

Pan-Canadian Assessment Program (PCAP) 2019

Summary of Results for British Columbia

WHAT IS PCAP?

The Pan-Canadian Assessment Program (PCAP) is a national assessment of Grade 8 student achievement in Mathematics, Science and Reading. It is organized in partnership with the Council of Ministers of Education, Canada (CMEC) and all Canadian jurisdictions.

PCAP is administered every three years in English and French. In the 2019 administration, Mathematics was the major domain, while Science and Reading were minor domains. This was the fifth administration of PCAP (2007, 2010, 2013, 2016, 2019).

PCAP 2022 was delayed for one year due to the COVID-19 pandemic, the next administration session is in 2023 with Science as the major domain and Mathematics and Reading as the minor domains.

| Domain | Spring 2007 | Spring 2010 | Spring 2013 | Spring 2016 | Spring 2019 | Spring 2023 |
|--------|-------------|-------------|-------------|-------------|-------------|-------------|
| Major | Reading | Mathematics | Science | Reading | Mathematics | Science |
| Minor | Mathematics | Science | Reading | Mathematics | Science | Reading |
| Minor | Science | Reading | Mathematics | Science | Reading | Mathematics |

PCAP is conducted on a random sample basis. Across Canada, approximately 32,000 students in Grade 8 /Secondary II from close to 1,600 schools participated in 2019. In B.C., about 3,600 students from 178 schools participated (165 Anglophone and 13 Francophone schools).

Students, teachers, and principals also complete questionnaires, which help to contextualize achievement results and provide information on factors associated with successful students, schools, and education systems¹.

PCAP achievement results are presented in terms of “ranges”. Since only a sample of BC students writes the assessment, we use the results of those students to estimate how well BC students would have performed if all students had participated. This involves a certain degree of uncertainty, so we include a range of possible scores above and below the mean score of the participating students (95% confidence interval). If the range of one province overlaps the range of another province, we say they are performing in the same range (no statistically significant difference). If there is no overlap between the ranges, it means that one of the provinces outperformed the other one (statistically significant difference).

HOW DID B.C. STUDENTS DO IN MATHEMATICS (MAJOR DOMAIN)?

Mathematics performance

- In Mathematics, which was the major domain of the PCAP 2019, BC students performed below the Canadian average. Four provinces performed above BC’s range (Quebec, Ontario, Alberta, Nova Scotia), while two provinces performed below BC’s range (Newfoundland & Labrador and Manitoba).
- Although male students performed slightly better than female students in Mathematics, the difference was not statistically significant. Since PCAP 2010, where Mathematics was the major domain, the gender gap in Mathematics has narrowed.

¹ Questionnaire results are released separately from achievement results.

- Francophone students performed significantly better in Mathematics than Anglophone students in both BC and Canada as a whole. The gap between these two groups has widened since the 2010 administration.
- Although BC's performance in Mathematics has declined since the previous PCAP administration in 2016, it is not statistically significant. However, compared to the 2010 administration, where Mathematics was the major domain, BC's performance has significantly increased, even though it is still below the national average.

HOW DID B.C. STUDENTS DO IN SCIENCE AND READING (MINOR DOMAINS)?

Reading performance

- BC students performed in the same range as the Canadian average in Reading, on par with Alberta, Prince Edward Island, Nova Scotia, Newfoundland and Labrador, Saskatchewan, and Quebec. One province (Ontario) performed above BC's range in Reading, and two provinces performed below BC's range (New Brunswick and Manitoba)
- BC female students performed significantly better than BC male students in Reading. This was observed across all provinces.
- BC Anglophone students performed significantly better in Reading than BC Francophone students.

Science performance

- In Science, which was a minor domain of PCAP 2019, BC performed at the Canadian average, on par with Prince Edward Island, Ontario, Nova Scotia, Saskatchewan, Newfoundland & Labrador, and New Brunswick. One province (Alberta) performed above BC's range, while two provinces performed below BC's range (Manitoba and Quebec).
- There was no gender gap in Science.
- Although Anglophone students performed better than Francophone students in BC, the difference was not statistically significant.
- BC's Science performance has remained stable since 2013.

WHERE CAN I GET MORE INFORMATION?

B.C. Ministry of Education webpage: http://www.bced.gov.bc.ca/assessment/nat_int_pubs.htm

Email questions to: natintquestions@gov.bc.ca