



Issue in Focus

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Saskatchewan's Student Achievement: Pan-Canadian Assessment Program (PCAP) 2010

Education's Importance to Business

The viability and growth potential of Saskatchewan's economy depends on the strength and capabilities of students exiting the K-12 education system. Employers and post-secondary institutions rely on the K-12 system to provide young people with the knowledge and skills necessary to allow them to enhance Saskatchewan's economic competitiveness by actively participating in the workforce and/or engaging in additional training.

Students coming out of the K-12 system who do not have the workplace skills, knowledge and abilities employers and post-secondary institutions expect, result in additional costs and delays as deficits need to be addressed prior to the commencement of additional training.

About the Pan-Canadian Assessment Program (PCAP) 2010

Developed by the Council of Ministers of Education, Canada, the PCAP measures the skill levels of grade 8 students across Canada. For PCAP 2010, close to 32,000 Grade 8 students from 1,600 schools across the country were tested. Implemented every three years since 2007, the 2010 PCAP marks the second time that a comprehensive set of information on skills of grade 8 Canadian students has been available. Math was the major domain of PCAP 2010. It is expected that a significant number of the Grade 8 students tested in PCAP 2010 will take the PISA 2012 assessment when they are 15 years old. Because PISA 2012 will also have mathematics as its major domain, it will be possible to compare performance patterns between the two assessments.

The *PCAP-2010: Report on the Pan-Canadian Assessment of Mathematics, Science, and Reading* was released on November 28, 2011. Students from all provinces and territories, with the exception of Northwest Territories and Nunavut, participated.

The PCAP Results

Overview

Over 90% of Canadian students in Grade 8 are achieving at or above their expected level of performance in mathematics (a level 2 or above) with almost half achieving above their expected level. On a gender basis, more boys than girls demonstrated high-level math knowledge and skill proficiency. However, for Canada as a whole, girls performed better than boys in both science and reading.

In all jurisdictions except Quebec, students in French-language school systems had higher math scores than students in English-language school systems. The reverse was true for reading, where students attending English language school outperformed students who attended French minority-language school (in all jurisdictions except Quebec).

Due to subtle but substantial changes in the mathematics and science assessment instruments, the PCAP 2010 report only makes direct comparisons for the reading results. Overall, the mean score in reading of Grade 8 students enrolled in English schools in 2010 was not significantly different than in 2007, whereas the reading score in French schools in 2010 was significantly lower than in 2007.

Saskatchewan Specifics

Saskatchewan has approximately 180,000 kindergartens to Grade 12 students. About 89% of elementary/secondary students attend 719 publicly funded provincial schools; 9% attend First Nation schools and the remainder attend independent schools or are home-schooled.

Approximately 90% of Saskatchewan students in Grade 8 students achieved or exceeded the expected level of performance (level 2) in mathematics. However, in mathematics overall Saskatchewan scored below the Canadian mean score. Ranking 6th, Saskatchewan was outperformed by Quebec, Ontario, Alberta, British Columbia and New Brunswick. In 2007 Saskatchewan ranked 7th.

Despite continuing to be below the Canadian mean score in math, Saskatchewan Grade 8 students posted the largest improvement in math scores in the country from 2007 to 2010. Based on a Canadian mean score of 500, Saskatchewan's score moved from 461 in 2007 to 474 in 2010.

With math being the major component of PCAP 2010, the section was broken out into four subsections: numbers and operations, geometry and measurement, patterns and relationships, and data management and probability. The mean scores of all four math domains for Saskatchewan students were significantly lower than those of Canadian students. Overall the province scored poorest in geometry and measurement, and best in numbers and operations.

Saskatchewan students also scored below the Canadian mean score in science. The province ranked 6th being out-performed by Alberta, Ontario, British Columbia, Prince Edward Island and Nova Scotia. In 2007, the Saskatchewan ranked 7th falling behind Newfoundland and Labrador. Saskatchewan's score in science, based on a Canadian mean score of 500, went from 480 in 2007 to 488 in 2010.

In reading, Saskatchewan was again below the Canadian mean score, but still managed to be ranked fourth among the province behind Ontario, Alberta and British Columbia. Compared to the 2007 PCAP, when the province ranked 7th, Saskatchewan experienced a significant increase in reading scores. Based on a Canadian mean score of 500, Saskatchewan's score moved from 471 in 2007 to 491 in 2010.

Other Information

The forthcoming PCAP-2010 Contextual Report will provide more information about how the context of learning impacts the results of students in Canada. This information, based on questionnaires completed by students, teachers, and principals, will be published in the coming months and will offer insight into some of the factors that may influence student performance.

Saskatchewan Chamber of Commerce Position

The K-12 education system must provide young people with the knowledge and skills necessary to allow them to actively participate in the workforce and enhance Saskatchewan's economic competitiveness. The Saskatchewan Chamber believes a high school diploma should represent a standard level of education regardless of where it was earned.

In order to more effectively cooperate with Alberta and British Columbia within the New West Partnership as we compete within the global economy as a Western Canadian economic region, Saskatchewan must improve its levels of student achievement to be comparable with theirs.

Without first ensuring that our students are as ready to enter the workforce as those of our neighbours to the west, we are creating a scenario in which Saskatchewan will become the weakest link within the Partnership.

The Chamber is pleased that the results of PCAP 2010 show some improvement with regard to the overall quality of education in Saskatchewan. The organization will continue to monitor the impacts of Saskatchewan's renewed curriculum on education outcomes and encourage additional enhancements to Saskatchewan's K-12 education system.

Further Reading

Council of Ministers of Education, Canada. (2011, November). *PCAP-2010: Mathematics, Science, and Reading HIGHLIGHTS*. Retrieved December 01, 2011, from Pan-Canadian Assessment Program:

<http://www.cmec.ca/Programs/assessment/pancan/Documents/2010/pcap2010-highlights.pdf>

Council of Ministers of Education, Canada. (2011, November). *PCAP-2010: Report on the Pan-Canadian Assessment of Mathematics, Science and Reading*. Retrieved December 01, 2011, from Pan-Canadian Assessment Program:

<http://www.cmec.ca/Publications/Lists/Publications/Attachments/270/pcap2010.pdf>

Council of Ministers of Education, Canada. (2008). *PCAP-2010: Report on the Pan-Canadian Assessment of Mathematics, Science and Reading*. Retrieved December 01, 2011, from Pan-Canadian Assessment Program:

<http://www.cmec.ca/Publications/Lists/Publications/Attachments/124/PCAP2007-Report.en.pdf>