2003).* This is a program which provides federal funding to states on a conditional basis to fund adult literacy. The program is results oriented such that there is a strict measure of accountability. Implementation of the *Equipped for the Future (1994-present)* program. It is designed to inform adults with what they need to know in order to meet responsibilities their future responsibilities in a civil society as employees, parents, and citizens.
United Kingdom	The implementation of the *Skills for Life* (2001- 2007) program. At an estimated cost of £3.1 billion, this national strategy is designed to improve the basic skills of approximately 1.5 million adults in the UK and equip them the basic literacy skills necessary for the challenges of the knowledge economy.

Literacy and Essential Skills: Diagnostique, November 23, 2004, HRSDC

The following section, which looks at the literacy skill levels of Canadians will highlight even further why adult literacy should be such a high priority for all levels of government in Canada. While we celebrate our *current* good standing internationally, the consequences of complacency in the realm of adult training and education can be quite severe.

IV.b Looking inward

Shifting our attention inward, it is important to develop an understanding of the characteristics of those who are in skill levels 1 and 2. This way, we can better devise policies to meet their needs and to raise their skill levels through targeted policies. Whether these policies are to take into consideration age, sex, ethnicity, and language skills, devising the appropriate set of policies will require a more in-depth analysis of the characteristics of those at the lower skill levels.

Age:

Table 3 shows the age distribution of those in skill levels 1 and 2.

Table 3: Age Distribution in Skill Levels 1 and 2

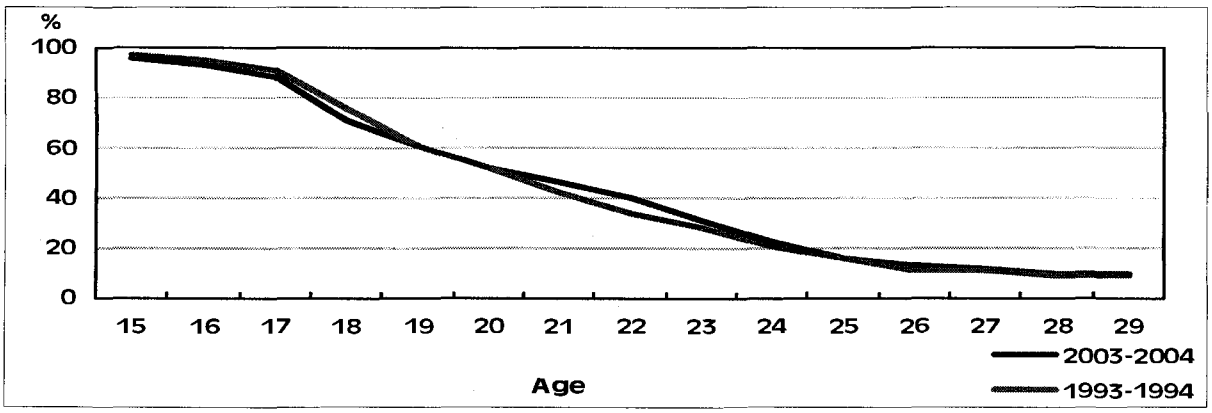
Age (years)	Level 1		Level 2		Levels 1 & 2	
	%	Millions	%	Millions	%	Millions
16-25	8.49	388,973	16.91	929,155	13.08	1,318,128
26-35	13.31	610,121	25.85	1,419,914	20.15	2,030,035
36-45	12.96	593,829	15.10	829,713	14.13	1,423,542
46-55	14.65	671,189	17.89	982,926	16.42	1,654,115
56-65	17.54	803,900	10.29	565,229	13.59	1,369,130
65+	33.05	1,514,209	13.95	766343	22.63	2,280,552
Total	**100**	**4,582,222**	**100**	**5,493,280**	**100**	**10,075,502**

Of all those who are in skill levels 1 and 2:

- 47.36% are in the age range 16 to 45 (prime working age);
- 22.63% are 65 years and over (past retirement);
- 13.59% are 56 to 65 years of age (approaching retirement)

Figure 3, shows the total participation rate in education by age. Several important observations can be made from this figure. First, beyond age 17 there is a rapid and sustained decline in the rate at which Canadians pursue education. Second, despite the recognition of the importance of *life-long learning* and the emphasis that we are placing on the updating of skills, there is hardly any change today compared with a decade ago in the rate at which Canadians beyond age 25 participate in education. We may have expected this rate to be higher in 2003-2004 than it was in 1993-1994. This potentially implies that more needs to be done to encourage a culture of life-long learning such that the rate of participation in Canada for those over the age of 27 is higher than the current and modest 10%.

Figure 3: Total Participation Rate in Education by Age, Canada, 1993-1994 and 2003-2004



* Source: ***Labour Force Survey, Statistics Canada. Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa***

Gender:

Inevitably, there are also differences in skill level by gender. It is important to study and highlight these differences in order to implement appropriate and effective policies. Table 4, shows the distribution by gender and shows whether either gender has an advantage in terms of skill level.

Table 4: Distribution by Gender

Gender	Level 1	Level 2 (%)	Levels 1 & 2 (%)
	Prose	Prose	Prose
Male	52.48	50.0	51.13
Female	47.52	50.0	48.87

While there are more men (52.5%) than women (47.5%) with prose literacy skill level 1, the distribution is the same when we look at skill level 2, with both males and females at 50%. In the following sections, the gender difference is studied further especially in the context of the labour force, where we observe a greater difference between the literacy skill levels of males and females.

Education and Employment Status:

Typically, we would expect a positive correlation between education and literacy skill levels. In other words, we would expect to see a higher literacy skill level for higher levels of education. Table 5 shows the distribution across prose literacy skill levels 1 and 2 by education levels.

Table 5: Distribution by Education

Education Status	Level 1 (%)	Level 2 (%)	Levels 1 & 2 (%)
	Prose	Prose	Prose
Less than High School	76.83	40.74	57.21
High School	17.81	38.35	28.97
Post Secondary	5.36	20.91	13.81

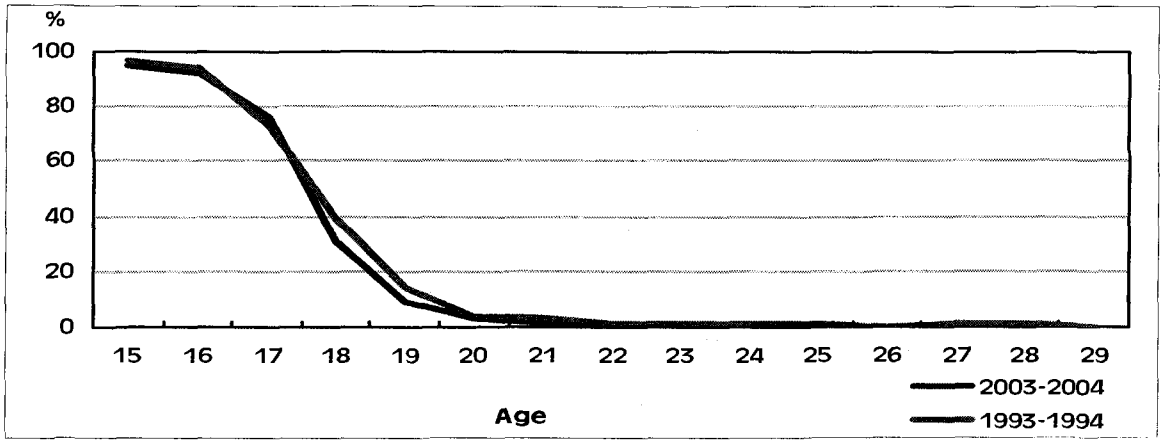
*Note that we have relied on the International Standard Classification of Education (ISCED) to determine educational attainment. Accordingly, ISCED 0, 1, and 2 have been designated below high school, ISCED 3 is high school, and ISCED 4, 5, and 6 have been designated as PSE.

Most surprising is the fact that 5.36% and 20.91% of those with a post-secondary education are at skill levels 1 and 2. In some ways, this is contrary to expectation in that we would expect a higher education to translate into high literacy levels. However, the evidence seems to show that this may not necessarily be the case all the time. Even though this report does not pursue this issue further, the literature suggests 'skills atrophy' as a possible explanation especially in cases where the job does not necessarily

make use of an individual's education (i.e., job mismatching).[16] However, generally speaking, we observe that higher education has an impact on literacy skill level as evidenced by the fact that a greater proportion of those with 'less than high school' are in skill level 1 than skill level 2, and the fact that that approximately 77% of those at prose level 1 have not completed high school.

As per Figure 4 below, it also becomes apparent that the participation rate in high school training or its equivalent declines sharply past age 17 and stands at below 5% after age 21. One might say that this is expected since the typical high school graduation age is 18. However, given that 77% of those at prose level 1 have not completed a high school degree (which would span across all age categories shown in table 5 above), a substantial proportion of the working age population will not only be in the labour force without a high school degree, but worse yet, will not even participate further in acquiring a high school degree either. The figures in Appendix D show the participation rate at the college and university levels.

Figure 4: Participation rate at the Secondary Level, Canada, 1993-1994 and 2003- 2004



*Source: *Labour Force Survey, Statistics Canada. Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa*

Turning the attention to literacy and employment, the question here is whether a disproportionate number of low skilled individuals are unemployed? Again, intuitively

[16] Boothby, Daniel "Literacy Skills, Occupational Assignment and the Returns to Over- and Under-Education" , Human Resources and Skills Development Canada, Catalogue number 89-552-MIE, no. 9, January 2002

we would expect to see a higher proportion of those with low literacy skill levels being unemployed and we would expect this disproportionality to increase even further as the knowledge economy takes hold. Table 6 shows the distribution by employment status.

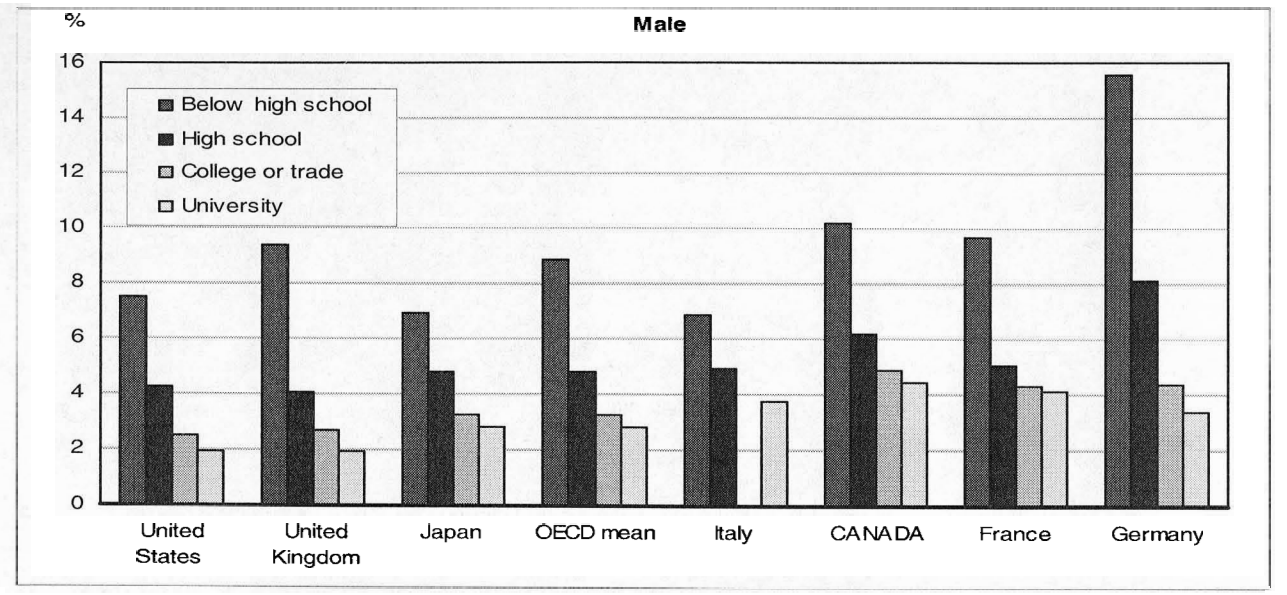
Table 6: Distribution by Employment Status

Employment Status	Level 1 %	Level 2 %	Levels 1 & 2 %
	Prose	Prose	Prose
Employed	29.90	54.21	43.17
Unemployed	10.27	6.10	7.99
Student/Other	10.56	11.02	10.81
Homemaker	13.41	11.64	12.44
Retired	35.87	17.04	25.59

It is apparent that more than 40% of those with low literacy skill levels had managed to secure employment of one kind or another, 8% were unemployed, and the remainder were either students, homemakers, retired, or other. Therefore, some initial concerns regarding whether the low skilled were employable can be put to rest as the unemployment rate for those in the low skill category is relatively low. However, it is worth noting that the percentage of those employed almost doubles when we go from skill level 1 to skill level 2. This is an important indication that the chances of employability increase significantly with an increase in literacy skill levels. It is necessary to caution however, against comparing this figure with the national unemployment rate. This figure shows the proportion of the unemployed to all Canadians regardless of whether or not they are in the labour force.

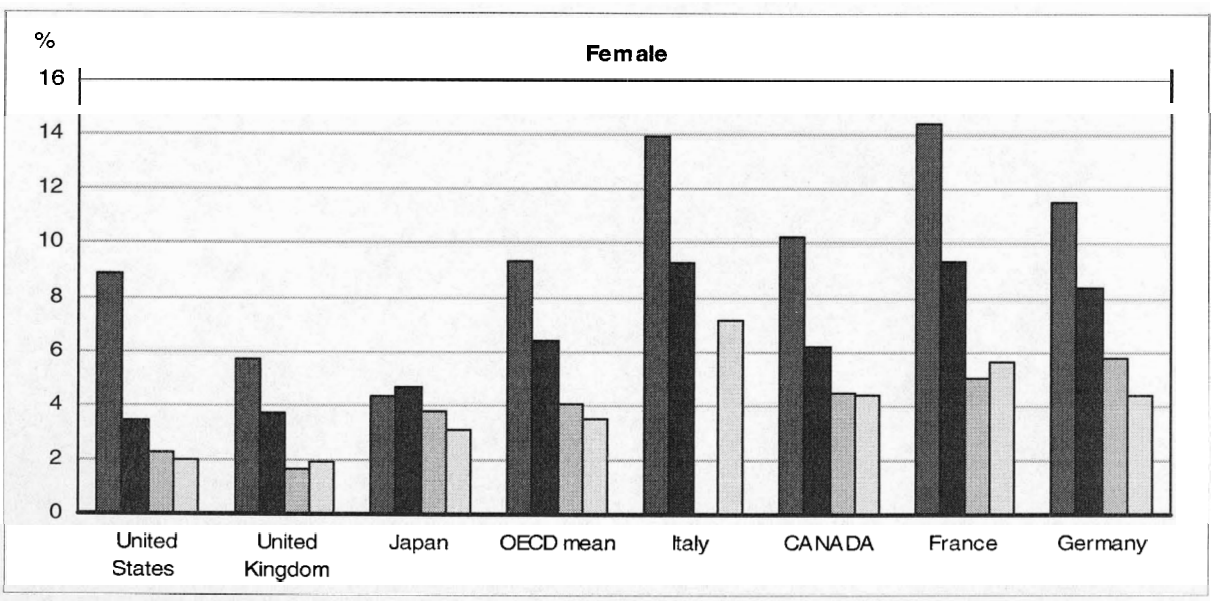
Nonetheless, it is important to be aware of the fact that the likelihood of being unemployed is higher for those with lower skills and lower education levels. Consider figure 5, which clearly illustrates the significant gap in the unemployment rates between those with a university education and those without a high school degree in selected OECD countries.

Figure 5: Unemployment Rates by Level of Educational Attainment and Sex of 25- to 64-year-olds, selected OECD countries, 2001



* Statistics Canada. 2003. "Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program". Catalogue no. 81-582-XIE. Ottawa

Figure 6: Unemployment Rates by Level of Educational Attainment and Sex of 25- to 64-year-olds, Selected OECD Countries, 2001



* Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

Initial Assessment

Based on the results shown above, several observations can be made. We see that:

- Internationally, Canada does quite well in terms of literacy skills compared with other advanced industrial countries;
- Approximately 10 million adult Canadians are considered low skilled and poorly equipped to compete in a knowledge economy;
- More males than females are at literacy levels 1 and 2;
- There is a strong positive correlation between education and literacy skill level despite observations showing even those with a higher education can fall into the low literacy skilled category; and finally
- Higher skill levels increase the chances of employability.

These initial findings are important in that they set a course as to how we should proceed further with our investigation into identifying those groups within our society who need the most help and to better allocate resources to help the low skilled individuals increase their skill level.

The next section explores further the characteristics of those in the low skill categories. The focus will shift to only working-age individuals (i.e. 16-65), because relatively few over the age of 65 will be part of the knowledge economy other than consumers. Among these differentiating characteristics, we also look at ethnicity to determine whether region of origin (and consequently language capabilities) play a role in determining literacy skills. Finally, we will look at income levels. As noted above, approximately 40% of those with low literacy skill levels were employed. The question remains, where (which sectors) were they employed, and whether the low skilled are essentially being ghettoized both in terms of type of employment as well as income? This is especially important given that we expect earning potential to be positively correlated with skill levels. The following section therefore takes a closer look at the characteristics of those on the lower skill levels.

IV.c Restricting to working age

Based on the 1994 IALS, we know that there were approximately 8 million working age Canadians at skill levels 1 and 2. This represented approximately 42% of the total

working age population of Canada. However, in this group a greater proportion were at skill level 2 than skill level 1.

Table 7: Working Age Canadians at Skill Levels 1 and 2

Domain	Level 1		Level 2		Levels 1 & 2
	%	Millions	%	Millions	Millions
PROSE	39.35	3,068,013	60.64	4,726,937	7,794,950

As shown earlier for the entire adult population, again we observe a greater proportion of men in skill levels 1 and 2 than women. In fact, by restricting to working population only, the difference becomes even more noticeable especially for level 1 literacy.

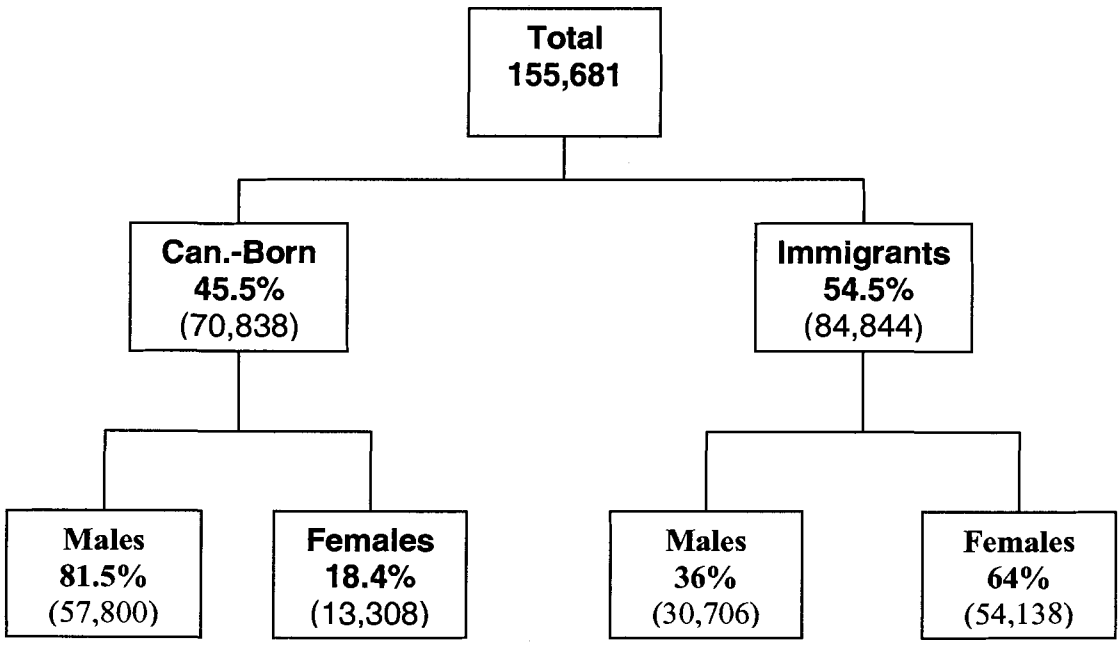
Table 8: Working Age Canadians by Gender

Gender	Level 1%	Level 2%	Level 1 & 2
	Prose	Prose	Prose
Male	56.0	51.0	53.0
Female	44.0	49.0	47.0

Just how poorly do the worst performers score?

Even though the 1994 IALS assigns "levels" of performance, within each level there is significant variation. For example, it should be noted that anyone scoring between 0 and 225 is considered to be at skill level 1 and a score between 225 and 275 is considered to be level 2. Approximately 150,000 Canadians scored less than 75. This represents 5% of all those who are at skill level 1. Of this 150,000 more than half were immigrants and among those immigrants, 64% were females. In other words, approximately 150,000 working age people in Canada were at the absolute bottom of the literacy skill scale, and many of them were female immigrants. Consider chart 1 below:

Chart 1: Working age Canadians scoring less than 75 in IALS 1994



The fact that a larger proportion of immigrants (subsequently female immigrants when we separate by gender) are the lowest performers should be an indictor that second language training would potentially be beneficial in improving literacy skill levels. I will return to this point again when looking at immigrant income levels.

Employment Status by Gender

Several important observations can be made when we look at the employment status of (the) working age by gender. Based on the figures shown in Table 9, we observe that:

- In both skill levels 1 and 2, a greater proportion of males were employed than females;
- At level 2, over 70% of males were employed while only approximately 50% of females were employed;
- The likelihood of being employed increases significantly for both genders with an increase in skill level; and
- It is more likely for females with lower skill levels to be homemakers as evidenced by the significant difference between skill levels 1 and 2;

Table 9, also presents other comparisons regarding employment status by skill levels (separated by gender).

Table 9: Employment status by skill level and gender for the working aged

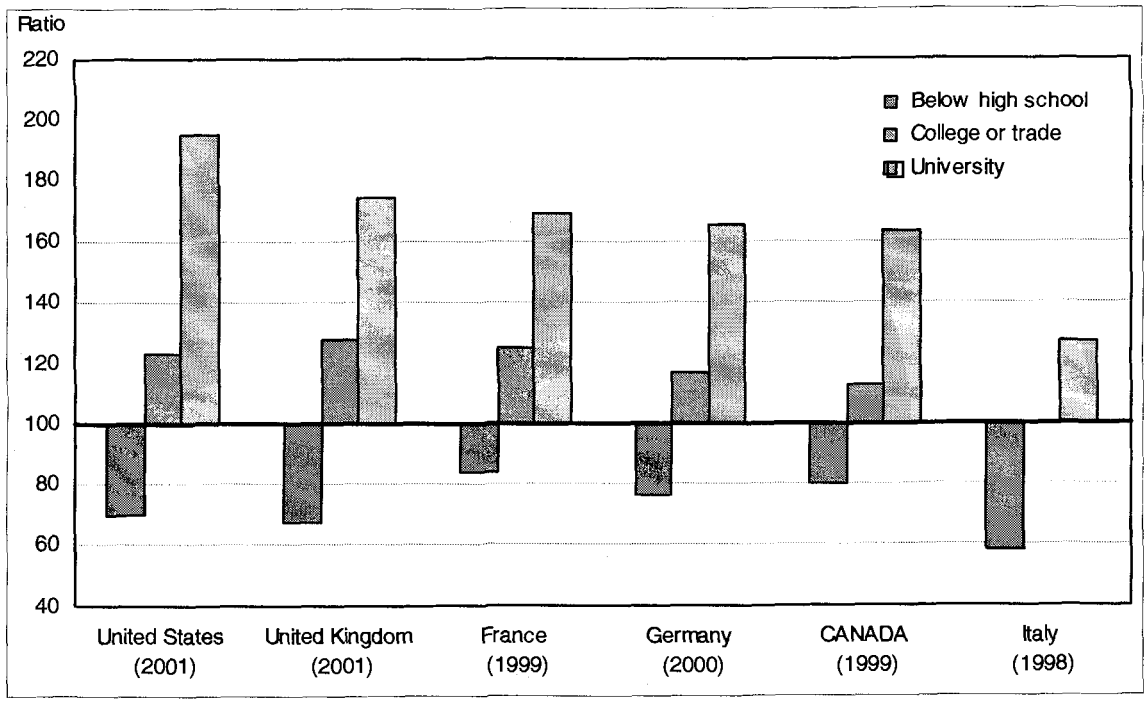
Employment Status	Level 1 (%)	Level 2 (%)	Levels 1 & 2 (%)
	Prose	Prose	Prose
Male			
Employed	51.39	72.42	63.66
Unemployed	21.73	5.32	12.15
Student/Other	18.71	14.84	16.45
Homemaker	0.78	0.48	0.61
Retired	7.40	6.94	7.13
Female			
Employed	34.18	49.46	43.87
Unemployed	7.06	8.95	8.26
Student/Other	11.95	10.43	10.99
Homemaker	39.53	25.62	30.71
Retired	7.28	5.54	6.18
Total			
Employed	43.91	61.23	54.42
Unemployed	15.35	7.09	10.33
Student/Other	15.77	12.69	13.90
Homemaker	17.63	12.74	14.66
Retired	7.35	6.26	6.68

Income Distribution

Perhaps the most important aspect of this study is to assess the income distribution of those with low skill levels. We have already established that a significant proportion of those with low skill levels are in fact employed, even though it is apparent from the results that employability increases with higher skill levels. However, the focus now shifts from mere employability to income levels to assess whether there really is a premium to higher education and literacy. As per the evidence from the IALS "About one-quarter of working age adults performing at Level 1 on the prose scale lived in households with less than $15,000, compared with only about one-tenth of those at

Levels 2 and 3."[17] Figure 7 illustrates the differences observed across a number of OECD countries. The figure shows that across all countries, there is a consistent premium to higher levels of education.[18] However, we also observe some differences in the relative premiums to a higher education in these countries, with the United States showing the highest relative return to a university education while Canada is second to last behind Italy.

Figure 7: Relative Earnings by Level of Educational Attainment for 25- to 64-year-olds (High School Graduation =100)



Countries are ranked in descending order of relative earnings for the population with university education.
Source: Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

[17] See Shalla, Vivian and Schellenberg, Grant "The Values of words: Literacy and Economic Security in Canada" p. 15. The authors suggest "an examination of average household income confirms the strength of the literacy-economic security relationship...the average household income of working-age adults at Level 1 on the prose scale was approximately $28,100—less than half of the average household income of adults at Level 4/5 ($61,200).

[18] In Italy the relative returns to a college education seem to be on par with a high school education, though there are higher returns to a university degree. Whether this is due to inflated earnings for high school graduates or in fact no real returns to a college education will require further investigation.

Numerous reports[19] indicate that there is a direct positive correlation between education (used as a proxy for literacy skill levels) and income levels. The 1994 IALS provides some interesting results in this regard. Note that IALS '94 does not show actual income levels but rather income quintiles. This allows the results to be internationally comparable.

We can observe from the results that overall, approximately 31% of those with low literacy (levels 1 and 2) in fact had reported incomes in the two highest quintiles. Furthermore, the proportion of those in skill level 2 reporting a high income level (37%) is significantly more than those in skill level 1 (27%). Also, when looking at the results by gender, it is apparent that it is more likely for employed males with low literacy skills to report incomes in the upper two quintiles than females.

Table 10: Distribution of Income of Employed by Gender and Literacy Domain

Income	Level 1 (%)	Level 2 (%)	Level 1 & 2 (%)
	Prose	Prose	Prose
Male			
Lowest	13.37	12.50	12.86
Next to lowest	34.06	7.50	18.43
Mid. level	25.89	27.20	26.66
Next to highest	18.96	30.86	25.96
Highest	7.72	21.94	16.09
Female			
Lowest	31.24	30.08	30.46
Next to lowest	40.40	31.14	34.18
Mid. level	18.27	20.54	19.80
Next to highest	8.08	16.94	14.03
Highest	2.02	1.31	1.54
Total			
Lowest	19.79	20.33	20.13
Next to lowest	36.34	18.03	24.93
Mid. Level	23.15	24.23	23.82
Next to highest	15.05	24.66	21.03
Highest	5.67	12.75	10.08

[19] The latest report from Statistics Canada released on October 13, 2005, titled "Study: Earnings of couples with high and low levels of education" shows a widening gap between the income levels of the highly educated compared with those who have lower levels of education.

Note that:

- Whereas approximately 42% of males with low literacy skills reported incomes in the highest quintile, only 15% of females reported such income; and
- While approximately 22% of males in skill level 2 reported incomes in the highest quintile this number was a mere 1% for females.

Therefore, generally, females with lower skill levels are significantly more disadvantaged in terms of income potential than males. This is an issue that I will return to when assessing employment by sector and gender.

IV.d Immigrants

So far a number of interesting observations have been made that clearly identify how we should target policy. Based on IALS '94, it is found that there are more men than women with lower skill levels, that not all those with low skill levels are having difficulties finding jobs, and that not all are economically disadvantaged. We have also found that women with low skills are worse off than men economically and that a significant proportion of women with low skill are not in the labour force and are homemakers.

This section narrows the focus even more by looking at whether ethnicity (i.e. Canadian born vs. foreign born) is a factor in assessing overall literacy skill levels in Canada. The findings will likely have a number of policy implications.

Table 11, below, separates the Canadian labour force by both skill level and birth status.

Table 11: Canadian Labour Force by Skill Level and Birth Status

Prose Level 1		Prose Level 2		Prose Level 3		Prose Level 4/5	
1,812,828		3,229,125		4,906,525		3,221,144	
Canadian born	Immig.	Canadian born	Immig.	Canadian born	Immig.	Canadian born	Immig.
1.09	0.721	2.79	0.441	4.34	0.567	2.42	0.793
60.22%	39.78%	86.32%	13.68%	88.44%	11.56%	75.35%	24.65%

We can make the following observations:

- Approximately 46% of the 2.5 million immigrants in the labour force have low literacy skills;

- Approximately 36% of the 10.6 million Canadian born individuals have low literacy skills;
- There are approximately 3.9 million Canadian born individuals and 1.2 million immigrants with low literacy skill levels;
- Among immigrants, we see a greater number at level 1 than level 2; and
- Among Canadian born, we see a greater number at level 2 than level 1

The last two points are important. What reasons would account for this observation, and why would the same pattern not be seen for both immigrants and the Canadian born?

Table 12: Employed/Unemployed Canadians and Immigrants at Skill level 1

Employed					
	Male		Female		Total
Education	Canadian	Immigrant	Canadian	Immigrant	
Primary or less	267,090	142,565	43,488	119,097	572,240
Some Secondary	159,815	28,333	68,006	29,877	286,032
Total					858,272
Unemployed					
Primary or less	136,553	111,785	18,189	17,105	283,631
Some Secondary	29,212	1,396	28,450	5,833	64,891
Total					348,522

Table 12 shows a possible explanation. Employed immigrant females in level 1 were almost 3 times as likely to have an education at or below primary level and approximately just under one-half as likely to have some secondary education compared with Canadian born females. Of the unemployed, there were fewer men and women in level 1 with some post-secondary education. It becomes necessary then to see how immigrants perform in the labour market by skill and education levels and how they generally compare with the Canadian born.

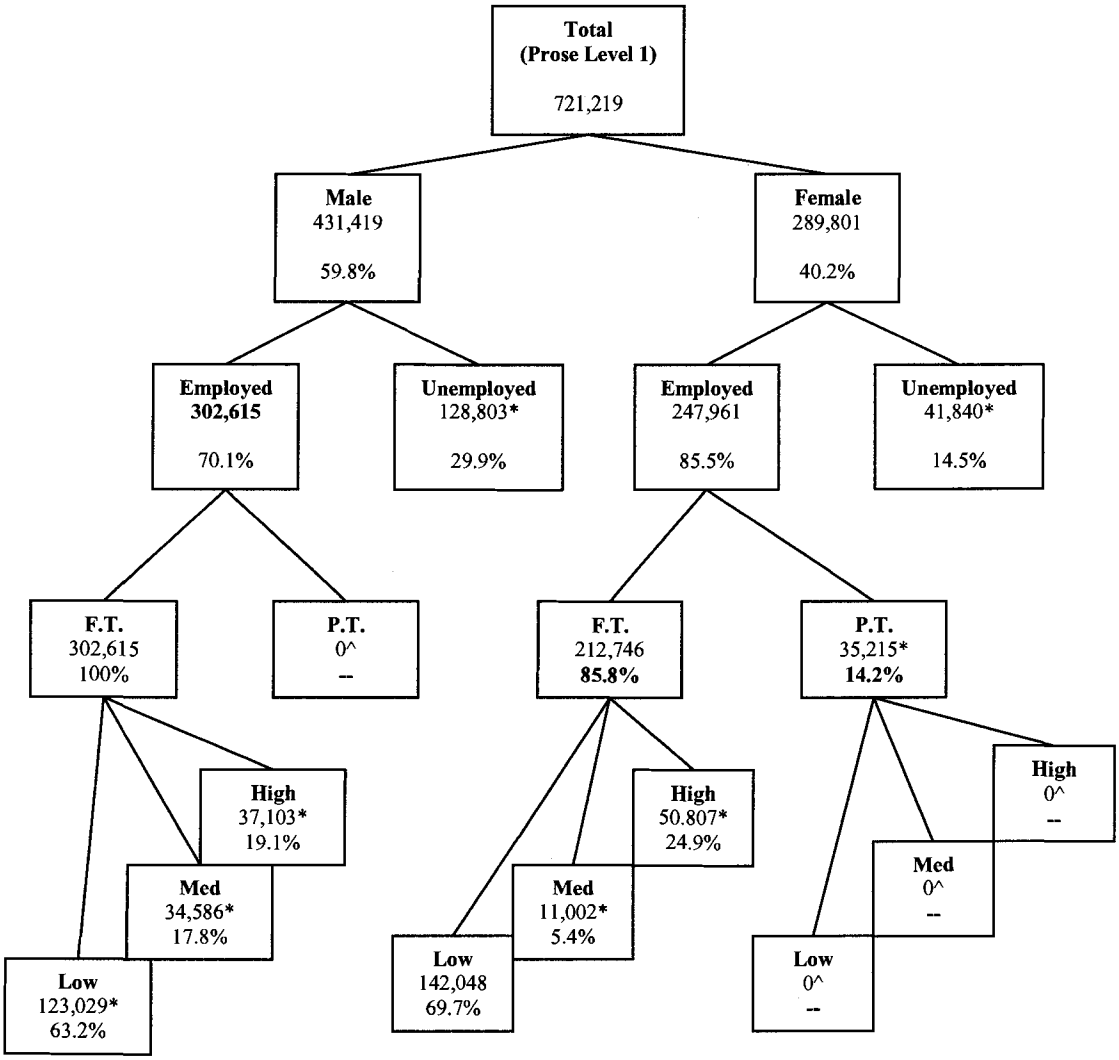
For a more complete assessment of the overall performance of immigrants in the labour market, we have separated by skill level, gender, employment status, and income. By doing the same for the Canadian born, we can then make the necessary comparisons to assess whether there are any significant differences between the two groups in terms of labour market success. This analysis should lend itself towards targeting policy to where it will be most beneficial.

Several important observations can be made regarding the labour market outcomes for those with level 1 literacy skills from Chart 2.

- Approximately 721,000 (40%) of the 1.8 million respondents who were in the labour force were foreign born;
- A large majority of this group (550,000) were employed;
- When separating by gender, females had a higher likelihood of being employed;
- However, males had a higher likelihood of securing full-time employment compared with females;
- In terms of earnings, we observe that a large proportion of the males in full time employment (63%, 123,000) and women in full time employment (69%, 142,000) earned in the lowest two quintiles. These proportions are greater than what we observe for the Canadian born (26% for males and 62% for females).
- Of the 700,000 immigrants at level 1, approximately 265,000 are considered to be 'working poor'.
- This constitutes approximately 2/3 of the total 394,000 working poor we observe for both foreign born (i.e. immigrants) and Canadian born.

See Chart 2, below, for a complete breakdown by gender, employment status and income level.

Chart 2: Distribution by Gender, Employment Status, and Income Level, for Immigrants aged 16 to 65 in Prose Literacy Level 1



Source: IALS 1994

Note that the total of High, Med and Low boxes may not add to the total in the box above due to missing information on earnings. The percentages in these boxes (High, Med, Low) are based on those for whom earnings information was available.

* These figures should be interpreted with caution as there were fewer than 30 observations in the unweighted sample.

^ No observations available.

Labour Market Outcomes of immigrants with Level 2 literacy

Of the 3.2 million respondents at literacy Level 2, approximately 442,000 (14%) were immigrants.

- The majority of the 442,000 immigrants with Level 2 literacy in the labour force were employed (372,000), and about 70,000 were unemployed.

- There is a noticeable and disproportionate difference by gender in the employment numbers. Whereas approximately 97% of males (228,534) were employed, only 68% of the females (142,971) reported being employed.

- Of those who were employed, all the males reported being in full-time employment, however, only 75% of the women were in full time employment.

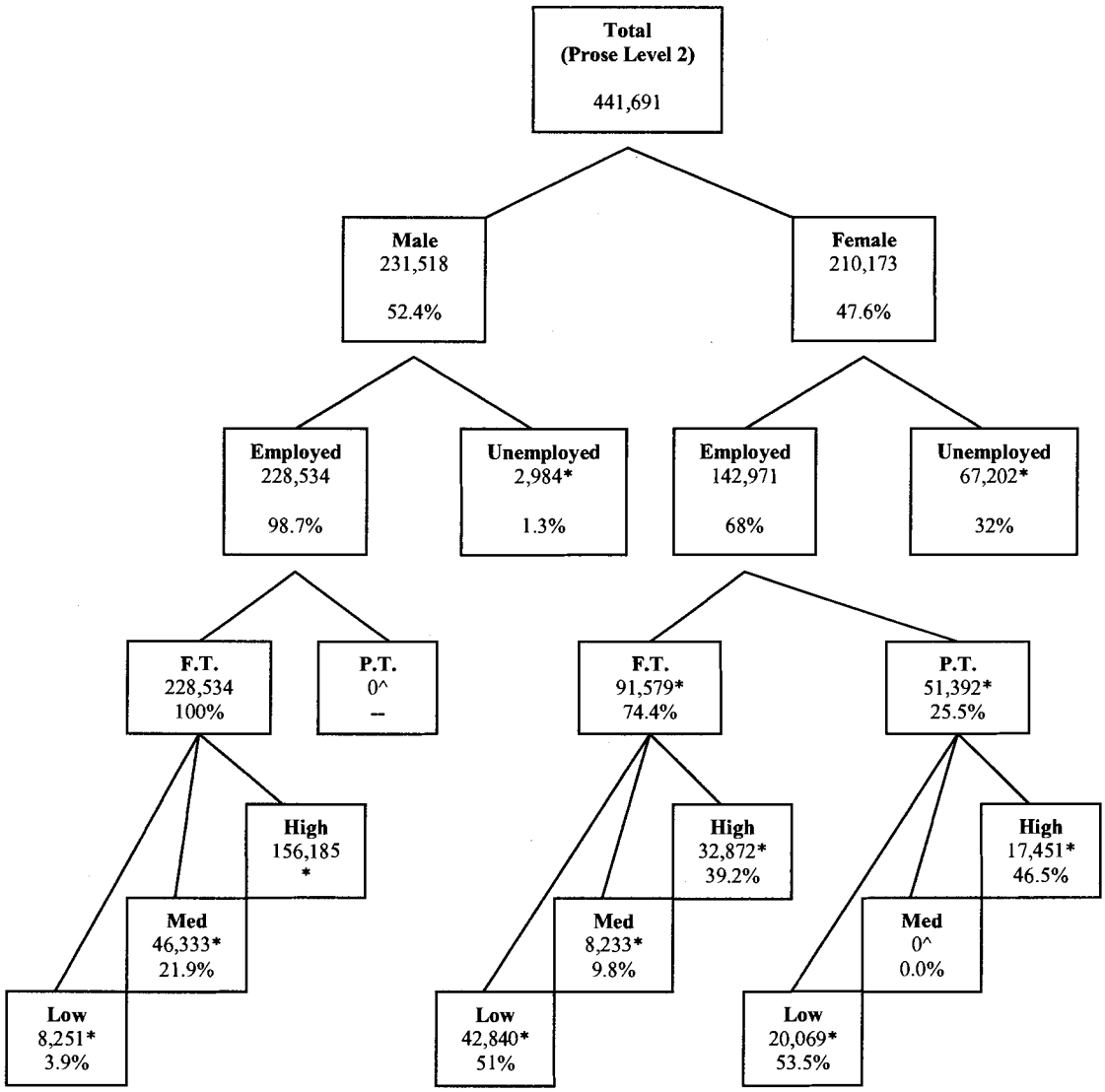
- A much higher percentage of full time employed men in this skill level earned in the top two quintiles (74%, 156,185) compared with those in skill level 1. Among women, half had incomes in the lowest two quintiles (43,000).

- Among the 441,000 immigrants in the labour force with literacy Level 2, 71,160 were the working poor. Add to this the 70,000 unemployed immigrants who are also likely to have low incomes and we are looking at approximately 30% of those immigrants with level 2 literacy skills who are poor. The majority happens to be women.

- A higher proportion of both immigrant men and women working full time earned in the lowest two quintiles compared to the Canadian born. Over twice the proportion of Canadian born males with Level 1 literacy earned in the highest two quintiles compared to immigrant males. Among other reasons, this may very well be attributable to seniority.

Chart 3 provides a complete breakdown by skill level, gender, employment and income status.

Chart 3: Distribution by Gender, Employment Status, and Income Level, for Immigrants aged 16 to 65 in prose Level 2



Source: IALS 1994

Note that the total of High, Med and Low boxes may not add to the total in the box above due to missing information on earnings. The percentages in these boxes (High, Med, Low) are based on those for whom earnings information was available.

* These figures should be interpreted with caution as there were fewer than 30 observations in the unweighted sample.

^ No observations available.

Table 13: Distribution of Labour Market Outcomes by Immigrant Status

	Prose Level 1			Prose Level 2		
	All %	Canadian Born %	Immig. %	All %	Canadian Born %	Immig. %
Male (employed full-time)						
Low Income	26.4	**11.5**	**63.2**	9.7	10.6	3.9
Middle Income	32.8	39.0	17.8	25.4	26.0	21.9
High Income	40.7	**49.5**	**19.1**	64.8	**63.4**	**74.1**
Female (employed full-time)						
Low Income	62.3	**43.0**	**69.7**	44.2	43.4	51.0
Middle Income	9.5	20.0	5.4	21.1	22.5	9.8
High Income	28.3	37.0	24.9	34.7	34.1	39.2

Table 13, highlights the differences we observe in the skill and income level of immigrants (male and female) when compared with the Canadian born. There is a striking difference between immigrants and the Canadian born when looking at males with prose skill level 1. Whereas 11.5% of Canadian born were in the low-income quintile, approximately 63.2% of immigrant males at this skill level were in the low income category. For females, the difference in percentage points is not as pronounced, but, it is still significant at 26.7%.

Interestingly, at skill level 2 the difference at the low-income level is quite small, and in the higher income level we see a reversal such that a higher percentage of immigrants are in the higher income category. For females a high percentage of both immigrants and Canadian born are still in the low-income category. However, we also observe the same switch with males whereby a higher percentage of immigrant females are in the high-income category compared with Canadian born females. One thing to note is that of all respondents, immigrants only make up 14% of those in skill level 2.

IV.e Characteristics of immigrants

It is sufficiently established that at the lower skill levels, immigrants face a significant disadvantage. As such, it is important to examine more closely the characteristics of the immigrant class in terms of age, education, and their occupational characteristics.

Age

A number of interesting observations can be made by further examining these respondents based on their demographic and other characteristics. Table 14 shows the age distribution of immigrants for skill level 1 and by income level. The differences by gender in the age-income distributions are quite noticeable as are the changing age distributions as we move from low to high-income levels.

Table 14: Age Distribution of Full-time Employed Immigrants With Level 1 literacy

Immigrant (employed full-time)	Prose Level 1					
Male	**Low Income**	**%**	**Middle Income**	**%**	**High Income**	**%**
16-25	1,832	1.49	--	--	--	--
26-35	5,289	4.30	13,130	85.95	18,023	48.58
36-45	--	--	2,147	14.05	13,173	35.50
46-55	7,655	6.22	--	--	4,245	11.44
56-65	108,253	87.99	--	--	1,662	4.48
Total	**123,029**	100	**15,277**	100	**37,103**	100
Female	**Low Income**	**%**	**Middle Income**	**%**	**High Income**	**%**
16-25	52,060	36.65	--	--	--	--
26-35	9,715	6.84	6,329	57.53	46,472	91.47
36-45	54,902	38.65	--	--	4,335	8.53
46-55	25,372	17.86	4,673	42.47	--	--
56-65	--	--	--	--	--	--
Total	**142,049**	100	**11,002**	100	**50,807**	**100**

Table 14 shows that the majority of immigrants with low skills who are also in the low income category are in the 56 to 65 age bracket, with only a small fraction in the younger age group. The opposite is true for those in the higher income category where the

majority were young immigrant males. Regardless of income, female immigrants who worked full-time were mostly young.

Education

Looking at the educational attainment of immigrants also provides a number of interesting observations. We typically view education as being positively correlated with literacy skills, which in turn is also viewed as exhibiting a positive correlation with income. Consider the results reported in Table 15.

At Level 1, almost all of the immigrants, regardless of gender, had a high school education or less. Also, as expected, those earning in the lowest income quintiles mostly had 'less than high school' compared with almost all of the immigrants who had reported earnings in the two highest income quintiles who had a completed high school education or better.

Table 15: Educational Attainment of Full-time Employed Immigrants at Level 1 literacy

Immigrants (employed full-time)	Prose Level 1					
Male	**Low Income**	**%**	**Middle Income**	**%**	**High Income**	**%**
Less than high school	116,209	94.46	13,130	42.93	1,662	4.48
High school	6,312	5.13	17,458	57.07	35,441	95.52
PSE	508	0.41	--	--	--	--
Total	**123,029**	**100**	**30,588**	**100**	**37,103**	**100**
Female	**Low Income**	**%**	**Middle Income**	**%**	**High Income**	**%**
Less than high school	115,099	81.03	11,002	100.00	--	--
High school	25,372	17.86	--	--	46,472	91.47
PSE	1,578	1.11	--	--	4,335	8.53
Total	**142,049**	**100**	**11,002**	**70**	**50,807**	**100**

Occupation

Finally, analyzing the occupations where immigrants with low literacy skills find employment will also be helpful in implementing effective policies that could potentially

help individuals trapped in dead-end jobs to move to other sectors and improve their earning potential.

Immigrant males earning in the two lowest income quintiles were mainly concentrated in Construction. This is not entirely unexpected as most individuals with low literacy skill are typically drawn to labour intensive jobs. However, of males who are in the high income category, approximately two-thirds are employed in the Business and Finance Services sector.

As for females, the Manufacturing and Wholesale and Retail Trade sectors dominate. Interestingly for the low skilled/low income group, manufacturing is where most are employed, whereas for the middle and higher income levels there is a shift towards wholesale and retail but we also still do observe a significant proportion in manufacturing.

Table 16 shows the distribution by occupation and income for those at skill level 1.

Table 16: Educational Attainment of Full-time Employed Immigrants at Level 1 literacy

Immigrant (employed full-time)	Prose Level 1					
Male	**Low Income**	%	**Middle Income**	%	**High Income**	%
Agriculture, Hunting, Forestry & Fishing	508	0.41	--	--	--	--
Manufacturing	--	--	30,588	88.44	21,219	57.19
Construction	113,542	92.29	--	--	13,173	35.50
Wholesale and Retail Trade	8,979	7.30	3,998	11.56	--	--
Financing, Insurance, Real Estate and Business Services	--	--	--	--	2711	7.31
Total	**123,029**	100	**34,586**	100	**37,103**	100
Female	**Low Income**	%	**Middle Income**	%	**High Income**	%
Manufacturing	64,616	45.49	--	--	10,268	20.21
Construction	--	--	--	--	--	--
Wholesale and Retail Trade	50,482	35.54	11,002	100	36,204	71.26
Community, Social and Personal Services	26,950	18.97	--	--	4,335	8.53
Total	**142,048**	100	**11,002**	100	**50,807**	**100**

Immigrants with Level 2 Literacy Skills

There is a noticeable difference in the characteristics of immigrants in level 2 literacy compared with those in level 1. In this skill level:

- Immigrants were generally younger for both males and females;
- Very few males were in the lower income levels;
- Most males had completed their high school education;
- A high proportion of female immigrants had post secondary education;
- Two thirds of male immigrants in the high income level were employed in the Finance and Business and related sectors;
- The wholesale and retail sector still employed most of the females in the lower income category, while the community and social work sector employed those in the higher income categories.

IV.f Is assimilation into mainstream society a factor?

We would expect to see literacy skills of immigrants improving with additional time spent in Canada. As per Table 17, we observe that a high proportion of immigrants who arrived at least 13 years prior to the survey in 1994 were at levels 1 and 2. This proportion was even higher for women in skill level 1 who had arrived between 1980 and 1995.

Table 17: Literacy and Years since arrival in Canada of Immigrants with Low Literacy

Gender	Year of immigration	Prose Level			
		Level 1	%	Level 2	%
Male	Prior to 1949	4,513	0.78	914	0.22
	1950 - 1964	149,879	25.84	167,683	40.66
	1965 - 1979	212,225	36.59	65,900	15.98
	1980 - 1995	212,944	36.71	175,467	42.55
	Total	579,997	100	412,376	100
Female	Prior to 1949	6,012	1.00	5,250	1.17
	1950 - 1964	37,778	6.25	63,621	14.15
	1965 - 1979	188,468	31.20	174,917	38.91
	1980 - 1995	371,783	61.55	205,768	45.77
	Total	604,041	100	449,556	100

It is entirely possible that second language training will be helpful in improving the literacy skill levels of immigrants in levels 1 and 2. This, especially since more than 80% of immigrant women and 70% of immigrant men at Level 1 have very good reading skills in the first language spoken as a child. See Table 18.

Table 18: Low literacy and Self Assessment of Reading Skills in the first language spoken as a child

Gender	Reading skills in language first spoken as a child	Prose Level			
		Level 1	%	Level 2	%
Male	Cannot read that language	19,852	3.78	4,853	1.92
	Poor	25,711	4.90	42,359	16.73
	Fair	53,985	10.29	98,923	39.07
	Good	58,008	11.05	24,289	9.59
	Very Good	367,241	69.98	82,800	32.70
	Total	524,797	100	253,224	100
Female	Cannot read that language	10,034	1.73	17,768	5.69
	Poor		0.00	5,758	1.85
	Fair	14,515	2.50	4,116	1.32
	Good	87,462	15.08	8,067	2.59
	Very Good	468,038	80.69	276,319	88.56
	Total	580,049	100	312,028	100

V. Determining Suitable Policy: The Road Ahead

Research shows that a 1% increase in the literacy score of an OECD country relative to the international average can have a 2.5% relative increase in labour productivity and a 1.5% increase in GDP per capital.[20] Therefore, we are faced with the question of how best to realize this increase in literacy scores? Will a policy geared towards increasing the scores of already high scorers or a policy of reducing the number of low scorers be more effective and feasible? Furthermore, should policy implement a ***broad*** approach encompassing the entire population or a ***targeted*** approach designed to help those most in need?

[20] Coulombe, S., J.F. Tremblay and S. Marchand (2004), Literacy Scores, Human Capital and Growth Across Fourteen OECD Countries", Statistics Canada, catalogue no. 89-552-XPE, no.11.

V.a Broad Policy

A broad policy is an attempt at increasing scores at every level. It will attempt to address the needs of the entire population through early childhood development programs, K-12 education, and PSE. These will be long term policies the results and success of which can only be assessed in generational intervals. However, evidence has now been presented in this study that this broad approach to education and literacy development has failed to reach a sizeable proportion of the Canadian labour force. As such, a supplementary and more targeted approach would be required to meet the needs of those who have otherwise not benefited from the broad policy.

V.b Targeted Policy

Given the results of the analysis, a targeted approach directed at those with low scores would require planning for approximately 10.1 million Canadians. However, groups within this population can then be selected based on criteria or filters chosen to identify those who are most in need of additional help to improve their literacy skills.

Inevitably, the implementation of targeted policies will have to serve as a complement to the broader policies and not as a substitute. Given the use of filters to narrow the intended targets does make this feasible as it focuses on a significantly smaller group of people and will require a relatively smaller amount of resources compared with any other alternative that would involve any restructuring to the broad 3-pronged approach. However, it is recognized that total expenditures on education (3-pronged approach and supplemental policies) will increase. The political feasibility of diverting additional funds towards the expansion of educational policies remains to be seen. However, given that education has remained a policy priority for successive Canadian governments, especially in the context of maintaining technological and economic competitiveness globally, allocating funds to education is unlikely to be an issue of political liability. In light of new policies adopted by various foreign governments (outlined in Table 2), as well as Canadian data showing a substantial proportion of the Canadian adult population lacking sufficient literacy skills, there may be greater political costs in not committing

additional funds (possibly from the budget surplus) to address low literacy skills in Canada. Furthermore, if it is determined that the marginal value of additional funds put into targeted policies is higher in terms of increased literacy than it is in the 3-pronged policy (most likely funds in PSE), there may be a case for diverting some funds from the broad approach towards a targeted approach. This route will be contentious and politically difficult to justify especially given rising costs of PSE. However, it is an option to consider especially if there are inefficiencies in the current funding plans.

As per IALS '94, we first managed to narrow the focus from looking at the entire population to those at the lowest skill levels, or about 10.1 million Canadians. We have shown that even this figure can be reduced if we exclude those who are past their working age (i.e., age 65 and over). Therefore, policy can be targeted to those who are in the working age range which means focusing on 8 million Canadians who could potentially benefit from additional skills training. In other words, policy should focus on those who are in skill levels 1 and 2 and are working age.

However, we have also shown that not all of those who are working age are necessarily in the labour force. By eliminating those who are not in the labour force (e.g., students, homemakers, etc...) we are now looking at approximately 5 million respondents who are in the labour force and who are in the lower skill levels. Nonetheless, this is still a substantially large group and the question still remains if this entire group should be the focus of policy or whether it is possible to narrow the target even further to make any alternative policy feasible in terms of available resources.

V.c Using Evidence for Further Targeting

Narrowing the target group further requires some choices to be made about the intended objectives and results of the policy. Two possible criteria can be used to further direct policy.

1. **Need (equity)**[21]
2. **Maximum return on investment (efficiency)**

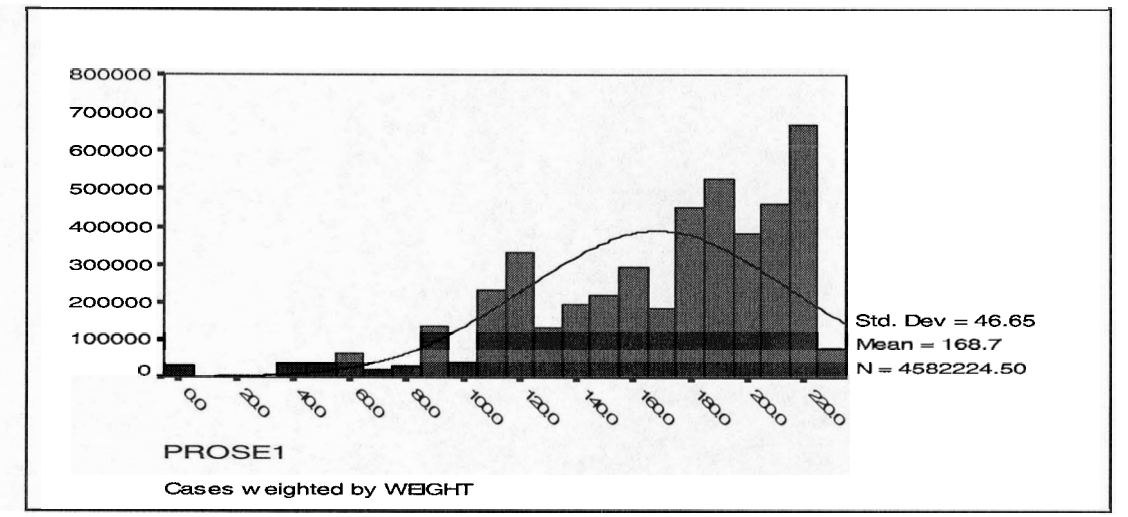
[21] "Need" does not directly refer to financial need, but rather need in terms of literacy skills. However, research does show that those with low literacy skills are typically low earners as well.

These two criteria essentially set the question in the familiar framework of equity versus efficiency, each of which will have its supporters and detractors.

Targeting Based on Need or Efficiency?

In a strictly needs-based assessment (i.e., those with the lowest scores), we observe approximately 200,000 respondents who were more than 2 standard deviations (score of 75 or lower) away from the mean score of 168 at skill level 1.

Figure 8: Distribution of Level 1 Scores in Canada



* Source: IALS '94

However, the question remains whether targeting this group will have any real and tangible results? In other words, what kind of resources would be required to increase the literacy scores of this group and if it is even possible that they can be moved to a higher literacy level or just some higher score, but still within level 1?

In fact, one might suggest that the greatest benefit would come by improving the literacy skills of those in level 2 to a level 3, rather than moving people from level 1 to level 2. After all, as indicated earlier, a level 3 literacy skill level is the minimum skill level required in a knowledge economy. Therefore, targeting just those at level 1 (strictly needs based) would mean potentially ignoring 3.2 million individuals at level 2 who

could potentially be moved to level 3. Therefore, in determining where and how to target policy, we must look for alternatives other than strictly literacy score/skill level.

The analysis here has helped us to identify those not only with the lowest skill levels, but also those *within* the low skill levels that are economically disadvantaged. Of the 1.8 million respondents in level 1 we have identified approximately 864,000 who were economically disadvantaged. There were approximately 703,000 working poor from a total of 3.2 million respondents in level 2. Therefore, by using such filters as literacy level *and* economic status taken together, we have effectively identified the target group. 1.5 million Canadians, from a starting level of approximately 10.1 million Canadians, are not benefiting from the broad policies aimed at increasing education and literacy skills levels and are in need of additional help before they can potentially improve their literacy and subsequently earning levels.

The Challenge

There is little doubt that finding a suitable policy (or policies) will be a challenge. The results of this study have identified the approximate number of Canadians who stand to gain the most from a targeted policy. However even though we have narrowed the intended target, there still cannot be one targeted literacy policy for all those who stand to benefit. Therefore, the diversity and the heterogeneity of those with low literacy, calls for a number of different approaches to help increase the literacy levels of this group.

Several types of literacy assistance that could meet the varying needs of the target group include:

- Remedial training for those with English (or French) as a first language with an education but low literacy;
- Primary services for the Canadian born who did not complete primary and secondary education (this can be extended to immigrants once language training is complete);
- Second language proficiency training for immigrants; and
- Upgrading of post-secondary education to ensure skills atrophy is reversed

This does not imply that these have not been tried in one way or another, however, given the surprisingly high number of Canadians with low literacy skills, there is an indication

that the previous *methods* of service delivery, the accountability, and perhaps the lack of emphasis on results has led to what might be considered a relative failure in terms of meeting the objectives.

The implementation of targeted policies in addition to the continuation of the long term universal policies will not only see the long term objectives of an improving PSE system, but will also see that those who would otherwise not benefit from a post-secondary education have the opportunity to improve literacy skills and to potentially improve their economic status.

V.d Moving Forward:

There are several principles which can guide us in devising and implementing more effective policies to meet our expectations. These include:

- Developing a national vision for literacy standards (the UK approach);
- Continued collaboration and partnership with provinces, territories and other stakeholders (the US approach);
- Pursuing an evidence based approach towards effective policy design and implementation; and
- Clearly defining end objectives and implementing a series of checks and balances to continually reinforce accountability.

These principles can then be used to ensure that the following targets/objectives of increasing adult literacy levels among Canadians can be reached.

These objectives include[22]:

1. Promoting life-long learning;
2. Improving the quality of education;
3. Reducing inequality in the outcomes of schooling;
4. Increasing accessibility to adult education; and
5. Promoting a culture of continued learning at the workplace, in the home, and in the community.

It must immediately become apparent that in order to meet these objectives the universal approach towards education and literacy development should be *complemented* with the targeted approach if we plan to help the most vulnerable and those most in need. These

[22] See Tuijnman, Albert, International Adult Literacy Survey: Benchmarking Adult Literacy in North America: An International Comparative Study.

complementary policies have already been put into place in other advanced industrial countries and unless we also recognize the significance of improving the literacy levels of Canadians, we run the risk of falling behind some of our international competitors. There are a number of stakeholders in this endeavor, who may initially add a level of complication due to jurisdictional issues. However, through a coordinated effort led by the federal government, and the development of a national strategy, the multiple jurisdictions may in fact make these targeted policies more feasible by having tasks delegated to the various stakeholders while still operating under a 'national strategy'. Furthermore, drawing upon the experiences of other countries, we realize that "targeting" is not a unique approach and it is something that has been in practice in other countries. In fact, to meet with success and to ensure that resources are sufficiently available, inevitably, there is a need for a targeted approach. While countries such as the United States, the United Kingdom, Australia, and New Zealand all have various programs that target policy towards helping low skill low income adults, Sweden and Norway have implemented comprehensive programs towards raising literacy levels among their adult populations which could be used to guide the development of a Canadian model.[23]

Sweden: Adults aged 21 to 55 who have not completed there secondary school training are entitled to further schooling. To meet its objectives, Sweden has created an additional 100,000 full-time study spaces for adults at various levels of schooling and has provided additional financial aid to ensure that financial barriers do not prevent adults from seeking additional literacy skills training.

> In Sweden, adults are entitled to education and it is considered an integral part of "folk-building", building up the society. There is no charge for studying and in addition, study grants and loans are available. As well, universal childcare and school lunches simplify the daily life of parents who choose to study. Adults usually did not have to wait to get in to programs and there was no system of volunteer tutoring. In addition, study circles are offered by eleven national voluntary organizations that receive state funding to help support their

[23] Literacy and Essential Skills: Diagnostique, November 23, 2004, HRSDC

programs. Informal learning is encouraged through newspapers and television.[24]

Norway:

> Lifelong learning and educational opportunities for adults are important principles of Norwegian educational policy. The aim is to provide suitable conditions in order to strengthen the competence of the adult population. Updated and new competence is necessary to improve competitiveness and increase flexibility in a changing working life. New competence can give individuals greater freedom of choice and possibilities to realize their wishes and needs.[25]

According to the Norwegian Ministry of Education, Research and Church Affairs, there are five major features to adult policy in Norway and "there are more than 1 million participants in adult education each year. Training takes place in the public educational system, adult education associations, folk high schools, distance education institutions and other private institutions and on the workplace."[26] What is equally important is the attention paid to ensuring that the disadvantaged also have the opportunity to pursue further education and literacy training with the end objective being the ability to pull themselves out of poverty or low-income status. According to the Ministry of Education "Considerable efforts have been made in recent years to improve educational opportunities for disadvantaged groups through adult education. This particularly applies to adults with especially weak schooling, various groups of physically disabled persons, adults with reading and writing difficulties and adult immigrants"[27]. As such, there may be some lessons to be learned from the Norwegian model in developing a Canadian approach to adult education. The five features of the Norwegian model are:[28]

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[24] Adult Literacy in Canada and Sweden: From Policy to Practice, November 2003, available from: http://www.usask.ca/education/alcs/update.htm

[25] Norway Ministry of Education, Research and Church Affairs, Adult Education, available from: http://odin.dep.no/ufd/english/topics/education/adult/bn.html

[26] Norway Ministry of Education, Research and Church Affairs, Adult Education, available from: http://odin.dep.no/ufd/english/topics/education/adult/bn.html

[27] Ibid

[28] See Norway Ministry of Education, Research and Church Affairs, Adult Education, available from: http://odin.dep.no/ufd/english/topics/education/adult/bn.html

Adult education associations:

Adult education associations are run by voluntary organisations, such as the Folkeuniversitetet Adult Education Association and the Workers' Educational Association of Norway, which are primarily concerned with adult education. Courses are offered in a wide variety of subjects, ranging from recreational courses to vocational courses and courses at university and college level. Twenty-two adult education associations receive state support to hold such courses.

700,000 adults participate annually in courses held by adult education associations.

24,000 adults participate in courses at the upper secondary level.

48,000 adults attend courses at university and college level.

Folk high schools
Folk high schools have approximately 7,000 places divided between about 80 schools located throughout Norway. Most of them are boarding schools that are owned and operated by several different types of groups and bodies, ranging from Christian organizations to local councils and independent foundations. Folk high schools provide general courses for young people and adults, but there are no formal examinations.

Distance education
Distance education is widespread in Norway. Traditionally this has consisted of correspondence courses, but a number of multimedia programs are now offered. Each year, over 40,000 students complete courses held by 14 authorized distance education institutions. In the coming years, distance education will play an important part in providing alternative and more flexible facilities to meet the need for continuing education and training.

Training for the labour market
Training for the labour market consists of cooperation between the authorities responsible for the labour market and the education authorities. Courses give vocational qualifications and are provided by a number of different agencies including upper secondary schools, autonomous resource centres attached to the schools, study associations or private companies. In 1999, 22,400 persons took part in such training courses for the labour market. Such courses are financed in full by the State.

Study financing
The State Educational Loan Fund was founded in 1947. The fund provides financial support to students in the form of loans and grants. The support can be obtained by students attending either upper secondary or higher education. The fund enables people to study regardless of their social and economic backgrounds. Such support is also available for studies abroad.

The Stakeholders

While it is important to learn from other countries and assess the policies that they have implemented, it is more important to design and implement policies that are suitable to Canadian needs. As such, we have to identify the stakeholders and assess their role in shaping Canadian policy for improved adult literacy skills. Table 19, identifies a number of stakeholders with direct links to the development of a successful national literacy strategy in Canada. Each of these stakeholders has their own set of motives and can play a unique role in contributing to a national strategy. However, the stakeholders are *not* uniformly in favour or against any one of the potential policy options, but because of different motives, there remains the potential for policy disagreements.

Table 19: Engaging the Stakeholders

Stake-holders	Motives	Role and Resources
Low skilled adults	Potential desire to improve skill levels, given the proper incentives to do so.	Must be willing to undertake further training to improve on current skill sets or to develop new skills more relevant to the labour market.
Prov. and territories	Provinces are key stakeholders as creating and retaining a highly educated and skilled workforce is crucial to the economic competitiveness of the province. This remains a key motivating factor in improving the quality of the labour force.	Recognizing the importance of having an educated and skilled labour force, the provinces are devoting significant resources to 'formal' education.
Employers and unions	Employers and unions benefit directly from a high quality labour force. As such they are significant stakeholders. The desire for a well trained, skilled, and educated labour force will be a strong motivating factor in getting employers and unions more heavily involved in the policy process.	The importance of the role played by employers is highlighted by the fact that many adults indicate the inability to take time off from work as a primary reason for not pursuing further training and the upgrading of skills.
Community	Local communities and NGOs also have a stake. With education and literacy levels being negatively correlated with crime and the participation in illegal activities, communities recognize the positive externalities of encouraging and motivating continued learning at all levels.	Local communities, through NGOs, libraries, and schools can increase their role in the delivery of services and programs especially geared towards adult learners. The infrastructure already exists for the expansion of adult learning programs and especially the encouragement of adults to participate.
Government of Canada	By taking the lead, the federal government can set national standards for the provinces and territories to meet. Despite education being within the realm of provincial control, the government of Canada can establish national standards.	The government of Canada can take the lead role in devising a national strategy towards encouraging adult learning and skills development at home, in the communities, and in the workplace. A national strategy would serve to coordinate policy implementation within the context of a national strategy.
Educational and Training institutions	Private education and training institutions are motivated by their profit margins; public institutions are constrained by their budget and availability of space. Any government effort that competes with business would be met with resistance from the private sector and any efforts to cut or reallocate funds from operating budgets of public institutions will also face resistance.	It would be appropriate to involve these stakeholders to play a more active role and to incorporate them into the national literacy strategy especially given that the infrastructure and organization already exists.

V.e A National Strategy

The implementation of a national program does not necessarily call for a top down approach. Rather, it can be framed more in terms of a partnership with clearly defined roles at each level. However, a national initiative in this regard is important both in terms of ensuring the availability of funding and resources across all regions and provinces, and also in terms of accountability. In fact, what makes a national strategy necessary is because it will provide for:

1- ***A coherent and coordinated effort between the various educational and training systems:*** As of now there is little integration and coordination and therefore there is a rather fragmented system whereby in certain jurisdictions more attention is paid to adult education and skills upgrading compared to others.

2- ***Ensuring accountability and meeting of end objectives:*** There is a lack of a consistent measurement process in the achievement of adult literacy programs across various jurisdictions.

3- ***More cohesive partnerships:*** Currently there is a lack of a national vision and a well-defined national objective. This lack of a unified and nationally agreed upon vision has made it difficult to clearly establish a national policy and to set new "Canadian" markers in the realm of adult education.

Since it is generally agreed that higher education and skill levels lead to a better economic standing in society, looking at this from the perspective of each of the stakeholders, there should be overall support for a national strategy:

Low skilled adult learners who in most instances are stuck in dead-end jobs can expect to see more doors opening to them as a result of improvement in education and literacy skill levels.

Provinces and territories depend on the quality of their labor force as they compete with other regions for economic growth and prosperity. In a cyclical fashion, a highly skilled labour force, coupled with sufficient investments, will drive a more robust economy. At the same time, given the improved labour mobility and the reduced barriers to labour movement, a strong economy determines the direction of human capital flows. As such, even though education and training falls under the jurisdiction of the provinces, a national

strategy aimed at developing a degree of universality across provinces and territories will be in the interest of the provinces, territories, and all of Canada.

Employers and unions perhaps have the most to gain from a skilled labour force before the effects are felt on a provincial and national level. Productivity is directly dependent on the skills and abilities of employees. As such, proper incentives to encourage employers to provide "work-place training" and continuous upgrading of skill levels will benefit employees, employers, and unions. A national strategy can better facilitate this and ensure that it is implemented across the country rather than seeing it adopted in some parts and not in other parts of the country.

Communities also have a lot to gain from encouraging continued learning. Firstly, communities clearly benefit from a healthier and more competitive economy. More importantly, from the community perspective, a highly educated public leads to better social engagement, reduced crime, less poverty, and a greater sense of community through the encouragement of continued learning and skills development.

Government of Canada is in the best position to initiate, coordinate, and aid in the implementation of a national strategy. Again, with education policy falling under the control of the provinces, this national strategy is more a call for a partnership to ensure a degree of universality across the country rather than a direct top down approach originating in Ottawa. Furthermore, the emphasis of this strategy will be outside of the broad education policies, which focus on early childhood development, K-12, and PSE accessibility. These *supplemental* policies will be aimed at helping low skilled and low income adults, whom we have identified. However, by not interfering with the broader three-pronged educations policy, the overlap and conflict in terms of federal-provincial jurisdiction is likely to be reduced.

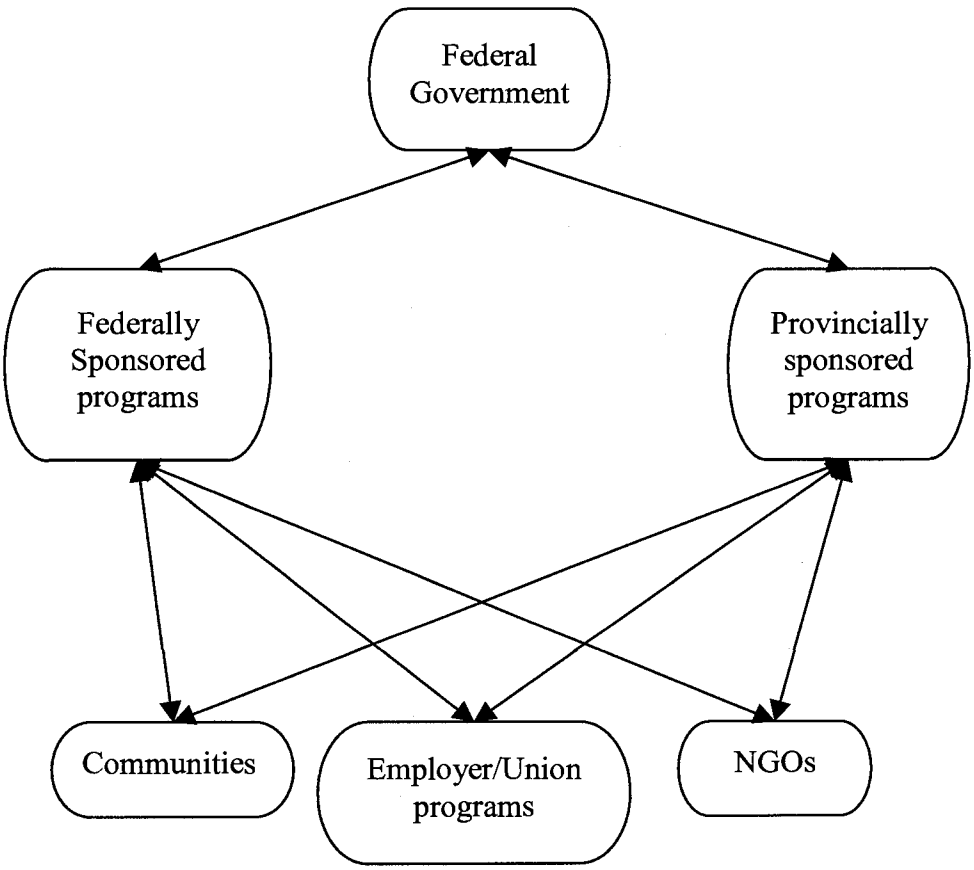
A national strategy essentially acts as a coordinating mechanism whereby funding is made available to federally sponsored programs, provincially sponsored programs, and non-governmental institutions (especially when it comes to language training for immigrants). Accountability will be maintained through provincially and nationally

recognized certification programs, which will also include the recognition of foreign credentials of new immigrants. What the national strategy calls for is:

1- Closer cooperation and partnerships with the provinces and territories in education and training services delivery for adults;
2- Closer cooperation with employers and unions to support and encourage spending and investment in skill upgrading; and
3- Closer cooperation with communities and local governments to encourage life long learning in the communities.

The chart below demonstrates the linkages between the federal government and the other stakeholders. The arrows pointing in a downward direction indicate resource flows, while the upward pointing arrows represent accountability.

Figure 9: Structural Organization



The need for a national strategy is perhaps best highlighted in a government of Ontario document, whereby it is noted that despite valuable lessons learned from other countries, there has not yet been a well defined strategy in Ontario for tackling adult literacy. This may very well be true in other provinces as well.

> Ontario has benefited from the research efforts of other jurisdictions in the United States, Australia, and the United Kingdom. During the past several years, the Ministry of Training, Colleges and Universities (MTCU) LBS Program has supported various literacy research activities but there has been no particular research agenda to guide work in this area. Recently, the LBS Section began to focus its support to adult literacy research. The goal has been to focus research resources on significant themes and questions that will result in improvements in literacy practice. To meet this goal, the development of a literacy research strategy that would establish an agenda for literacy research in Ontario was necessary. (p.5) [29]

Therefore, rather than a fragmented approach where provinces and territories independently seek to address the issue of adult learning and literacy development, a national strategy can help provide a focus and consistency that may otherwise be lost.
In this regard, criteria will have to be set to ensure the viability of the national initiative on adult literacy and to ensure that it meets the end objectives.

V.f Evaluative Criteria for a National Strategy

In devising a successful national strategy, evaluative criteria must be established to ensure that the entire process remains viable. These criteria will include the availability of resources, political feasibility, cost effectiveness, degree of coercion/motivation, timing, and overall assessment. These criteria are discussed in greater detail below. On top of these broad criteria, which essentially determine the feasibility of any policy, there are several evaluative criteria specific to the policies that have been proposed. These will also be discussed in the context of foreseeing challenges and objections to the proposals made here.

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[29] Setting the Agenda: The Ontario Literacy Research Strategy, A strategy for literacy research and development activities, August 2000. Available from:
http://www.edu.gov.on.ca/eng/training/literacy/strategy/strategy.pdf

1. Availability of resources

Naturally, one of the most important issues that is part of any policy discussion is the issue of resources that can be devoted to any new initiative. The issue of resources is not necessarily restricted only to funds but is also determined in terms of infrastructure, personnel, and time. However, funding is still the primary concern and the issue of a national strategy (along with provincial partnerships) inevitably revolves around the issue of tax dollars. One rationale then for having a targeted policy is that it is likely to consume fewer resources than broadly-based policies.

The evidence in this study highlights three important issues.

a- there is a need for a targeted approach aimed at those who are not necessarily benefiting from the current broad education policies;
b- not everyone in the low skill category is economically disadvantaged; and
c- The numbers of the low skilled and economically disadvantaged is sufficiently low.

Therefore, targeted policies will only serve as a supplement to the current policy and by narrowing down the target group, it is likely to achieve its end objective without the need for significant additional funding. As such, even though at this stage in policy development there cannot be a discussion of actual dollar figures, the implementation of a national strategy aimed at low skilled and low income Canadians is likely to cost only a very small fraction of the current allocation to early childhood, K-12, and post secondary education. This does raise some concerns as to where the additional funds will inevitably come from. The evidence has already shown that approximately 10.1 million Canadians lack the literacy skills needed to succeed in the knowledge economy. Furthermore, other advanced industrialized countries are already implementing plans to ensure that they meet the required literacy skill levels of the 21st century. Given the importance that this issue has taken, government may consider reallocating some funds from the budget surplus towards programs designed under the national strategy for improved literacy. Also, given the partnership with the provinces, the costs will not be borne entirely by the federal government. An actual funding formula will have to be worked out in close consultation with the provinces. However, recognizing the political importance of this issue especially given the evidence as contained in this report, the federal government

may take the lead and reallocate funds from the budget surplus towards adult education. This would signal to the provinces the willingness of the federal government to follow through with a national strategy, while at the same time recognizing that the provinces may be hesitant to sign on to a national plan which requires them to potentially make cuts to other programs. The priorities of the provinces are not clear at this point, and this may require a willingness on the part of the federal government to make a greater initial commitment especially when it comes to funding. However, any funding decision is premature until government undertakes a full costing of the policy options.

2. Political feasibility

Another important criterion for the implementation of this national strategy would be the political feasibility of the plan. There is a degree of complexity in implementing a national strategy in the realm of education and training due mainly to the jurisdictional element and the nature of federal/provincial relations and cooperation. However, given that this national strategy is a partnership with considerable powers delegated to the provinces and territories in terms of its implementation, there is likely to be very little resistance to the idea of a national plan, especially since the main purpose is to create a degree of cohesion and unity rather than a fragmented approach. As such and especially given that this is not necessarily a top down approach, there is likely to be little resistance, politically, at either the federal or the provincial level. If programs of this nature are working in the United States, where there are substantially greater levels of control and accountability at the federal level, there is little to suggest that provinces would willingly turn away from a program which grants them significant authority in determining their course of action. Federal – provincial relations are very complicated. However, once the evidence showing the number of low skilled Canadians is presented, the costs of inaction are determined, and the benefits of joining in a national partnership determined, it is less likely that most provinces will turn away. But, the possibility always exists, that one or more provinces may wish to 'go it alone'. This should not pose a significant problem to the overall vision and spirit of a national strategy especially since it is considered more a partnership rather than any sort of a top-down approach. If Quebec (or any other provinces) wants to opt out, there is little than can be done.

However, given the importance of this issue and especially considering Quebec's constant weak performance relative to other provinces in terms of educational attainment, opting out of this program may be politically costly at the local level. The bottom line for the provinces is that there is much to gain from joining this partnership, but it is not forced on any province.

3. Anticipated Program Cost

As a supplemental policy to the broad three-pronged approach, there will be careful scrutiny to ensure that the program is meeting its end objectives. The evidence-based approach that identifies those who are most in need makes a cost effectiveness assessment relatively easier as it allows policymakers to track the progress of the targeted groups and consequently the relative success (or failure) of the programs that are to be implemented and to make corrections where necessary. However, for effectiveness to mean the actual success of the program, only studies conducted in five or ten year intervals to assess the economic status of the low skilled and low income will answer this question. However, given that a results based program in the United States is already underway whereby federal funds are available to the states to improve literacy levels, a blue print already exists from which we may be able to develop a Canadian model suited to our needs. At this stage however, it is unlikely that we would be able to fully assess the costs and the benefits of a national strategy as any attempt would be speculative at best, unless programs that have already been implemented in the United States are sufficiently similar to the national strategy proposed for Canada.

4. Coercion/Motivation

Perhaps one of the more important criteria in terms of assessing the success of this national strategy would be the assessment of how well it has altered and affected the behaviour of the target group. In other words, after identifying those who have the most to gain from additional skills training (i.e., low skilled and low income workers), the issue remains as to whether or not the intended target group will take advantage of the opportunities to upgrade their skill levels. In using this criterion to assess the

effectiveness of the national strategy, a number of important sub-questions will have to be answered:

a- Has information about the availability of the programs been sufficiently disseminated so that those who might benefit are actually aware of their existence?
b- Given that those with low income are most dependent on a paycheck and can least afford to take time off work, are there sufficient opportunities available to allow them to remain at their jobs while seeking to improve their skills (i.e. evening classes, income support programs, fee wavers, etc...)?
c- Whether or not the low skilled and low-income groups are sufficiently informed about the link between higher skills and the potential for higher earnings?
d- Are the low skilled and low-income groups willing to upgrade their skills, even if they were made aware of the increased likelihood of a higher income?

If the answer to any of these questions is no, then adjustments will have to be made. However, the entire issue essentially comes down to ensuring that there are no barriers and impediments preventing those who are willing and able to upgrade their skills, from doing so. This very issue is perhaps one of the bigger challenges that the national strategy will face especially since research shows that a substantial proportion of adults cite lack of funding, time, and resources as reasons why they would not seek any further training.

5. Timing

Even though timing is a crucial component in assessing the relative successes and failures of any given policy, it is important to realize that skills training requires a long time-horizon and that the impact of the policy will not be felt immediately. Therefore, as noted above, assessment of its effectiveness must occur at regular intervals into the future when literacy tests are given.

Overall Assessment

The evidence has shown that a proportion of the Canadian labour force does not have the sufficient literacy skills to remain competitive in the knowledge economy and has fallen into a poverty trap from which they cannot escape unless they improve their skills. Further, based on the evidence, it is also clear that the broad three-pronged approach of early childhood development, K-12, and PSE, does not necessarily capture everyone,

despite its design to do so, and that many Canadians are not able to take advantage. Therefore, the implementation of the supplemental policies is intended to identify those who are most in need, and to provide the opportunity for those who could benefit most from additional skills training to upgrade their skill levels and potentially economic status.

In terms of an overall assessment, the end objective is to ensure that low skilled and low income Canadians are not trapped in a perpetual cycle of poverty where because of the lack of skills they are unable to remove themselves from poverty and similarly, because of low income levels they are unable to seek further skills training.

Even though assessments can be made in terms of delivery of programs and also measures used to inform the target population of their existence, a complete evidence based assessment can only be made through completion of surveys over time. As such, the newest International Adult Literacy Survey, which was completed in 2004, will shed light on the relative successes of the policies that have been implemented in the past 10 years. It is noteworthy that while other surveys such as the Program for International Student Assessment (PISA), conducted every three years, are also available, IALS is perhaps the most robust and most detailed assessment of literacy skills. The results of the 2004 survey will be a clear assessment of the successes and failures of the policies of the past ten years.

V.g Partnerships and programs for a national strategy

Given the evaluative criteria above, there are several target areas for which programs can be developed. Whether these programs are adopted and implemented is essentially subject to how they are ranked using these evaluative criteria. Any program which scores high has a greater chance of success and those which score low are likely to be discarded as viable policy alternatives. Potential programs include:

1. Creation of a national certification program;
2. Creation of national language testing and certification centers;
3. Federally and provincially funded language training centers;

4. Federally and provincially funded skills training centers; and
5. Federal and provincial support for employers to encourage skills training and upgrades.

The justification for each of these programs and the potential issues and concerns that they would have to address is outlined in table 20. Each of these policy alternatives would also have to be weighed against a series of criteria to assess their feasibility. Based on this, the policy alternatives could be ranked so that the ones best meeting the end objectives, while also being practical in terms of the evaluative criteria, are selected.

Table 20: Policy Options, Justification and Outstanding Issues

Policy	Justification	Outstanding Issues
National Certification Program	• Despite higher levels of education and training, immigrants to Canada are having difficulty finding employment in their fields of expertise. • Immigrants' earnings have dropped from 80% to 60% of the Canadian born in the past 15 years despite higher qualifications. • The fact that many foreign students to Canada perform quite well at the masters and PhD levels is an indicator of a high undergraduate training in a number of other countries. • Skilled labour is being lost to underutilization and this is to the detriment of the Canadian economy.	• How to fast track educated and skilled immigrants? • Should certain degrees and certificates such as medical degrees and engineering degrees receive priority? • Should Canadian universities be partnered with well-known universities around the world especially from feeder countries such as India, China, Pakistan, so that credentials are automatically recognized for meeting Canadian requirements?
Language Testing and Certification	• Immigrants to Canada are perceived to be lacking sufficient language skills, which becomes a barrier to finding employment. National language certification will likely be a solution. • Language skills can be tested on a strictly voluntary basis so that immigrants can prove they meet the language skill required for success in the Canadian labour market.	• The logistics of administering such a test would be an issue. • A deadline may not be necessary and immigrants can decide to take this test from time of entry onwards to show they have sufficient language skills for the Canadian labour market • It is important to determine a nationally agreed upon test that would suitably test language skills. This would involve consultation with the provinces and territories.

	• This test would have no bearing on immigration procedures, as it is a voluntary test and separate from a language skills assessment as conducted by the department of immigration and with entirely different objectives.	• Some may point to other tests such as TOEFL as serving this purpose. However, since TOEFL is used to also assess language skills for entrance to university, the design may end up being significantly different from a test designed to assess language skills for the workplace.
Government Funded Language Training Centers	• There is a greater need for language training. • This is not restricted to immigrants, but while other adult education programs are available to native speakers, immigrants are more likely to find language classes useful. • These classes are designed to provide the most basic and rudimentary language training as a first step to 'get people going'. • Too many immigrants live within their own communities and never even seek to learn the English language. This may be understandable for older immigrants, but this phenomenon is also now showing up among younger members as communities become more and more self-sufficient.	• Concerns have been and will continue to be raised regarding the funding of these classes and whether or not taxpayers should pay for this. • With immigrant earnings slipping and more immigrants finding themselves receiving social assistance, taxpayers are *paying* in one way or another. The questions should be framed more in terms where such payments will have the highest return. • Immigration policy may be challenged on many levels, but as long as current policy stands, the unintended consequences should be addressed. • Private businesses may find this policy undermining their business, unless they can be involved and their existing infrastructure put to use as part of this policy.
	• There are certain job skills that are taken for granted and not necessarily taught in a college or university.	• Technological changes have made literacy skills essential to many jobs, which may not have required literacy in the past.

Federally and provincially funded job skills training centers	• Certain soft skills, which may not be known to both immigrants (cultural differences) and non-immigrants alike. • Interpersonal skills, communication skills, work discipline fall into this category, while other more job specific skills such as basic training for computer use, may also be incorporated into these job skills training centers.	• Older workers will require literacy training, which is unlikely to be offered by formal institutions. • Financial and time barriers, along with family obligations may prevent older workers from seeking additional training. • Governments in Scandinavian countries such as Sweden and Norway are already addressing these issues by providing financial support.
Federal and provincial support for employers to encourage skills training and upgrades	• Employers can play a significant role in improving the literacy skill levels of their employees especially in the context of keeping up with changing technology	• Employers would be concerned about internalizing costs • They would be concerned about 'poaching' • Logistics of providing training (i.e. time off work, reduced working hours, etc...)

While each of the policy alternatives noted above address certain shortcomings of the status quo, not all of these can be implemented. The evaluative criteria listed in table 21 assess each of the policy alternatives to determine how they can be ranked in terms of feasibility and practicality. With each policy alternative scoring either 'low', 'medium', or 'high' (high indicating greater likelihood of acceptance) policy-makers can use the overall score of each policy alternative to assess the relative likelihood of success in achieving the stated objectives.

Note that while the availability of funding and resources is one of the most important factors in evaluating a policy option, it is here implied that firstly resources are available for implementing any of these policy alternatives given the decade long budget surplus; and secondly, given the importance of literacy and essential skills to the future of Canada,

policy-makers will recognize the need for allocating resources and will therefore allocate funds to various social programs such that due consideration is given to the issue of adult literacy and essential skills development. As such, it is assumed that funding will be available. Therefore, to avoid redundancy, it will not be included in the table as a separate criterion, but rather, in combination with 'political feasibility', to essentially assess what would be the public reaction to the expenditure of public money in support of any one of these programs. Therefore, political feasibility then becomes a measure of the political decision to either spend the available surplus money on these programs and/or to redirect money from other areas in support of these programs.

Table 21: Summary of program assessment against selected

Program	**Evaluative Criteria**				
	Political feasibility	**Anticipated Program Cost**	**Coercion and/or Motivation**	**Timing**	**Overall assessment**
National certification program	High	High	High	High	Primary component of a national strategy
National language testing and certification centers	Medium	High	Medium	High	Primary component of a national strategy
Fed./Prov. funded language training centers	Low	Medium	Medium	High	Secondary component of a national strategy
Fed./Prov. funded skills training centers	Medium	Medium	Medium	High	Secondary component of a national strategy
Fed./Prov. Support to encourage employers to provide literacy training to workforce	Medium	Medium	Low	High	Tertiary component of a national strategy

Creation of national certification programs for foreign credentials

The evidence shows that immigrants are over represented in the low-skilled and low-income categories. One of the issues that still needs to be resolved is how to adequately recognize foreign credentials and the relevance of foreign training to the needs of the Canadian job market. This is not only useful for filling in the gaps (i.e., 'skills shortage') that Canada may face in the future, but also as a means of helping immigrants find employment in their fields of specialty. Naturally this raises some questions about quality of training, and whether or not foreign training is in fact on par with Canadian credentials. By having in place a national certification program, such that recent arrivals in Canada can have their skills tested in accordance with Canadian standards, and be certified accordingly, Canadian employers will be able to tap into this resource more easily and without worrying about the quality of foreign training. This will benefit both the Canadian economy and also help improve the standard of living of recent immigrants. Two separate reports from the Institute for Research on Public Policy show that there continues to be low returns to foreign credentials and work experience, and also that the unrecognized qualifications, skills, and abilities of immigrants is not only hurting immigrants, but also the Canadian economy.[30, 31]

Creation of a national certification program will allow immigrants to have their previous education and training tested against Canadian requirements and be certified if their credentials meet Canadian standards. This will mean that employers will no longer have to exercise what essentially amounts to ill-informed hiring decisions that inevitably impose a penalty on foreign education and work experiences.

Certification is considered a primary component of a national strategy because it ranks highly for all six criteria.

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[30] Alboim, Naomi; Finnie, Ross; and Meng, Ronald "The Discounting of Immigrants' Skills in Canada", Vol. 11, No. 2, February 2005, ISSN 0711-0677. Available from: www.irpp.org

[31] Reitz, Jeffrey G., "Tapping Immigrants' Skills: New Directions for Canadian Immigration Policy in the Knowledge Economy" Vol. 11, No.2, February 2005, ISSN 0711-0677. Available from www.irpp.org

Political feasibility:

Tying in with the issue of using public funds in support of this program, inaction is likely to be a greater political liability than action to implement a program to recognize foreign credentials. The program will enjoy the backing and support of a growing immigrant population who are finding it more and more difficult to assimilate. This program may initially be unpopular with Canadian graduates, unions, and professional organizations who might be concerned about their members competing for jobs with foreign trained individuals. However, with shortages for example in the medical and nursing fields, or skilled trades, this may not be a significant factor and it is doubtful that job shortages would become the issue. As such, this is unlikely to be a political liability, whereas inaction and the consequent hardships on a growing immigrant population may be more damaging to the Canadian social fabric with negative consequences in the long run.[32]

Anticipated Program Cost:

This program is very cost effective in the sense that while the country of origin has invested in its people, Canada, as the host country can benefit from the skills and training of new arrivals without having to invest significantly in their training. For example, medical doctors can be required to pass a series of exams and to perhaps upgrade their skills before being certified rather than having to go through the entire educational process to become a doctor. This is essentially the brain drain argument that we hear when skilled Canadians move to the United States. The recipient country receives, at little cost, high levels of human capital. The same argument can be applied here. Without a national certification program, Canada is essentially allowing significant investment in human capital (which did not occur at the expense of Canadians) to be underutilized. A national certification program which would recognize the credentials of top foreign schools would allow Canada to take advantage of this 'brain flow' into Canada.

[32] "Ottawa Pressed to Help Immigrants Find Jobs that Match Their Qualifications", Vancouver Sun, April 12, 2005.

Coercion/Motivation:

There is little need for coercion and motivation as new arrivals will see it in their best interest to present their credentials and prove that they meet Canadian standards. This may mean passing a series of exams and/or taking courses to improve their skills. The economic incentives are sufficiently strong such that little will be required in terms of coercion and motivation.

Timing:

Given that the issue of timing is important, this program is likely to be effective in the least amount of time. In other words, highly skilled and educated immigrants are potentially ready to join the labour force (even some preparatory courses are needed). There is no need for a program as extensive as the ESL, and also, results should be observed in a relative short period of time as skilled and educated immigrants find employment in their respective fields.

Overall assessment:

The recognition of foreign credentials should become a key component of a national strategy. This will improve the well being of immigrants to Canada by removing the barrier that prevents many new arrivals from securing employment in their fields of expertise. This barrier to entry also denies the Canadian economy of tapping into the human capital that is coming into Canada at little cost. New arrivals to Canada are typically marginalized as evidenced by the many examples of the doctor, lawyer, and engineer taxi drivers who in the process of not practicing in their areas of expertise inevitably suffer skills atrophy and a waste of human capital.

Creation of national language testing and certification centers

Language skills continue to be an issue of concern, and one where regardless of actual abilities, seem to be an impediment to recent immigrants securing gainful employment. Creation of national language testing and certification centers may be another method of identifying the language skills of immigrants such that potential employers may no longer have to worry about the language skills of otherwise qualified employees. The testing

centers can be located both in Canadian embassies abroad such that tests can be administered prior to entry, and in Canada. The idea behind the implementation of national testing and certification centers is to recognize those who have the language skills and those who do not and then to provide the necessary training required for those who do not have sufficient skills. What is most important about all of this to make sure that recent immigrants are not unduly punished because the employer is not prepared to offer jobs to recent immigrants fearing that language skills are lacking. This is also a primary component of the national strategy and one which can be considered feasible as per the evaluative criteria.

Political feasibility:

While the effects of the program are to 'signal' to employers that a particular job applicant does meet the required language skills to perform in the Canadian job market, it may also be argued that this may make things worse for those who might not successfully complete the program. In other words, for those who fail the test it will be a definite signal that they do not meet the basic language requirements of the Canadian labour market. To be politically feasible, firstly, assurances must be provided that language testing will not be used to prevent immigration to this country, and secondly, for those who are unsuccessful, programs will be available to help improve their language skills.

Anticipated Program Cost:

While there will be costs, using the available infrastructure (for example Canadian consulates and missions abroad and government offices such as HRSDC domestically) will reduce the total costs of implementing this program.

Coercion/Motivation:

Some degree of motivation may be required to ensure participation. Information regarding the purpose of the program has to be made available and the benefits clearly explained. There will likely be some hesitation, for fear of the implications of failing the test. However, given the fact that those who fail then become eligible to enroll in

language training, motivating individuals to participate may not be a terribly difficult task.

Timing:

Implementing a language testing and certification program would help new arrivals to this country to become more easily absorbed into the labour market. By eliminating what is essentially an unfair barrier to entry which has resulted from misperceptions and uncertainty by potential employers regarding the language capabilities of new immigrants, new arrivals may be able to secure employment more easily. A program such as this is long overdue.

Overall assessment:

By implementing language testing and certification centers, the risk factor, which is a big reason as to why employers are hesitant to hire recent immigrants, is reduced. In other words, the certificate essentially signals to the employer that an individual meets the minimum language requirements of the Canadian labour market. However, concerns are likely to be raised regarding the implications of this plan for those who either refuse to participate or simply fail. While there may be some unintended consequences, the fact remains that the Canadian labour market is not very hospitable to new arrivals. As such, there is an underutilization of immigrant skills. A national certification program would likely help to expedite the transition of new arrivals to Canada into the Canadian labour market. Those who might fail (i.e., do not meet the minimum language requirements of the Canadian labour market) have the opportunity for language training. It should be noted that these individuals are unlikely to succeed in the Canadian labour market to begin with and therefore will not be further penalized by failing the language certification test.

Federally and provincially funded language training centers

Given the evidence regarding the economic status of many immigrants, attending private language training centers is simply not an option. Federally and provincially funded language training centers would allow immigrants who need language training to get it

and to receive the certification and recognition for having completed the various levels. These language centers would aim to prepare immigrants with limited language capabilities for the labour market. Also, as in the case of the testing centers where language skills would be tested and certified in accordance with skill levels required to succeed in the labour market, these training centers would then certify their graduates such that employers can easily recognize their competencies.

Critics of language programs aimed at immigrants have in the past called for banning people without sufficient language skills from entering into Canada as a solution. This may be a challenge posed to Canadian immigration laws and is an issue that may or may not be getting much attention in the political arena given its controversial and rather extreme position. Regardless, the fact remains that a significant proportion of immigrants lack the necessary language skills to contribute to the Canadian economy, and the question remains as to what should be done now that they are here? Improving the literacy levels of immigrants is a solution to a problem that seems to be getting worse rather than better as immigrants are falling further and further behind in terms of earnings despite being more educated and skilled compared with their predecessors.[33]

Political feasibility:

There will be some questions regarding the political feasibility of this program. There are currently various private language-training facilities which will likely be financially impacted if government were to provide the same service either free of charge or at a much lower cost. Also, Canadians may object to tax revenues (budget surplus) being used to provide language-training services for new arrivals to Canada while there are other areas that could benefit from additional funding such as health and childcare and education. The fact remains that many immigrants to Canada, and soon to be Canadians, do not have the language skills, and have not been able to acquire the language skills required to succeed in the Canadian labour market. Consequently, they have become

[33] See reports by Alboim, Naomi; Finnie, Ross; and Meng, Ronald "The Discounting of Immigrants' Skills in Canada", Vol. 11, No. 2, February 2005, ISSN 0711-0677, and Reitz, Jeffrey G., "Tapping Immigrants' Skills: New Directions for Canadian Immigration Policy in the Knowledge Economy" Vol. 11, No.2, February 2005, ISSN 0711-0677. Available from www.irpp.org

marginalized in the labour market and 'ghettoized' in terms of their economic status. This is a problem that needs to be addressed and one that requires a bold policy shift.

Anticipated Program Cost:

Language training centers will likely be an added cost to the program. However, since the infrastructure is available, and also through partnerships with public and private institutions, it is possible to still minimize the costs as opposed to initiating an entirely separate program.

Coercion/Motivation:

While it is unlikely that immigrants turn away from using this service, they too may feel the financial constraints and the opportunity costs of participating. As we saw in the European model where provisions have been made to reduce the financial burden of leaving the labour force to participate in continuous learning programs, some consideration may have to be given to this fact when implementing this program. For example, one possible solution is to ensure that the program is offered in the evenings. This way, financial constraints are lessened, as most would be able to keep their jobs during the day while participating in language training sessions in the evenings.

Timing:

With evidence showing immigrants being marginalized in the labour force and economically disadvantaged, despite being more skilled and educated than even before, implementing language-training courses is long overdue. It is a waste of human capital to the Canadian economy, and it is also an unfortunate barrier that continues to keep educated and skilled individuals out of their areas of expertise. Again, this is an issue which certainly should have been dealt with by now and one that is long overdue given the evidence that has been accumulated over the years.

Overall assessment:

In terms of an overall assessment, the degree to which this program can be implemented will depend on government's recognition of current short-comings based on all the

evidence that is available. Implementing this program will require a great deal of political finesse as it will potentially raise calls from various stakeholder groups that the funds dedicated to this program can be better utilized in other areas. Specifically it may be suggested that various private institutions and language training centers are in place for this very purpose.

Federally and provincially funded job skills training centers

The skills training centers are essentially centers designed to help those who are lacking in communication skills, workplace skills, and simpler analytical and problem solving skills. Generally, universities and colleges are not designed to provide informal training in soft skills, but rather, as institutions of higher learning, they are more geared towards formal academic training. Granted, there are a number of vocational schools, which provide courses and training in non-academic areas, but even these institutions may require basic language competencies that could potentially exclude applicants. What is being suggested here could be anything from local libraries providing workshops, to evening sessions at local schools for adults to improve these skills. This does not require a formal institutional setting and the infrastructure is already in place to support these programs. Furthermore, such additional skills' training is not limited to immigrants. This is not to say that such programs do not already exist, however they are likely to be fragmented and most likely offered in certain higher income municipalities. Under a more aggressive program where national standards are developed and applied to these training sessions, several objectives can be better met. Firstly, there can be a degree of uniformity across the various jurisdictions, and secondly, access would not be restricted to higher income municipalities, and finally there will be greater levels of accountability

Political feasibility:

See earlier comments about political feasibility.

Anticipated Program Cost:

As mentioned, in partnership with various public and private institutions, the infrastructure required to provide this program is available. Anticipated costs will of

course depend on levels of enrollment and the number of people looking to take advantage of programs being offered. Cost sharing plans such as user fees can also be introduced.

Coercion/Motivation:

There is a financial restraint on those in the labour force to voluntarily seek further education or job skills training. The greatest disincentive comes from potentially having to give up some time during a work day, which means reduced earnings. Other constraints include family obligations, lack of awareness about the availability of such programs, or simply the lack of desire. These are issues which need to be addressed in order to provide the right incentives. In the European countries which already have some experience in this area, incentives have taken the form of financial support through loans, employer sponsored training programs, and the availability of evening courses. With the right incentives it is likely that a majority of those who might be contemplating expanding their literacy and skill levels would participate in such programs.

Timing:

See earlier comments about timing. Note that this while this criterion ranks highly for all policy alternatives, the other criteria will be the determining factors as to which policy alternative is implemented.

Overall assessment:

The availability of such job training centers where soft skills are taught can potentially be a fundamental component of improving literacy and job skills. While most of the emphasis continues to be placed on formal post-secondary education, the fact of the matter is a large proportion of the Canadian labour force never has and never will place foot in a college or university for a formal education. By continuing to place emphasis on higher education, we ignore a sizeable proportion of the labour force that is in need of skills training. Furthermore, this group (i.e., low skilled, low income) is the one most at risk of suffering the consequences of an evolving labour market which inevitably will place more stringent demands on employees and future job applicants. While there are

hurdles to overcome before implementing such a policy, and while it will require political finesse, this policy should not be overlooked and should in fact form a key component of the overall long run national strategy.

Federal and provincial support for employers to encourage skills training and upgrades

One of the most important components of this national strategy is a plan to give employers the incentives they need to encourage employees to continually upgrade their skill levels. Employers can accomplish this by providing such skills training directly, or to allow employees to seek additional training outside of the work environment to ensure that they are keeping up with the changes in a very complex and demanding economy. Government has a role in creating the necessary incentives for private business to allow and encourage this sort of continued learning. As it stands, employers may be reluctant to provide additional training and labour economics theory provides a number of reasons as to why this may be the case. Employers would not on their volition internalize costs to provide additional training to employees while remaining uncertain of the potential future benefits of a more skilled pool of employees. Poaching is always a concern, as is the potential for employee disloyalty. Either of these would be reason enough for employers not to internalize the additional costs of training while remaining uncertain of the benefits.

By creating the right set of incentives, either through additional contracts, government funding, or tax breaks, it may be possible to devise mechanisms that would reduce the uncertainty and risk that exists in providing additional training. Currently there are certain government programs such as government subsidies for youth employment and co-op employment, which are essentially designed for this very purpose of allowing for on the job training. However, these programs fall short of their intended objectives. For example, to qualify for a co-op program, an individual would have to be in college or university with an above average academic standing. It is likely that those admitted to the co-op program would have better literacy skills. As per the evidence in this paper, there is a need for a more aggressive approach to help those who do not qualify for merit

based assistance programs such as cooperative education. Those who are most in need are simply not benefiting from current programs and more needs to be done to reach them.

Political feasibility:

There are some political dangers in implementing a program like this especially when it involves using public money for programs which may very well be difficult to monitor in terms of overall success and accountability. While creating greater opportunities for on-the-job-training seems like a logical and intuitive step, there are certain political dangers which may make this proposal less palatable to politicians. Any hint of the misuse of public money is politically damaging. As such, and given that government control over this program will be more limited than the other programs, there may be some hesitation in endorsing it.

Anticipated Program Cost:

This program calls for educating employees to ensure that their skill levels match the changing labour market. In other words, for employers to adopt newer technologies and become more efficient while in the process allowing their employees to become educated in the use of the new technologies. However, given the costs associated with providing the necessary training, employers may resist introducing new technologies and in the process cost the Canadian economy. Employers may require additional incentives, as it is unlikely that they would internalize the costs and potentially lose the added investment in their employees if for example they chose to leave the company after they acquire the additional skills.

Coercion/Motivation:

What is most likely to prevent individuals from participating or taking advantage of additional literacy and skills training programs is the economic impact that it will have in the home. Other issues such as family obligations and overall time constraints will also play a role, however, before even considering these, if additional training means reduced work hours and consequently a pay cut, it is likely to fail in persuading people to

participate. Note that we are already trying to target those who are economically disadvantaged and those who essentially live paycheck to pay check. Therefore, the best motivating factor would be to provide the necessary financial assurances. This will be a difficult task as it is unlikely that he employer will willingly internalize the costs, nor will the employee want to internalize the costs regardless of potentially higher returns in the future. Government can play a role, as in the case of other European countries, to lessen the financial burdens on both employer and employee and ensure that sufficient resources are available to assist those who are willing to undergo further training and education.

Timing:

In light of the evidence presented, it is clear that a large number of Canadians, while employed, lack the sufficient literacy and essential skills to succeed as we transition to a 'knowledge economy'. This group is at risk of losing their jobs as the nature of their jobs continue to change. Therefore, it may be argued that any attempt to improve the literacy and skill levels of this group is long overdue.

Overall assessment:

Even though implementing a program for on-the-job-training seems like the next logical approach, there are certain barriers that need to be overcome. First and foremost, while such programs have been implemented in other countries, it may still be seen as a bit of a political liability for two reasons. Firstly, there is the matter of spending public money to aide and assist low skilled individuals improve upon their basic skills while it could be argued that this money should be spent elsewhere including higher education and the universities in order to improve the advanced skills of Canadians. Secondly, there is the issue of accountability. In light of several high profile cases of mismanaging public funds, politicians may be weary of endorsing a program, which requires releasing substantial funds towards the development of an experimental on-the-job literacy and skills training program. Therefore, while this program has been implemented elsewhere, there may be some difficulties in implementing it on a national scale in Canada.

VI. Priorities for a National Strategy

Given the broad scale of this national strategy, it is unlikely that all of what has been proposed will be implemented at the same time. Based on the criteria outlined earlier, we can assess the most feasible short-term policies that can be implemented while remaining mindful of the long-term objective of raising literacy levels among Canadians.

Given that this report advocates a need for a national strategy and the need for the federal government to take a leading role, the first steps would likely come in areas where there is little overlap with provincial spheres of influence, the most obvious being policies that may be linked to immigration. The federal government can play a significant role in this area without initially involving the provinces and other stakeholders. As such, the first steps towards implementing a national strategy can be taken by focusing on immigrants. Finally, while the federal government can take the lead on certifying the credentials and language skills of recent arrivals to Canada, the remaining policies, which call for language skills and on the job training, require direct consultation with the various stakeholders.

VII. Conclusion

This report uses evidence from the 1994 International Adult Literacy Survey to show that there are approximately 10.1 million adult Canadians with insufficient literacy skills to cope with the labour market demands of a complex twenty-first century economy. This report acknowledges the daunting task of devising and implementing policies that would help raise the literacy skill levels of all 10.1 million Canadians. By narrowing the focus to a select group of Canadians who are most in need of government assistance in developing their literacy skills and economic well-being (i.e., those with low literacy skills and low incomes), a set of policy options have been proposed to help the target group of approximately 1.2 million.

Even though other countries have realized the need for action, Canada has been slow in developing a national strategy to assist low skilled and low income Canadians. There

remains a very real danger from inaction as the gap between the highly skilled/literate and those with minimal literacy skills continues to grow. The result of this growing gap in literacy skill will manifest itself on several levels. First and foremost it will result in a growing earnings gap. Second, with a changing and more complex economy where literacy skills are becoming more and more important, a portion of Canada's labour force will remain dormant. Finally, the social problems that arise from low literacy and low income will continue to have a negative impact on Canadian society.

The link between literacy levels and earnings potential has been well documented in the literature. This has also been supported by the data in IALS '94 as we compare those in literacy skill levels 1 and 2, with those in skill levels 4 and 5. As such, there is a real need for a national strategy to address the shortcomings of the current 3-pronge approach to literacy and education. As documented, other countries have recognized this and are devoting considerable resources preparing the labour force of their countries for the complexities of a knowledge economy. While we ranked highly in the 1994 IALS, unless we come up with new and innovative ideas to address the current failures, we run the risk of not only falling behind in terms of international literacy rankings, but also in terms of a less competitive national economy if our labour force becomes weaker in terms of literacy skills.

Note to this report

The latest survey of Adult Literacy and Life Skills (ALLS 2004) has just become available. It is beyond the scope of this project to examine that data in detail. However, preliminary analysis shows that in 10 years, literacy levels have not changed in Canada.

> Despite widespread efforts and millions of dollars, the number of Canadians who cannot meet most everyday reading requirements has not changed in almost 10 years. In 2003, 42 per cent of adult Canadians lacked literacy skills considered necessary to cope in modern society. The percentage was exactly the same in 1994. [34]

[34] The Globe and Mail "Illiteracy rate hasn't budged in decade", Thursday May 12, 2005

In other words, still approximately 42% of adult Canadians lack the literacy skills necessary to succeed in today's economy. This means, while in 1994 it was recognized that approximately 10 million adult Canadians lack basic literacy skills, and while millions of dollars have been spent to improve the literacy levels of Canadians, the policies of the past ten years have been ineffective. This, highlights the need for a more uniform national strategy with more attention being paid to specific target areas as outlined in this report rather than what has amounted to throwing money at the problem.

Appendices

Appendix A: Descriptive Statistics of IALS '94

Table 1: By Age

	Sample size	Weigted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted
Age	Level 1	Level 1	Level 2	Level 2	Level 3	Level 3	Level 4/5	Level 4/5	Total	Total
16-25	112	388,973	353	929,155	538	1,580,026	256	721,450	1,259	3,619,604
26-35	139	610,121	286	1,419,914	379	1,648,719	206	1,299,318	1,010	4,978,072
36-45	160	593,829	264	829,713	370	1,637,064	203	1,391,340	997	4,451,946
46-55	187	671,189	183	982,926	204	1,005,809	84	600,084	658	3,260,008
56-65	232	803,900	197	565,229	114	598,390	33	173,110	576	2,140,629
65+	714	1,514,209	282	766,343	145	528,748	19	48,334	1,160	2,857,634
Total	1,544	4,582,221	1,565	5,493,280	1,750	6,998,756	801	4,233,636	5,660	21,307,893

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	3598200	15	0	
Likelihood Ratio	3614867	15	0	
Linear-by-Linear Association	2275161	1	0	
N of Valid Cases	21307893			

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 425318.6.

Table 2: By Education

	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted
Education	Level 1	Level 1	Level 2	Level 2	Level 3	Level 3	Level 4/5	Level 4/5	Total	Total
Less than High school	1,280	3,495,548	766	2,206,423	421	1,580,972	79	310,858	2,546	7,593,801
High School	175	810,112	482	2,077,458	682	2,702,769	267	1,219,815	1,606	6,817,784
Post Secondary	77	243,906	301	1,132,554	623	2,609,251	440	2,596,434	1,441	6,622,849
Total	1,532	4,549,566	1,549	5,416,435	1,726	6,892,992	786	4,127,107	5,593	21,034,434

Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	6469799.71	6	0	
Likelihood Ratio	6757531.89	6	0	
Linear-by-Linear Association	5807772.14	1	0	
N of Valid Cases	21034434			
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 1314669.				

Table 3: By Gender

	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted	Sample size	Weighted
	Level 1	Level 1	Level 2	Level 2	Level 3	Level 3	Level 4/5	Level 4/5	Total	Total
Male	715	2,404,639	681	2,746,562	729	3,619,592	298	1,612,326	2,423	10,383,119
Female	829	2,177,583	884	2,746,717	1,021	3,379,164	503	2,621,309	3,237	10,924,773
Total	1,544	4,582,222	1,565	5,493,279	1,750	6,998,756	801	4,233,635	5,660	21,307,892

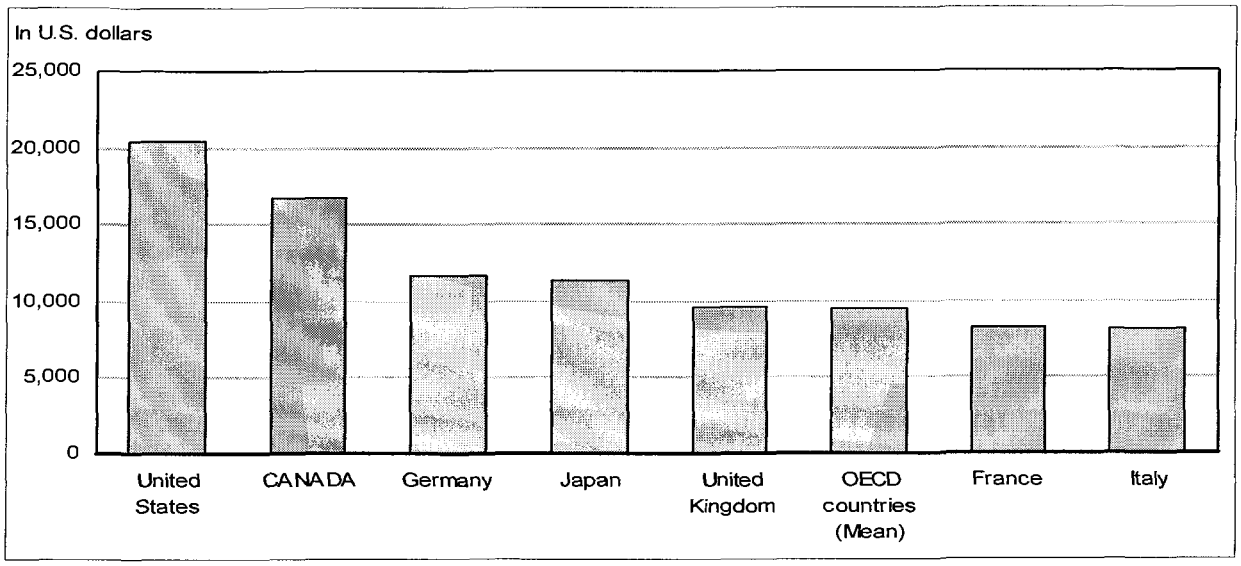
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	246367	3	0	
Likelihood Ratio	248542	3	0	
Linear-by-Linear Association	130146	1	0	
N of Valid Cases	21307892			

0 cells (.0%) have expected count less than 5. The minimum expected count is 2063007.

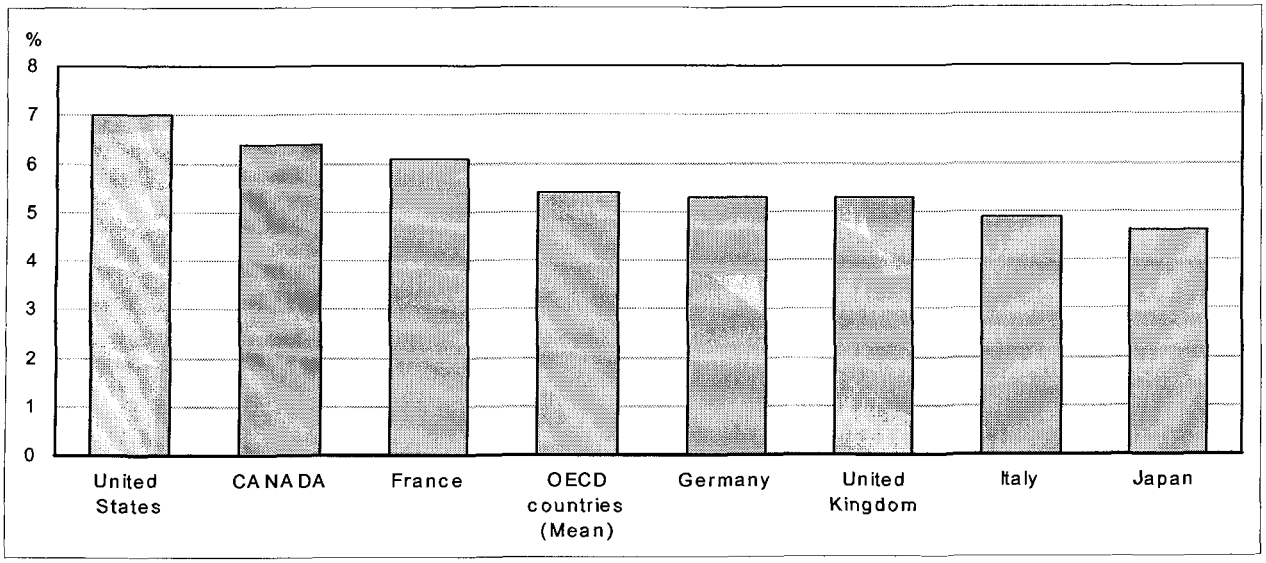
Appendix B: International comparison of expenditure on education

Figure 1: Combined public and private expenditures on educational institutions per student, university level, G-7 countries and OECD mean, 2000 (in U.S. dollars converted using PPPs)



Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

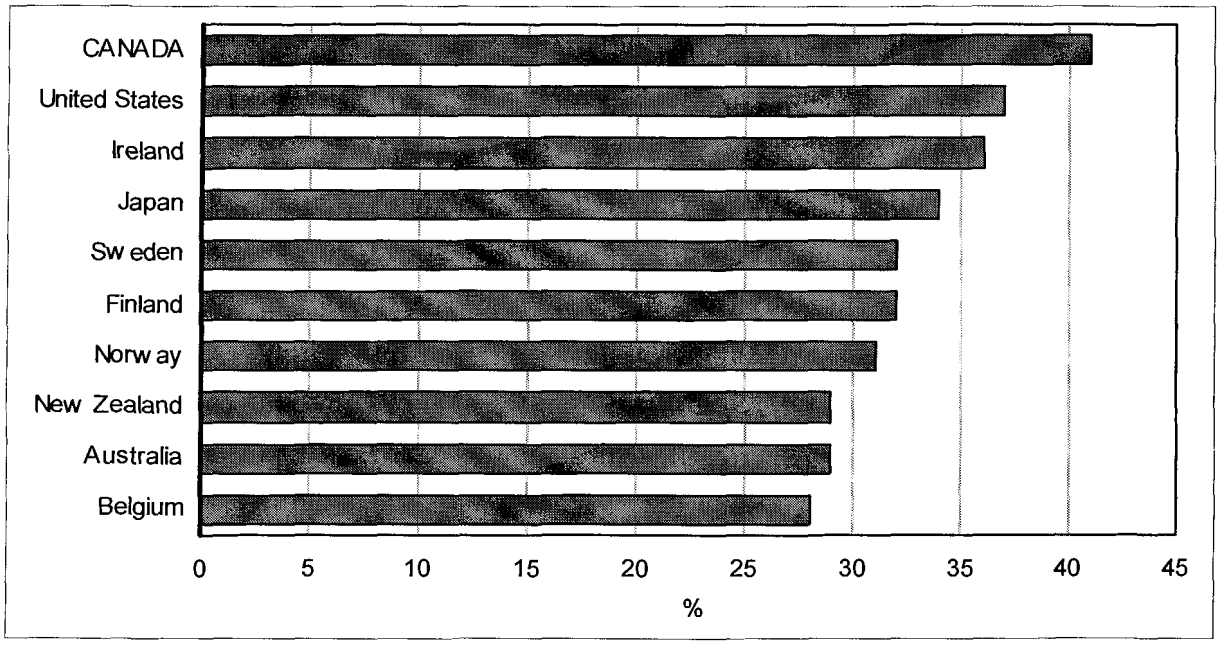
Figure 2: Combined public and private expenditures on educational institutions as a percentage of GDP, all levels of education combined, G-7 countries and OECD mean, 2000



* Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

Appendix C: Comparison of college and university educated work force across countries

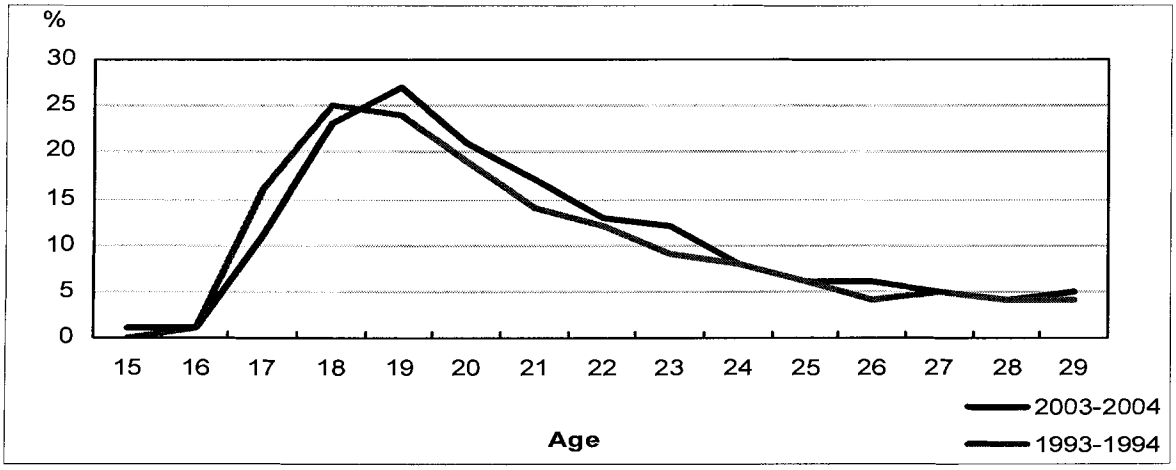
Figure 1: Proportion of the population aged 25 to 64 with college or university qualifications, top ten OECD countries, 2001



Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

Appendix D: Post Secondary participation rate of Canadians

Figure 1: Participation rate at the college level, Canada, 1993-1994 and 2003-2004

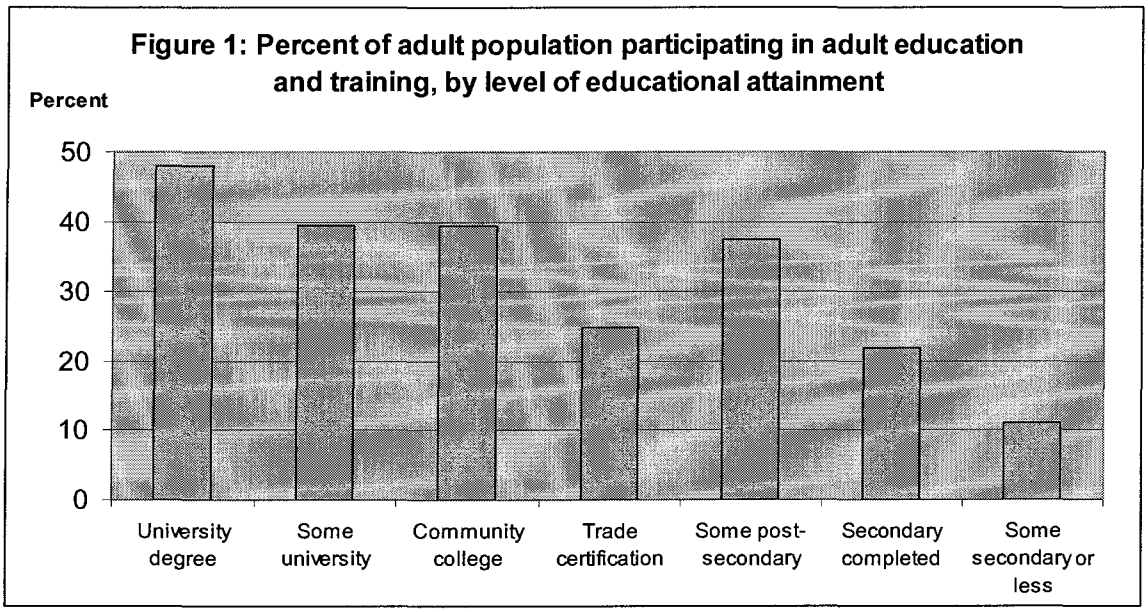


*** Source:** *Labour Force Survey, Statistics Canada. Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa*

Figure 2: Participation rate at the university level, Canada, 1993-1994 and 2003-2004

*** Source:** *Labour Force Survey, Statistics Canada.* Statistics Canada. 2003. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa

Appendix E: Adult education participation rates



Source: *Learning a Living: A Report on Adult Education and Training in Canada,* Statistics Canada and Human Resources Development Canada, Catalogue no. 81-586-XIE, May 2001.

As per the report:

"The odds of participating for a Canadian with a university degree is 7.5 times that of a Canadian who didn't complete high school. The comparable odds are 2.3 for those with a high school diploma and 5.3 for community college graduates...the general 'law of inequality'—which suggests that the higher the educational attainment the more likely a person is to participate in adult education—holds up to scrutiny in all regions of Canada."[35]

[35] Learning a Living: A Report on Adult Education and Training in Canada, Statistics Canada and Human Resources Development Canada, Catalogue no. 81-586-XIE, May 2001.

Appendix F: Income by literacy skill levels

Figure 1: Percentage of working-age adults with personal incomes of $30,000 or more, by sex and level of prose literacy, Canada, 1994

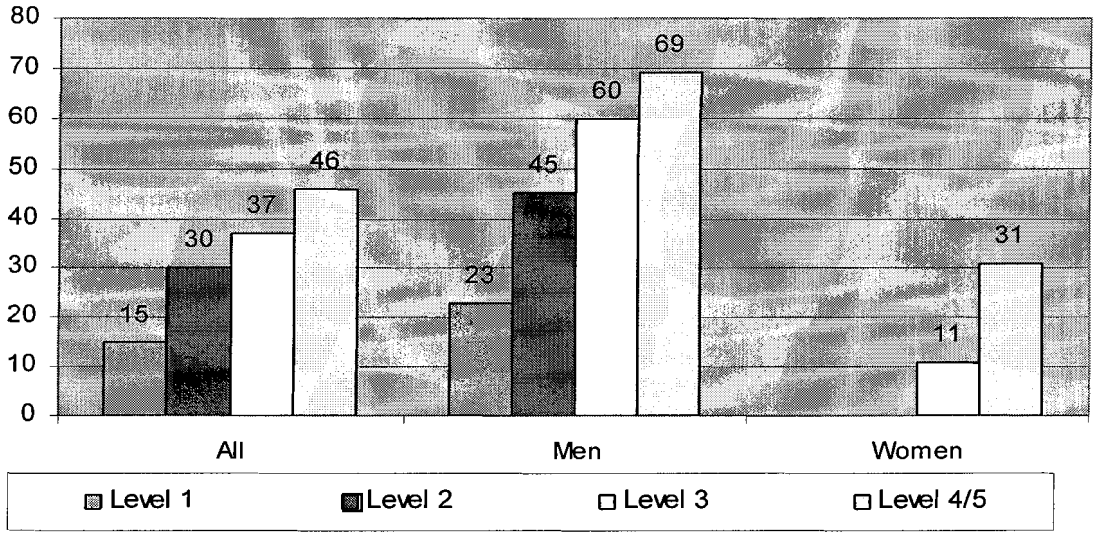
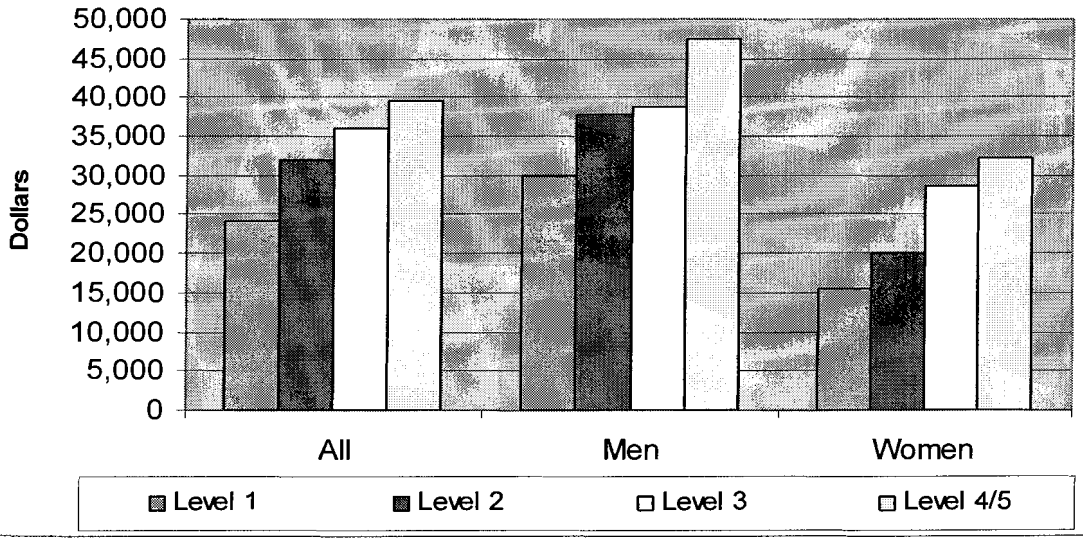
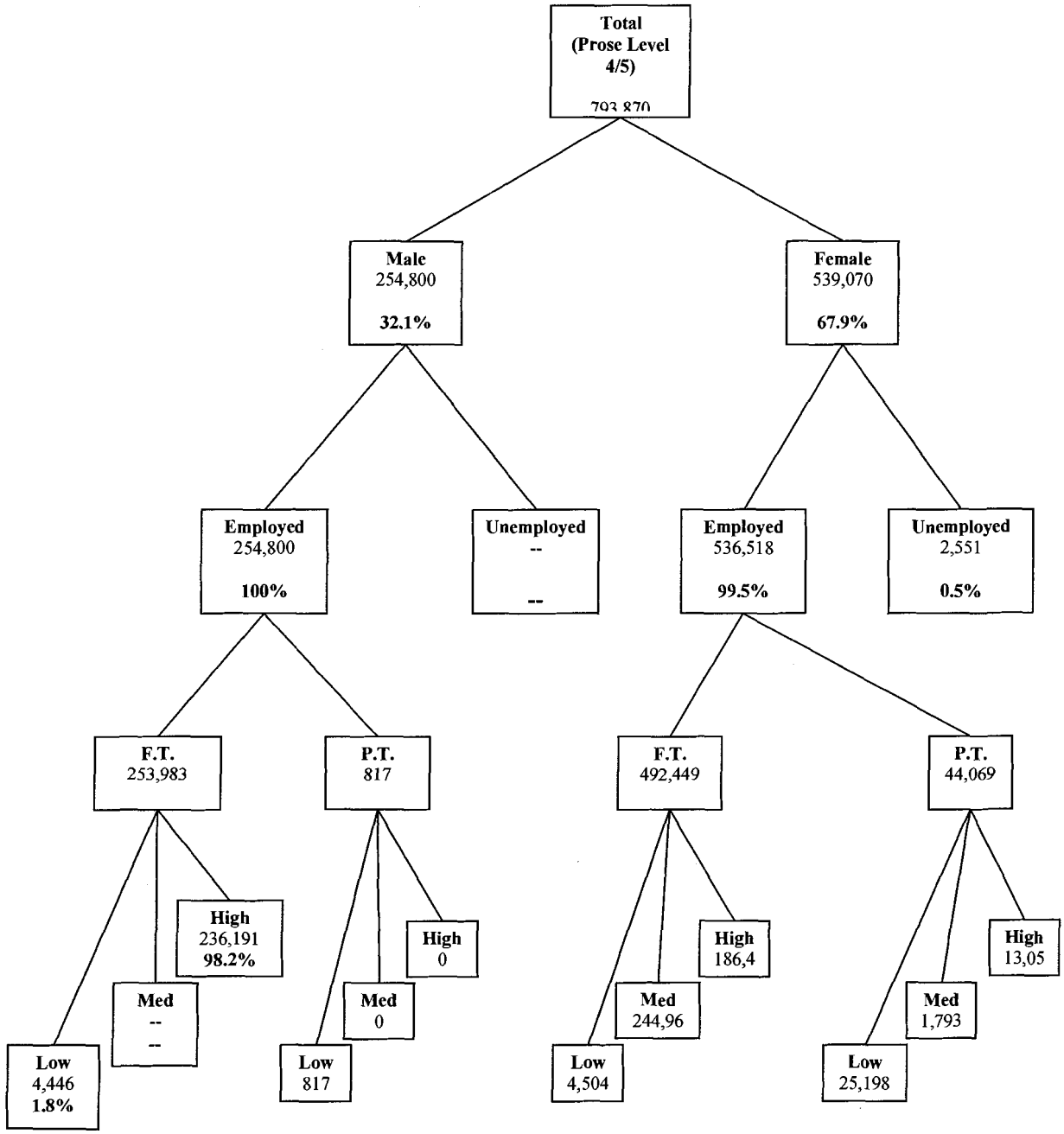


Figure 2: Average earnings of working-age adults, by level of prose literacy and sex, Canada, 1994



Distribution by Gender, Employment Status, and Income Level, for Immigrants aged 16 to 65 in Prose Literacy Levels 4/5



Source: IALS 1994

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Norway Ministry of Education, Research and Church Affairs, Adult Education, available from: http://odin.dep.no/ufd/english/topics/education/adult/bn.html