

# Fact Sheet

## PIAAC Results for BC

### What is PIAAC?

PIAAC is an OECD (Organisation for Economic Co-operation and Development) international survey which measures adult skills and competencies. A successor to the 2006 Adult Literacy and Life Skills Survey (ALS) and the 1996 International Adult Literacy Survey (ALS), PIAAC has a particular focus on skills needed for success in work and everyday life in the information age. In addition to assessing literacy and numeracy skills and the ability to solve problems in technology-rich environments, the survey collects information on how skills are used at work and in other contexts (home and community). The PIAAC survey is made up of three main parts: a direct skills assessment, a background questionnaire, and a module on the use of skills.

### When was PIAAC conducted?

Canada was involved in Round 1 of PIAAC. Information was collected in Canada from November 1, 2011 to July 27, 2012. The majority of respondents completed computer-based surveys through in-home interviews.

The initial results for Canada were published in October, 2013. Detailed reports for Canada from Statistics Canada were released starting in 2015.

### Who was involved?

Over 27,000 adults aged 16 to 65 participated in this survey in Canada. The general sample of adults was chosen from the 2011 Census, while the National Household Survey was used to select the Aboriginal and Immigrant supplementary samples.

The PIAAC survey was conducted by Statistics Canada on behalf of the Council of Ministers of Education, Canada; Employment and Social Development Canada (ESDC, formerly HRSDC); and other partners.

### What does PIAAC tell us about literacy and numeracy in BC?

Compared to other countries studied in OECD's PIAAC survey, British Columbians performed at the average for both literacy and numeracy. <sup>(4)</sup>

Overall, higher levels of education are associated with higher level of skills, but results indicate that a proportion of those with higher levels of education score at the lowest level of skill and some with lower levels of education performed at the highest level of skills.<sup>(4, p. 31; 5, p. 10)</sup>

### Literacy

16% of British Columbians aged 16 to 65 scored at, or below, Literacy Level 1 - at the lowest literacy levels. They struggle with tasks such as:

- filling out a form at work
- navigating a website <sup>(3, p. 65)</sup>
- finding information in a list sent home from preschool <sup>(2)</sup>
- using information on a food label
- comparison shopping

An additional 29% of British Columbians aged 16 to 65 (Literacy Level 2) who can accomplish the tasks above still have difficulty with:

- understanding newspapers
- following instruction manuals <sup>(4, p. 17)</sup>
- filling out a tax return
- reading health information
- reading a rental agreement
- using a library catalogue <sup>(3, p. 65)</sup>

Together, these levels represent 45% of British Columbians aged 16 to 65 who have difficulty in accomplishing some accomplishing some daily living tasks due in part to limited literacy skills. <sup>(4, p. 17)</sup>

### Numeracy

22% of British Columbians aged 16 to 65 are at the lowest numeracy levels (at or below Numeracy Level 1). They struggle with tasks such as:

- filling out a logbook at work <sup>(3, p. 77)</sup>
- calculating mileage expenses <sup>(3, p. 77)</sup>
- reading a scale in metric and imperial<sup>(2)</sup>

An additional 30% of British Columbians aged 16 to 65 who can accomplish the tasks above are at Numeracy Level 2 and have difficulty interpreting and evaluating numerical information including:

- using the information from graphs <sup>(2; 3, p. 78)</sup>
- visualizing what dimensions would look like in a 3 dimensional shape <sup>(2)</sup>
- calculating interest on a car loan<sup>(2)</sup>
- calculating appropriate dosage for children's cough medicine based on child's weight.

Combining these two levels means that 52% of British Columbians aged 16 to 65 have difficulty in accomplishing some daily living tasks due in part to limited numeracy skills.

## Problem–Solving in Technology-Rich Environments (PSTRE)

PSTRE means “using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks.”

- 20% of British Columbians aged 16 to 65 reported no previous computer experience or did not pass the basic computer skills test or opted out of the computer-based test.
- 13% of British Columbians aged 16 to 65 are below Level 1 and have very limited computer skills, generally using one function in a familiar environment, such as basic email.
- 28% of British Columbians aged 16 to 65 are at Level 1 and are able to do tasks that use widely available and familiar technology such as email and browsers to access information and assign it to categories, including:
  - sorting emails into pre-existing folders <sup>(3, p. 89)</sup>
  - downloading music files <sup>(2)</sup>
- Almost 40% of British Columbians aged 16 to 65 recorded scores in the two highest categories for problem-solving in technology-rich environments.
- 31% of British Columbians aged 16 to 65 are at Level 2 and are able to navigate across pages and applications, use tools available in software to solve problems, monitor progress and evaluate the information available.
- Sample tasks include:
  - responding to a request by locating information using the sort function on a spread sheet and emailing the information to the person who requested the information. <sup>(3, p. 89)</sup>
  - going online to find free job search sites <sup>(2)</sup>
- 8% of British Columbians aged 16 to 65 are at Level 3 - the highest skill level of PSTRE. This involves the use of multiple applications, a large number of steps, the need to evaluate and eliminate extraneous information and the need for monitoring and readjusting actions. A sample task includes scheduling competing room reservations using a web-based reservation system and communicating with all parties. <sup>(3, p.89)</sup>

## What doesn't PIAAC tell us about literacy and numeracy in BC?

- PIAAC doesn't cover:
  - Aboriginal people living on reserve
  - anyone under the age of 16
  - adults over the age of 65
  - anyone living in residential care
  - anyone who is incarcerated.
- PIAAC is not a longitudinal study so it doesn't chart individual progress. It provides a snapshot of the state of skills for a population at a particular point in time. While the level of literacy doesn't seem to have improved for the population as a whole since 2006, this alone cannot be interpreted as the lack of progress for people in literacy programs. It does indicate a continuing need for skill improvement within the population.
- While literacy levels may be correlated to demographic variables, this cannot be interpreted to mean that one causes the other. Correlation is not causation.
- Comparing the distribution of skills revealed in PIAAC (2012) to the distribution of skills in ALL (Adult Literacy and Life Skills Survey, 2003) is difficult, as the measurements are quite different and OECD has determined that further analysis is required before conclusions are drawn. <sup>(4, p. 52)</sup>

## References

1. Alexander, Craig. (2013). *Canada's literacy and numeracy challenge worsens*. Special report: TD Economics. Retrieved from <https://www.td.com/document/PDF/economics/special/CanadaLiteracyAndNumeracyChallengeWorsens.pdf>
2. National Center for Education Statistics. (n.d.) *Program for the International Assessment of Adult Competencies (PIAAC): Sample items*. Retrieved from [http://nces.ed.gov/surveys/piaac/sample\\_lit.asp](http://nces.ed.gov/surveys/piaac/sample_lit.asp)  
[http://nces.ed.gov/surveys/piaac/sample\\_num.asp](http://nces.ed.gov/surveys/piaac/sample_num.asp)  
[http://nces.ed.gov/surveys/piaac/sample\\_pstre.asp](http://nces.ed.gov/surveys/piaac/sample_pstre.asp)
3. OECD. (2013). *OECD skills outlook 2013: First results from the Survey of Adult Skills*. Retrieved from <http://www.oecd.org/site/piaac/Skills%20volume%201%20%28eng%29--full%20v12--eBook%20%2804%2011%202013%29.pdf>
4. Statistics Canada, Employment and Social Development Canada, Council of Ministers of Education, Canada. (2013). *Skills in Canada: First results from the Programme for the International Assessment of Adult Competencies (PIAAC)*. Retrieved from <http://www.cmec.ca/Publications/Lists/Publications/Attachments/315/Canadian-PIAAC-Report.EN.pdf>
5. Statistics Canada, Employment and Social Development Canada, Council of Ministers of Education, Canada. (2013). *Skills in Canada: First results from the Programme for the International Assessment of Adult Competencies (PIAAC). Annex D*. Retrieved from [http://www.cmec.ca/docs/PIAAC2013/Annex-D\\_new-tablesEN.pdf](http://www.cmec.ca/docs/PIAAC2013/Annex-D_new-tablesEN.pdf)