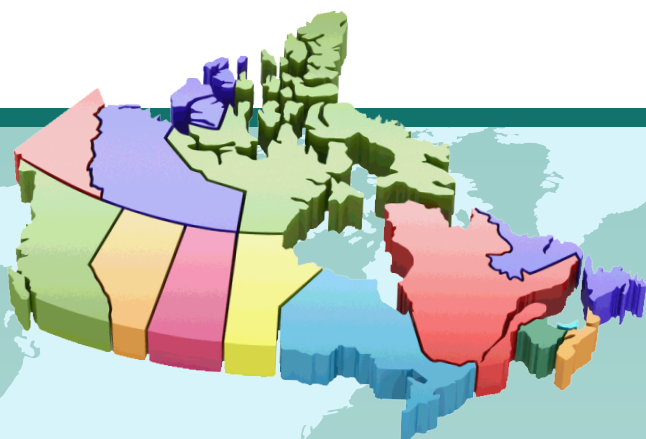


Measuring up: Canadian Results of the OECD PISA 2015 Study

The Performance of Canadian 15-year-olds in Financial Literacy

Highlights



cme^c

Canada

What is PISA?

The Program for International Student Assessment (PISA) is a collaborative effort among member countries of the Organisation for Economic Co-operation and Development (OECD). PISA is a survey of 15-year-old students from around the world. It is conducted every three years. PISA assesses the students' levels of key knowledge and skills that are essential for full participation in modern societies. The survey measures the core subject areas of reading, mathematics, and science, and an innovative domain (in 2015, this innovative domain was computer-based collaborative problem solving). In 2012, an optional financial literacy assessment was introduced. Canada participated in this optional component for the first time in 2015.

PISA focuses on students' abilities to apply knowledge and skills and to analyze, reason, and communicate effectively as they examine, interpret, and solve problems. PISA also asks students about their motivations, beliefs about themselves, and learning strategies. The PISA results can help educators, policy-makers, and the public identify how education systems are similar and different, but these results cannot directly identify cause-and-effect relationships between policies and student performances.

The PISA Financial Literacy Assessment Framework defines financial literacy through four content areas, four cognitive processes, and four context areas as "knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life."¹

By definition, financial literacy involves the areas of knowledge and understanding that are required to perform a particular financial task. PISA's financial literacy content areas are:

- **money and transactions** (e.g., knowledge of how to manage simple monetary transactions such as everyday payments);
- **planning and managing finances** (e.g., the process of managing, planning, and monitoring income and expenses and understanding how to enhance wealth and financial well-being);
- **risk and reward** (e.g., ability to identify ways of balancing and covering risks); and
- **financial landscape** (e.g., knowing the rights and responsibilities of consumers in the financial marketplace).

A financially literate individual relies on a number of cognitive processes such as recognizing and applying relevant concepts, understanding, analyzing, reasoning about, evaluating, and suggesting solutions. The PISA financial literacy process categories are:

- **Identify financial information**
- **Analyze information in a financial context**
- **Evaluate financial issues**
- **Apply financial knowledge and understanding.**

The context or situation in which an issue is presented can often affect how an individual thinks about it and consequently the decision he or she makes. Some situations will also be more familiar to some individuals than others. The PISA financial literacy context areas involve:

- **Education and work**
- **Home and family**
- **Individuals**
- **Society.**

In 2015, close to 48,000 students from 15 countries and economies took part in the financial literacy assessment. In Canada, approximately 3,400 15-year-olds from seven provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, and British Columbia) participated.

¹ OECD, *PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematic and Financial Literacy* (Paris: OECD Publishing, 2016), available at <http://dx.doi.org/10.1787/9789264255425-en>.

PISA 2015 Financial Literacy

Highlights



Financial literacy encompasses an important set of life skills for all Canadians. These skills enable citizens to fully participate in modern society, managing their financial well-being knowledgeably and confidently. Many youth make financial decisions for themselves, have their own bank accounts, and have access to on-line payment methods. As youth near the end of their compulsory education, it is important that they

have financial literacy to guide their everyday choices and major life decisions.² Results from the 2015 PISA financial literacy component provide an important baseline measure of the financial literacy level of 15-year-olds in Canada.

Canadian students achieve a high level of proficiency in financial literacy

In PISA 2015, 87 per cent of Canadian students performed at or above Level 2 in financial literacy, which the OECD considers a baseline level of proficiency. This compares to an average of 78 per cent of students in OECD countries performing at or above Level 2. Of all of the participating countries and economies, only Beijing, Shanghai, Jiangsu, and Guangdong [BSJG]–China (91 per cent) had a significantly higher proportion of students performing at or above Level 2 than Canada.

Overall, Canadian 15-year-old students achieved a mean score of 533 in financial literacy, which is well above the OECD average of 489. Among the 15 countries and economies that participated in the 2015 PISA financial literacy assessment, only one, BSJG–China, outperformed Canada.

Better than Canada

British Columbia, BSJG–China

As well as Canada

Flanders (Belgium),
Newfoundland and Labrador,
Nova Scotia, Ontario,
Prince Edward Island

Lower than Canada

Australia, Brazil, Chile, Italy, Lithuania,
Manitoba, the Netherlands,
New Brunswick, Peru, Poland,
Russian Federation, Slovak Republic,
Spain, United States

² OECD, *PISA 2012 Results: Students and Money—Financial Literacy Skills for the 21st Century*, Volume VI (Paris: OECD Publishing, 2014), available at http://www.oecd-ilibrary.org/education/pisa-2012-results-students-and-money-volume-vi_9789264208094-en.

Although Canadian students performed well, there is a large gap between those with the highest and lowest scores

Equity, or the gap that exists between students with the highest and those with the lowest scores, is an important indicator of education outcomes. For Canada overall, the top 10 per cent of students scored 295 points higher than the bottom 10 per cent of students. This gap compares to 285 across OECD participating countries, which puts Canada

among jurisdictions with above-average financial literacy performance but also with an above-average level of disparity in student performance. At the provincial level, the smallest gap can be observed in Prince Edward Island while the largest gap between students is in Ontario.

Most 15-year-olds in Canada save money regularly

In Canada, 33 per cent of 15-year-old students saved varying amounts of money each week or month, 20 per cent saved the same amount of money each week or month, 20 per cent saved money only when they wanted to buy something, and 17 per cent saved money only when they have some to spare. Only 4 per cent reported they do not save any money and 7 per cent reported that they do not have any money so they do not save. This pattern is similar to the OECD average.



Students who reported that they “save some money each week or month but the amount varies” had the highest financial literacy scores. These students achieved higher scores (Canada—566; OECD average—513) than the students who reported all other types of savings behaviour. The opposite is also true: students who reported not saving any money scored lower (Canada—477; OECD average—458) than students in all other categories.

Most students said they would save up to buy something they really wanted

In PISA 2015, students were given a hypothetical scenario where they did not have enough money to buy something they really wanted (e.g., an item of clothing or sports equipment) and were asked to choose among various strategies to acquire the desired object. In Canada, 63 per cent of students said that they would save up to buy it, 19 per cent said they would buy it by borrowing or using money that should be spent on something else, and 17 per cent said they would not buy it. These results were similar to OECD averages.

Across Canada and OECD countries on average, the financial literacy scores of students who would save up to buy an item they really wanted and those who would not buy it were similar. Students who would save up to buy the item scored 40 points higher on the financial literacy assessment than those who would buy it by borrowing or using money that should be spent on something else. This gap was observed both in Canada and on average across OECD countries.

Across Canada, discussing money matters with parents is associated with higher financial literacy

Most Canadian students discuss money matters with their parents between once a month and twice a week. In PISA 2015, Canadian students who discussed money matters with their parents once or

twice a week scored the highest in financial literacy. These students scored significantly higher than those who never or hardly ever discussed money with their parents.



On average, students with a bank account had higher financial literacy than students without one

Across Canada the majority (78 per cent) of 15-year-old students held bank accounts. This is significantly higher than the OECD average of 57 per cent.

Students who held bank accounts outperformed those who did not on the financial literacy assessment in four (Newfoundland and Labrador, Ontario, Manitoba, and British Columbia) of the seven participating provinces. This difference was also significant across participating OECD countries and economies.

Performance in financial literacy relates positively to performance in other PISA subject areas

Student performance in mathematics, reading, and science is associated with performance in financial literacy, both in Canada and across the OECD. However, students who do well in the other domains

will not necessarily do well in financial literacy: the financial literacy assessment also captures unique skills not measured by the other domains.

No gender differences were found, but there were variations by some demographic factors

PISA found no difference between boys and girls in average financial literacy scores in Canada or the provinces. There was a small gender gap in OECD countries whereby girls outperformed boys by a small margin (five points). These are encouraging findings given that adult males have frequently outperformed adult females.³

In PISA, socioeconomic status is measured by an index of economic, social, and cultural status (ESCS). According to the OECD, socioeconomically advantaged students were defined as the top 25 per cent of the ESCS index and socioeconomically disadvantaged students were defined as the bottom 25 per cent of the ESCS index.⁴ The socioeconomically advantaged students outperformed the disadvantaged students in financial literacy across OECD countries and in all participating provinces in Canada—except Prince Edward Island where the disparity in average financial literacy scores between the two groups was not statistically significant.

Related to socioeconomic status, students whose mother and/or father completed college or university performed significantly better on the financial literacy test than students whose parents did not attain this level of education in OECD countries, Canada, and all provinces, except Prince Edward Island where this difference was not statistically significant.

In Canada and the provinces there was no difference between immigrant and non-immigrant students in average financial literacy scores. In contrast, non-immigrant students scored 33 points higher than second-generation or first-generation students across OECD countries.

In financial literacy, students in the majority-language school system outperformed students in the minority-language school system by 62 points in Canada overall. Provincially, the same pattern was observed in Nova Scotia, Ontario, and British Columbia. No statistically significant difference in performance between the two language school systems was found in New Brunswick or Manitoba.

³ OECD, *OECD/INFE International Survey of Adult Financial Literacy Competencies* (Paris: OECD Publishing, 2016), available at <http://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf>.

⁴ OECD, *PISA 2015 Results (Volume IV): Students' Financial Literacy* (Paris: OECD Publishing, 2017).

Looking forward

According to the results of PISA 2015, Canada is one of the top-performing countries in financial literacy. It is encouraging that Canadian students have demonstrated a high level of financial literacy compared to their peers internationally, but results also show that there are some students in Canada who are not performing as well. Further investigation into the characteristics of the students who are struggling could help determine the best ways of helping them

attain the knowledge and skills required to make good financial decisions.

Today's teenagers will eventually become adults responsible for the success of our economy, so it is important to both celebrate the successes and address the challenges highlighted by the 2015 PISA assessment.

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