

PIAAC and its impact on Ontario

By Brigid Hayes¹

Introduction

The latest round of PIAAC (the Programme for the International Assessment of Adult Competencies) was released in December 2024. Published by the OECD (Organisation for Economic Co-operation and Development), PIAAC surveyed people aged 15 – 65 in 31 countries to assess their skill levels in literacy, numeracy and adaptive problem solving.²

The survey looks at three skills – literacy, numeracy and adaptive problem solving – assessing how well adults can read and understand text, work with numbers, and solve complex problems.³ This was cycle of two PIAAC; cycle one was released in 2013. ‘Adaptive problem solving’ was added to this cycle making it difficult to compare to the ‘problem solving in technology-rich environments’ skill assessed in the previous survey.

Canadian Results

Canada performed well overall when compared to the OECD average. It ranked 10th out of the countries surveyed for average literacy score. The results for literacy were slightly lower compared to the 2013 survey which were lower than the 2003 survey. The results for numeracy increased from the 2013 survey.

Internationally, adult skills have mostly declined or stagnated in the past decade; only Finland and Denmark saw significant improvements in adult literacy skills. The decline or stagnation can be attributed to scores at the lowest levels (Level 1 and below Level 1). Canada was only one of three countries where the percentage of those falling below level 1 decreased for numeracy.

¹ See *Initial Thoughts – 2023 Programme for the International Assessment of Adult Competencies (PIAAC) Results* by the author for more details. <https://brigidhayes.wordpress.com/2024/12/11/piaac-2023-survey-of-adult-skills-released-my-thoughts/>

² OECD (2024), *Do Adults Have the Skills They Need to Thrive in a Changing World?: Survey of Adult Skills 2023* https://www.oecd.org/en/publications/do-adults-have-the-skills-they-need-to-thrive-in-a-changing-world_b263dc5d-en/full-report.html

³ OECD (2024), *Survey of Adult Skills 2023 – Insights and Interpretations* https://www.oecd.org/content/dam/oecd/en/publications/support-materials/2024/12/survey-of-adult-skills-2023_1ab54c9e/PIAAC2024_InsightsInterpretations_FULL.pdf page 1.

Table 1 - Averages and proficiency levels of population aged 16 to 65, 2003, 2012 and 2023, Canada

Literacy	2003	2012	2023
Average Score	280	273.5	271
Level 4/5	18%	14%	14%
Level 3	41%	38%	37%
Level 2	27%	32%	30%
Level 1	10%	13%	13%
Below Level 1	5%	4%	6%

Numeracy	2003	2012	2023
Average Score	272	265.5	271
Level 4/5	14%	13%	15%
Level 3	37%	33%	34%
Level 2	31%	32%	30%
Level 1	13%	17%	15%
Below Level 1	5%	6%	6%

Adaptive Problem Solving	2003	2012	2023
Average Score			259
Level 4/5			6%
Level 3			33%
Level 2			39%
Level 1			17%
Below Level 1			5%

In Canada, average skill levels are higher among the 25–34-year-old group and lower for 55–64-year-olds. This is consistent with previous surveys, demonstrating age matters as does the lack of use of skills. Canadian adults with higher levels of educational achievement demonstrated a higher level of skills in the three assessed domains. However, between the two surveys, Canada experienced a decline in literacy skills for those with post-secondary education. Adults born in this country performed better on average in the three domains than those who were born elsewhere and had since immigrated, although the gap for numeracy scores was smaller. However, second-generation immigrants performed as well or better on average than non-immigrants.

Ontario Results

Ontario performed slightly below the national average in all three domains. Its average score for literacy was 269 compared to 270.8 for Canada; numeracy 270.3 compared to 270.7 for Canada; and 258.3 for adaptive problem solving compared to the Canadian average of 259.4.

Ontario ranked 4th among the provinces in the latest PIAAC survey. British Columbia and Nova Scotia made significant gains in their ranking.

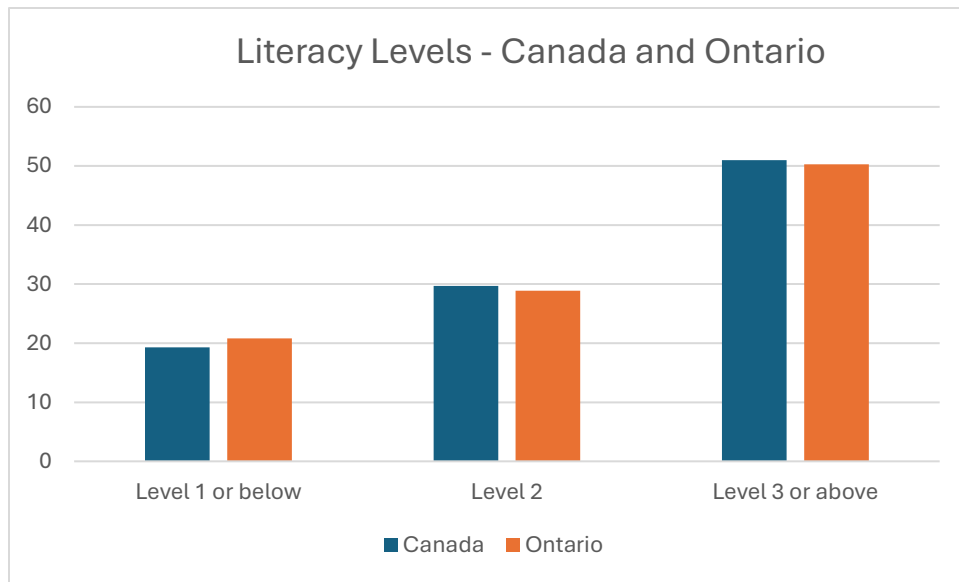
Table 2 – Average Literacy Scores by Province, 2013 and 2023

	Average Literacy Score – 2013	2013 Ranking	Average Literacy Score – 2023	2023 Ranking
British Columbia	274.8	4	281	1
Alberta	277.7	1	276	2
Nova Scotia	273.9	5	272	3
Canada	273.5		271	
Ontario	275.5	3	269	4
Manitoba	273.9	5	269	4
Saskatchewan	271.6	7	268	6
Prince Edward Island	277.5	2	267	7
Quebec	268.6	8	267	7
New Brunswick	268.3	9	264	9
Newfoundland and Labrador	265.4	10	263	10
OECD Average	273.3		260	

PIAAC breaks down the results into five levels. Data is available for Level 1 and below, Level 2 and Level 3 and beyond. Those at level 1 “can understand short texts and organized lists when information is clearly indicated, find specific information, and identify relevant links. Those below Level 1 can at most understand short, simple sentences.”⁴

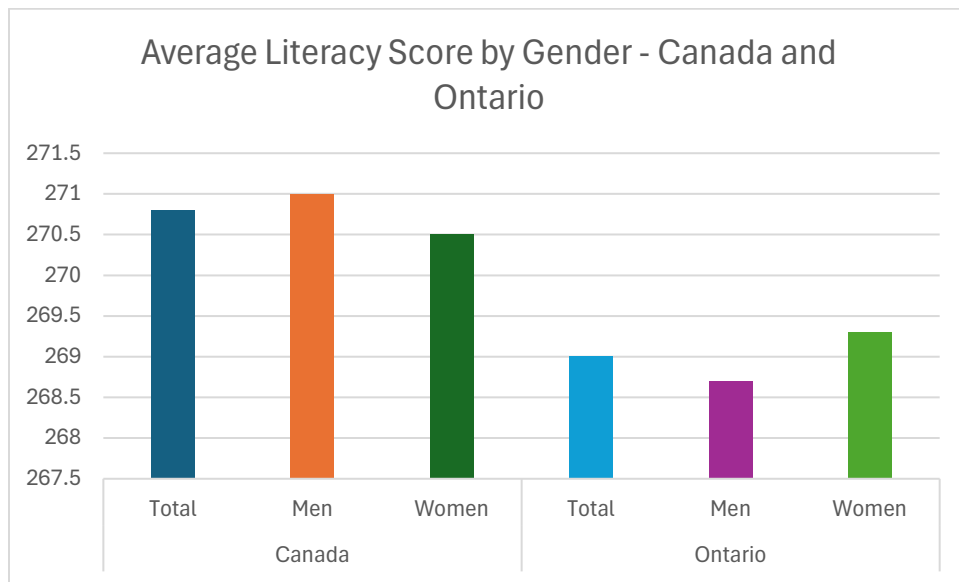
⁴ Statistics Canada (2024). *Literacy, numeracy and adaptive problem-solving skills of Canadians: Results from the 2022 Programme for the International Assessment of Adult Competencies*
<https://www150.statcan.gc.ca/n1/daily-quotidien/241210/dq241210a-eng.htm> Page 2

Chart 1 – Literacy Levels – Canada and Ontario⁵



A variety of factors influence literacy score. In Ontario, women had a higher average score than men only in the literacy domain.

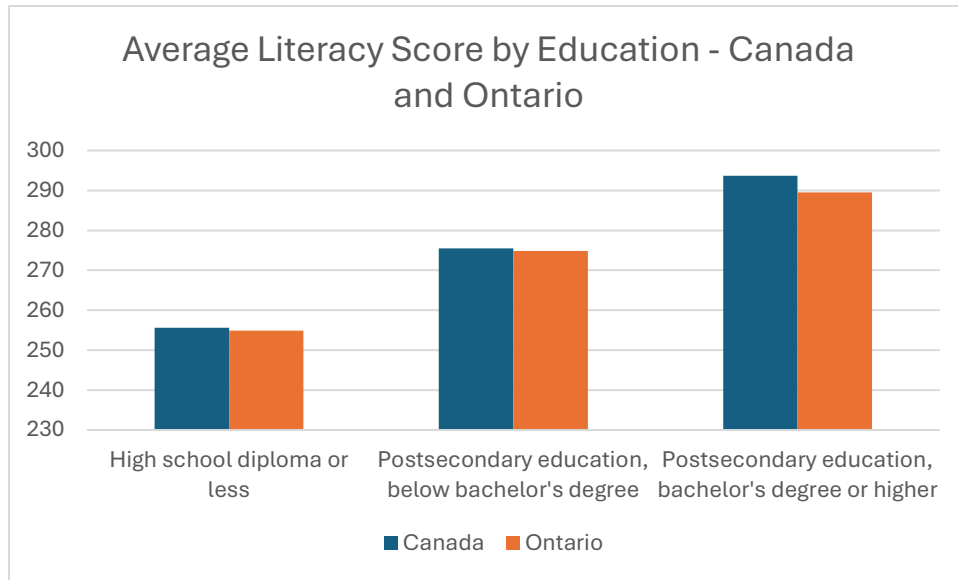
Chart 2 – Average Literacy Score by Gender – Ontario and Canada



Education obviously plays a role in literacy with stronger skills recorded as education increases. In Ontario however, literacy scores lag behind the Canadian average for post-secondary education and higher.

⁵ The charts that follow were created by the author based on Statistics Canada. Tables 37-10-0259-01 – 37-10-0262-01.

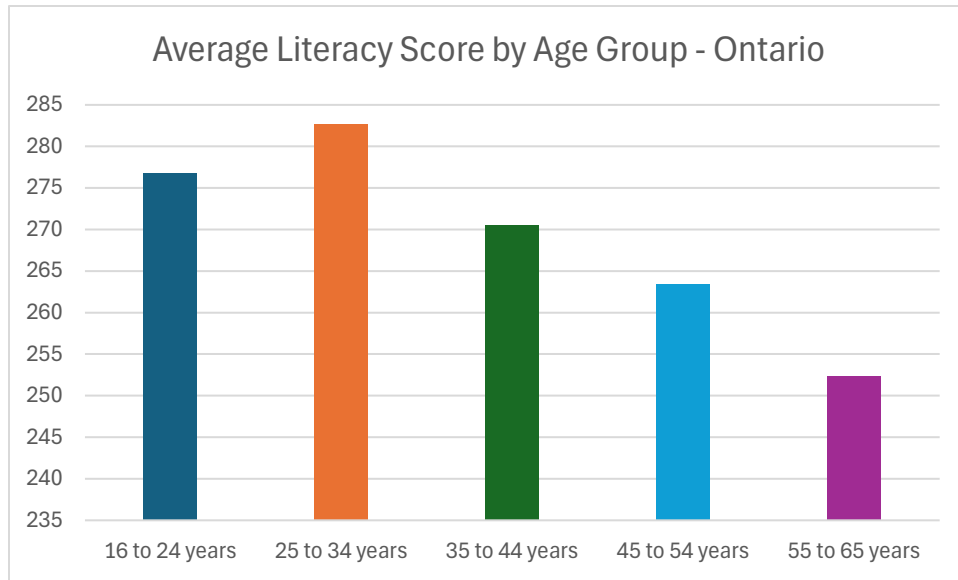
Chart 3 – Average Literacy Score by Education – Canada and Ontario



While education qualifications are static, age is not. Coming out of the education-receiving phase of life, those under 34 have the strongest skills. But as people age, their skill levels decline. This may be the result of people not working in literacy-rich jobs, or, at the oldest age level, a decline in capacity. Some have suggested that the way we receive information today, in short texts and documents, might be leading to a decline in literacy skills⁶.

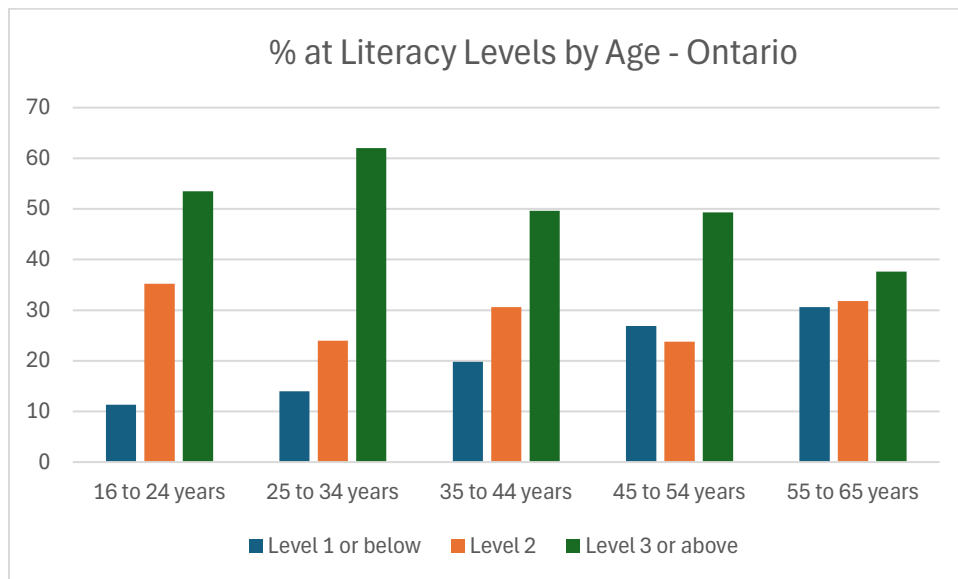
⁶ See OECD (2024), *Survey of Adult Skills 2023 – Insights and Interpretations*

Chart 4 – Average Literacy Score by Age Group – Ontario



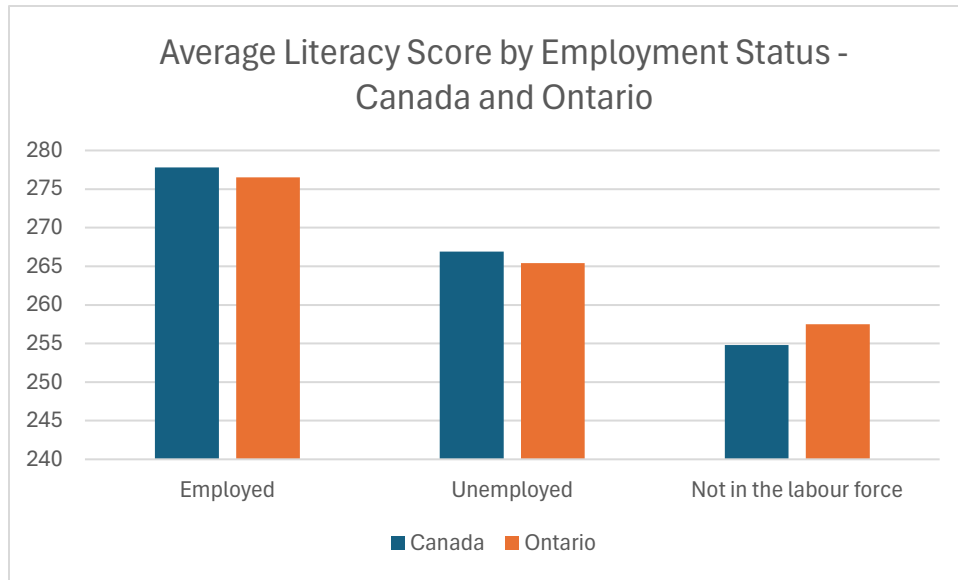
Also of note, is the increase in skill levels among those 25 to 34 years of age. This seems to be influenced by what people do after completing their education.

Chart 5: Percentage at Literacy Levels by Age - Ontario



The effect of work on literacy skills can be seen below. Stronger skills are associated with employment while lower skills with non-labour force participation. In Ontario, even those who are employed and unemployed still have lower literacy scores than the Canadian average. Interestingly, those not in the labour force in Ontario have a higher average literacy score than the Canadian average.

Chart 6 – Average Literacy Score by Employment Status – Canada and Ontario



Conclusion

Canadian literacy levels have not declined from previous survey results, but they have not improved. Numeracy skills improved slightly.

Canada was one of only six countries where the average proficiency of those with below high school significantly decreased between 2013 and 2023 while it was one of three countries where adults with post-secondary education recorded gains in average numeracy scores.

The PIAAC methodology underpins that of the Essential Skills Framework and the OALCF (Ontario Adult Literacy Curriculum Framework). The lack of change since the last survey and Ontario’s persistent placement under the Canadian average for all three skills is cause for concern. While understanding that PIAAC assesses a particular construct of literacy which might not reflect the lived experience, nevertheless, over two surveys, ten years apart, results were more or less the same. Unfortunately, the Ontario government has not responded to PIAAC.

Literacy is intertwined with poverty, social justice, and equality. Paying attention to those at the lowest levels, promoting literacy-rich jobs and supporting adult education would go a long way to improving Ontario’s situation. Looking to BC and Nova Scotia which made gains might provide insights. This continues to be a fundamental and foundational issue.