

Chapter 15: The Pan-Canadian Assessment Program (PCAP)

In 2007, over 30,000 students took part in the Pan-Canadian Assessment Program. This included 1,971 students from Newfoundland and Labrador. This chapter will provide an overview of how this province's students are performing in the three areas assessed - reading, mathematics and science.

What is PCAP?

PCAP was created by the Council of Ministers of Education, Canada (CMEC) to assess the performance of 13 year old students in three core subjects - reading, mathematics and science. This new assessment tool replaced the previous School Achievement Indicators Program. Similar to PISA, PCAP is administered once every three years with each cycle testing one major domain and two minor domains. In its first cycle in 2007, reading was the major domain. In the next two assessments in 2010 and 2013, mathematics and science, respectively, will be the major domains assessed.

The difference between the major and minor domains involves the number of students assessed with a larger number of students assessed for the major domain. For example, in 2007, the PCAP was administered to approximately 30,000 13 year old students. Of these, approximately 20,000 students wrote the reading segment (the major domain) while 10,000 wrote the mathematics and science section (the minor domains) (CMEC, 2008b, p.4).

Two performance measures can be derived from the assessment results - mean (or average) scores and proficiency level. In PCAP, the Canadian average score was set at 500 points with a standard deviation of 100. In other words, about two-thirds of all the Canadian students scored between 400 and 600 points in the assessments. This standardization of the Canadian mean allows comparisons to be made across provincial jurisdictions. The second measure allows student performance to be ranked into three proficiency levels of increasing difficulty. A student with a proficiency level of 3 would demonstrate a greater depth of understanding of the subject than a student at level 1. Level 2 is set as the acceptable level of performance for 13-year old students. Since mathematics and science were the minor domains in the 2007 assessment proficiency levels were not reported. Also, gender differences at the provincial level were not available in the mathematics and science assessments.





The reading assessment

In the reading assessment, the province's student's scored significantly lower than the Canadian average. This trend was also seen in the three reading sub-domains assessed (i.e., comprehension, interpretation and response to text) (see *figure 15.1*). Information for the other provinces is provided in *Table 15.1* at the end of the report.

Scores on the reading assessment were grouped into three proficiency levels ranging from level 1 (ability to demonstrate a partial understanding of a text) to level 3 (ability to understand more complex texts). In the province, 81% of the students achieved a proficiency level of 2 or 3. Similar percentages were seen in many of the provinces across the country (see *figure 15.2*).

Figure 15.1: Average scores in the reading assessment (PCAP 2007)

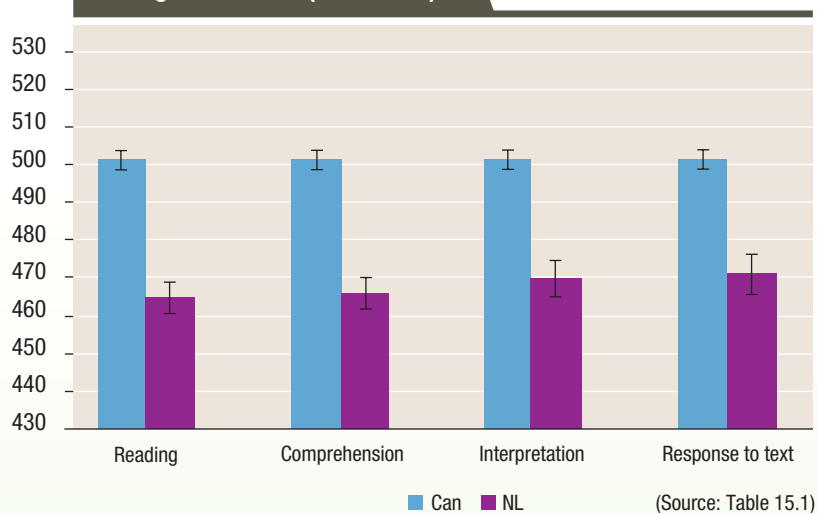
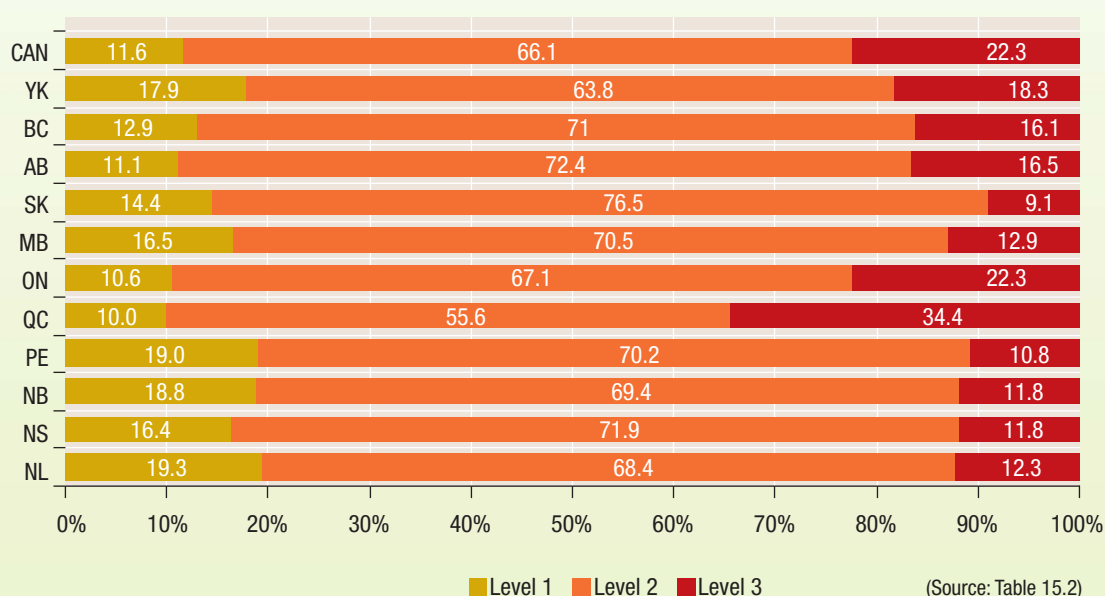
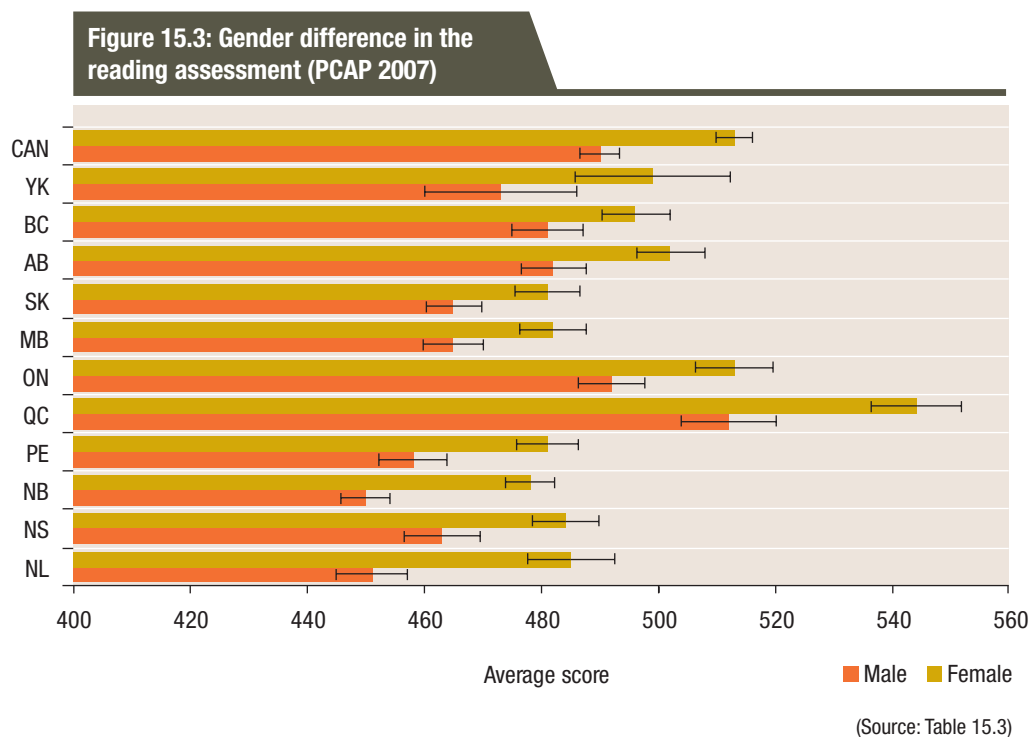


Figure 15.2: Reading proficiency levels across Canada (PCAP 2007)

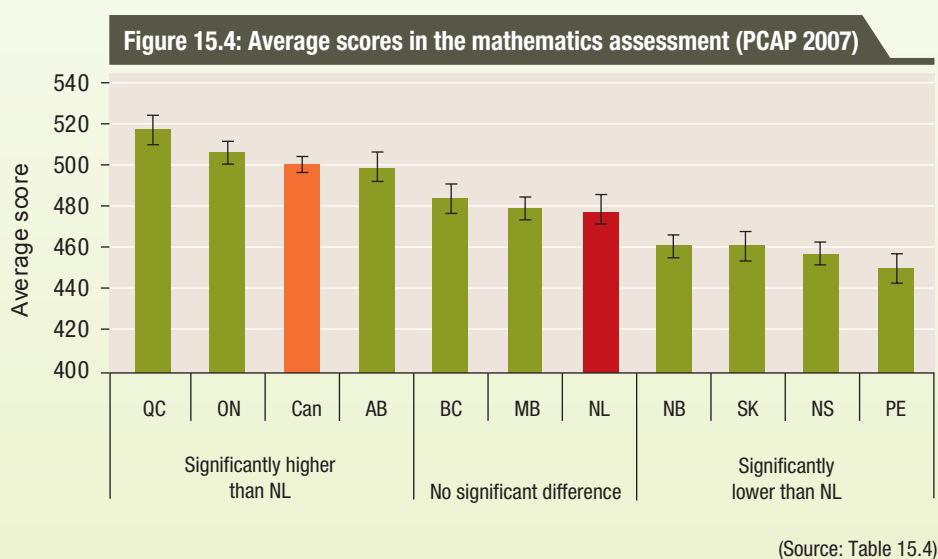




Along gender lines, girls performed better than boys. In Newfoundland and Labrador, girls achieved significantly higher scores in reading compared to boys. This trend is seen across Canada. However, the scores of girls and boys in the province were significantly lower than their Canadian counterparts (see *figure 15.3*).

The mathematical assessment

Students in Newfoundland and Labrador performed significantly higher than those in other Atlantic Canadian provinces. In the 2007 assessment, students achieved an average score of 478. There were three provinces (Quebec, Ontario and Alberta) and Canada as a whole where a significantly higher score was achieved (see *figure 15.4*).



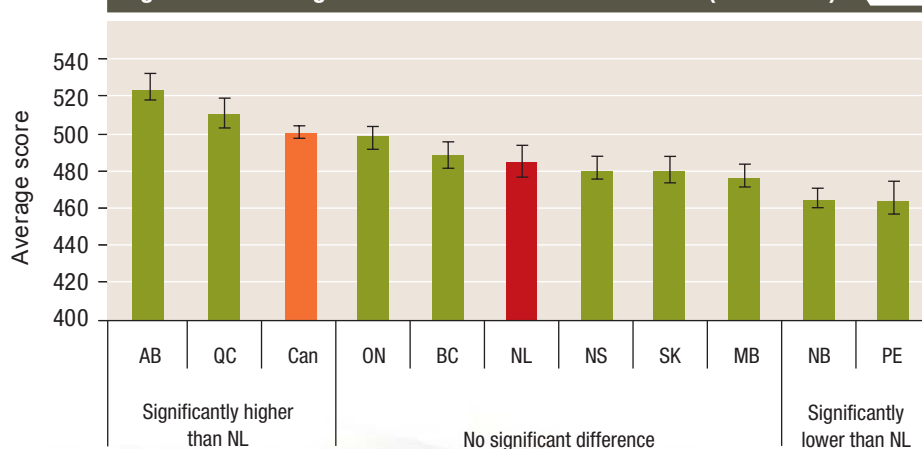


The science assessment

The average score of the province's students on the science assessment was 485 points. There were only two provinces (Alberta and Quebec) and

Canada as a whole where a significantly higher score was found. Students in New Brunswick and Prince Edward Island performed significantly lower than the province (see *figure 15.5*).

Figure 15.5: Average scores in the science assessment (PCAP 2007)



(Source: Table 15.5)



Summary

Overall, the province’s students scored significantly lower than their Canadian peers in the areas assessed by PCAP. However, the province performed at the

same level, or significantly better than the other provinces in Atlantic Canada. Students in Ontario, Quebec and Alberta achieved the highest scores in Canada (see *Table B*).

Table B: Performance of Newfoundland and Labrador students in relation to Canada (PCAP 2007)			
	Average score in relation to Newfoundland and Labrador		
	Significantly lower	No significant difference	Significantly higher
Reading overall		Nova Scotia New Brunswick Prince Edward Island Manitoba Saskatchewan	Quebec Ontario Alberta British Columbia Canada
Comprehension		New Brunswick Prince Edward Island	Nova Scotia Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Canada
Interpretation	Prince Edward Island	Nova Scotia New Brunswick Manitoba Saskatchewan	Quebec Ontario Alberta British Columbia Canada
Response to text	Prince Edward Island	Nova Scotia New Brunswick Manitoba Saskatchewan	Quebec Ontario Alberta British Columbia Canada
Mathematics	Nova Scotia New Brunswick Prince Edward Island Saskatchewan	Manitoba British Columbia	Quebec Ontario Alberta Canada
Science	New Brunswick Prince Edward Island	Nova Scotia Ontario Manitoba Saskatchewan British Columbia	Quebec Alberta Canada