INDICATORS 2012/13

A Report on Schools

Newfoundland Labrador

Indicators 2012/13 -

A Report on Schools

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CHAPTER 1: INTRODUCTION

Public interest in school-level data, particularly student achievement, is very high and increasing all the time. People want to know how their children and their schools are performing. In an effort to make our education system open and accountable to the public it serves, the Department of Education publishes the annual Indicators report: *Indicators 2012/13 - A Report on Schools*.

This report is divided into four parts:

- Part I provides a profile of the educational system reporting on such things as the number of schools, students and teachers in the province.
- Part II focuses on the high school years and examines topics such as the graduation and drop-out rates in the province and across Canada.
- Part III explores student performance on a variety of provincial, national and international standardized assessments.
- Part IV offers an impression of student attitudes towards school as determined by the annual School Climate Survey.
- Appendix A includes the data used to create the figures throughout the report.

It is important to note that *Indicators 2012/13 - A Report in Schools* does not rank schools. Rather, it is the purpose of this document to provide a wide range of information about various aspects the province's educational system and show various trends over the past five years. This information can be used to inform administrators, educators, students and the broader school community where their schools are succeeding at this moment in time and where they can work together to improve.

Part I:

The Provincial Educational System

CHAPTER 2: A PROFILE OF THE EDUCATIONAL SYSTEM

The Department of Education is responsible for the education of all citizens from pre-school to post-secondary and beyond. To meet the needs of such a diverse population, the department provides its programs and services through one of the following two branches:

(1) The *Primary, Elementary & Secondary Branch* is responsible for school services; program development; student support services; evaluation and research; distance learning and innovation; and early childhood learning.

(2) *The Corporate Services Branch* is responsible for strategic planning and annual reporting; budget preparation and monitoring; financial services; school bussing; policy development and accountability; school construction; teacher payroll services; and federal-provincial agreements.

Specifically, the department's responsibilities can be grouped into six main program and service areas. These are:

(1) *Curriculum and Programs.* In the K-12 system, the Department of Education is responsible for developing and monitoring the provincial curriculum, creating or selecting learning resources, developing and implementing distance learning activities, developing programs for Improved teaching and learning, developing and supporting school development, developing programs and resources for Aboriginal students, and providing teacher professional development.

In addition, inclusive support services to children with special needs are provided by administering student support programs and the allocation of a full range of personnel to school districts. The department also fosters and delivers improved early childhood learning opportunities through cooperation with other departments.

(2) *Educational Policy and Direction*. The department sets the strategy and vision for the K-12 educational system. Decision-making is informed through conducting relevant research and analysis, and the provision of statistical indicators and background information.

(3) *Student Assessment and Certification*. Responsibilities include the evaluation, monitoring, test development and certification processes for the K-12 system and administration of the General Equivalency Diploma (GED) tests.

(4) *Research, Records and Reporting/Accountability*. Responsibilities include all major functions related to education system performance such as education statistics, planning, evaluation, accountability, policy development, and research. The department collects data and manages databases for core areas such as enrolment and graduate outcomes.

(5) *Support to Federal, Provincial and Territorial Agreements & Initiatives*. The department coordinates the activities of a number of federal-provincial agreements for which it is a key stakeholder. This includes agreements such as Official Languages in Education, the Community Access Program, and agreements pertaining to Aboriginal schools. The department's broader roles and interests are advanced by collaboration at a regional and pan-Canadian level through organizations such as the Council of Ministers of Education, Canada; the Council of Atlantic Ministers of Education and Training; the Atlantic Provinces Special Education Authority; and their sub-committees and working groups.

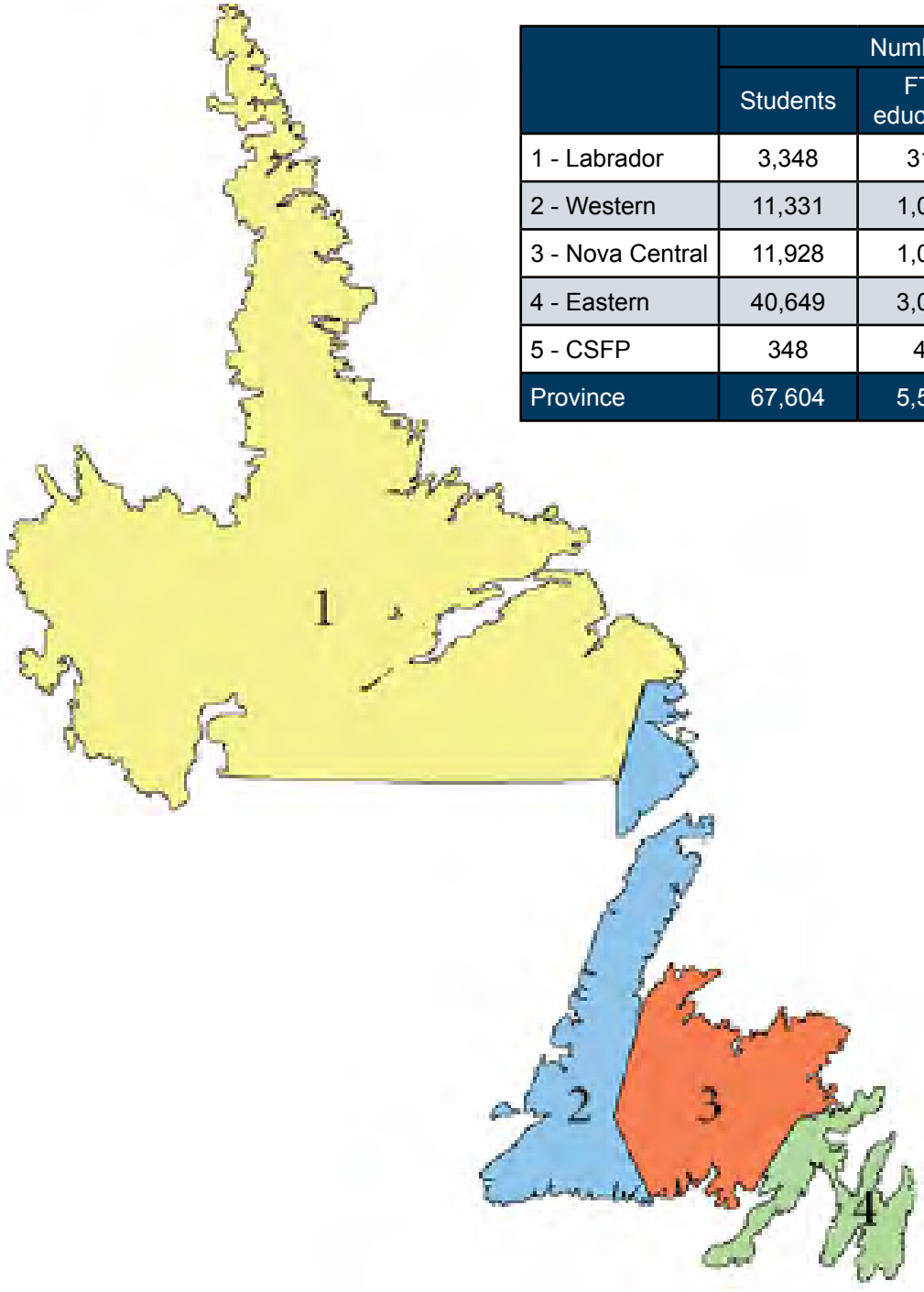
(6) *Finance, Administration and Corporate Services*. Responsibilities include preparation and monitoring of the annual budget, financial management, legislation and regulations, school construction, public libraries, teacher certification, teachers' payroll, and financing the K-12 educational system.

School districts

On a local level, regional school districts oversee the daily operations of schools. Each district is managed by a regional school board and is responsible for a variety of things including staffing and distributing resources; evaluating, acquiring, distributing and maintaining technological resources and buildings; transporting students; and developing instructional policies and practices.

In 2012/13, five regional school districts existed in the province - four Anglophone districts (the Labrador, Western, Nova Central and Eastern School Districts) and one Francophone district (Le Conseil scolaire francophone provincial de Terre-Neuve-et-Labrador (CSFP)). The CSFP was created to meet the needs of students whose first language was French. It is responsible for five schools located in Happy Valley-Goose Bay, Labrador City, Cap Saint-Georges, La Grand'Terre and St. John's. The map on the following page shows the location of each school district as well as some key indicators. The CSFP is not shown on the map because the district encompasses the entire province.

A District Profile (2012/13)



	Number of		
	Students	FTE educators	Schools
1 - Labrador	3,348	313	15
2 - Western	11,331	1,033	65
3 - Nova Central	11,928	1,035	65
4 - Eastern	40,649	3,089	118
5 - CSFP	348	45	5
Province	67,604	5,515	268

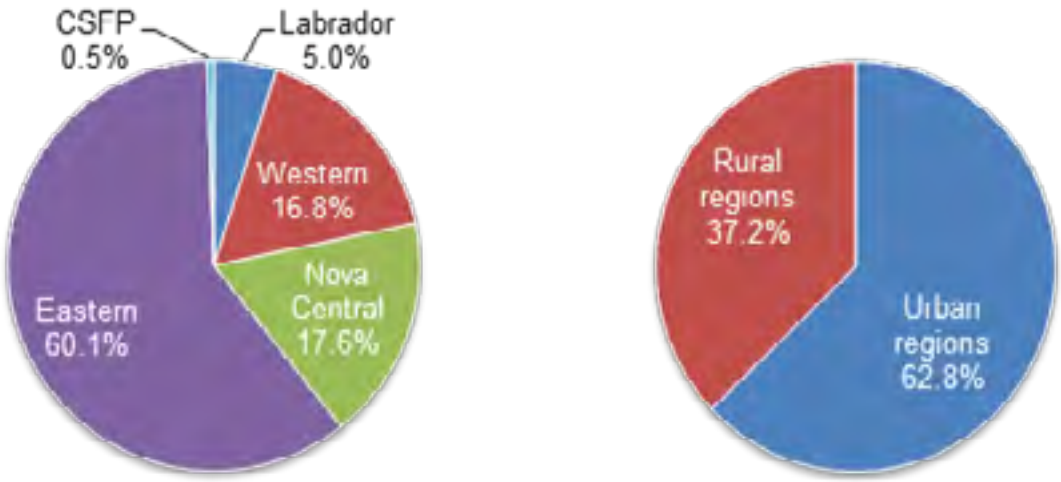
Note: The number of FTE (or full time equivalent) teachers refers to the head count of full-time teachers (those employed as 100% of an allocated unit) combined with the number of part-time teachers according to the percent of an allocated unit. Teachers who are employed less than full-time are counted in accordance with the percentage employed. In other words, a teacher who is employed in a 75% position is counted as 0.75 of a full-time equivalent teacher.

The province's students

In 2012/13, 67,604 students were enrolled in the province's public school system. While the Eastern School District was the smallest in geographic size, it had the highest concentration of students with 60.1%. In addition, about two thirds of students were located in urban[1] regions of the province with the remaining in rural regions (see figure 1).

Figure 1: Distribution of students across the province

(a) By district (2012/13) **(b) By region (2012/13)**



(Source: Table 1)

Trends in student enrolment

Student enrolment has been gradually declining over the past five years. While total enrolment decreased by 4.3% (i.e. 3,027 fewer students) between 2008/09 and 2012/13, the year to year decline is growing smaller. Enrolment projections to the year 2017/18, suggest this decline will almost stabilize in the coming years (see figure 2a).

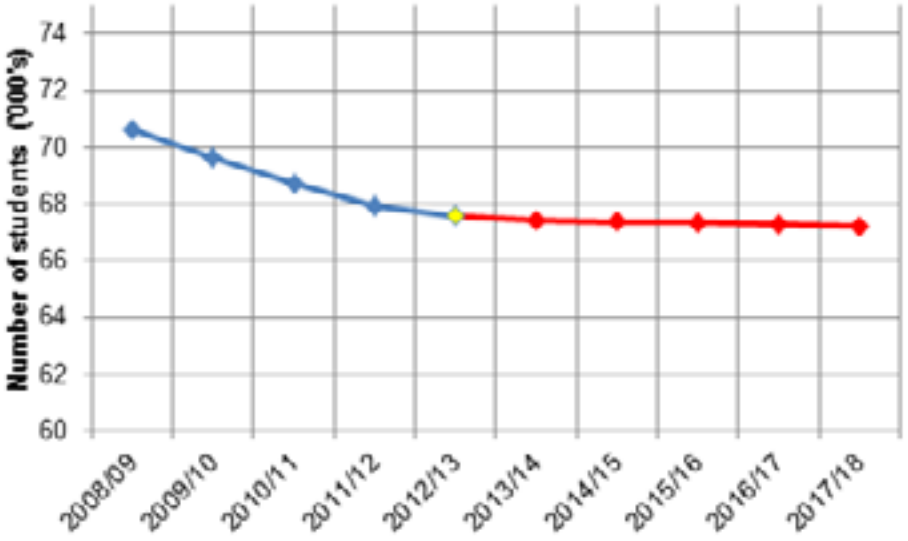
Looking back over the past five years (i.e., from 2008/09 to 2012/13), the CSFP was the only district where enrolment grew (by 29.9% or an increase of 79 students). In the other four school districts, the greatest decline occurred in the Western School District where enrolment decreased by 11.3%. The smallest decline (1.5%) in enrolment was in the Eastern School District (see figures 2b and c).

As shown in figure 2d, rural regions of the province experienced a greater decline in enrolment as compared to urban regions. Rural enrolment declined by 10.6% between 2008/09 and 2012/13 whereas urban enrolment declined by only 0.1% for the same time frame.

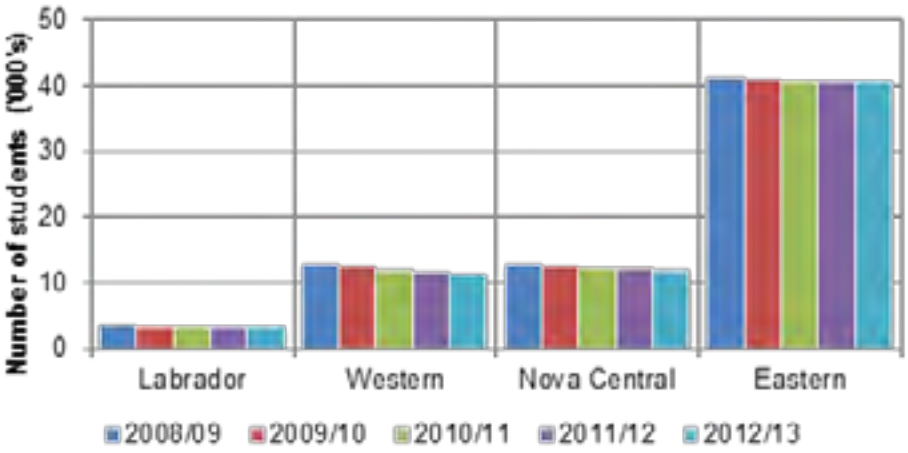
1 Urban regions have a population of 5,000 residents or more and rural regions have a population of less than 5,000 residents.

Figure 2: Provincial and district enrolment trends

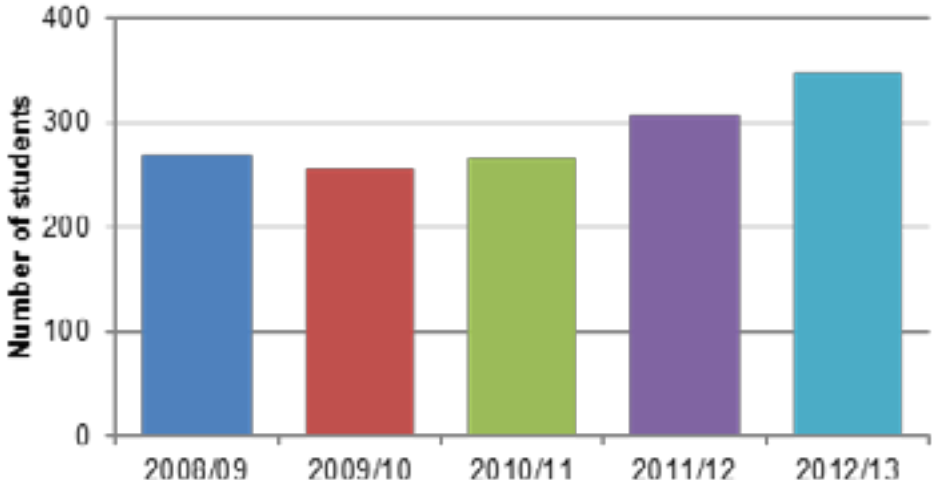
(a) Actual and projected provincial trends (2008/09 - 2017/18)



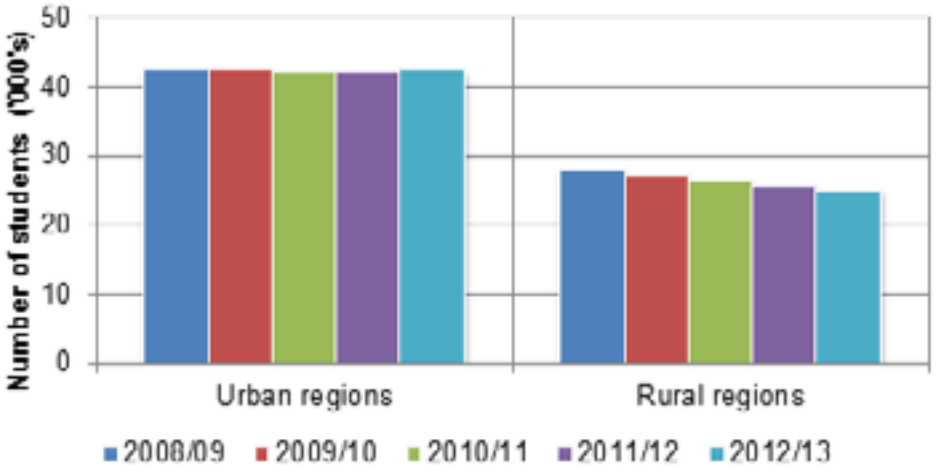
(b) Anglophone district enrolment (2008/09 – 2012/13)



(c) Francophone district enrolment (2008/09 – 2012/13)



(d) Urban and rural enrolment (2008/09 - 2012/13)



(Source: Table 2)

The province's teachers

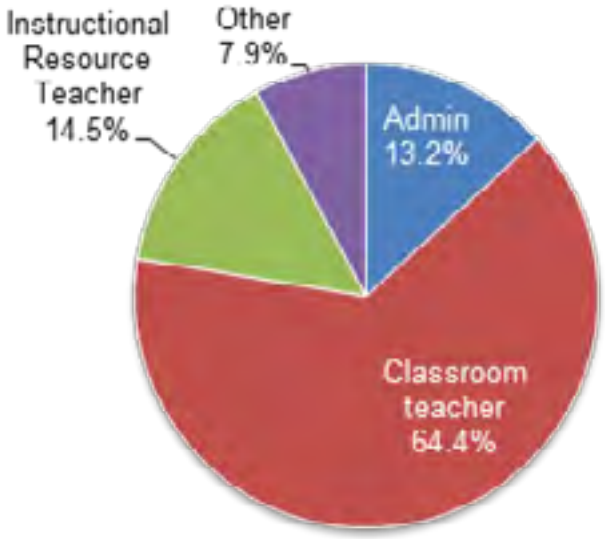
In 2012/13, there were 5,515 full-time equivalent (FTE) educators in the province. Approximately two thirds of these were classroom teachers and an additional 14.5% were instructional resource teachers[2] (see figure 3a) The 'other' category in the following figure includes positions such as itinerant teachers, guidance counsellors and English as Second Language (ESL) teachers.

Along gender lines, women accounted for 72.2% of the FTE educators in 2012/13. Within the specific positions, only the administrative positions (i.e., principal, assistant principal and/or departmental head) had a similar percentage of men and women. In each of the other positions, the percentage of women was much higher than men (see figure 3b).

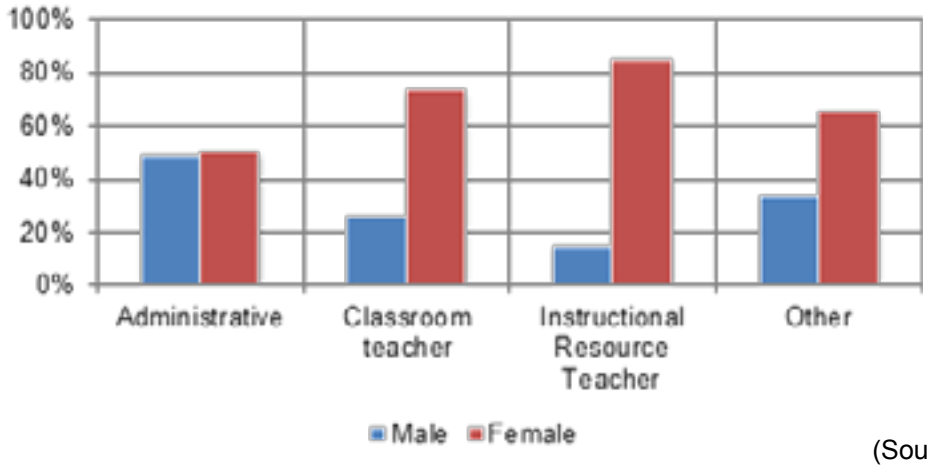
2 The instructional resource teachers (IRTs) (formerly known as special education teachers) category includes Teachers for the Severely Mentally Handicapped and Teachers for the Severely Physically Disabled.

Figure 3: A profile of the province's educators

(a) Position breakdown (2012/13)



(b) Gender breakdown (2012/13)



(Source: Table 3)

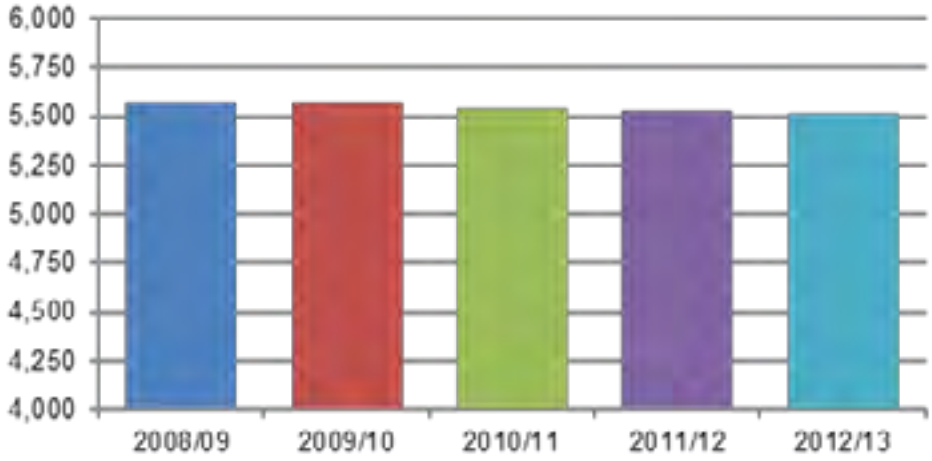
Trends in the profile of FTE teachers

Over the past five years, the number of FTE teachers in the province has remained fairly stable decreasing by only 1.0% between 2007/08 and 2012/13 (see figure 4a). However, the workforce is aging. While the majority of teachers have been between 40 and 49 years of age since 2008/09, the percentage of younger teachers (i.e. those under 30 years of age) has gradually decreased from 13.5% in 2008/09 to 11.5% in 2012/13. In addition, the percentage of teachers in the oldest age group (50 years or older) is on the rise (see figure 4b).

Along gender lines, the profile of administrative positions is changing. Over the past five years, the percentage of female administrators has increased from 49.9% in 2008/09 to 50.7% in 2012/13. This was the first time where there was a higher percentage of females than males in an administrative position (see figure 4c).

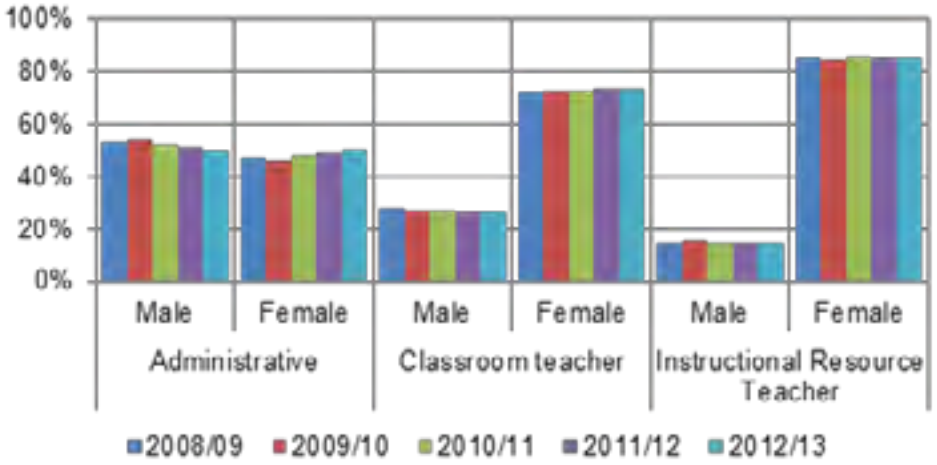
Figure 4: A changing profile of FTE educators in the province

(a) Number of FTE teaching positions (2008/09 – 2012/13)



(b) Teacher's age (2008/09 – 2012/13)

(c) Gender trends (2008/09 – 2012/13)



(Source: Table 4)

Pupil Teacher Ratio

The pupil teacher ratio (PTR) is a measure of human resources to the system. It is a national indicator developed by Statistics Canada to enable comparisons to be made across provincial jurisdictions. The PTR is calculated by dividing the total enrolment of all public school students by all school-based educators, including principals, assistant principals and learning resource teachers (many of whom also teach in classrooms). However, this is not meant to represent an average or ideal class size.

In 2012/13, the provincial PTR was 11.8 or one teacher for every 11.8 students. Across the five school districts, the PTR ranged from 7.3 in the CSFP to 12.7 in the Eastern School District (see figure 5a).

Since the PTR is a national indicator, it is possible to compare Newfoundland and Labrador to other Canadian jurisdictions. As shown in figure 5b, Newfoundland and Labrador had the lowest PTR in the country (11.8). The two highest PTRs were found in Alberta (15.9) and British Columbia (16.8). Information from the Yukon was not available for 2010/11.

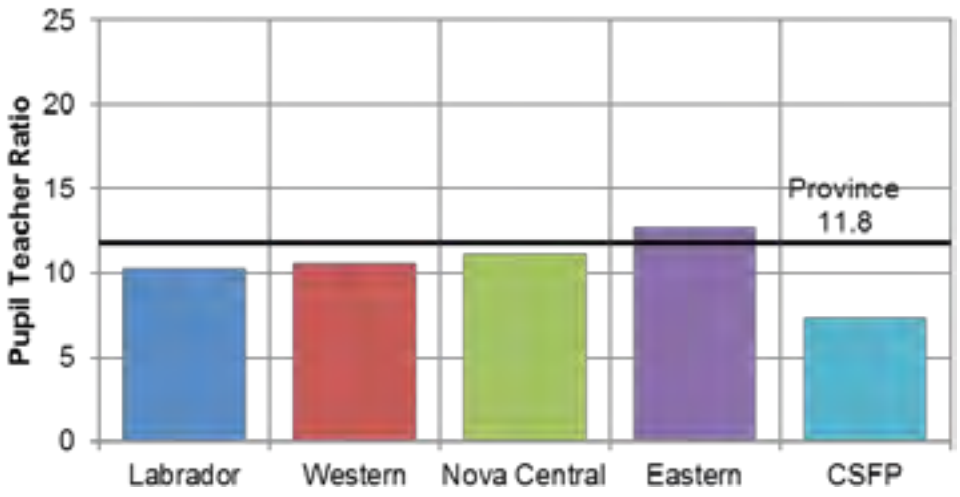
Over the past five years, the provincial PTR has decreased 12.2 in 2008/09 to 11.8 in 2012/13 (see figure 5c), As shown in figure 5d, a similar trend is seen at the district level with two exceptions:

(1) The Eastern School District PTR has remained at 12.7 over the past four years (2009/10 to 2012/13), and

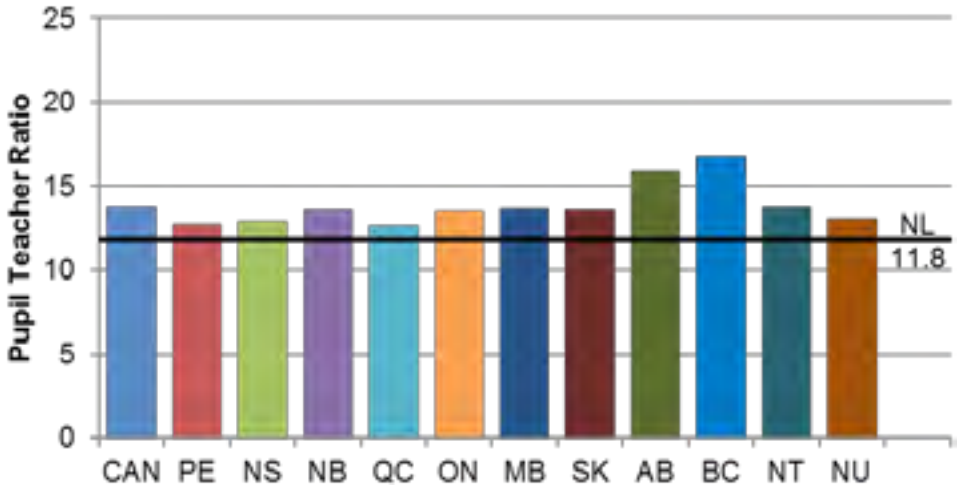
(2) The CSFP PTR increased from 6.4 in 2008/09 to 7.3 in 2012/13.

Figure 5: Pupil Teacher Ratio

(a) Provincial and district PTR's (2012/13)

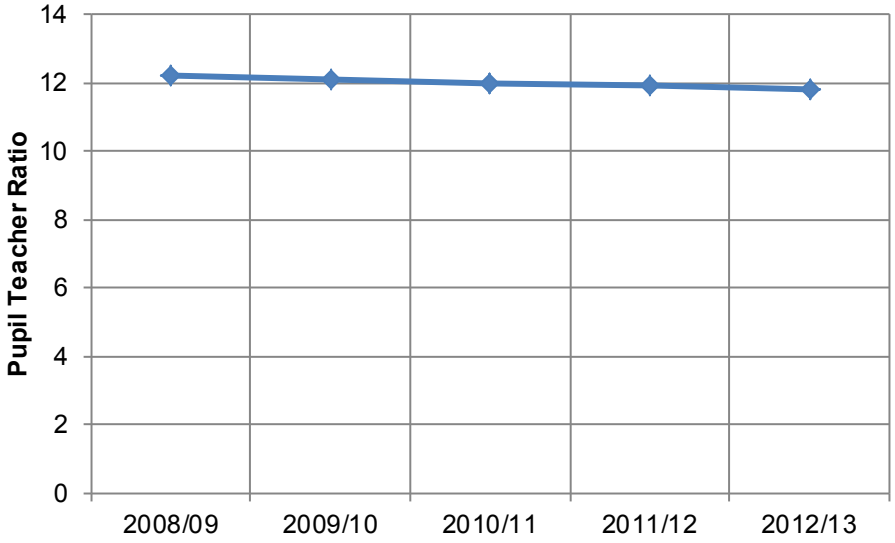


(b) PTR's across Canada (2010/11)[3]

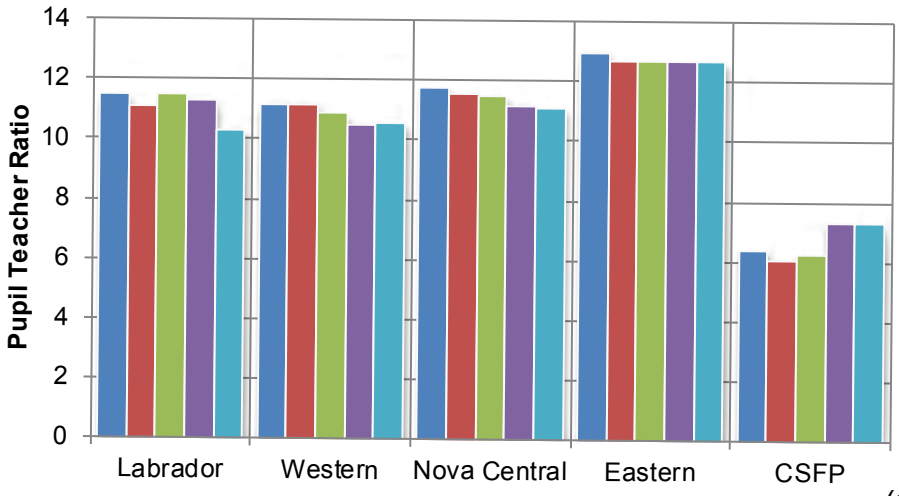


3 This is the most recent data provided by Statistics Canada.

(c) Provincial trends in the PTR (2008/09 – 2012/13)



(d) District trends in the PTR (2008/09 – 2012/13)



(Source: Table 5)

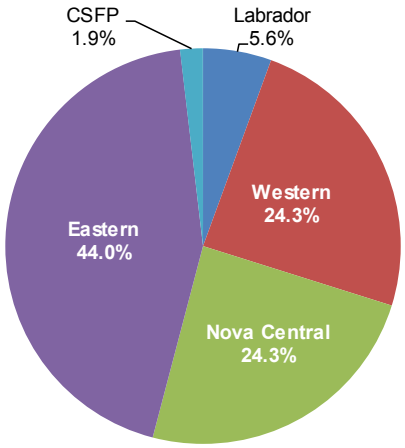
The province's schools

In 2012/13, there were 268 public schools in the province. As shown in figure 6, close to half of the schools were in the Eastern School District and approximately two thirds were in rural regions of the province.

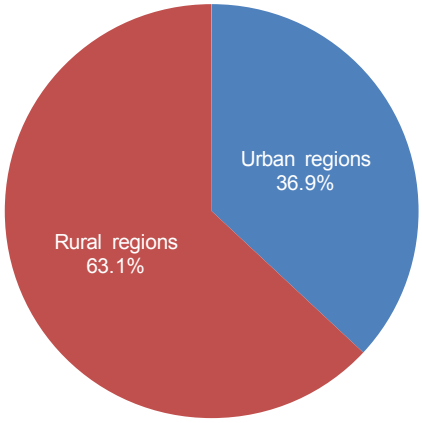
During the past five years, the total number of schools declined by 5.1% from 279 in 2008/09 to 268 in 2012/13. The Western School District experienced the greatest change with seven schools closing between 2008/09 and 2010/11. However, the number of schools has remained fairly stable over the past two or three years depending on the district (see figures 6c and 6d).

Figure 6: A profile of schools in the province

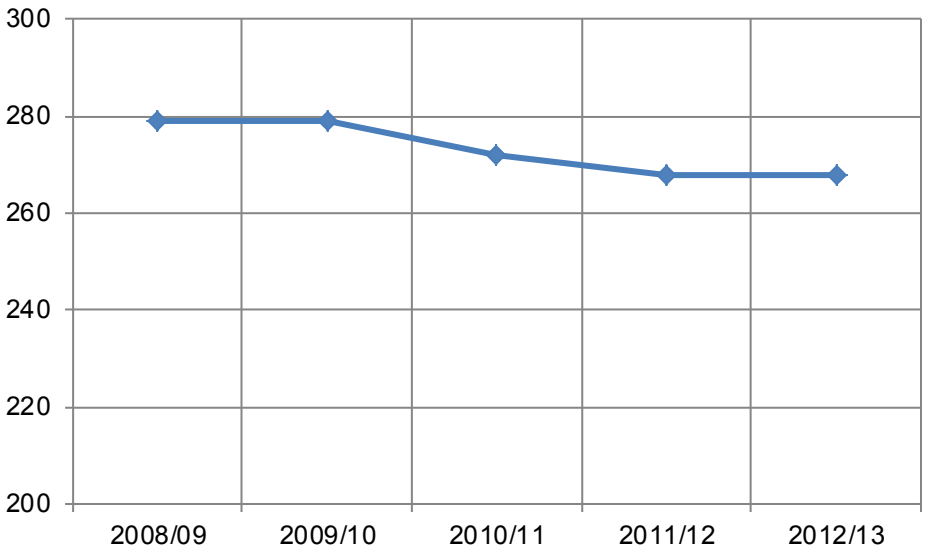
(a) By district (2012/13)



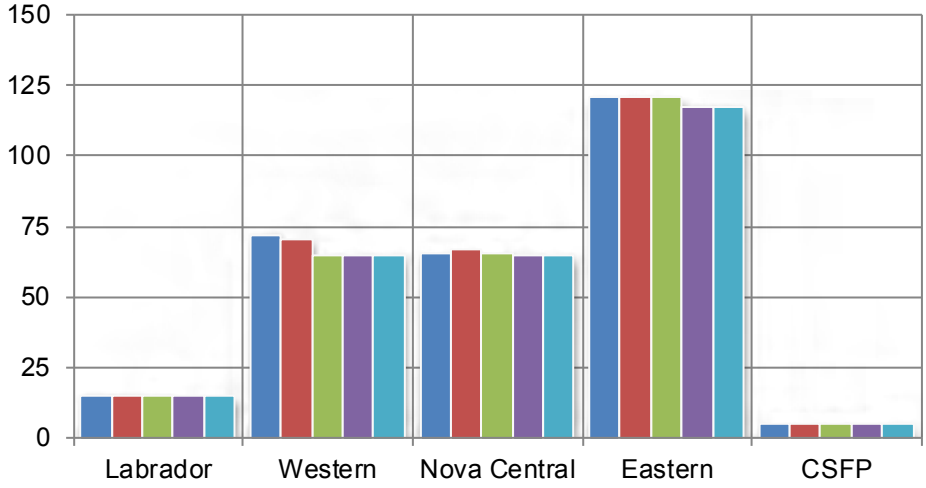
(b) By region (2012/13)



(c) Provincial trends in the number of schools (2008/09 - 2012/13)



(d) District trends in the number of schools (2008/09 - 2012/13)



(Source: Table 6)

School configuration

Schools can be grouped based on the grades they offer. Currently, there are six different school configurations in the province. They include:

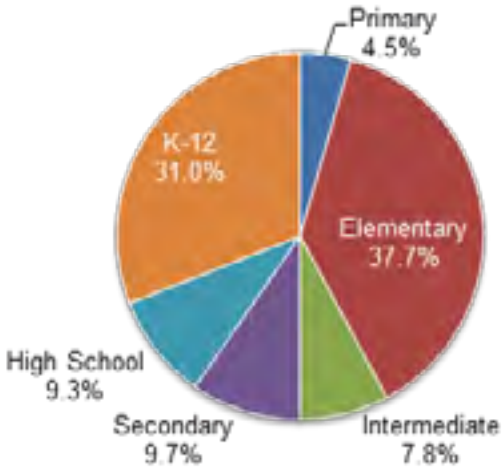
School configuration	Range of grades available
K – 12	All grades between Kindergarten and Grade 12
Primary	Any combination of grades between Kindergarten and Grades 3, 4 or 5 with no higher grades present
Elementary	Kindergarten to Grades 6 or 9 or any combination in this range
Intermediate	Often includes Grades 7 to 9 but can include 1 or 2 grades above or below (e.g., Grades 6 to 9)
Secondary	Any combination of grades between Grades 7 and 10 to 12
Senior High	Grades 9 to 12 or Grades 10 to 12

In 2012/13, the majority of the province's 268 schools were either elementary or K-12. Combined, these two configurations accounted for over two-thirds of the schools (see figure 7a). In terms of population density, approximately half of the schools in urban regions were configured for the elementary grades whereas rural areas had a majority of K-12 schools (see figure 7b).

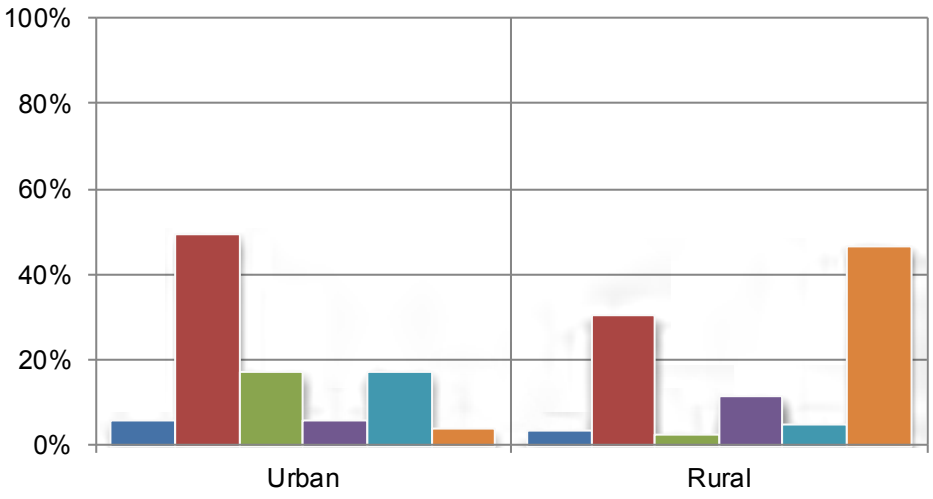
With the exception of the Eastern School District, the majority of schools in each district were K-12 (see figure 7c). For example, the percentage of K-12 schools ranged from 53.3% in the Labrador School District to 38.5% in the Nova Central School District. In the Eastern School District, close to half of the schools (49.2%) were elementary.

Figure 7: Grade configurations of schools in the province

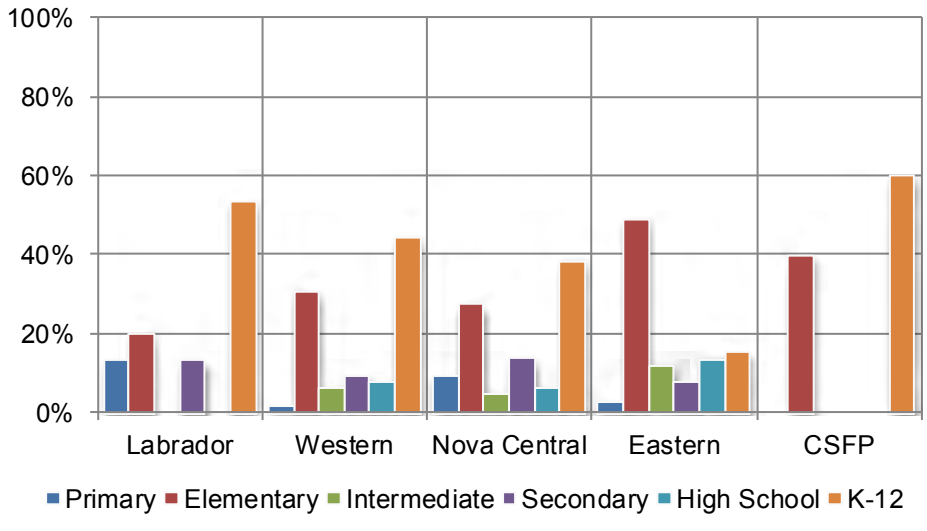
(a) Provincial breakdown (2012/13)



(b) By region (2012/13)



(c) District breakdown (2012/13)



(Source: Table 7)

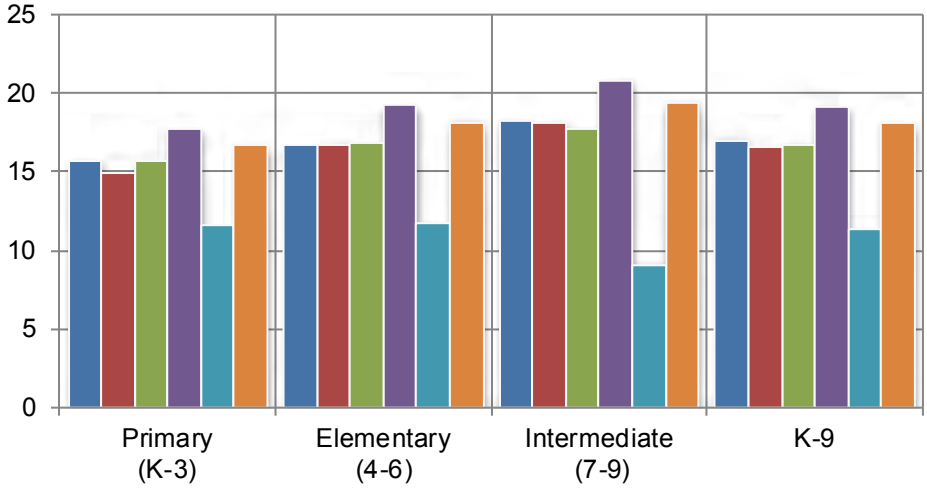
Average class size

Average class size is defined as the total number of students in classes divided by the total number of classes. In 2012/13, the provincial average class size ranged from 16.6 in the primary grades to 19.5 students in the intermediate grades. Figure 8a shows the average class size for the primary, elementary, intermediate and K-9 grades at the district level. The Eastern School District had the highest average class size in each of the four grade levels. The smallest average class sizes in the province were in the CSFP where it ranged from 9.1 for the intermediate grades to 11.8 for the elementary grades.

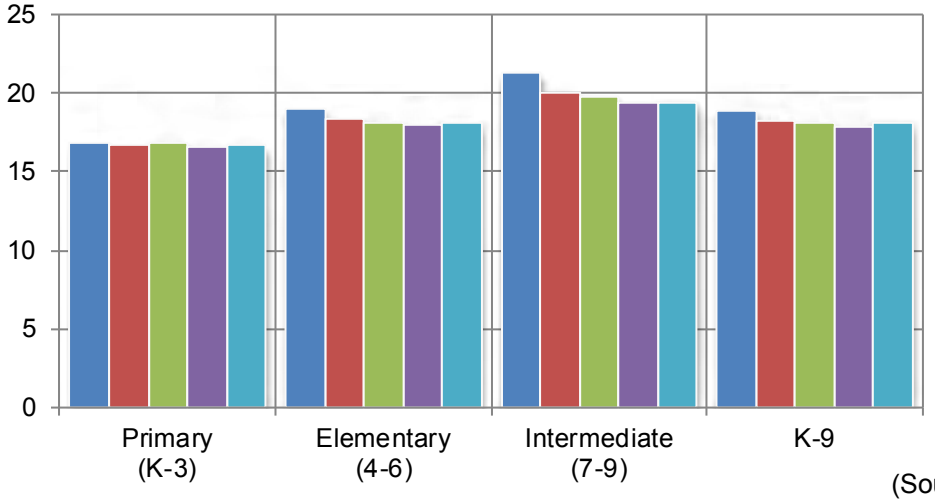
Provincially, average class sizes have been stable over the past five years (see figure 8b). At three of the four grade levels, the highest and lowest average class sizes are only separated by a point or less. The exception was at the intermediate level, where the change is slightly more pronounced. During this time, average class size decreased from 21.3 students per class in 2008/09 to 19.5 in 2012/13.

Figure 8: Average class size

(a) District and provincial breakdown (2012/13)



(b) Trends in provincial average class (2008/09 – 2012/13)



(Source: Table 8)

Part II:

High School Indicators

CHAPTER 3: HIGH SCHOOL COURSE SELECTIONS

In grade 9, students select the courses they wish to complete in their first year of high school. Students can choose either general or academic level courses in three subject areas: mathematics, sciences and English language arts. The general courses were designed to meet the needs of students who are experiencing difficulties in that particular subject. The academic courses are intended for the majority of students and particularly those who intend on pursuing a post-secondary (i.e., university or college) education. Table 3.1 lists the names of the general and academic level courses in these subject areas.

The selection of a general level course in Grade 10 (or Level I) does not necessarily mean a student will have to complete general courses in Levels II or III. Students can choose to complete an academic course at a later date. Also, students experiencing difficulties with academic level courses can request a transfer to the general level course. However, if students continue to complete these general courses in their second and third year of high school, they are on the way to graduating with a general diploma.

The remainder of this chapter will focus on enrolment in first year general level courses in mathematics, science and English language arts. This is because these subjects will affect the type of diploma they receive upon graduation.

Table 3.1: Course types

Subject area	General	Academic
Mathematics	Mathematics 1202	Mathematics 1201
Science*	Science 2200	Science 1206
English Language Arts	English 1202	English 1201

* In Level I, a student who starts on a general program will usually choose Science 2200. If they are following the academic science program, students will usually start with Science 1206 in Level I.

Enrolment in level I general courses

Figure 9 shows the percentage of students enrolled in a general level course in mathematics, science and English Language Arts. These percentages are calculated by dividing the number of students in the general level course by the total number of students in the general and academic level courses combined. For example, in 2012/13, there were 5,751 students completing one of the two first level mathematics courses. Of these, 17.8% (or 1,024) were enrolled in the general course (Mathematics 1202).

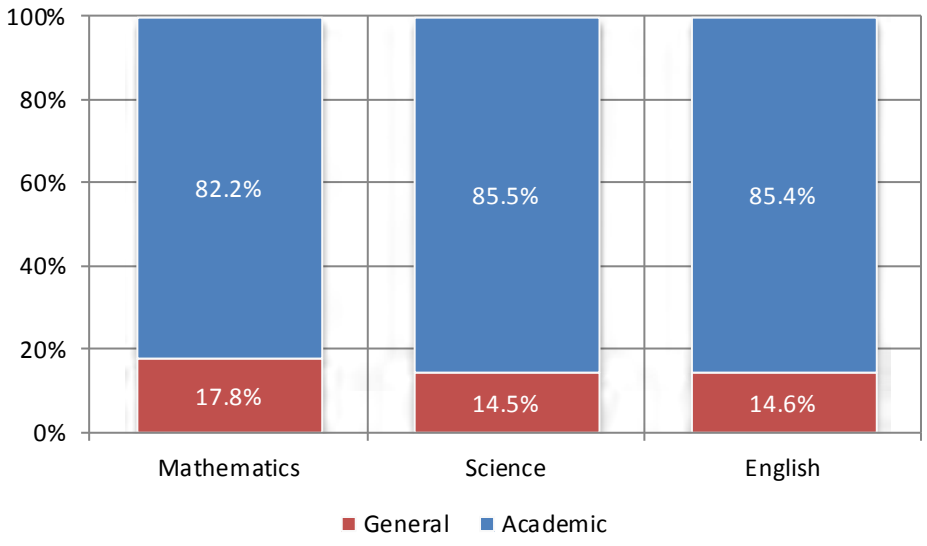
Mathematics had a slightly higher percentage of students enrolled in the general level course (17.8%) compared to science and English (see figure 9a). In addition, the percentage of males enrolled in the general level course was approximately nine percentage points higher than females in each subject area (see figure 9b).

Over the past five years, the percentage of students enrolled in the science and English general level courses declined each year. In mathematics, the pattern was somewhat different. A decline occurred each year between 2008/09 and 2010/11 followed by an increase of 6.3 percentage points in 2011/12. The following year, the percentage of students enrolled in the general level mathematics course decreased again (see figure 9c).

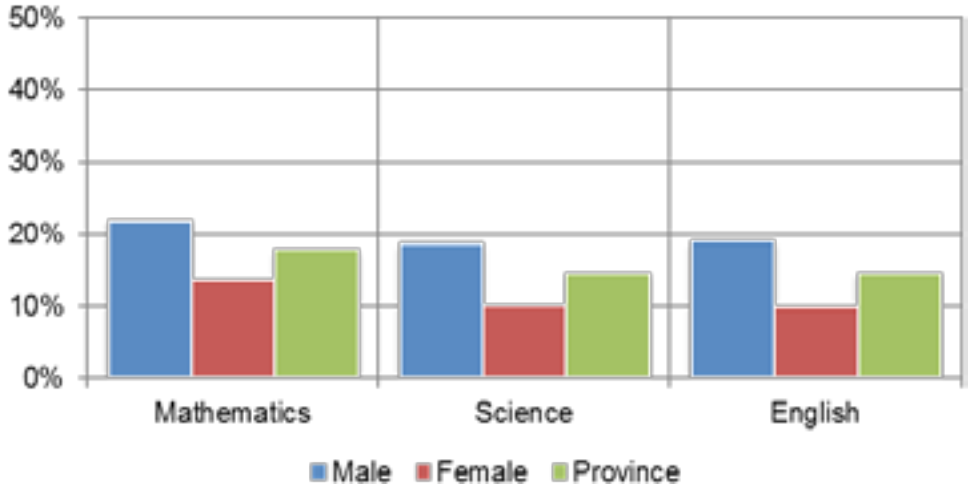
As shown in figure 10, the majority of students pass the general level courses. The percentage of successful students ranged from 86.0% in English to 90.1% in science.

Figure 9: Percentage of students enrolled in Level I general courses

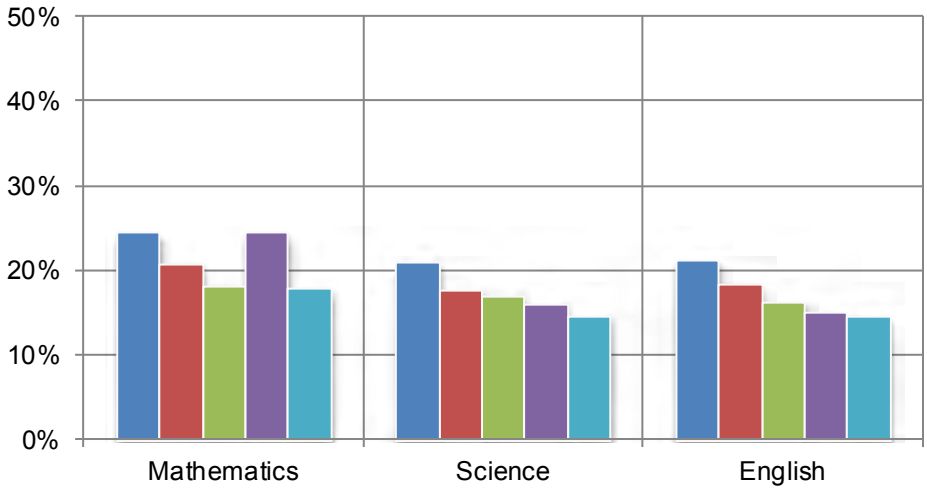
(a) By subject



(b) Gender breakdown and provincial percentages (2012/13)



(c) Trends in general level course enrolment (2008/09 – 2012/13)



(Source: Table 9)

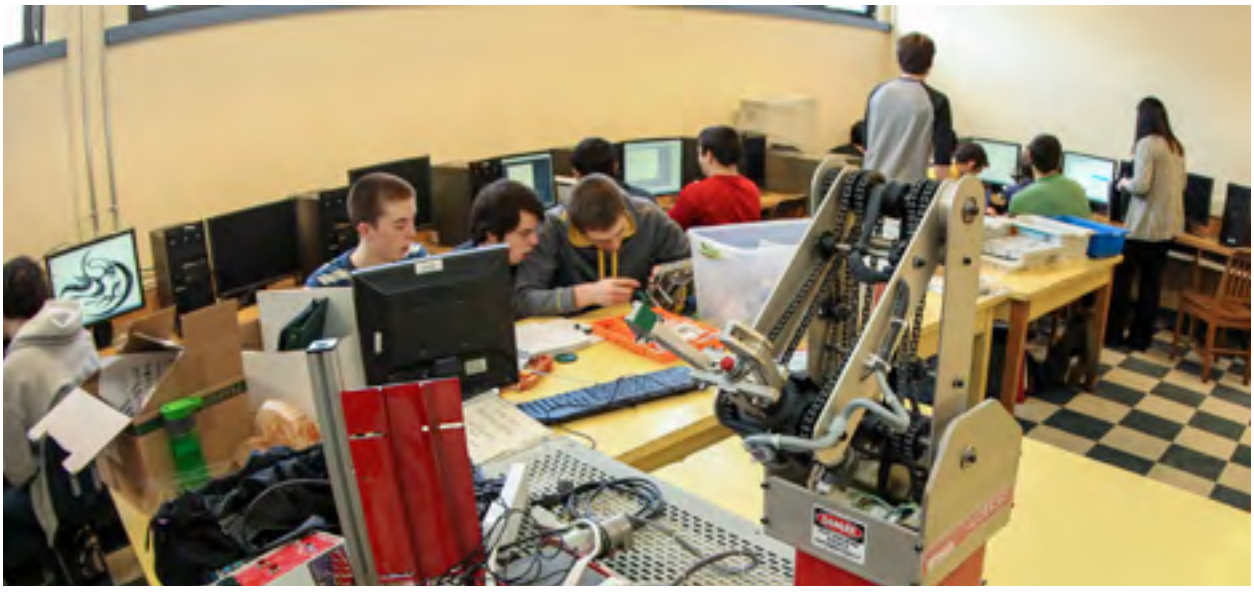
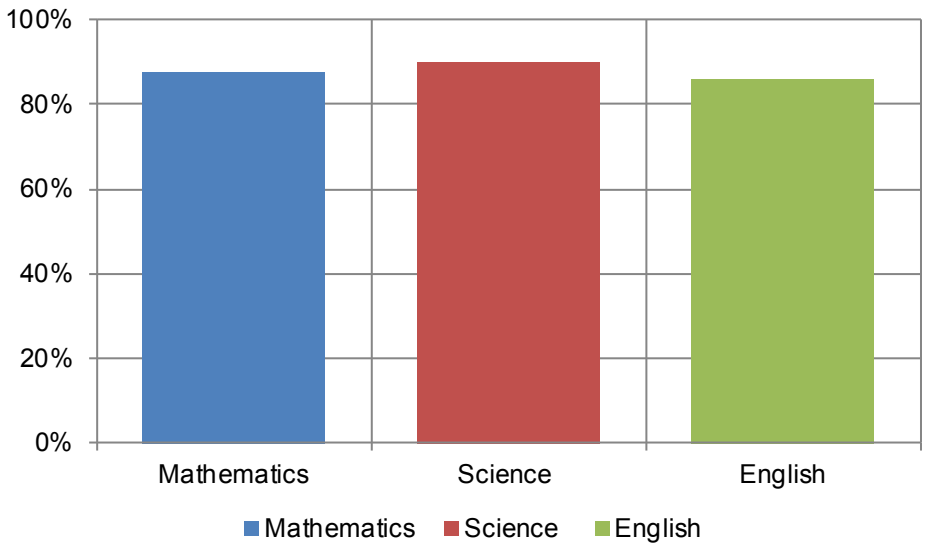


Figure 10: Student success rate in general level courses (2012/13)



(Source: Table 10)

CHAPTER 4: EARLY SCHOOL LEAVERS

While the majority of high school students graduate, some will not. For whatever reason, some young people will leave school before graduating. This chapter will look at this group of young people – the early school leavers.

Early school leaver rate versus drop-out rate

There are two different rates used to calculate the percentage who do not graduate: the early school leaver rate (a provincial measure) and the drop-out rate (a national measure). While these two rates measure the same concept, they are calculated differently and may not be the same.

The provincial early school leaver rate defined

The provincial Early School Leaver Rate (ESLR) rate is calculated by the Department of Education. It is based on student registration information for a specific school year. Once a school registers a student for their first high school course, they are recorded in the high school certification system. Each student is then tracked until he/she either graduates, or does not show up in a subsequent year on the high school certification system. A list of students who did not graduate and are not registered for high school courses is sent to each school in the province. The principal is asked to identify the status of these students – did they drop out of school, move out of the province, etc. This information is used to calculate the ESLR for a given year by following this formula:

$$\text{ESLR rate} = \frac{\text{Number of students identified by principals as having dropped out of school}}{\text{Total number of students registered in high school}} \times 100\%$$

The national drop-out rate defined

The national drop-out rate is determined by Statistics Canada using information collected from the monthly Labour Force Survey. Specifically, it is calculated by dividing the total number of young people between 20 and 24 years of age who do not have a high school diploma and are not attending school, by the total number of all 20 to 24 year olds. In other words:

$$\text{Drop-out rate} = \frac{\text{The number of young people (20-24 years old) without a high school diploma and not attending school}}{\text{All young people between 20 and 24 years of age}} \times 100\%$$

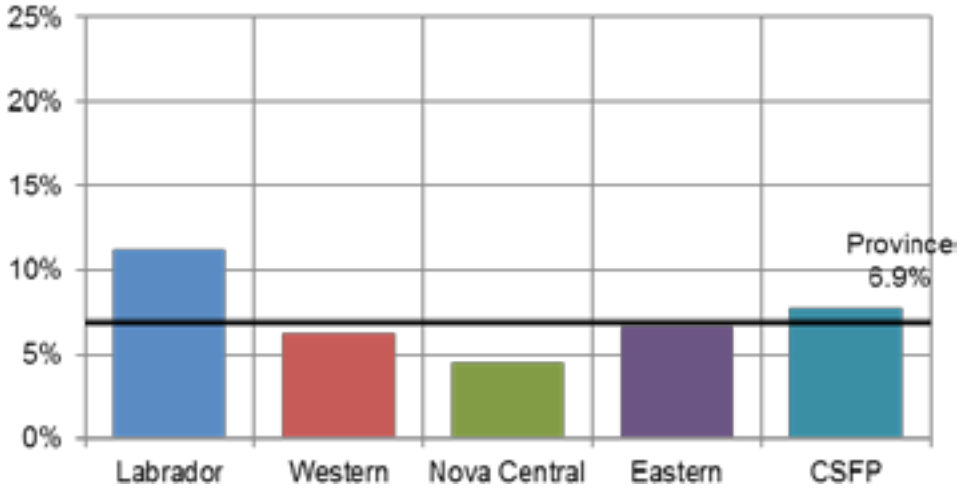
Provincial early school leaver rate

In 2012/13, the provincial ESLR was 6.9%. This is down from 7.5% in 2011/12. At the district level, the ESLR ranged from 4.5% in the Western School District to 11.2% in the Labrador School District (see figure 11a). Along gender lines, the male ESLR was higher than the female rate (7.7% vs. 6.0%).

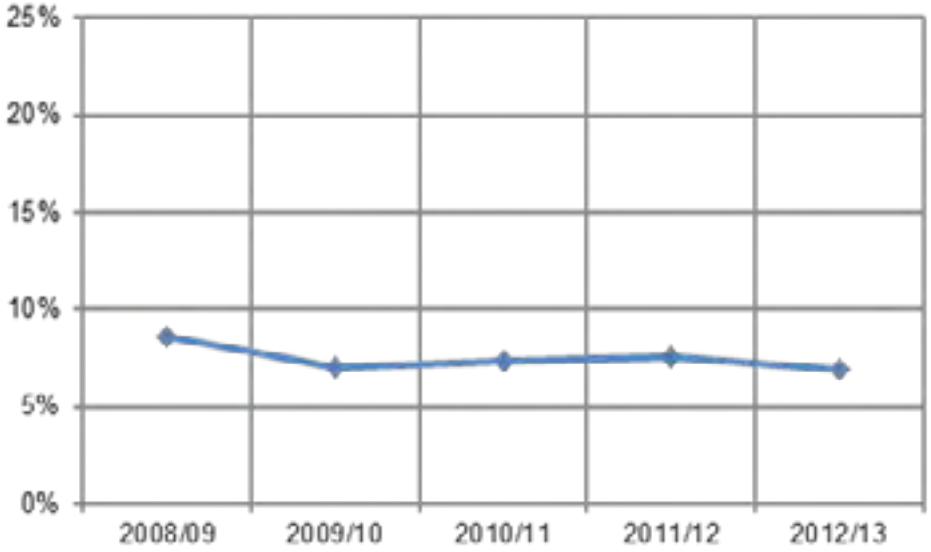
Over the past five years, the provincial ESLR has dropped from 8.6% in 2008/09 to 6.9% in 2012/13 (see figure 11b). This pattern was also seen at the district level. In each school district the 2012/13 ESLR was between 1.4 and 3.0 percentage points lower than in 2008/09. At the district level, the highest rates were consistently in the Labrador School District and CSFP. The lowest rates were found in the Western, Nova Central and Eastern School Districts (see figure 11c). Along gender lines, the male ESLR is consistently higher than the female rate with approximately two percentage points separating them each year (see figure 11d).

Figure 11: Early School Leaver Rate

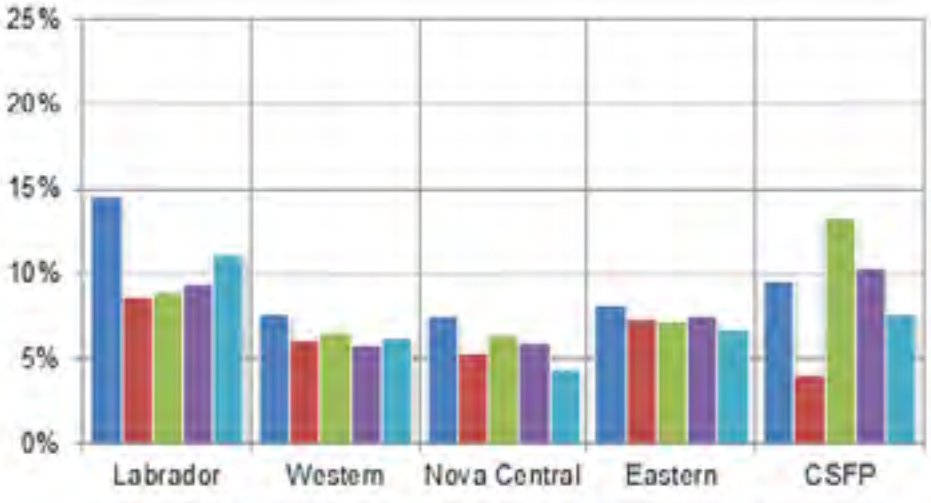
(a) District and provincial (2012/13)



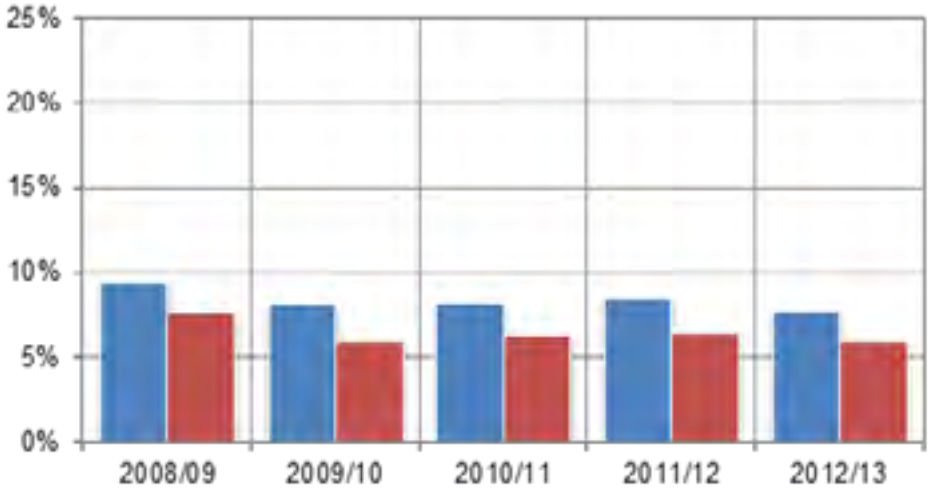
(b) Provincial trends (2008/09 – 2012/13)



(c) District trends (2008/09 – 2012/13)



(d) Gender trends (2008/09 – 2012/13)



(Source: Table 11)

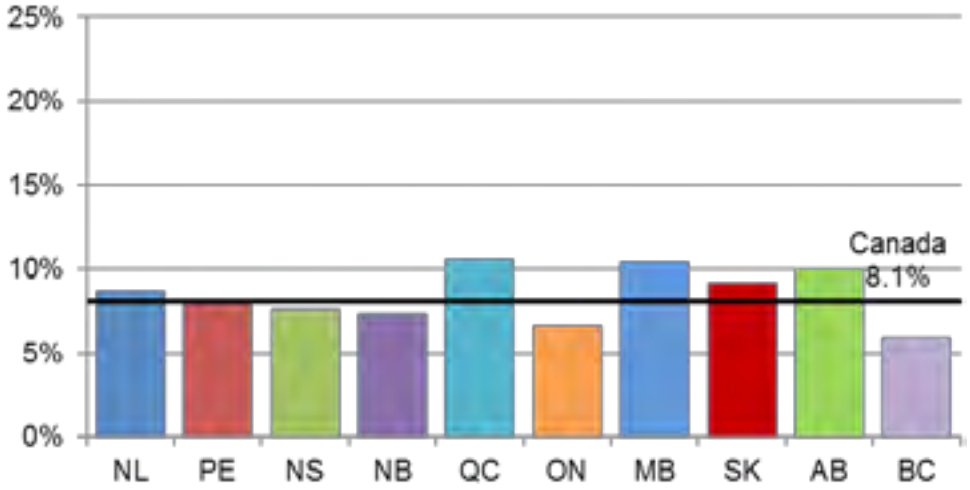
National drop-out rate[4]

In 2012, the provincial drop-out rate was 8.7% which was higher than the Canadian rate (8.1%). Across the country, the drop-rate ranged from a low of 5.9% in British Columbia to a high of 10.6% in Quebec. Newfoundland and Labrador had the sixth lowest drop-out rate in the country. However, less than three percentage points separate the six provinces with the lowest drop-out rate (see figure 12a).

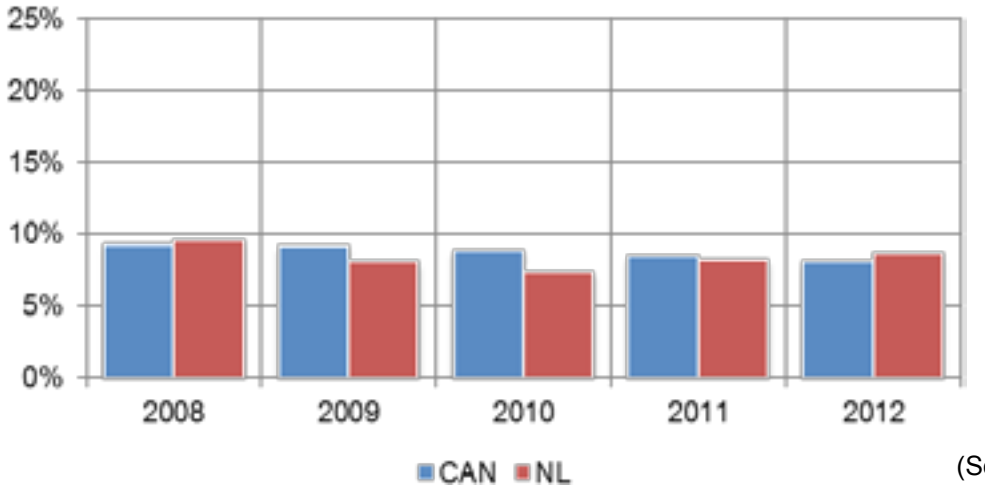
During the past five years, the provincial drop-out rate has slightly increased since hitting its lowest point of 7.4% in 2010. In each of following two years, the rate grew by less than one percentage point (8.2% in 2011 and 8.7% in 2012). The Canadian drop-out rate continued its decline dropping from 9.3% in 2008 to 8.1% in 2012 (see figure 12b).

Figure 12: Drop-out rates

(a) Across Canada (2012)



(b) Trends in Canadian and Newfoundland and Labrador drop-out rates (2008 - 2012)



(Source: Table 12)

4 The drop-out rate calculated by Statistics Canada is based on a three-year moving average.

CHAPTER 5: HIGH SCHOOL GRADUATION

Each year, thousands of students begin their final year of high school. This chapter will describe how they fare by exploring graduation rates and diploma status. Additional information about high school graduation requirements can be found in the following resources:

- *On Course: A Handbook for Grade 9 Students and Parents* provides a basic overview of the graduation requirements.
- The *High School Certification Handbook* provides a more detailed explanation of graduation requirements.

Both of these resources are located on the Department of Education's website and can be accessed through the following link: http://www.ed.gov.nl.ca/edu/k12/highschool/gradreq.html

Pass rate versus graduation rate

There are two ratios that can be used to describe the number of students who successfully complete (i.e. graduate) high school – the pass rate (provincial) and the graduation rate (national). While each describes the same concept, they are calculated differently and may give slightly different results.

The provincial pass rate defined

The pass rate is a provincial measure useful for exploring differences among the province's schools. It is calculated by dividing the actual number of graduates by the number of eligible graduates in a given school. Students are considered to be 'eligible to graduate' if they are enrolled in the courses needed to meet graduation requirements for that school year. These students will graduate IF they successfully complete the courses they are registered in. In other words:

$$\text{Pass Rate} = \frac{\text{Total number of students who 'actually' graduate}}{\text{Total number of students 'eligible' to graduate}}$$

The national graduation rate defined

Since other jurisdictions may have different ways to calculate the high school completion rate, a standardized way of calculating this is needed to make reasonable comparisons. To accomplish this, Statistics Canada developed the graduation rate. The graduation rate is calculated by dividing the number of graduates with the average of the 17 and 18 year old population. This includes individuals who may not attend school. In other words:

$$\text{Graduation Rate} = \frac{\text{Total number of secondary graduates}}{[(\text{17 year old population} + \text{18 year old population})/2]}$$

Provincial pass rate

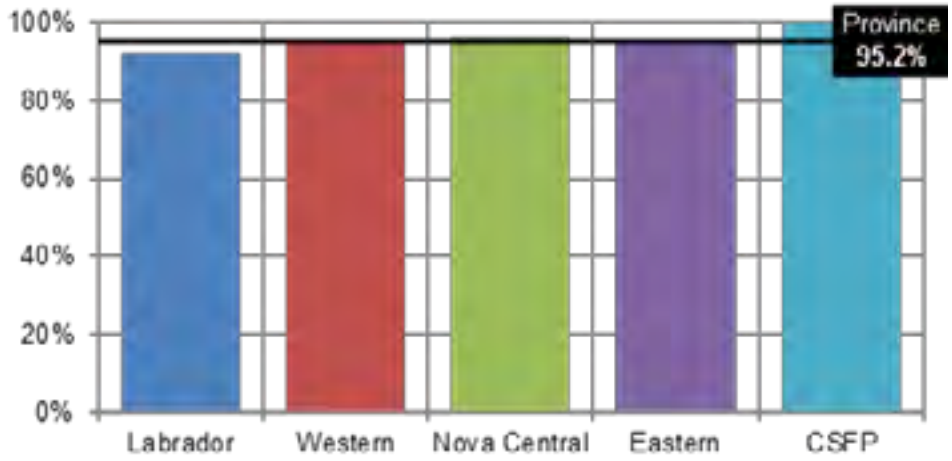
The vast majority of students graduate from high school. In 2012/13, 95.2% of the 4,962 eligible graduates actually graduated. A high pass rate was seen across the, ranging from 92.1% in the Labrador School District to 100.0% in the CSFP (see figure 13a).

The pass rate appears to be on an upward trend As shown in figure 13b, the provincial pass rate has increased from 90.3% in 2008/09 to 95.2% in 2012/13. This gradual upward trend is also seen in the Western, Nova Central and Eastern School Districts (see figure 13c).

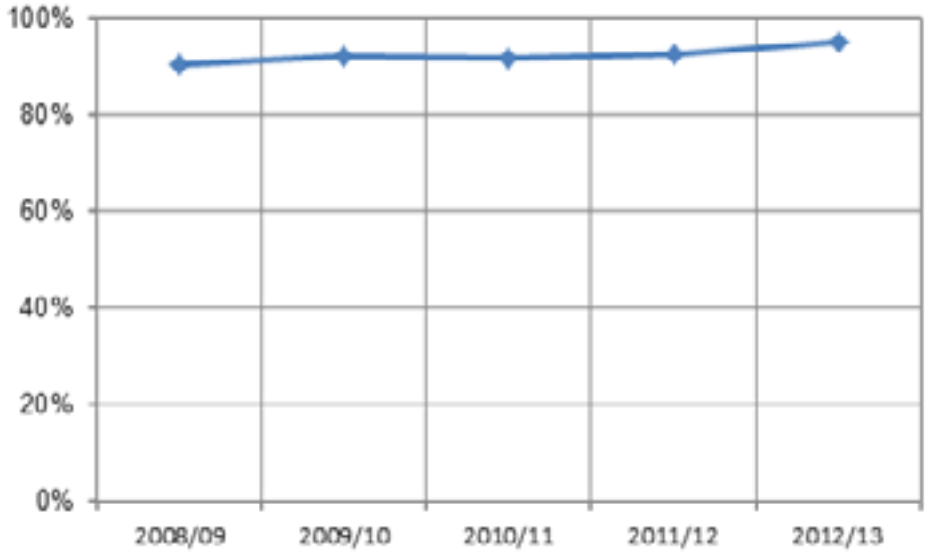
Each year, girls have a higher pass than boys (see figure 13d). However, 2012/13 was the first time when the female and male pass rates were virtually the same (95.4% and 94.9% respectively). In 2008/09, the female pass rate was 4.3% higher than the male (92.4% and 88.2% respectively).

Figure 13: High school pass rate

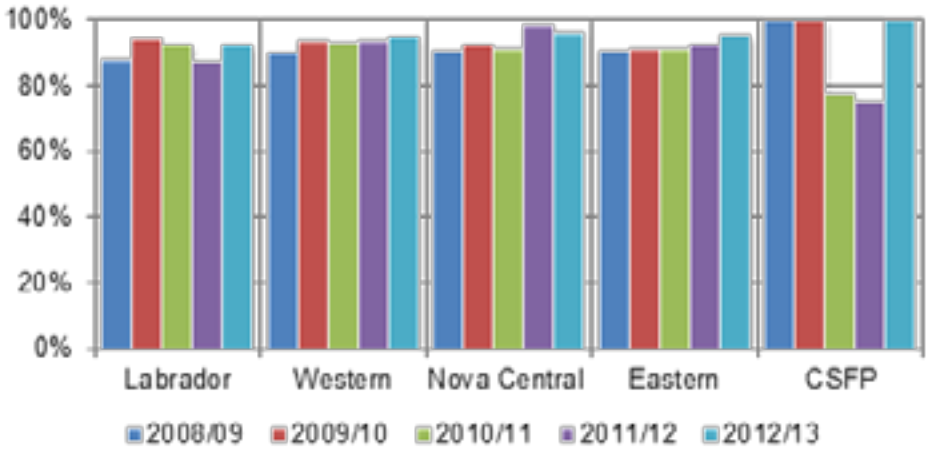
(a) Provincial and district pass rate (2012/13)



(b) Provincial trends (2008/09 – 2012/13)



(c) District trends (2008/09 – 2012/13)



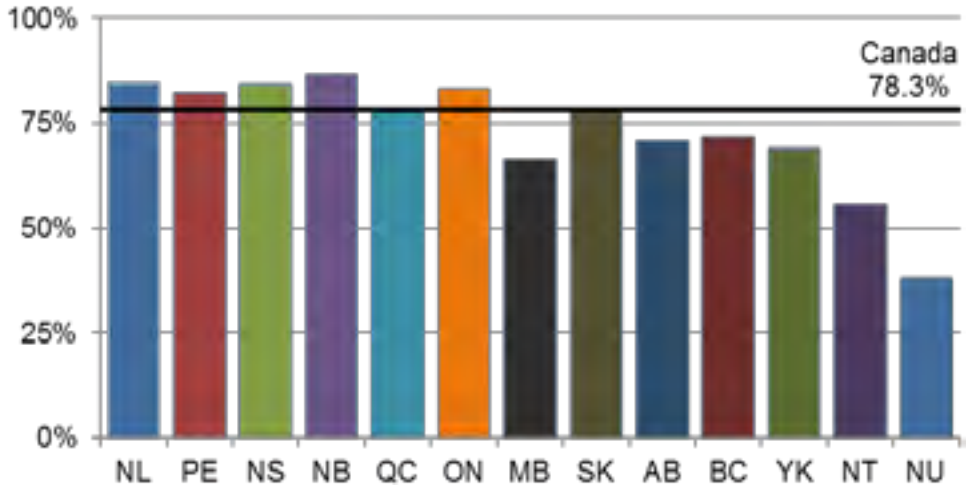
(c) Gender and pass rate (2007/08 – 2012/13)

(Source: Table 13)

National graduation rate

The most recent graduation rate provided by Statistics Canada is for the 2009/10 school year. As shown in figure 14, the provincial graduation rate (84.5%) is among the highest in the country. Only the province of New Brunswick had a higher rate (86.5%).

Figure 14: Graduation rates across Canada (2009/10)



(Source: Table 14)

Graduation status

There are three different types of high school diploma students can earn once they graduate. These are based on student performance.

(1) **Honours:** Students earn an honours diploma upon graduation if they achieve an overall average of 80% in five subject areas (English, mathematics, science, social studies and an elective).

(2) **Academic:** If students meet the same criteria as the honours diploma but have a minimum mark of 50% in each of the required courses. A student is awarded an academic high school diploma.

(3) **General:** Students who meet the minimum graduations requirements but not the requirements for an academic or honours diploma are awarded a general high school diploma.

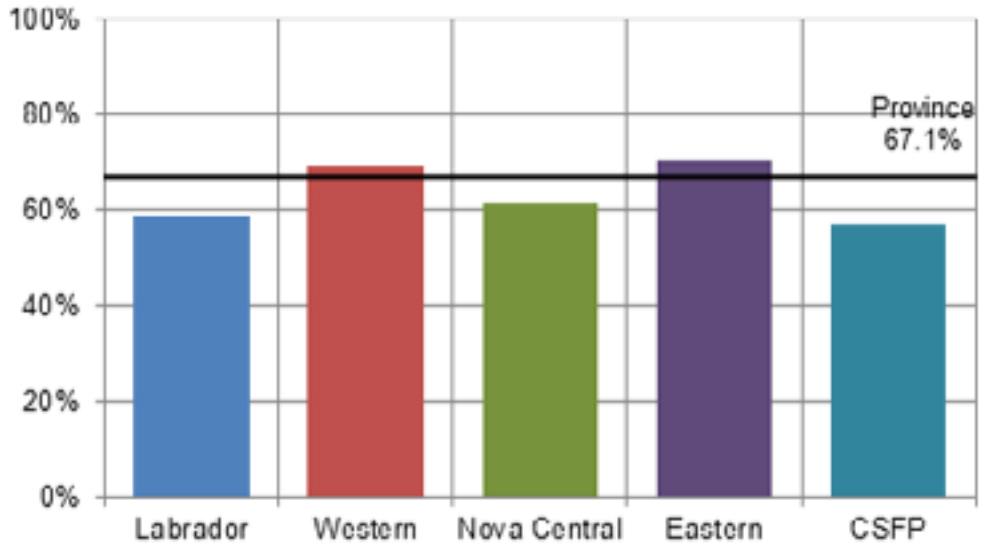
The majority of students graduate from high school with an academic or honours diploma. In 2012/13, this was the case for approximately two thirds (67.1%) of graduates. The remaining 32.9% graduated with a general diploma. Figure 15a reports the percentage of students graduating with an academic/honours diploma or general diploma in each of the school districts. The percentage with an academic/honours diploma ranged from 57.1% in the CSFP to 70.4% in the Eastern School District. The Labrador School District and CSFP had the highest percentage of students graduating with a general diploma.

Looking back over the previous five years, there was a general upward trend in the percentage of students graduating with an academic/honours diploma. With the exception of the Eastern School District, the percentage of students in 2012/13 graduating with an academic/honours diploma was higher than 2008/09. In the Eastern School District, this percentage has hovered around 70.0% during this time. The Eastern School District consistently had the highest percentage of academic/honours graduates in the province (see figure 15b).

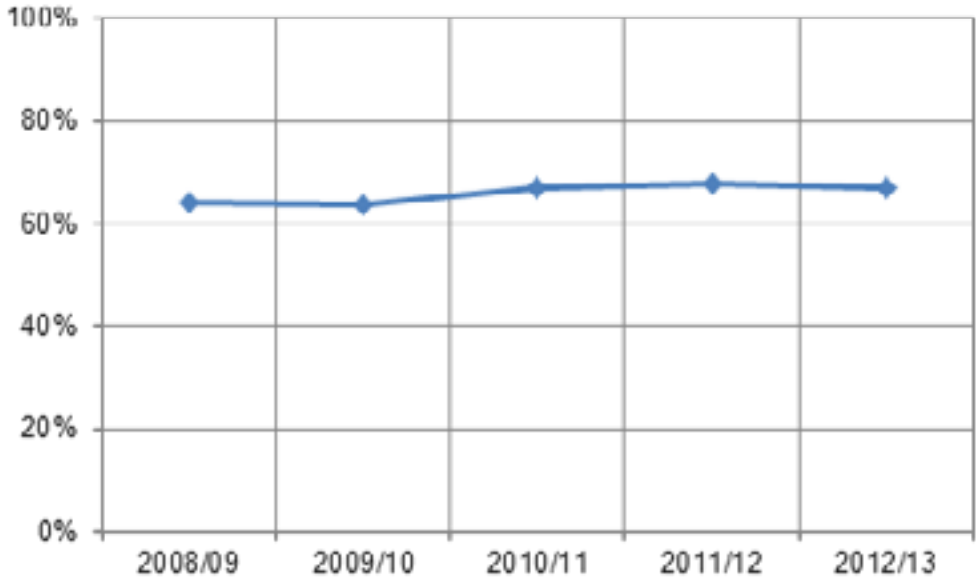
Higher percentages of girls than boys earn academic/honours diplomas. In June 2013, despite the fact that a similar number of females and males graduated (2,379 and 2,343 respectively), 74.1% of the girls earned an academic/honours diploma compared to 60.1% of boys. A similar pattern was seen over the past five years. Each year, the percentage of females graduating with an academic/honours diploma is approximately 13 percentage points higher than the percentage of males (see figure 15c).

Figure 15: Percentage of students graduating with an honours/academic diploma

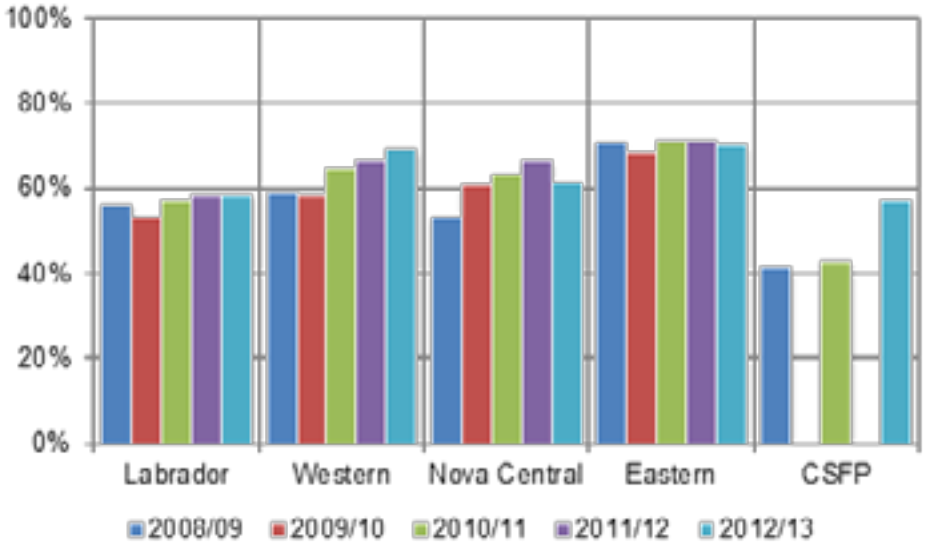
(a) District and province (2012/13)



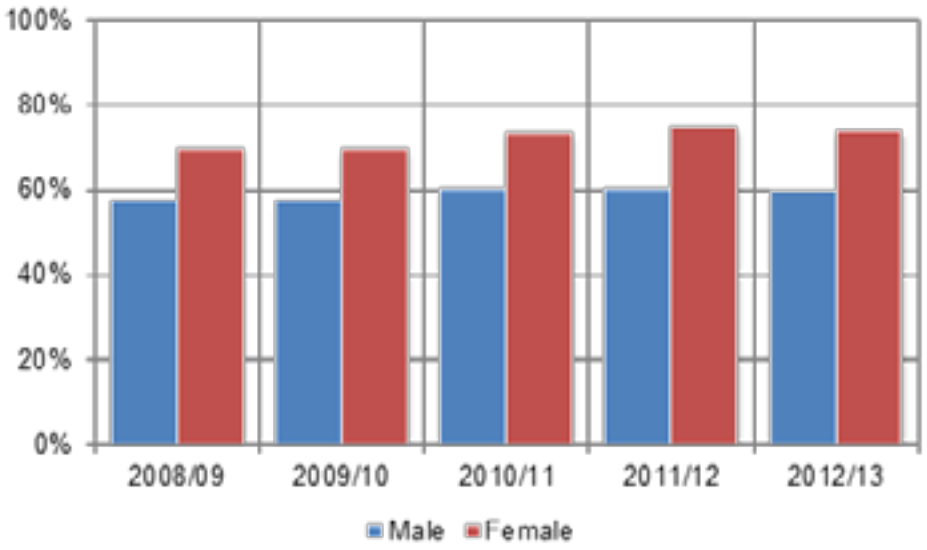
(b) Provincial trends (2008/09 – 2012/13)



(c) District trends (2008/09 – 2012/13)



(d) Gender trends (2008/09 - 2012/13)



(Source: Table 15)

Part III:

Standardized Assessments in Newfoundland and Labrador

CHAPTER 6: STANDARDIZED ASSESSMENTS

The next four chapters will explore how students fared on the standardized assessments completed during the past two years. This includes

(1) Public examinations,
(2) Provincial assessments ,
(3) Progress in International Reading Literacy Study (PIRLS), and
(4) Programme for International Student Assessment (PISA).

Each of these assessments is for a specific grade level and has a specific purpose. There is only one that directly impacts a student's educational career - public examinations. It is how students perform on these courses that will determine if they graduate and what type of diploma they will receive (i.e., honours, academic or general).

Students in Grades 3, 6 and 9 complete write provincial assessments at the end of the school year. These assessments are based on the provincial curriculum and provide a common standard to assess a student's proficiency in a specific subject area. The information obtained from these assessments assist in:

- Improving student achievement,
- Evaluating the effectiveness of provincial programs,
- Informing parents and students of performance based on curriculum outcomes, and
- Setting expectations of what students should know and be able to do by the end of the primary elementary and intermediate levels.

In 2012/13, the provincial assessment schedule was changed. Prior to this, students in Grades 3, 6 and 9 were assessed in two subject areas each year: mathematics and English Language Arts. Starting in 2012/13, these subjects are now assessed on a rotating schedule with English Language Arts first followed by mathematics in 2013/14.

Finally, students regularly take part in three international and one national assessment. Table 6.1 provides a summary of these four assessments. Student performance on these assessments provides two valuable types of information:

- Allows comparisons to be made between Newfoundland and Labrador and other Canadian jurisdictions; and
- Shows how student performance changes over time.

Table 6.1: International Assessments Overview

	Progress in International Reading Literacy Study (PIRLS)	Programme for International Student Assessment (PISA)	Pan-Canadian Assessment Program (PCAP)	International Computer and Information Literacy Study (ICILS)
Cycle	Every 5 years	Every 3 years	Every 3 years	Every 3 years
Date of last assessment	2011	2012	2013	2013
When were/ will the results published?	December 2012	December 2013	Summer 2014	November 2014.
Who was assessed?	Grade 4 students	15 year old students (around Grade 10)	Grade 8 students	Grade 8 students
What was assessed?	General reading skills defined as the ability to understand information presented in the written format required by society and favoured by the person, and the ability to use it.	Knowledge and skills in science, reading and mathematics The 2013 assessment focused on mathematics.	Knowledge and skills in science, reading and mathematics. The 2013 assessment focused on science.	The extent students know about, understand, and are able to use information and communication technology (ICT).

CHAPTER 7: PUBLIC EXAMINATIONS

In high school, public examinations are required in selected Level III courses in mathematics, sciences, social studies and languages. These examinations are different from school-based exams in that all students registered in the course write the same examination. Once completed, examinations are returned to the Department of Education for grading by an independent marking board. This chapter will explore how high school students fared on the June 2013 public examinations. Provincial trends over the past five years will be also be reported. Unless otherwise noted, the course's final mark is reported and not the examination mark. A course's final mark is a composite measure using 50 per cent school mark, and 50 per cent examination mark.

There are five courses not included in this chapter because of the small number of students registered but the results are reported in Appendix A. These are:

- three courses only offered in the CSFP, Mathématiques 3231(3 students), Biologie 3231 (2 students) and Chimie 3239 (2 students), and

- two courses offered across the province with a small number of students enrolled the CSFP = Histoire mondiale 3231 (8 students) and English 3201 (5 students).

While only provincial five year trends in student performance are reported in this chapter, district level data is included in Appendix A.

Mathematics

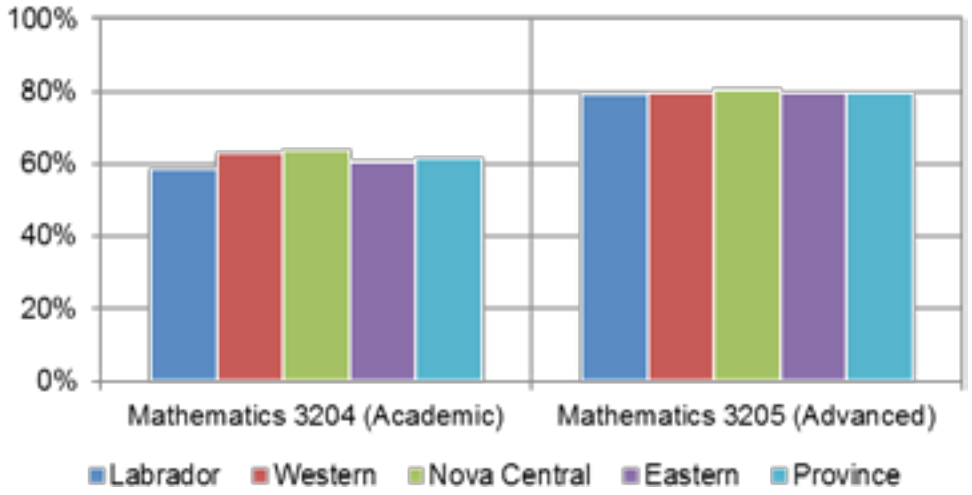
Public examinations occur in two mathematics courses: Mathematics 3204 (Academic) and Mathematics 3205 (Advanced). Differences in achievement for these two courses must be interpreted with caution. Students who excel in mathematics or who plan on studying mathematics at the post-secondary level are typically encouraged to select advanced mathematics courses in high school rather than the academic mathematics courses.

Provincially, the average course mark was 61.3% in Mathematics 3204 (Academic) and 79.7% in Mathematics 3205 (Advanced). At the district level, the average course mark was similar across the four districts ranging from 58.5% to 63.7% for Mathematics 3204 (Academic) and from 79.5% to 80.4% for Mathematics 3295 (Advanced) (see figure 16a). Along gender lines, girls performed better than boys with female average mark was about 20 percentage points higher than the male in both courses (see figure 16b)

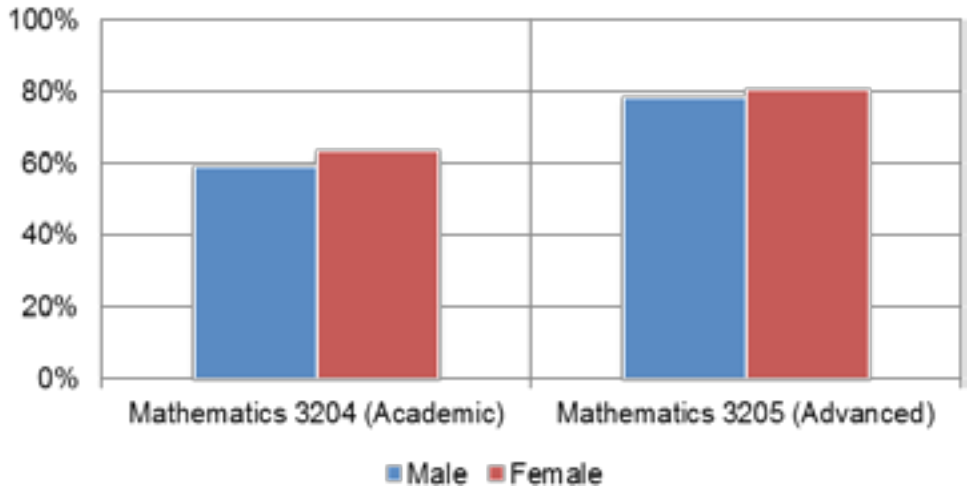
Overall, there has been little change in the average final course marks between 2007/08 and 2012/13 with only one or two percentage points separating the highest and lowest marks in both courses (see figure 16c).

Figure 16: Average final course mark in mathematics courses

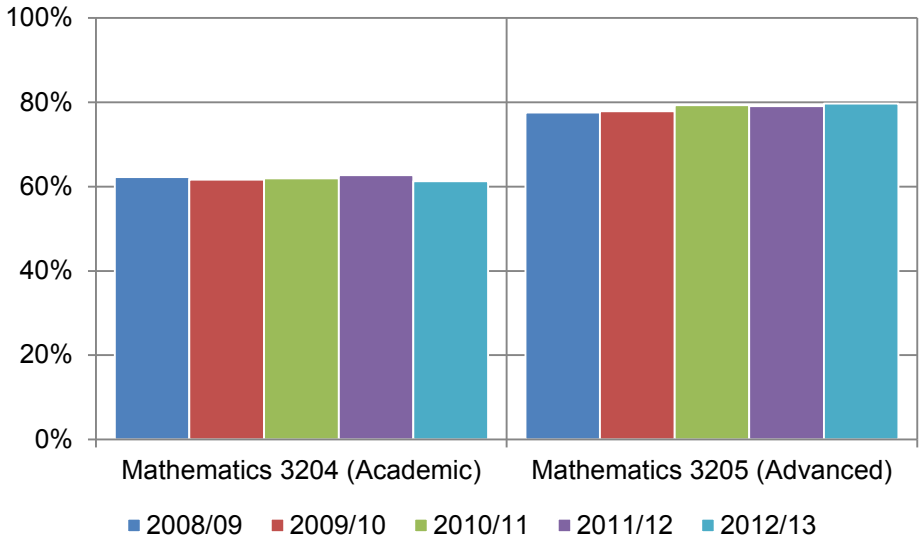
(a) District and provincial performance (2012/13)



(b) Gender differences (2012/13)



(c) Provincial trends (2008/09 – 2012/13)



(Source: Table 16)

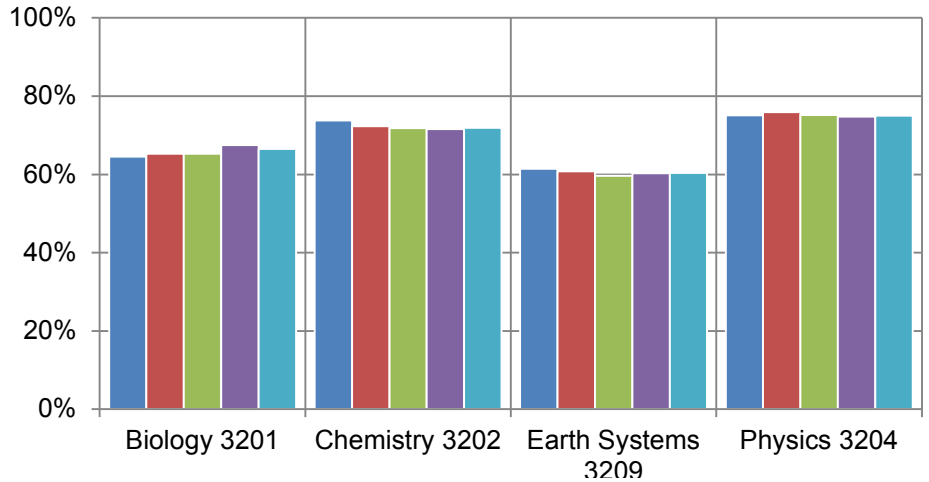
Sciences

Four science courses have public examinations - Biology 3201, Chemistry 3202, Physics 3204 and Earth Systems 3209. Provincially, the average final course marks ranged from 60.4% in Earth Systems 3209 to 75.0% in Physics 3204. Higher average final course marks occurred in chemistry and physics as compared to biology and earth systems. This was also seen across the four districts (see figure 17a). Along gender lines, there was little difference between average final course marks in each of the science courses (see figure 17b).

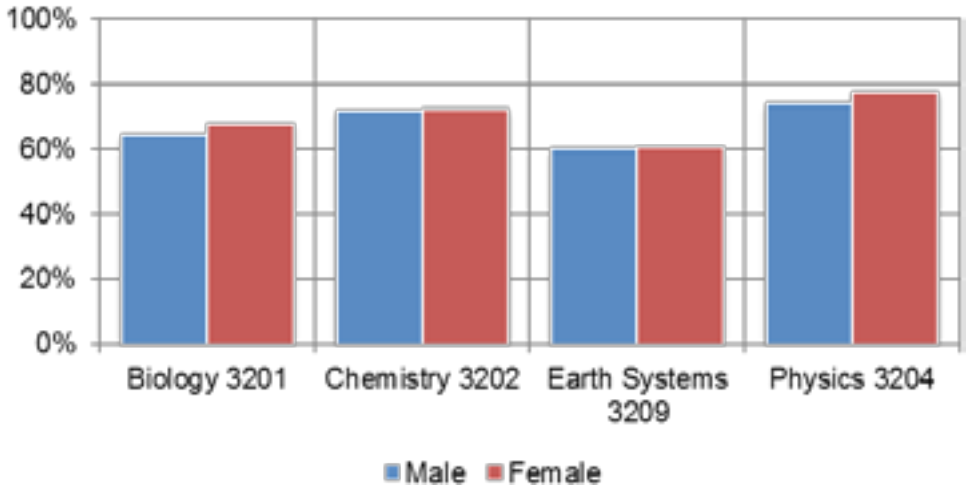
A gradual upward trend can be seen in the average final course mark over the past five years. The only exception was in Earth Systems 3209 where the 2012/13 average mark dropped slightly from the previous year (see figure 17c).

Figure 17: Average final course mark in science courses

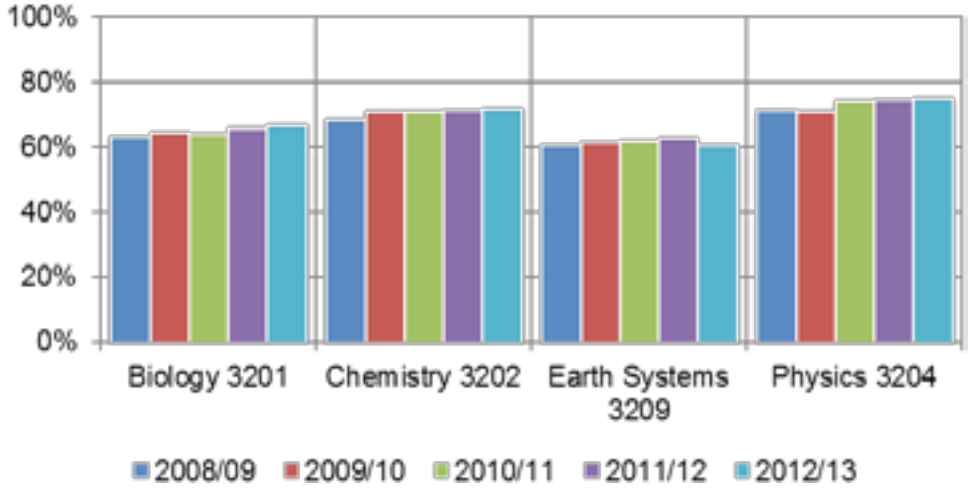
(a) District and provincial performance (2012/13)



(b) Gender differences (2012/13)



(c) Provincial trends (2008/09 – 2012/13)



(Source: Table 17)

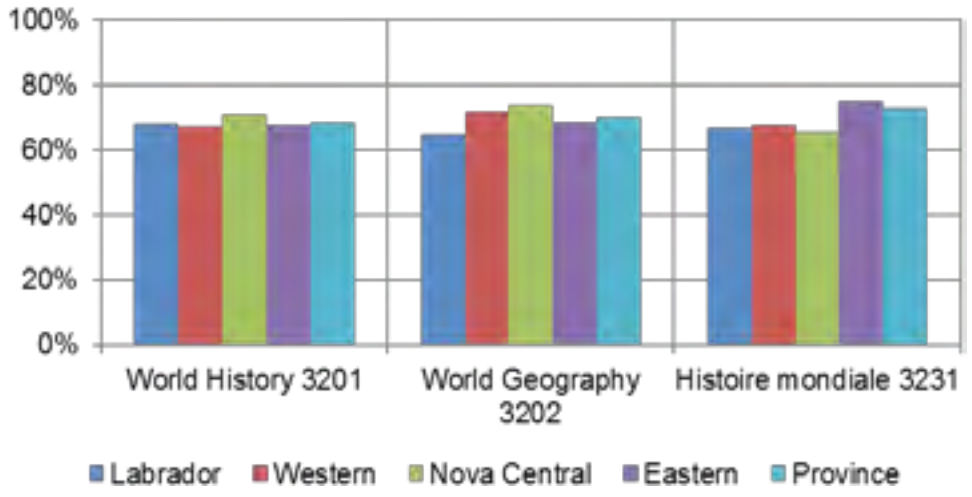
Social studies

Three social studies courses have public examinations: World History 3201, World Geography 3202 and Histoire mondiale 3231. Provincially, the average final course grade was similar in these courses, ranging from 68.5% to 72.7%. At the district level, there was a small degree of variability in student performance in World Geography 3202 and Histoire mondiale 3231 with approximately nine percentage points separating the highest and lowest marks (see figure 18a). As shown in figure 18b, there was virtually no gender difference in the average final grade in these courses.

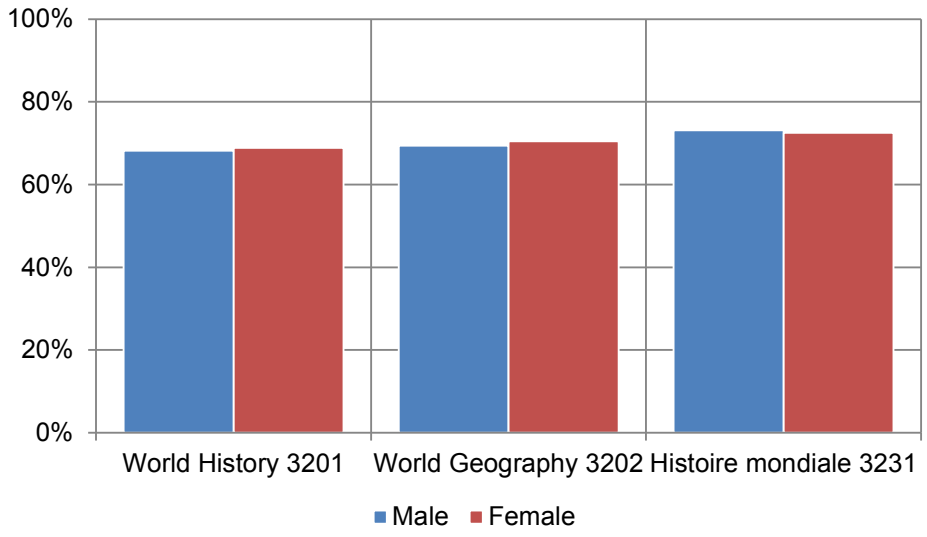
Provincially, average final course marks have been similar over the past five years with less than six percentage points separating the highest and lowest average course marks (see figure 18c).

Figure 18: Average final course mark in social studies courses

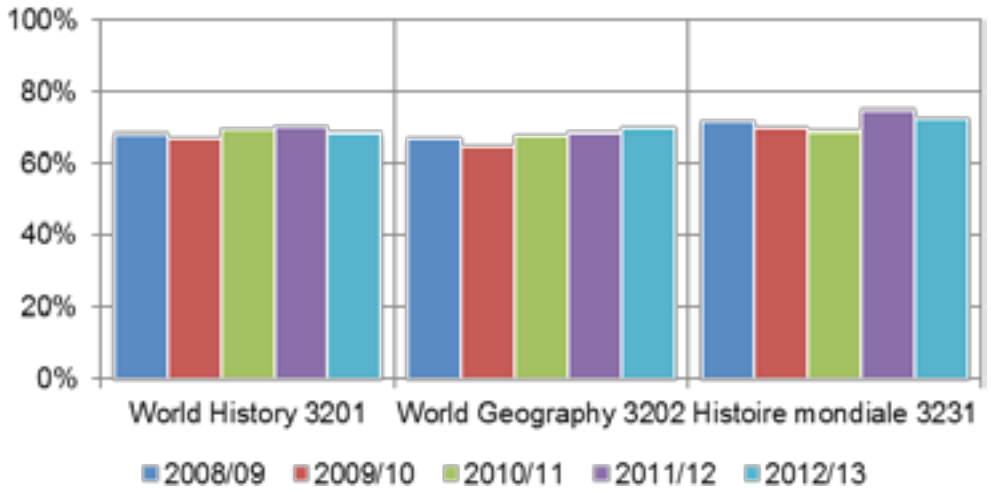
(a) District and provincial performance (2012/13)



(b) Gender differences (2012/13)



(c) Provincial trends (2008/09 - 2012/13)



(Source: Table 18)

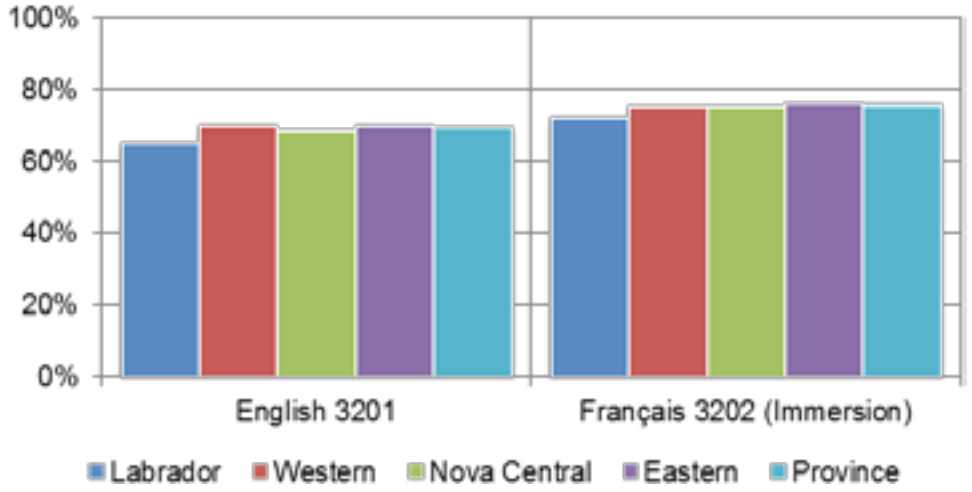
Languages

English 3201 and Français 3202 (Immersion) are the two language courses with public examinations. Provincially, the average course marks were 69.4% in English 3201 and 75.7% in Français 3202. On a district level, there was little variation in student performance with less than five percentage points separating the highest and lowest average marks (see figure 19a). For English 3201, marks ranged from 65.0% to 69.9% and for Français 3202 it was between 72.0% and 76.0%. While the female average course mark was slightly higher for English 3201, there was little difference between the male and female marks in Français 3202 (see figure 19b).

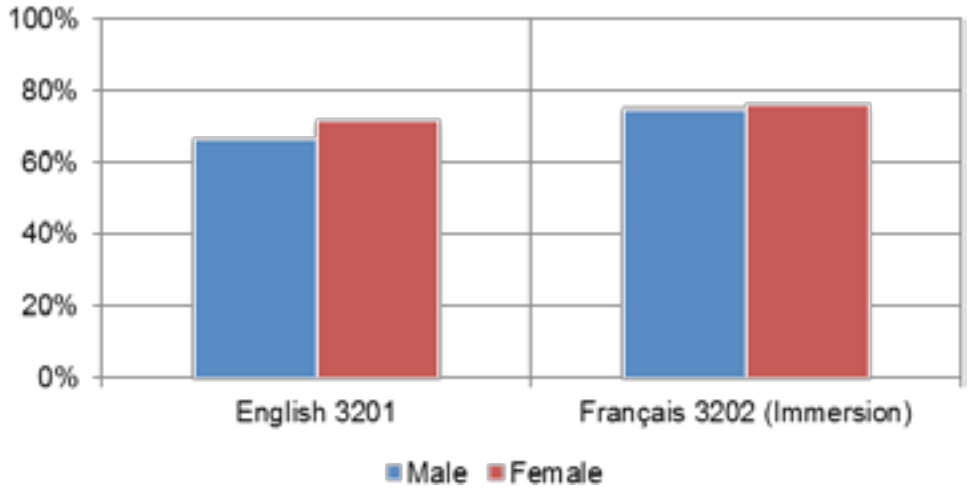
Over the past five years, a gradual upward trend has occurred in the average final marks in both courses (see figure 19c). In English 3201, the average final course mark increased from 64.2% in 2008/09 to 69.3% in 2012/13. For Français 3202, it increased from 73.3% to 75.7% during the same time.

Figure 19: Average final course mark in language courses

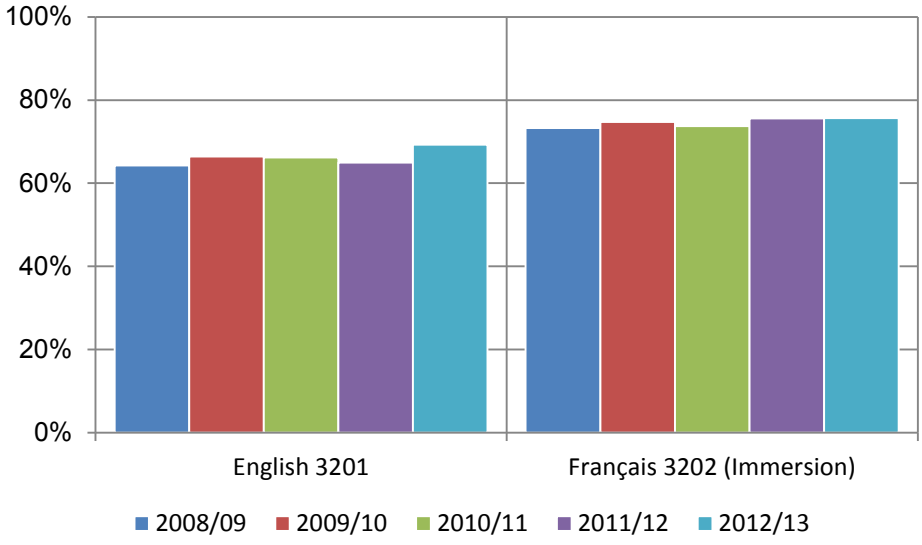
(a) District and provincial performance (2012/13)



(b) Gender differences (2012/13)



(c) Provincial trends (2008/09 – 2012/13)



(Source: Table 19)

CHAPTER 8: PROVINCIAL ASSESSMENTS

In 2012/13, students in Grades 3, 6 and 9 completed the English Language Arts provincial assessment. This assessment produces two performance measures - an average score based on student performance on the multiple choice section and student proficiency or the percentage of students performing at or above grade level. This chapter will focus on reporting student proficiency. While the average score on the multiple choice section is not included in the chapter, it is reported in Appendix A.

In 2012/13, the format and scoring of the provincial assessment was revised. While provincial multiyear trends are reported, the charts must be viewed with caution because of this. District trends are reported in Appendix A.

Primary level

The primary assessment focuses on two strands of the ELA curriculum: 'Reading' and 'Writing'. For reading, students must read two types of writing (a fiction and a non-fiction sample) and answer a series of multiple choice and closed response questions. To assess writing ability, students compose two writing samples – an example of creative writing and one of persuasive writing. For one sample, students are provided with a written prompt and a visual prompt for the second.

Reading and writing performance

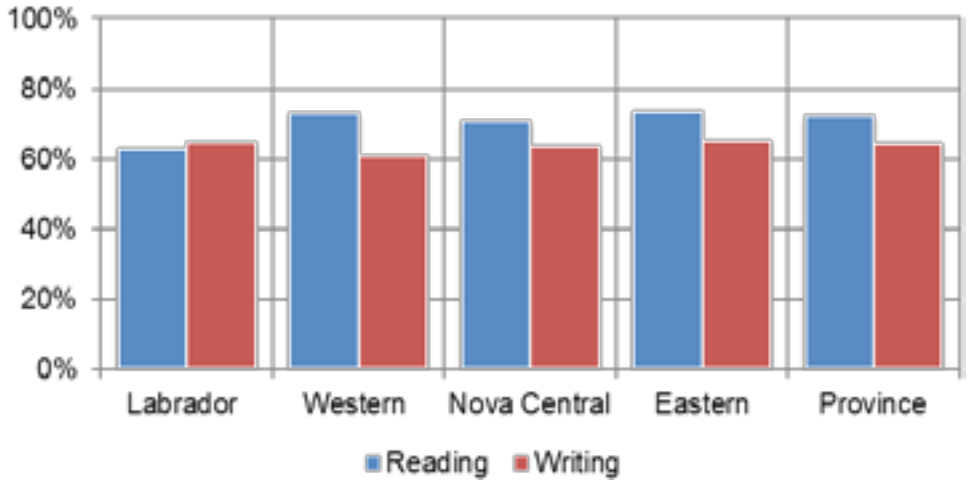
Students tended to perform slightly better in reading than writing with 73.6% and 64.4% respectively performing at/above grade level (see figure 20a). At the district level, this percentage ranged from 62.9% to 73.6% for reading compared to between 60.7% to 65.3% for writing. The exception was in the Labrador School District where the percentage was about the same (approximately 64%) for both reading and writing..

A higher percentage of girls were assessed to be at or above grade level in both reading and writing than boys (see figure 20b). The largest gender gap was in writing where the percentage of girls at/above grade level was 15.4 percentage points higher than the boys (72.5% vs 57.1%).

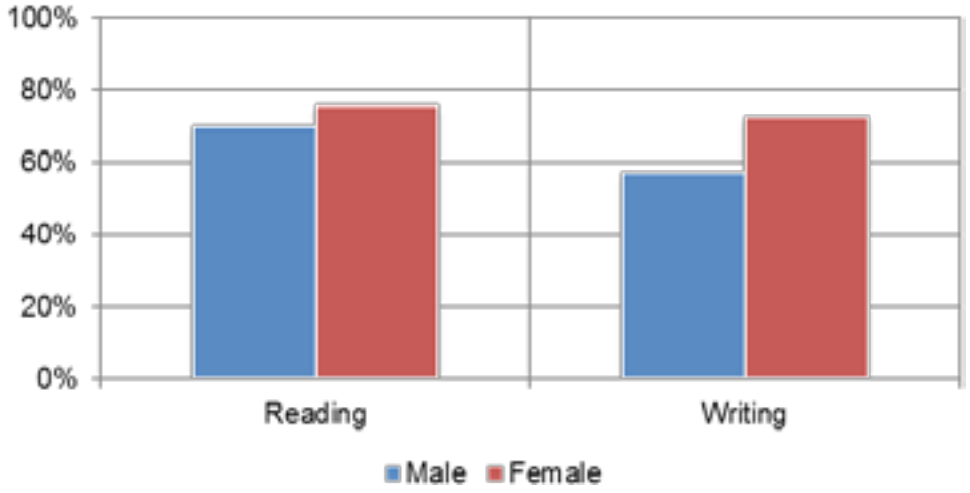
The impact of the changes made in the provincial assessment can be seen when student performance over the past five years is reviewed (see figure 20c). Before 2012/13, the percentage of students performing at/above grade level was decreasing in reading and increasing in writing. In 2012/13, this stopped with the percentage at/above grade level reading increasing by 16.4 percentage points from the previous year. For writing, this percentage decreased by 17.3 percentage points. To obtain a more accurate reflection of how students are performing over time, additional data from future assessments is needed.

Figure 20: Percentage of primary students performing at/above grade level

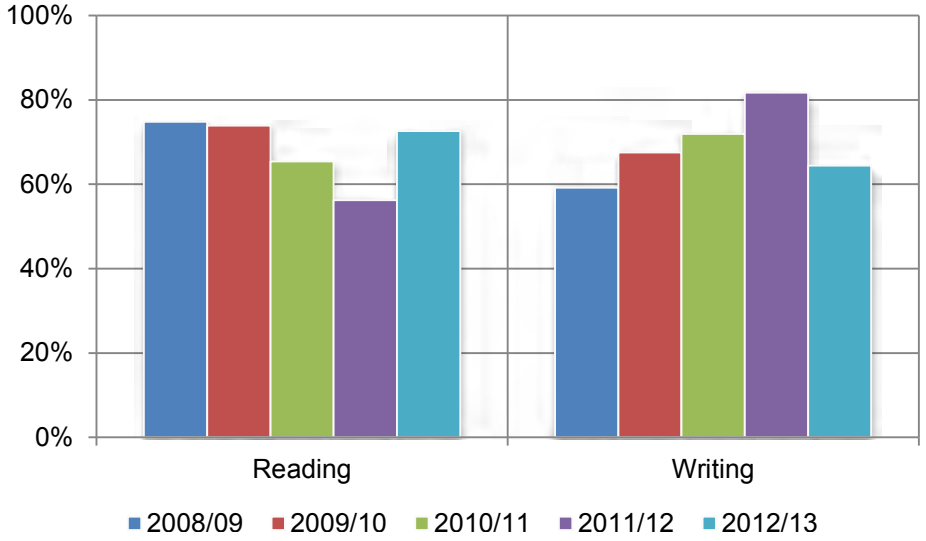
(a) District and provincial performance (2012/13)



(b) Gender differences (2012/13)



(c) Provincial trends (2008/09 – 2012/13)



(Source: Table 20)

Elementary level

During the elementary years, students continue to build upon the foundational language skills learned during the primary years. By the end of Grade 6, students are expected to be able to:

- Contribute thoughts, ideas, and questions to the group discussion and have the ability to support their opinions with evidence;
- Independently choose books and reading material appropriate to their range of interests and learning needs;
- Develop effective pieces of writing by using a range of pre-writing, drafting, revising, editing, proofreading, and presentation strategies; and,
- Use technology with increasing proficiency to create, revise, edit and publish texts.

As in the primary level, the provincial assessment evaluates reading by asking students to read two types of writing (fiction and non-fiction) and answer a series of multiple choice and closed response questions.

Reading and writing performance

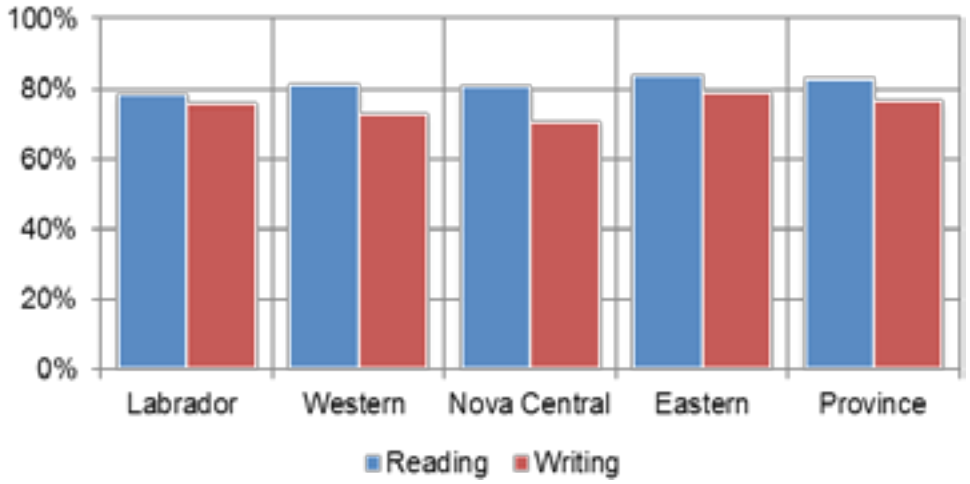
Overall, students tended to perform better in reading than writing (see figure 21a). Provincially, the percentage of students assessed at/above grade level was 82.9% for reading compared to 76.5% for writing. The same pattern was seen across the districts with the percentage of students performing at/above grade level in reading ranging from 78.5% (in the Labrador School District) to 82.9% (in the Eastern School District) compared to between 70.7% (in the Nova Central School District) to 78.9% (in the Eastern School District) for writing.

Girls fared better than boys on the assessment. Overall, there was a higher percentage of girls assessed at or above grade level in both reading and writing than boys (see figure 21b). The largest gender gap was in writing where the percentage of girls at/ above grade level was 17.7 percentage points higher than the boys (85.5% vs 67.8%).

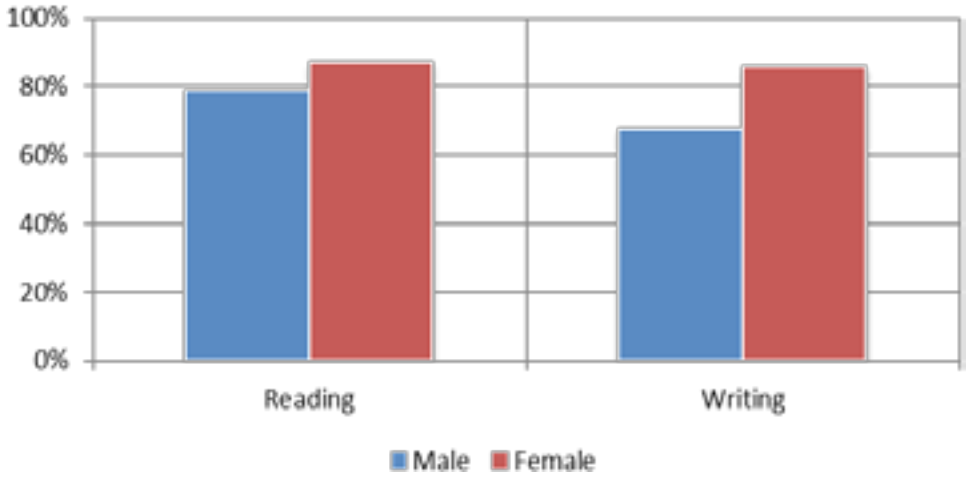
Figure 21c shows how elementary students performed over the past five years. While the percentage of the students at/above grade level for writing has hovered around 77% for the past five years, reading performance is somewhat more varied. Since 2009/10, the percentage of students performing at/above grade level has declined each year. In 2012/13, this stopped with the percentage increasing by 28.5% (from 54.4% in 2011/12 to 82.9% in 2012/13). However, it must be stressed that data from future provincial assessments is needed to provide a more accurate portrayal of student performance.

Figure 21: Percentage of elementary students performing at/above grade level

(a) District and provincial performance (2012/13)



(b) Gender differences



(c) Provincial trends (2008/09 – 2012/13)

(Source: Table 21)

Intermediate level

During the intermediate years, students continue to build upon and broaden their language arts skills. They should have developed a good understanding of the skills needed for effective verbal and written communication.

By the end of Grade 9, students are expected to be able to:

- Examine other peoples' ideas and actively take part in small and large group discussions and debate;
- Demonstrate active listening and respect for the needs, rights, and feelings of others. In other words, students must be able to go beyond simply listening to the words that are being said to actually hearing and understanding the message being presented;
- Critically evaluate and question information;
- Adapt their writing style to meet the needs of specific audiences; and,
- Integrate information gathered from several sources to create and communicate meaning.

Reading and writing performance

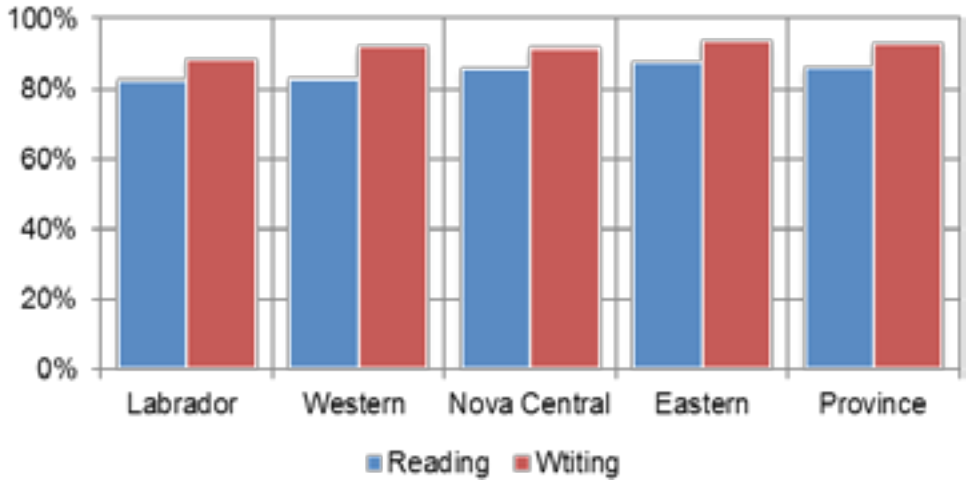
The majority of intermediate students performed at/above grade level in English Language Arts. The percentage was slightly higher for writing (92.7%) than reading (86.2%). As shown in figure 22a, there was little difference in this percentage across the four school districts.

In terms of gender, a familiar trend is seen – girls outperform boys. In both the reading and writing sections, the percentage of girls at/above grade level was approximately 7.5 percentage points higher than the boys (see figure 22b).

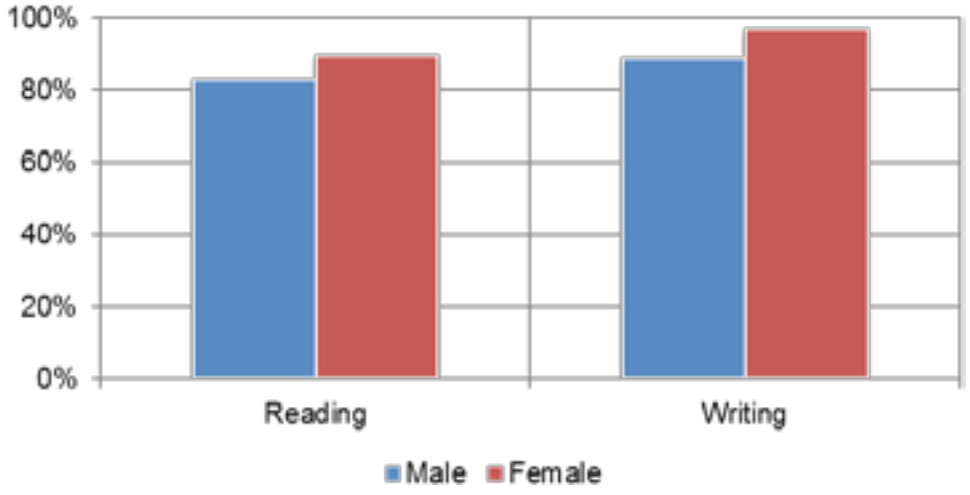
Looking back over the past five years, the percentage of students at/above grade level in reading has been somewhat more varied than writing. As shown in figure 22c, the percentage decreased from 77.5% in 2008/09 to 65.3% in 2010/11. In 2011/12, this percentage increased by 25.4 percentage points before declining slightly the following year. For writing, the percentage was stable for the first three school years at approximately 84% followed by slight increases during the next two years (from 90.2% to 92.7%).

Figure 22: Percentage of intermediate students performing at/above grade level

(a) District and provincial performance (2012/13)



(b) Gender comparison (2012/13)



(c) Provincial trends

(Source: Table 22)

CHAPTER 9: THE PROGRESS IN INTERNATIONAL READING LITERACY STUDY

The Progress in International Reading Literacy Study (PIRLS) was developed by the International Association for the Evaluation of Educational Achievement (IEA) to assess reading literacy in Grade 4 students. This assessment started in 2001 and occurs every five years. It is currently the only international assessment that measures reading skills at this grade level.

In 2011, PIRLS was administered in Newfoundland and Labrador. This was also the first year that the majority of Canadian provinces took part in PIRLS. This meant pan-Canadian results could be published.

Assessing reading literacy

PIRLS defines reading literacy as "the ability to understand and use those written language forms required by society and/or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers in school and everyday life, and for enjoyment" (Labrecque, 2012).

PIRLS 2011 focused on assessing the following three aspects of reading literacy:

(1) **The purposes of reading** (i.e., reading for literary experience and reading to acquire and use information);

(2) **The processes of comprehension** (i.e., focusing and retrieving explicitly stated information; making straightforward inferences; interpreting and integrating ideas and information; and examining and evaluating content, language, and textual elements); and

(3) **Behaviours and attitudes toward reading**.

How are results reported?

The PIRLS assessment reports average reading scores on a standardized scale ranging from 0 to 1000 with a mean (or average) of 500 with a standard deviation of 100. This allows comparisons to be made among different countries and jurisdictions.

Since, the results are based on a sample of students and not the entire group, average scores must be interpreted along with their confidence interval (CI). Typically, a 95% CI is used and this provides a range of scores where the "true" achievement level might fall. In other words, one can be confident that the actual achievement level of all students would fall somewhere in the established range 19 times out of 20 (95% of the time), if the assessment was repeated with different samples randomly drawn from the same student population. For the sake of comparisons, if the confidence intervals overlap, the differences are not considered to be statistically significant. When the confidence intervals overlap, the differences are typically significantly different. In other words, this is a real difference that cannot be attributed to chance.

The remainder of the chapter will focus on how this province's students performed on PIRLS 2011 in each of the areas assessed. Unless otherwise noted, the information provided was collected from the report written by Mélanie Labrecque, Maria Chuy, Pierre Brochu, and Koffi Houme -- *PIRLS 2011 Canada in Context.* This report can be viewed at http://cmec.ca/Publications/Lists/Publications/Attachments/294/PIRLS_2011_EN.pdf

How did students fare?

Approximately 325,000 students from around the world participated in PIRLS 2011. This included approximately 23,000 Canadian students from about 1,000 schools. Provincially, 2,135 students took part in the assessment. In total, nine Canadian jurisdictions participated in PIRLS: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick (French), Nova Scotia, and Newfoundland and Labrador.

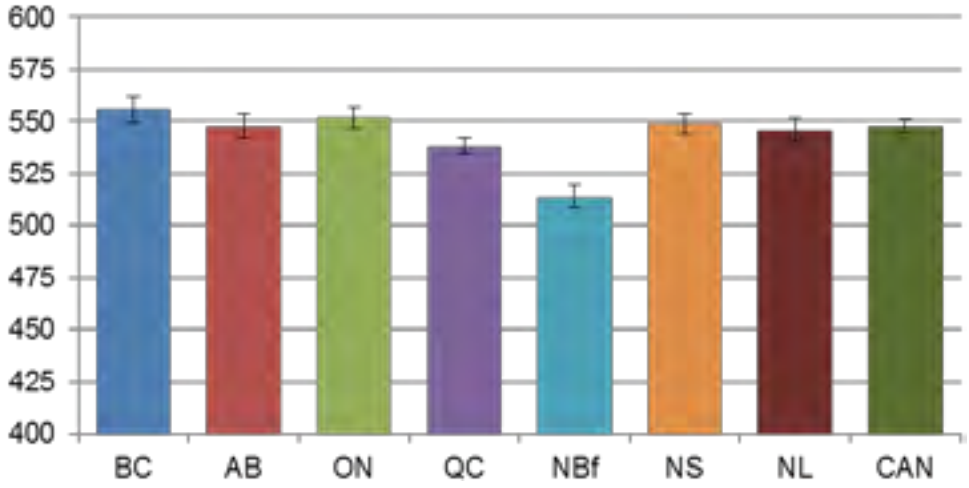
Overall, Canadian students performed quite well on PIRLS achieving a higher average score than most participating countries. The Canadian average score was 548, which is well above the PIRLS scale center point of 500. There were only seven of 45 countries who participated where the average score was significantly higher than Canadian students: Hong Kong SAR (Special Administration Region), Russian Federation, Finland, Singapore, Northern Ireland, United States, and Denmark. There are six countries performing as well as Canada: Croatia, Chinese Taipei, Ireland, England, Netherlands, and Czech Republic.

Figure 23 reports the average scores of the various Canadian provinces. These scores ranged from 514 in New Brunswick (French) to 556 in British Columbia. Only Quebec and New Brunswick (French) had significantly lower average scores than that of Canada overall. There was no statistical difference among the five provinces with the highest average scores. In Newfoundland and Labrador, the average score was 545. In other words, this province's students show the same degree of reading skill as those in British Columbia, Alberta, Ontario and Nova Scotia.

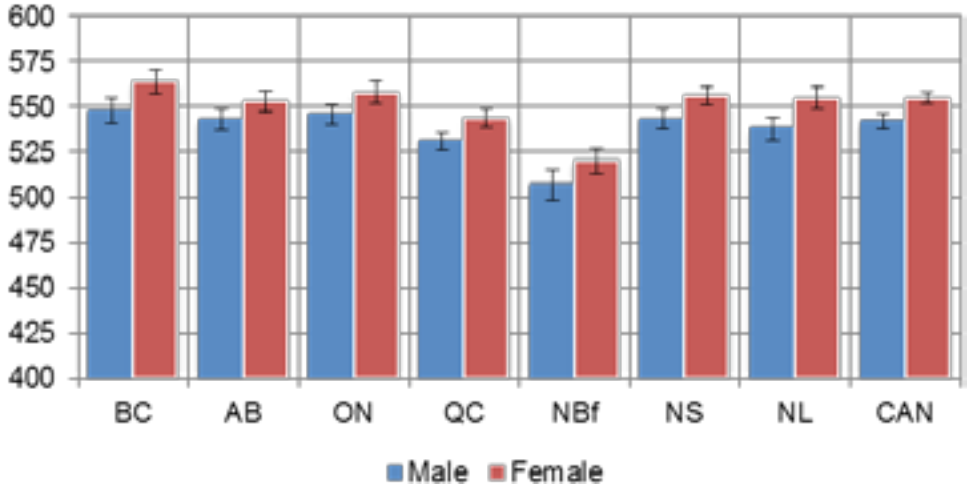
Along gender lines, girls perform better than boys in reading. This was seen in each of the Canada provinces (see figure 23b). In Canada, girls outperformed boys by 13 points (an average score of 555 for girls compared to 542 for boys). Across the provinces, the gender difference ranged from 10 points in Alberta to 16 points in British Columbia and Newfoundland and Labrador. In all but two of the provinces (Alberta and New Brunswick- French), the average score of girls was significantly higher than boys.

Figure 23: Average reading scores

(a) Canadian jurisdictions



(b) Gender differences



(Source: Table 23)

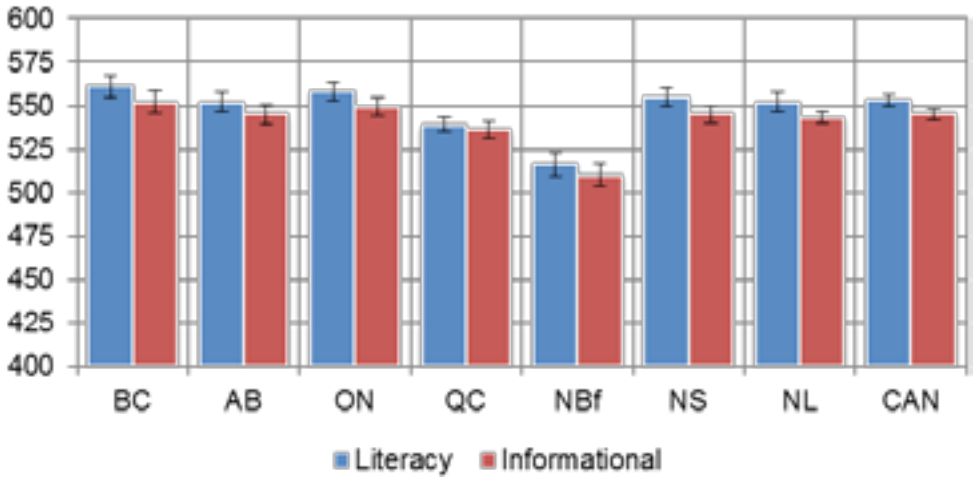
Reading purpose and comprehension

Figure 24a reports the average scores on the 'Reading Purposes' and 'Comprehension Processes' sections. For reading purposes, the results show that Canadian students are performing significantly better in literary reading than in informational reading. This was also seen in each of the provinces. In Newfoundland and Labrador, the average literacy and informational scores were approximately 552 and 543.

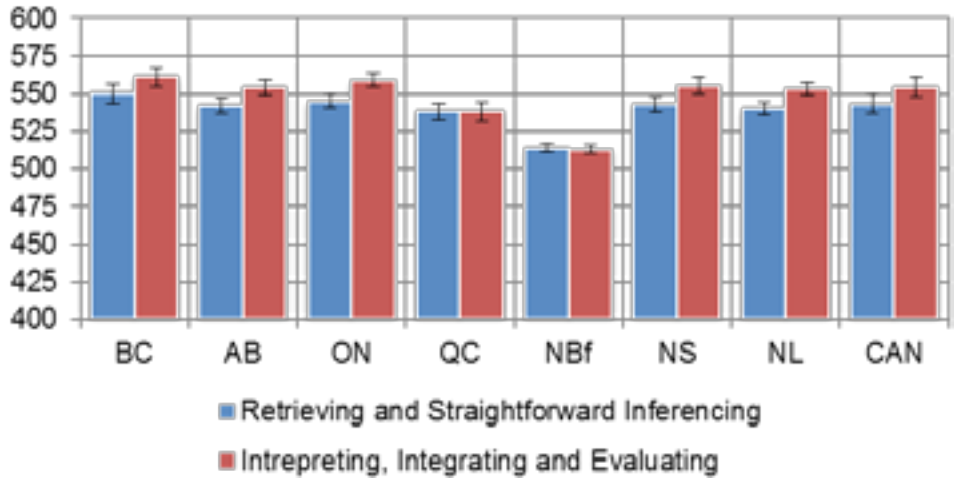
For comprehension processes, students tend to perform better on the 'Interpreting, Integrating and Evaluation' section. In many provinces, including Newfoundland and Labrador, and Canada as a whole, this average was significantly higher than the average score on the 'Retrieving and Straightforward Inferencing' section (see figure 24b).

Figure 24: Assessing reading skills

(a) Reading purposes



(b) Comprehension processes



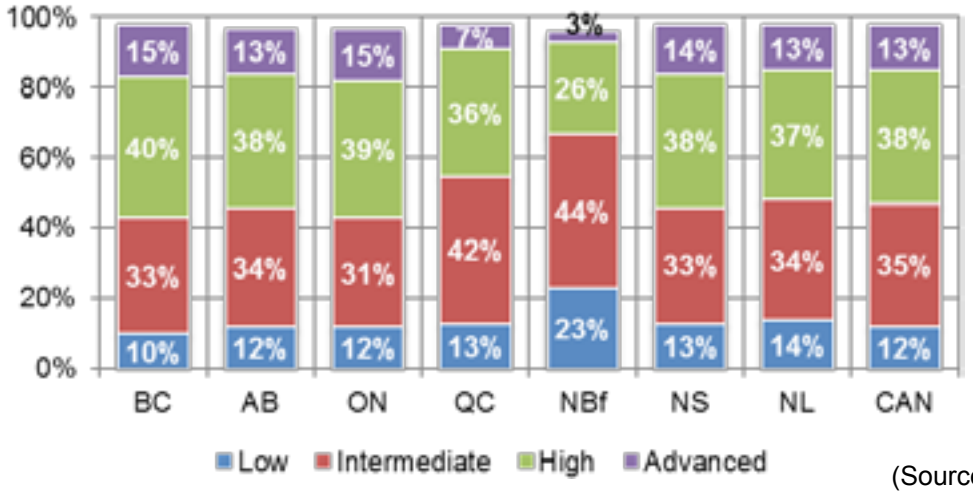
(Source: Table 24)

Reading proficiency

PIRLS created four international benchmarks to assess reading performance ranging from low (students can demonstrate basic reading skills) to advanced (students can demonstrate an in-depth understanding and grasp of reading). These four levels are defined in Appendix B.

Canada is among the countries with the highest proportion of advanced students. The results showed that 13% of students reached the highest level of performance, the Advanced International Benchmark, which is well above the international median (8%). Figure 25 reports the percentage of students at each level for each of the provinces involved. With the exception of Quebec and New Brunswick (French), similar percentages were seen across the country. For example, the percentage of students reaching the Advanced International Benchmark ranged from 13% in both Newfoundland and Labrador and Alberta to 15% in British Columbia and Ontario. For Quebec and New Brunswick (French) the percentages were 7% and 3% respectively.

Figure 25: Reading proficiency across Canada



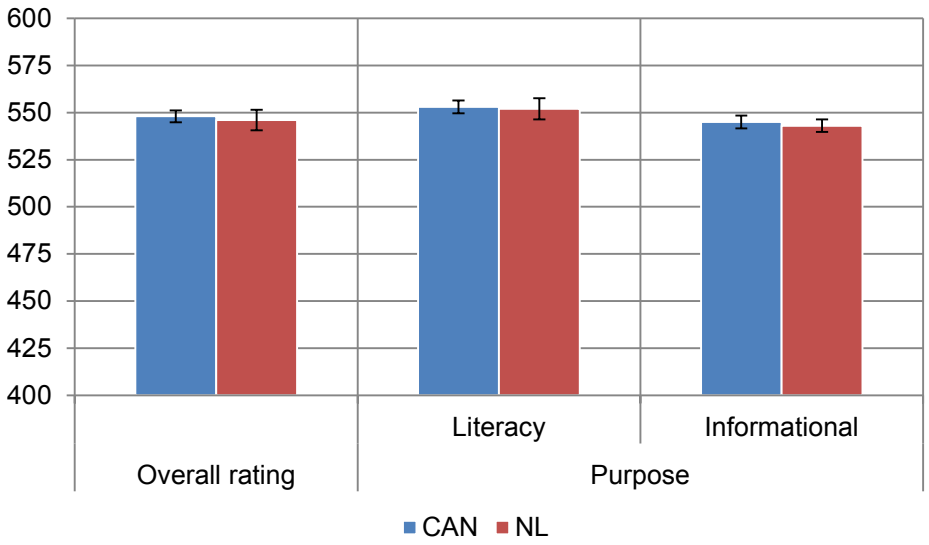
(Source: Table 25)

Summary

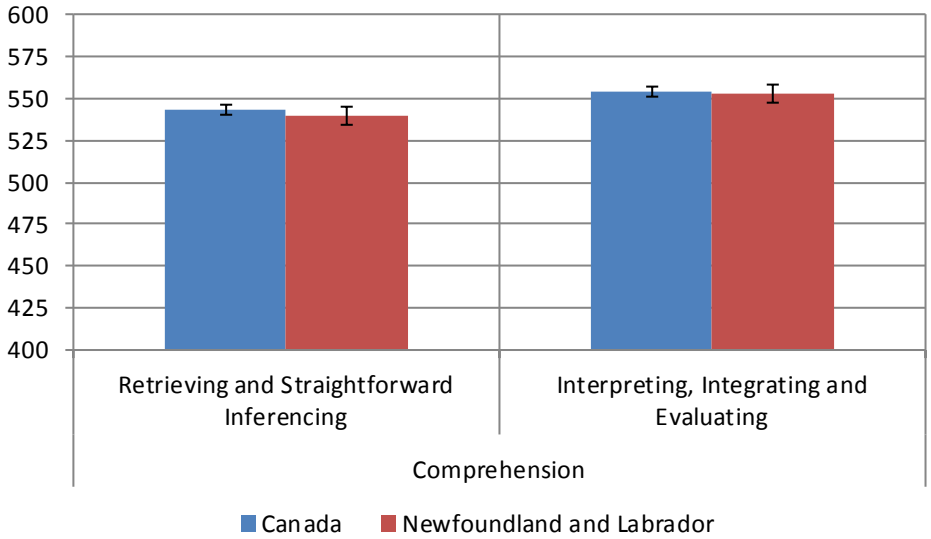
Grade 4 students in the province performed very well on the PIRLS. In each area assessed, the average scores were consistently among the highest in Canada. As shown in figure 26, there was no real difference between provincial and Canadian average scores. The PIRLS report also examined contextual information on factors that could affect student performance, such as the home and school environment. The results showed that Newfoundland and Labrador ranked first in Canada in several categories, including: teachers with the most training; teachers with the most experience; teachers who were mostly satisfied with their work conditions; and teachers who report schools were safe and orderly. The province also scored best in the country on issues related to student discipline and bullying (Department of Education, 2013, p.20).

Figure 26: Student performance in Canada and Newfoundland and Labrador

(a) Average scores in overall reading and reading purpose



(b) Average score on comprehension processes



(Source: Table 26)

CHAPTER 10: THE PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT

The Programme for International Student Assessment (PISA) was started in 2000 by the Organization for Economic Co-operation and Development (OECD) to assess student ability in reading literacy, mathematics literacy, and scientific literacy. PISA occurs every three years and 2012 marked the fifth time PISA was administered. In 2012, over half a million 15-year-old students, including 21,000 Canadians, were assessed. Provincially, approximately 1,313, students from 56 schools took part in PISA (Brochu, Deussing, Houme & Chuy, 2012, p. 12)

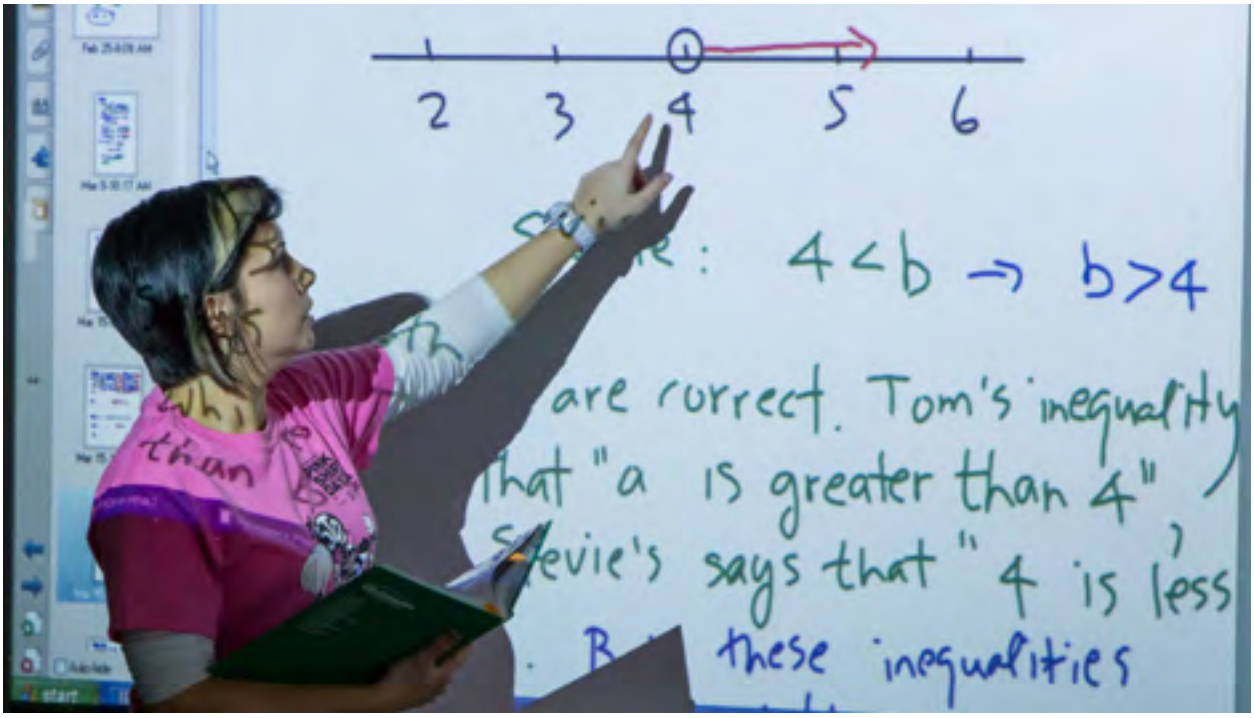
During each testing cycle, one of the three subject areas assessed (i.e., reading, mathematics or science) is considered a major domain and the other two are minor domains. The subject area identified as the major domain for that year involves a more intensive assessment. This allows information to be provided on several sub-domains. For example, the main focus of in 2012 was mathematics. This was assessed through:

- **Three mathematics processes***:* formulating situations mathematically; employing mathematical concepts, facts, procedures, and reasoning; and interpreting, applying, and evaluating mathematical outcomes;

- **Four content areas***:* quantity, space and shape, change and relationships, and uncertainty and data; and

- **Four contexts***:* personal, educational, societal, and scientific.

Information in this chapter was obtained from *Measuring Up: Canadian Results of the OECD PISA Study* published by Council of Ministers of Education, Canada. This report can be viewed at http://www.cmec.ca/252/Programs-and-Initiatives/Assessment/Programme-for-International-Student-Assessment-%28PISA%29/PISA-2012/index.html



Scoring

Two scores can be derived from the PISA assessment data: the mean (or average) score and student proficiency. Proficiency is ranked on a scale from a low of one to six. These proficiency levels are defined in Appendix B. Based on performance, each student is assigned to the highest proficiency level for which s/he would be expected to answer the majority of the assessment questions correctly.

Confidence intervals were used to determine if differences among the provinces were significantly different. PISA uses a 95% confidence interval to represent the actual high and low end points where the actual mean score should fall 95% of the time. Differences were determined to be significantly different if the respective confidence intervals do not overlap. If the confidence intervals overlap then the differences are not considered to be significant.

Assessing mathematical literacy

In 2012, PISA focused on assessing a student's ability to use mathematical content and language in age appropriate contexts for 15-year-olds. Specifically, mathematical literacy is defined as "an individual's capacity to formulate, employ, and interpret mathematics in a variety of contexts. It includes reasoning mathematically and using mathematical concepts, procedures, facts, and tools to describe, explain, and predict phenomena. It assists individuals to recognize the role that mathematics plays in the world and to make the well-founded judgments and decisions needed by constructive, engaged and reflective citizens" (Brochu et al, 2012, p. 15).

Since mathematics was the major domain, student performance was assessed on three additional mathematical processes and four sub-domains. These mathematical processes are used in PISA to describe what individuals do to integrate the context of a problem with mathematics to solve it. They are:

(1) **Formulating** situations mathematically: being able to recognize and identify opportunities to use mathematics and then provide mathematical structure to a problem presented in some contextualized form by translating it into a mathematical form.

(2) **Employing** mathematical concepts, facts, procedures, and reasoning: being able to employ these elements to solve mathematically formulated problems.

(3) **Interpreting, applying, and evaluating** mathematical outcomes: being able to reflect upon mathematical solutions, results, or conclusions and interpret them in the context of real-life problems.

The four sub-domains assessed included:

(1) **Change and Relationships** - the study of temporary and permanent relationships among phenomena, where changes occur within systems of interrelated objects or phenomena when the elements influence one another.

(2) **Space and Shape** relates to visual phenomena that are encountered everywhere in our world: patterns, properties of objects, positions and orientations, representations of objects, decoding and encoding of visual information, navigation, and dynamic interaction with real shapes and representations.

(3) **Quantity** involves understanding measurements, counts, indicators, relative size, and numerical trends and patterns. Mathematical literacy in the area of Quantity relies heavily on knowledge and processes related to numbers, applied in a wide variety of settings.

(4) **Uncertainty and Data** involves recognizing the place of variation in processes, having a sense of the quantification of that variation, acknowledging uncertainty and error in measurement, and knowing about chance. In the traditional areas of probability and statistics, it provides means of describing, modelling, and interpreting uncertainty phenomena, and of making inferences.

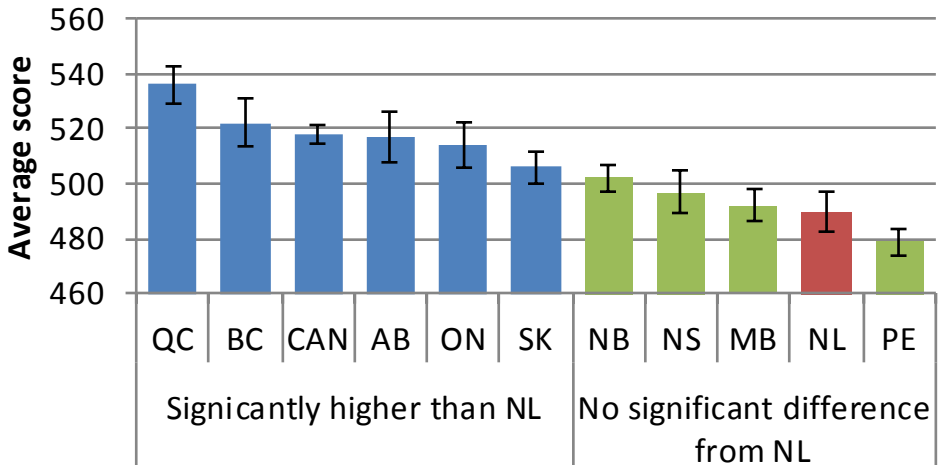
Average mathematics scores

Mathematics scores are expressed on a scale with an average of 500 points and a standard deviation of 100. Students in Newfoundland and Labrador achieved an average score of 490 on the 2012 assessment. As shown in figure 27a, students in five provinces (Quebec, British Columbia, Alberta, Ontario and Saskatchewan) and Canada overall achieved significantly higher average scores.

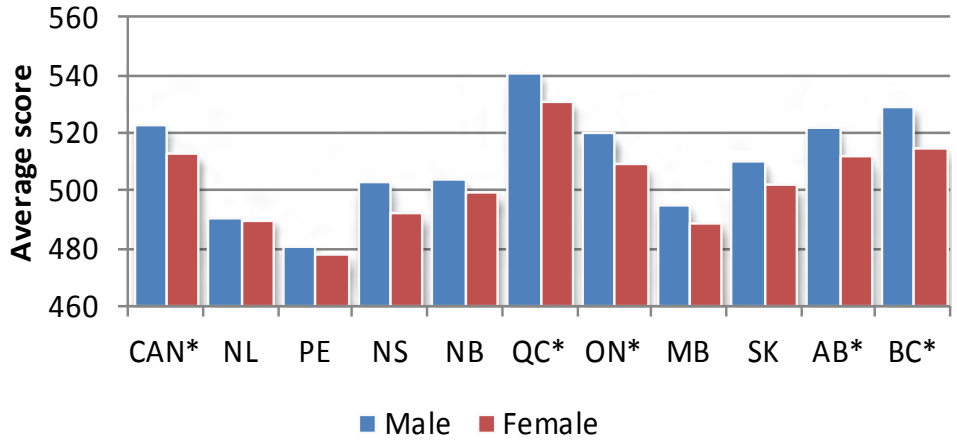
In Canada, boys performed significantly better than girls. The male average score was 10 points higher than the female average score (523 vs. 513). This trend was also seen in many of the other countries assessed by PISA. There were four provinces where a significant gender difference was present. In Quebec, Ontario, Alberta, and British Columbia, the male average score was significantly higher than the female. In Newfoundland and Labrador along and the remaining provinces the average scores did not differ significantly (see figure 27b).

Figure 27: Average mathematics scores

(a) Across Canada (PISA 2012)



(b) Gender differences



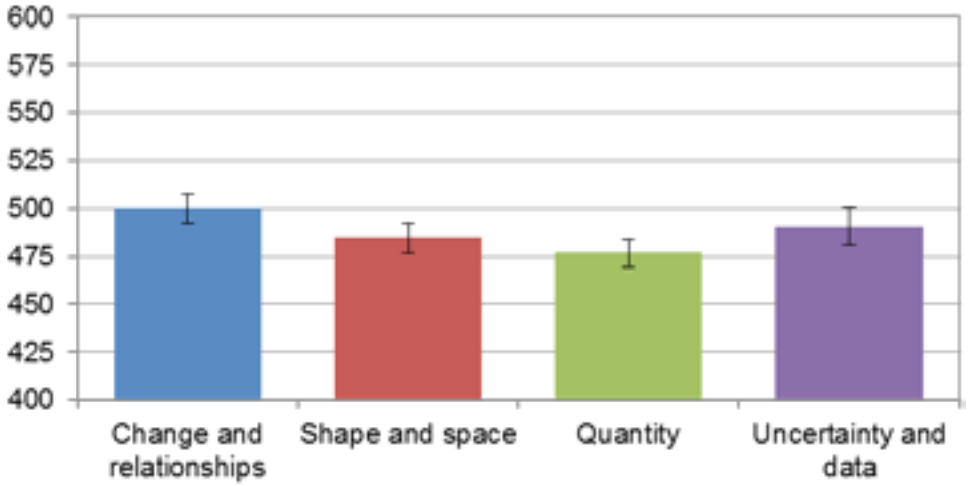
Note: * Significant gender difference present (Source: Table 27)

Performance on the sub-domains

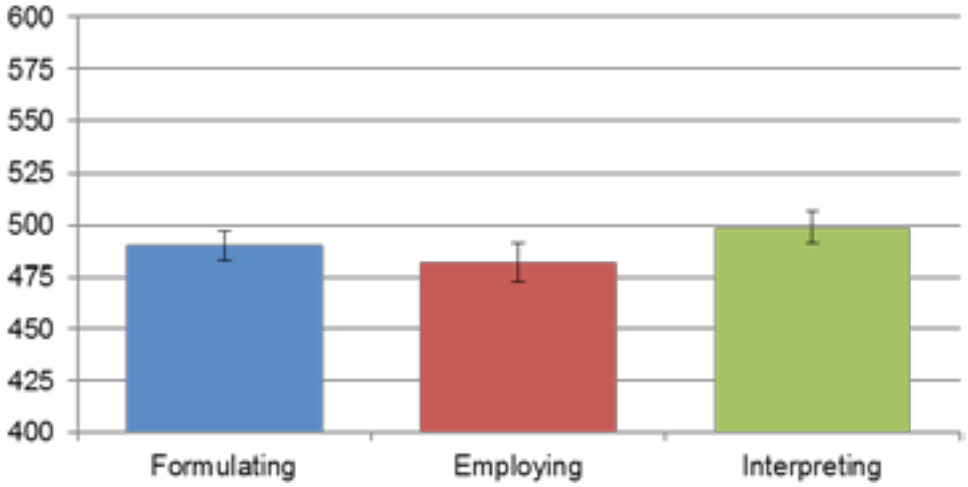
The average score of students in the province ranged from a low of 477 on the quantity subdomain to 500 on the change and relationships domain (see figure 28). Table 10.1 reports the performance of other provinces in relation to Newfoundland and Labrador. The actual average scores for each jurisdiction are provided in table 28 in Appendix A. As shown, the province's students tend to rank in the middle of the country. For example, students in Quebec, Ontario, Saskatchewan, Alberta and British Columbia typically have significantly higher scores than Newfoundland and Labrador while the remaining provinces are about the same.

Figure 28: Provincial performance on mathematical subdomains

(a) Average score on content sub-domain



(b) Average score on process sub-domain



(Source: Table 28)

Table 10.1: Significant differences in average scores between Newfoundland and Labrador and other jurisdictions

(a) Content subdomain

	Significantly higher than NL	No significant difference from NL	Significantly lower than NL
Change and Relationships	Canada Quebec Ontario Saskatchewan Alberta British Columbia	Prince Edward Island Nova Scotia New Brunswick Manitoba	**
Space and Shape	Canada New Brunswick Quebec Ontario Saskatchewan Alberta British Columbia	Nova Scotia Manitoba	Prince Edward Island
Quantity	Canada New Brunswick Quebec Ontario Saskatchewan Alberta British Columbia	Prince Edward Island Nova Scotia Manitoba	**
Uncertainty and Data	Canada Quebec Ontario Saskatchewan Alberta British Columbia	Prince Edward Island Nova Scotia New Brunswick Manitoba	**

(b) Process subdomain

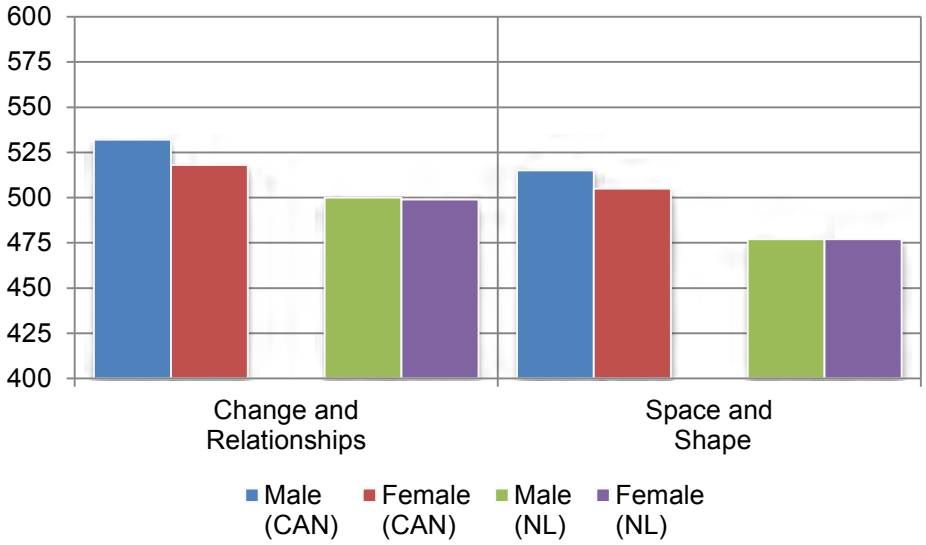
	Significantly higher than NL	No significant difference from NL	Significantly lower than NL
Formulating	Canada Quebec Ontario Saskatchewan Alberta British Columbia	Prince Edward Island Nova Scotia New Brunswick Manitoba	**
Employing	Canada New Brunswick Quebec Ontario Saskatchewan Alberta British Columbia	Prince Edward Island Nova Scotia Manitoba	**
Interpreting	Canada Quebec Ontario Alberta British Columbia	New Brunswick Prince Edward Island Nova Scotia Manitoba Saskatchewan	**

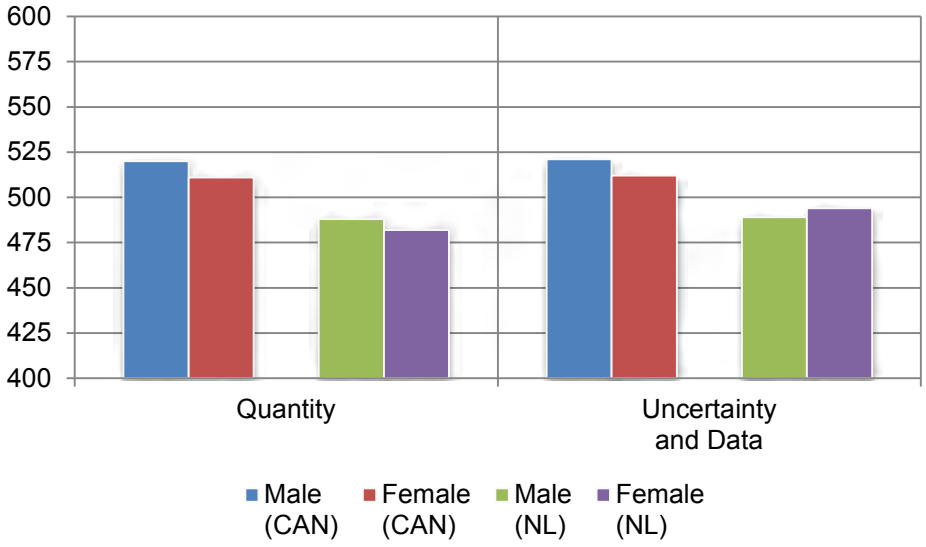
Gender differences

When analyzing mathematical processes and content areas, the gender difference is statistically significant for three process areas and all content areas at the Canadian level, with larger gender differences in favour of boys observed in the 'Formulating' (13 points) and in 'Change and Relationships' (14 points) sub-domains. In Newfoundland and Labrador, there was no significant gender difference present in any of the areas assessed (see figure 29). Table 10.2 lists the provinces where a significant gender difference was present. Table 29 in Appendix A reports the average scores for each jurisdiction.

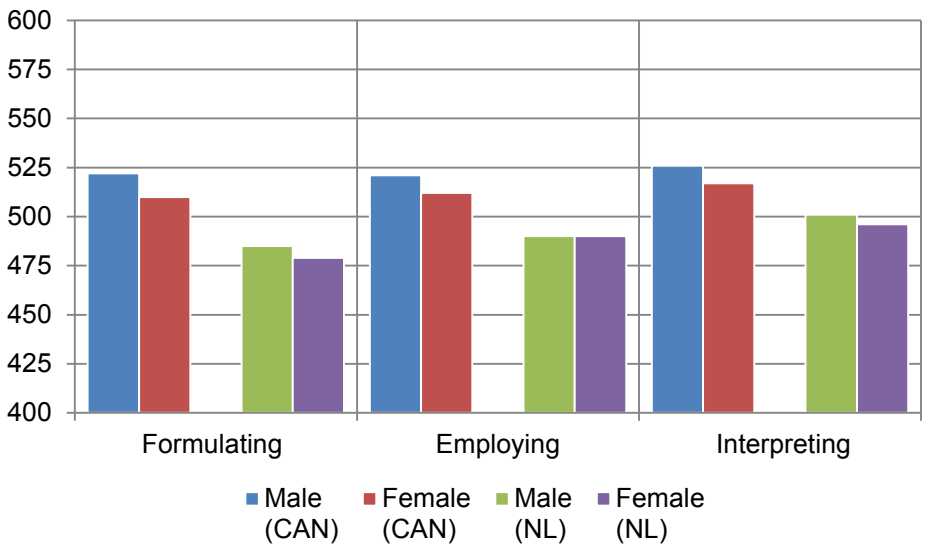
Figure 29: Gender differences in mathematics

(a) Average scores on the content subdomain





(b) Average scores on the process subdomain



(Source: Table 29)

Table 10.2: Jurisdictions with significant gender differences in performance on the sub-domains

Sub-domain		Significant gender difference
Content	Change and Relationships	Canada Nova Scotia Quebec Ontario Saskatchewan Alberta British Columbia
	Quantity	Canada Nova Scotia Quebec Alberta British Columbia
	Space and Shape	Canada Nova Scotia New Brunswick Quebec Ontario Manitoba Alberta British Columbia
	Uncertainty and Data	Canada Quebec Alberta
Process	Employing	Canada Quebec Ontario Alberta
	Formulating	Canada Nova Scotia Quebec Ontario Saskatchewan Alberta British Columbia
	Interpreting	Canada Nova Scotia Quebec Alberta

Proficiency in mathematics

In PISA 2012, mathematical literacy is expressed on a six-level scale where tasks at the lower end of the scale (Level 1) are deemed easier and less complex than tasks at the higher end (Level 6). Level 2 can be considered the baseline level of mathematical proficiency required to participate fully in modern society.

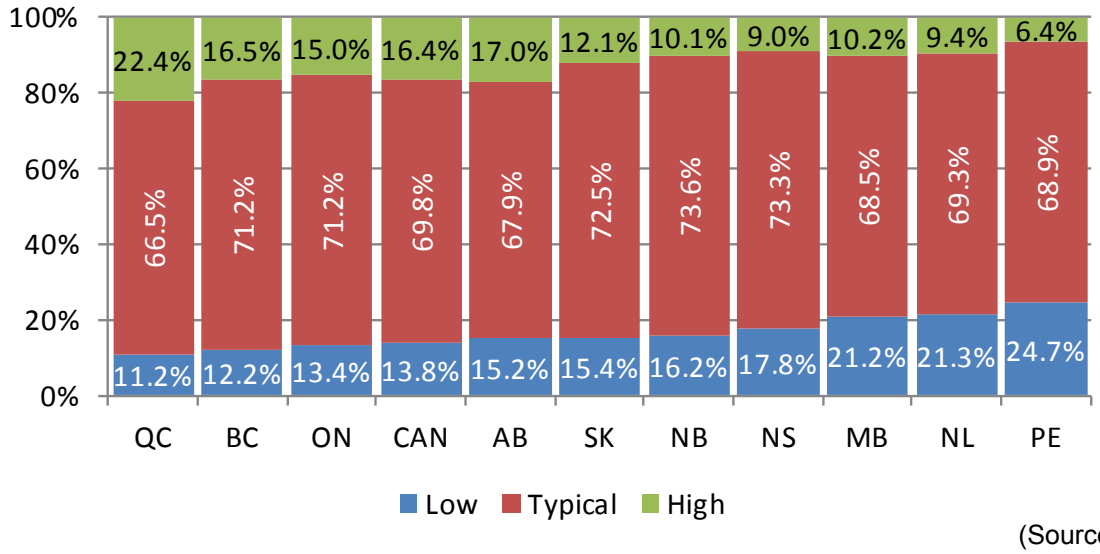
Figure 30a reports Canadian and provincial proficiency levels for mathematics. These levels are grouped into three categories:

- Low performers (students performing below the baseline measure of level 2),
- Typical performers (those with a proficiency level between 2 and 4), and
- High performers (students achieving a proficiency level of 5 or higher)

Quebec led the country in mathematical proficiency with the largest percentage of high performers (22.4%) and the smallest percentage of low performers (11.2%). Students in Prince Edward Island did not fare very well. They had the highest percentage of low performing students (24.7%) and the lowest percentage of high performing students (6.4%) in the country. In Newfoundland and Labrador, over two thirds of students were in the 'Typical performer' range. This was similar to the Canadian percentage (69.3% and 69.8% respectively).

The only significant gender difference occurred in the group of high performers. Four provinces (Prince Edward Island, Quebec, Ontario, Manitoba and Alberta) and Canada overall had a significantly higher percentage of males assessed as high performers than females).

Figure 30: Student proficiency levels across Canada



(Source: Table 30)

Assessing reading and scientific literacy

In PISA 2012, reading and science were the minor domains with less time devoted to assessing student performance in these areas. Due to this, only the average scores were calculated.

To assess reading, PISA uses the concept of reading literacy. This is "an individual's capacity to understand, use reflection on, and engage with written texts, in order to achieve one's goals, develop one's knowledge and potential, and participate in society" (Brochu, 2012, p. 33). For science, PISA assesses scientific literacy which is defined as "an individual's scientific knowledge and use of that knowledge to identify questions, acquire new knowledge, explain scientific phenomena and draw evidence based conclusions about science-related issues, an understanding of the characteristic features of science as a form of human knowledge and enquiry, an awareness of how science and technology shape our material, intellectual, and cultural environments, and willingness to engage in science-related issues, and with the ideas of science, as a reflective citizen" (Brochu, 2012, p. 33).

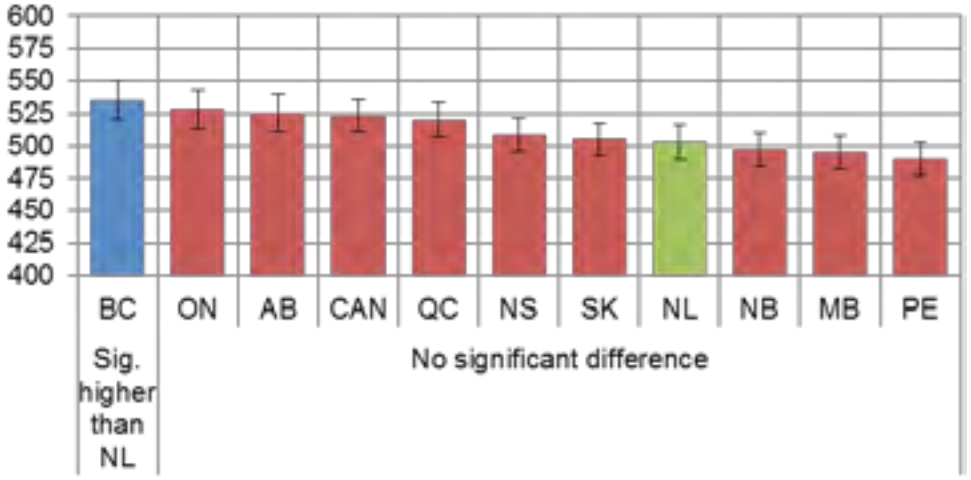
Average reading and science scores

Across Canada, the average reading score ranged from 490 in Prince Edward Island to 535 in British Columbia. In Newfoundland and Labrador, the average score was 503. As shown in figure 31a, only British Columbia had a significantly higher score. The average scores seen in the rest of the provinces and Canada were not significantly different.

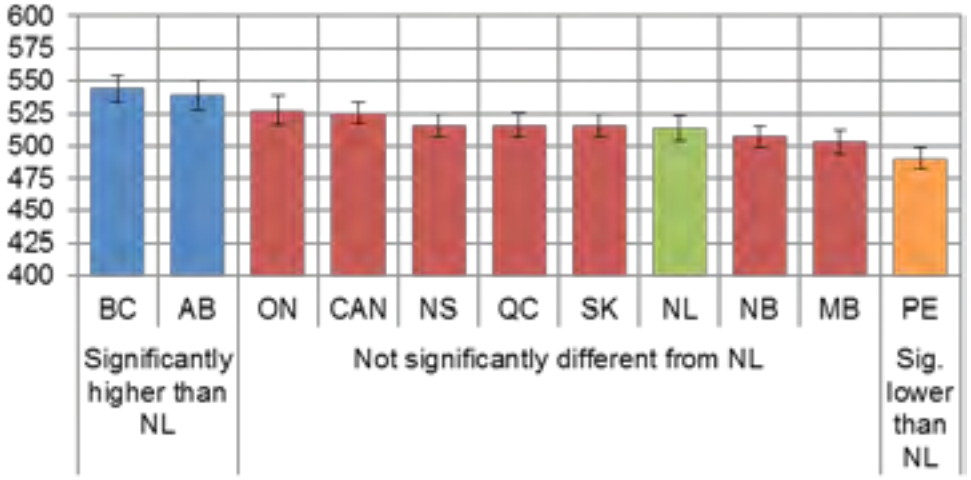
For science, average scores ranged from 490 in Prince Edward Island to 544 in British Columbia. For Newfoundland and Labrador, the average score was 514. In comparison to the other provinces, two scored significantly higher (British Columbia and Alberta) and one scored significantly lower (Prince Edward Island). The remaining provinces were in the same range as Newfoundland and Labrador's (i.e., the average scores were not significantly different (see figure 31b).

Figure 31: Student performance across Canada

(a) Average score in reading



(b) Average score in science



(Source: Table 31)

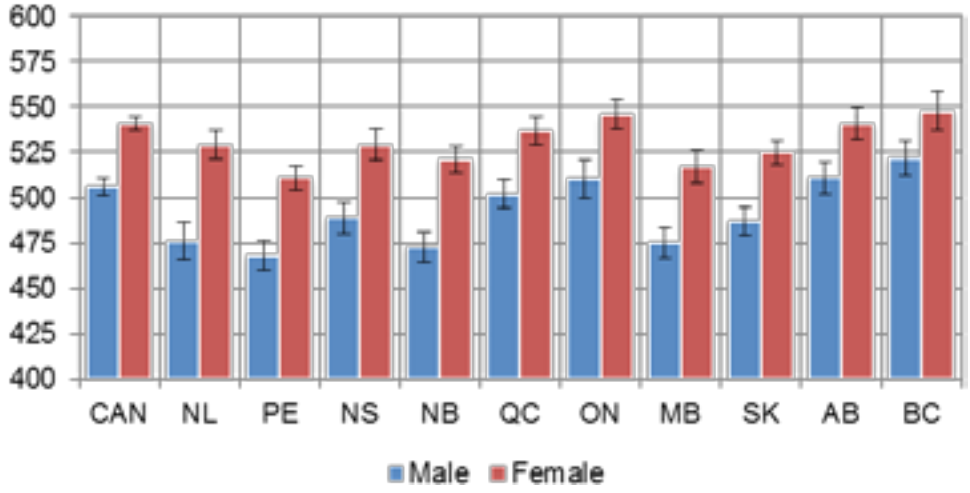
Gender differences in reading and science

Overall, girls performed significantly better than boys on the reading in each province across the country (see figure 32a). This was also the case in each of 65 countries who took part in the assessment. This difference ranged from a low of 26 points in British Columbia to 53 points in Newfoundland and Labrador.

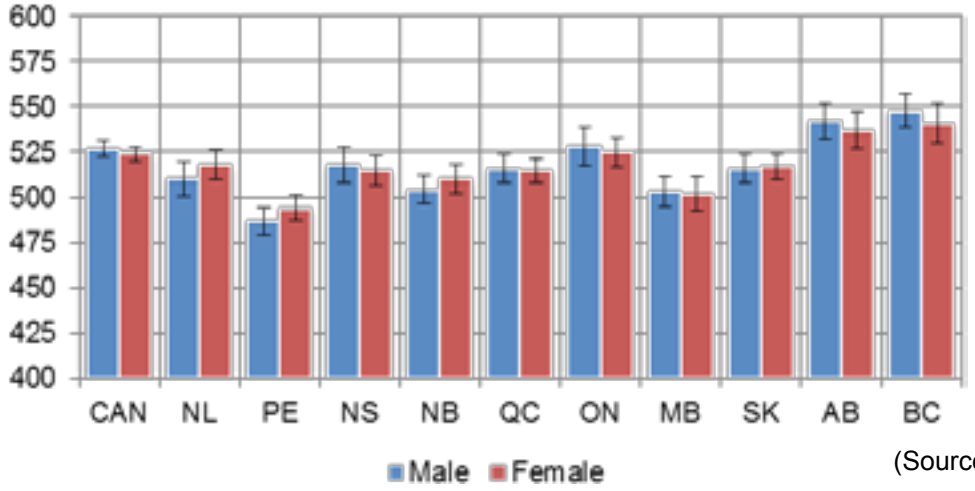
Unlike reading, there were no significant gender differences in the science average scores. As shown in figure 32b, there was virtually no gender gap present. In Newfoundland and Labrador the average score was 518 for girls and 510 for boys.

Figure 32: Gender differences in reading and science

(a) Average score in reading



(b) Average score in science



(Source: Table 32)

Trends in student performance

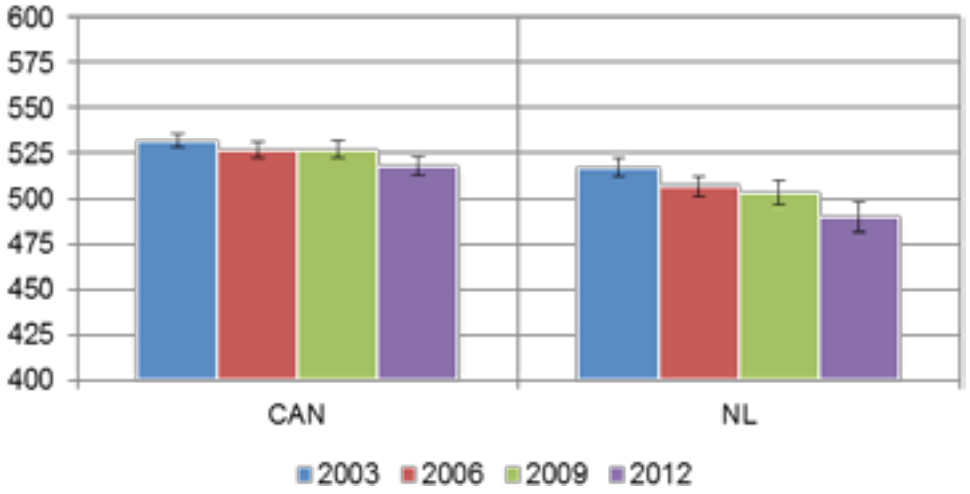
With several PISA cycles being completed, multiyear trends across four cycles (from 2003 to 2012) can be examined. Figure 33 shows how students in Newfoundland and Labrador performed in relation to Canada. Table 33 in Appendix A provides information for all of the jurisdictions.

For mathematics, the average score has been on a downward trend in both Canada and many of the provinces. Since 2003, the Canadian average score has declined significantly from 532 to 518 in 2012. The average score declined significantly in all provinces except Quebec and Saskatchewan. The largest declines occurred in Manitoba (36 points), Alberta (32 points), and Newfoundland and Labrador (26 points).

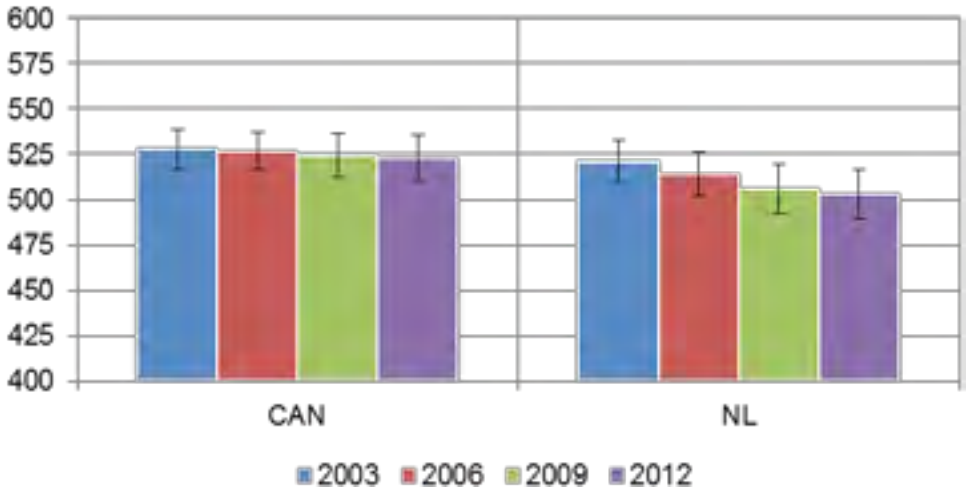
In reading and science, student performance has been consistent for both Canada overall and Newfoundland and Labrador with no significant differences from year to year. For science, only three years of data can be compared,

Figure 33: Canadian and provincial trends

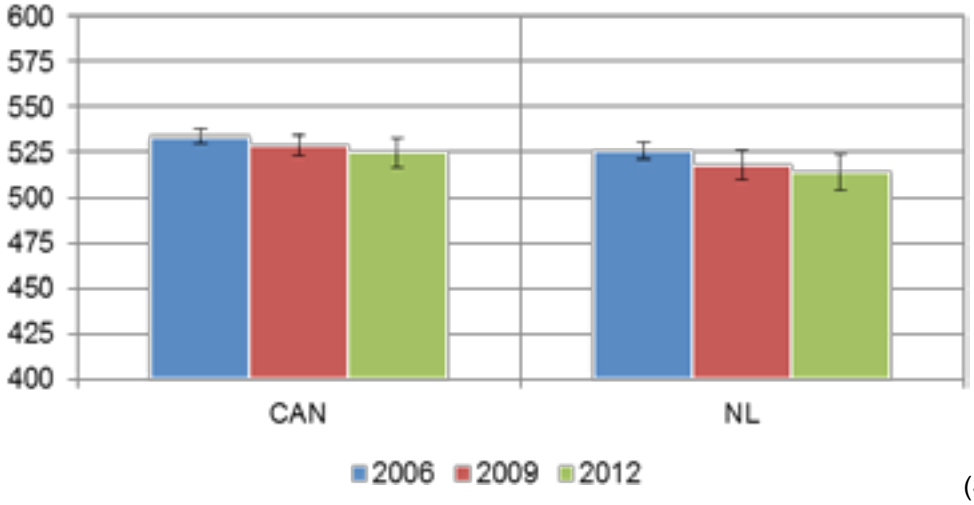
(a) Mathematics



(b) Reading



(c) Science

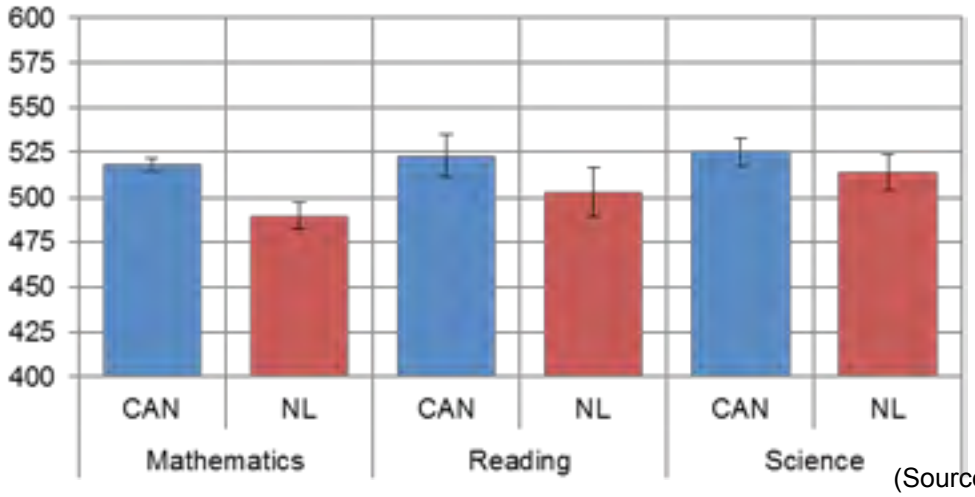


(Source: Table 33)

Summary

High school students performed quite well on PISA 2012. In mathematics, the provincial average score was slightly below the Canadian average score. However, in both reading and science, there was no significant differences present (see figure 34).

Figure 34: Student performance in Canada and Newfoundland and Labrador



(Source: Table 34)

Part IV:

Selected Aspects of the School Climate Survey

CHAPTER 11: THE SCHOOL CLIMATE SURVEY

Each year, students in various grades complete the School Climate Survey. The results provide a snapshot of student's attitudes and feelings about various aspects of the school environment. This chapter will focus on the following three dimensions assessed by the survey:

(1) Feelings of safety in the school environment,
(2) Personal experiences of bullying and harassment in school, and
(3) Drug and alcohol use (for the older grades).

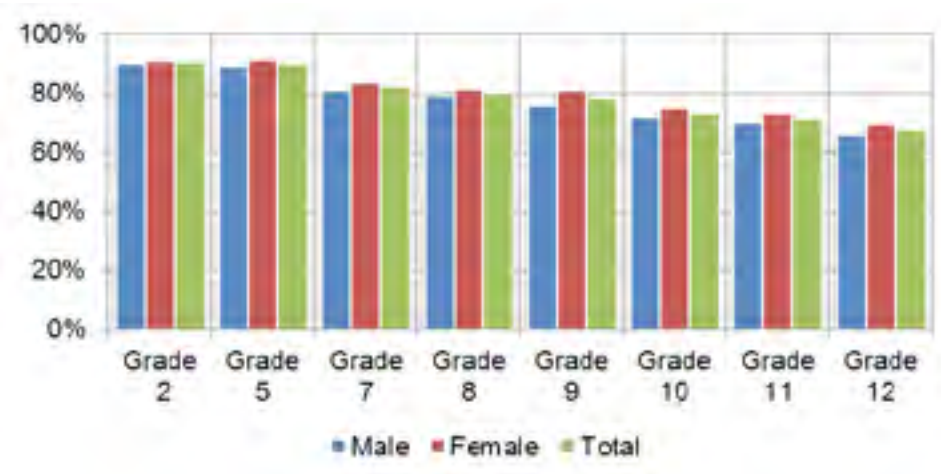
For each dimension, students are asked if they agree or disagree with a series of statements. The complete list of statements included in each dimension is provided in Appendix C.

The percentages reported in this chapter represent the percentage of students in agreement with each statement. However, this does not mean the inverse (i.e. 100% - % agree) represents the percentage of students who disagree. There may be students who were unsure or did not provide a response to one or more statements.

The 2012/13 administration

In 2012/13, 16,767 students from eight grades (2, 5, 7, 8, 9, 10, 11 and 12) completed the School Climate Survey. This represents close to 80.0% of all the students in these grades. Figure 35 shows the participation rate for each of the grades surveyed. As shown, participation rates drop off as the grade level increases. In Grade 2, 90.6% of students completed the survey compared to 67.7% of Grade 12 students. The participation rates for males and females mirror the overall rate for each grade.

Figure 35: Student participation rate



(Source: Table 35)

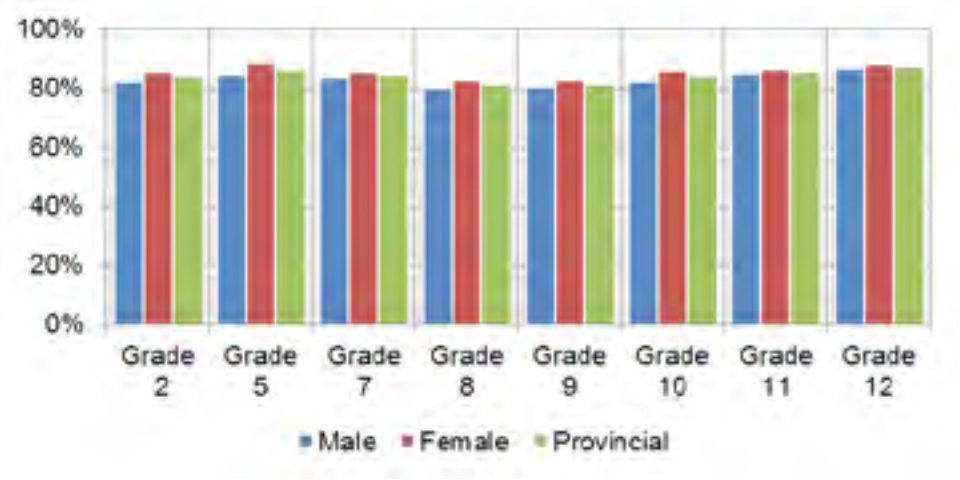
Feelings of safety and security in the school environment

Overall, students feel safe in school. This is the case across each of the grades. The percentage of students ranged between 81.5% and 87.0% (see figure 36a). Grades 8 and 9 had a slightly lower percentage of students who felt safe. Along gender lines, while there was little difference in the percentages, the percentage of females who felt safe was always slightly higher than the males.

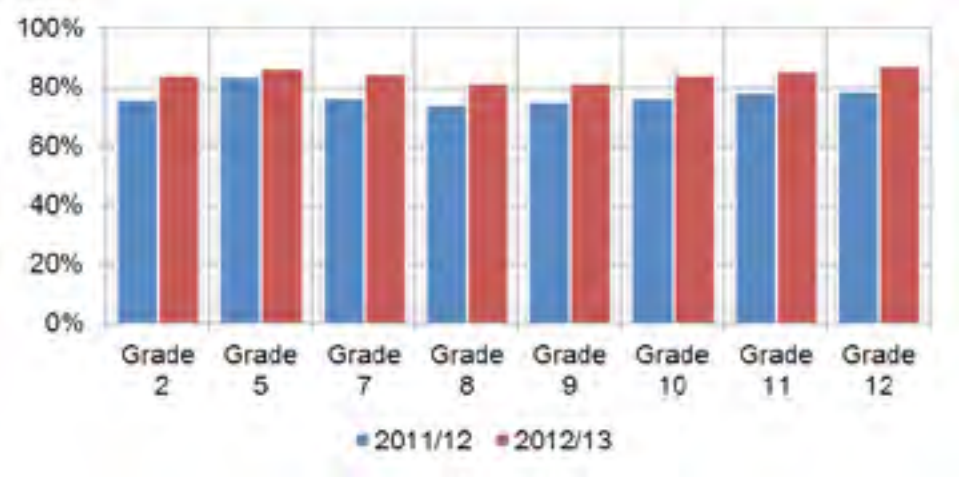
The percentage of students who feel safe in school increased from the previous year (2011/12). This was the case in each of the grades surveyed. With the exception of Grade 5, the 2012/13 percentages were approximately eight percentage points higher (see figure 36b).

Figure 36: Percentage of students who feel safe in school

(a) Grade level and gender trends



(b) Provincial year to year change



(Source: Table 36)

Personal experiences with bullying and harassment

Students were asked about their experiences at school with any behaviour that could be interpreted as bullying and/or harassment in the month before they completed the survey. These behaviours included such things as being:

- hit, kicked, pushed or shoved (physical);
- teased/made fun of in a hurtful way or called mean names (emotional); and/or
- left out of activities/ignored by others on purpose (social exclusion).

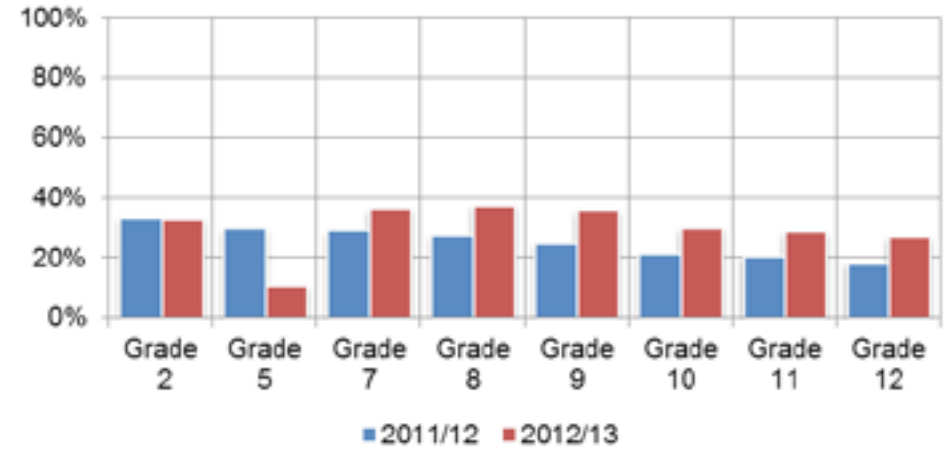
Approximately one third of all students experienced some form of bullying in the month before the survey was completed. As shown in figure 37a, this percentage peaked in Grade 8 (37.8%) and then declined across the other grades until it reaches 26.9% in Grade 12. Overall, the percentage who felt they were bullied was highest in the intermediate grades (i.e. Grades 7 to 9) and lowest in the high school years (Grades 10 to 12). Along gender lines, a higher percentage of girls than boys experienced bullying in each of the grades surveyed.

A higher percentage of students experienced bullying in 2012/13 than 2011/12. This was seen in each grade except Grade 2. However, both years follow the same general pattern - decreasing percentages as the grade level increases (see figure 37b).

Figure 37: Percentage who experienced some form of bullying in the month before the survey

(a) Grade level and gender trends

(b) Year to year change



(Source: Table 37)

Note: The 2012/13 percentage of Grade 5 students who were bullied should be viewed with caution. This percentage was much lower than both the other grades and the percentage from the 2011/12 survey.

Electronic/cyber bullying

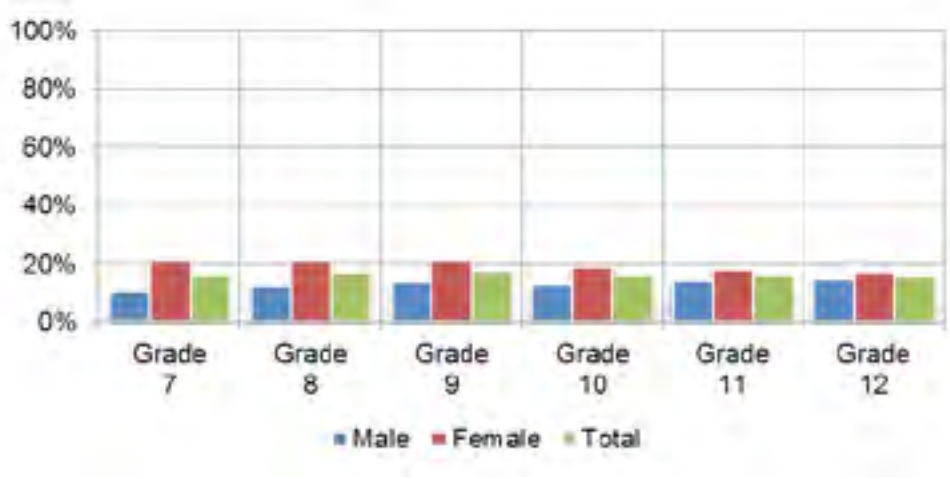
Students in Grades 7 to 12 were asked about their experiences with cyberbullying during the month preceding the survey. Specifically they were asked if they had had been bullied or harassed electronically (teased or bullied via a computer or mobile phone).

In 2012/13, 16.4% of students in these grades personally experienced some form of cyberbullying. There is little difference in this percentage through the grades, ranging between 15.8% and 17.6%. A higher percentage of females reported experiencing cyberbullying in each grade than males. Interestingly, the trend seen throughout the grades is opposite for males and females. As the grade level increased, the percentage of females who experienced cyberbullying decreased from 21.4% in Grade 7 to 16.9% in Grade 12. For males, this percentage increased from 10.7% in grade 7 to 14.6% in Grade 12 (see figure 38a).

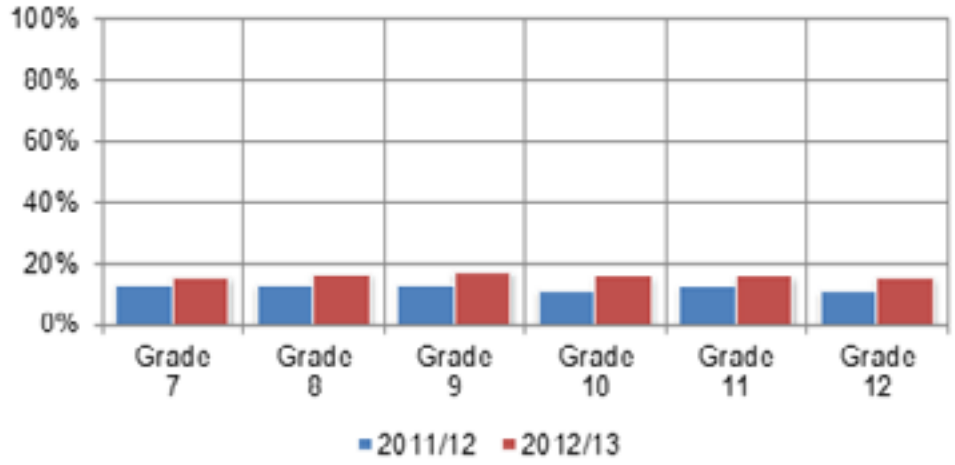
A slightly higher percentage of students experienced cyberbullying in 2012/13 than 2011/12. This difference between the two years ranged from a low 2.2 percentage points in Grade 7 to 4.6% in Grade 12 (see figure 38b).

Figure 38: Experiences with cyberbullying

(a) Grade level and gender trends



(b) Year to year change



(Source: Table 38)

Drug and alcohol Use

The School Climate Survey includes a section on drug and alcohol use for students in Grades 7 to 12. It asks students about their use of illicit drugs (including abusing prescription medications), cigarettes and alcohol during the preceding month.

In 2012/13, the percentage of students who used drugs or alcohol increased as the grade level increased. From Grade 7 to 12, this percentage increased from 2.8% to 27.3%. Along gender lines, the percentage for males is always higher than females regardless of the grade. As the grade level increases, so does the gender gap. For example, in Grade 7, 3.2% of males and 2.8% of females (a difference of 0.8 points) used drugs and/or alcohol. This increases to a difference of 6.6 points (30.7% of males and 24.1% of females) in Grade 12 (see figure 39a).

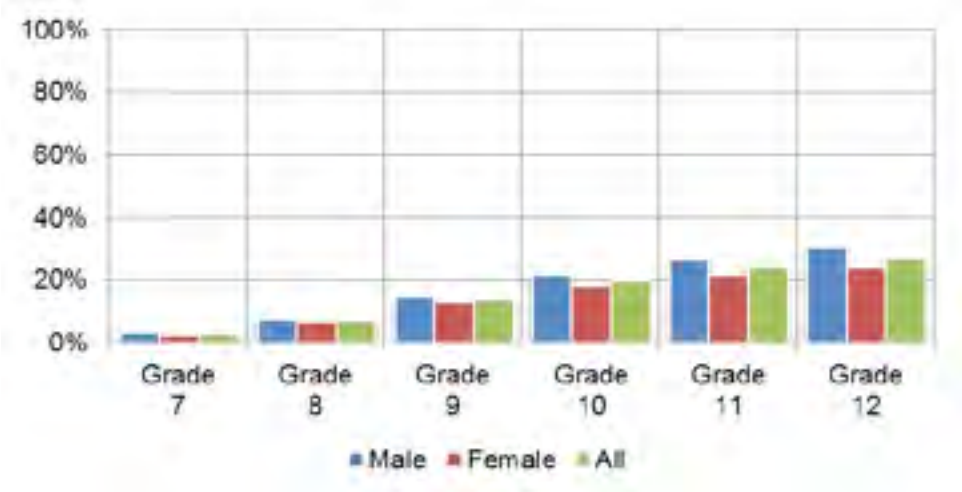
There was little overall difference from 2011/12 and 2012.13 (see figure 39b). The percentage of Grade 7 to 9 students who used drugs or alcohol was slightly lower than 2011/12 but for the other grades (10 to 12) the percentages were virtually identical.

While the percentage of students who reportedly used drugs and/or consumed alcohol during the preceding month increased from grade to grade, alcohol use showed the most dramatic increase (see figure 40). In Grade 7, 4.9% of students used alcohol in the month before the survey. This increased to 57.3% of Grade 12 students. For cigarette smoking, the percentage increased from 2.7% in Grade 7 to 23.5% in Grade 12.

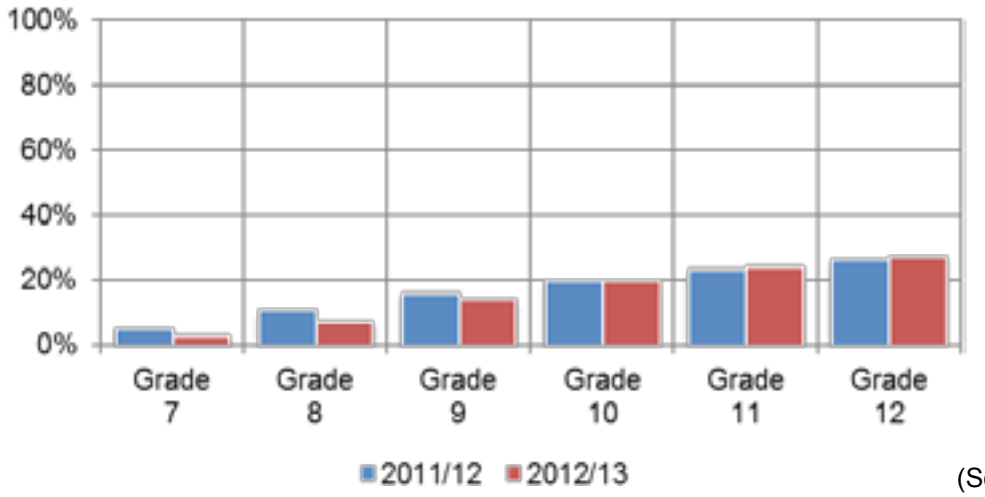
Figure 41 shows the gender difference in drug and alcohol use. Overall, a higher percentage of males than females reported used drugs or smoked cigarettes. However, there was virtually no difference in alcohol use.

Figure 39: Drug and alcohol use in the month prior to the survey

(a) Grade level and gender trends (2012/13)

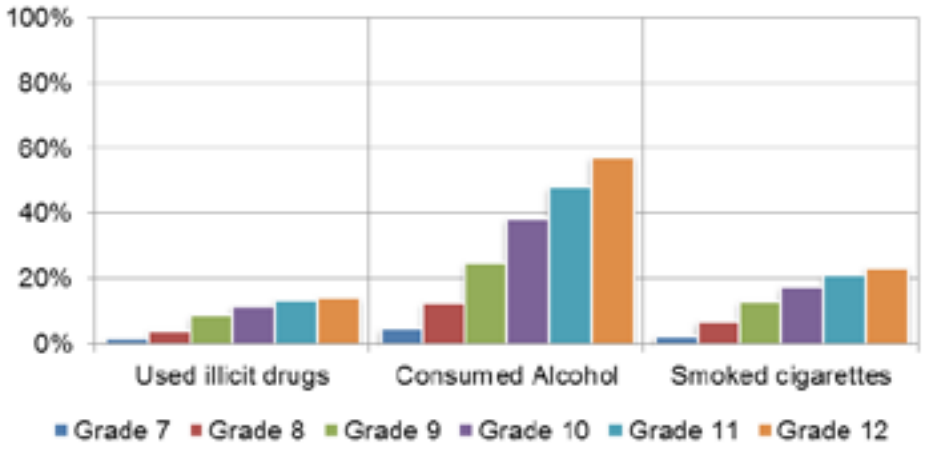


(b) Year to year difference (2011/12 and 2012/13)



(Source: Table 39)

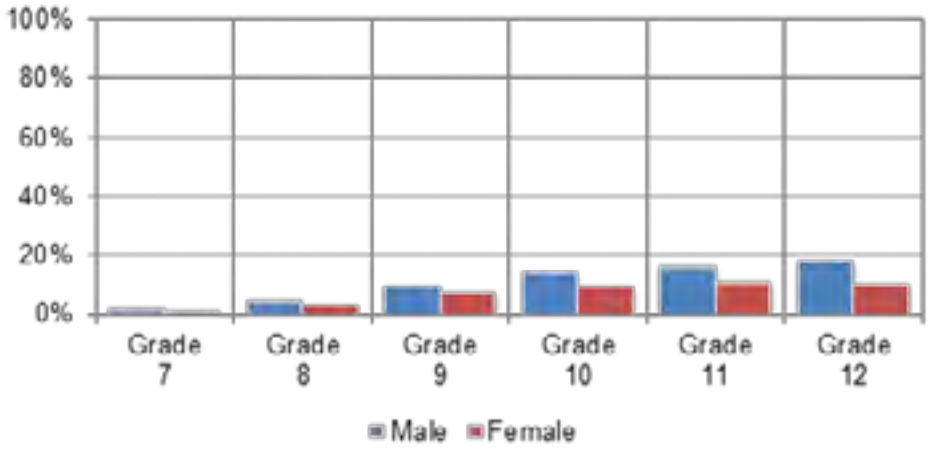
Figure 40: Alcohol, tobacco and drug use in the month preceding the survey (2012/13)



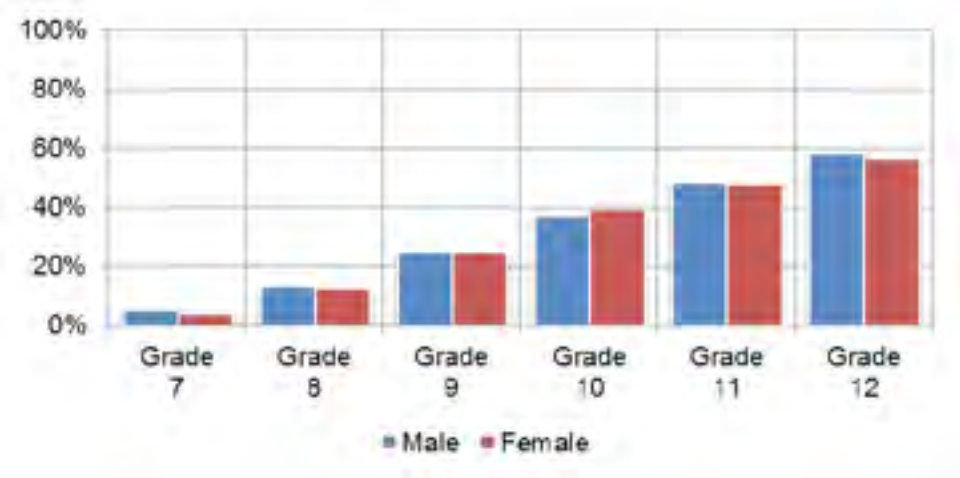
(Source: Table 40)

Figure 41: Gender differences in drug and alcohol use in the month before the survey

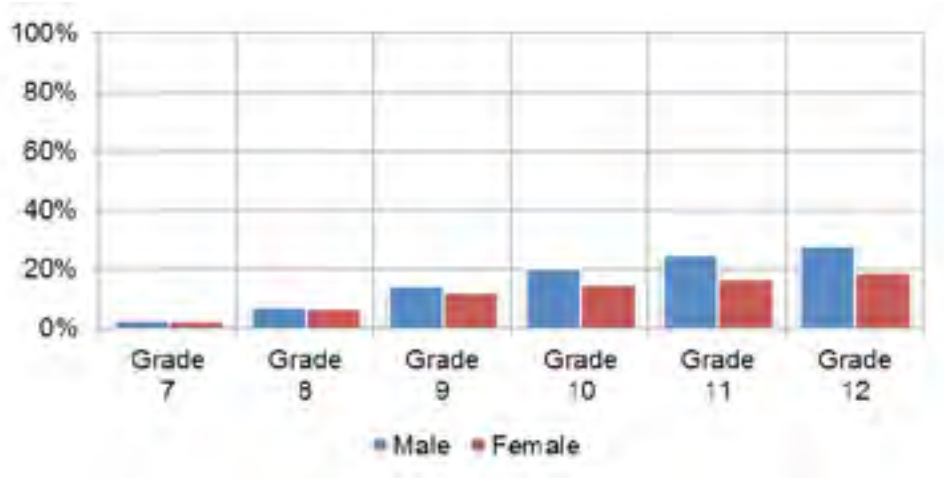
(a) Percentage who used illicit drugs or abused prescription drugs (2012/13)



(b) Percentage who consumed alcohol (2012/13)



(c) Percentage who smoked cigarettes (2012/13)



(Source: Table 41)

Appendices

Chapter 2: A Profile of the Educational System

Table 1: Distribution of students across the province

(a) By school district (2012/13)

District	Number of students	Percentage
Labrador	3,348	5.0
Western	11,331	16.8
Nova Central	11,928	17.6
Eastern	40,649	60.1
CSFP	348	0.5
Province	67,604	100.0

(b) By region (2012/13)

Region	Number of students	Percentage
Urban regions	42,483	62.8
Rural regions	25,121	37.2
Province	67,604	100.0

Table 2: Enrolment trends

(a) Provincial enrolment (2008/09 - 2017/18)

	School year	Student enrolment
Actual	2008/09	70,631
	2009/10	69,665
	2010/11	68,729
	2011/12	67,933
	2012/13	67,604
	2013/14	67,436
Projected	2014/15	67,400
	2015/16	67,353
	2016/17	67,299
	2017/18	67,223

(b) Urban and rural enrolment trends (2008/09 - 2012/13)

School year	Urban regions	Rural regions	Province
2008/09	42,519	28,112	70,631
2009/10	42,360	27,305	69,665
2010/11	42,225	26,504	68,729
2011/12	42,185	25,748	67,933
2012/13	42,483	25,121	67,604
Actual change*	-36	-2,991	-3,027
Percentage change*	-0.1	-10.6	-4.3

Note:
* between 2008/09 and 2012/13

(c) District enrolment trends (2008/09 - 2012/13)

School year	Labrador	Western	Nova Central	Eastern	CSFP
2008/09	3,589	12,773	12,743	41,257	269
2009/10	3,477	12,489	12,493	40,950	256
2010/11	3,413	12,046	12,331	40,673	266
2011/12	3,386	11,600	12,083	40,558	306
2012/13	3,348	11,331	11,928	40,649	348
Actual change*	-241	-1,442	-815	-608	+79
Percentage change*	-6.7	-11.3	-6.4	-1.5	29.4

Note:
* between 2008/09 and 2012/13

Table 3: A profile of the province's educators

(a) By position (2012/13)

Position	Number of FTE educators	Percentage
Administrative	728	13.2
Classroom teacher	3,551	64.4
Instructional Resource Teacher	802	14.5
Other	434	7.9
Total	5,515	100.0

(b) By position and gender (2012/13)

Position	Number of FTE educators	Male (%)	Female (%)
Administrative	728	49.3	50.7
Classroom teacher	3,551	26.3	73.7
Instructional Resource Teacher	802	14.7	85.3
Other	434	34.2	65.8
Total	5,515	27.8	72.2

Table 4: Workforce trends

(a) Number of FTE educators (2008/09 - 2012/13)

School year	Number of FTE educators
2008/09	5,572
2009/10	5,569
2010/11	5,544
2011/12	5,529
2012/13	5,515
Actual change*	-57
Percentage change*	-1.0

Note:
* between 2008/09 and 2012/13

(b) By age (2008/09 - 2012/13)

School year	Number of FTE educators	Percentage who were …			
		Younger than 30 years	30-39 years	40-49 years	50 years or older
2008/09	5,572	13.5	27.1	40.0	19.4
2009/10	5,569	13.2	25.8	40.4	20.7
2010/11	5,544	12.3	26.0	40.7	20.9
2011/12	5,529	12.3	25.5	39.9	22.3
2012/13	5,515	11.5	26.9	39.4	22.2
Actual change*	-57	-119	-25	-56	142
Percentage change*	-1.0	-15.8	-1.7	-2.5	13.1

Note:
* between 2008/09 and 2012/13

(c) By position and gender (2008/09 - 2012/13)

School year	Administrative		Classroom teacher		Instructional Resource Teacher	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
2008/09	53.1	46.9	28.2	71.8	14.8	85.2
2009/10	54.0	46.0	27.6	72.4	15.4	84.6
2010/11	52.1	47.9	27.2	72.8	14.5	85.5
2011/12	51.3	48.7	26.7	73.3	14.7	85.3
2012/13	49.3	50.7	26.3	73.7	14.7	85.3
Actual change in the number*	-27	28	-64	72	-7	-38
Percentage change*	-7.0	8.2	-6.4	2.8	-5.6	-5.3

Note:
* between 2008/09 and 2012/13

Table 5: Pupil Teacher Ratios (PTR)

(a) Provincial and district PTRs (2012/13)

District	PTR
Labrador	10.3
Western	10.6
Nova Central	11.1
Eastern	12.7
CSFP	7.3
Province	11.8

(b) Canadian and jurisdictional PTR[5] (2010/11)

Jurisdiction	PTR
Canada	13.8
Newfoundland and Labrador	11.8
Prince Edward Island	12.8
Nova Scotia	12.9
New Brunswick	13.6
Quebec	12.7
Ontario	13.5
Manitoba	13.7
Saskatchewan	13.6
Alberta	15.9
British Columbia	16.8
North West Territories	13.8
Yukon	n/a
Nunavut	13.1

(c) Trends in the provincial and district PTR (2008/19 – 2012/13)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	11.5	11.1	11.5	11.3	10.3
Western	11.2	11.2	10.9	10.5	10.6
Nova Central	11.8	11.6	11.5	11.2	11.1
Eastern	13	12.7	12.7	12.7	12.7
CSFP	6.4	6.1	6.3	7.3	7.3
Province	12.2	12.1	12.0	11.9	11.8

5 Adapted from: Statistics Canada Table C.2.3 - Student-educator ratio in public elementary and secondary schools, Canada, provinces and territories, 2001/2002 to 2010/2011 Retrieved from http://www.statcan.gc.ca/pub/81-582-x/2013001/tbl/tblc2.3-eng.htm

Table 6: Number of schools

(a) District breakdown (2012/13)

District	Number of schools	Percentage
Labrador	15	5.6
Western	65	24.3
Nova Central	65	24.3
Eastern	118	44.0
CSFP	5	1.9
Province	268	100.0

(b) By region (2012/13)

Region	Number of schools	Percentage
Urban regions	99	36.9
Rural regions	169	63.1
Province	268	100.0

(c) Change in the number of schools (2008/09 - 2012/13)

School year	Labrador	Western	Nova Central	Eastern	CSFP	Province
2008/09	15	72	66	121	5	279
2009/10	15	71	67	121	5	279
2010/11	15	65	66	121	5	272
2011/12	15	65	65	118	5	268
2012/13	15	65	65	118	5	268
Actual change*	0	-7	-1	-3	0	-11
Percentage change*	0.0	-9.7	-1.5	-2.5	0.0	-3.9

Note:
* between 2008/09 and 2012/13

Table 7: School configurations

(a) Provincial breakdown (2012/13)

School configuration	Number of schools	Percentage
Primary	12	4.5
Elementary	101	37.7
Intermediate	21	7.8
Secondary	26	9.7
High School	25	9.3
K-12	83	31.0
Total	268	100.0

(b) By region (2012/13)

School configuration	Percentage of schools in	
	Urban regions (n=99)	Rural regions (n=169)
Primary	6.1	3.6
Elementary	49.5	30.8
Intermediate	17.2	2.4
Secondary	6.1	11.8
High School	17.2	4.7
K-12	4.0	46.7
Total	100.0	100.0

(c) By school district (2012/13)

School configuration	Labrador (n=15)	Western (n=65)	Nova Central (n=65)	Eastern (n=118)	CSFP (n=5)	Province (n=268)
Primary	13.3	1.5	9.2	2.5	0.0	4.5
Elementary	20.0	30.8	27.7	49.2	40.0	37.7
Intermediate	0.0	6.2	4.6	11.9	0.0	7.8
Secondary	13.3	9.2	13.8	7.6	0.0	9.7
High School	0.0	7.7	6.2	13.6	0.0	9.3
K-12	53.3	44.6	38.5	15.3	60.0	31.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 8: Average class size

(a) District breakdown (2012/13)

Grade level	Labrador	Western	Nova Central	Eastern	CSFP	Province
Primary (K-3)	15.7	15.0	15.7	17.8	11.6	16.7
Elementary (4-6)	16.7	16.8	16.9	19.3	11.8	18.2
Intermediate (7-9)	18.3	18.2	17.8	20.9	9.1	19.5
K-9	17.0	16.6	16.8	19.2	11.4	18.1

(b) Provincial trends (2008/09 - 2012/13)

Grade level	2008/09	2009/10	2010/11	2011/12	2012/13
Primary (K-3)	16.9	16.7	16.9	16.6	16.7
Elementary (4-6)	19	18.4	18.2	18	18.2
Intermediate (7-9)	21.3	20.1	19.8	19.4	19.5
K-9	18.9	18.3	18.2	17.9	18.1

Table 9: Enrolment in Level I general courses

(a) Identifying general and academic level courses (2012/13)

Subject	Number of students enrolled in	
	General course	General and academic course
Mathematics	Mathematics 1202	Mathematics 1202 + Mathematics 1201
Science	Science 2200	Science 2200 + Science 1206
English	English 1202	English 1202 + English 1201

(b) Percentage of students in general courses (2012/13)

Subject	Number of students enrolled in		Percentage in general (a/b)
	General level course only (a)	General and academic level courses (b)	
Mathematics	1,024	5,751	17.8
Science	808	5,575	14.5
English	819	5,612	14.6

(c) Gender breakdown (2012/13)

Subject	Number of students enrolled in				Percentage in general (a/b)	
	General level course only (a)		General and academic level course (b)			
	Male	Female	Male	Female	Male	Female
Mathematics	645	379	2,949	2,802	21.9	13.5
Science	535	273	2,869	2,706	18.6	10.1
English	552	267	2,898	2,714	19.0	9.8

(d) Trends in the percentage of students in general courses (2008/09 – 2012/13)

Subject	2008/09	2009/10	2010/11	2011/12	2012/13
Mathematics	24.5	20.8	18.2	24.5	17.8
Science	21.0	17.5	16.9	15.9	14.5
English	21.2	18.3	16.3	14.9	14.6

Table 10: Student success in Level I general and academic courses

(a) Percentage of students who successfully completed the course (2012/13)

Subject	General level course	Academic level course
Mathematics	87.7	83.2
Science	90.1	91.6
English	86.0	92.7

(b) Gender difference in successful completions (2012/13)

Subject	General level course		Academic level course	
	Male (%)	Female (%)	Male (%)	Female (%)
Mathematics	86.7	89.4	80.9	85.4
Science	90.6	89.0	90.8	92.3
English	84.4	89.7	90.5	94.7

Table 11: Early school leaver rate

(a) Provincial and district rates (2012/13)

District	Early School Leaver Rate
Labrador	11.2
Western	6.2
Nova Central	4.5
Eastern	6.7
CSFP	7.7
Province	6.9

(b) Provincial and district trends (2008/09 - 2012/13)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	14.6	8.8	8.9	9.5	11.2
Western	7.7	6.2	6.6	5.8	6.2
Nova Central	7.5	5.4	6.5	6.0	4.5
Eastern	8.2	7.5	7.3	7.5	6.7
CSFP	9.7	4.1	13.3	10.3	7.7
Province	8.6	7.1	7.3	7.5	6.9

(c) Gender trends (2008/09 - 2012/13)

Gender	2008/09	2009/10	2010/11	2011/12	2012/13
Male	9.4	8.1	8.2	8.4	7.7
Female	7.7	5.9	6.4	6.4	6.0
Province	8.6	7.1	7.3	7.5	6.9

Table 12: Dropout rates across Canada

(a) Across Canada (2012)

Jurisdiction	Dropout rate
Canada	8.1
Newfoundland and Labrador	8.7
Prince Edward Island	8.1
Nova Scotia	7.6
New Brunswick	7.4
Quebec	10.6
Ontario	6.6
Manitoba	10.4
Saskatchewan	9.2
Alberta	10.0
British Columbia	5.9

(b) Trends in the Canadian and provincial dropout rate (2008 – 2012)

Year	Canada	Newfoundland and Labrador
2008	9.3	9.6
2009	9.2	8.1
2010	8.9	7.4
2011	8.5	8.2
2012	8.1	8.7

Table 13: High school pass rate

(a) Provincial and district pass rate (2012/13)

District	Pass Rate
Labrador	92.1
Western	95.1
Nova Central	96.3
Eastern	95.2
CSFP	100.0
Province	95.2

(b) Provincial and district trends (2008/09 – 2012/13)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	88.3	94.0	92.6	87.6	92.1
Western	89.6	93.5	92.8	93.4	95.1
Nova Central	90.4	92.5	91.1	95.5	96.3
Eastern	90.6	91.4	91.4	92.5	95.2
CSFP	100.0	100.0	77.8	75.0	100.0
Province	90.3	92.2	91.7	92.7	95.2

(c) Gender trends (2008/09 – 2012/13)

Gender	2008/09	2009/10	2010/11	2011/12	2012/13
Male	88.2	91.4	90.9	91.8	94.9
Female	92.4	93.1	92.4	93.6	95.4
Province	90.3	92.2	91.7	92.7	95.2

Table 14: Graduation rates across Canada (2009/10)

Jurisdiction	Graduation rate
Canada	78.3
Newfoundland and Labrador	84.5
Prince Edward Island	82.3
Nova Scotia	84.2
New Brunswick	86.5
Quebec	77.9
Ontario	83.2
Manitoba	66.4
Saskatchewan	78.2
Alberta	70.8
British Columbia	71.8
Yukon	69.1
Northwest Territories	55.7
Nunavut	38.1

Table 15: Percentage of students graduating with a general or academic/honours diploma

(a) District breakdown (2012/13)

District	General	Honours or Academic
Labrador	41.2	58.8
Western	30.7	69.3
Nova Central	38.4	61.6
Eastern	29.6	70.4
CSFP	42.9	57.1
Province	32.9	67.1

(b) Percentage graduating with an academic/honours diploma (2008/09 – 2012/13)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	56.1	53.3	57.0	58.4	58.8
Western	58.9	58.6	64.6	66.6	69.3
Nova Central	53.6	60.9	63.3	66.6	61.6
Eastern	70.8	68.4	71.3	71.3	70.4
CSFP	41.6	0.0	42.9	0.0	57.1
Province	64.0	63.5	67.0	67.8	67.1

(c) Gender difference in graduating with an academic/honours diploma (2008/09 – 2012/13)

Gender	2008/09	2009/10	2010/11	2011/12	2012/13
Male	57.4	57.5	60.2	60.7	60.1
Female	70.1	69.7	73.5	75.0	74.1
Province	64.0	63.5	67.0	67.8	67.1

Table 16: Student performance in mathematics

(a) District and provincial results (2012/13)

Course name	District	Number of students	Average final grade
Mathematics 3204 (Academic)	Labrador	107	58.5
	Western	516	62.9
	Nova Central	441	63.7
	Eastern	1,588	60.6
	Province	2,718	61.3
Mathematics 3205 (Advanced)	Labrador	48	79.5
	Western	245	79.7
	Nova Central	102	80.4
	Eastern	572	79.8
	Province	986	79.7
Mathématiques 3231	CSFP	4	60.5
	Province	4	60.5

(b) Gender differences (2012/13)

Course name	Male		Female		Gender difference
	Number of students	Average final grade	Number of students	Average final grade	
Mathematics 3204 (Academic)	1251	59.1	1467	63.3	4.2
Mathematics 3205 (Advanced)	448	78.4	538	80.8	2.4

(c) Provincial trends (2008/09 – 2012/13)

Course name	2008/09	2009/10	2010/11	2011/12	2012/13
Mathematics 3204 (Academic)	62.3	61.7	62.0	62.7	61.3
Mathematics 3205 (Advanced)	77.6	77.9	79.3	79.1	79.7

(d) District trends (2008/09 - 2012/13)

(i) Mathematics 3204 (Academic)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	62.6	66.3	59.7	57.6	58.5
Western	65.0	63.8	63.2	62.4	62.9
Nova Central	60.6	60.0	63.0	65.5	63.7
Eastern	61.8	61.1	61.8	62.6	60.6
CSFP (Mathématiques 3231)	64.9	60.4	54.8	55.0	60.5

(ii) Mathematics 3205 (Advanced)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	79.2	80.3	81.7	76.7	79.5
Western	80.4	79.2	80.4	79.1	79.7
Nova Central	74.3	72.8	75.4	76.1	80.4
Eastern	77.7	79.0	80.1	80.1	79.8

Table 17: Student performance in science

(a) District and provincial results (2012/13)

Course name	District	Number of students	Average final grade (%)
Biologie 3231	CSFP	3	54.3
	Province	3	54.3
Biology 3201	Labrador	129	64.5
	Western	535	65.3
	Nova Central	567	65.3
	Eastern	1,688	67.5
	Province	2,985	66.5
Chemistry 3202	Labrador	46	73.8
	Western	372	72.3
	Nova Central	317	71.8
	Eastern	1,071	71.6
	Province	1,829	71.9
Chimie 3239	CSFP	1	50.0
	Province	1	50.0
Earth Systems 3209	Labrador	28	61.4
	Western	45	60.8
	Nova Central	42	59.6
	Eastern	747	60.3
	Province	862	60.4
Physics 3204	Labrador	27	75.1
	Western	156	75.9
	Nova Central	119	75.2
	Eastern	687	74.8
	Province	997	75.0

(b) Gender differences (2012/13)

Course name	Male		Female		Gender difference
	Number of students	Average final grade (%)	Number of students	Average final grade (%)	
Biology 3201	1,068	64.4	1,917	67.7	3.3
Chemistry 3202	799	71.9	1,030	72.1	0.2
Earth Systems 3209	471	60.1	391	60.7	0.6
Physics 3204	670	73.9	327	77.4	3.5

(c) Provincial trends (2008/09 – 2012/13)

Course name	2008/09	2009/10	2010/11	2011/12	2012/13
Biology 3201	63.1	64.4	64.0	65.8	66.5
Chemistry 3202	68.3	70.8	71.1	71.2	72.0
Earth Systems 3209	60.7	61.4	61.7	62.6	60.4
Physics 3204	71.6	71.0	73.9	74.5	75.0

(d) District trends (2008/09 - 2012/13)

(i) Biology 3201

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	65.2	64.6	62.7	62.4	64.5
Western	63.2	64.7	62.3	66.3	65.3
Nova Central	62.4	65.2	63.8	66.1	65.3
Eastern	63.0	64.2	65.0	66.0	67.5
CSFP (Biologie 3231)	60.1	57.3	48.1	48.0	54.3

(ii) Chemistry 3202

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	60.4	72.5	72.6	68.0	73.8
Western	65.8	72.6	69.9	71.0	72.3
Nova Central	69.6	70.2	70.0	68.5	71.8
Eastern	69.2	70.5	71.8	72.2	71.6
CSFP (Chimie 3239)	--	--	--	57.0	50.0

(iii) Earth Systems 3209

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	--	--	--	--	61.4
Western	59.7	55.1	60.2	60.5	60.8
Nova Central	54.9	55.1	63.2	57.7	59.6
Eastern	61.4	62.0	62.1	63.2	60.3

(iv) Physics 3204

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	76.5	77.2	77.8	78.2	75.1
Western	68.6	69.4	71.8	72.2	75.9
Nova Central	72.0	71.9	74.2	75.6	75.2
Eastern	71.8	70.8	74.3	74.6	74.8

Table 18: Student performance in language

(a) District and provincial results (2012/13)

Course name	District	Number of students	Average final grade (%)
English 3201	Labrador	158	65.0
	Western	757	69.9
	Nova Central	645	68.7
	Eastern	2,395	69.6
	CSFP	5	64.0
	Province	4,032	69.3
Français 3202 (Immersion)	Labrador	23	72.0
	Western	27	75.4
	Nova Central	41	75.1
	Eastern	419	76.0
	Province	510	75.7

(b) Gender differences (2012/13)

Course name	Male		Female		Gender difference
	Number of students	Average final grade (%)	Number of students	Average final grade (%)	
English 3201	18,54	66.6	2,178	71.7	5.1
Français 3202 (Immersion)	169	74.8	241	76.2	1.4

(c) Provincial trends (2008/09 – 2012/13)

Course name	2008/09	2009/10	2010/11	2011/12	2012/13
English 3201	64.2	66.5	66.2	65.0	69.3
Français 3202 (Immersion)	73.3	74.7	73.7	75.6	75.7

(d) District trends (2008/09 - 2012/13)

(i) English 3201

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	60.6	63.5	63.7	60.4	65.0
Western	63.9	67.0	66.6	65.1	69.9
Nova Central	64.0	65.5	66.7	65.1	68.7
Eastern	64.6	66.7	66.5	65.2	69.6
CSFP	60.5	60.4	63.8	61.0	64.0

(ii) Français 3202 (Immersion)

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	74.4	71.6	77.6	73.8	72.0
Western	78.3	75.7	75.6	76.3	75.4
Nova Central	72.9	77.4	72.5	78.9	75.1
Eastern	72.9	74.5	73.5	75.3	76.0

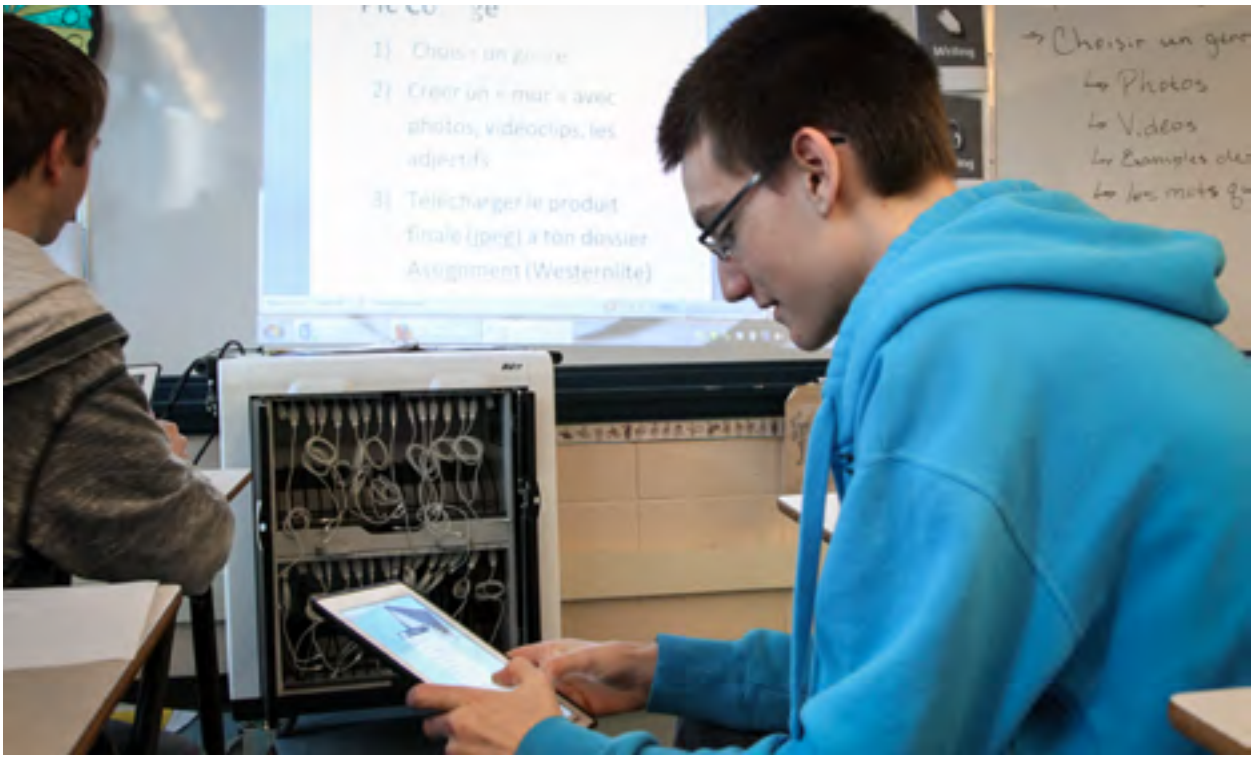


Table 19: Student performance in social studies courses

(a) District and provincial results (2012/13)

Course name	District	Number of students	Average final grade (%)
World History 3201	Labrador	46	68.0
	Western	122	67.2
	Nova Central	104	70.8
	Eastern	692	67.6
	Province	1,024	68.5
World Geography 3202	Labrador	100	64.9
	Western	589	72.0
	Nova Central	510	73.6
	Eastern	1,358	68.2
	Province	2,575	69.9
Histoire mondiale 3231	Labrador	32	66.6
	Western	41	67.3
	Nova Central	20	65.3
	Eastern	336	74.8
	CSFP	8	55.5
	Province	437	72.7

(b) Gender differences (2012/13)

Course name	Male		Female		Gender difference
	Number of students	Average final grade (%)	Number of students	Average final grade (%)	
World History 3201	486	68.2	538	68.9	0.7
World Geography 3202	1,241	69.4	1,334	70.5	1.1
Histoire mondiale 3231	156	73.1	281	72.5	-0.6

(c) Provincial trends (2008/09 – 2012/13)

Course name	2008/09	2009/10	2010/11	2011/12	2012/13
World History 3201	68.0	67.2	69.3	70.3	68.5
World Geography 3202	67.2	64.6	68.0	68.7	69.9
Histoire mondiale 3231	71.7	69.9	69.0	74.7	72.7

(d) District trends (2008/09 - 2012/13)

(i) World History 3201

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	63.2	66.9	67.7	65.2	68.0
Western	69.2	67.8	68.9	71.7	67.2
Nova Central	69.5	68.6	71.7	76.1	70.8
Eastern	67.7	67.0	68.9	69.9	67.6

(ii) World Geography 3202

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	65.8	61.5	64.7	65.9	64.9
Western	68.4	66.7	69.0	69.8	72.0
Nova Central	68.2	65.3	69.3	69.1	73.6
Eastern	66.2	63.8	67.4	68.4	68.2

(iii) Histoire mondiale 3231

District	2008/09	2009/10	2010/11	2011/12	2012/13
Labrador	69.1	60.0	64.9	70.8	66.6
Western	67.8	69.0	69.0	74.2	67.3
Nova Central	59.6	69.7	61.2	76.4	65.3
Eastern	73.1	70.1	70.2	74.9	74.8
CSFP	64.7	68.3	60.4	69.0	55.5

Table 20: Primary performance

(a) Percentage of students performing at/or above grade level (2012/13)

District	Number of students assessed	Reading	Writing
Labrador	209	62.9	65.0
Western	717	73.4	60.7
Nova Central	752	71.0	63.8
Eastern	2,425	73.6	65.3
Province	4,176	72.6	64.4

(b) Gender differences in percentage at/above grade level (2012/13)

Gender	Number of students assessed	Reading	Writing
Male	2,177	69.8	57.1
Female	1,999	75.7	72.4
Province	4,176	69.8	57.1

(c) Provincial trends in percentage at/above grade level (2008/09 – 2012/13)

Year	Number of students assessed	Reading	Writing
2008/09	4,506	74.8	59.2
2009/10	4,317	73.9	67.5
2010/11	4,315	65.4	71.9
2011/12	4,212	56.2	81.7
2012/13	4,176	72.6	64.4

(d) Student performance on the multiple choice section (2012/13)

District	Number of students assessed	Average score in reading
Labrador	209	69.4
Western	717	73.5
Nova Central	752	71.4
Eastern	2,425	73.0
Province	4,176	72.7

(e) Gender differences in average score (2012/13)

Gender	Number of students assessed	Average score in reading
Male	2,177	71.5
Female	1,999	73.9
Province	4,176	72.7

(f) Provincial trends in average score (2008/09 - 2012/13)

Year	Number of students assessed	Average score in reading
2008/09	4,506	88.3
2009/10	4,317	92.2
2010/11	4,315	79.7
2011/12	4,212	67.5
2012/13	4,176	72.7

Table 21: Elementary performance

(a) Percentage of students at/above grade level (2012/13)

District	Number of students assessed	Reading	Writing
Labrador	210	78.5	75.6
Western	807	81.1	72.9
Nova Central	855	80.9	70.7
Eastern	2,935	83.8	78.9
Province	4,877	82.9	76.5

(b) Gender differences in percentage at/above grade level (2012/13)

Gender	Number of students assessed	Reading	Writing
Male	2,499	78.8	67.8
Female	2,378	87.0	85.5
Province	4,877	82.9	76.5

(c) Provincial trends in percentage at/above grade level (2008/09 – 2012/13)

Year	Number of students assessed	Reading	Writing
2008/09	5,221	61.7	78.7
2009/10	5,181	69.2	81.4
2010/11	5,157	62.5	74.7
2011/12	5,020	54.4	74.8
2012/13	4,877	82.9	76.5

(d) Student performance on multiple choice section (2012/13)

District	Number of students assessed	Average score in reading
Labrador	210	76.9
Western	807	76.8
Nova Central	855	77.8
Eastern	2,935	79.0
Province	4,877	78.5

(e) Gender differences in average score (2012/13)

District	Number of students assessed	Average score in reading
Male	2,499	76.6
Female	2,378	80.4
Province	4,877	78.5

(f) Provincial trends in average score (2008/09 – 2012/13)

District	Number of students assessed	Average score in reading
2008/09	5,221	87.1
2009/10	5,181	81.0
2010/11	5,157	79.5
2011/12	5,020	71.1
2012/13	4,877	78.5

Table 22: Intermediate performance

(a) Percentage of students at/above grade level (2012/13)

District	Number of students assessed	Reading	Writing
Labrador	265	82.6	88.6
Western	874	82.8	92.0
Nova Central	894	85.8	91.7
Eastern	2,850	87.5	93.6
Province	4,951	86.2	92.7

(b) Gender differences in percentage at/above grade level (2012/13)

Gender	Number of students assessed	Reading	Writing
Male	2,503	82.7	89.6
Female	2,448	88.7	96.8
Province	4,951	86.2	92.7

(c) Provincial trends in percentage at/above grade level(2012/13)

Year	Number of students assessed	Reading	Writing
2008/09	2,665	77.5	83.0
2009/10	874	71.6	85.5
2010/11	894	65.3	83.3
2011/12	2,850	90.4	90.7
2012/13	4,951	86.2	92.7

(d) Student performance on the multiple choice sections (2012/13)

District	Number of students assessed	Average score in reading
Labrador	2,665	54.4
Western	874	54.2
Nova Central	894	54.7
Eastern	2,850	56.7
Province	4,951	55.9

(e) Gender differences in average scores (2012/13)

Gender	Number of students assessed	Average score in reading
Male	2,503	55.7
Female	2,448	56.0
Province	4,951	55.9

(f) Provincial trends in average scores (2012/13)

Year	Number of students assessed	Average score in reading
2008/09	5,268	77.1
2009/10	5,306	82.2
2010/11	5,297	68.0
2011/12	5,117	71.7
2012/13	4,951	55.9

Table 23: Average reading scores (2011)

(a) Across Canada

Jurisdiction	Average Score	Standard Error
Canada	548	1.6
Newfoundland and Labrador	546	2.8
Nova Scotia	549	2.4
New Brunswick (French)	514	2.7
Quebec	538	2.1
Ontario	552	2.6
Alberta	548	2.9
British Columbia	556	3.2

(b) Gender differences

Jurisdiction	Male		Female		Gender difference
	Average score (%)	Standard error	Average score (%)	Standard error	
Canada	542	2.1	555	1.7	13
Newfoundland and Labrador	538	3.1	555	3.1	17
Nova Scotia	543	2.8	556	2.6	13
New Brunswick (French)	507	4.4	520	3.5	13
Quebec	531	2.4	544	2.6	13
Ontario	546	2.8	558	3.1	12
Alberta	543	3.1	553	3.1	10
British Columbia	548	3.7	564	3.5	16

Table 24: Assessing reading skills (2012)

(a) Reading purpose

Jurisdiction	Literacy		Informational	
	Average score (%)	Standard error	Average score (%)	Standard error
Canada	553	1.7	545	1.7
Newfoundland and Labrador	552	2.9	543	1.7
Nova Scotia	555	2.6	545	2.5
New Brunswick (French)	516	3.4	510	3.2
Quebec	539	2.0	536	2.4
Ontario	558	2.6	549	2.7
Alberta	552	3.0	545	2.8
British Columbia	561	3.4	552	3.2

(b) Comprehension processes

Jurisdiction	Retrieving and Straightforward Inferencing		Interpreting, Integrating and Evaluating	
	Average score (%)	Standard error	Average score (%)	Standard error
Canada	543	1.5	554	1.5
Newfoundland and Labrador	540	2.5	553	2.8
Nova Scotia	543	2.4	555	2.4
New Brunswick (French)	514	3.3	513	3.3
Quebec	538	2.1	538	2.3
Ontario	545	2.5	559	2.6
Alberta	542	2.9	554	3.2
British Columbia	550	3.2	561	3.2

Table 25: Percentage of students assessed at each proficiency level (2012)

Jurisdiction	Below	Low	Intermediate	High	Advanced
Canada	2	12	35	38	13
Newfoundland and Labrador	2	14	34	37	13
Nova Scotia	2	13	33	38	14
New Brunswick (French)	4	23	44	26	3
Quebec	2	13	42	36	7
Ontario	3	12	31	39	15
Alberta	3	12	34	38	13
British Columbia	2	10	33	40	15

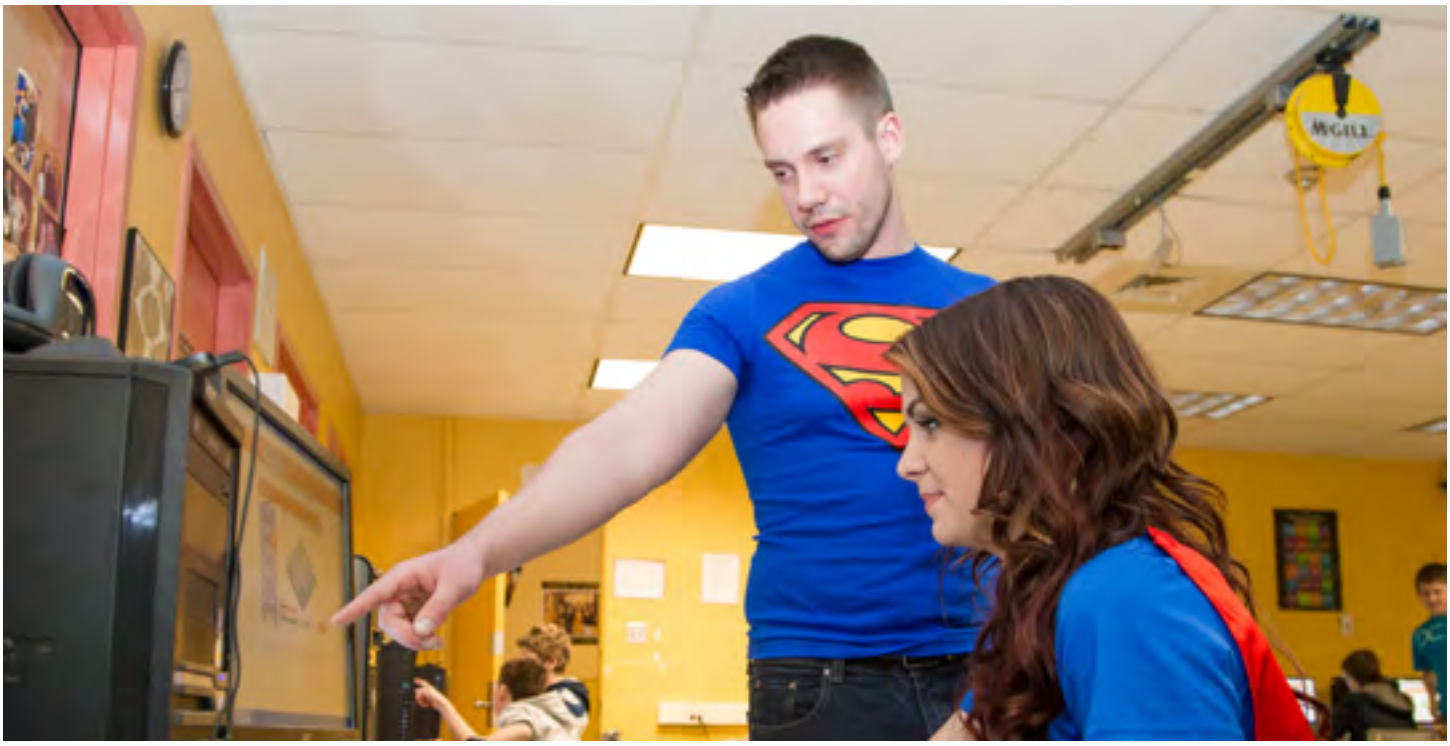
Table 26: Student performance in Canada and Newfoundland and Labrador (2012)

		Newfoundland and Labrador		Canada	
		Average score (%)	Standard error	Average score (%)	Standard error
Purpose	Literacy	552	2.9	553	1.7
	Informational	543	1.7	545	1.7
Comprehension	Retrieving and Straightforward Inferencing	540	2.5	543	1.5
	Interpreting, Integrating and Evaluating	553	2.8	554	1.5
Overall rating		546	2.8	553	1.6

Table 27: Student performance in mathematics (2012)

(a) Average scores across Canada

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	536	3.4	529	543
	British Columbia	522	4.4	513	531
	Canada	518	1.8	515	522
	Alberta	517	4.6	508	526
	Ontario	514	4.1	506	522
	Saskatchewan	506	3.0	500	512
No significant difference from NL	New Brunswick	502	2.6	497	507
	Nova Scotia	497	4.1	489	505
	Manitoba	492	2.9	486	498
	Newfoundland and Labrador	490	3.7	483	497
	Prince Edward Island	479	2.5	474	484



(b) Gender differences in average scores

Jurisdiction	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score difference	Standard error
Canada	523	2.1	513	2.1	-10*	2.0
Newfoundland and Labrador	491	5.2	490	3.9	-1	5.6
Prince Edward Island	481	3.6	478	3.3	-3	4.9
Nova Scotia	503	3.9	492	6.1	-11	6.1
New Brunswick	504	3.9	500	3.8	-4	5.7
Québec	541	4.3	531	3.8	-10*	4.3
Ontario	520	4.9	509	4.0	-11*	3.7
Manitoba	495	3.6	489	4.5	-6	5.7
Saskatchewan	510	3.9	502	3.6	-8	4.5
Alberta	522	5.0	512	5.1	-10*	4.0
British Columbia	529	4.8	515	5.9	-14*	6.1

* Significant gender difference present

Table 28: Student performance on the mathematics sub-domains (2012)

(a) Content subscales

(i) Change and Relationships

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	535	3.7	528	543
	British Columbia	530	4.8	521	540
	Alberta	526	4.9	517	536
	Canada	525	2.0	521	529
	Ontario	525	4.2	517	533
	Saskatchewan	516	3.3	509	522
No significant difference from NL	New Brunswick	505	3.0	499	511
	Newfoundland and Labrador	500	3.9	492	507
	Nova Scotia	499	5.8	487	510
	Manitoba	498	3.2	492	504
	Prince Edward Island	490	2.7	485	495

(ii) Quantity

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	534	3.5	527	541
	British Columbia	523	5.3	513	534
	Canada	515	2.2	511	520
	Alberta	512	5.3	502	523
	Ontario	511	4.9	501	521
	New Brunswick	504	2.9	499	510
	Saskatchewan	501	3.5	494	507
No significant difference from NL	Manitoba	488	3.5	481	495
	Nova Scotia	494	4.1	486	502
	Newfoundland and Labrador	485	4.0	477	493
	Prince Edward Island	475	2.9	469	480

(iii) Space and shape

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	535	4.0	527	543
	British Columbia	512	5.0	502	521
	Canada	510	2.1	506	514
	Alberta	509	4.9	500	519
	Ontario	505	4.4	496	513
	Saskatchewan	497	3.8	490	505
	New Brunswick	493	2.7	488	499
No significant difference from NL	Manitoba	484	3.2	478	490
	Nova Scotia	482	2.7	477	488
	Newfoundland and Labrador	477	3.7	470	484
Significantly lower than NL	Prince Edward Island	460	2.6	455	465

(iv) Uncertainty and Data

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	534	3.5	527	540
	British Columbia	521	4.1	513	529
	Alberta	517	4.8	508	527
	Canada	516	1.8	513	520
	Ontario	511	4.1	503	519
	Saskatchewan	507	2.9	502	513
No significant difference from NL	Nova Scotia	503	5.5	492	514
	New Brunswick	498	2.8	492	503
	Manitoba	495	2.9	489	501
	Newfoundland and Labrador	491	5.0	482	501
	Prince Edward Island	488	2.7	482	493

(c) Average scores on the process subscales

(i) Employing

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	536	3.4	529	543
	British Columbia	522	4.5	513	531
	Canada	517	1.9	513	521
	Alberta	515	4.6	506	524
	Ontario	512	4.3	504	520
	Saskatchewan	506	3.2	500	512
No significant difference from NL	New Brunswick	500	2.8	495	505
	Nova Scotia	493	3.1	487	499
	Newfoundland and Labrador	490	3.8	483	497
	Manitoba	489	3.2	483	495
	Prince Edward Island	479	2.5	474	484

(ii) Formulating

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	539	3.9	531	547
	British Columbia	517	5.2	507	527
	Canada	516	2.2	512	520
	Alberta	514	5.6	503	525
	Ontario	512	4.7	503	521
	New Brunswick	504	2.9	498	510
	Saskatchewan	502	3.3	496	508
No significant difference from NL	Nova Scotia	494	6.4	481	507
	Manitoba	487	3.3	481	493
	Newfoundland and Labrador	482	4.6	473	491
	Prince Edward Island	476	2.8	471	481

(iii) Interpreting

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	Quebec	536	3.4	529	543
	British Columbia	528	4.1	520	536
	Alberta	523	5.2	513	533
	Canada	521	2.0	517	525
	Ontario	517	4.4	508	526
No significant difference from NL	Saskatchewan	508	3.1	502	514
	Nova Scotia	507	3.8	500	514
	New Brunswick	502	2.8	497	507
	Manitoba	502	3.0	496	508
	Newfoundland and Labrador	499	3.8	492	506
	Prince Edward Island	487	2.9	481	493

Table 29: Gender differences in average scores (2012)

(a) Content subscales

(i) Change and Relationships

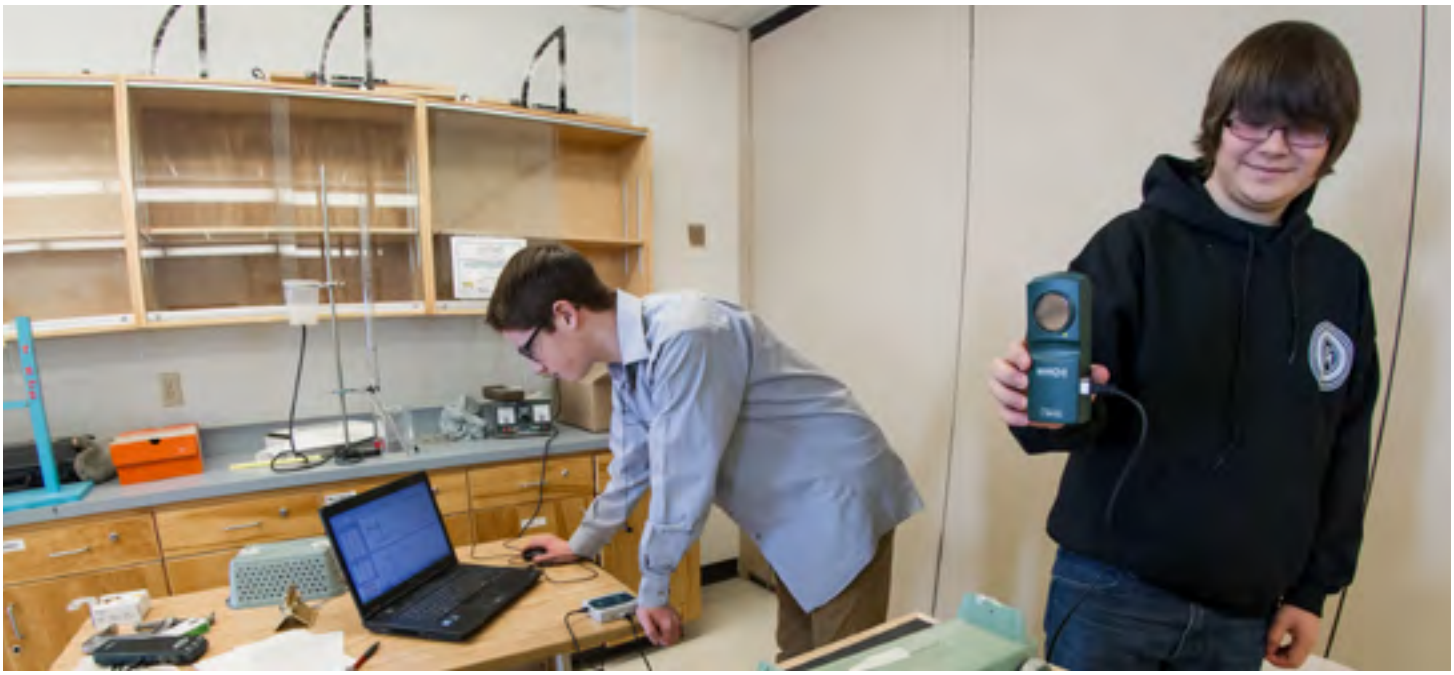
	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score difference	Standard error
Canada	532	2.2	518	2.2	-14*	2.0
Newfoundland and Labrador	500	5.2	499	4.4	-1	5.6
Prince Edward Island	493	3.7	486	3.4	-7	4.9
Nova Scotia	507	5.2	490	7.7	-17*	6.2
New Brunswick	507	4.5	503	3.6	-4	5.6
Québec	545	4.4	527	4.3	-18*	4.5
Ontario	531	4.9	519	4.2	-12*	3.7
Manitoba	503	4.1	493	5.0	-10	6.4
Saskatchewan	521	4.0	510	3.6	-11*	5.1
Alberta	533	5.5	520	5.2	-13*	4.3
British Columbia	539	5.0	521	6.6	-18*	6.6

* Significant gender difference present

(ii) Quantity

	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score differ-ence	Standard error
Canada	520	2.5	511	2.4	-9*	2.3
Newfoundland and Labrador	488	5.9	482	4.0	-6	6.2
Prince Edward Island	476	4.0	473	3.8	-3	5.1
Nova Scotia	502	4.7	487	5.8	-15*	6.6
New Brunswick	507	4.3	502	3.9	-5	6.0
Québec	537	4.5	531	3.8	-6	4.5
Ontario	516	5.6	506	5.0	-10	4.2
Manitoba	492	4.3	484	5.1	-8	6.3
Saskatchewan	505	4.5	496	4.1	-9*	5.2
Alberta	519	5.7	505	5.7	-14*	4.5
British Columbia	531	5.9	515	6.6	-16*	6.6

* Significant gender difference present



(iii) Shape and Space

	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score difference	Standard error
Canada	515	2.4	505	2.3	-10*	2.2
Newfoundland and Labrador	477	5.0	477	3.7	0	4.9
Prince Edward Island	463	3.6	457	3.4	-6	4.6
Nova Scotia	490	4.1	475	4.0	-15*	6.0
New Brunswick	494	4.3	493	3.3	-1	5.6
Québec	541	4.9	529	4.4	-12*	4.7
Ontario	509	5.3	500	4.5	-9*	4.4
Manitoba	489	3.7	478	4.8	-11*	5.8
Saskatchewan	499	4.8	496	4.3	-3	5.2
Alberta	513	5.0	505	5.6	-8*	4.0
British Columbia	518	5.3	505	6.6	-13*	6.4

* Significant gender difference present

(iv) Uncertainty and data

	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score differ-ence	Standard error
Canada	521	2.2	512	2.0	-9*	2.1
Newfoundland and Labrador	489	7.3	494	4.4	5	6.8
Prince Edward Island	488	3.9	488	3.4	0	4.8
Nova Scotia	506	4.9	500	7.3	-6	5.8
New Brunswick	495	4.2	501	3.4	6	5.3
Québec	537	4.4	531	3.7	-6	4.1
Ontario	517	4.9	506	4.2	-11*	3.9
Manitoba	498	3.7	493	4.5	-5	5.7
Saskatchewan	510	4.0	505	3.3	-5	4.6
Alberta	523	5.5	511	4.9	-12*	4.4
British Columbia	527	4.9	516	5.0	-11	5.7

* Significant gender difference present

(b) The process subscales

(i) Employing

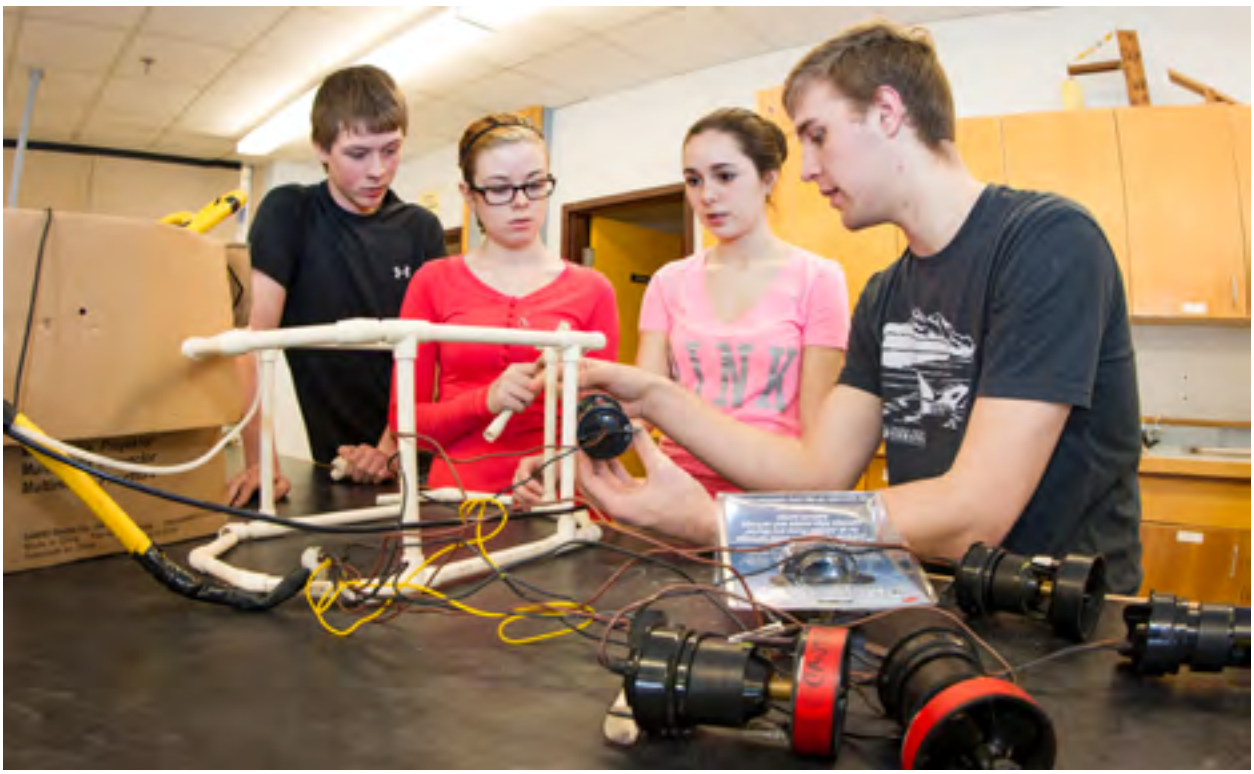
	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score difference	Standard error
Canada	521	2.1	512	2.2	-9*	2.2
Newfoundland and Labrador	490	5.4	490	4.2	0	5.8
Prince Edward Island	481	3.6	478	3.4	-3	4.9
Nova Scotia	497	3.9	489	5.2	-8	6.7
New Brunswick	500	4.1	500	3.6	0	5.4
Québec	540	4.2	531	3.9	-9*	4.3
Ontario	518	4.8	507	4.4	-11*	3.7
Manitoba	493	4.2	485	4.5	-8	5.9
Saskatchewan	508	4.2	502	3.6	-6	4.6
Alberta	519	4.7	510	5.2	-9*	3.7
British Columbia	527	4.7	517	6.0	-10	5.9

* Significant gender difference present

(ii) Formulating

	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score differ-ence	Standard error
Canada	522	2.6	510	2.4	-12*	2.4
Newfoundland and Labrador	485	5.8	479	5.1	-6	6.1
Prince Edward Island	480	3.9	472	3.8	-8	5.3
Nova Scotia	502	5.4	486	8.8	-16*	7.1
New Brunswick	505	4.7	502	3.9	-3	6.4
Québec	544	5.0	533	4.3	-11*	4.9
Ontario	518	5.6	506	4.6	-12*	4.1
Manitoba	492	4.3	482	4.8	-10	6.3
Saskatchewan	508	4.8	495	3.8	-13*	5.9
Alberta	522	6.1	505	6.0	-17*	4.6
British Columbia	526	5.7	508	7.0	-18*	7.2

* Significant gender difference present



(iii) Interpreting

	Male		Female		Gender difference	
	Average score (%)	Standard error	Average score (%)	Standard error	Score difference	Standard error
Canada	526	2.3	517	2.3	-9*	2.2
Newfoundland and Labrador	501	5.3	496	4.3	-5	5.9
Prince Edward Island	491	4.0	483	3.6	-8	5.0
Nova Scotia	513	4.6	501	5.1	-12*	6.0
New Brunswick	504	4.2	499	3.8	-5	5.8
Québec	542	4.3	529	4.0	-13*	4.6
Ontario	520	5.1	513	4.5	-7	3.8
Manitoba	504	3.8	499	4.7	-5	6.0
Saskatchewan	511	4.2	505	4.0	-6	5.3
Alberta	529	6.5	517	4.9	-12*	5.0
British Columbia	533	4.9	523	5.4	-10	6.0

* Significant gender difference present

Table 30: Proficiency in mathematics (2012)

(a) Percentage of students at each proficiency level

Jurisdiction	Low Achievers (Below Level 2)	Typical Achievers (Levels 2 - 4)	High Achievers (Levels 5 - 6)
Canada	13.8	69.8	16.4
Newfoundland and Labrador	21.3	69.3	9.4
Prince Edward Island	24.7	68.9	6.4
Nova Scotia	17.8	73.3	9.0
New Brunswick	16.2	73.6	10.1
Québec	11.2	66.5	22.4
Ontario	13.4	71.2	15.0
Manitoba	21.2	68.5	10.2
Saskatchewan	15.4	72.5	12.1
Alberta	15.2	67.9	17.0
British Columbia	12.2	71.2	16.5

(b) Gender differences in proficiency levels

	Low Achievers (Below Level 2)			Typical Achievers (Levels 2 - 4)			High Achievers (Levels 5 - 6)		
	Male	Female	Diff*	Male	Female	Diff*	Male	Female	Diff*
CAN	13.4	14.3	0.9	67.6	71.9	4.3	19.0	13.8	-5.2**
NL	22.4	20.2	-2.2	67.4	71.2	3.8	10.2	8.6	-1.6
PE	25.4	24.0	-1.4	66.5	71.2	4.7	8.1	4.8	-3.3**
NS	17.0	18.5	1.5	72.4	74.1	1.7	10.6	7.4	-3.2
NB	17.1	15.4	-1.7	72.1	75.3	3.2	10.8	9.3	-1.5
QC	10.5	11.8	1.3	64.2	68.7	4.5	25.3	19.5	-5.8**
ON	13.9	13.7	-0.2	67.9	74.3	6.4	18.2	12.0	-6.2**
MB	20.8	21.6	0.8	67.3	69.9	2.6	11.9	8.5	-3.4**
SK	14.7	16.0	1.3	72.0	73.0	1.0	13.3	11.0	-2.3
AB	13.8	16.6	2.8	66.9	69.1	2.2	19.3	14.3	-5.0**
BC	10.9	13.6	2.7	70.2	72.3	2.1	18.9	14.1	-4.8

* Gender Difference
** Significant difference present

Table 31: Student performance in reading and science (2012)

(a) Reading

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	British Columbia	535	7.4	520.5	549.5
No significant difference from NL	Ontario	528	7.4	513.5	542.5
	Alberta	525	7.2	510.9	539.1
	Canada	523	6.2	510.8	535.2
	Quebec	520	6.9	506.5	533.5
	Nova Scotia	508	6.7	494.9	521.1
	Saskatchewan	505	6.5	492.3	517.7
	Newfoundland and Labrador	503	7.0	489.3	516.7
	New Brunswick	497	6.5	484.3	509.7
	Manitoba	495	6.8	481.7	508.3
	Prince Edward Island	490	6.5	477.3	502.7

(b) Science

		Average score (%)	Standard error	95% Confidence Interval	
				Lower Limit	Upper limit
Significantly higher than NL	British Columbia	544	5.3	533.6	554.4
	Alberta	539	5.8	527.6	550.4
No significant difference from NL	Ontario	527	5.6	516.0	538.0
	Canada	525	4.0	517.2	532.8
	Nova Scotia	516	4.6	507.0	525.0
	Quebec	516	4.8	506.6	525.4
	Saskatchewan	516	4.6	507.0	525.0
	Newfoundland and Labrador	514	5.0	504.2	523.8
	New Brunswick	507	4.4	498.4	515.6
	Manitoba	503	4.8	493.6	512.4
Significantly lower than NL	Prince Edward Island	490	4.4	481.4	498.6

Table 32: Gender differences in reading and science (2012)

(a) Reading

Jurisdiction	Male		Female		Gender difference	
	Average score	Standard error	Average score	Standard error	Score differ-ence	Standard error
Canada	506	2.3	541	2.1	35*	2.1
Newfoundland and Labrador	476	5.2	529	4.0	53*	5.5
Prince Edward Island	468	4.0	511	3.5	43*	5.3
Nova Scotia	489	4.4	529	4.4	40*	6.5
New Brunswick	473	4.2	521	3.7	49*	6.0
Québec	502	4.0	537	4.0	36*	4.1
Ontario	510	5.4	546	4.2	36*	3.9
Manitoba	475	4.2	517	4.6	41*	5.9
Saskatchewan	487	3.9	525	3.4	37*	4.6
Alberta	511	4.6	541	4.3	29*	3.7
British Columbia	522	5.1	548	5.5	26*	6.1

* Significant gender difference present

(b) Science

Jurisdiction	Male		Female		Gender difference	
	Average score	Standard error	Average score	Standard error	Score difference	Standard error
Canada	527	2.4	524	2.0	-3	2.1
Newfoundland and Labrador	510	5.0	518	4.0	9	5.5
Prince Edward Island	487	3.8	494	3.6	7	5.2
Nova Scotia	518	4.8	515	4.3	-3	6.7
New Brunswick	504	4.0	510	4.1	6	6.2
Québec	516	3.9	515	3.5	-2	3.7
Ontario	528	5.4	525	4.0	-3	4.1
Manitoba	503	4.2	502	4.6	-1	5.9
Saskatchewan	516	4.0	517	3.5	2	4.8
Alberta	542	4.9	537	5.1	-5	3.6
British Columbia	548	4.7	541	5.4	-7	6.3

* Significant gender difference present

Table 33: Trends in average scores (2003 - 2012)

(a) Mathematics

Jurisdiction	2003		2006		2008		2012	
	Avg. Score	Std. Error	Avg. Score	Std. Error	Avg. Score	Std. Error	Avg. Score	Std. Error
Canada	532	1.8	527	2.4	527	2.6	518*	2.7
Newfoundland and Labrador	517	2.5	507*	2.8	503*	3.5	490*	4.2
Prince Edward Island	500	2.0	501	2.7	487*	3.0	479*	3.2
Nova Scotia	515	2.2	506*	2.6	512	3.0	497*	4.5
New Brunswick	511	1.4	506	2.5	504*	3.0	502*	3.2
Québec	536	4.5	540	4.4	543	4.0	536	3.9
Ontario	530	3.6	526	3.9	526	3.8	514*	4.5
Manitoba	528	3.1	521	3.5	501*	4.1	492*	3.5
Saskatchewan	516	3.9	507	3.6	506	3.8	506	3.6
Alberta	549	4.3	530*	4.0	529*	4.8	517*	5.0
British Columbia	538	2.4	523*	4.6	523*	5.0	522*	4.8

* Significantly different than 2003

(b) Reading

Jurisdiction	2003		2006		2009		2012	
	Avg. Score	Std. Error	Avg. Score	Std. Error	Avg. Score	Std. Error	Avg. Score	Std. Error
Canada	528	5.6	527	5.5	524	5.2	523	6.2
Newfoundland and Labrador	521	6.2	514	5.9	506	6.1	503	7.0
Prince Edward Island	495	5.8	497	5.7	486	5.5	490	6.5
Nova Scotia	513	5.8	505	6.1	516	5.6	508	6.7
New Brunswick	503	5.6	497	5.5	499	5.5	497	6.5
Québec	525	6.8	522	7.1	522	5.8	520	6.9
Ontario	530	6.4	534	6.8	531	5.8	528	7.4
Manitoba	520	6.3	516	6.1	495	6.1	495	6.8
Saskatchewan	512	6.8	507	6.5	504	6.0	505	6.5
Alberta	543	6.8	535	6.5	533	6.8	525	7.2
British Columbia	535	5.9	528	7.5	525	6.5	535	7.4

(c) Science

Jurisdiction	2006		2009		2012	
	Avg. Score	Std. Error	Avg. Score	Std. Error	Avg. Score	Std. Error
Canada	534	2.0	529	3.0	525*	4.0
Newfoundland and Labrador	526	2.5	518	4.0	514*	5.0
Prince Edward Island	509	2.7	495*	3.5	490*	4.4
Nova Scotia	520	2.5	523	3.7	516	4.6
New Brunswick	506	2.3	501	3.5	507*	4.4
Québec	531	4.2	524	4.1	516	4.8
Ontario	537	4.2	531	4.2	527	5.6
Manitoba	523	3.2	506*	4.7	503*	4.8
Saskatchewan	517	3.6	513	4.5	516	4.6
Alberta	550	3.8	545	5.0	539	5.8
British Columbia	539	4.7	535	4.8	544	5.3

* Significantly different than 2006

Table 34: Student performance in Canada and Newfoundland and Labrador (2012)

Subject area	Jurisdiction	Average Score	Standard Error	95% Confidence Interval	
				Lower limit	Upper limit
Mathematics	Canada	518	1.8	514.5	521.5
	Newfoundland and Labrador	490	3.7	482.7	497.3
Reading	Canada	523	6.2	510.8	535.2
	Newfoundland and Labrador	503	7.0	489.3	516.7
Science	Canada	525	4.0	517.2	532.8
	Newfoundland and Labrador	514	5.0	504.2	523.8

Table 35: School climate survey participation rate

(a) By grade (2012/13)

Grade	Number of students per grade	Percentage who completed the survey
Grade 2	4,836	90.6
Grade 5	5,006	90.0
Grade 7	5,236	82.1
Grade 8	5,323	80.3
Grade 9	5,346	78.3
Grade 10	5,605	73.2
Grade 11	5,561	71.4
Grade 12	5,518	67.7
Overall	42,431	78.8

(b) By grade and gender (2012/13)

Grade	Number of students per grade		Percentage who completed the survey	
	Male	Female	Male	Female
Grade 2	2,465	2,371	90.2	90.9
Grade 5	2,500	2,506	88.7	91.2
Grade 7	2,754	2,482	80.8	83.4
Grade 8	2,655	2,668	79.0	81.5
Grade 9	2,735	2,611	75.9	80.8
Grade 10	2,902	2,703	71.9	74.7
Grade 11	2,866	2,695	69.9	73.1
Grade 12	2,794	2,724	65.7	69.7
Overall	21,671	20,760	77.4	80.4

Table 36: Percentage who feel safe at school

(a) By grade and gender (2012/13)

Grade level	Male	Female	Total
Grade 2	82.4	85.3	84.0
Grade 5	84.4	88.1	86.3
Grade 7	83.7	85.4	84.4
Grade 8	80.1	82.8	81.5
Grade 9	80.6	82.5	81.5
Grade 10	82.4	85.6	83.9
Grade 11	84.8	86.0	85.3
Grade 12	86.4	87.8	87.0

(b) Change in the percentage who feel safe (2011/12 - 2012/13)

Grade level	2011/12	2012/13
Grade 2	75.9	84.0
Grade 5	83.5	86.3
Grade 7	76.2	84.4
Grade 8	74.1	81.5
Grade 9	74.7	81.5
Grade 10	76.0	83.9
Grade 11	78.0	85.3
Grade 12	79.0	87.0

Table 37: Percentage who experienced some form of bullying during the month before the survey

(a) By grade and gender (2012/13)

Grade level	Male	Female	Total
Grade 2	31.9	33.6	32.9
Grade 5	10.7	10.2	10.4
Grade 7	33.2	39.3	36.1
Grade 8	35.3	39.2	37.3
Grade 9	31.7	39.8	35.8
Grade 10	28.2	31.5	29.8
Grade 11	26.7	30.2	28.4
Grade 12	25.5	28.2	26.9

(b) Change in the percentage who experienced some form of bullying (2011/12 - 2012/13

Grade level	2011/12	2012/13
Grade 2	33.3	32.9
Grade 5	29.7	10.4
Grade 7	28.8	36.1
Grade 8	27.3	37.3
Grade 9	24.9	35.8
Grade 10	21.2	29.8
Grade 11	20.5	28.4
Grade 12	18.1	26.9

Table 38: Percentage who experienced cyber/electronic bullying during the month before the survey

(a) By grade and gender (2012/13)

Grade level	Male	Female	Total
Grade 7	10.7	21.4	15.9
Grade 8	12.5	21.3	17.0
Grade 9	13.7	21.5	17.6
Grade 10	12.9	19.2	16.0
Grade 11	14.1	18.1	16.1
Grade 12	14.6	16.9	15.8

(b) Change in the percentage who experienced cyber/electronic bullying (2011/12 - 2012/13)

Grade level	2011/12	2012/13
Grade 7	13.7	15.9
Grade 8	13.3	17.0
Grade 9	13.5	17.6
Grade 10	11.7	16.0
Grade 11	12.8	16.1
Grade 12	11.2	15.8

Table 39: Percentage who used drugs, consumed alcohol or smoked cigarettes in the month before the survey

(a) By grade and gender (2012/13)

Grade level	Male	Female	Total
Grade 7	3.2	2.4	2.8
Grade 8	7.6	6.6	7.1
Grade 9	14.8	13.1	14.0
Grade 10	21.4	18.3	19.9
Grade 11	26.7	21.5	24.1
Grade 12	30.7	24.1	27.3

(b) Change in the percentage who consumed drugs/alcohol (2011/12 - 2012/13)

Grade level	2011/12	2012/13
Grade 7	5.3	2.8
Grade 8	10.7	7.1
Grade 9	15.7	14.0
Grade 10	19.7	19.9
Grade 11	23.2	24.1
Grade 12	26.4	27.3

Table 40: Percentage of students who engaged in the following behaviours in the month before the survey (2012/13)

Grade level	Used illicit drugs/ abused prescription medications	Consumed alcohol	Smoked cigarettes
Grade 7	1.8	4.9	2.7
Grade 8	4.2	12.8	7.0
Grade 9	8.7	24.9	13.4
Grade 10	11.8	38.4	17.6
Grade 11	13.7	48.1	21.0
Grade 12	14.3	57.3	23.5

Table 41: Gender differences in drug and alcohol use

(a) Percentage who used Illicit drugs or abused prescription drugs in the month before the survey (2012/13)

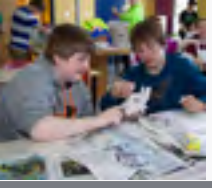
Grade level	Male	Female
Grade 7	2.1	1.5
Grade 8	4.9	3.6
Grade 9	9.7	7.8
Grade 10	14.1	9.5
Grade 11	16.6	10.8
Grade 12	18.2	10.5

(b) Percentage who consumed alcohol in the month before the survey (2012/13)

Grade level	Male	Female
Grade 7	5.4	4.4
Grade 8	13.1	12.5
Grade 9	25.0	24.8
Grade 10	37.3	39.5
Grade 11	48.4	47.8
Grade 12	58.4	56.3

(c) Percentage who smoked cigarettes (2012/13)

Grade level	Male	Female
Grade 7	3.1	2.3
Grade 8	7.4	6.6
Grade 9	14.7	12.1
Grade 10	20.3	14.9
Grade 11	25.1	16.9
Grade 12	28.0	19.1



APPENDIX B: PIRLS AND PISA BENCHMARKS

The four international benchmarks used by PIRLS to assess reading achievement are:

(1) Low International Benchmark (between 400 and 474 points).

When reading literary texts, students can

- Recognize explicitly stated detail and locate a specific part of the story and make an inference clearly suggested by the text.
- When reading information texts, students can locate and reproduce explicitly stated information that is readily accessible, for example, at the beginning of the text or in a clearly defined section and
- Begin to make a straightforward inference clearly suggested by the text.

(2) Intermediate International Benchmark (between 475 and 549 points)

When reading literary texts, students can

- Identify central events, plot sequence and relevant story details;
- Make straightforward inferences about the attributes, feelings and motivations of main characters and
- Begin to make connections across parts of the text.

When reading information texts, students can

- Locate and reproduce one or two pieces of information in the text;
- Make straightforward inferences to provide information from a single part of the text and
- Use subheadings, textboxes and illustrations to locate parts of the text.

(3) High International Benchmark (between 550 and 624 points),

When reading literary texts, students can

- Locate relevant episodes and distinguish significant details embedded across the text;
- Make inferences to explain relationships between intentions, actions, events and feelings, and give text-based support;
- Recognize the use of some textual features (e.g., figurative language, abstract message) and
- Begin to interpret and integrate story events and character actions across the text.

When reading information texts, students can

- Recognize and use a variety of organizational features to locate and distinguish relevant information;
- Make inferences based on abstract or embedded information;
- Integrate information across the text to recognize main ideas and provide explanations;
- Compare and evaluate parts of a text to give a preference and a reason for it and
- Begin to understand textual elements, such as simple metaphors and author's point of view.

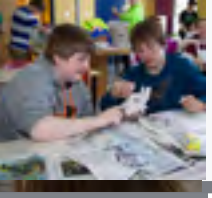
(4) Advanced International Benchmark (625 points or above),

When reading literary texts, students can

- Integrate ideas across a text to provide interpretations of a character's traits, intentions and feelings, and provide full-text support;
- Interpret figurative language and
- Begin to examine and evaluate story structure.

When reading information texts, students can

- Distinguish and interpret complex information from different parts of text, and provide full text-based support;
- Understand the function of organizational features and
- Integrate information across a text to sequence activities and fully justify preferences.



PISA PROFICIENCY LEVELS

Summary descriptions of the six proficiency levels in mathematics

Level	Lower score limit	What students can typically do
6	669	Students can conceptualise, generalise and utilise information based on their investigations and modelling of complex problem situations, and can use their knowledge in relatively non-standard contexts. They can link different information sources and representations and flexibly translate among them. Students at this level are capable of advanced mathematical thinking and reasoning. These students can apply this insight and understanding, along with a mastery of symbolic and formal mathematical operations and relationships, to develop new approaches and strategies for attacking novel situations. Students at this level can reflect on their actions, and can formulate and precisely communicate their actions and reflections regarding their findings, interpretations, arguments, and the appropriateness of these to the original situation.
5	607	Students can develop and work with models for complex situations, identifying constraints and specifying assumptions. They can select, compare, and evaluate appropriate problem-solving strategies for dealing with complex problems related to these models. Students at this level can work strategically using broad, well-developed thinking and reasoning skills, appropriate linked representations, symbolic and formal characterisations, and insight pertaining to these situations. They begin to reflect on their work and can formulate and communicate their interpretations and reasoning.
4	545	Students can work effectively with explicit models for complex concrete situations that may involve constraints or call for making assumptions. They can select and integrate different representations, including symbolic, linking them directly to aspects of real-world situations. Students at this level can utilise their limited range of skills and can reason with some insight, in straightforward contexts. They can construct and communicate explanations and arguments based on their interpretations, arguments, and actions.

Level	Lower score limit	What students can typically do
3	482	Students can execute clearly described procedures, including those that require sequential decisions. Their interpretations are sufficiently sound to be a base for building a simple model or for selecting and applying simple problem-solving strategies. Students at this level can interpret and use representations based on different information sources and reason directly from them. They typically show some ability to handle percentages, fractions and decimal numbers, and to work with proportional relationships. Their solutions reflect that they have engaged in basic interpretation and reasoning.
2	420	Students can interpret and recognise situations in contexts that require no more than direct inference. They can extract relevant information from a single source and make use of a single representational mode. Students at this level can employ basic algorithms, formulae, procedures, or conventions to solve problems involving whole numbers. They are capable of making literal interpretations of the results.
1	358	Students can answer questions involving familiar contexts where all relevant information is present and the questions are clearly defined. They are able to identify information and to carry out routine procedures according to direct instructions in explicit situations. They can perform actions that are almost always obvious and follow immediately from the given stimuli.

APPENDIX C: SCHOOL CLIMATE SURVEY DIMENSIONS

List of statements included within each dimension

Dimension	Defining Statements
Safety and security in the school environment	I feel safe at school
	I feel safe in my classrooms
	I feel safe in school washrooms
	I feel safe in the school gym
	I feel safe on the school grounds
Bullying	In the last month, I have been: • hit, kicked, pushed or shoved, • called mean names, been made fun of, or been teased in a hurtful way, and/or • left out of things on purpose, been left out of groups, or been ignored.
Cyber/electronic bullying*	In the last month, I have been: • bullied or harassed electronically in the last month (e.g. teased or bullied using a computer or mobile phone)
Drug and alcohol use*	In the last month, I have… • Used illegal drugs • Abused prescription drugs • Consumed alcohol • Smoked cigarettes

- Included on the intermediate and high school surveys only

Calculating the dimension measures

For each statement, the percentage of students in agreement is recorded. To provide an approximate reflection of the percentage of students who feel safe in the school environment, the average of the five percentages is reported. The following table provides an illustration of this using information from the Grade 2 survey.

Table C.1: Calculating feelings of safety

Statement	Percentage in agreement
I feel safe at school	90.7
I feel safe in my classrooms	93.0
I feel safe in school washrooms	65.4
I feel safe in the school gym	91.2
I feel safe on the school grounds	79.7
Sum	**420.0**
Average (sum/5)	**84.0%**

In other words, 84.0% of grade 2 students feel safe in school.

APPENDIX D: BIBLIOGRAPHY

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