

THE FACTS ON PCAP (THE PAN-CANADIAN ASSESSMENT PROGRAM)

WHAT IS PCAP?

Every three years, starting in 2007, Canadian students in Grade 8 participate in writing paper-based national test that is designed to measure how these students perform, in reading, math and science. The total time required to complete the test is 90 minutes for the cognitive or performance-based subject matter questions, with an additional 30 minutes for additional questions that help to provide information concerning their background context. The test has been created by the Council of Ministers of Education, Canada (or CMEC) and is written by students across Canada's ten provinces in both majority and minority language schools (English and French).

For the latest test, written in spring, 2016, approximately 27,000 Grade 8 students participated across 1,500 schools nationwide. The test is not written by students in Canada's northern territories and students enrolled in federally funded First Nations schools do not write the test either. The major focus subject tested by PCAP in 2016 was reading, with minor subject focus on science and mathematics. Every three years, the major and minor focus areas rotate among these three subject matters. A weblink to which is provided at the end of this document.

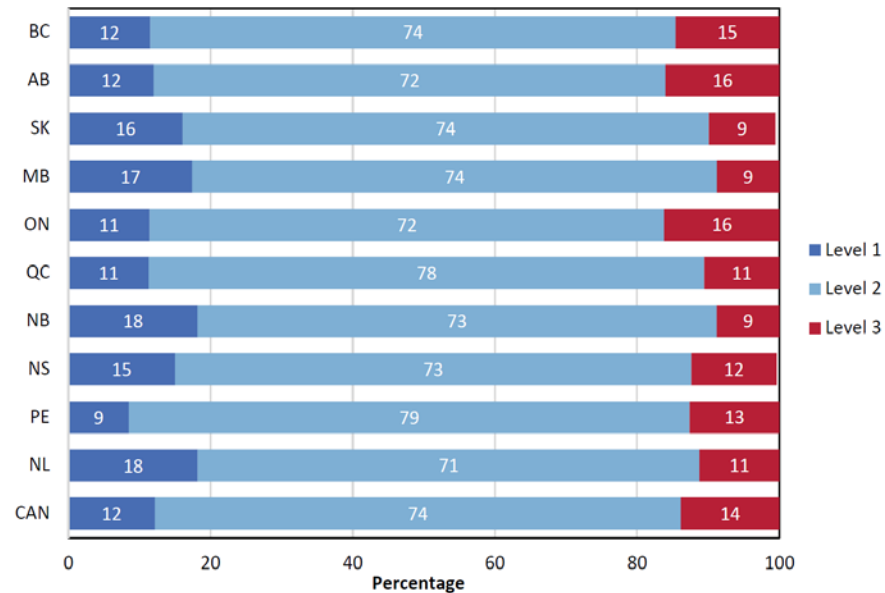
HOW DID MANITOBA'S STUDENTS DO ON THE TEST?

In Manitoba, 2,600 Grade 8 students (out of an approximate total of 13,000 students) in 163 schools participated in writing the test. Manitoba's students' overall test performance places our province in close proximity to the average abilities of all other students nationwide, as based on the CMEC "mean" or average score. The 2016 PCAP test shows that this fact remains true across reading, science, and mathematics. In terms of average score, Manitoba's Grade 8 students achieved an overall average (or "mean") score of 487 in reading, a score of 479 in mathematics, and a score of 491 in science.

These scores tell us about the general level of skill or ability of our students, and explain how much they know and what they can do in each of the tested subject areas. Each score indicates that on average, Manitoba students are able to perform according to Level 2 or 3. This further indicates that they are able to achieve at the expected level of achievement for their grade level in a certain subject area. PCAP also tells us that in terms of the major focus area (reading): 83 percent or over eight out of ten Manitoba students, perform at or above the normally expected level of proficiency for this subject matter (see Figure 1.2 on the next page, as reproduced from page 18 of the PCAP Report). This overall result tends to reflect the situation across all of Canada, with minor variance between Levels 2 and 3 achievement.

To obtain a better understanding of what each of the reading scores mean as defined by the CMEC, please consult Tables 1.2, 1.3 and 1.4 on page of the Report (interpretation of reading scores). Definition of scores for mathematics and science can be found across the 2007, 2010, and 2013 PCAP Reports, which are accessible at: [https://www.cmec.ca/240/Pan-Canadian_Assessment_Program_\(PCAP\).html](https://www.cmec.ca/240/Pan-Canadian_Assessment_Program_(PCAP).html)

FIGURE 1.2 Percentage of students at each performance level in reading



Note: Percentages may not add up to 100 due to rounding.

WHAT “GRADE” DID OUR STUDENTS GET ON THE TEST?

Unlike most tests, PCAP is not based on traditional “grading” scales (for example, letter grade scales based on “A, B, C, D, F”, or 100 point scales based on percentages). Instead, the scores achieved by Manitoba’s students tend to reflect their overall knowledge and skill. Therefore, PCAP addresses positive or negative differences in proficiency and achievement over time, as compared to earlier test results.

Put another way, there are no “right” or “wrong” scores on PCAP tests. The way that students answer questions on the test show us how much a student knows or what they can do, according to their overall level of ability or proficiency. The scores also show us where we need to focus so that, as a public school system, we can help students build upon their existing skills and proficiency by the time they graduate from high school.

Finally, because PCAP serves as a benchmark for us to measure outcomes in subject matter areas over the span of time, we can learn whether our achievement reflects positive differences over time, steady results, or negative change. This then in turn helps us as a school system to know where to increase classroom efforts for even greater achievement in the future.

In these respects, according to the Report of PCAP, a positive change in reading overall was found in British Columbia, Manitoba, Quebec, New Brunswick, Nova Scotia and PEI, while in mathematics, significant improvements in achievement between 2010 and 2016 occurred overall in Canada and in all provinces except Ontario, where results remained stable over time. Finally, in the PCAP 2016 Science

Assessment, Canadian students registered higher scores over time, compared to the baseline year of 2013. Manitoba, Quebec, and New Brunswick showed gains in science in both the anglophone and francophone school systems, and more than half of the provinces showed gains for girls. Achievement improved over time for boys in Manitoba, Quebec, New Brunswick, and Prince Edward Island. Please see page 151 and 152 of the 2016 PCAP Report for these and other concluding observations.

HOW DO MANITOBA'S STUDENTS COMPARE TO OTHER STUDENTS?

The results and outcomes that are achieved by Manitoba's students on PCAP tests have often been used for a variety of different purposes, one of which involves comparing Manitoba's students with those in other provinces. While mean scores can be rank-ordered in such manner as to categorize results in ascending or descending order, from the highest to lowest score achieved, doing so also deserves greater contextualization, in terms of how many students within each jurisdiction meet or exceed the expected level of performance for their grade level, and other important background factors, such as socioeconomic status. The latter factor can influence test score outcomes by a factor of up to 40 percent. This increases to 60 percent difference when both family background (including socioeconomic status) and school context are considered when calculating each province's outcome.

PCAP 2016 Achievement scores by province

Province	Reading	Math	Science
British Columbia	509	494	505
Alberta	510	505	518
Saskatchewan	491	483	491
Manitoba	487	479	491
Ontario	512	508	510
Quebec	503	541	507
New Brunswick	489	498	500
Nova Scotia	498	497	499
Prince Edward Island	513	503	516
Newfoundland and Labrador	491	490	501
Canada	507	511	508

PLEASE NOTE: Results in this Table are referenced from analyses (including greater detail and context) contained in Tables 1.9, 2.1 and 3.1 on pages 23, 36 and 45 of the 2016 PCAP Report.

Situated in the context of how many Manitoba students perform according to Level 2 and expectations in reading, mathematics and science (viewed longitudinally across PCAP tests), it remains true that over eight out of ten students continue to meet or exceed these standards, again reflecting a national trend.

WHAT ELSE DOES PCAP TELL US?

There is a lot of valuable information that PCAP 2016 tells us, based on Canada's and also Manitoba's scores in reading, mathematics and science. Results are further analysed in terms of gender and also by enrolment of students in majority or minority language schools. As the major subject focus for the 2016 test was reading, it is also possible to review results in terms of four critical proficiencies related to this subject area, including understanding, interpreting, and responding (personally and critically) to texts. For information on Manitoba specific results under PCAP 2016, please see pages 81-90 of the Report.

IN CONCLUSION: THE MANITOBA SCHOOL BOARD ASSOCIATION'S MAJOR OBSERVATIONS ABOUT PCAP 2016

Our students' overall abilities help to place Manitoba Grade 8 students on a competitive standing with their national peers, in all three of the subject areas (reading, mathematics and science) that were tested by PCAP in 2016. While Manitoba remains below the Canadian average in all three subject areas according to the mean scores set by PCAP, the overall margin of difference between the top performing and last performing jurisdiction remains insignificant, when situated in the context of our students' performance according to standard expectations at Level 2 and 3 proficiency.

It is reasonable to expect that across Canada and in Manitoba, our students' abilities in reading, mathematics and science will change across PCAP tests. Where positive differences are noted, this reflects improvement between one test and another and generally reflects positive changes to each province's school system in terms of teaching and learning. In this respect, PCAP concludes that Manitoba has experienced positive change over time in terms of reading, mathematics and science (see Tables 1.19, 2.6 and 3.6 on pages 32, 41 and 49 in the PCAP 2016 Report).

Additional reports and analyses will be released in late 2018 by CMEC, concerning the 2016 PCAP outcomes. These will include contextual and technical reports with additional details concerning the administration of the test and provincial performance. Notwithstanding this additional reporting, the observations and facts provided in this fact sheet will remain valid and applicable.

WHERE CAN I GET MORE INFORMATION ABOUT PCAP?

Please visit the website and webpages of the Council of Ministers of Education, Canada at:

English Overview:

<https://www.cmec.ca/536/Overview.html>

French Overview:

<https://www.cmec.ca/552/Aper%c3%a7u.html>

English Report:

<https://www.cmec.ca/Publications/Lists/Publications/Attachments/381/PCAP-2016-Public-Report-EN.pdf>

French Report:

<https://www.cmec.ca/Publications/Lists/Publications/Attachments/381/PCAP-2016-Public-Report-FR.pdf>