

INVESTING IN  
UPSKILLING:  
Gains for  
Individuals,  
Employers and  
Government



Summary Quebec



## The Benefits of Investing in Literacy Skills

Canadians share a common interest in finding ways to raise incomes and reduce dependence on income support programs. Canadian Literacy and Learning Network (CLLN) and DataAngel Policy Research Incorporated have produced a report that explores the potential of an investment in adult literacy to simultaneously raise Canadians earnings and reduce government expenditures on Employment Insurance, Workers Compensation and Social Assistance benefits. This summary presents highlights from the main report and key findings for Canada.

### Summary: Purpose of the report

The research literature suggests that a literacy investment would precipitate economic benefits for *three* constituencies.

**Individuals** receiving skill upgrading stand to:

- ▶ Increase their market earnings,
- ▶ Reduce the burden of unemployment and illness on their quality of life,
- ▶ Reduce their need for, and dependence upon, the Employment Insurance, Workers Compensation and Social Assistance systems for income support.

**Employers** stand to gain:

- ▶ Access to a more productive, globally competitive workforce,
- ▶ Access to a larger pool of skilled workers from which to recruit,
- ▶ Fewer days lost to workplace illness or accident,
- ▶ The possibility of reduced premiums for Employment Insurance and Workers Compensation systems and lower taxes to support the Social Assistance system.

**Federal and Provincial/Territorial governments** stand to gain from:

- ▶ A more productive and participatory citizenry,
- ▶ Reduced income support payments,
- ▶ Reductions in premium and program costs to support the Employment Insurance, Workers Compensation and Social Assistance systems.

Overall, increased literacy skills would create a healthier, wealthier, more engaged and more equitable society.

### Summary: Methodology

The analysis is based upon statistically matched data from the 2003 International Adult Literacy and Skills Survey and the 2005 to 2009 Surveys of Labour and Income Dynamics. The analysis examined the costs and savings associated with moving every Canadian with a Level 1 or 2 rank on the international scale of literacy achievement to Level 3. Research suggests that Level 3 proficiency is needed for Canada to compete on global markets. The methods provide a mechanism to explore the relationships between benefit receipt and literacy skill.

### Summary: Highlights of Findings

The analysis establishes several facts:

- ▶ There is a strong relationship between receipt of benefits and literacy skills. A large body of research suggests that these relationships are causal. Determining whether a relationship is causal is important to be able to establish what expected benefits and rates of return associated with a given investment in literacy would be.
- ▶ Assuming “best practice” instruction, a one-time investment of \$8.05 billion over 5 years would be required to raise the skills of all adults in Quebec to Level 3.

- ▶ Applying the relationships between earnings and literacy skills yield estimates of the implied increases in earnings that would be associated with an investment that increased literacy skill.

If that \$8.05 billion investment were made, earnings for Quebec adults' who receive literacy upgrading are estimated to rise by \$21.7 billion, or an average of \$3,478/worker annually.

- ▶ Nationally, for each additional point of literacy increase, Employment Insurance expenditures would be reduced by \$0.61, Social Assistance expenditures by \$3.85 and Workers Compensation expenditures by \$0.90. Assuming the \$8.05 billion investment were made in Quebec, total savings of \$770 million could be realized in Quebec: \$90 million in Employment Insurance, \$130 million on Workers Compensation, and \$550 million on Social Assistance.

The estimates of potential earnings increases and Employment Insurance, Social Assistance and Workers Compensation savings imply significant rates of return on investment even under the most conservative assumptions. The analysis suggests:

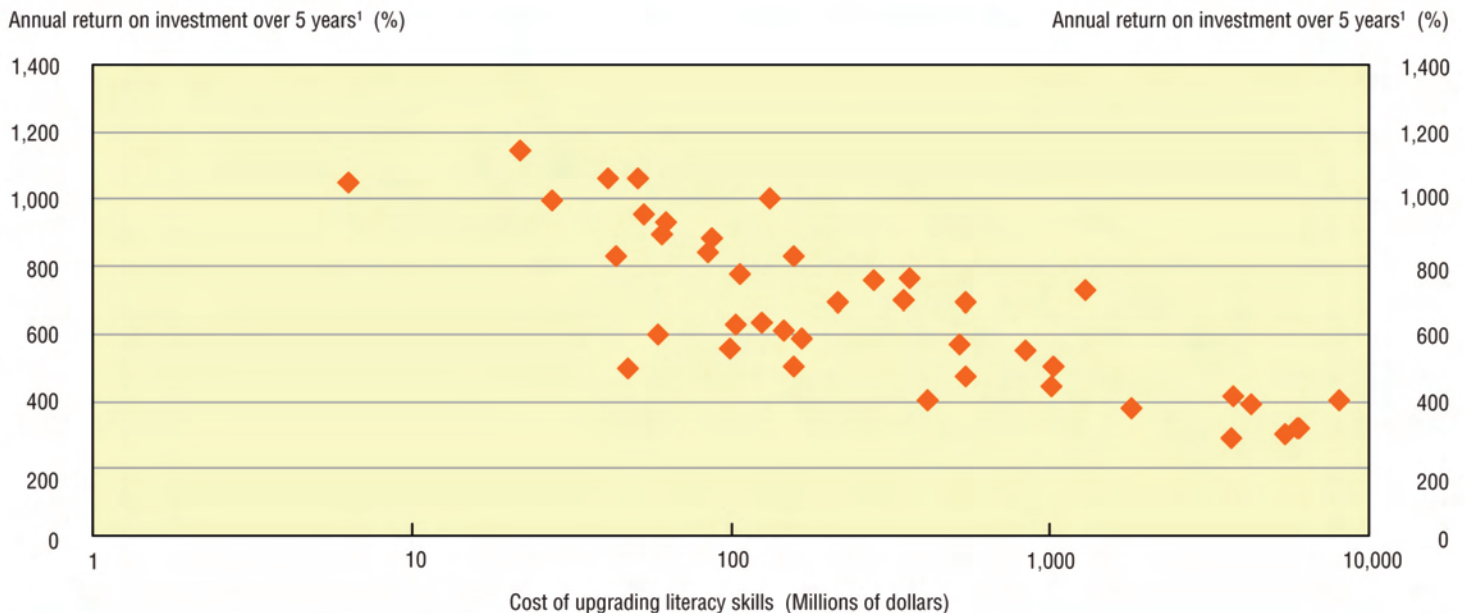
An annual rate of return of 1,327% in Quebec under the assumption that the benefits of higher skills only last for 5 years.

An estimated annual fiscal rate of return of 403% for governments in Canada from additional tax revenue and program saving.

These estimated rates of return exclude the value of reduced health costs and other benefits, including the benefits of having a more equitable society, improvements in the quality of life and the significant increase in GDP and productivity growth rates that would result from increasing the skill levels of all Canadians to a minimum of Level 3.

Figure 1

Annual return on investment for Quebec by cost of upgrading literacy, selected groups



1. Return includes 33% of earnings.

Source: 2003 IALSS and 2005 to 2009 SLID.

Returns on investment vary by demographic group, industry and occupation. Investments would best be targeted on those sectors yielding the highest rates of return. In general, rates of return fall with rising investment size. The following chart and associated table identifies where skill investments would yield the highest returns in Quebec. The most important

conclusion is that the top 50% of investments yield strong positive returns. Investments in adults working in Social Science, Education, Government and related occupations and in Utilities would yield the highest annual rates of return, 1,063% and 1,051% respectively.

**Investment yielding the highest rates of return on investment**  
**All ages, Quebec**

Sum of return on investment over 5 years <sup>1</sup>		Return on investment-quartile		
Cost order of magnitude	Cost		Quartile 1	Quartile 2
Millions of dollars	Millions of dollars	Label	Percent	
<b>0 to 9</b>	10	Utilities	1,051	n/a
<b>10 to 99</b>	20	Natural and applied science	1,146	n/a
	30	Occupations in art, culture, recreation and sport	996	n/a
	50	Finance, insurance, real estate and leasing	954	n/a
		Occupations in social science, education, government and related occupations	1,063	n/a
	90	Management occupations	886	n/a
		Health occupations	842	n/a
	60	Educational services	933	n/a
		Public administration	895	n/a
	40	Professional, science and technical services	1,060	n/a
		Information, culture and recreation	n/a	832
<b>100 to 999</b>	110	Graduate degree	n/a	776
	130	Business, finance and administrative occupations	1,004	n/a
	550	Sales and services occupations	n/a	696
	350	16 to 24	n/a	700
	360	25 to 34	n/a	762
	220	Bachelors degree	n/a	691
	280	Trade	n/a	760
	160	Health care and social assistance	n/a	831
	100	Business, building and other support services	n/a	629
	120	Other services	n/a	632
<b>1,000 to 9,999</b>	1,280	Some post-secondary education	n/a	727

1. Return includes 33% of earnings.

Source: 2003 IALSS and 2005 to 2009 SLID.

The report’s conclusions depend upon the reasonable, but unproven, assumption that literacy skill is a fundamental determinant of benefit receipt, employment and of long term rates of GDP and labour productivity growth. Assuming this to be true the estimated rates of return are high enough to warrant further research.

For a copy of the full report please visit  
[www.literacy.ca/research-and-resources](http://www.literacy.ca/research-and-resources)  
 or [www.dataangel.ca](http://www.dataangel.ca)

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