

Evidence for Policy and Practice Decision-making for Adult Skills Training in Canada



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Why is this an issue which requires government action?

Because the issue is

- of national importance for economic prosperity and well being.
- impacts the whole population and other key issues such as health or standard of living.
- is larger than the citizen who cannot easily break out of the problem without help.

THEN

Evidence enables strategic and effective policy decisions for complex, multiple and persistent problems affecting the public good

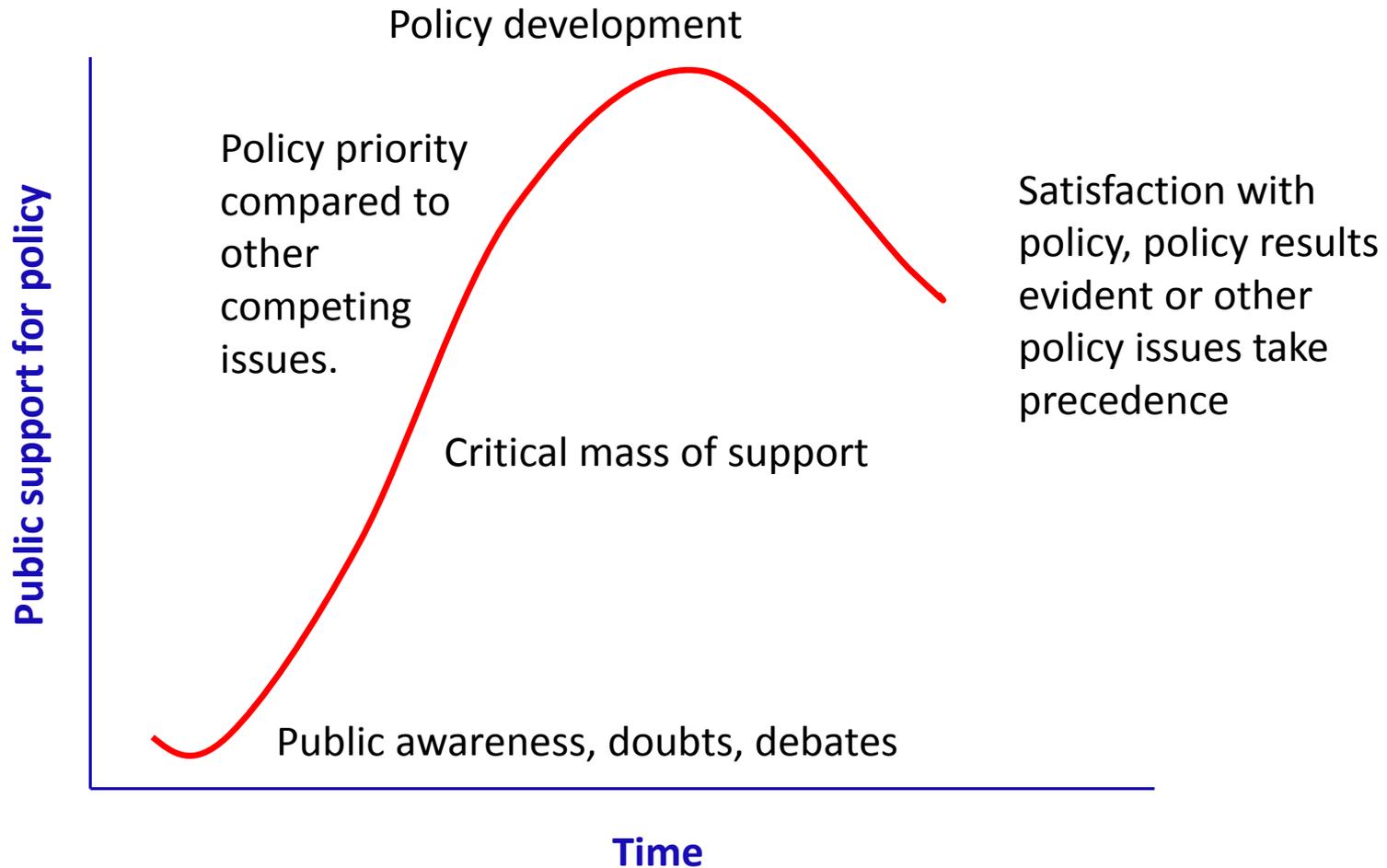
- To contribute to policy debate based on evidence rather than ideology.
- To determine need and target clientele
- To choose between policy options based on evidence of cause and effectiveness of intervention.
- To determine the best time for interventions.
- To increase the chances of successful results.

Policy research generates evidence for the democratic process of public policy

Two essentials:

- Public support for the creation of policy using tax payer money.
- Evidence that policies can make a difference.

Public support for a specific policy issue



Evidence that policies can make a difference

Why ? How? Who? How many? When? Where? Which?

- Why is the issue important today and in the future for Canada?
- How do we compare internationally?
- How big is the issue?
- Will it worsen without policy action?
- Can it be prevented?
- Who needs it?
- How many need it?
- What kind of programming? How much of each?
- What do they need?
- Where are they? How can we find them ?
- How durable are the results?

Why is the issue important today and in the future?

Literacy is highly correlated with labour market outcomes of individuals and economic growth of countries.

Individuals:

A 10% increase in document literacy yields an average of 7% increase in annual earnings. (Green and Riddell, 2007).

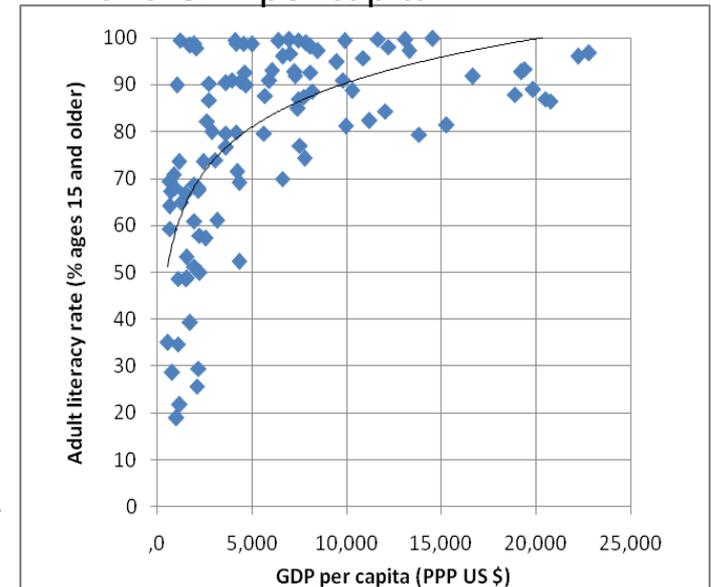
People with low literacy three times more likely to be living in a low income household (Statistics Canada, 2005)

Literacy is an important competence for future training. (HRSDC, 2005)

National:

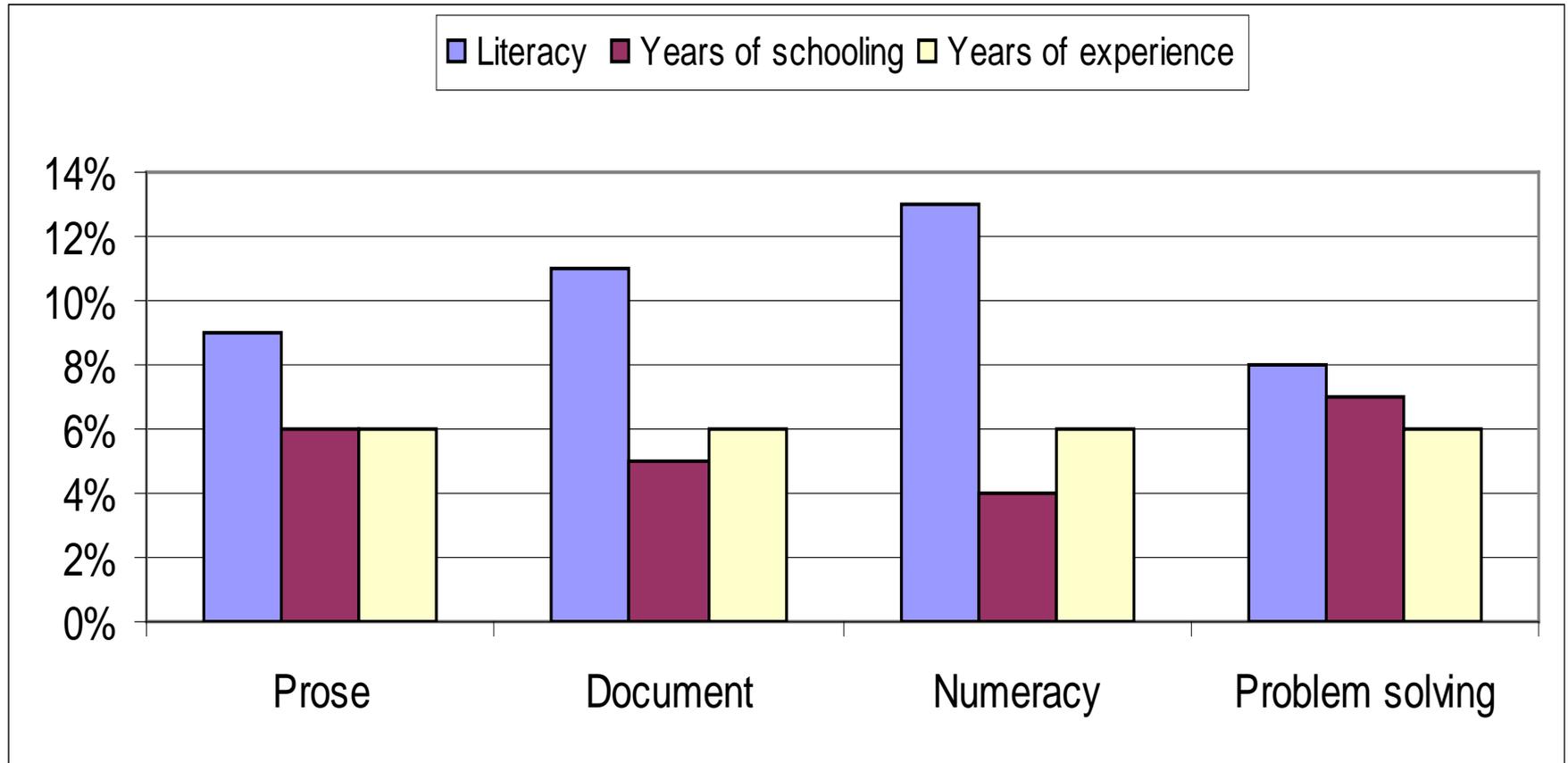
- Difference in average literacy explains over 55% of GDP per capita and productivity growth over the long term. (Murray and Shillington, 2011).
- Boost in national income by \$32 billion for every 1% increase in literacy scores (Coulombe, Tremblay, & Marchand, 2004)
- Failure to ensure skills growth has short term consequences such as skill shortages and long term ones such as lower economic growth and equality of opportunities. (OECD 2010).

Relationship between literacy and GDP per capita



In Canada, literacy has a strong independent effect on earnings, over and above the impact of years of schooling and years of experience

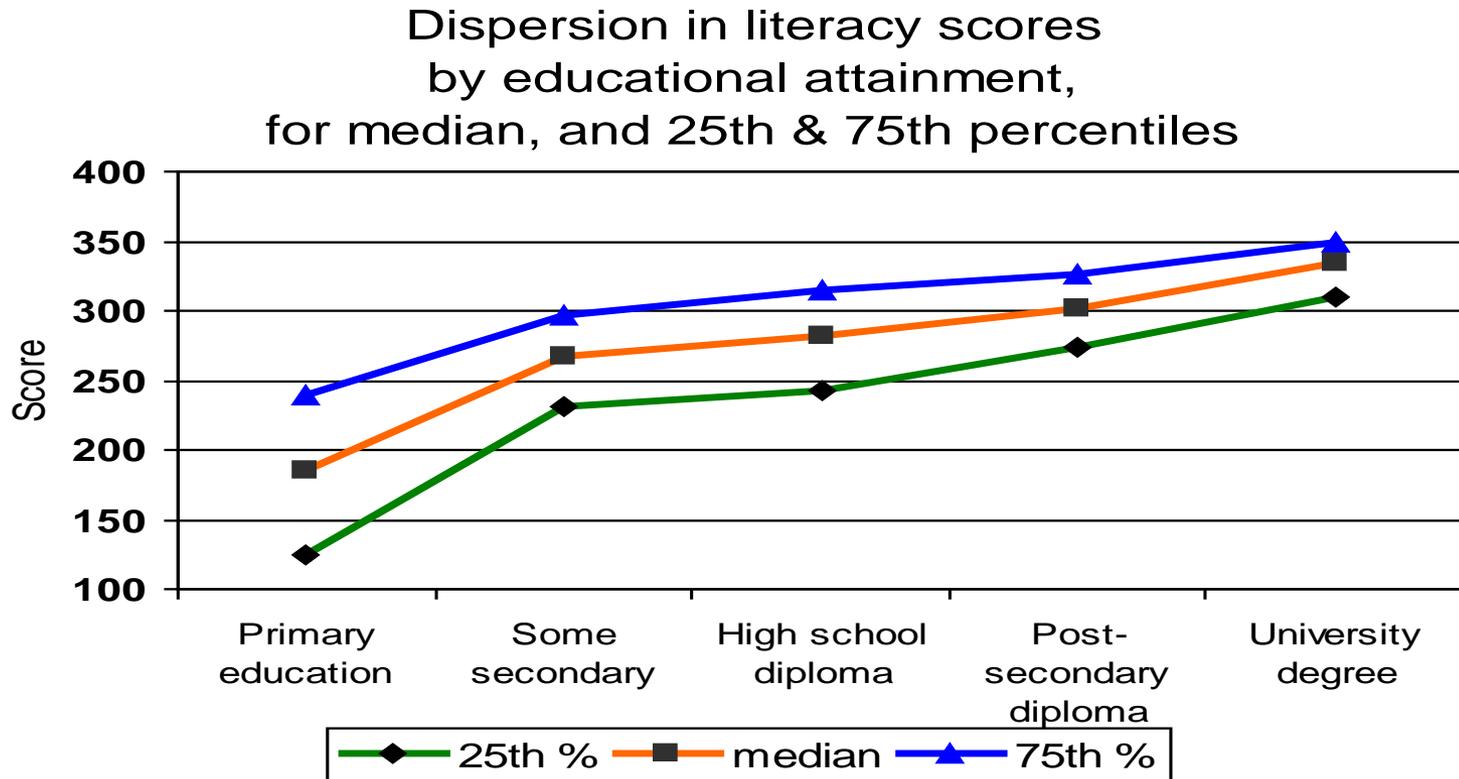
Per cent increase in weekly earnings per increase of 10 percentiles on prose, document, numeracy and problem solving scales, and per increase of additional year of schooling and work experience, adjusted least squares model, labour force population aged 16 to 65, 2003



Source: ALL/ IALSS, 2003

Literacy increases with educational attainment but varies within each level of attainment

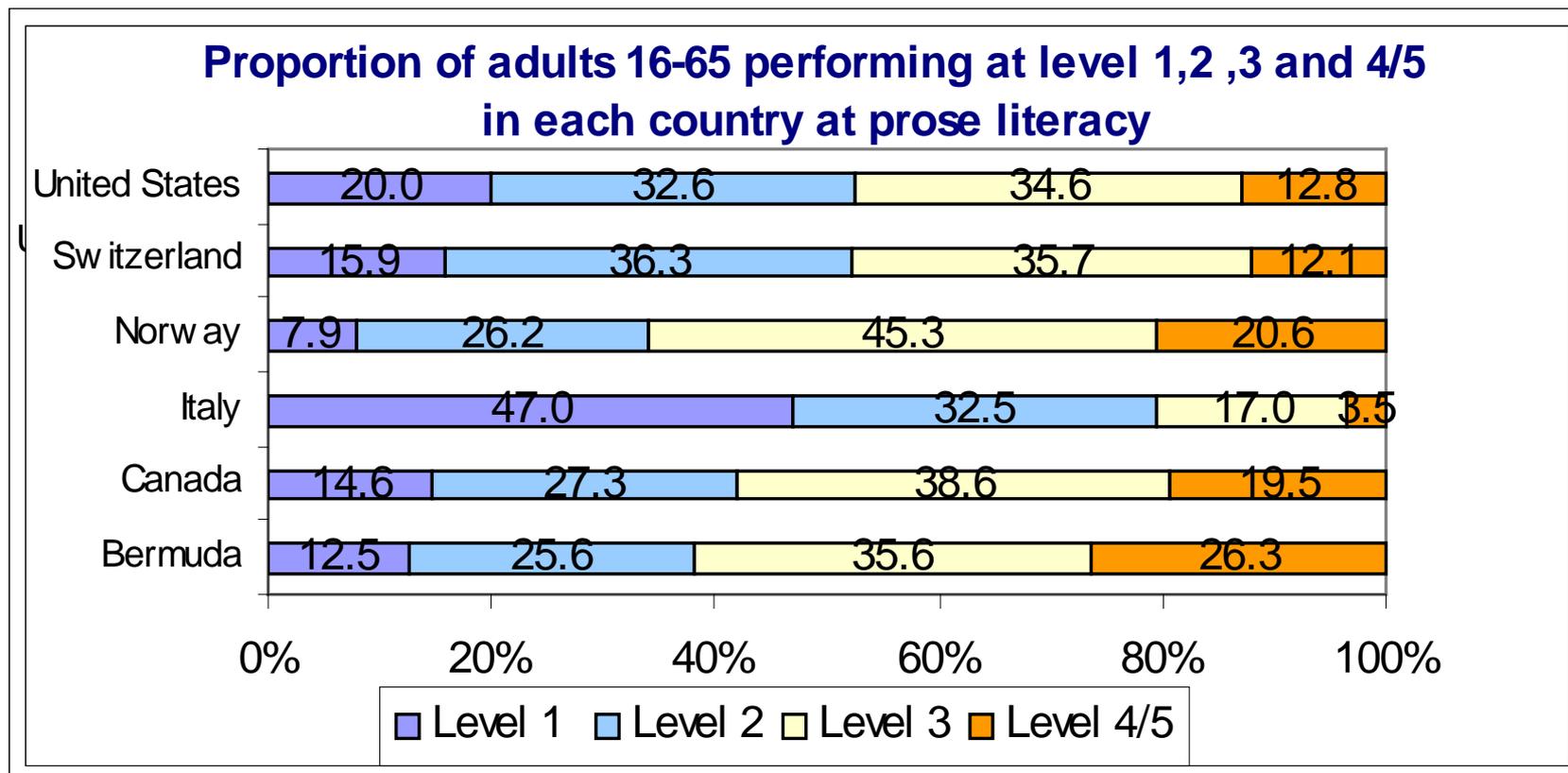
The top 25% of adults with a high school diploma have higher literacy than the bottom 25% of adults with a university degree.



Source: International Adult Literacy Survey, 1994

How does Canada compare internationally?

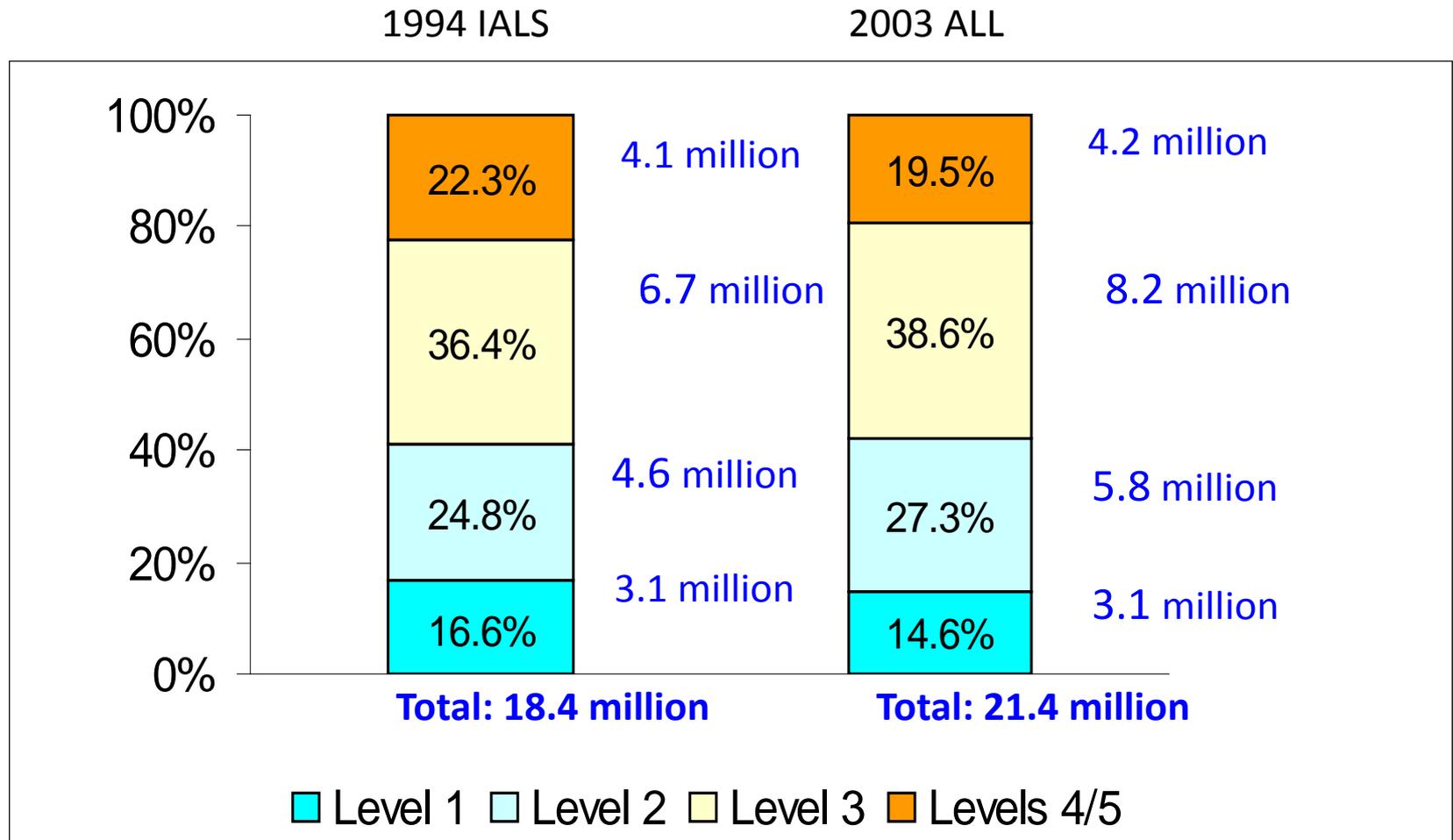
42% of Canadians performed at prose levels 1 and 2 compared to 34% in Norway



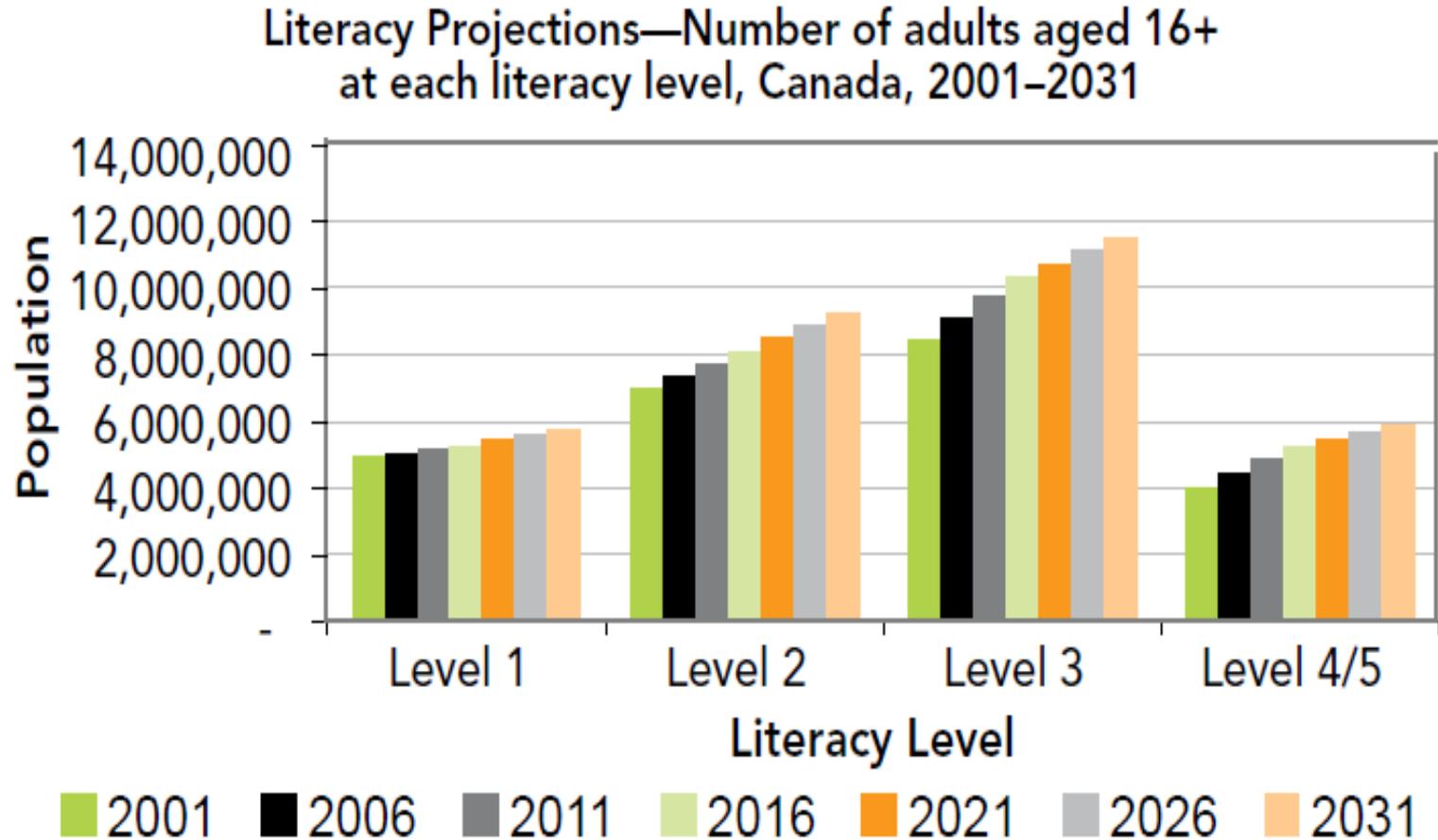
58% of Canadians performed at level 3 or higher

How big is the issue of adult literacy?

Between 1994 and 2003, despite literacy programming, there was no change in the percentage of people with low literacy, however, the number of people had substantially increased from 8 to 9 m.



Will adult literacy worsen without policy action?



Source: Reading the future, Canadian Council of Learning, 2008

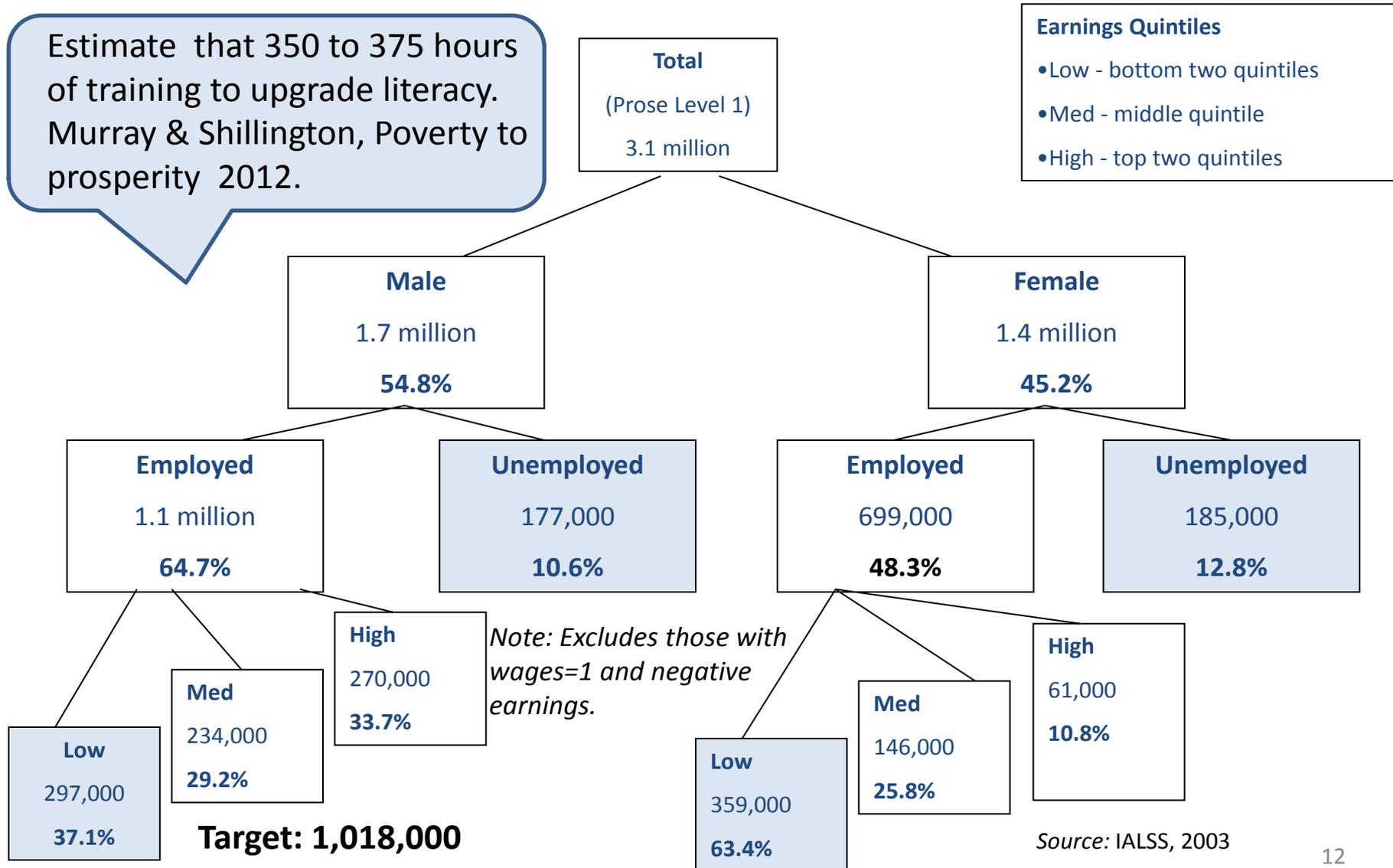
Who should be targeted by policies?

Working age Canadians with level 1 literacy (population 16-65)

Estimate that 350 to 375 hours of training to upgrade literacy. Murray & Shillington, Poverty to prosperity 2012.

Earnings Quintiles

- Low - bottom two quintiles
- Med - middle quintile
- High - top two quintiles



Where can the people with low literacy be found?

Almost two-thirds (65%) of Canadians with low literacy work and they are concentrated in some labour market sectors

- In Canada most persons with low literacy work (5.9 million).
- Employees with low literacy are concentrated in certain labour market sectors. The top five vary with provincial labour markets but are similar.
- Workplace training can reach the majority of workers with low literacy.

Concentration of workers, 16-65 with low literacy, Canada

3.8m in top five labour market sectors		
Industries	Level 1	Level 2
Manufacturing	439,000	671,000
Trade, finance, insurance, real estate and Leasing	330,000	920,000
Accommodation and food services	179,000	331,000
Construction	165,000	266,000
Health care and social assistance	133,000	412,000

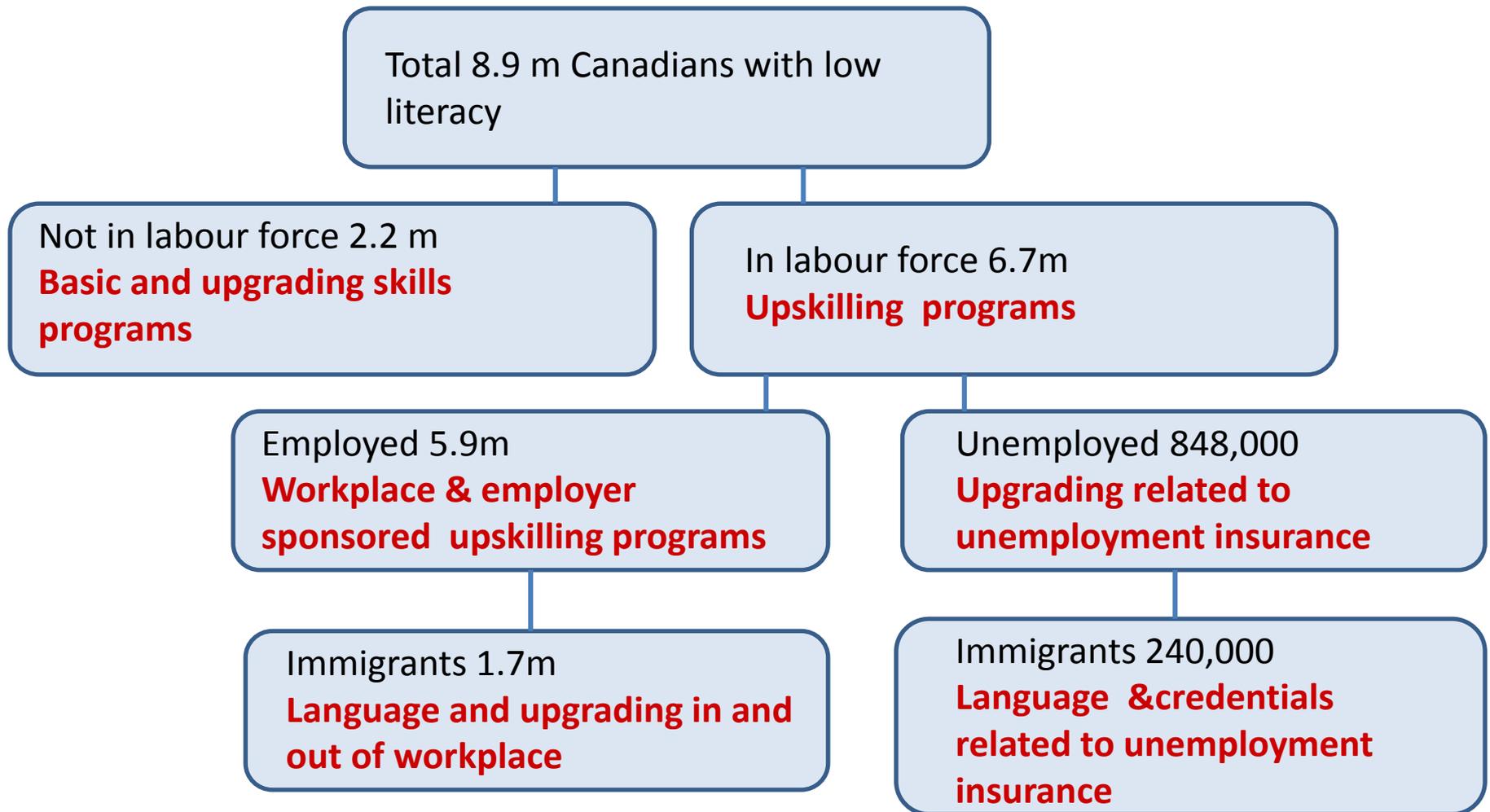
Source: IALS, 2003

* Using 5 plausible value



What kind of programming and how much of each?

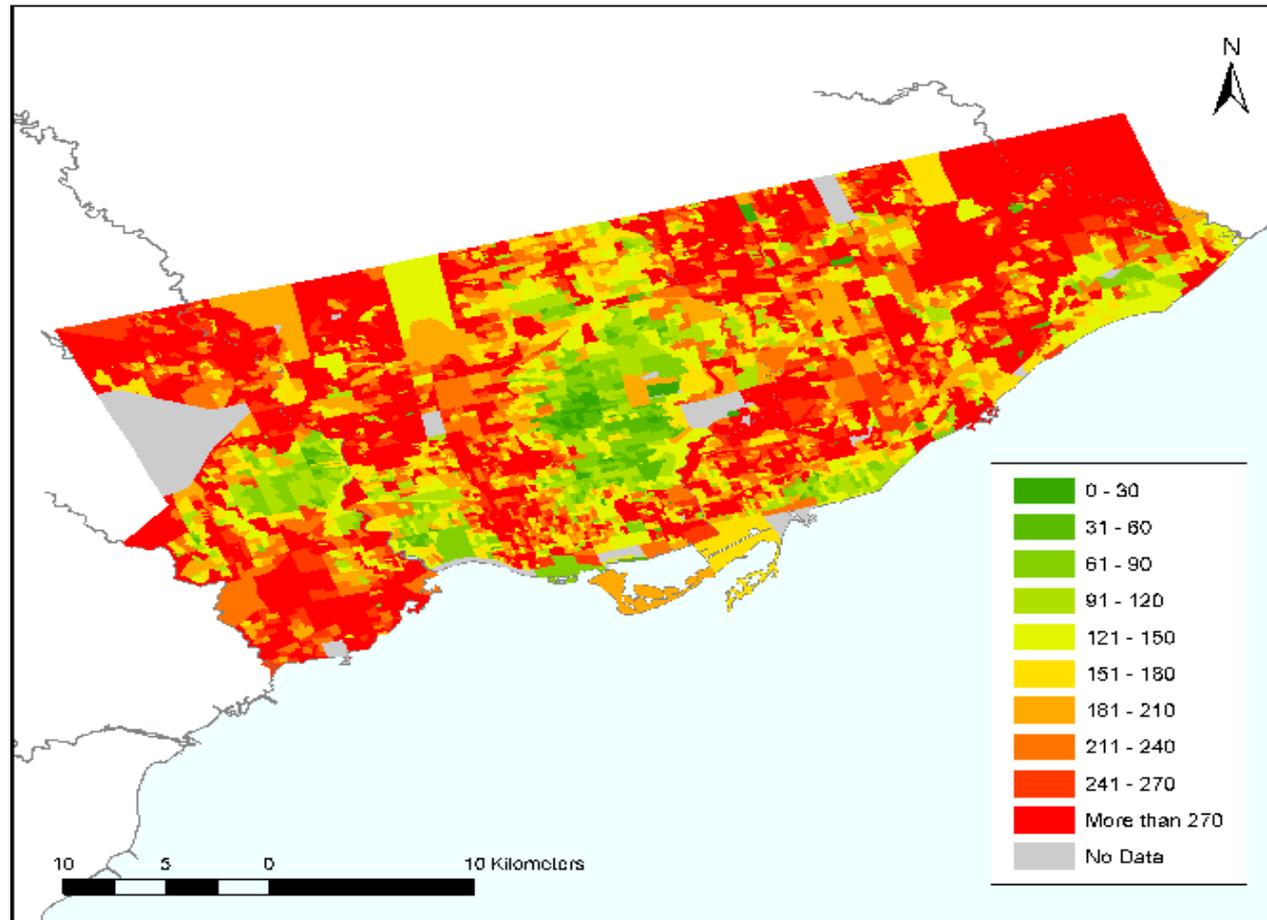
8.9 million Canadian with Levels 1 & 2 literacy – 6.3m native born & 2.6m immigrants



Where are low literacy people geographically located?

Maps used by decision makers and practitioners

Geographic distribution of people at levels 1 and 2 in prose in Toronto (IALSS population 16-65)



What do they need?

Low numeracy (10.5m) is a bigger challenge than low literacy (9m) in Canada

- Over 1m Canadians had level 3 or above in numeracy but low literacy.
- Over 2.5m Canadians had level 3 or above in literacy but low numeracy.
- Providing exactly what is needed saves money and pays back handsomely in the long run. In the UK, “raising adult numeracy and literacy would bring savings to the taxpayers of over £2.5 billion in respect of numeracy, and almost £0.5 billion in respect of literacy. Schuller, 2010.

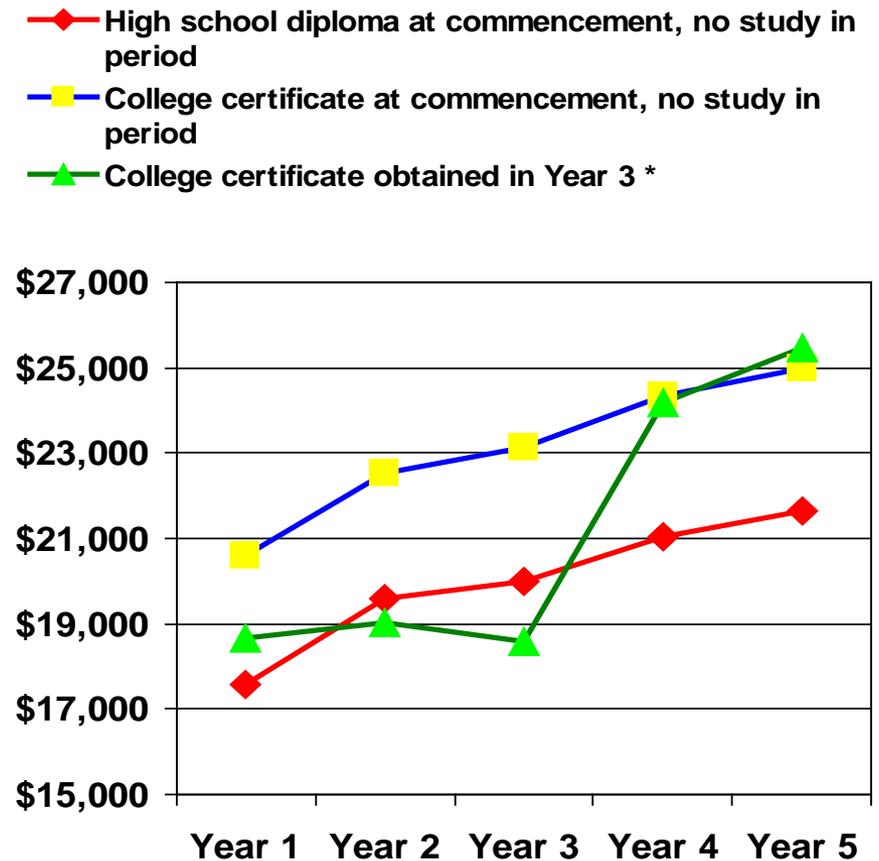
Although the same people often have low literacy and low numeracy, some have low scores in only one domain (population aged 16 to 65)

Document literacy	Numeracy	Estimates
Level 1	Level 1	2,700,000
Level 1	Level 2	570,000
Level 1	Level 3 and above	40,000
Level 2	Level 1	1,300,000
Level 2	Level 2	3,400,000
Level 2	Level 3 and above	1,100,000
Level 3 and above	Level 1	140,000
Level 3 and above	Level 2	2,600,000

How durable are the results?

The return to each additional year of upgrading is immediate and affects lifetime earnings

- Annual average income of individuals who obtained a college diploma in Year 3 dropped during acquisition then grew to level of college graduates immediately.
- Annual average income of individuals with high school diploma grew from \$17,600 to \$21,700 over five years.

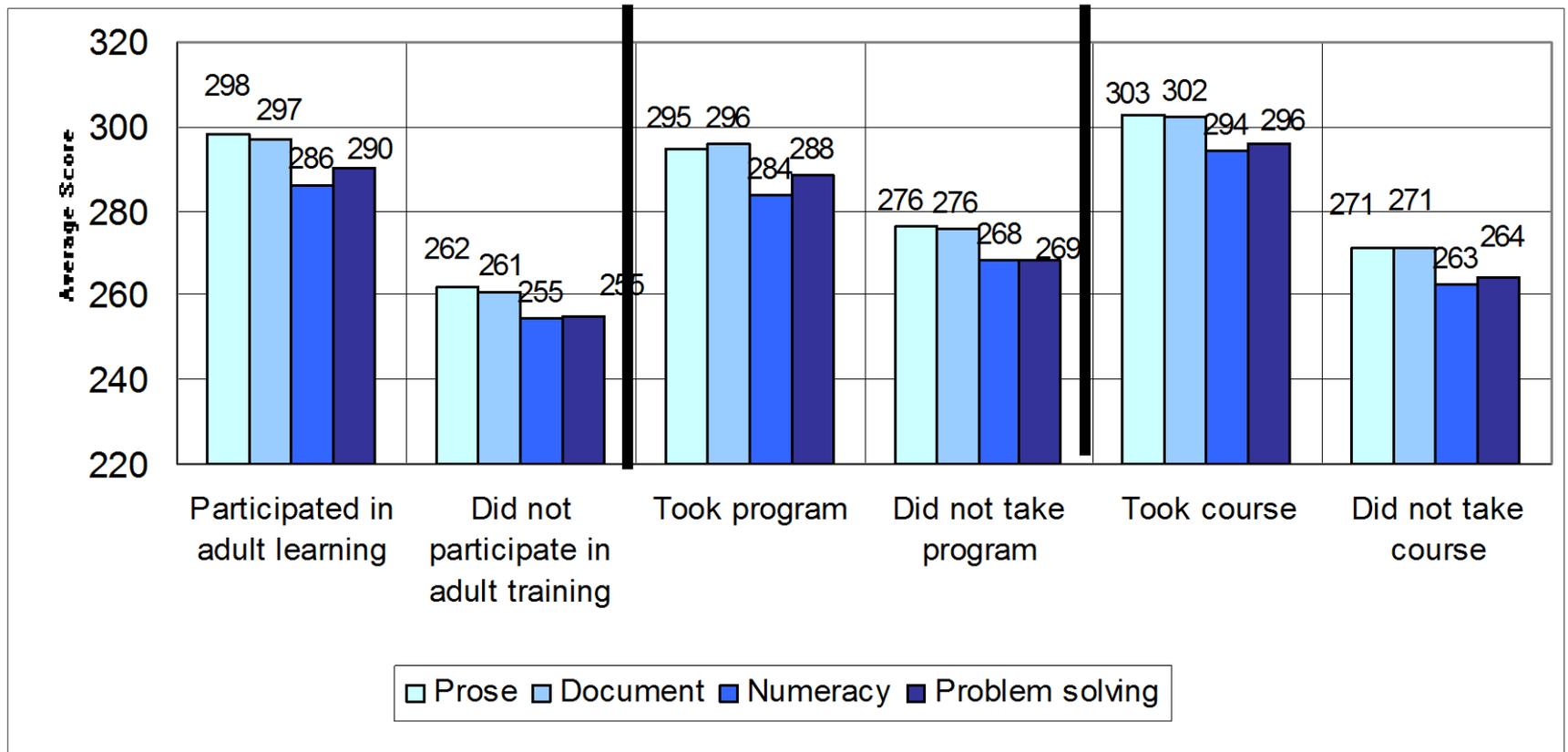


* Results should be treated with caution due to the small sample size

Source: Canadian Survey of Labour Income Dynamics

Education and training are the primary determinants to raise literacy and job related skills, but those with low literacy and numeracy are the least likely to participate in adult learning

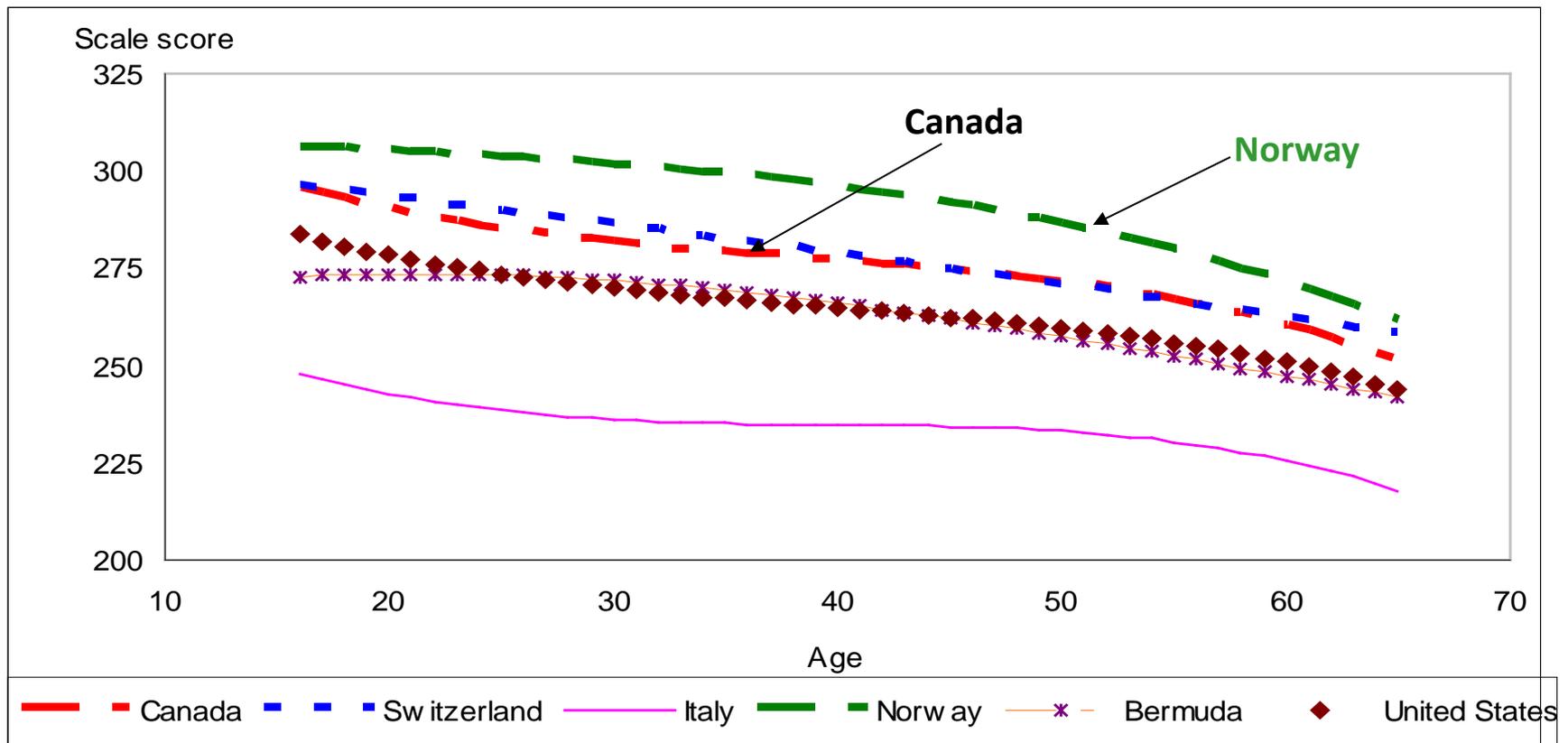
Average scores in the four skill domains, populations aged 16-65 receiving adult education and training, Canada, 2003



What is the impact of age on literacy performance?

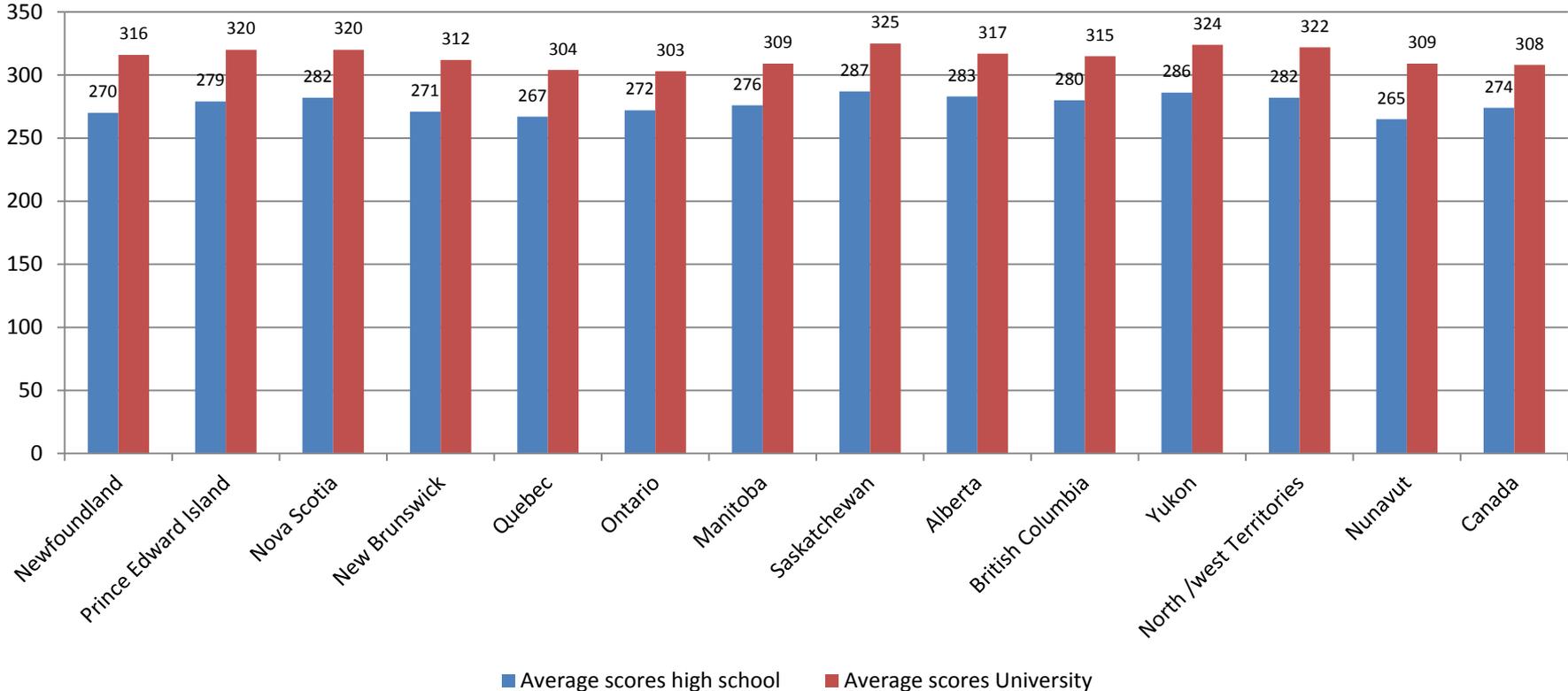
There is an inverse relationship between age and literacy performance, even after controlling for educational attainment

Relationship between age and literacy scores on the document literacy scale, with adjustment for level education, 2003



Can it be prevented?

- Compulsory education is intended to graduate students with Level 3 literacy so that they can have positive labour market and life outcomes.
- Graduates in Newfoundland, New Brunswick, Ontario, Quebec and Nunavut score below this threshold.
- University graduates score well above the threshold in every province.



■ Average scores high school ■ Average scores University

Policy actions taken by governments

- **Federal Government Policy - Canada Job Grant:**
Budget 2013. \$500m per year. Goal is to match unemployed Canadians with more than 220,000 current job vacancies through skills training. Training upto \$15,000 equally shared by provinces and employers. Applications are to be made by businesses to meet their needs and to train underemployed and unemployed workers and training provided by community colleges, trade union training centres, private career colleges and employers themselves.
- **Provincial Government Policy - The Ontario Secondary School Literacy Test (OSSLT)**
Introduced in 2002, OSSLT is a compulsory standardized test for high school students in Ontario and must be passed to obtain the Ontario Secondary School Diploma. It is administered by the Education Quality and Accountability Office. In 2012, 82% were successful. Failed students can take the test again.

Policy actions taken by governments

Federal Government research - Impact of literacy training on Business Success Indicators in the manufacturing small business sector:

The goal is to provide evidence and tools for small business employers to make decisions for literacy and skill investments based on the potential improvement to their bottom line. The research will examine impacts for low literacy as well as high literacy enterprises with a view to future automation, expansion and modernization of equipment.

Federal and Provincial government Tools – PIAAC-online pre-test:

OECD will publish the results of the Programme for International Assessment of Adult Competencies in late 2013. Following the results, a self administered tool will be created which will be pre-tested in Canada.



Thank you!

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