Measuring up: Canadian Results of the OECD PISA 2018 Study

The Performance of Canadian 15-Year-Olds in Financial Literacy





Canada

PISA 2018 Financial Literacy

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 triennial survey designed to provide policy-oriented international indicators of the skills and knowledge of 15-year-old students from around the world and to shed light on a range of factors that contribute to successful students, schools, education systems, and learning environments. It measures skills that are generally recognized as key outcomes of the educational process, as well as young people's ability to use their knowledge and skills to meet real-life challenges.

PISA has been conducted every three years since 2000. The study measures achievement in the core subject areas of reading, mathematics, and science, as well as in an innovative domain (in 2018, this innovative domain was global competence). In 2012, an optional financial literacy assessment was introduced. Canada participated in this optional component in both 2015 and 2018, thus allowing comparison of students' financial literacy skills over time.

In the context of PISA, financial literacy is defined 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." PISA reports on financial literacy through four content areas, four cognitive processes, and four context areas, which are described in the table below.

Content areas

Money and transactions

- awareness of different forms and purposes of money
- knowledge of how to handle simple monetary transactions (e.g., everyday payments, bank cards, cheques, bank accounts, currencies)

Planning and managing finances

- process of managing, planning, and monitoring income and expenses
- · understanding how to enhance wealth and financial well-being over both the short and long term

Risk and reward

- ability to identify ways of balancing and covering risks
- understanding of the potential for financial gains or losses across a range of financial contexts and products (e.g., variable interest rates on credit card agreements, investment products)

Financial landscape

- knowing the rights and responsibilities of consumers in the financial marketplace and the main implications of financial contracts
- understanding of the consequences of change in economic conditions and public policies (e.g., interest rates, inflation, taxation, welfare benefits)

OECD, PISA 2018 Assessment and Analytical Framework (Paris: OECD Publishing, 2019), p. 128, retrieved from https://doi.org/10.1787/b25efab8-en

Cognitive process categories

Identifying financial information

Applicable when the student searches for and accesses sources of financial information and identifies or recognizes their relevance

Analyzing information in a financial context

Includes interpreting, comparing and contrasting, synthesizing, and extrapolating from information that is provided

Evaluating financial issues

Focuses on recognizing or constructing financial justifications and explanations, by

- · applying financial knowledge and understanding to specific contexts
- involving cognitive activities such as explaining, assessing, and generalizing

Applying financial knowledge and understanding

Focuses on taking effective action in a financial setting, by

- using knowledge of financial products and contexts
- applying their understanding of financial concepts

Context areas

Education and work

Highlights that students' lives beyond compulsory education may take a variety of forms, in that students may

- continue their education or training following their compulsory education
- · move into the labour market
- · already be engaged in casual employment outside of school hours

Home and family

Includes financial issues relating to the costs involved in running a household (e.g., shared accommodation that young people often use shortly after leaving the family home)

Individual

Covers topics related to most of students' financial decisions, including

- decisions related to products such as mobile phones or laptops
- · purchasing personal products and services
- contractual issues, such as getting a loan

Societal

Covers topics highlighting that individual financial well-being is affected by the broader social context, including

- consumer rights and responsibilities
- · the purpose of taxes and local government charges
- the role of consumer purchasing power

Adapted from OECD, PISA 2018 Assessment and Analytical Framework (Paris: OECD Publishing, 2019), pp. 130-150.

In 2018, around 117,000 students from 20 countries and economies took part in the financial literacy assessment. In Canada, close to 8,000 15-year-olds from seven provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, and British Columbia) participated.

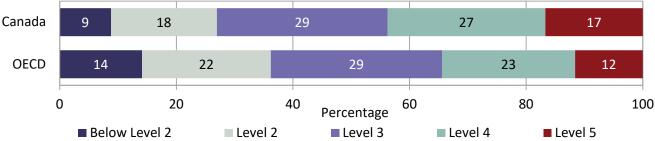
Highlights

Financial literacy encompasses an important set of life skills for all Canadians, and it is increasingly being viewed by policy-makers around the world as essential for the economic strength and well-being of their citizens. Developing skills in this area enables citizens to fully participate in modern society, managing their financial well-being knowledgeably and confidently. Many youth make financial decisions for themselves and are already consumers of financial services. For instance, they may have their own bank accounts, have access to a credit or debit card, and even make payment using a mobile device. The PISA financial literacy study provides data on how 15-year-olds are already using money and are involved in financial decisions. Students completed questionnaires that were designed to provide contextual information to aid in the interpretation of the performance results. 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. Results from the 2018 PISA financial literacy component provide an important update on the financial literacy level of 15-year-olds in Canada since PISA 2015.

Results in financial literacy

Canadian students demonstrated a high level of proficiency in financial literacy, with 91 percent of Canadian students achieving at or above the baseline level of financial literacy (Level 2), while almost one in six students reached Level 5. Of all the participating countries and economies, only one country, Estonia, had a significantly higher proportion of students performing at or above Level 2 than Canada.

FIGURE 1 Percentage of students at each proficiency level in financial literacy



Overall, Canadian 15-year-old students achieved a mean score of 532 in financial literacy, which is 28 points above the OECD average of 505. Out of the 20 countries and economies that participated in the PISA 2018 financial literacy assessment, only students in Estonia had higher mean scores than those in Canada. Across provinces, students in Ontario performed better than the Canadian average, while students in British Columbia and Prince Edward Island has scores that were similar to the average for Canada overall.

TABLE 1 Comparison of achievement scores in financial literacy to the Canadian average

Above the Canadian average	At the Canadian average	Below the Canadian average
Estonia, Ontario	British Columbia, Finland, Prince Edward Island	Australia, Brazil, Bulgaria, Chile, Georgia, Indonesia, Italy, Latvia, Lithuania, Manitoba , New Brunswick , Newfoundland and Labrador , Nova Scotia , Peru, Poland, Portugal, Russian Federation, Serbia, Slovak Republic, Spain, United States

Equity in Canada

Across Canada and in all participating provinces, there was no statistically significant gender gap in financial literacy when achievement was measured by average score. Across OECD countries, boys outperformed girls by a small margin (2 points). Although a higher proportion of girls than boys (92 vs. 90 percent) reached the baseline level (Level 2), more boys than girls achieved Level 5 in Canada overall (19 percent and 14 percent, respectively).

Of all countries participating in PISA 2018, Canada recorded one of the highest proportions of students with an immigration background. Overall, more than one-third of students in Canada have an immigrant background, with the highest proportions in Ontario and British Columbia (44 percent and 41 percent, respectively). As was the case for the major domain of reading in PISA 2018, there was no statistically significant difference in average financial literacy achievement between immigrant and non-immigrant students.² This was the case for Canada overall and for all participating provinces.

Financial literacy achievement remained unchanged in Canada between 2015 and 2018.

In 2018, Canadian students achieved an average score in financial literacy that is comparable to that obtained in 2015 (532 and 533 points, respectively). There was also no significant difference across the provinces between the two assessment cycles.

Students' financial behaviours are strongly related to financial literacy.

A 2019 survey, *Financial Well-being in Canada*,³ showed that financial well-being was most strongly related to specific financial behaviours such as making an effort to save money and avoiding borrowing to pay for daily expenses. In PISA 2018, students reported that they had displayed the following behaviours over the past 12 months:

- 90 percent had checked how much money they had;
- 85 percent had talked to someone about the job they would like to do when they finished their education;
- 83 percent had checked that they were given the right change when they bought something;
- 73 percent had bought something online (alone or with a family member); and
- 67 percent had undertaken voluntary work.

² Council of Ministers of Education, Canada, Measuring up: Canadian Results of the OECD PISA 2018 Study. The Performance of Canadian 15-Year-Olds in Reading, Mathematics, and Science (Toronto: Author, 2019), retrieved from https://www.cmec.ca/Publications/Lists/Publications/Attachments/396/PISA2018 PublicReport EN.pdf

³ Financial Consumer Agency of Canada (FCAC), Financial Well-being in Canada: Survey Results (Ottawa: Author, 2019), retrieved from https://www.canada.ca/content/dam/fcac-acfc/documents/programs/research-surveys-studies-reports/financial-well-being-survey-results.pdf

There was very little variation across provinces with respect to the proportion of students engaging in these behaviours. The relationship between these behaviours and achievement in financial literacy at the Canadian level was significant and positive (i.e., those who indicated they had engaged in these behaviours had a higher average achievement than those who hadn't).

A majority of Canadian students do not feel confident performing a number of tasks related to financial services ...

Students were asked to indicate their level of confidence in performing several routine banking tasks. Between half and a third of Canadian students responded that they were either confident or very confident about performing four of these tasks:

- making a money transfer such as paying a bill (50 percent)
- filling in forms at the bank (44 percent)
- understanding bank statements (41 percent)
- understanding a sales contract (31 percent)

On the other hand, over 60 percent of students expressed confidence in planning their spending in consideration of their current financial situation and in keeping track of their account balance. The proportion of students expressing confidence in performing these tasks varied little across provinces.

The relationship between students' level of confidence in performing these routine banking tasks and their performance in financial literacy is not as strong as it is with respect to most of the behaviours related to financial well-being mentioned above (e.g., checking how much money they had, talking to someone about their job aspirations, etc.). However, there are two exceptions to this trend: students who indicated that they were very confident about keeping track of their account balance and about planning their spending in consideration of their current financial situation attained average scores 63 points and 56 points higher, respectively, than those who said they were not at all confident about performing these tasks.

... but they feel confident performing many tasks outside of a bank using digital or electronic devices.

Considering the widespread availability of digital devices such as mobile phones, tablets, or portable computers, it is not surprising that, across Canada and in all participating provinces, more than half of all students expressed confidence (i.e., were confident or very confident) about transferring money, keeping track of their balance online, paying with a debit card instead of using cash, paying with a mobile device instead of using cash, and ensuring the safety of sensitive information when making an electronic payment or using online banking.

Most students agreed that young people should make their own decisions about how they spend their money.

Between 69 and 75 percent of 15-year-old students across all participating provinces agreed or strongly agreed that young people should make their own decisions about how they spend their money. These students performed better on average in financial literacy than those who disagreed or strongly disagreed with this statement.

Students obtain the information they need about money matters from their parents ...

Overwhelmingly, students reported that they got their information about money matters from their parents (94 percent or more across OECD countries as well as in Canada and the provinces). Canadian students who derived information about money matters from their parents achieved an average score 33 points higher in financial literacy than students who did not obtain such information from their parents. Other sources of information commonly reported by Canadian students were the Internet (66 percent) and teachers (57 percent). Approximately a quarter of students across the OECD obtained such information from magazines, although the proportion is smaller in Canada (15 percent).

... but Canadian students do not discuss financial decisions with their parents frequently.

Although students turn to their parents to get information on financial matters, the frequency of these conversations depends on the topic. While almost half of 15-year-olds in Canada had discussions with their parents once a week or more about money for things they want to buy, far fewer discussed the family budget or news related to economics or finance with the same frequency.

Looking forward

Results from the PISA 2018 study indicate that Canadian students demonstrate strong levels of financial literacy. It is also encouraging to note that there is no achievement gap by gender or by immigration status in Canada overall. However, almost one in ten students does not possess the baseline level of financial literacy that would enable them to participate fully in modern society. This is an important consideration, since confidence and sound financial knowledge and behaviours are key determinants of financial well-being for all Canadians.

The PISA data provide an opportunity for policy-makers, educators, and researchers to gain further understanding of the factors at home and at school related to financial literacy. Today's 15-year-olds are already consumers of financial products, and their present and future well-being depends to a large extent on their understanding of the financial mechanisms affecting their choices on a daily basis.

This publication was prepared jointly by the Council of Ministers of Education, Canada (CMEC), Employment and Social Development Canada (ESDC), and the Financial Consumer Agency of Canada (FCAC).

Further Canadian results are available in the report Measuring up: Canadian Results of the OECD PISA 2018 Study — The Performance of Canadian 15-Year-Olds in Financial Literacy.

This report will be available electronically in summer 2020 at www.cmec.ca