## INDICATORS 2014/15

## A Report on Schools





**Education and Early Childhood Development** 

# Indicators 2014/15 - A Report on Schools



Department of Education and Early Childhood Development P.O. Box 8700 St. John's, NL A1B 4J6

Telephone: (709) 729-5097 Facsimile: (709) 729-1400

www.ed.gov.nl.ca/edu/

#### A Guide to Indicators 2014/15 – A Report on Schools

- The information provided is based on the 2014/15 school year and is current as of December 31, 2015, unless otherwise noted.
- Percentages listed in the figures and tables throughout the report may not sum to 100% due to rounding errors.
- The total number of the students reported from each district and/or region does not equal the provincial total cited in the tables in the appendix. This is because the provincial total includes students from the private and Native-Federal schools.
- In this document, gender gap refers to the difference between male and female performance on selected indicators. It is calculated using the following equation: Gender gap = female performance male performance.
- Unless otherwise noted, provincial data are based on information provided in the annual Education Statistics report published by the Department of Education and Early Childhood Development.
- Additional school level indicators are available on the following site: http://www.education.gov.nl.ca/sch\_rep/2014/index.htm
- Schools are organized based on the grades offered. There are seven different school types:

School type	What grades are available at the school?		
Primary	Any combination of grades between Kindergarten and Grade 5		
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 7 and 12/Level III		
Senior High	Grades 9 to 12/Level III or Grades 10/Level I to 12/Level III		
Kindergarten (K) - 12	All grades		
Other	Includes private schools and First Nations schools		

- Data are not reported in cases where scores are based on five or fewer students.
- For new schools, data are displayed only if the test or survey was administered after the school was opened.

## Table of Contents

Chapter 1: Introduction	1
Part I: The Educational System	
Chapter 2: The Organization of the Educational System	4 6
Chapter 3: A Profile of the Educational System  Student enrolment  Educators  Pupil Teacher Ratio  Schools.  School configuration  Part II: Student Assessments	
Chapter 4:Standardized Assessments	23
Chapter 5: English Language Arts Assessment  Primary level  Elementary level  Intermediate level  Student performance across the grades	26 30 34
Chapter 6: Public Examinations  Provincial performance - June 2015.  Languages.  Mathematics.  Social studies  Sciences	41 43 45
Chapter 7: International Computer and Information Literacy Study  What is the ICILS?	53 53
Chapter 8: The Pan-Canadian Assessment Program  What is the PCAP?  Reporting student performance  The science assessment  The reading assessment	57 58 59

### Part III: High School Indicators

Chapter 9: Early School Leavers	75
Early School Leaver Rate defined	
Provincial Early School Leaver Rate	
The dropout rate across Canada	
Chapter 10: Graduation	80
Pass/graduation rate defined	
The provincial pass rate	
Graduation status	
Part IV: Appendices	
Appendix A: Data tables	89
Appendix B: Computer and Information Literacy proficiency levels	127
Appendix C: PCAP 2013 science performance levels	128
Appendix D: Bibliography	400



## List of Figures

## Part I: The Educational System

Figure 1: Distribution of students across the province (2014/15)	8
Figure 2: Student enrolment trends (2010/11 - 2014/15)	
Figure 3: A profile of the province's educators (2014/15)	11
Figure 4: Trends in the number of FTE educators (2010/11 – 2014/15)	13
Figure 5: Pupil Teacher Ratio (2014/15)	15
Figure 6: Trends in the PTR (2010/11 - 2014/15)	16
Figure 7: Schools in the province (2014/15)	
Figure 8: Change in the number of schools (2010/11 – 2014/15)	18
Figure 9: School configurations	20
Figure 10: Average class size	21
Part II: Student Assessments	
Figure 11: Grade 3 student performance (2014/15)	27
Figure 12: Provincial trends in Grade 3 performance (2009/10 - 2014/15)	29
Figure 13: Grade 6 student performance (2014/15)	
Figure 14: Provincial trends in Grade 6 performance (2009/10 – 2014/15)	33
Figure 15: Grade 9 student performance (2014/15)	
Figure 16: Provincial trends in Grade 9 performance (2009/10 – 2014/15)	
Figure 17: Change in student performance (2014/15)	
Figure 18: Provincial performance on public examination courses (2014/15)	
Figure 19: Student performance in the languages	
Figure 20: Student performance in mathematics	
Figure 21: Student performance in social studies	
Figure 22: Student performance in the sciences	
Figure 23: ICILS CIL average score	
Figure 24: Gender differences in student performance	
Figure 25: ICILS proficiency levels	
Figure 26: Average science scores	
Figure 28: Student performance on the agings sub-demains	
Figure 28: Student performance on the science sub-domains	
Figure 20: How students fared on the science competencies	
Figure 30: Reading assessmentsFigure 31: Mathematics assessment	
rigure 31. Mathematics assessment	1 ∠
Part III: High School Indicators	
Figure 32: Early School Leaver Rate (2013/14)	
Figure 33: Trends in the Early School Leaver Rate (2009/10 - 2013/14)	
Figure 34: Dropout rates across Canada (2012)	
Figure 35: Provincial and regional pass rate (2014/15)	
Figure 36: Pass rate trends (2010/11 – 2014/15)	
Figure 37: Graduation status (2014/15)	
Figure 38: Trends in graduation status (2010/11 – 2014/15)	85

## List of Tables

Table 1: Distribution of students across the province (2014/15)	89
Table 2: Enrolment trends	
Table 3: A profile of the province's FTE educators (2014/15)	91
Table 4: Trends in the number of FTE educators (2010/11 – 2014/15)	
Table 5: Provincial and district PTR's (2014/15)	
Table 6: Trends in the PTR (2010/11-2014/15)	
Table 7: School indicators (2014/15)	
Table 8: Change in the number of schools (20010/11 -2014/15)	
Table 9: School Configurations (2014/15)	
Table 10: Average class size (2014/15)	
Table 11: Grade 3 student performance (2014/15)	98
Table 12: Provincial trends in Grade 3 student performance (2009/10 - 2014/15)	
Table 13: Grade 6 student performance (2014/15)	
Table 14: Provincial trends in Grade 6 student performance (2009/10 - 2014/15)	101
Table 15: Grade 9 student performance (2014/15)	101
Table 16: Provincial trends in Grade 9 student performance (2009/10 - 2014/15)	102
Table 17: Change in student performance (2014/15)	103
Table 18: Student performance on public examination courses (2014/15)	104
Table 19: Student performance in language courses	104
Table 20: Student performance in mathematics courses	105
Table 21: Student performance in social studies courses	106
Table 22: Student performance in science courses	108
Table 23: Computer and Information Literacy (CIL) average score (ICILS 2013)	109
Table 24: Gender differences in student performance (ICILS 2013)	110
Table 25: Percentage of students at each CIL proficiency level (ICILS 2013)	111
Table 26: Average scores in science (PCAP 2013)	112
Table 27: Student proficiency in science (PCAP 2013)	113
Table 28: Student performance on the science sub-domains (PCAP 2013)	114
Table 29: Student performance on the science competencies (PCAP 2013)	116
Table 30: Reading assessment (PCAP 2013)	
Table 31: Mathematics assessment (PCAP 2013)	
Table 32: Early School Leaver Rate (2013/14)	
Table 33: Trends in the Early School Leaver Rate (2009/10 – 2013/14)	122
Table 34: Dropout rates across Canada	
Table 35: High school pass rate (2014/15)	
Table 36: Trends in the high school pass rate (2010/11 – 2014/15)	
Table 37: Graduation status (2014/15)	125
Table 38: Trends in the percentage of students graduating with an academic/honor	
diploma (2010/11 – 2014/15)	
Table 39: Graduation rates across Canada (2009/10)	126



## Introduction





#### Chapter 1: Introduction

ublic 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 and Early Childhood Development publishes the annual Indicators report. This report provides a snapshot of how the province's 67,293 students performed during the 2014/15 school year. When possible, information from several years will be provided to explore long term trends.

Indicators 2014/15 - A Report on Schools is divided into three parts

- Part I provides a profile of the educational system reporting such things as the number of schools, students and teachers in the province.
- Part II explores student performance on a variety of provincial, national and international standardized assessments.
- Part III focuses on the high school years examining such topics as the graduation and dropout rates.

Many factors contribute to the success of a school and its students. While this report does not contain every indicator which influences a school's success, it does provide a broad range of statistical information designed to inform administrators, educators, students and the school community where their schools are succeeding at this moment in time and where they can work together to improve.

A companion document that includes a collection of demographic and performance indicators for each of the 262 schools in the province is available on the following website: <a href="http://www.education.gov.nl.ca/sch\_rep/2014/index.htm">http://www.education.gov.nl.ca/sch\_rep/2014/index.htm</a>

It is important to note that this school level information is not meant to rank schools in any fashion. Rather, 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 Educational System





#### Chapter 2: The Organization of the Educational System

n September 30, 2014, some of the responsibilities provided by the Department of Child, Youth and Family Services was moved to the Department of Education to create the new Department of Education and Early Childhood Development (EECD). While this new department continues to be responsible for early childhood learning and development, the K-12 school system and the province's public libraries, responsibilities for child care and family resource programming are now included under the new mandate. This restructuring was made with the objective to build an educational community in Newfoundland and Labrador that fosters safe, caring and inclusive learning environments for all children and youth in early childhood settings, regulated child care and family resources centres, and pre-school to Grade 12 (Department of Education and Early Childhood Development, 2014).

Currently, the programs and services offered by the EECD are provided through one of the following three branches:

- (1) The K-12 Education and Early Childhood Development Branch is responsible for distance learning and innovation, early childhood learning, evaluation and research, family and child development (including regulated child care services), program development, school services and student support services.
- (2) The *Corporate Services Branch* is responsible for strategic planning and annual reporting, budget preparation and monitoring, financial services, school busing, international education, policy development and accountability, school construction, teacher payroll services, and federal-provincial agreements.
- (3) The *Infrastructure Branch* is responsible for the administration and management of the K-12 school capital construction program which includes new construction, extensions, renovations and/or redevelopments, and all major maintenance for existing school infrastructure.



#### **Major responsibilities**

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

- (1) Educational Policy and Direction The department sets the strategy and vision for the province's K-12 education system, early childhood learning, and child care. Decision-making is informed through reviewing and amending legislation and regulations, conducting relevant research and analysis, and providing statistical indicators and background information. The department is responsible for the certification of teachers and the administration of various articles of the teachers' collective agreement. The department also approves the certification of early childhood educators (ECEs), which is completed by the Association of Early Childhood Educators Newfoundland and Labrador (AECENL).
- (2) Curriculum and Programs In the K-12 system, responsibilities include: developing and monitoring the French and English curricula and programs, creating or selecting learning resources, developing programs for improved teaching and learning, developing and supporting inclusive education initiatives, supporting safe, caring and inclusive environments, providing teacher professional learning opportunities, and collaborating with Aboriginal groups.
- (3) Support for Children and Youth with Diverse Needs/Exceptionalities The department provides a broad range of support services to enhance inclusive practices in child care and learning environments for children and youth with diverse needs/exceptionalities. The Inclusion Support Program is a voluntary program that provides support to child care providers in regulated child care settings (centre-based or family child care) to help children with diverse needs (birth to 13 years) participate meaningfully in the programs. In the K-12 system, support for students with exceptionalities is provided within the inclusive education framework. The service delivery model is supported by policies and guidelines, and professional learning and is enhanced through collaboration with community partners.
- (4) Early Childhood Learning The department fosters early childhood learning opportunities through cooperation with other departments and agencies. Responsibilities include: developing and implementing early childhood learning resources, developing and monitoring the KinderStart program, the provincial early childhood learning framework, evaluation activities, the provincial early childhood learning strategy, Learning from the Start, early literacy partnerships with public libraries, Parent Resource Kit partnership with regional health authorities, and the Power of Play promotional campaign.

- (5) Child Care Services and Family Resource Centres Responsibilities include: monitoring and licensing of regulated child care services (centre-based or family child care home) throughout the province, providing financial support for regulated child care services on behalf of eligible families, providing financial support for the development and operation of child care centres and family child care homes; providing financial assistance to help recruit and retain early childhood educators (ECEs), and supporting the operation and development of family resource centres in many areas of the province.
- (6) Student Assessment and Research The department collects data and manages databases for core areas such as child care services, enrolment, student support services, student achievement, and graduate outcomes. Responsibilities include: the evaluation, monitoring, test development, and certification processes for the K-12 system; administration of the General Educational Development (GED) tests; and all major functions related to education system performance, such as education statistics, planning, accountability, policy development and research.
- (7) Support to School Districts Areas include: school transportation; school construction, major repairs, and maintenance; monitoring compliance with codes and legislation (including Occupational Health and Safety compliance); school board operations; teacher allocation; and teacher payroll (including teachers and student assistants).



- (8) e-Learning Responsibilities include: the delivery of distance education programs and services to secondary level students attending schools supported by the two provincial school districts; the provision of digital learning resources to support selected intermediate course delivery; the development and delivery of online e-course review supports for public and school-based exams; the development and delivery of multimedia learning objects as learner supports for select intermediate and secondary level provincial curricula; the hosting of the provincial K-12 video-conferencing bridging services; and the negotiation, purchase, and oversight of select provincial software licensing acquisitions.
- (9) Support for Public Libraries Areas include: support for compliance with codes and legislation (Occupational Health and Safety, Access to Information and Protection of Privacy), early literacy, and a community Internet access youth employment program.

#### **Provincial school districts**

Two school districts oversee the daily operations of public schools across within the province: the Newfoundland and Labrador English School District (NLESD) and Le Conseil scolaire francophone provincial de Terre-Neuve-et-Labrador (CSFP). Each district is directly responsible for such things as:

- staffing,
- distributing resources, including human resources,
- evaluating, acquiring, distributing and maintaining technology resources,
- acquiring, maintaining and repairing buildings,
- transporting students, and
- developing instructional policies and practices.

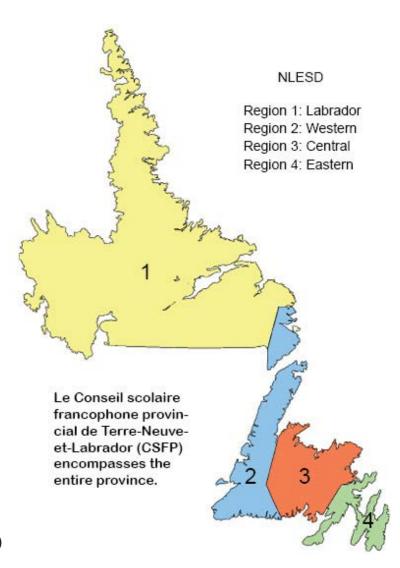
#### **Newfoundland and Labrador English School District**

On September 1, 2013, the four existing school districts were consolidated under a new provincial district, the Newfoundland and Labrador English School District (NLESD). This district is divided into four geographic areas with each having a regional office. In total, the district is responsible for approximately 67,000 students and 257 schools in the province.

## Le Conseil scolaire francophone provincial de Terre-Neuve-et-Labrador

Le Conseil scolaire francophone provincial de Terre-Neuve-et-Labrador (CSFP) is responsible for the delivery of educational services and French first language programs from Kindergarten to Grade 12. Currently, this district is responsible for approximately 350 students and the following five schools spread across the province:

- Centre éducatif l'ENVOL (Labrador City)
- École Boréale (Happy Valley Goose Bay)
- École des Grands-Vents (St. John's)
- École Notre-Dame du Cap (Cap Saint-Georges)
- École Sainte-Anne (La Grand'Terre (Mainland))



#### School councils

School councils represent a partnership among the school, family and community. Its underlying purpose is to represent the school's educational interests, advise on the quality of teaching and learning in the school, assist and encourage parent and community involvement, and to advise the school board on matters of concern.

Specifically, school councils have the following five roles:

- (1) To provide a formal structure through which all partners can come together to discuss the education of the children with the primary goal of enhancing the quality of teaching and learning, resulting in improved student achievement.
- (2) To represent the educational interests of all students collectively. Council members also represent the views of their respective groups in that parent representatives speak for the parents of children in the school, teacher representatives speak for the teachers of the school, student representatives speak for the students of the school, and community representatives speak for the community. In order to effectively represent a group, council members should regularly seek feedback from their respective groups on the teaching and learning environment of the school, and any issues that may have an impact. It is the responsibility of council members to bring these issues forward on behalf of their groups and to communicate any decisions/actions back to the groups they represent.
- (3) To encourage active participation from the school community in the teaching and learning process.
- (4) To advise on the quality of the teaching and learning in the school. To effectively carry out this function, school councils should actively participate in the school development process, including contributing to the creation of the school development plan.
- (5) To advise the board on matters of concern to the school and to the school community. In some cases, a specific communications protocol is outlined in the school council's protocol agreement with their board.

(Department of Education, 2008, p.8)

More information about school council's and the role they play can be found in "The Building Learning Communities - A Handbook for School Councils, 2nd Edition." This handbook is published by the EECD and available as a pdf file through the following link: http://www.ed.gov.nl.ca/edu/publications/k12/Handbook2ndedition.pdf

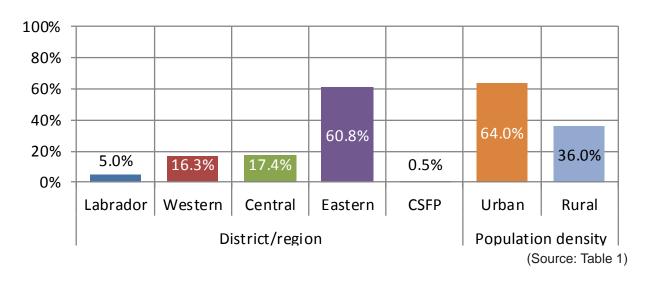
#### Chapter 3: A Profile of the Educational System

This chapter will explore three core components of the educational system – students, educators, and schools. For each, information will be provided for both the 2014/15 school year as well as the five year trend (2010/11 – 2014/15) where applicable.

#### Student enrolment

In 2014/15, 67,293 students were enrolled in the province's public school system. This is down slightly from 67,436 in 2013/14. As shown in figure 1, the largest percentage of students can be found in the Eastern region of the NLESD (60.8%) or in urban areas (i.e. with a population of 5,000 or more) of the province (64.0% vs. 36.0% in rural areas).

Figure 1: Distribution of students across the province (2014/15)





#### Five year enrolment trends

While enrolment has declined over the past five years, the year to year change is getting smaller. For example, between 2010/11 and 2011/12 enrolment decreased by 1.3%). This compares to virtually no change (i.e. 0.2%) in enrolment between 2013/14 and 2014/15.

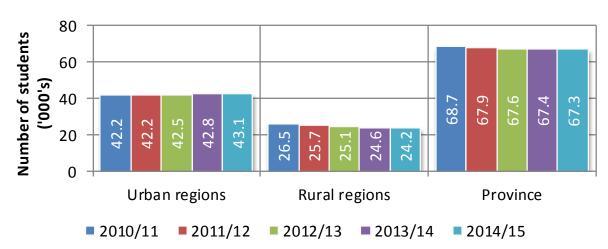
Not all areas experienced a decline in enrolment between 2010/11 and 2014/15. As shown in figures 2a and b, enrolment growth occurred in urban areas (by 2.0%), the Eastern region (by 0.6%) and in the CSFP (by 34.6% from 266 students in 2010/11 to 358 in 2014/15).

Finally, figure 2c reports the change in enrolment in four different grade groupings: primary (Kindergarten to Grade 3), elementary (Grades 4 to 6), intermediate (Grades 7 to 9) and high school (Levels I to III). The primary group is the only instance where enrolment has been on the rise. Starting in 2010/11, enrolment has gradually increased each year from 19,319 to 20,143 in 2014/15 (an increase of 4.3%).



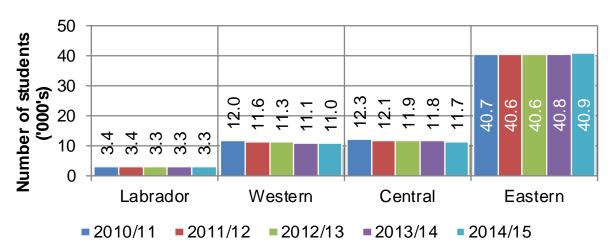
Figure 2: Student enrolment trends (2010/11 - 2014/15)

#### (a) Change in provincial and urban/rural enrolment

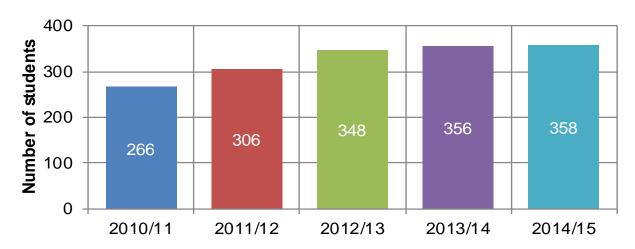


#### (b) District/regional enrolment

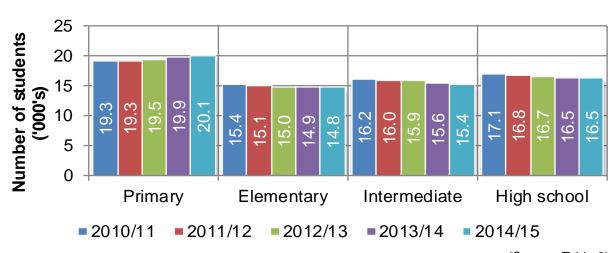
#### (i) NLESD



#### (ii) CSFP



#### (c) Enrolment by grade level



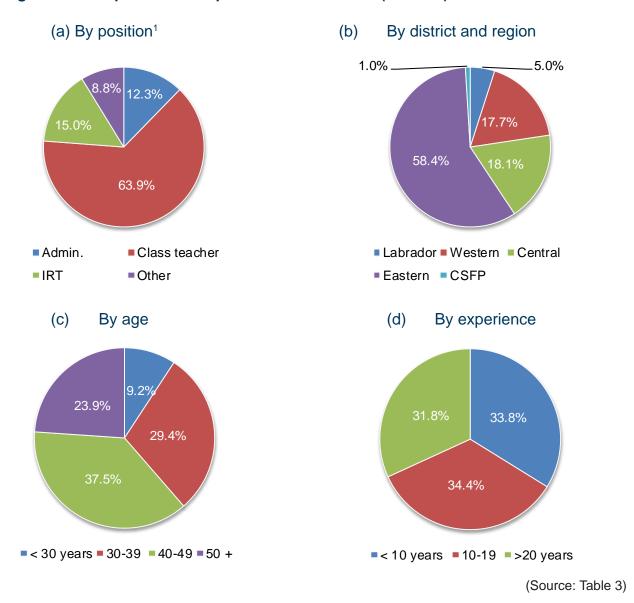
(Source: Table 2)

#### **Educators**

In 2014/15, 5,379 full-time equivalent (FTE) educators were employed in the province. This is up slightly from 5,357 in 2013/14. The typical educator in the province is 42.1 years of age with 14.7 years of experience. As shown in figure 3,

- Approximately two thirds (63.9%) were classroom teachers and 14.5% were instructional resource teachers (IRTs),
- Over half (58.4%) were located in the Eastern region of the NLESD,
- 61.4% were 40 years or older, and
- 34.4% had between 10 and 19 years of experience.

Figure 3: A profile of the province's educators (2014/15)



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. The 'other' category in the following figure includes positions such as itinerant teachers, guidance counsellors and English as Second Language (ESL) teachers.

#### Five year trends in FTE educators

During the past five years the number of FTE educators in the province declined by 3.0 percent (from 5,544 in 2010/11 to 5,379 in 2014/15). While this decline occurred each year, there was a slight increase (of 22 positions) between 2013/14 and 2014/15. As shown in in figure 4, the number of educators is declining across the province with two exceptions – the Eastern region of the NLESD and the CSFP. While the number of educators in the Eastern region grew smaller each year between 2010/11 and 2013/14, there was a small increase between 2013/14 and 2014/15. In the CSFP, the number of FTE positions in the CSFP has steadily increased from 42 in 2011/12 to 52 in 2014/15 (see figure 4b).

The province's workforce is aging. Since 2010/11, the majority of educators have been between 40 and 49 years of age. Additionally, the percentage of educators in the oldest age group (50 years or older) is increasing (see figure 4c), and the percentage of younger educator (i.e. under 30 years of age) has gradually decreased from 12.3% in 2010/11 to 9.2% in 2014/15 (see figure 4c).

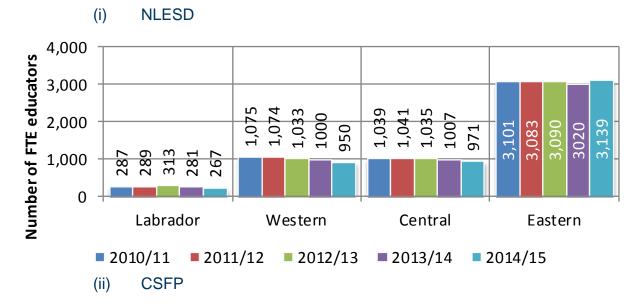
Along gender lines, the majority of educators are women. Over the past five years, women accounted for over 70% of the teaching workforce and the percentage has increased each year (see figure 4e). Between 2010/11 and 2014/15, the percentage of female educators increased from 71.1% to 72.8% whereas the percentage of male educators decreased from 28.9% to 27.2% (see figure 4d).

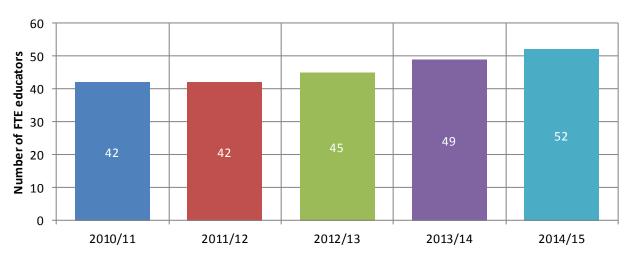


Figure 4: Trends in the number of FTE educators (2010/11 – 2014/15)

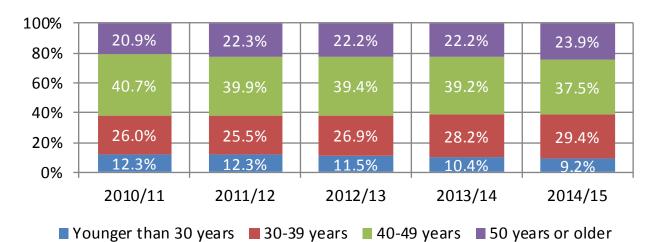


(b) District and regional trends

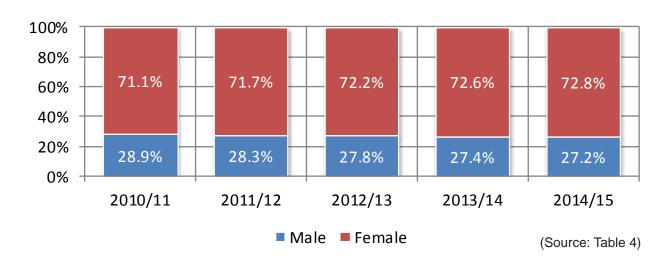




#### (c) Age



#### (d) Gender





#### **Pupil Teacher Ratio**

The pupil teacher ratio (PTR) is a measure of human resources to the system. The PTR is calculated by dividing the full-time equivalent (FTE) enrolment by the number of FTE 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 2014/15, the provincial PTR was 12.1 meaning there was one educator for every 12.1 students. Across the province, the PTR ranged from 6.9 in the CSFP to 12.5 in the Eastern region of the NLESD. The Eastern region was the only place where the PTR was higher that the provincial PTR (see figure 5). Across the province, there has been little change in the PTR since 2010/11 (see figure 6).

Figure 5: Pupil Teacher Ratio (2014/15)

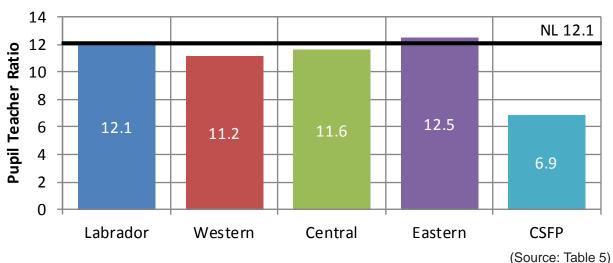
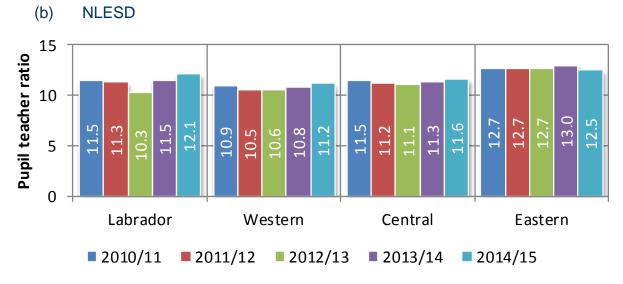
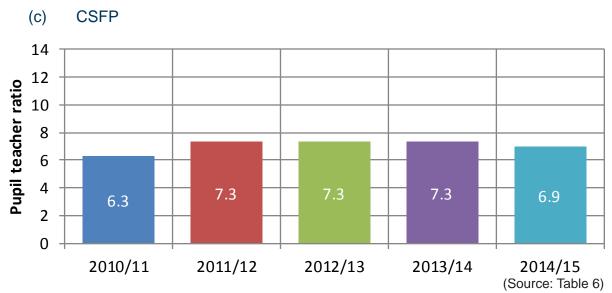


Figure 6: Trends in the PTR (2010/11 - 2014/15)







#### **Schools**

In 2014/15, there were 262 public schools in the province with close to half located in the Eastern region of the NLESD and approximately two thirds in a rural region of the province (see figure 7).

The number of public schools in the province is declining (see figure 8). During the past five years, there was a 3.7% reduction in the number of schools (from 272 in 2010/11 to 262 in 2014/15). This decline was seen in both urban and rural regions of the province.

The Eastern and Western regions experienced the greatest change in the number of schools. Between 2010/11 and 2014/15, six schools in the Eastern region and three in the Western region closed. There was no change in the Labrador region of the NLESD and the CSFP where the number of schools remained at 15 and 5 respectively.



Figure 7: Schools in the province (2014/15)

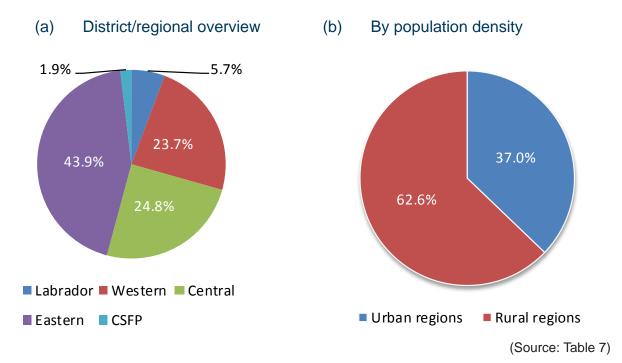
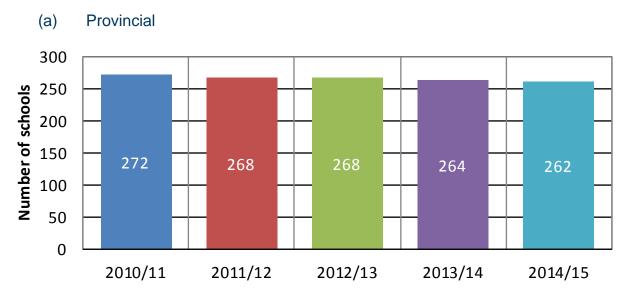
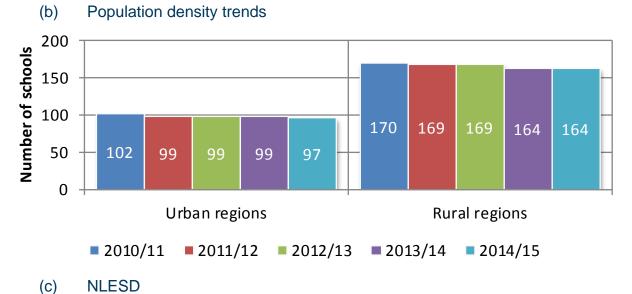
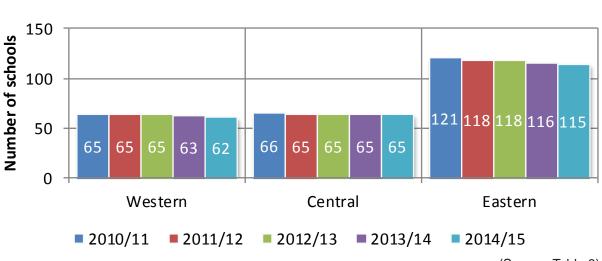


Figure 8: Change in the number of schools (2010/11 – 2014/15)







(Source: Table 8)

#### **School configuration**

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

Configuration type	Grades offered
Primary	Any combination of grades between Kindergarten and Grades 3, 4, or 5 with no higher grades present
Elementary	Kindergarten to Grades 6, 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
K – 12	All grades between Kindergarten and Grade 12

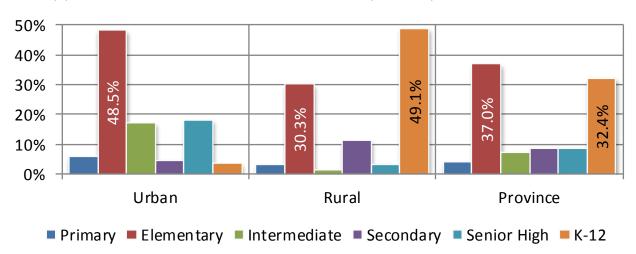
In 2014/15, the majority of the province's schools were either elementary or K-12. Combined, they accounted for over two-thirds of all the schools (see figure 9a). In terms of population density, approximately half of the schools in urban regions were elementary, whereas the majority of schools in rural areas were K-12 schools. With the exception of the Eastern region, the majority of schools were K-12 (see figure 9b). The percentage of K-12 schools ranged from 53.3% in the Labrador region to 38.5% in Central. However, in the Eastern region, close to half of the schools (47.8%) were elementary. In the CSFP, there were two elementary and three K-12 schools.

As shown in figure 9c, there has some change in the profile of schools in the province. While the percentage of elementary, intermediate and secondary schools have decreased between 2010/11 and 2014/15, the percentage of K-12 schools has steadily increased. For example, in 2010/11, 30.5% of the schools in the province were K-12. By 2014/15, the percentage increased to 32.4%. There was virtually no change in the percentage of primary or senior high schools during this time.

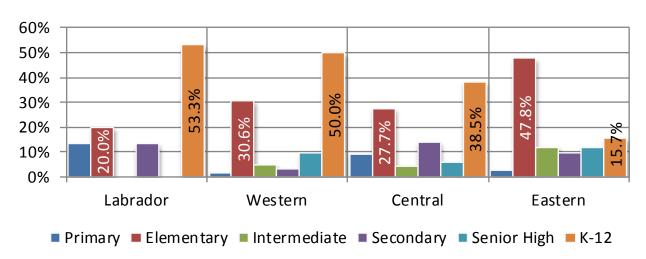


Figure 9: School configurations

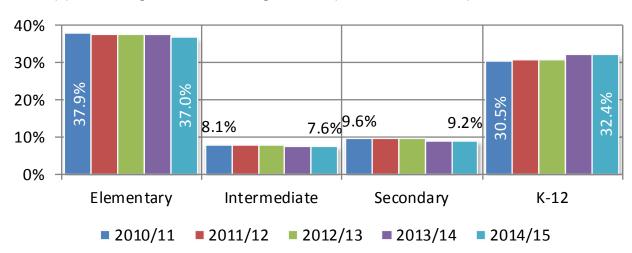
#### (a) Provincial and urban/rural distribution (2014/15)



#### (b) District/regional breakdown (2014/15)



#### (c) Change in school configurations (2010/11 - 2014/15)



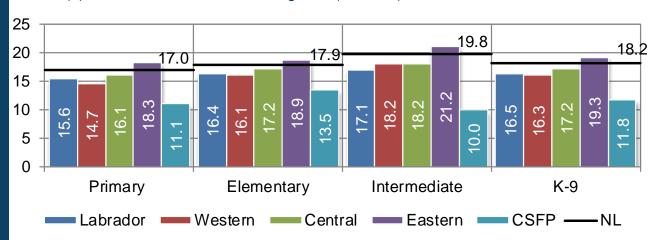
#### Class size

Average class size is defined as the total number of students in a group of classes divided by the total number of classes. Average class size information is available for four grade groupings: primary (K-3), elementary (4-6), intermediate (7-9), and K-9.

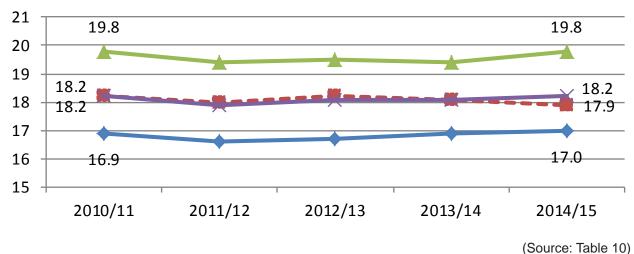
In 2014/15, the provincial average class size ranged from 17.0 in the primary level to 19.8 for the intermediate grades. Across the province, the highest average class sizes were found in the Eastern region and the smallest in the CSFP (see figure 10a). As shown in figure 10b, there has been little change in average class sizes over the past five years.

Figure 10: Average class size

(a) Provincial, district and regional (2014/15)



(b) Trends in provincial average class (2010/11 – 2014/15)





PART II

**Student Assessments** 





#### Chapter 4: Standardized Assessments

n Newfoundland and Labrador, students take part in several provincial, national, and international standardized assessments. Provincially, students complete two different types of standardized assessments: Provincial assessments and public examinations.

- (1) Provincial assessments Each year, students in Grades 3, 6, and 9 are assessed in either reading and writing or Mathematics on an alternating basis¹. These assessments are developed based on the provincial curriculum. This provides a common standard to assess a student's proficiency in a specific subject area. Chapter 5 will describe student performance on the 2014/15 provincial assessments.
- (2) Public examinations In high school, public examinations are required in selected academic/advanced Level III courses in mathematics, sciences, social studies and languages. These differ from regular schoolbased exams in that all students across the province registered in the course write the same exam. Once completed, all exams are returned to the Department of Education and Early Childhood Development for grading by an independent marking board. Chapter 6 will focus on the results of the June 2015 public examinations.



On a national and international level, students regularly take part in four international and one national assessment. Table 4.1 provides an overview of these assessments. Performance on these assessments shows how students in Newfoundland and Labrador compare to other Canadian jurisdictions, and how their performance changes over time. Chapters 7 and 8 will explore student performance on the two most recent assessments - International Computer and Information Literacy Study (ICILS) and Pan-Canadian Assessment Program (PCAP).

During 2012/13, the provincial assessment schedule was changed. Prior to this, students in Grades 3, 6 and 9 were assessed in two subject areas (English Language Arts and mathematics) each year. These subjects are now assessed on a rotating schedule. In 2012/13, English Language Arts was the subject assessed, followed by mathematics in 2013/14, English Language Arts in 2014/2015 and the pattern continues.

Table 4.1: International and National Assessments Overview

	International Computer and Information Literacy Study (ICILS)	Pan- Canadian Assessment Program (PCAP)	Programme for International Student Assessment (PISA)	Progress in International Reading Literacy Study (PIRLS)	Trends in International Mathematics and Science Study (TIMSS)
When did it start	2013	2007	2000	2001	1995
Cycle	Every 3 years	Every 3 years	Every 3 years	Every 5 years	Every 4 years
Date of last assessment	2013	2013	2015	2016	2015
When were the results published?	Fall 2014	Spring 2014	December 2016	2017	December 2016
Date of next assessment	2016	2016	2018	2021	2019
Who was assessed?	Grade 8 students	Grade 8 students	15 year old students (around Grade 10)	Grade 4 students	Grade 4 and/ or Grade 8 students
What was assessed?	The extent students know about, understand, and are able to use information and communication technology (ICT).	Knowledge and skills in science, reading and mathematics.  The 2013 assessment focused on science.	Knowledge and skills in science, reading and mathematics  The 2015 assessment focused on science.	General reading skills defined as the ability to understand and use information presented in the written format required by society and favoured by the person.	Student achievement in mathematics and science

#### Chapter 5: English Language Arts Assessment

n 2014/15, students in Grades 3, 6 and 9 completed the English Language Arts (ELA) provincial assessment. This chapter will explore how students performed at the district, regional and provincial levels. In addition, gender differences and five year provincial trends will be highlighted. This five year trend actually spans six school years (2009/10 to 2014/15) because the ELA provincial assessment was not administered 2013/14. In addition, it must be noted that the format and scoring of the ELA assessment was revised in 2012/13. While provincial multiyear trends are reported, the charts must be viewed with caution.

For each grade level, a brief summary of some of the potential skills and knowledge students may have developed is provided. The English Language Arts curriculum guides provide a complete list of grade level expectations. These documents can be accessed on the Department of Education and Early Childhood Development's website (http://www.ed.gov.nl.ca/edu/k12/curriculum/index.html). This is followed by reporting student performance using two indicators:

- Average score based on student performance on the multiple choice section, and
- Student proficiency or the percentage of students meeting or exceeding grade level expectations. This indicator is based on student performance on a series of constructed response questions. For these questions, students must write a response rather than selecting an answer from a list.



#### **Primary level**

The primary years span Kindergarten to Grade 3. This is when children begin to develop literacy skills and growth in language development. During this time, students are provided with the opportunities to:

- develop language skills with a focus on oral/spoken language;
- use the processes of thinking: predicting, sequencing, synthesizing, selfmonitoring, analyzing, evaluating, inferring, and making connections;
- interact and engage with a variety of texts daily;
- learn how to view, think and respond critically to texts that they encounter;
- create imaginative representations;
- use the four cueing systems to develop proficient reading and writing skills; and
- learn to speak, listen, read, view, write, and represent through an integrated teaching style.

(Department of Education and Early Childhood Development, 2015, p. 40).

The provincial assessment occurs at the end of the primary stage – Grade 3. It focuses on measuring student ability in two components: reading and writing. For the reading component, students are provided with two types of writing (fiction and nonfiction) to read and answer a series of questions. To assess writing, students are expected to create two samples of their writing. For one sample, they are provided with a written prompt and a visual prompt for the second.



#### Grade 3 reading and writing performance

Students did well on the multiple choice section of the assessment with an overall average score of 83.6%. Across the province, average scores ranged from a low of 79.6% in the Labrador region to 84.0% in the Eastern region (see figure 11a). Along gender lines, there was little difference between the male and female average scores (82.7% and 84.6% respectively).

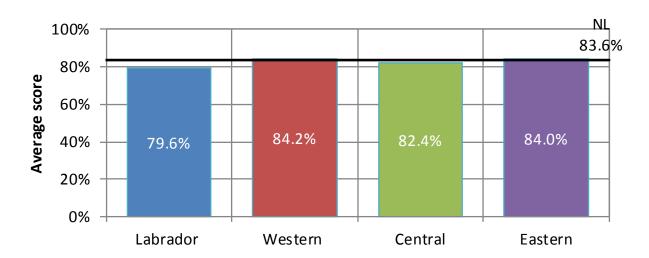
Students tended to perform slightly better in reading than writing (see figure 11b). Provincially, 76.8% of the students assessed met or exceeded grade level expectations for reading. For writing, this percentage was 73.6%. Regionally, the percentage ranged from 71.3% in the Labrador region to 77.4% in Eastern region for reading compared to between 64.7% of students in the Labrador region to 77.1% in Eastern.



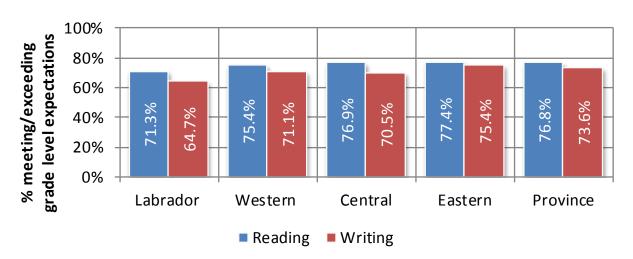
A higher percentage of girls than boys were proficient in both reading and writing (see figure 11c). The largest gender gap was in writing where the percentage of girls meeting or exceeding grade level expectations was 16.2 percentage points higher than the boys (82.0% vs 65.8%). For reading, the gender gap was 8.4 points.

Figure 11: Grade 3 student performance (2014/15)

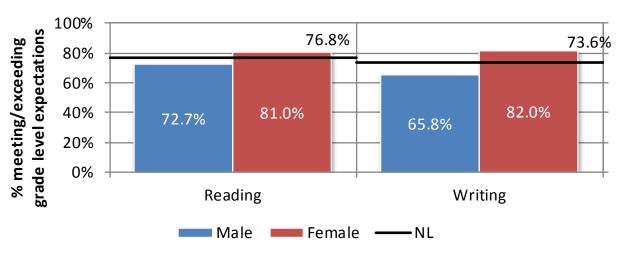
(a) Average reading scores across the province



## (b) Student proficiency



# (c) Gender difference in provincial proficiency levels



(Source: Table 11)



### Trends in student performance

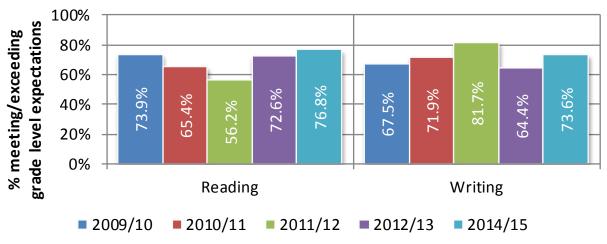
Over the past five years, student performance has varied (see figure 12). For reading, the average score and percentage of students meeting or exceeding grade level expectations decreased each year between 2009/10 and 2011/12. The average score declined by 24.7 points and the percentage of proficient students declined by 17.7 points. In 2012/13, this stopped with both percentages steadily increasing in each of the next two assessments (by 16.1 points and 20.6 points respectively between 2011/12 and 2014/15).

For writing, a different trend can be seen (see figure 12b). The percentage of students meeting or exceeding grade level expectations steadily increased between 2009/10 and 2011/12 before decreasing by 17.3 points (from 81.7% in 2011/12 to 64.4% in 2012/13). This was followed by an increase to 73.6% in 2014/15.

Figure 12: Provincial trends in Grade 3 performance (2009/10 – 2014/15)







(Source: Table 12)

## **Elementary level**

During the elementary years, students continue to build on the skills developed during the primary years. Students are encouraged to take part in various activities and experiences that will help them become skilled in using language for learning and communicating in both personal and public contexts. Specifically, students are provided with the opportunities to:

- analyze issues/messages in texts related to fairness, equity and social justice;
- analyze the structure and elements of a variety of texts;
- apply knowledge of language conventions in creating texts;
- · be creative in generating and developing ideas for texts;
- create increasingly complex texts, using a variety of text forms;
- extend endurance for independent listening, reading and viewing;
- navigate appropriate texts fluently with expression and confidence; and
- use cognitive strategies to make meaning of more complex texts.

(Department of Education and Early Childhood Development, 2015, p.40).

This provincial assessment occurs at the end of the elementary stage - Grade 6. As in the primary level, the elementary assessment measures student ability in reading and writing. To assess reading, students are asked to read two types of writing (fiction and nonfiction) and answer a series of multiple choice and closed response questions. For the writing component, students are expected to write two pieces of text. For the first piece, students are given a written prompt to start and a visual prompt is used for the second piece.



## Grade 6 reading and writing performance

Students performed well on the multiple choice section of the assessment with a provincial average score of 81.0%. Regionally, the average score ranged from 76.7% in the Labrador region to 81.5% in Eastern (see figure 13a). Along gender lines, the male and female average scores were quite similar with only 2.3 points separating the two (79.8% and 82.1% respectively).

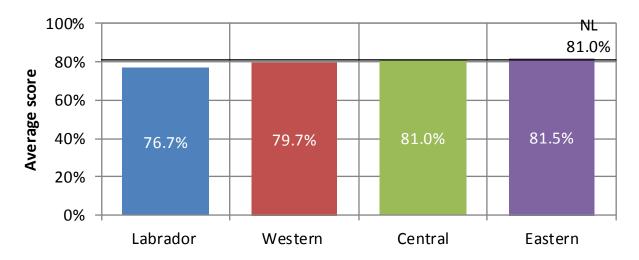
The majority of Grade 6 students were proficient in English language arts with over 85% of students meeting or exceeding the grade level expectations for both reading and writing. As in the primary assessment, students tended to perform better in reading than writing (see figure 13b). Across the province, the percentage of students meeting or exceeding grade level expectations for reading ranged from 82.6% in the Labrador region to 88.1% in Eastern. For writing, the percentage ranged from 76.6% in the Labrador region to 85.9% in Eastern.



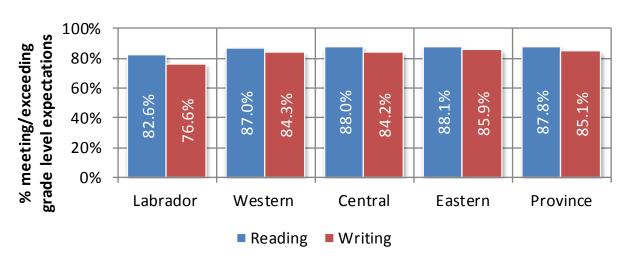
Overall, a higher percentage of girls met or exceeded grade level expectations in both reading and writing than boys (see figure 13c). As was the case in the primary assessment, the largest gender gap was in writing where the percentage of proficient girls was 13.9 points higher than the boys (92.0% vs 78.2%).

Figure 13: Grade 6 student performance (2014/15)

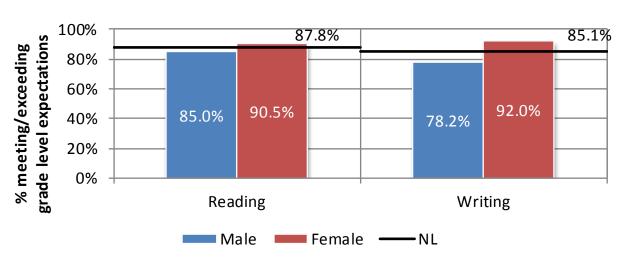
(a) Average reading scores across the province



## (b) Student proficiency



# (c) Gender difference in provincial proficiency levels



(Source: Table 13)

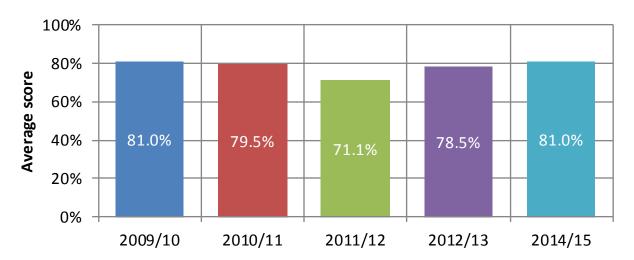


### Trends in student performance

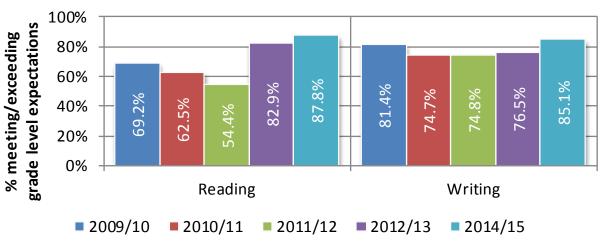
For the most part, student performance has been relatively stable over the past five assessments. As shown in figure 14a, with the exception of 2011/12, only 2.5 points separate the highest and lowest average reading scores. Student proficiency levels present somewhat of a different picture (see figure 14b). For reading, the percentage of students meeting or exceeding grade level expectations followed the same pattern as in the primary assessment – decreasing during the first three years followed by an increase. The percentage of proficient students decreased by 14.8 points between 2009/10 and 2011/12 followed by a sharp increase of 33.4% 2011/12 and 2014/15.

Figure 14: Provincial trends in Grade 6 performance (2009/10 – 2014/15)1





# (b) Student proficiency



(Source: Table 14)

<sup>1</sup> The ELA assessment was not administered in 2013/14.

## Intermediate level

The intermediate years cover Grades 7 to 9. During this time, curriculum focuses on students' interaction with and the creation of texts. It is through this discussion and creation of various written work that students can grow in both their critical thinking and understanding of the impact language has on them and others. Specifically, students are provided with opportunities to:

- articulate their thinking about their learning as producers and consumers of information;
- be creative and imaginative in their oral communication, writing and representing;
- independently apply strategies when navigating or creating texts;
- interact with a wide variety of texts including, digital texts, drama, fiction, non-fiction, media texts, poetry and visual texts; and
- think and respond critically to texts they read, view or hear.
   (Department of Education and Early Childhood Development, 2015, p.41).

The intermediate level provincial assessment occurs during Grade 9. This assessment measures student ability in reading and writing. Students are asked to read a sample of non-fiction text and answer a series of multiple choice and closed response questions. For the writing component, students will write one piece of text using a visual prompt as a starting point.



## Grade 9 reading and writing performance

The provincial average score on the multiple choice section was 68.4%. There was little difference in student performance across the four regions with the average score ranging between 64.7% in the Labrador region to 68.7% in Eastern (see figure 15a). Along gender lines, the male and female average scores were quite similar with less than two points separating them (67.5% and 69.2% respectively).

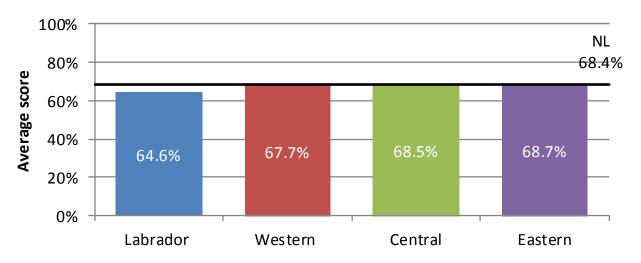
In contrast to the Grade 3 and 6 assessment results, students performed slightly better on the writing component as compared to reading (see figure 15b). Across the province, the percentage of students meeting or exceeding grade level expectations for reading ranged from 66.5% in the Labrador region to 82.6% in Western region. For writing, this percentage ranged from 71.4% in the Labrador region to 86.8% in Central.

Girls fared better than boys on the assessment. Overall, a higher percentage of girls met or exceeded grade level expectations in both reading and writing than boys (see figure 15c). The largest gender gap was in writing where the percentage of proficient girls was 14.5 points higher than the boys (92.8% vs 78.3%). A similar trend was seen in both the Grade 3 and 6 assessment results.

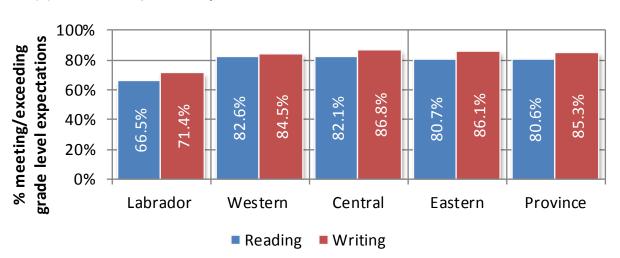


Figure 15: Grade 9 student performance (2014/15)

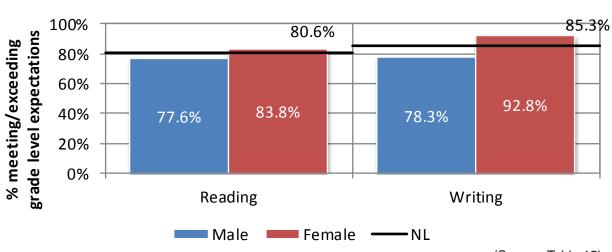
(a) Average reading scores across the province



(b) Student proficiency



(c) Gender difference in provincial proficiency levels



(Source: Table 15)

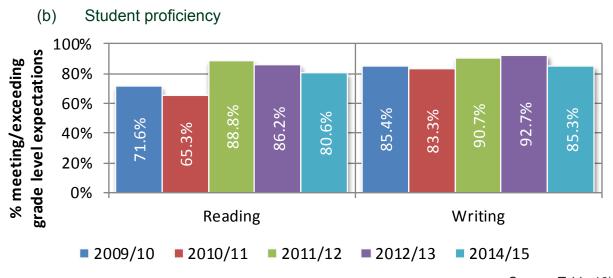
### Trends in student performance

For the most part, student performance on the reading and writing components has varied (see figure 16). For reading, an overall decline occurred between 2009/10 and 2012/13 followed by a rebound in 2014/15 when the average score increased by 12.5 points (from 55.9% to 68.4%). The percentage of students meeting or exceeding grade level expectations has gradually declined in each of the last three provincial assessments (from peaking at 88.8% in 2012/13 to 80.6% in 2014/15).

For writing, performance has been fairly stable. The percentage of students meeting or exceeding grade level expectations has ranged from 85.4% in 2009/10 to 85.3% in 2014/15. There were two years that standout – 2011/12 and 2012/13. In both years, the percentage of proficient students was over 90% (see figure 16b).

Figure 16: Provincial trends in Grade 9 performance (2009/10 – 2014/15)<sup>2</sup>





Source: Table 16)

2

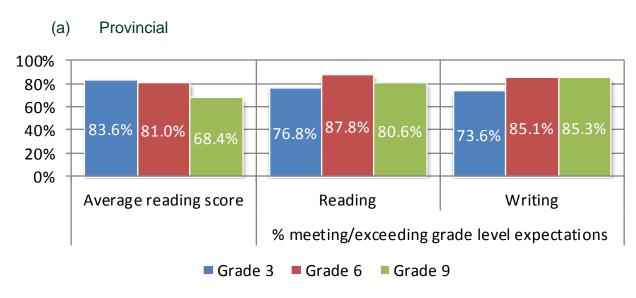
## Student performance across the grades

Since provincial assessments occur at three different grade levels, the opportunity exists to explore how performance changes as students progress through the grades. Figure 17 reports the average scores and the percentage of students meeting or exceeding grade level expectations for Grades 3, 6 and 9 for the 2014/15 assessment. As shown, there were distinct differences present. For example, while average scores decline between Grades 3 and 9, the percentage of proficient students is on an upward trend. For writing proficiency, the percentage of students meeting or exceeding grade level expectations increases from Grade 3 to Grade 6 and remains there for Grade 9.

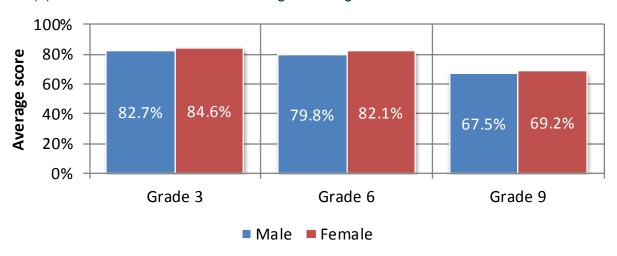
While the gender gap remains quite similar within each grade, it varies based on the component (i.e. reading or writing) assessed and how it was assessed. For example, approximately two points separate the male and female average scores in each grade (see figure 17b). However, approximately 15 points separate the percentage of males and females in each grade who met or exceeded grade level expectations for writing (see figure 17c).



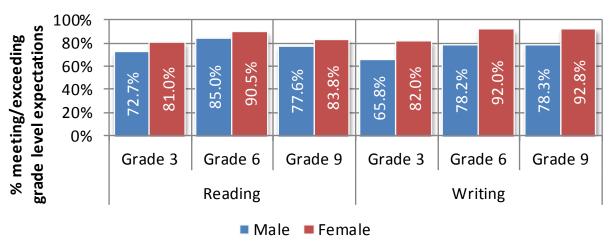
Figure 17: Change in student performance (2014/15)



# (b) Gender differences in average reading scores



# (c) Gender differences in reading and writing proficiency levels



(Source: Table 17)



# Chapter 6: Public Examinations

his chapter focuses on student performance on the June 2015 public examinations. Provincial trends over the past five years will also be explored. Unless otherwise noted, each 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.

For the purpose of reporting, these courses are presented in the following four groups:

Table 6.1: Course groupings

Subject area	Course name	
Languages	<ul><li>English 3201</li><li>Français 3202 (Immersion)</li></ul>	
Mathematics	<ul> <li>Mathematics 3200 (Advanced)</li> <li>Mathematics 3201 (Academic)</li> <li>Mathématiques 3231</li> </ul>	
Social Studies	<ul><li>World History 3201</li><li>World Geography 3202</li><li>Histoire mondiale 3231</li></ul>	
Sciences	<ul> <li>Biology 3201</li> <li>Biologie 3231</li> <li>Chemistry 3202</li> <li>Physics 3204</li> <li>Earth Systems 3209</li> </ul>	

For the district and regional overviews, there are four courses in the province's Francophone school district not included because of the small number of students registered. These are:

- two courses only offered in the CSFP Mathématiques 3231(5 students) and Biologie 3231 (5 students), and
- two courses offered across the province with a small number of students enrolled in the CSFP - Histoire mondiale 3231 (11 students) and English 3201 (5 students).

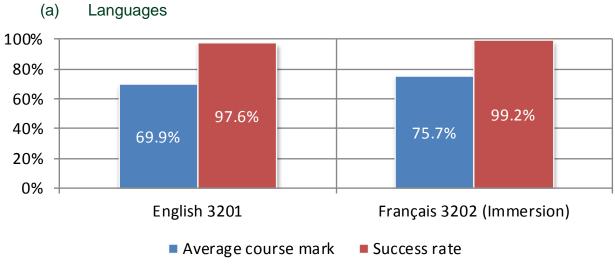
Student performance in these courses can be found in Appendix A.

# **Provincial performance - June 2015**

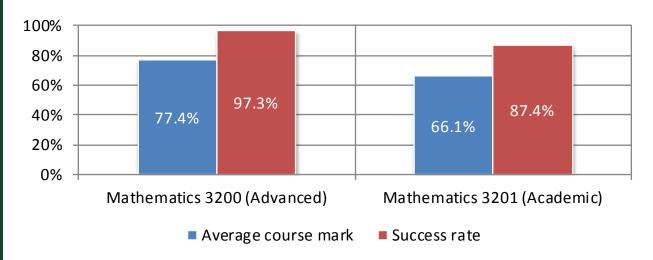
Two indicators are used to describe student performance: average final course mark and course success rate (i.e. the percentage of students scored at least 50% in the public examination course).

Figure 18 shows how students fared on each of the 2014/15 public examination courses. The vast majority of students successfully completed these courses with the success rate ranging from 83.4% in Earth Systems 3209 to 99.2% in Français 3202 (Immersion). The average final course mark was lower ranging from 61.1% in Earth Systems 3209 to 77.4% in Mathematics 3200 (Advanced).

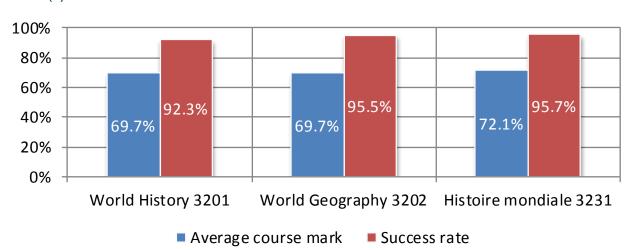
Figure 18: Provincial performance on public examination courses (2014/15)



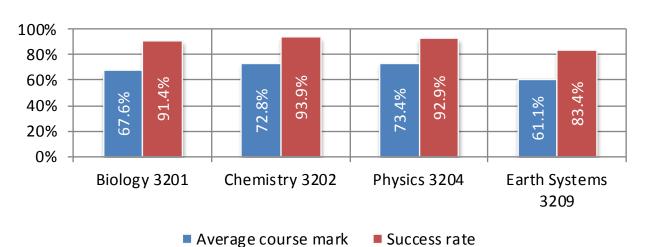




## (c) Social studies



## (d) Sciences



(Source: Table 18)



## Languages

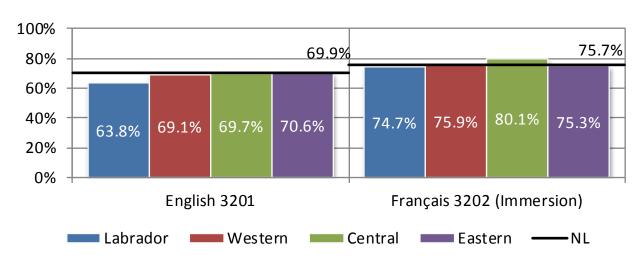
English 3201 and Français 3202 (Immersion) are the two language courses with public examinations. Provincially, the average course mark was 69.9% in English 3201 and 75.7% in Français 3202. Overall, there was little variation in student performance across the four regions with one exception - English 3201 (see figure 19a). In this course, the average final course grade in the Labrador region was lower (by approximately six points) than the other regions. Females performed better than males in both courses (see figure 19b). The female average course mark was between four and six points higher than the male average course mark.

Over the past five years, there has been little variation in student performance (see figure 19c). In English 3201, the average final course mark ranged from 66.2% in 2010/11 to 69.9% in 2014/15. Français 3202 was a little higher ranging from 73.7% to 75.7%.

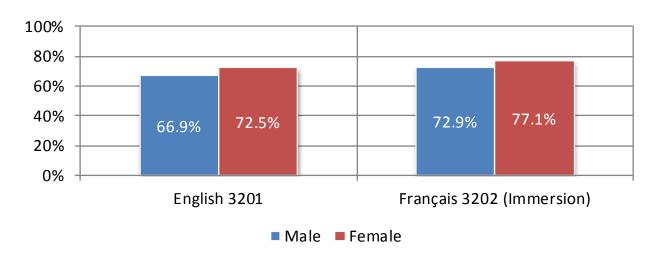


Figure 19: Student performance in the languages

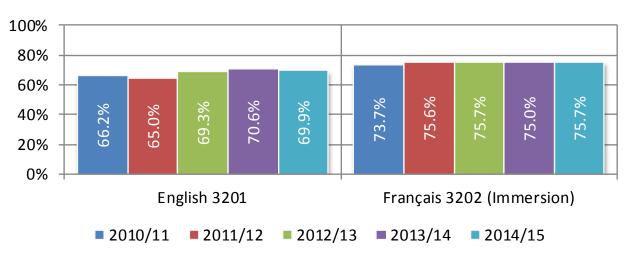
(a) Average course mark (2014/15)



## (b) Gender differences in average course mark (2014/15)



## (c) Provincial trends (2010/11 – 2014/15)



(Source: Table 19)



#### **Mathematics**

Public examinations occur in two mathematics courses: Mathematics 3200 (Advanced) and Mathematics 3201 (Academic). Comparisons should not be made between these two courses. 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 77.4% in Mathematics 3200 (Advanced) and 66.1% in Mathematics 3201 (Academic). Across the province, student performance in Mathematics 3200 (Advanced) ranged from 73.2% in the Labrador region to 81.5% in Western. In the Western and Central regions, the average course mark was higher than the provincial average. Student performance in Mathematics 3201 (Academic) was similar across all four regions, ranging from 64.4% in the Labrador region to 68.2% in the Eastern region (see figure 20a).

In terms of gender, the female average course mark was slightly

higher than the male for the academic mathematics course (68.1% vs. 63.8%), but virtually identical in the advanced mathematics course (see figure 20b).

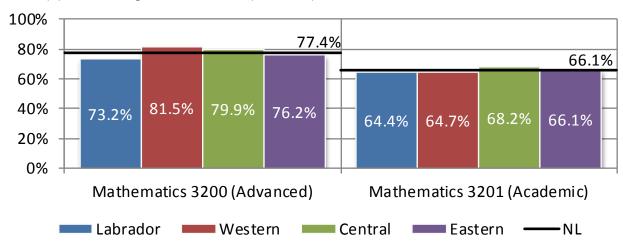
There has been a slight change in the provincial average final course marks over the past five years¹ (see figure 20c). For the advanced mathematics course, there has been a slight decrease between 2010/11 and 2014/15 (79.3% to 77.4%), and a gradual increase in the average course marks in the academic mathematics course (from 62.0% to 66.1%).



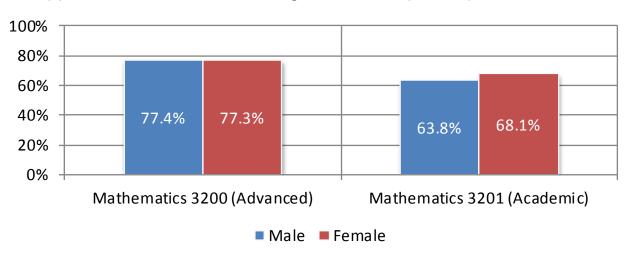
<sup>1</sup> The course numbering for high school mathematics changed in 2013/14. The academic mathematics course (Mathematics 3204) became Mathematics 3201 and the advanced mathematics course (Mathematics 3205) changed to Mathematics 3200.

Figure 20: Student performance in mathematics

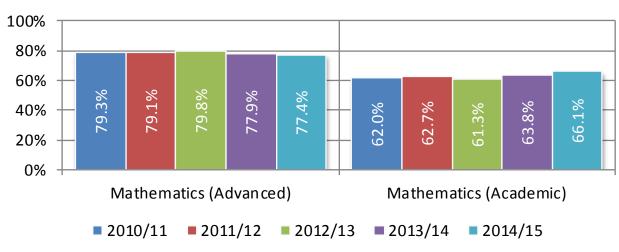
(a) Average course mark (2014/15)



(b) Gender differences in average course mark (2014/15)



(c) Provincial trends (2010/11 – 2014/15)



(Source: Table 20)

## Social studies

Three social studies courses have public examinations: World History 3201, World Geography 3202, and Histoire mondiale 3231. In 2014/15, student performance has remained fairly consistent with the provincial average final course mark in each of these courses (see figure 21a).

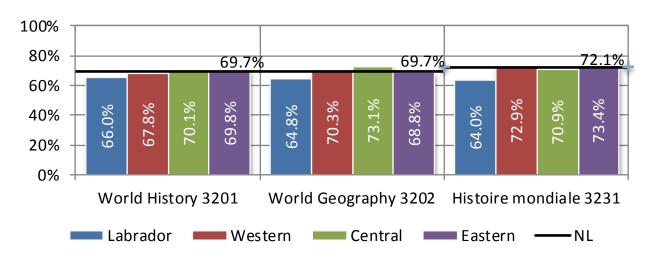
There was a small degree of variability found across the province. Typically, the average course marks found in the Labrador region were lower in relation to the other three regions (see figure 21a). Along gender lines, there was virtually no difference between the male and female average final mark in each of the three courses (see figure 21b).

Provincially, the average final course marks have been similar over the past five years. During this time, two points separated the highest and lowest average course marks in World History 3201 and World Geography 3202. For Histoire mondiale 3231, this difference was slightly larger with approximately six points separating the highest and lowest scores (see figure 21c).

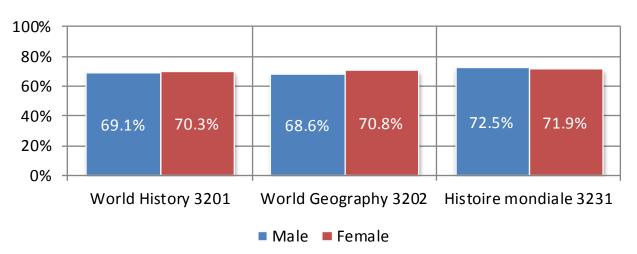


Figure 21: Student performance in social studies

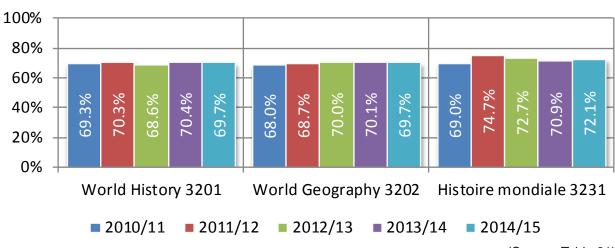
(a) Average course mark (2014/15)



(b) Gender differences



(c) Provincial trends (2010/11 – 2014/15)



(Source: Table 21)

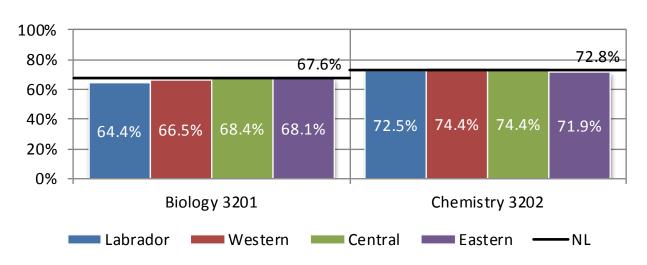
## **Sciences**

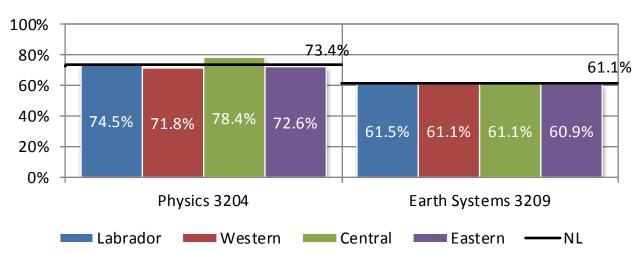
Four science courses have public examinations: Biology 3201, Chemistry 3202, Physics 3204, and Earth Systems 3209. Provincially, the average final course mark ranged from 61.1% in Earth Systems 3209 to 73.4% in Physics 3204. Students typically fared better in chemistry and physics than biology and earth systems. Students experienced the most difficulty with Earth Systems 3209. This course had the lowest average course grades among the four science courses in each region and the province overall (see figure 22a). There was little difference between the male and female average final course mark in each of the science courses (see figure 22b).

Since 2010/11, student performance in the science courses has been stable (see figure 22c). During this five year period, less than four points separated the highest and lowest final mark in each of the science courses.

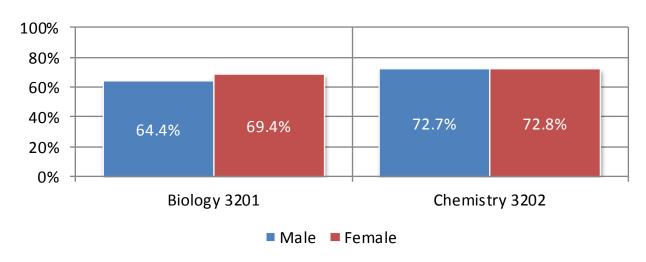
Figure 22: Student performance in the sciences

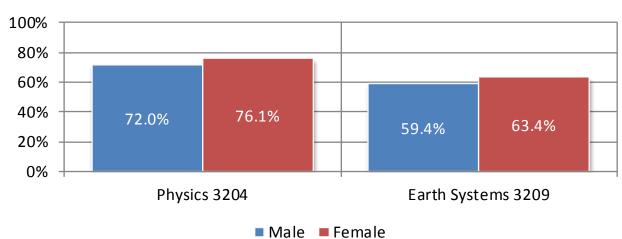
(a) Average course mark (2014/15)





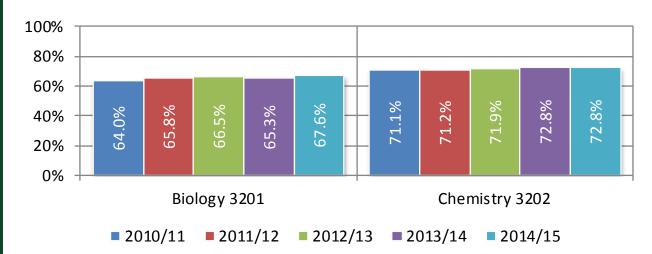
# (b) Gender differences (2014/15)

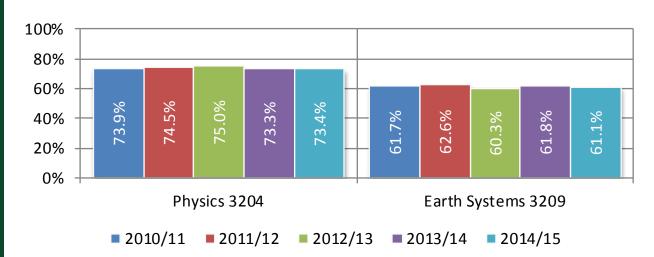




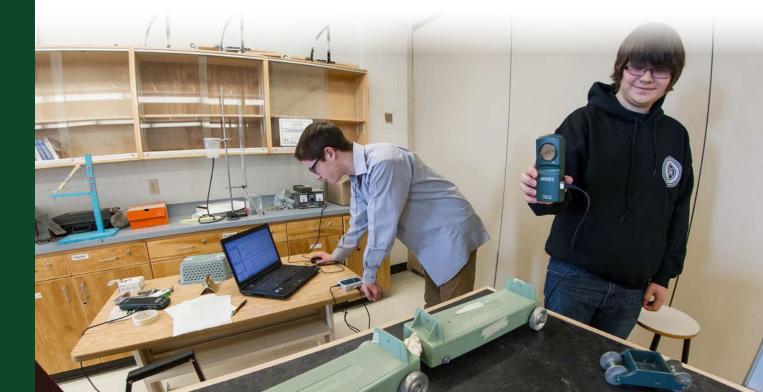


## (c) Provincial trends (2010/11 – 2014/15)





(Source: Table 22)



# Chapter 7: International Computer and Information Literacy Study

uring 2013, approximately 60,000 Grade 8 students from twenty countries around the world took part in the first ever International Computer and Information Literacy Study¹ (ICILS). This study was developed to discover the extent students knew about, understood, and were able to use information and communication technology (ICT).

In Canada, Newfoundland and Labrador and Ontario were the only two provinces that participated in ICILS. This chapter will provide an overview of how this province's students fared. The data used throughout this chapter was obtained from ICILS 2013 - Preparing for Life in a Digital Age: Results for Ontario and Newfoundland and Labrador published by the Council of Ministers of Education. This report can be viewed at: http://cmec.ca/Publications/Lists/Publications/Attachments/340/ICILS2013\_CdnReport\_EN.pdf

#### Overall, the results showed that:

- Students in Newfoundland and Labrador were outperforming almost three quarters of the participating countries/regions.
- The percentage of students that achieved the highest levels of proficiency for Newfoundland and Labrador was higher than the average percentage of students across all other participating countries.
- Girls performed significantly better than boys in Newfoundland and Labrador, as well as in Ontario and most participating countries.



<sup>1</sup> ICILS is carried out under the support of the International Association for the Evaluation of Educational Achievement (IEA), and in Canada, the participation of provinces is coordinated by the Council of Ministers of Education, Canada (CMEC).

#### What is the ICILS?

The International Computer and Information Literacy Study (ICILS) is a new assessment tool developed in response to:

- the increasing need for information and communication technology (ICT)-related literacies to be developed for citizens to function effectively in the digital age; and
- to inform policy-makers and educators on how to better understand the contexts and outcomes of ICT-related education programs in their countries.

In broad terms, the ICILS assesses computer and information literacy (CIL) or "... an individual's ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace, and in the community" (Fraillon, Schulz, & Ainley, 2013, cited in Labrecque & Dionne, 2014, p.3). To do this, the assessment focuses on the following two strands of ICT:

Strand one: Collecting and managing information which involves,

- Knowing about and understanding computer use,
- Accessing and evaluating information, and
- Managing information.

Strand two: Producing and exchanging information which involves,

- Transforming information,
- Creating information.
- Sharing information, and
- Using information safely and securely.



# **Administering the ICILS**

The administration of ICILS is conducted exclusively on computer. Students complete two 30 minute modules as well as an online questionnaire that gathers information about background characteristics, experience, and attitudes toward computer use and ICT. Teachers are surveyed to collect information on their background characteristics, the use of ICT in teaching, and their attitudes about ICT use in teaching and learning. The school questionnaire asks questions about school characteristics and school approaches when using ICT in teaching and learning. The questionnaire for ICT coordinators asks about ICT in schools, particularly the resources and support available for its use.

## Reporting student performance

The purpose of ICILS is to report results on the Grade 8 student population in Computer and Information Literacy (CIL) achievement. There are two measures of student performance used by the ICILS - average scores and proficiency levels.

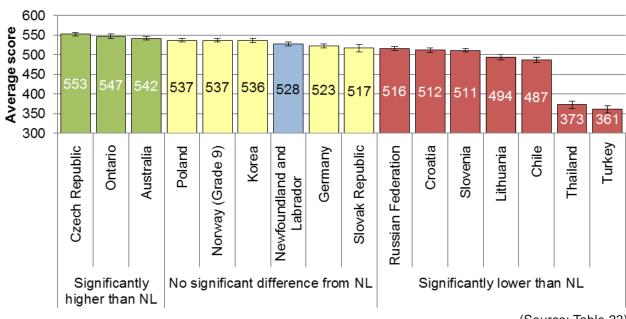
#### **Average scores**

The CIL average score was based on a scale with an average of 500 points and a standard deviation of 100. Internationally, the average score ranged from 361 (Turkey) to 553 (Czech Republic). Overall, Canadian Grade 8 students performed very well on the assessment. The average score of Ontario and Newfoundland and Labrador students was 547 and 528 respectively. These were both significantly higher than the ICILS international average of 500.

Figure 23 shows how students from other regions performed in relation to Newfoundland and Labrador. Overall, only two countries (Czech Republic and Australia) and the province of Ontario, performed significantly better than Newfoundland and Labrador. On the other hand, seven countries performed significantly worse (see table 7.1).



Figure 23: ICILS CIL average score



(Source: Table 23)

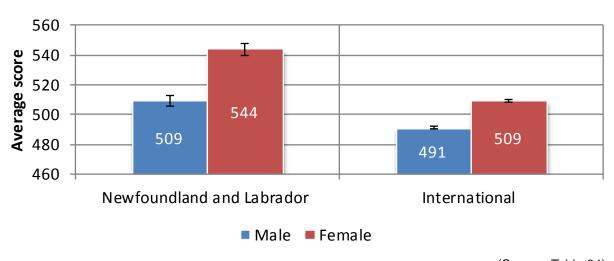
 Table 7.1:
 Provincial performance in relation to other countries

Province	List of countries/provinces that performed			
	Significantly lower than NL	The same as NL	Significantly better than NL	
Newfoundland and Labrador	<ul> <li>Russian Federation</li> <li>Croatia</li> <li>Slovenia</li> <li>Lithuania</li> <li>Chile</li> <li>Thailand</li> <li>Turkey</li> </ul>	<ul> <li>Poland,</li> <li>Norway (Grade 9)</li> <li>Korea</li> <li>Germany</li> <li>Slovak Republic</li> </ul>	<ul> <li>Czech Republic,</li> <li>Ontario</li> <li>Australia,</li> </ul>	

#### Gender differences

Typically, girls outperformed boys in terms of CIL. This was the case in all but two of the countries, Thailand and Turkey. The gender gap ranged from a low of 12 in the Czech Republic to a high of 28 in Korea. In Newfoundland and Labrador, this gender gap was large with 35 points separating the male and female average score (see figure 24). The gender gap is larger than the international average (18 points) and most other participating countries. Table 24 in Appendix A provides a breakdown for each of the countries.

Figure 24: Gender differences in student performance



(Source: Table 24)

## **Proficiency levels**

ICILS ranks student performance into four proficiency levels where the tasks performed at level one are easier and less complex than those being performed at level four. It is likely that students who are below level one will not be able to perform the most basic skills (e.g., clicking on a hyperlink). Appendix B lists the criteria that define each level.

Students typically showed a level two proficiency. This was the case for all countries except Thailand and Turkey. In these two countries, close to two thirds of students were assessed at below level one. For the remaining countries, the percentage assessed with a level two proficiency ranged from 36% in Korea to 48% in the Czech Republic.

As shown in figure 25, while the bulk of students in Newfoundland and Labrador performed at level two proficiency (40%), close to a third (29%) of students in Newfoundland and Labrador achieved the highest proficiency levels (i.e., 3 and 4). These percentages are higher than the average percentage of students across all countries (ICILS average of 23%). Table 25 in Appendix A shows how each of the countries performed.

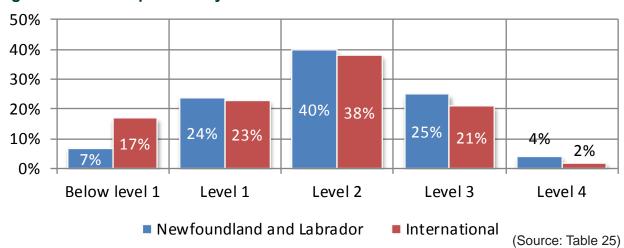


Figure 25: ICILS proficiency levels



# Chapter 8: The Pan-Canadian Assessment Program

uring 2013, over 32,000 Grade 8 students across Canada took part in the Pan-Canadian Assessment Program (PCAP). This chapter will provide an overview of how the 1,648 students from Newfoundland and Labrador performed in the three areas assessed: reading, mathematics and science. Information in this chapter was obtained from *PCAP-2013 – Contextual Report on student Achievement in Science* published by the Council of Ministers of Education. This report can be viewed at http://www.cmec.ca/240/Programs-and-Initiatives/Assessment/Pan-Canadian-Assessment-Program-%28PCAP%29/Overview/index.html

#### What is the PCAP?

PCAP was created by the Council of Ministers of Education, Canada (CMEC) to assess the performance of Grade 8 students in three core subject areas: reading, mathematics and science. Since the PCAP assessment is not tied to any specific provincial or territorial curriculum, it can be considered to be a fair measurement of a student's ability to use his/her learning skills to solve real-life situations.



PCAP is administered once every three years with each cycle assessing one major domain and two minor domains. Table 8.1 shows the actual and proposed domains for the PCAP administrations between 2007 and 2022.

Table 8.1: Major and minor domains assessed during PCAP

Administration Year	Major domain	Minor domain	Minor Domain
2007	Reading	Mathematics	Science
2010	Mathematics	Science	Reading
2013	Science	Reading	Mathematics
2016	Reading	Mathematics	Science
2019	Mathematics	Science	Reading
2022	Science	Reading	Mathematics

(O'Grady & Houme, 2014, p. 2)

For the 2013 administration, science was the major subject assessed. This meant science was broken down into four subdomains (nature of science, life science, physical science, and earth science) and three competencies (science inquiry, problem solving, and scientific reasoning). These competencies reflect the current Grade 8/ Secondary II science curricula for students in Canadian jurisdictions, as well as the foundation statements in the Common Framework of Science Learning Outcomes, K to 12: Pan-Canadian Protocol for Collaboration on School Curriculum (CMEC, 1997, cited in O'Grady & Houme, 2014, p. 7). The PCAP also assessed attitudes toward science to determine student interest in pursuing careers in that field.



# Reporting student performance

There are two performance measures used to report assessment results: Average (or mean) scores and proficiency level. The average score is determined by student performance on a series of selected response questions. In these questions, students are provided with a list of choices from which they must select a response. This includes questions such as multiple choice, check boxes, true-or-false statements, and yes/no observations. In PCAP, the Canadian average score was set at 500 points with a standard deviation of 100. In other words, about two thirds of all the Canadian students scored between 400 and 600 points in the assessments. This standardization of the Canadian mean allows comparisons to be made across provincial jurisdictions.

The determination of significant differences in jurisdictional mean scores was based on confidence intervals. The reported average scores provide an estimate of student achievement that would have resulted if all students participated in the assessment. Since these were estimated (not exact) scores, there was some degree of error. To take the error into account, a range of scores is given for each estimated average score. This range of scores is called a confidence interval. PCAP used a 95% confidence interval, which means the actual mean score should fall between the low and high points of the range 95% of the time. In other words, a typical student's score would fall within this range of scores. The confidence intervals are represented by the following symbol I—I. If the confidence intervals overlap, it means the differences between the average scores are not statistically significant.

The second measure is the student proficiency level. This is determined on how students fare on constructed response questions. For these questions, students must

write a response to a question. Student responses can range from short phrases, to two or three sentences, to several paragraphs. Students may also be asked to create tables or graphs, sketch diagrams, or design experiments.

The proficiency level allows student performance to be ranked according to four levels of increasing difficulty. In other words, a student assessed at a proficiency level of four would be able to demonstrate a greater depth of understanding of the subject in comparison to a student assessed at level one. A complete list of the criteria for each proficiency level can be found in Appendix C. Based on current curriculum expectations in mathematics across Canada, students in Grade 8 should demonstrate a proficiency of at least 2. Students who demonstrate a proficiency level of one are performing below what is expected in Grade 8. Proficiency levels are only reported for the major domain assessed.

#### The science assessment

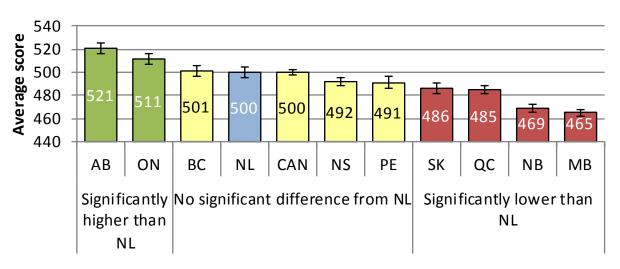
Across Canada, average scores on the science assessment ranged from 465 in Manitoba to 521 in Ontario. In Newfoundland and Labrador, the average score was 500, the same as the Canadian average score. There were only two jurisdictions where the average score was significantly higher than Newfoundland and Labrador - Alberta and Ontario. On the other hand, the average score in four provinces (Saskatchewan, Quebec, New Brunswick and Manitoba) was significantly lower (see figure 26).

Along gender lines, there were only two jurisdictions where a significant difference was found - Alberta and Saskatchewan. In Alberta, the female average score (525) was significantly higher than the male average score (516). For Saskatchewan, the male average score was significantly higher than the female (490 and 481 respectively). In Newfoundland and Labrador, both the male and female average score was 500. Table 26 in Appendix A lists both the male and female average scores across for each of the jurisdictions.

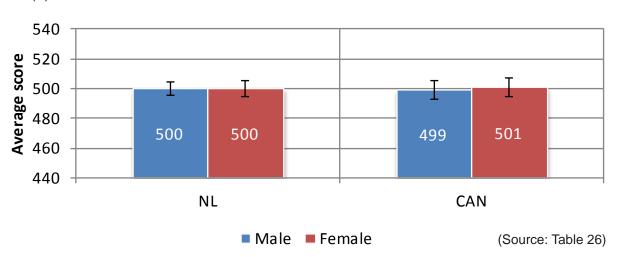


Figure 26: Average science scores

(a) Across Canada



(b) Gender differences





## **Proficiency levels**

Grade 8 students should be able to demonstrate a proficiency level of at least two (i.e., score 379 or higher). As shown in figure 27a, this was indeed the case with the percentage of students at or above level two ranging from 86% in Manitoba to 94% in Ontario and Newfoundland and Labrador.

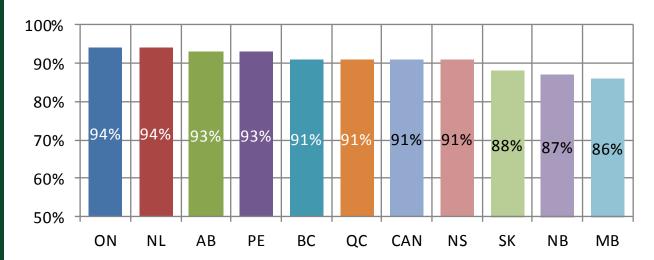
Figure 27b reports the percentage of students for each of the four proficiency levels. Alongside Alberta, Newfoundland and Labrador had the lowest percentage of students performing below grade level (6%). In the other jurisdictions, this percentage ranged from 7% in Prince Edward Island to 15% in Manitoba. On the other hand, 8% of students in Newfoundland and Labrador achieved the highest level of proficiency (Level 4), which was the same as the Canadian average. There were only three jurisdictions with a higher percentage of students achieving this advanced level of proficiency - Alberta (12%), Ontario (10%) and British Columbia (9%). In the other jurisdictions, this percentage ranged from 4% to 6%.



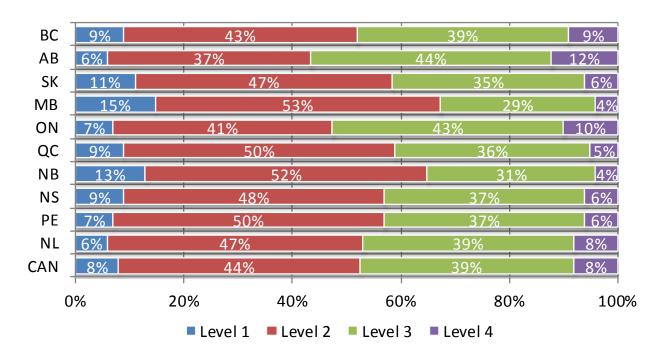
Figure 27c reports the percentage of males and females at each proficiency level for both Canada and Newfoundland and Labrador. As shown, there was virtually no gender difference present. This was also the case across the country with boys and girls achieving similar proficiency levels. Table 27 in Appendix A provides the percentage of males and females at each proficiency level for all jurisdictions.

Figure 27: Student proficiency in science

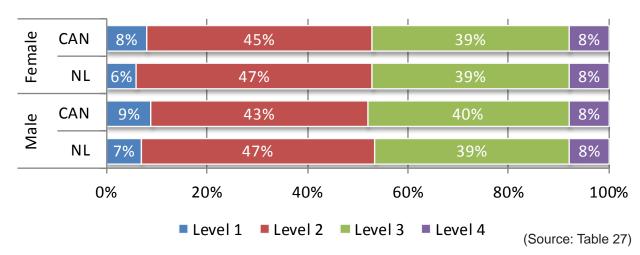
(a) Percentage of students with a proficiency of level 2 or higher



## (b) Percentage of students at each proficiency level



## (c) Gender differences male and female proficiency levels





#### Science sub-domains

PCAP assessed student performance in four science sub-domains: nature of science, life science, physical science, and earth science. Students typically performed better in:

- Life science for British Columbia students.
- Nature of science for Alberta students,
- Earth science for Prince Edward Island students, and
- Both life science and earth science for Manitoba and Newfoundland and Labrador students.



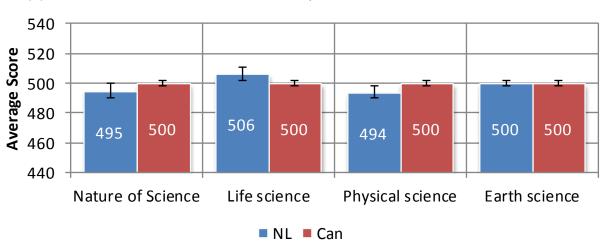
Provincially, student performance was quite similar across the four sub-domains with the average scores ranging from 495 on the nature of science sub-domain to 506 on the life sciences sub-domain. There was no significant difference found between provincial and Canadian average scores (see figure 28a).

Typically, there were no significant gender differences present within the sub-domains. In Newfoundland and Labrador, the only sub-domain with a significant gender difference was earth science, where girls outperformed boys (512 vs 500 respectively). When compared to Canadian means, females in Newfoundland and Labrador have lower achievement in physical science, and higher achievement in Earth science. There was no difference between male achievement in Newfoundland and Labrador compared to the Canadian average in either of the sub-domains (see figure 28b).

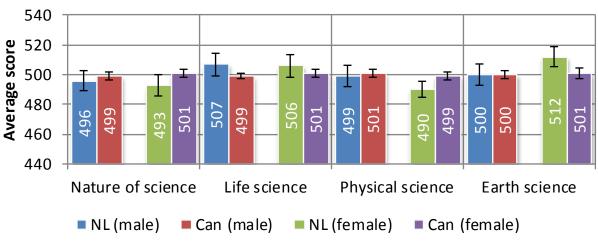


Figure 28: Student performance on the science sub-domains

(a) Provincial and Canadian student performance



(b) Gender differences in student performance



(Source: Table 28)



Table 8.2 compares the average scores in Newfoundland and Labrador to the rest of Canada. As shown, there were only two sub-domains where students from another jurisdiction fared significantly better. In both the nature of science and physical science sub-domains, a significantly higher average score was found in Alberta and Ontario than in Newfoundland and Labrador. Table 28 in Appendix A provides the average scores in each sub-domain.

 Table 8.2:
 Significant differences in average scores

Science	List of prov	rinces where the averag	e score was:
sub-domain	Significantly higher than NL	No significant difference from NL	Significantly lower than NL
Nature of science	Alberta Ontario	British Columbia Nova Scotia Prince Edward Island	Saskatchewan Manitoba Quebec New Brunswick
Life science		British Columbia Alberta Ontario	Saskatchewan Manitoba Quebec New Brunswick Nova Scotia Prince Edward Island
Physical science	Alberta Ontario	British Columbia Saskatchewan Quebec Nova Scotia Prince Edward Island	Manitoba New Brunswick
Earth science		Alberta Ontario Nova Scotia Prince Edward Island	British Columbia Saskatchewan Manitoba Quebec New Brunswick

### Competencies in science

PCAP defines scientific literacy as "a student's evolving competencies in understanding the nature of science using science-related attitudes, skills, and knowledge to conduct inquiries, to solve problems, and to reason scientifically in order to understand and make evidence-based decisions about science-related issues (O'Grady & Houme, 2014, p. 7). This section will discuss student performance within the three competencies - science inquiry, problem solving, and scientific reasoning.

In general, there were few significant differences in student performance in these competencies. The only two provinces where a significant difference was present was in British Columbia and Alberta.

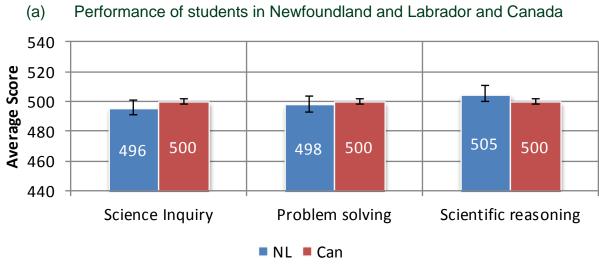
- In British Columbia, students performed significantly better in scientific reasoning than science inquiry and problem solving, and
- In Alberta, students achieved higher scores in both science inquiry and scientific reasoning as compared to problem solving.

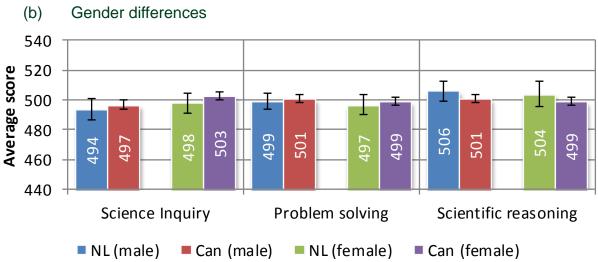
In Newfoundland and Labrador, there was no significant difference present in student performance on these three competencies. In other words, students performed equally well in science inquiry, problem solving, and scientific reasoning (see figure 29a).

For Canada overall, there was only one competency where girls achieved significantly higher results than boys – science inquiry (503 vs. 497 respectively). There were no significant gender differences present in Newfoundland and Labrador (see figure 29b).



Figure 29: How students fared on the science competencies



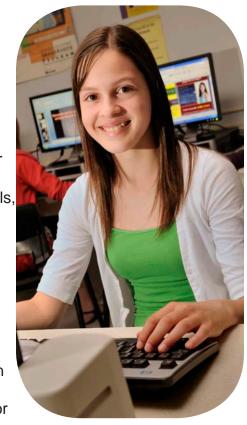




### The reading assessment

In PCAP 2013, reading was assessed as a minor domain. Since the assessment framework had not been changed from the original design in 2007, comparisons could be made over time. PCAP assesses the following three aspects of reading to produce a single average reading score:

- Comprehension Students understand the explicit and implicit information provided by the text. In particular they understand the vocabulary, parts, elements, and events of the text.
- (2) Interpretation Students make meaning by analyzing and synthesizing the parts/elements/ events to develop a broader perspective and/or meaning for the text. They may identify theme/ thesis and support that with references to details, events, symbols, patterns, and/or text features.
- (3) Response to text In responding, the readers engage with the text in many ways: by making personal connections between aspects of the text and their own real/vicarious/prior experiences, knowledge, values, and/or points of view; by responding emotionally to central ideas or aspects of the text; and/or by taking an evaluative stance about the quality or value of the text, possibly in relation to other texts and/or social or cultural factors.





### Student performance

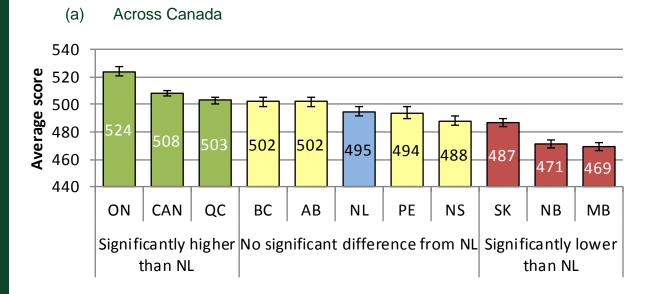
Average scores across Canada ranged from 469 in Manitoba to 524 in Ontario. In Newfoundland and Labrador, it was 495. There were only two provinces (Ontario and Quebec) where students achieved a significantly higher score (see figure 30a).

Newfoundland and Labrador was one of the nine jurisdictions where student performance was significantly lower that the Canadian mean. Ontario was the only jurisdiction where student performance was significantly higher than the Canadian mean. In terms of gender, females performed significantly better on the reading assessment than males. This was the case across Canada and within each of the jurisdictions. This gender gap ranged from 17 points in Newfoundland and Labrador to over 30 points in British Columbia and Alberta (see figure 30b).

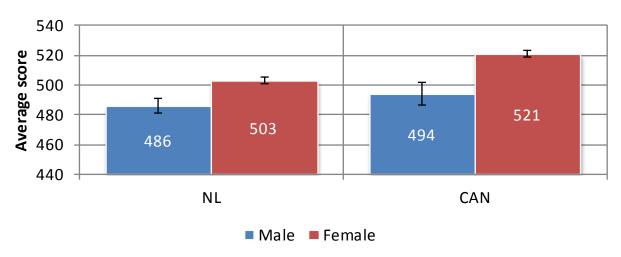
### Multiyear trends in student performance

Overall reading performance improved significantly in Canada between the 2010 and 2013 test administrations. Although there was no significant difference in achievement between 2007 and 2013, there was a decline in the average score between 2007 and 2010 (see figure 30c). Across the rest of Canada, there was a great deal of variation in reading performance during this time. For example, in British Columbia, Alberta, and Nova Scotia there was no significant difference among the three administrations of PCAP. On the other hand, between 2010 and 2013 there was a significant increase in reading scores for Canada overall, Ontario, Quebec, and Newfoundland and Labrador, but a significant decrease in Manitoba and New Brunswick. Student performance for each of the jurisdictions is provided in table 30c in Appendix A..

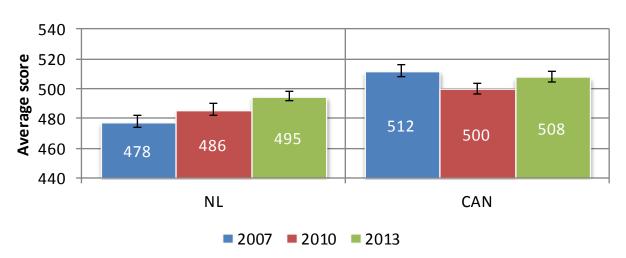
Figure 30: Reading assessments



### (b) Gender differences in reading performance



### (c) Change over time (2007 - 2013)



(Source: Table 30)



### The mathematics assessment

In PCAP 2013, mathematics was assessed as a minor domain. Since the assessment framework that defined mathematics had not changed between the 2010 and 2013 test administrations, comparisons could be made over time between these two years.

PCAP broadly defines mathematics as a conceptual tool students can use to increase their capacity to calculate, describe, and solve problems. The domain is divided into the following sub-domains and processes. The four sub-domains include:

- (1) *Numbers and operations* Properties, equivalent representations, and magnitude;
- (2) Geometry and measurement Properties of 2-D figures and 3-D shapes, relative position, transformations, and measurement;
- (3) Patterns and relationships Patterns and algebraic expressions, linear relations, and equations; and
- (4) Data management and probability Data collection and analysis, experimental and theoretical probability.

In addition, there were five processes assessed - problem solving, communication, representation, reasoning, and proof and connections.

### Student performance

Average scores across Canada ranged from 471 in Manitoba to 527 in Quebec. In Newfoundland and Labrador the average score was 487 which was significantly lower than the Canadian average score (507). There were six other jurisdictions with average scores significantly below the Canadian average (British Columbia, Saskatchewan, Manitoba, New Brunswick, Nova Scotia, Prince Edward Island) and one (Quebec) where it was significantly higher. In relation to Newfoundland and Labrador, there were three provinces (Quebec, Ontario and Alberta) where students achieved a significantly higher score and one (Prince Edward Island) with a significantly lower average score (see figure 31a).

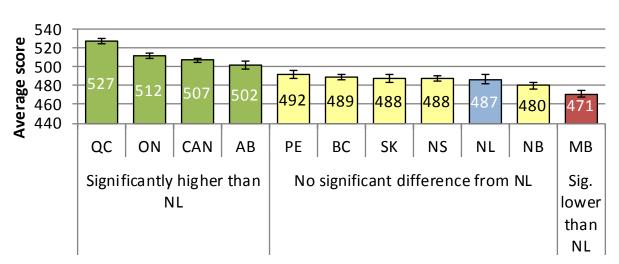
There was little difference in the performance of males and females on the mathematics assessment. This was true for the overall Canadian average and each jurisdiction including Newfoundland and Labrador (see figure 31b). The only significant difference found was in Prince Edward Island, where girls outperformed boys by 13 points in mathematics (average scores were 498 vs 487 respectively).

### Multiyear trends in student performance

Student performance in mathematics improved in Canada. The Canadian average score increased significantly from 500 in 2010 to 507 in 2013 (see figure 31c). There were seven jurisdictions where a significant positive change occurred in student performance. In Newfoundland and Labrador, average scores increased significantly from 472 in 2010 to 487 in 2013. In Manitoba, Ontario, and New Brunswick, average scores remained about the same during these two years. Student performance in each jurisdiction for 2010 and 2013 is provided in table 31c in Appendix A..

Figure 31: Mathematics assessment

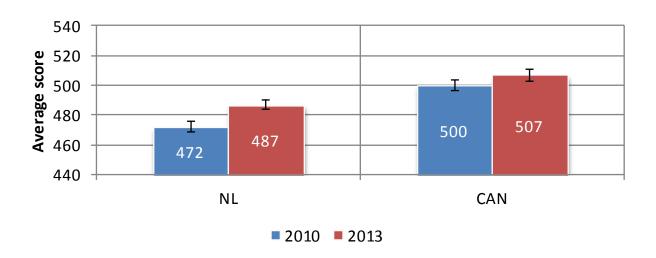
(a) Across Canada





# (b) Gender differences 540 520 500 480 460 440 NL CAN Male Female

# (c) Change over time (2010 – 2013)



(Source: Table 31)





PART III

High School Indicators





# Chapter 9: Early School Leavers

will look at this group of young people who leave school before graduating using two different indicators - the early school leaver rate (a provincial measure) and the dropout rate (a national measure). While these two rates measure the same concept, they are calculated differently and may not result in the same value.

### **Early School Leaver Rate defined**

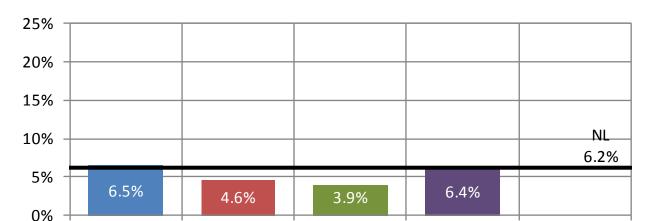
The Early School Leaver Rate (ESLR) is calculated by the Department of Education and Early Childhood Development and is based on high school enrolment. Once a school registers a student for his/her first high school course, s/he is recorded in the high school certification system. Each student is then tracked until he/she either graduates, or does not show up in a subsequent year in 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 – if they dropped out of school, moved out of the province, etc. This information is used to calculate the ESLR for a given year by following this formula:

The dropout rate is determined by Statistics Canada using information collected from the monthly Labour Force Survey. It is calculated by dividing the 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.



### **Provincial Early School Leaver Rate**

In 2013/14<sup>1</sup>, the provincial ESLR was 6.2% down from 6.9% in 2012/13. At the district and regional levels, the ESLR ranged from 3.5% in the Western region to 6.5% in the Labrador region (see figure 32). In terms of gender, the male ESLR was higher than the female rate (6.5% vs. 5.9%).



Central

Figure 32: Early School Leaver Rate (2013/14)

Labrador

(Source: Table 32)

**CSFP** 

Eastern

Western



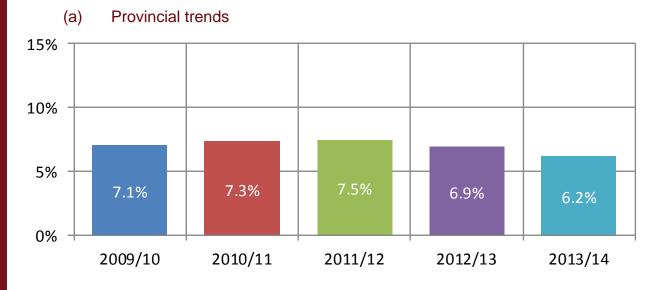
<sup>1</sup> This is the most recent year available at the time of publication.

### **Trends in the Early School Leaver Rate**

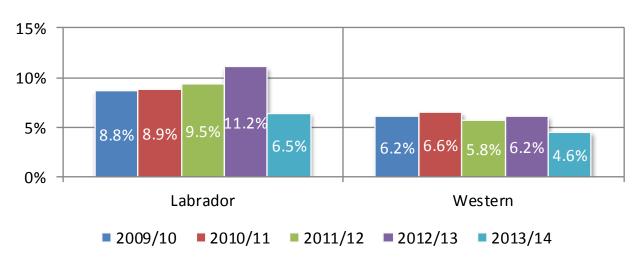
After increasing slightly between 2009/10 and 2011/12, the ESLR declined over the next two years from 7.5% in 2011/12 to 6.2% in 2012/13 (see figure 33a). With the exception of the Labrador region, a similar downward trend was seen at the regional level. In Labrador, the ESLR rate increased slightly each year and peaked at 11.2% in 2012/13 before declining sharply to 6.5% in 2013/14 (see figure 33b). While the CSFP ESLR rate is not reported due to small numbers of early school leavers, it is reported in table 33 in Appendix A.

In terms of gender, the male ESLR was consistently higher than the female rate but this difference is narrowing. While the female rate remained fairly stable between 2009/10 and 2013/14, the male rate has been on the decline. By 2013/14, less than one percentage point separated the male and female ESL rate (see figure 33c).

Figure 33: Trends in the Early School Leaver Rate (2009/10 – 2013/14)

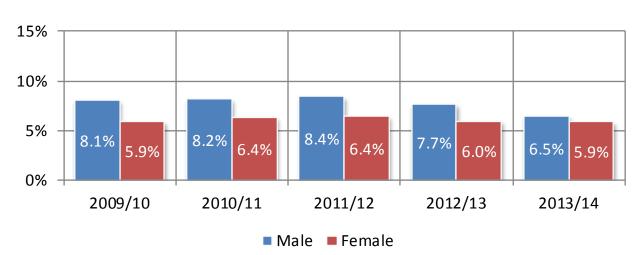








### (c) Gender trends



(Source: Table 33)



### **Dropout rate across Canada**

In 2012<sup>2</sup>, the dropout rate<sup>3</sup> ranged from 5.9% in British Columbia to 10.6% in Quebec. In Newfoundland and Labrador, the rate was 8.7% which was higher than the Canadian rate of 8.1%. There were four provinces with a higher dropout rate than Newfoundland and Labrador and five with a lower dropout rate (see figure 34).

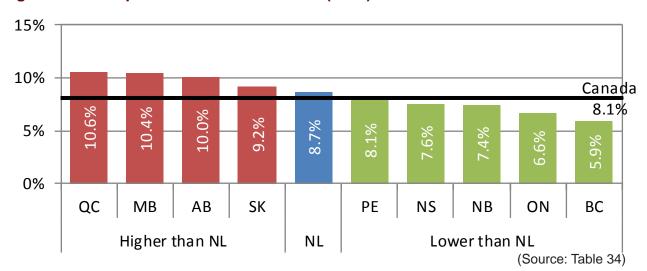


Figure 34: Dropout rates across Canada (2012)



<sup>2</sup> Information on the Canadian and jurisdictional dropout rates is provided from Statistics Canada. 2012 is the most recent data available at the time of publication.

The dropout rates provided in this section are based on a three-year moving average. Academic years are from September to April and are recorded to reflect the end of the academic period under examination (e.g., the 2012 dropout rate is based on the average for 2009/10 to 2011/12).

# Chapter 10: Graduation

ach September, thousands of students begin their final year of high school. This chapter will focus on this group of students to describe graduation/pass rates and diploma status. Additional information about 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 and Early Child Development's website and can be accessed through the following link: <a href="http://www.ed.gov.nl.ca/edu/k12/highschool/gradreq.html">http://www.ed.gov.nl.ca/edu/k12/highschool/gradreq.html</a>

### Pass/graduation rate defined

A common way to describe the high school completion rate is to use the graduation/ pass rate. This 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. In other words, these students will graduate IF they successfully complete the courses they are registered in.

# The provincial pass rate

The vast majority of students graduate from high school. In 2014/15, 95.4% of the 4,919 eligible graduates successfully met the graduation requirements. This was virtually the same as the previous year (95.2% in 2013/14). As shown in figure 35, over 95% of students across the NLESD graduate each year. While the graduation rate within the CSFP is not reported here due to the small number of eligible graduates, the information can be found in Appendix A. For example, in 2014/15, there were only four students who were eligible to graduate. In terms of gender, the female pass rate was slightly higher than the male (96.0% vs. 94.8%).

100% NL 95.4% 95% 90% 96.9% 96.0% 95.5% 95.3% 85% 95.1% 94.8% 80% 75% Male Labrador Western Central Female Eastern Gender **NLESD** (Source: Table 35)

Figure 35: Provincial and regional pass rate (2014/15)

### Provincial and regional trends

The pass rate has levelled off in the province. After increasing from 91.7% in 2010/11 to 95.7% in 2012/13, the rate has hovered around 95% for the past two years (see figure 36a). A similar trend was found in three of the four regions within the NLESD. As shown in figure 36b, an overall upward is seen between 2010/11 and 2014/15 in the Labrador, Western and Eastern regions. In the Central region, there has been little change in the pass rate over the previous three years.

The male and female pass rate have levelled off as well (see figure 36c). There was little difference between the male and female pass rate with less than two points separating the rate each year.

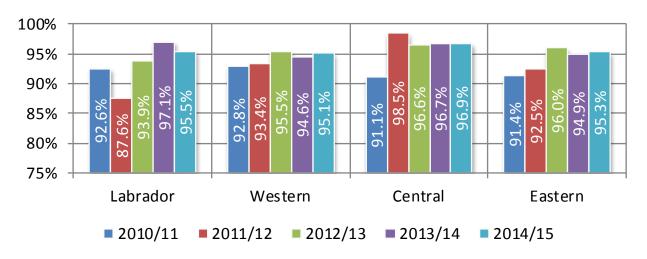


Figure 36: Pass rate trends (2010/11 – 2014/15)

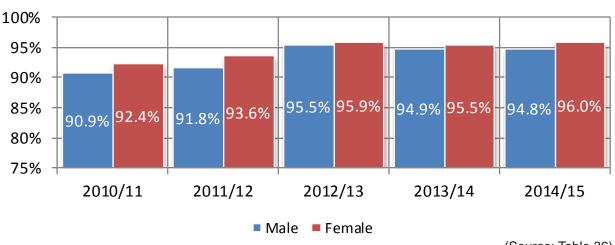
### (a) Provincial



### (b) Within the NLESD



### (c) Gender trends



(Source: Table 36)

### **Graduation status**

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

- (1) Honours status: Students earn an honours diploma if they achieve an overall average of 80% in five subject areas (English, mathematics, science, social studies and an elective).
- (2) Academic status: For students who do not meet the criteria for an honours diploma, but have a minimum mark of 50% in each of the required courses.
- (3) General status: For students who meet the minimum graduation requirements but not the requirements for an academic or honours diploma.

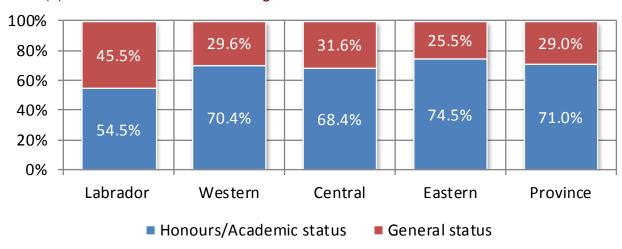


The majority of students graduate from high school with an honours or academic diploma (see figure 37a). In 2014/15, this was the case for 71.0% of the graduates with the remaining 29.0% earning a general diploma. At the regional level, the percentage of graduates with an honours/academic diploma ranged from 54.5% in the Labrador region to 74.5% in the Eastern region. In terms of gender, a higher percentage of females than males graduated with an honours/academic diploma (77.5% vs 64.4%).

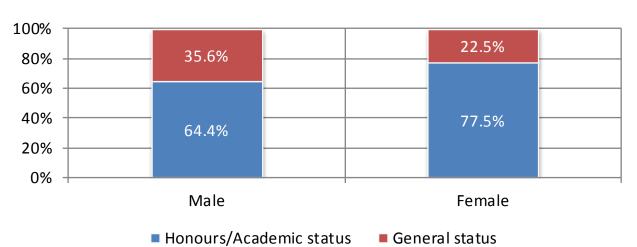


Figure 37: Graduation status (2014/15)

(a) Province and NLESD regions



(b) Gender



(Source: Table 37)



### Trends in graduation status

There has been a general upward trend in the percentage of students graduating with an honours/academic diploma over the past five years. Provincially, this percentage has increased from 61.7% in 2010/11 to 71.0% in 2014/15 (see figure 38a).

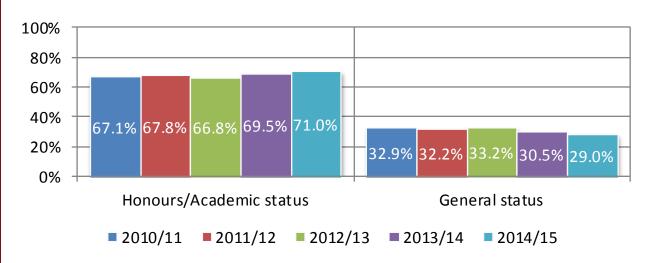
A similar trend can be found within the NLESD in three of the four regions (see figure 39b). The exception was in the Labrador region where the percentage has been gradually decreasing each year since 2011/12.

This general upward trend in the percentage of students graduating with an honours/academic diploma was also present with both females and males. Girls were typically more likely to graduate with an honours/academic diploma than boys. On average, the percentage of girls graduating with an honours/academic diploma was 13 points higher than boys each year (see figure 38c).



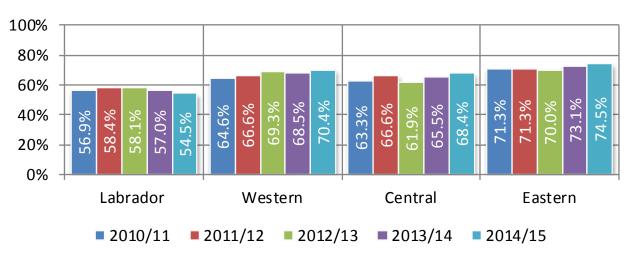
Figure 38: Trends in graduation status (2010/11 – 2014/15)

### (a) Provincial trends

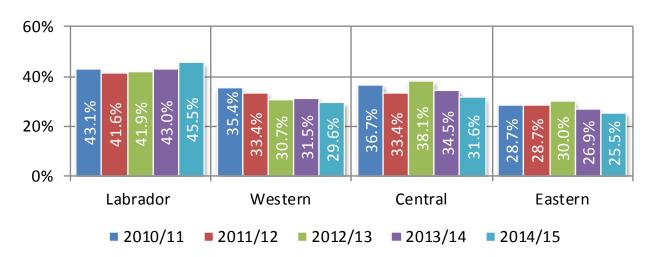


### (b) Regional trends

### (i) Percentage graduating with honours/academic status



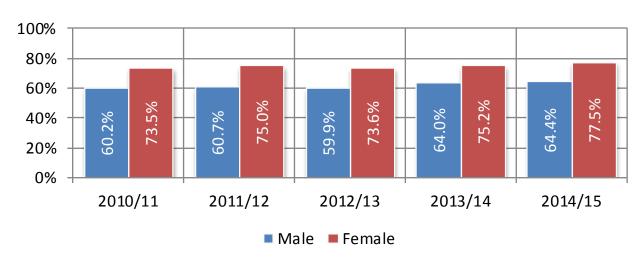
### (ii) Percentage graduating with general status



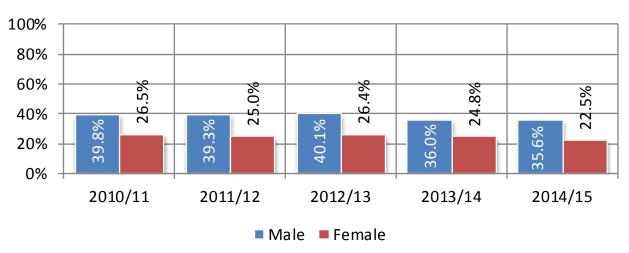


### (c) Gender

### (i) Percentage graduating with honours/academic status



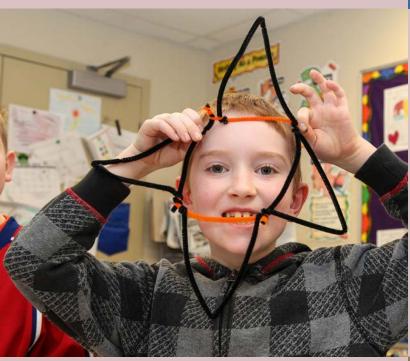
### (ii) Percentage graduating with general status



(Source: Table 38)







PART IV

Appendices



# Appendix A: Data tables

### **Chapter 3: A Profile of the Educational System**

Table 1: Distribution of students across the province (2014/15)

(a) By school district and region

Dis	trict/region	Number of students	Percentage
	Labrador	3,348	5.0
NLESD	Western	10,967	16.3
NLESD	Central	11,692	17.4
	Eastern	40,928	60.8
CSFP		358	0.5
Province		67,293	100.0

### (b) By population density

Area	Number of students (n)	Percentage
Urban regions	43,072	64.0
Rural regions	24,221	36.0
Province	67,293	100.0

Table 2: Enrolment trends

### (a) Provincial enrolment

Year	Student enrolment
2010/11	68,729
2011/12	67,933
2012/13	67,604
2013/14	67,436
2014/15	67,293
Actual change*	1,436
Percentage change*	-2.1

Note:

<sup>\*</sup> Between 2010/11 and 2014/15

### (b) Urban and rural enrolment

Year	Urban regions	Rural regions	Province
2010/11	42,225	26,504	68,729
2011/12	42,185	25,748	67,933
2012/13	42,483	25,121	67,604
2013/14	42,829	24,607	67,436
2014/15	43,072	24,221	67,293
Actual change*	847	-2,283	-1,436
Percentage change*	2.0	-8.6	-2.1

Note:

### (c) District enrolment

Year	NLESD				CSFP
Teal	Labrador	Western	Central	Eastern	COFF
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
2013/14	3,335	11,147	11,781	40,817	356
2014/15	3,348	10,967	11,692	40,928	358
Actual change*	-65	-1079	-639	255	92
Percentage change*	-1.9	-9.0	-5.2	0.6	34.6

Note:

# (d) Enrolment by grade level

Year	Primary (K-3)	Elementary (4-6)	Intermediate (7-9)	High School (10-12)
2010/11	19,319	15,384	16,210	17,087
2011/12	19,340	15,115	16,016	16,840
2012/13	19,531	14,994	15,905	16,684
2013/14	19,947	14,858	15,615	16,511
2014/15	20,143	14,794	15,379	16,453
Actual change*	824	-590	-831	-205
Percentage change*	4.3	-3.8	-5.1	-3.7

Note:

<sup>\*</sup> Between 2010/11 and 2014/15

<sup>\*</sup> Between 2010/11 and 2014/15

<sup>\*</sup> Between 2010/11 and 2014/15

Table 3: A profile of the province's FTE educators (2014/15)

# (a) Breakdown by position

Position	Number of educators	Percentage
Administrative	662	12.3
Classroom teacher	3,437	63.9
Instructional Resource Teacher	809	15.0
Other	471	8.8
Total	5,379	100.0

# (b) By district and region

District/region		Number of educators	Percentage
	Labrador	267	5.0
MLECD	Western	950	17.7
NLESD	Central	971	18.1
	Eastern	3139	58.4
CSFP		52	1.0
	Province	5,379	100.0

# (c) By age

Age	Number of educators	Percentage
Younger than 30 years	497	9.2
30-39 years	1,580	29.4
40-49 years	2,016	37.5
50 years or older	1,286	23.9
Province	5,379	100.0

# (d) By experience

Years of experience	Number of educators	Percentage
Less than 10 years	1,819	33.8
10-19 years	1,848	34.4
20 years or more	1,712	31.8
Province	5,379	100.0

Table 4: Trends in the number of FTE educators (2010/11 – 2014/15)

### (a) Provincial

Year	Number of educators
2010/11	5,544
2011/12	5,529
2012/13	5,515
2013/14	5,357
2014/15	5,379
Actual change*	-165
Percentage change*	-3.0

Note:

### (b) By district and regional

Year		NLE	SD		CSFP	Province
Teal	Labrador	Western	Central	Eastern	CSFF	Province
2010/11	287	1,075	1,039	3,101	42	5,544
2011/12	289	1,074	1,041	3,083	42	5,529
2012/13	313	1,033	1,035	3,090	45	5,515
2013/14	281	1,000	1,007	3,020	49	5,357
2014/15	267	950	971	3,139	52	5,379
Actual change*	-20	-125	-68	38	10	-165
Percentage change*	-7.0	-11.6	-6.5	1.2	23.8	-3.0

Note:

<sup>\*</sup> Between 2010/11 and 2014/15



<sup>\*</sup> Between 2010/11 and 2014/15

# (c) By age

	Number of		Percentage who were				
Year	Year educators	Younger than 30 years	30-39 years	40-49 years	50 years or older		
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		
2013/14	5,357	10.4	28.2	39.2	22.2		
2014/15	5,379	9.2	29.4	37.5	23.9		
Actual change*	-165	-187	139	-242	125		
Percentage change*	-3.0	-27.3	9.6	-10.7	10.		

Note:

# (d) By gender

Year	Number of	Ma	ale	Fen	nale
Teal	educators	Number	Percentage	Number	Percentage
2010/11	5,544	1,600	28.9	3,944	71.1
2011/12	5,529	1,565	28.3	3,964	71.7
2012/13	5,515	1,535	27.8	3,980	72.2
2013/14	5,357	1,466	27.4	3,891	72.6
2014/15	5,379	1,461	27.2	3,918	72.8
Actual change*	-165	-139		-26	
Percentage change*	-3.0	-8.7		-0.7	

Note:

<sup>\*</sup> Between 2010/11 and 2014/15



<sup>\*</sup> Between 2010/11 and 2014/15



Table 5: Provincial and district PTR's (2014/15)

District/region		PTR
	Labrador	12.1
NLESD	Western	11.2
NLESD	Central	11.6
	Eastern	12.5
CSFP		6.9
	Province	12.1

Table 6: Trends in the PTR (2010/11-2014/15)

# (a) Provincial, district and regional

Distric	ct/region	2010/11	2011/12	2012/13	2013/14	2014/15
	Labrador	11.5	11.3	10.3	11.5	12.1
NLESD	Western	10.9	10.5	10.6	10.8	11.2
INLESD	Central	11.5	11.2	11.1	11.3	11.6
	Eastern	12.7	12.7	12.7	13.0	12.5
CSFP		6.3	7.3	7.3	7.3	6.9
Pro	vince	12.0	11.9	11.8	12.1	12.1

### (b) Canadian and jurisdictional PTR<sup>1</sup> (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

Table 7: School indicators (2014/15)

### (a) Number of schools by district/region

District/region		Number of schools	Percentage
	Labrador	15	5.7
MIECD	Western	62	23.7
NLESD	Central	65	24.8
	Eastern	115	43.9
CSFP		5	1.9
Province		262	100.0

### (b) By population density

Area	Number of schools	Percentage
Urban regions	97	37.0
Rural regions	164	62.6
Province	262	100.0

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 8: Change in the number of schools (20010/11 -2014/15)

### (a) Provincial, district and regional trends

Voor		NLE	NLESD		CSFP	Province
Year	Labrador	Western	Central	Eastern	CSFP	Province
2010/11	15	65	66	121	5	272
2011/12	15	65	65	118	5	268
2012/13	15	65	65	118	5	268
2013/14	15	63	65	116	5	264
2014/15	15	62	65	115	5	262
Actual change*	0	-3	-1	-6	0	-10
Percentage change*	0.0	-4.6	-1.5	-5.0	0.0	-3.7

Note:

### (b) Population density trends

Year	Urban regions	Rural regions	Province
2010/11	102	170	272
2011/12	99	169	268
2012/13	99	169	268
2013/14	99	164	264
2014/15	97	164	262
Actual change*	-5	-6	-10
Percentage change*	-4.9	-3.5	-3.7

Note:

<sup>\*</sup> Between 2010/11 and 2014/15



<sup>\*</sup> Between 2010/11 and 2014/15

Table 9: School Configurations (2014/15)

### (a) Provincial breakdown

School configuration	Number of schools	Percentage
Primary	12	4.6
Elementary	97	37.0
Intermediate	20	7.6
Secondary	24	9.2
Senior High	24	9.2
K-12	85	32.4
Total	262	100.0

# (b) By population density

School	Percentage of schools in			
configuration	Urban regions (n=97)	Rural regions (n=165)		
Primary	6.2	3.6		
Elementary	48.5	30.3		
Intermediate	17.5	1.8		
Secondary	5.2	11.5		
Senior High	18.6	3.6		
K-12	4.1	49.1		
Total	100.0	100.0		

# (c) By district and region

School	NLESD				CSFP	Province
configuration	Labrador (n=15)	Western (n=62)	Central (n=65)	Eastern (n=115)	(n=5)	(n=262)
Primary	13.3	1.6	9.2	2.6	0.0	4.6
Elementary	20.0	30.6	27.7	47.8	40.0	37.0
Intermediate	0.0	4.8	4.6	12.2	0.0	7.6
Secondary	13.3	3.2	13.8	9.6	0.0	9.2
Senior High	0.0	9.7	6.2	12.2	0.0	9.2
K-12	53.3	50.0	38.5	15.7	60.0	32.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note:

<sup>\*</sup> Between 2010/11 and 2014/15

Table 10: Average class size (2014/15)

Grade level	NLESD				CSFP	Province
Grade level	Labrador	Western	Central	Eastern	COFF	FIUVIIICE
Primary (K-3)	15.6	14.7	16.1	18.3	11.1	17.0
Elementary (4-6)	16.4	16.1	17.2	18.9	13.5	17.9
Intermediate (7-9)	17.1	18.2	18.2	21.2	10.0	19.8
K-9	16.5	16.3	17.2	19.3	11.8	18.2

(b) Trends in average class size (2010/11 – 2014/15)

Grade level	2010/11	2011/12	2012/13	2013/14	2014/15
Primary (K-3)	16.9	16.6	16.7	17.0	17.0
Elementary (4-6)	18.2	18.0	18.2	18.0	18.0
Intermediate (7-9)	19.8	19.4	19.5	19.0	20.0
K-9	18.2	17.9	18.1	18.0	18.0

### **Chapter 5: Provincial Assessments in English Language Arts (ELA)**

Table 11: Grade 3 student performance (2014/15)

(a) Average reading scores by region

Region	Number of students assessed	Average score
Labrador	179	79.6
Western	689	84.2
Central	689	82.4
Eastern	2,494	84.0
Province	4,129	83.6

### (b) Gender differences in average reading scores

Gender	Number of students assessed	Average score	
Male	2,169	82.7	
Female	1,960	84.6	
Gender gap <sup>2</sup>		1.9	

### (c) Percentage of students who met/exceeded grade level expectations

Region	Number of students assessed	Reading	Writing
Labrador	179	71.3	64.7
Western	689	75.4	71.1
Central	689	76.9	70.5
Eastern	2,494	77.4	75.4
Province	4,129	76.8	73.6

# (d) Gender differences in the percentage of students who met/exceeded grade level expectations

Gender	Number of students assessed	Reading	Writing
Male	2,169	72.7	65.8
Female	1,960	81.0	82.0
Gender gap		8.4	16.2

Table 12: Provincial trends in Grade 3 student performance (2009/10 – 2014/15)

## (a) Average score

Year	Number of students assessed	Average score
2009/10	4,317	92.2
2010/11	4,315	79.7
2011/12	4,212	67.5
2012/13	4,176	72.7
2014/15	4,129	83.6

### (b) Percentage who met/exceeded grade level expectations

Year	Number of students assessed	Reading	Writing
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
2014/15	4,129	76.8	73.6

Table 13: Grade 6 student performance (2014/15)

### (a) Average reading scores by region

Region	Number of students assessed	Average score
Labrador	231	76.7
Western	789	79.7
Central	835	81.0
Eastern	2,891	81.5
Province	4,820	81.0

#### (b) Gender differences in average reading scores

Gender	Number of students assessed	Average score
Male	2,422	79.8
Female	2,398	82.1
Gender gap		2.0

### (c) Percentage of students who met/exceeded grade level expectations

Region	Number of students assessed	Reading	Writing
Labrador	231	82.6	76.6
Western	789	87.0	84.3
Central	835	88.0	84.2
Eastern	2,891	88.1	85.9
Province	4,820	87.8	85.1

# (d) Gender differences in the percentage of students who met/exceeded grade level expectations

Gender	Number of students assessed	Reading	Writing
Male	1,422	85.0	78.2
Female	2,398	90.5	92.0
Gender gap		5.5	13.9

Table 14: Provincial trends in Grade 6 student performance (2009/10 – 2014/15)

### (a) Average score

Year	Number of students assessed	Average score
2009/10	5,181	81.0
2010/11	5,157	79.5
2011/12	5,020	71.1
2012/13	4,877	78.5
2014/15	4,820	81.0

### (b) Percentage who met/exceeded grade level expectations

Year	Number of students assessed	Reading	Writing
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
2014/15	4,820	87.8	85.1

Table 15: Grade 9 student performance (2014/15)

### (a) Average reading scores by region

Region	Number of students assessed	Average score
Labrador	225	64.6
Western	819	67.7
Central	936	68.5
Eastern	2,930	68.7
Province	4,963	68.4

### (b) Gender differences in average reading scores

Gender	Number of students assessed	Average score
Male	2,588	67.5
Female	2,375	69.2
Gender gap		1.7

#### (c) Percentage of students who met/exceeded grade level expectations

Region	Number of students assessed	Reading	Writing
Labrador	225	66.5	71.4
Western	819	82.6	84.5
Central	936	82.1	86.8
Eastern	2,930	80.7	86.1
Province	4,963	80.6	85.3

# (d) Gender differences in the percentage of students who met/exceeded grade level expectations

Gender	Number of students assessed	Reading	Writing
Male	2,588	77.6	78.3
Female	2,375	83.8	92.8
Gender gap		6.2	14.5

Table 16: Provincial trends in Grade 9 student performance (2009/10 – 2014/15)

### (a) Average score

Year	Number of students assessed	Average score
2009/10	5,306	82.2
2010/11	5,297	68.0
2011/12	5,117	71.7
2012/13	4,951	55.9
2014/15	4,963	68.4

### (b) Percentage who met/exceeded grade level expectations

Year	Number of students assessed	Reading	Writing
2009/10	5,306	71.6	85.4
2010/11	5,297	65.3	83.3
2011/12	5,117	88.8	90.7
2012/13	4,951	86.2	92.7
2014/15	4963	80.6	85.3

Table 17: Change in student performance (2014/15)

### (a) Provincial

		Grade 3 (n= 4,129)	Grade 6 (n=4,820)	Grade 9 (n=4.963)
Average reading score		83.6	81.0	68.4
Percentage meeting/	Reading	76.8	87.8	80.6
exceeding grade level expectations in:	Writing	73.6	85.1	85.3

### (b) Gender differences in average scores

Gender	Grade 3	Grade 6	Grade 9
Male	82.7	79.8	67.5
Female	84.6	82.1	69.2
Gender gap	-1.9	2.3	1.7

### (c) Gender differences in reading proficiency levels

Gender	Grade 3	Grade 6	Grade 9
Male	72.7	85.0	77.6
Female	81.0	90.5	83.8
Gender gap	-8.4	5.5	6.2

### (d) Gender differences writing proficiency levels

Gender	Grade 3	Grade 6	Grade 9
Male	65.8	78.2	78.3
Female	82.0	92.0	92.8
Gender gap	16.2	13.9	14.5



### **Chapter 6: Public Examinations**

Table 18: Student performance on public examination courses (2014/15)

	Course name	Number of students	Success rate	Average course mark
Languages	Français 3202 (Immersion)	620	99.2	75.7
	English 3201	4,003	97.6	69.9
	Mathematics 3201 (Academic)	2,782	87.4	66.1
Mathematics	Mathematics 3200 (Advanced)	1,114	97.3	77.4
	Mathématiques 3231	5	0.0	30.8
	World History 3201	1,137	92.3	69.7
Social studies	World Geography 3202	2,570	95.5	69.7
	Histoire mondiale 3231	462	95.7	72.1
	Biology 3201	2,825	91.4	67.6
	Biologie 3231	5	0.0	41.6
Science	Chemistry 3202	1,761	93.9	72.8
	Physics 3204	1,080	92.9	73.4
	Earth Systems 3209	868	83.4	61.1

Table 19: Student performance in language courses

(a) District/regional results (2014/15)

Course name	District/region	Number of students	Average final course mark
	NLESD – Labrador	156	63.8
	NLESD – Western	718	69.1
English 3201	NLESD - Central	677	69.7
	NLESD – Eastern	2,382	70.6
	CSFP	5	50.8
	NLESD – Labrador	23	74.7
Français 3202	NLESD – Western	43	75.9
(Immersion)	NLESD – Central	43	80.1
	NLESD – Eastern	511	75.3

### (b) Gender differences (2014/15)

	Male		Fen		
Course name	Number of students	Average final course mark	Number of students	Average final course mark	Gender gap
English 3201	1,857	66.9	2,146	72.5	5.7
Français 3202 (Immersion)	212	72.9	408	77.1	4.1

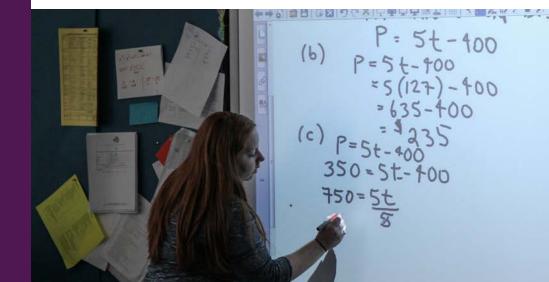
### (c) Provincial trends (2010/11 – 2014/15)

Course name	2010/11	2011/12	2012/13	2013/14	2014/15
English 3201	66.2	65.0	69.3	71.0	69.9
Français 3202 (Immersion)	73.7	75.6	75.7	75.0	75.7

Table 20: Student performance in mathematics courses

### (a) District/regional results (2014/15)

Course name	District/region	Number of students	Average final course mark
	NLESD – Labrador	92	64.4
Mathematics 3201	NLESD – Western	577	64.7
(Academic)	NLESD – Central	466	68.2
	NLESD – Eastern	1,590	66.1
	NLESD – Labrador	35	73.2
Mathematics 3200	NLESD – Western	127	81.5
(Advanced)	NLESD - Central	193	79.9
	NLESD – Eastern	748	76.2
Mathématiques 3231	CSFP	5	30.8



### (b) Gender differences (2014/15)

	Ma	ale	Female		
Course name	Number of students	Average final course mark	Number of students	Average final course mark	Gender gap
Mathematics 3201 (Academic)	1,298	63.8	1,484	68.1	4.3
Mathematics 3200 (Advanced)	514	77.4	600	77.3	-0.1
Mathématiques 3231	2	31.5	3	30.3	-1.2

### (c) Provincial trends (2010/11 – 2014/15)

Course name	2010/11	2011/12	2012/13	2013/14	2014/15
Mathematics 3201 (Academic)	62.0	62.7	61.3	64.0	66.1
Mathematics 3200 (Advanced)	79.3	79.1	79.7	78.0	77.4
Mathématiques 3231	54.8	55.0	60.5	53.7	30.8

Table 21: Student performance in social studies courses

### (a) District/regional results (2014/15)

Course name	District/region	Number of students	Average final course mark
	NLESD – Labrador	36	66.0
World History 3201	NLESD – Western	109	67.8
World History 3201	NLESD - Central	108	70.1
	NLESD – Eastern	836	69.8
	NLESD – Labrador	120	64.8
Morld Coography 2202	NLESD – Western	584	70.3
World Geography 3202	NLESD - Central	473	73.1
	NLESD – Eastern	1,370	68.8
	NLESD – Labrador	26	64.0
	NLESD – Western	35	72.9
Histoire mondiale 3231	NLESD - Central	21	70.9
	NLESD – Eastern	369	73.4
	CSFP	11	48.3

### (b) Gender differences (2014/15)

	Male		Fen		
Course name	Number of students	Average final course mark	Number of students	Average final course mark	Gender gap
World History 3201	571	69.1	565	70.3	1.2
World Geography 3202	1,253	68.6	1,316	70.8	2.1
Histoire mondiale 3231	166	72.5	296	71.9	-0.7

### (c) Provincial trends (2010/11 – 2014/15)

Course name	2010/11	2011/12	2012/13	2013/14	2014/15
World History 3201	69.3	70.3	68.5	70.0	69.7
World Geography 3202	68.0	68.7	69.9	70.0	69.7
Histoire mondiale 3231	69.0	74.7	72.7	71.0	72.1



Table 22: Student performance in science courses

### (a) District/regional results (2014/15)

Course name	District/region	Number of students	Average final course mark
Biologie 3231	CSFP	5	41.6
	NLESD – Labrador	119	64.4
Piology 2201	NLESD – Western	619	66.5
Biology 3201	NLESD - Central	445	68.4
	NLESD – Eastern	1,584	68.1
	NLESD – Labrador	45	72.5
Chamiatry 2202	NLESD – Western	272	74.4
Chemistry 3202	NLESD - Central	267	74.4
	NLESD – Eastern	1,160	71.9
	NLESD – Labrador	30	74.5
Dhysics 2204	NLESD – Western	151	71.8
Physics 3204	NLESD - Central	152	78.4
	NLESD – Eastern	734	72.6
	NLESD – Labrador	21	61.5
Earth Systems 2200	NLESD – Western	94	61.1
Earth Systems 3209	NLESD – Central	63	61.1
	NLESD – Eastern	681	60.9

### (b) Gender differences (2014/15)

	Ma	ale	Fen		
Course name	Number of students	Average final course mark	Number of students	Average final course mark	Gender gap
Biologie 3231	2	37.5	3	44.3	6.8
Biology 3201	1,023	64.4	1,801	69.4	5.0
Chemistry 3202	750	72.7	1,011	72.8	0.1
Physics 3204	699	72.0	381	76.1	4.1
Earth Systems 3209	505	59.4	363	63.4	4.0

#### (c) Provincial trends (2010/11 – 2014/15)

Course name	2010/11	2011/12	2012/13	2013/14	2014/15
Biologie 3231	48.1	39.0	56.5	58.0	41.6
Biology 3201	64.0	65.8	66.5	65.3	67.6
Chemistry 3202	71.1	71.2	71.9	72.8	72.8
Physics 3204	73.9	74.5	75.0	73.3	73.4
Earth Systems 3209	61.7	62.6	60.3	61.8	61.1

### **Chapter 7: International Computer and Information Literacy Study (ICILS)**

Table 23: Computer and Information Literacy (CIL) average score (ICILS 2013)

#### (a) National and international jurisdictions

	Country/province	Average	95% CI*	95% Confide	95% Confidence Interval		
	Country/province	score	95% CI	Lower limit	Upper limit		
Significantly	Czech Republic	553	4.1	548.9	557.1		
higher than	Ontario	547	6.3	540.7	553.3		
NL	Australia	542	4.5	537.5	546.5		
	Poland	537	4.7	532.3	541.7		
	Norway (Grade 9)	537	4.7	532.3	541.7		
No	Korea	536	5.3	530.7	541.3		
significant difference from NL	Newfoundland and Labrador	528	5.5	522.5	533.5		
	Germany	523	4.7	518.3	527.7		
	Slovak Republic	517	9.0	508.0	526.0		
	Russian Federation	516	5.5	510.5	521.5		
	Croatia	512	5.7	506.3	517.7		
Significantly	Slovenia	511	4.3	506.7	515.3		
lower than	Lithuania	494	7.1	486.9	501.1		
NL	Chile	487	6.1	480.9	493.1		
	Thailand	373	9.2	363.8	382.2		
	Turkey	361	9.8	351.2	370.8		

Note:

CI is the 95 Confidence Interval and is calculated with the following formula CI=1.96  $^{\star}$  Standard Error

Table 24: Gender differences in student performance (ICILS 2013)

Country	Fen	nale	Ma	Gender	
Country/ province	Average score	95% CI	Average score	95% CI	gap
Korea	556	6.1	517	7.3	38
Newfoundland and Labrador	544	8.0	509	7.3	35
Slovenia	526	5.5	497	5.5	29
Ontario	560	7.8	535	6.7	25
Chile	499	7.6	474	7.6	25
Australia	554	5.5	529	6.5	24
Norway (Grade 9)	548	5.5	525	6.1	23
Lithuania	503	8.2	486	7.4	17
Germany	532	5.7	516	6.3	16
Croatia	520	6.1	505	7.1	15
Russian Federation	523	5.5	510	6.7	13
Slovak Republic	524	9.4	511	10.0	13
Poland	544	5.7	531	6.1	13
Czech Republic	559	3.9	548	5.5	12
Thailand	378	11.2	369	10.4	9
Turkey	362	10.2	360	10.6	2
International	509	2.0	491	2.0	18



Table 25: Percentage of students at each CIL proficiency level (ICILS 2013)

Country/ province	Below level 1	Level 1	Level 2	Level 3	Level 4
Czech Republic	2	13	48	34	3
Ontario	4	18	42	32	5
Norway (Grade 9)	5	19	46	27	3
Australia	5	18	42	30	4
Poland	6	20	42	29	4
Newfoundland and Labrador	7	24	40	25	4
Germany	7	22	45	24	1
Slovenia	8	28	47	16	0
Russian Federation	9	27	41	21	2
Korea	9	19	36	30	5
Croatia	11	25	42	31	1
Slovak Republic	12	21	40	25	2
Lithuania	15	30	39	15	1
Chile	18	30	40	13	0
Thailand	64	23	11	2	2
Turkey	67	24	8	1	1
International	17	23	38	21	2



### **Chapter 8: The Pan-Canadian Assessment Program (PCAP)**

Table 26: Average scores in science (PCAP 2013)

### (a) Across Canada

	Jurisdiction	Average	95%	95% Confid	lence Interval
	Julisalction	score	CI	Lower limit	Upper limit
Significantly	Alberta	521	4.9	516.1	525.9
higher than NL	Ontario	511	4.5	506.5	515.5
	British Columbia	501	4.2	496.8	505.2
No significant	Newfoundland and Labrador	500	4.3	495.7	504.3
difference from	Canada	500	1.9	498.1	501.9
NL	Nova Scotia	492	3.6	488.4	495.6
	Prince Edward Island	491	5.0	486	496
	Saskatchewan	486	4.2	481.8	490.2
Significantly	Quebec	485	3.6	481.4	488.6
lower than NL	New Brunswick	469	3.7	465.3	472.7
	Manitoba	465	3.1	461.9	468.1

### (b) Gender differences

	Fen	nale	Ma	Gender	
Jurisdiction	Average score	95% CI	Average score	95% CI	gap
British Columbia	503	5.4	498	4.8	5
Alberta*	525	6.2	516	6.4	9
Saskatchewan*	481	5	490	6.1	-9
Manitoba	463	4.6	467	4.6	-4
Ontario	511	5.6	511	5.7	0
Quebec	485	4.8	485	4.5	0
New Brunswick	472	5.5	467	5.3	5
Nova Scotia	491	5.7	492	5.2	-1
Prince Edward Island	488	7.2	495	5.6	-7
Newfoundland and Labrador	500	6.7	500	7.7	0
Canada	503	5.4	498	4.8	5

Note

<sup>\*</sup> significant gender difference present

Table 27: Student proficiency in science (PCAP 2013)

### (a) Percentage of students at each proficiency level across Canada

Jurisdiction	Level 1	Level 2	Level 3	Level 4
British Columbia	9	43	39	9
Alberta	6	37	44	12
Saskatchewan	11	47	35	6
Manitoba	15	53	29	4
Ontario	7	41	43	10
Quebec	9	50	36	5
New Brunswick	13	52	31	4
Nova Scotia	9	48	37	6
Prince Edward Island	7	50	37	6
Newfoundland and Labrador	6	47	39	8
Canada	8	44	39	8

### (b) Gender differences in proficiency levels

Jurisdic-	Level 1		Lev	Level 2		el 3	Level 4	
tion	Female	Male	Female	Male	Female	Male	Female	Male
ВС	8	10	43	42	39	38	9	9
AB	6	7	37	38	45	44	13	11
SK	12	10	49	46	33	38	6	6
MB	15	14	53	52	28	29	4	4
ON	6	8	43	38	42	43	9	10
QC	9	8	50	51	36	36	5	4
NB	11	15	53	50	32	31	4	4
NS	8	9	50	46	35	38	6	6
PE	6	7	51	48	36	38	7	6
NL	6	7	47	47	39	39	8	8
CAN	8	9	45	43	39	40	8	8

Table 28: Student performance on the science sub-domains (PCAP 2013)

### (a) Average scores across Canada

Juris-	Nature of Science		Life so	Life science		Physical science		Earth science	
diction	Average score	95% CI	Average score	95% CI	Average score	95% CI	Average score	95% CI	
ВС	496	3.6	513	4.0	498	3.6	497	3.8	
AB	524	3.9	513	4.0	509	3.7	513	4.2	
SK	485	3.1	491	4.2	489	4.6	494	3.7	
MB	469	3.0	481	4.2	470	3.2	477	3.5	
ON	508	3.5	508	3.9	511	3.7	505	3.7	
QC	489	2.7	482	3.2	489	3.1	494	3.4	
NB	477	3.2	474	4.0	477	3.2	481	2.7	
NS	492	3.8	490	3.4	497	4.1	498	3.7	
PE	490	5.5	488	4.3	494	5.1	504	5.6	
NL	495	5.1	506	4.6	494	4.3	506	5.9	
CAN	500	2.0	500	2.0	500	2.0	500	1.6	

### (b) Gender differences - (i) Nature of Science

	Fen	nale	Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia	497	5.0	495	6.4
Alberta	526	6.2	521	7.0
Saskatchewan	482	4.8	488	3.8
Manitoba	470	4.9	469	5.4
Ontario	508	6.3	509	7.0
Quebec	491	5.1	488	4.6
New Brunswick	480	4.3	475	5.8
Nova Scotia	494	5.6	491	6.5
Prince Edward Island	486	7.2	494	7.7
Newfoundland and Labrador	493	7.2	496	6.5
Canada	501	2.7	499	2.8

### (ii) Life science

	Fen	nale	Male		
Jurisdiction	Average score	95% CI	Average score	95% CI	
British Columbia*	517	4.9	508	5.0	
Alberta*	517	5.7	508	6.2	
Saskatchewan	487	4.1	494	9.1	
Manitoba	478	4.9	484	5.4	
Ontario	506	5.1	510	4.7	
Quebec	484	5.3	481	4.6	
New Brunswick	478	5.3	471	4.8	
Nova Scotia	491	4.3	489	5.6	
Prince Edward Island	491	7.8	486	8.0	
Newfoundland and Labrador	506	7.8	507	7.6	
Canada	501	2.5	499	2.1	

Note:

### (iii) Physical science

	Fen	nale	Male		
Jurisdiction	Average score	95% CI	Average score	95% CI	
British Columbia	500	5.7	496	5.5	
Alberta	509	6.6	510	6.9	
Saskatchewan*	484	4.7	493	6.1	
Manitoba*	466	5.7	475	5.7	
Ontario	511	5.5	511	5.7	
Quebec*	484	5.4	493	5	
New Brunswick	477	4.6	477	4.5	
Nova Scotia	494	5.9	500	4.8	
Prince Edward Island	489	6.9	499	6.5	
Newfoundland and Labrador	490	5.5	499	7.2	
Canada	499	2.5	501	2.4	

Note:

<sup>\*</sup> significant gender difference present

<sup>\*</sup> significant gender difference present

(iv) Earth science

	Fen	nale	Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia	497	5.2	497	4.6
Alberta*	519	6.1	507	6.1
Saskatchewan*	489	4.5	498	4.8
Manitoba	475	5.3	479	4.9
Ontario	506	6.1	504	5.6
Quebec	493	3.8	495	4.1
New Brunswick	179	4.6	483	4.4
Nova Scotia*	493	4.5	503	5.2
Prince Edward Island	497	6.5	511	6.7
Newfoundland and Labrador*	512	6.9	500	6.8
Canada	501	3.3	500	2.9

Note:

Table 29: Student performance on the science competencies (PCAP 2013)

### (a) Average scores

Jurisdic-	Science Inquiry		Problem	Problem solving		Scientific reasoning	
tion	Average score	95% CI	Average score	95% CI	Average score	95% CI	
ВС	496	3.4	495	3.6	507	3.7	
AB	525	3.7	506	3.7	515	4.5	
SK	485	3.3	492	3.4	489	4.3	
MB	469	3.8	473	3.4	472	2.8	
ON	508	4.7	510	4.1	509	3.4	
QC	489	3.3	491	3.4	484	3.4	
NB	475	3.2	482	4.7	471	3.8	
NS	494	4.4	495	4.1	492	4.4	
PE	492	5.7	501	5.2	492	6.5	
NL	496	4.7	498	5.5	505	5.4	
CAN	500	1.7	500	1.8	500	2.0	

<sup>\*</sup> significant gender difference present

### (b) Gender differences

### (i) Science Inquiry

	Female		Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia*	501	5.2	492	6.4
Alberta*	530	6.3	520	5.8
Saskatchewan	483	4.8	488	6.0
Manitoba	471	5.1	467	5.3
Ontario	510	6.7	505	5.1
Quebec*	493	5.6	486	3.8
New Brunswick*	479	4.5	472	5.2
Nova Scotia*	498	5.0	490	5.6
Prince Edward Island	489	7.6	494	6.9
Newfoundland and Labrador	498	6.8	494	7.3
Canada*	503	2.6	497	3.3

Note:

### (ii) Problem solving

	Fen	nale	Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia	497	4.9	493	5.2
Alberta	506	5.1	506	5.4
Saskatchewan*	485	4.8	498	5.4
Manitoba*	469	6.3	476	4.6
Ontario	509	5.5	512	5.7
Quebec*	488	4.9	494	3.8
New Brunswick*	486	5.1	478	5.1
Nova Scotia	493	5.8	497	5.8
Prince Edward Island	500	6.5	501	8.1
Newfoundland and Labrador	497	6.9	499	5.5
Canada	499	3.0	501	2.4

Note:

<sup>\*</sup> significant gender difference present

<sup>\*</sup> significant gender difference present

### (iii) Scientific reasoning

	Fen	nale	Male		
Jurisdiction	Average score	95% CI	Average score	95% CI	
British Columbia	507	4.5	507	5.4	
Alberta*	518	5.5	511	7.5	
Saskatchewan*	486	5.2	493	6.8	
Manitoba*	468	5.7	477	4.7	
Ontario	508	5.1	512	6.1	
Quebec	482	5.1	485	4.3	
New Brunswick	470	5.1	473	6.3	
Nova Scotia	488	4.5	495	4.9	
Prince Edward Island	486	6.7	497	7.1	
Newfoundland and Labrador	504	8.3	506	6.9	
Canada	499	2.5	501	2.7	

Note:

Table 30: Reading assessment (PCAP 2013)

### (a) Across Canada

Jurisdiction	Jurisdiction	Average	95% CI	95% Confidence Interval		
Junsalction	Julisalction	score	95% CI	Lower limit	Upper limit	
Significantly	Ontario	524	3.6	520.4	527.6	
higher than	Canada	508	2.0	506.0	510.0	
NL	Quebec	503	2.5	500.5	505.5	
	British Columbia	502	3.4	498.6	505.4	
No	Alberta	502	3.7	498.3	505.7	
significant difference	Newfoundland and Labrador	495	3.8	491.2	498.8	
from NL	Prince Edward Island	494	4.4	489.6	498.4	
	Nova Scotia	488	3.2	484.8	491.2	
Significantly	Saskatchewan	487	3.1	483.9	490.1	
lower than	New Brunswick	471	3.0	468.0	474.0	
NL	Manitoba	469	2.9	466.1	471.9	

<sup>\*</sup> significant gender difference present

#### (b) Gender differences

	Fen	nale	Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia*	518	4.2	486	4.7
Alberta*	518	5.1	485	5.1
Saskatchewan*	498	3.9	476	5.3
Manitoba*	480	4.3	459	4.2
Ontario*	538	4.8	510	5.5
Quebec*	514	4.6	493	4.3
New Brunswick*	485	4.0	459	5.2
Nova Scotia*	499	5.2	477	5.0
Prince Edward Island*	509	5.9	479	7.2
Newfoundland and Labrador*	503	4.8	486	7.8
Canada*	521	2.2	494	2.3

Note:

#### Change over time (2007 – 2013) (c)

	2007		2010		2013	
Jurisdiction	Average score	95% CI	Average score	95% CI	Average score	95% CI
British Columbia	495	4.1	499	3.7	502	3.4
Alberta	502	4.1	506	4.0	502	3.7
Saskatchewan	482	4.1	491	3.9	487	3.1
Manitoba*+	477	3.9	478	3.8	469	2.9
Ontario*	515	4.2	515	3.9	524	3.6
Quebec*	538	5.7	481	3.6	503	2.5
New Brunswick*	471	3.1	479	3.9	471	3.0
Nova Scotia	483	4.1	489	4.0	488	3.2
Prince Edward Island*	471	4.6	481	9.0	494	4.4
Newfoundland and Labrador*+	478	4.1	486	5.2	495	3.8
Canada*	512	2.3	500	2.2	508	2.0

significant gender difference present between \* 2010 and 2013

<sup>\*</sup> significant gender difference present

<sup>&</sup>lt;sup>+</sup> 2007 and 2013

Table 31: Mathematics assessment (PCAP 2013)

### (a) Across Canada

	Jurisdiction	Average	95% CI	95% Confidence Interval	
	Julisaiction	score	93% CI	Lower limit	Upper limit
	Quebec	527	2.9	524.1	529.9
Significantly	Ontario	512	3.5	508.5	515.5
higher than NL	Canada	507	2.0	505.0	509.0
	Alberta	502	3.9	498.1	505.9
	Prince Edward Island	492	3.7	488.3	495.7
	British Columbia	489	3.2	485.8	492.2
No significant	Saskatchewan	488	3.9	484.1	491.9
difference from NL	Nova Scotia	488	3.3	484.7	491.3
HOIH NL	Newfoundland and Labrador	487	4.7	482.3	491.7
	New Brunswick	480	3.5	476.5	483.5
Sig. lower than NL	Manitoba	471	3.3	467.7	474.3

### (b) Gender differences

	Fen	nale	Male	
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia	491	4.3	487	4.4
Alberta	504	5.1	499	5.3
Saskatchewan	487	4.6	488	6.6
Manitoba	470	3.8	471	4.1
Ontario	511	5.3	514	5.6
Quebec	528	4.8	526	3.4
New Brunswick	483	4.3	477	5.2
Nova Scotia	489	4.0	487	4.4
Prince Edward Island*	498	5.9	485	7.2
Newfoundland and Labrador	489	4.9	484	6.8
Canada	507	1.9	507	2.9

Note:

<sup>\*</sup> significant gender difference present

### (c) Change over time (2010 – 2013)

	20	10	20	13
Jurisdiction	Average score	95% CI	Average score	95% CI
British Columbia*	481	3.6	489	3.2
Alberta*	495	4.0	502	3.9
Saskatchewan*	474	3.8	488	3.9
Manitoba	468	4.2	471	3.3
Ontario	507	4.0	512	3.5
Quebec*	515	3.9	527	2.9
New Brunswick	478	3.9	480	3.5
Nova Scotia*	474	3.9	488	3.3
Prince Edward Island*	460	8.3	492	3.7
Newfoundland and Labrador*	472	5.2	487	4.7
Canada*	500	2.2	507	2.0

Note:

significant gender difference present between 2010 and 2013



### **Chapter 9: Early School Leavers**

Table 32: Early School Leaver Rate (2013/14)

### (a) Provincial, district and region

	District/region	Early School Leaver Rate (ESL)
	Labrador	11.5
NLESD	Western	10.8
NLESD	Central	11.3
	Eastern	13.0
CSFP		7.3
	Province	12.1

Table 33: Trends in the Early School Leaver Rate (2009/10 – 2013/14)

### (a) Provincial, district and regional trends

District/region		2009/10	2010/11	2011/12	2012/13	2013/14
	Labrador	9.5	10.2	11.4	11.2	5.3
NLESD	Western	6.8	6.9	6.4	6.6	4.7
INLESD	Central	6.5	6.6	6.6	5.6	4.3
	Eastern	8.6	8.7	8.8	7.8	6.8
CSFP		8.7	8.3	0.0	8.3	0.0
Pr	ovince	8.1	8.2	8.4	7.7	6.5

#### (b) Gender differences

Gender	2009/10	2010/11	2011/12	2012/13	2013/14
Male	8.1	8.2	8.4	7.7	6.5
Female	5.9	6.4	6.4	6.0	5.9
Gender gap	-2.2	-1.8	-2.0	-1.7	-0.6

Table 34: Dropout rates across Canada

### (a) Across Canada (2012)

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

### (b) Canadian and provincial dropout trends (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



### **Chapter 10: Graduation**

Table 35: High school pass rate (2014/15)

### (a) Provincial, district and region

District/region		Number of students who actually graduate (Actual)	Number of students eligible to graduate (Eligible)	Pass rate (Actual/Eligible)
	Labrador	211	221	95.5
NLESD	Western	839	882	95.1
INLESD	Central	864	892	96.9
Eastern		2,664	2,795	95.3
CSFP		0	4	0.0
	Province	4,693	4,919	95.4

### (b) Gender differences

	Number of st			
Gender	Actually graduate (Actual)	Are eligible to graduate (Eligible)	Pass rate (Actual/Eligible)	
Male	2,337	2,464	97.8	
Female	2,356	2,455	96.0	
Gender gap			-1.8	

Table 36: Trends in the high school pass rate (2010/11 - 2014/15)

### (a) By district and region

District/region		2010/11	2011/12	2012/13	2013/14	2014/15
	Labrador	92.6	87.6	93.9	97.1	95.5
NLESD	Western	92.8	93.4	95.5	94.6	95.1
NLESD	Central	91.1	98.5	96.6	96.7	96.9
	Eastern	91.4	92.5	96.0	94.9	95.3
CSFP		77.8	75.0	100.0	66.7	0.0
Pr	ovince	91.7	92.7	95.7	95.2	95.4

### (b) Gender differences

Gender	2010/11	2011/12	2012/13	2013/14	2015/16
Male	90.9	91.8	95.5	94.9	94.8
Female	92.4	93.6	95.9	95.5	96.0
Gender gap	1.5	1.9	0.3	0.6	1.1

Table 37: Graduation status (2014/15)

### (a) Across the province

District/region		Total number of	Percentage of students with a/an		
		graduates	General diploma	Honours or Academic diploma	
	Labrador	211	45.5	54.5	
NLESD	Western	839	29.6	70.4	
	Central	864	31.6	68.4	
	Eastern	2,664	25.5	74.5	
CSFP		0	0.0	0.0	
Province		4,693	29.0	71.0	

### (b) Gender differences

Gender	Total number of graduates	Percentage of st General diploma	tudents with a/an Honours or Academic diploma	
Male	2,337	35.6	64.4	
Female	2,356	22.5	77.5	
Gender gap		-13.1	13.1	

Table 38: Trends in the percentage of students graduating with an academic/honours diploma (2010/11 – 2014/15)

#### (a) Across the province

Distric	ct/region	2010/11	2011/12	2012/13	2013/14	2014/15
	Labrador	57.0	58.4	58.8	57.0	54.5
MIECD	Western	64.6	66.6	69.3	68.6	70.4
NLESD	Central	63.3	66.6	61.6	62.6	68.4
	Eastern	71.3	71.3	70.4	73.1	74.5
CSFP		42.9	0.0	57.1	0.0	0.0
Pro	vince	67.0	67.8	67.1	69.5	71.0

### (b) Gender differences

Gender	2010/11	2011/12	2012/13	2013/14	2014/15
Male	60.2	60.7	59.9	64.0	64.4
Female	64.6	66.6	69.3	68.5	77.5
Gender gap	4.4	5.9	9.4	4.6	6.0

Table 39: Graduation rates across Canada (2009/10²)

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	

<sup>2</sup> This is the most recent information released by Statistics Canada.

### Appendix B: Computer and Information Literacy proficiency levels

A description of the computer and information literacy (CIL) proficiency levels<sup>3</sup> used in the International Computer and Information Literacy Study (ICILS).

#### Level 4 (661 score points and more)

Students working at level 4 select the most relevant information to use for communicative purposes. They evaluate the usefulness of information based on criteria associated with their need and evaluate the reliability of information based on its content and probable origin. These students create information products that demonstrate a consideration of audience and communicative purpose. They also use appropriate software features to restructure and present information in a manner consistent with presentation conventions and adapt that information to suit the needs of an audience. Students working at level 4 demonstrate awareness of problems that can arise regarding the use of proprietary information on the Internet.

#### Level 3 (from 576 to 661 score points)

Students working at level 3 demonstrate the capacity to work independently when using computers as information-gathering and management tools. These students select the most appropriate information source to meet a specified purpose, retrieve information from given electronic sources to answer concrete questions, and follow instructions to use conventionally recognized software commands to edit, add content to, and reformat information products. They recognize that the credibility of Web-based information can be influenced by the identity, expertise, and motives of the information's creators.

#### Level 2 (from 492 to 576 score points)

Students working at level 2 use computers to complete basic and explicit information-gathering and management tasks. They locate explicit information from within given electronic sources. These students make basic edits and add content to existing information products in response to specific instructions. They create simple information products that show consistency of design and adherence to layout conventions. Students working at level 2 demonstrate awareness of mechanisms for protecting personal information and some consequences of public access to personal information.

#### Level 1 (from 407 to 492 score points)

Students working at level 1 demonstrate a functional working knowledge of computers as tools and a basic understanding of the consequences of computers being accessed by multiple users. They apply conventional software commands to perform basic communication tasks and add simple content to information products. They demonstrate familiarity with basic layout conventions of electronic documents.

From Labrecque & Dionne (2014), p.15

### Appendix C: PCAP 2013 science performance levels

A Description of science performance levels<sup>4</sup> used by the Pan-Canadian Assessment Program (PCAP 2013)

#### Level 4 (Scores of 655 and above)

Students at performance level 4 communicate an understanding of complex and abstract concepts in science. They can identify the scientific components of many complex life situations; apply both scientific concepts and knowledge about science to these situations; and can compare, select, and evaluate appropriate scientific evidence for responding to life situations. Students at this level can use well-developed inquiry abilities, link knowledge appropriately, and bring critical insights to these situations. They can construct evidence-based explanations and arguments based on their critical analysis. They can combine information from several sources to solve problems and draw conclusions, and can provide written explanations to communicate scientific knowledge.

#### Level 3 – Above Expected Level (Scores between 516 and 654)

Students at performance level 3 demonstrate understanding of concepts related to science principles. They demonstrate some science inquiry skills, and combine and interpret information from various types of diagrams, graphs, and tables; select relevant information, analyze, and draw conclusions; and provide explanations conveying scientific knowledge. At this level, students can work effectively with situations and issues that may involve explicit phenomena requiring them to make inferences about the role of science. They can select and integrate explanations from different disciplines of science and link those explanations directly to aspects of life situations. Students at this level can reflect on their actions, and they can communicate decisions using scientific knowledge and evidence.

#### Level 2 – At Expected Level (Scores between 379 and 515)

Students at performance level 2 recognize and apply their understanding of basic scientific knowledge in various contexts. They interpret information from tables, graphs, and pictorial diagrams; draw conclusions; and communicate their understanding through brief descriptive responses. At this level, students can identify clearly described scientific issues in a range of contexts. They can select facts and knowledge to explain phenomena and apply simple models or inquiry strategies. They can interpret and use scientific concepts from different disciplines and can apply them directly. They can also develop short communications using facts and make decisions based on scientific knowledge.

<sup>4</sup> From O'Grady & Houme (2013), p.13

#### Level 1 – Below Expected Level (Scores of 378 and less)

Students at performance level 1 may recognize some basic science facts and may be able to interpret simple pictorial diagrams, complete simple tables, and apply basic knowledge to practical situations. At this level, they may be able to provide possible explanations in familiar contexts or draw conclusions based on simple investigations. They may be capable of direct reasoning and making literal interpretations of the results of scientific inquiry.

### Appendix D: Bibliography

- Department of Education (2008). *Building Learning Communities: A Handbook for School Councils 2<sup>nd</sup> Edition*. St. John's, NL: Author
- Department of Education and Early Childhood Development (2015). *Program of Studies 2015-2016.* St. John's, NL: Author
- Department of Education and Early Childhood Development (2014). 2014-2017 Strategic Plan. St. John's, NL: Author
- Labrecque, M. & Dionne, J. (2014). *ICILS 2013 Preparing for Life in a Digital Age:*Results for Ontario and Newfoundland and Labrador. Toronto, ON: Council of Ministers of Education, Canada
- O'Grady, K. & Houme, K. (2014). *PCAP 2013 Report on the Pan-Canadian Assessment of Science, Reading, and Mathematics*. Toronto, ON: Council of Ministers of Education, Canada

# Indicators 2014/15 -

# A Report on Schools



**Education and Early Childhood Development** 

Department of Education and Early Childhood Development P.O. Box 8700 St. John's, NL A1B 4J6

Telephone: (709) 729-5097 Facsimile: (709) 729-1400

www.ed.gov.nl.ca/edu/