

EDUCATION INDICATORS

2013 Edition



This publication was produced by the Direction des statistiques et de l'information décisionnelle.

Supervision: Myriam Proulx
Coordination: Kouadio Antoine N'Zué
Text: Simon Bézy
Luc Beauchesne
Alain Carpentier
Karl De Grandpré
Marius Demers
Pierre Ducharme
François Girard
Pie Landry Iloud
Caroline Major
Kouadio Antoine N'Zué
Raymond Ouellette
Richard Royer
Gaston Sylvain
Statistical Appendix: Karl De Grandpré
Caroline Major
Computer Processing: Marie-Anne Bilodeau Nicole Dion
Guy Boulianne Hugo Ouellet
France Brassard Karl Mathieu
Maryse Dallaire Robert Szalay
Production: Direction des communications
Computer graphics: Deschamps Design
Special Assistance:* Secteur des services aux anglophones, aux autochtones et aux communautés culturelles
Secteur du développement pédagogique et du soutien aux élèves
Secteur du soutien aux réseaux et aux enseignants

Title of Original Document: *Indicateurs de l'éducation*, édition 2013

English Translation: Direction des services à la communauté anglophone – Services langagiers

* This publication was jointly developed by the Ministère de l'Éducation, du Loisir et du Sport and the Ministère de l'Enseignement supérieur, de la Recherche et de la Science.

© Gouvernement du Québec

Ministère de l'Éducation, du Loisir et du Sport, 2014

ISBN 978-2-550-70838-4 (PDF)

ISSN 1911-0332 (PDF)

ISBN 978-2-550-70839-1 (French, PDF)

ISSN 1911-0324 (French, PDF)

Legal Deposit – Bibliothèque nationale du Québec, 2014

14-00140

Table of Contents

	Page
Table of Indicators	4
Introduction	7
Québec's Education System: An Overview	11
1. Financial Resources Allocated to Education	14
2. Activities	48
3. Results—Educational Outcomes	70
4. Results—Evaluation of Learning	86
5. Results—Graduation	104
6. The Labour Market	120
Statistical Appendix	135
Tables on Enrollment, Personnel, Diplomas and Schooling Rates	137
Definition of Concepts	145

Table of Indicators

	Financial Resources Allocated to Education	Activities	Results
			Educational Outcomes
Education System and Social Context	1.1 Québec Government Spending on Education, Recreation and Sports and on Higher Education, Research, Science and Technology14	2.1 School Life Expectancy48 2.2 Enrollment in Preschool Education50	
	1.2 Total Educational Spending in Relation to the GDP16		
	1.3 Total Educational Spending Per Capita in School Boards, Colleges and Universities . .18		
	1.4 Total Educational Spending per Student in Relation to Per Capita GDP20		
	1.5 Cost of Educating Graduates22		
Elementary and Secondary Education	1.6 Total Spending on Elementary and Secondary Education in Relation to the GDP24	2.3 Enrollment in Secondary General Education—Youth Sector52	3.1 Success in Secondary Cycle Two of General Education—Adult Sector70
	1.7 Total School Board Spending in Current and Constant Dollars26	2.4 Enrollment in Secondary Vocational Training—Youth and Adult Sectors54	3.2 Success in Secondary Vocational Training .72
	1.8 Comparison of Total School Board Spending per Student28	2.5 Enrollment in Secondary General Education—Adult Sector56	
	1.9 Student-Teacher Ratio in School Boards .30	2.6 Dropping Out of Secondary School58	
	1.10 Average Salary of Teachers in School Board32		
College	1.11 CEGEP Operating Expenses for Regular Education34	2.7 College Enrollment—Regular Education . .60	3.3 Success in College Pre-University Programs—Regular Education74
	1.12 Student-Teacher Ratio, Average Teacher Salary and Cost of Teachers per Student in CEGEPs36	2.8 Immediate Transition From College to University62	3.4 Success in College Technical Programs—Regular Education76 3.5 Duration of College Studies—Regular Education78
University	1.13 Total University Spending in Relation to the GDP38	2.9 University Enrollment64	3.6 Success and Duration of Studies in Bachelor's Programs80
	1.14 Total University Spending per Student . .40	2.10 Training of Researchers66	3.7 Success and Duration of Studies in Master's Programs82
	1.15 Salary Costs of University Professors . .42	2.11 The Proportion of Foreign Students in Postsecondary Education68	3.8 Success and Duration of Studies in Doctoral Programs84
	1.16 Student Financial Assistance and Tuition Fees44		
	1.17 Funded and Sponsored Research in Universities46		

Table of Indicators (cont.)

	Results		The Labour Market
	Evaluation of Learning	Graduation	
Education System and Social Context		5.1 Highest Diploma or Degree Earned104	6.1 Changes in Educational Attainment in the Labour Force.120 6.2 Labour Force Participation by Level of Education.122 6.3 Labour Market Integration of Graduates. . .124
Elementary and Secondary Education	4.1 Secondary School Examination Results, by Several Variables—Youth Sector.86 4.2 Regional Disparities in Secondary School Examination Results—Youth Sector.88 4.3 Secondary V French, Language of Instruction, Examination—Youth Sector . . .90 4.4 Reading Competences of Elementary 4 Students (4th Grade).92 4.5 Mathematics Competencies of Elementary 4 Students (4th Grade)94 4.6 Mathematics Competencies of Secondary II Students (8th Grade)96 4.7 Science Competencies of Elementary 4 Students (4th Grade)98 4.8 Science Competencies of Secondary II Students (8th Grade) . . .100	5.2 Graduation From Secondary School—Youth and Adult Sectors106 5.3 Graduation From Secondary School Vocational Training—Youth and Adult Sectors108 5.4 Graduation From Secondary School in Québec and OECD Countries, 2010 . .110	6.4 Labour Market Integration of Secondary Vocational Training Graduates126
College	4.9 Ministerial Examination of College French102	5.5 Graduation From College.112	6.5 Labour Market Integration of Graduates With an Attestation of College Studies . .128 6.6 Labour Market Integration of Graduates With a Diploma of College Studies in Technical Training130
University		5.6 Graduation From University114 5.7 University Degrees by Field of Study . . .116 5.8 University Degrees by Level of Study . . .118	6.7 Labour Market Integration of Doctoral Graduates.132

Introduction

This edition of the *Education Indicators* deals with all levels of education, from kindergarten to university. Some indicators cover the education system as a whole, whereas others focus on a specific level.

The purpose of publishing indicators is to ensure accountability by providing specific information on the resources allocated to education, the various activities pursued by the education system and the results obtained. The indicators are presented under a series of headings classifying recent and historical data¹ that help trace these developments over time.

The development of *education indicators* in Québec is part of a larger movement. The Council of Ministers of Education, Canada (CMEC) has undertaken projects to develop indicators for Canada's provinces; the Organisation for Economic Co-operation and Development (OECD) has done the same for its member countries; and the United Nations Educational, Scientific and Cultural Organization (UNESCO) has also published a series of indicators on education throughout the world. Québec has been an active participant in this worldwide movement, having published the first edition of the *Education Indicators* in 1986.

The examination of the indicators in this publication reveals a number of trends and developments that characterize Québec's education system. Some are explained briefly below. Additional information on these topics and others can be found further on in this document.

Financial Resources Allocated to Education

In 2008-2009, Québec's total educational spending was estimated at 6.9% of the gross domestic product (GDP). In comparison, the share of the GDP allocated to education in the rest of Canada was 6.1% and 6.2% in the OECD countries.

In 2010-2011, total school board spending per capita amounted to \$1 485 in Québec, or 16.8% less than the average for the rest of Canada (\$1 784). Per capita spending in Québec universities was 12.1% lower than in universities in the rest of Canada (\$772 compared with \$878). However, total per capita spending in Québec's colleges was higher: \$341, compared with \$267 in the rest of Canada. In Québec, the provincial government provides a large part of the funds for total spending at all levels of education whereas in the rest of Canada, this proportion

is lower. In 2013-2014, 16.0% of the Québec government's spending was on education, recreation and sports and 9.9% was on higher education, research, science and technology.

Another indicator that is often used to compare Québec with neighbouring regions is total per-student spending. In 2010-2011, total per-student spending in Québec school boards (\$12 098) was lower than in the rest of Canada (\$12 677). However, it should be noted that this comparison of per-student spending among the various provinces does not take into account the cost of living, which is lower in Québec than the average in the rest of Canada (7% difference in 2010). If the data were adjusted to take this into account, per-student spending would be slightly higher in Québec than in the rest of Canada.

Per-student operating expenses in CEGEPs were \$10 060 in 2010-2011, or 50.4% higher than in 1998-1999. This sharp increase can be explained in large part by a decrease in the student-teacher ratio, which went from 13.8 in 1998-1999 to 12.7 in 2010-2011. In addition, total per-student spending in Québec universities was \$28 545 in 2010-2011, 5.5% less than the average for the rest of Canada (\$30 213). The average salary of full-time university professors in Québec was lower than in the rest of Canada (\$107 673, compared with \$117 548 in 2010-2011), but the average number of students per professor was lower in Québec (more costly factor).

In 2011-2012, 156 564 persons benefitted from Québec's Loans and Bursaries Program. Of the financial assistance granted to Québec university students, 52.5% was in the form of loans and 47.5% was in the form of bursaries. Tuition fees in 2012-2013 averaged \$2 565 in Québec (\$2 168 for Québec residents) for full-time undergraduate studies, compared with \$6 246 in the rest of Canada.

Student Retention From Elementary School to University

Student retention in Québec's education system for 2011-2012 is illustrated on the following page. The diagram represents the proportions of a cohort of young people who could expect to enroll and to obtain a diploma or degree in each level

1. The data have been actualized.

of education. The diagram shows that, out of 100 Quebecers, 99 could be expected to reach the secondary level and 93 to obtain a first secondary school diploma, 40 to obtain a Diploma of College Studies (DCS), 33 to earn a bachelor's degree, 10 to be awarded a master's degree, and 2 to obtain a doctorate. Furthermore, of the 93 students to obtain a secondary school diploma, 36 would do so in vocational training. However, the educational playing field was far from level for the two genders in 2010-2011: more male students than female students left their studies before earning a diploma or degree. Furthermore, in 2011, approximately 40.8% of women obtained at least a bachelor's degree, compared with only 25.9% of men.

Children who began elementary school in 2011-2012 can expect to be in school for 15.5 years, assuming that the success rates and retention rates prevailing in the education system in the current year do not change. Secondary school graduates will have been in school for 11.2 years, at a cost of \$147 596 in 2010-2011; those obtaining a bachelor's degree will have studied for 17.2 years, at a total cost of \$254 725.

Staying in School and Obtaining a Diploma

The dropout issue is a major concern among educators. Numerous approaches have shed light on this phenomenon. Educational success, defined here as obtaining a diploma, is measured differently for each level and sector of education. In 2010-2011, the proportion of those who left school (general education, youth sector) without a secondary school diploma or qualification (annual dropout rate) was 16.2%.

The proportion of students in other education sectors who obtained diplomas or degrees and the proportion who left school either temporarily or permanently were determined by observing the number of students who leave school each year. Thus, of the students in Secondary Cycle Two in the adult sector who left their studies before the age of 20, 63.0% did so with a diploma. In secondary vocational training, of 100 students of all ages who were enrolled in programs leading to a Diploma of Vocational Studies (DVS) and who left secondary school, approximately 75 did so with that diploma. At the college level, 71% of students in pre-university programs leading to a DCS obtained a diploma; in technical training, 61% of students obtained a DCS. At the university level, 67% of students

in bachelor's programs obtained a degree, compared with 73% and 61% of students enrolled in master's and doctoral programs, respectively.

Evaluation of Learning

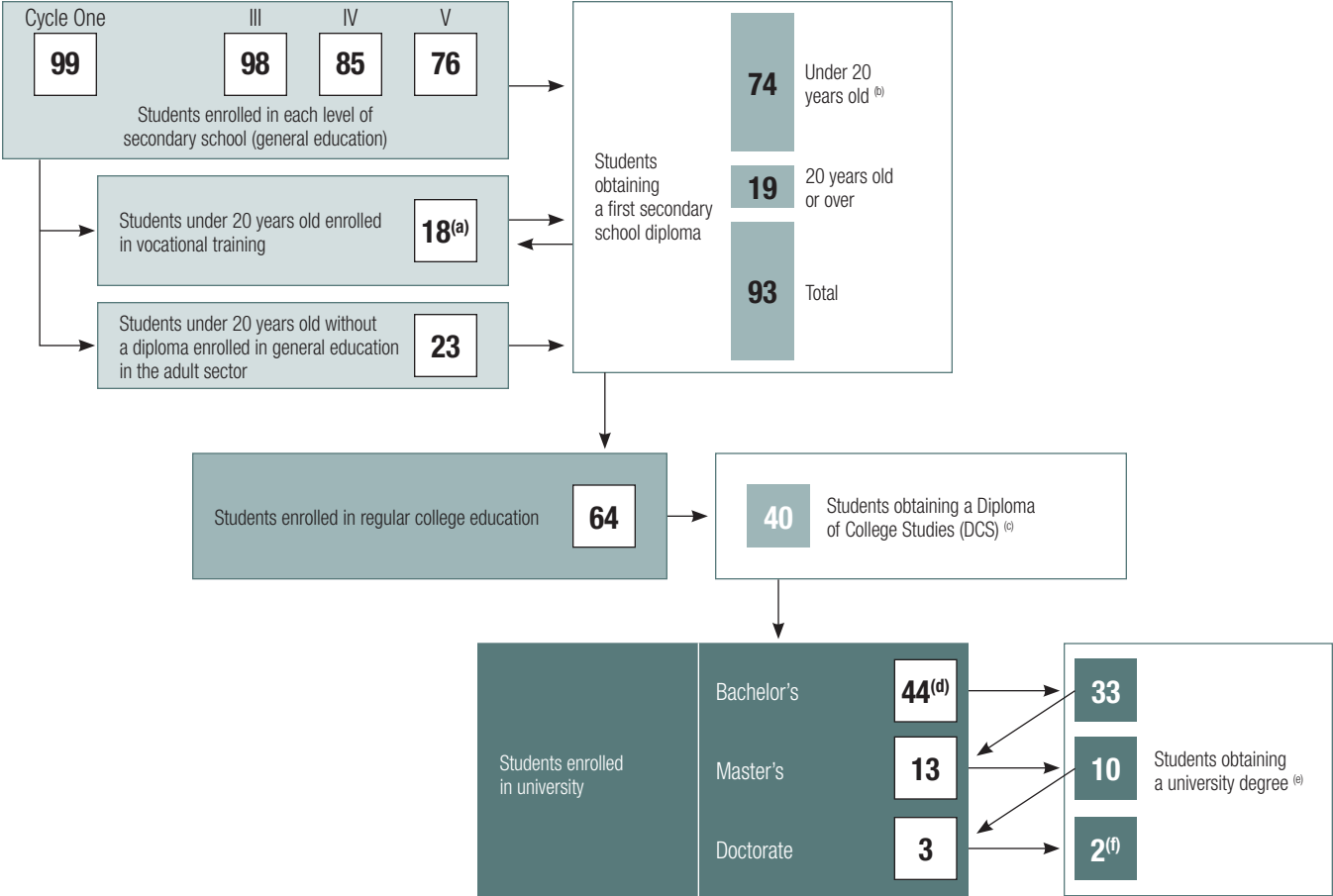
In the subjects for which uniform examinations were administered for the certification of studies by the Ministère de l'Éducation, du Loisir et du Sport in June 2012, students in Secondary IV and V obtained an average mark of 70.5% and had a success rate of 83.4%. The male students' average was 69.2% and the female students', 71.6%. Students obtained an average final mark of 72.9% on the examination in Secondary V French, language of instruction, and 90.7% passed. In 2011-2012, 84.3% of college students passed the ministerial examination of college French, language of instruction and literature.

What Becomes of Graduates and Non-Graduates

When they finish school, graduates from secondary school, college and university have to make choices. Some decide to continue their education, while others set their sights on the labour market. Thus, at the end of their college studies, 80.8% of pre-university program graduates under the age of 25 went on to university the following year, compared with 30.8% of graduates from technical programs.

In March 2012, graduates with a DVS or AVS had an unemployment rate of 10.1% and 7.7%, respectively, compared with 3.7% for graduates of college technical programs. Since 1990, the profile of the labour force in Québec has changed significantly. In 2012, the increase in the number of jobs was more beneficial to those who graduated from postsecondary or university studies. Since 2000, the number of employed people who did not have a secondary school diploma has dropped by 27.8%.

**Student Retention of 100 Quebecers in the Education System,
Based on Findings for 2011-2012**



(a) This figure includes 10 general education graduates likely to obtain another diploma in vocational training.

(b) All diplomas earned in the youth sector are included, regardless of the age of the graduates.

(c) The most recent year for which data are available is 2010-2011.

(d) Students who enroll in university are not limited to those who hold a DCS.

(e) The most recent year for which data are available is 2011.

(f) The graduation rate from doctoral programs was 1.7% in 2011.

Readers seeking a more in-depth analysis or an up-to-date picture of the situation should consult the individual sections in the pages that follow. Also, the Ministère de l'Éducation, du Loisir et du Sport, the Ministère de l'Enseignement supérieur, de la Recherche et de la Science and the Conseil supérieur de l'éducation produce and publish specialized studies on these topics. Finally, general information on the education system is available in the following publications:

- *Basic Statistics on Education*
- *Education Statistics Bulletins*
- *Student Flow From Secondary School to University*
- Annual management report of the Ministère de l'Éducation, du Loisir et du Sport
- *Annual Report on the State and Needs of Education*, published by the Conseil supérieur de l'éducation
- *Strategic Plan* of the Ministère de l'Éducation, du Loisir et du Sport

This information is also available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport (<http://www.mels.gouv.qc.ca>) or the Web site of the Ministère de l'Enseignement supérieur, de la Recherche et de la Science (<http://www.mesrst.gouv.qc.ca>).

Québec's Education System: An Overview

Québec's education system offers a wide range of educational programs and services from kindergarten to university.

Preschool, Elementary and Secondary Education

Elementary school normally lasts six years; secondary school, five. Children are admitted to the first year of elementary school in the school year in which they will have turned six years old by October 1. Prior to 1997, five-year-olds generally attended kindergarten on a half-time basis. Although it is not compulsory, since the fall of 1997, almost all five-year-olds attend kindergarten on a full-time basis. Four-year-olds with handicaps or living in low-income areas may be admitted to preschool. School attendance is compulsory until the year in which students turn 16 years old, which normally corresponds to Secondary IV.

Elementary education is offered in French, English or an Aboriginal language, and secondary education, in French or English. Students deemed eligible to study in English are chiefly those whose father or mother attended English elementary school in Canada. Public elementary and secondary education is provided by school boards. The school boards are managed by school commissioners, who are elected by residents within the school board's jurisdiction. The school boards hire the staff they need to provide educational services. In 2010-2011, the Québec government provided 78.3% of school boards revenues, while local taxes accounted for 14.1% and other sources provided the remaining 7.6%.

In July 1998, the number of school boards was reduced to 72, and they were organized along linguistic lines, except for three with special status. There are 60 French school boards and 9 English school boards, with enrollments ranging from 600 to 70 000 for a median size of approximately 8 000 students. The special-status school boards serve French-speaking and English-speaking students in the Côte-Nord region (Commission scolaire du Littoral) and Aboriginal students in the Nord-du-Québec region (Cree School Board and Kativik School Board).

Elementary and secondary education is also provided by private institutions, some of which are subsidized by the Ministère de l'Éducation, du Loisir et du Sport. The private school system accounts for 7% of elementary students and approximately 20% of secondary students in the youth sector. About 50% of the operating expenses of subsidized private institutions are funded by the Québec

government. Elementary and secondary education is also offered by some public institutions that are not part of the school board system but that fall under Québec or federal government jurisdiction; these institutions account for 0.1% of students.

Secondary school diplomas are awarded by the Minister of Education, Recreation and Sports to students who fulfill the certification requirements set by the Minister. A Secondary School Diploma (SSD) is required for admission to college¹. A Diploma of Vocational Studies (DVS) generally leads to the labour market, but also allows admission to college. The harmonization of educational services offered in the youth sector and the adult sector is a feature of Québec's education system. Adult education leads to secondary school diplomas that are the same as or equivalent to those offered in the youth sector.

College Education

Students may enroll in college programs leading to a Diploma of College Studies (DCS) or in short technical programs leading to an Attestation of College Studies (ACS). College education theoretically consists of a two-year program for students enrolled in pre-university education or a three-year program for those in technical training; technical programs are primarily designed to provide entry into the labour market, but also allow admission to certain disciplines in university.

Students may pursue their college studies in the language of instruction of their choice. Public college education is provided by CEGEPs (a French acronym that stands for general and technical college). CEGEPs are administered by boards of directors composed of representatives appointed by the Minister as well as representatives of parents, students, teachers, nonteaching professionals and support staff, a director general and a director of studies. In 2010-2011, the Québec government provided 85% of CEGEP funding. Private educational institutions served 9% of college students, and 56% of their funding came from the Québec

1. Since the fall of 1997, students who earned a Secondary School Diploma (SSD) or a Diploma of Vocational Studies (DVS) after May 31, 1997, must also have accumulated the required number of credits for Secondary IV History and Physical Science, Secondary V language of instruction and second language, and Secondary V Mathematics or a comparable Secondary IV Mathematics course determined by the Minister. The Minister sets specific secondary-level prerequisites for some programs leading to a DCS.

government. College education is also available at a few institutions associated with ministries other than the Ministère de l'Enseignement supérieur, de la Recherche et de la Science, and at the Macdonald Campus of McGill University.

A DCS is awarded to a student by the Minister of Higher Education, Research and Science following the recommendation of the educational institution attended. For shorter programs, other types of certification are awarded.

University Education

Québec has English and French universities; students make their choice. University education is divided into three levels of studies. The first leads to a bachelor's degree (generally after three years or four years in certain programs), the second to a master's degree, and the third to a doctorate. Universities also award certificates, diplomas and other forms of attestation to certify the successful completion of short programs. In 2010-2011, 53% of university expenses were subsidized by the Québec government.

1.1 Québec Government Spending on Education, Recreation and Sports and on Higher Education, Research, Science and Technology

Québec government spending on education, recreation and sports was estimated at \$10.2 billion in 2013-2014, accounting for 16.0% of government program spending. The amount spent on higher education, research, science and technology was \$6.3 billion, or 9.9% of government program spending.

Québec government program spending rose from \$40.2 billion in 2000-2001 to \$63.8 billion in 2013-2014, an annual increase of 3.6%. During this period, Québec government spending on education, recreation and sports rose an average of 3.3% a year, while spending on higher education, research, science and technology increased by 4.2%.

Table 1.1 presents the percentage breakdown of Québec government program spending in the five major sectors: education, recreation and sports; higher education, research, science and technology; health and social services; employment and social solidarity; and family. Spending on other portfolios and programs are grouped together under "Other portfolios." The table makes it possible to compare changes in the portion of government spending on major sectors between 2012-2013 and 2013-2014.¹

Previous editions of the *Education Indicators* reported major changes in the portion of spending allocated to each sector in recent years. Thus the portion allocated to health and social services has increased significantly, which has had a major impact on the portion of spending allocated to other sectors.

In the 2000s, the portion of program spending on education, recreation and sports fell somewhat, while at the beginning of the 2010s, it was up slightly. This spending increase is explained by the rise in system costs, but also by numerous reinvestment and development measures.²

These reinvestment and development measures include programs to reduce the dropout rate; smaller classes; increased teaching time at the elementary level; support for students with handicaps, social maladjustments or learning difficulties and the *Éducation, emploi et productivité* action plan in vocational and technical training and adult education.

In the area of higher education, research, science and technology, the reinvestment and development measures in recent years include additional funding for educational institutions to promote student retention and student success as well as improvements to student financial assistance programs.³

Québec government spending on education, recreation and sports as well as on higher education, research, science and technology remained the same for 2012-2013 and 2013-2014.

1. When this table was prepared, the data for previous years, based on the 2013-2014 budgetary structure, were not available.
2. See Section 1.7, among others.
3. See Sections 1.11, 1.14, 1.16 and 1.17, among others.

Table 1.1

**Québec government
program spending,
by sector¹ (%)**

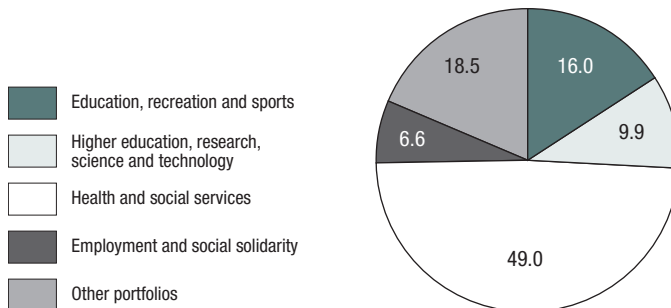
	2012-2013 ^e	2013-2014 ^e
Education, recreation and sports	16.0	16.0
Higher education, research, science and technology	9.9	9.9
Health and social services	48.3	49.0
Employment and social solidarity	6.9	6.6
Family	3.8	3.9
Other portfolios	15.1	14.6
Program spending	100.0	100.0

Source: Conseil du trésor du Québec, *Budget de dépenses 2013-2014*

e: Estimates

1. Data related to program spending are presented according to the 2013-2014 budgetary structure.

Graph 1.1

**Distribution of Québec
government program
spending, by sector (%)**

2013-2014

1.2 Total Educational Spending in Relation to the GDP

In 2008-2009, Québec allocated 6.9% of its gross domestic product (GDP) to education, compared with Ontario at 6.3%, the rest of Canada at 6.1% and the average of 6.2% for the member countries of the Organisation for Economic Co-operation and Development (OECD).¹

To explain why Québec invested a greater share of its GDP than the rest of Canada in 2008-2009, the following four factors may be considered: per-student spending; collective wealth (defined by per capita GDP); the school attendance rate (the ratio of total school enrollment to the population between 5 and 24 years old); and the demographic factor (the ratio of the 5-to-24 age group to the total population).

Two of these four factors help explain why Québec invests a greater share of its GDP in education: Québec's lesser collective wealth compared with the rest of Canada and the slightly higher school attendance rate in Québec.

The two other factors had the opposite effect: per-student spending was slightly less in Québec than the average spent in the rest of Canada, and there are relatively fewer school-age students (demographic factor) in Québec.

Per-student spending in Québec was slightly less than that observed in the rest of Canada, mainly because teachers' wages are generally lower in Québec (in current dollars). However, there are other more costly factors in Québec, such as lower student-teacher ratios; more spending on vocational training, school childcare services and transportation expenses in the school boards; and greater research costs in universities.²

There is an important point to be made about the difference between per-student spending in Québec and in the rest of Canada regarding differences in the cost of living. The cost of living is lower in Québec than in the rest of Canada (7.5% lower in 2008). If expenses were adjusted to take this into account, per-student spending would be approximately the same in Québec and in the rest of Canada.

Table 1.2 presents data for selected OECD member countries.³ There are significant differences in the portion of the GDP spent on education by different countries. The two factors that are the main contributors to these differences are the per-student spending and the collective wealth as measured by the per capita GDP.

The principal factor that explains why the portion of the share of the GDP allocated to education in Québec (6.9%) is larger than the average share allocated by OECD countries (6.2%) is that per-student spending is higher in Québec. It is also

important to note that postsecondary education, which is more developed in Québec than in OECD countries, accounted for a significant part of the greater spending on education in Québec.

Québec's collective wealth (measured by the per capita GDP) was similar to the average collective wealth of OECD member countries.

In 2008-2009, the share of the GDP allocated to education was higher in Québec than the average in the rest of Canada and the OECD countries.

1. The data in this section are not comparable to the data provided in previous editions of the *Education Indicators* (Section 1.2), due to the different concepts used. In this section of the present edition, the concepts are those defined by the OECD. See the sources given at the bottom of Table 1.2.
2. See Sections 1.8, 1.9, 1.10, 1.14 and 1.15, among others.
3. The data for all the countries are available in *Education at a Glance 2012: OECD Indicators*, Table B2.2.

Table 1.2

Total educational spending¹ in relation to the GDP: Québec, Ontario, Canada and selected OECD member countries, 2006-2007 to 2008-2009 (%)

	2006-2007	2007-2008	2008-2009
Québec	7.0	7.0	6.9
Ontario	6.3	6.3	6.3
Canada	6.1	6.0	6.1
United States	7.6	7.2	7.3
Japan	4.9	4.9	5.2
Germany	4.7	4.8	5.3
France	6.0	6.0	6.3
United Kingdom	5.8	5.7	6.0
Italy	4.5	4.8	4.9
OECD average	5.7	5.9	6.2

Sources:

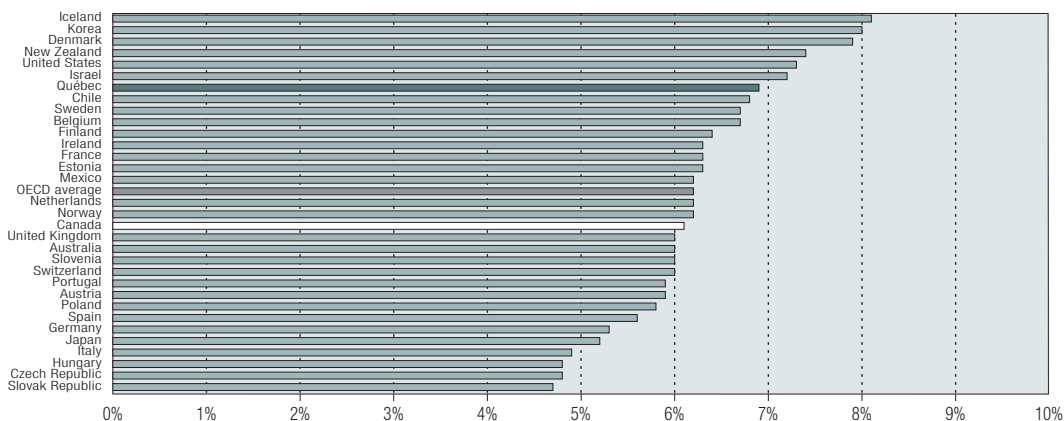
For Québec and Ontario: Statistics Canada, *Education Indicators in Canada: An International Perspective* (annual publication)

For OECD countries: *Education at a Glance 2012: OECD Indicators* (annual publication)

1. The data in this section are not comparable to the data provided in previous editions of the *Education Indicators* (Section 1.2), due to the different concepts used. In this section of the present edition, the concepts are those defined by the OECD.

Graph 1.2

Total educational spending in relation to the GDP: Québec and OECD member countries, 2008-2009 (%)



1.3 Total Educational Spending¹ Per Capita in School Boards, Colleges and Universities

In 2010-2011, total spending per capita was lower in Québec school boards (\$1 485) than in the rest of Canada (\$1 784), but higher in Québec colleges (\$341) than in the rest of Canada (\$267). It was lower in Québec universities than in universities in the rest of Canada (\$772 compared with \$878).

Table 1.3a shows the data on per capita spending by level of education. The differences in per capita spending observed between regions are explained in part by the organizational differences between the education systems. Thus, the fact that total per capita spending in Québec school boards is lower than in the rest of Canada is explained in part by the shorter duration of studies in Québec (11 years in Québec and normally 12 years in the rest of Canada). Conversely, total spending per capita at the college level is higher in Québec than in the rest of Canada because of the unique characteristics of our college network (including the mandatory two years of college before entering university).²

Table 1.3b shows data on the contribution of provincial governments to the total funding of school boards, colleges and universities. These figures indicate that, in Québec, provincial subsidies make up a larger part of the funding than in the rest of Canada on average.

In Québec, the provincial government provided the school boards with 78.3% of their 2010-2011 funding, compared to 64.8 % for the rest of Canada. This difference is explained mainly by the fact that school taxes, on average, are higher in the other provinces. In Québec, local funding provides school boards with 14.1% of their funding, compared with 28.3% in the rest of Canada.

In Québec, colleges received 85.3% of their funding from the provincial government in 2010-2011, compared with 58.1% in the rest of Canada. This difference is explained mainly by the fact that, unlike in Québec, students in other provinces enrolled in colleges are usually required to pay tuition fees. Thus, most students in the other provinces enrolled full-time in programs leading to a diploma or certificate in a technical college in Ontario are required to pay more than \$2 000 a year in tuition fees.³ This amount does not include other compulsory fees, textbooks or supplies. In the rest of Canada, tuition and other fees account for 25.9% of the colleges' funding.

In 2010-2011, the provincial government's contribution to funding universities was also greater in Québec (52.9%) than in the rest of Canada (43.6%). In Québec, university tuition fees are lower than in the rest of Canada because the province provides more funding.⁴ In 2010-2011, tuition and other fees charged to

students accounted for 14.4% of the universities' funding in Québec and for 25.6% in the rest of Canada.

Total spending per capita was lower in Québec school boards and universities than in the rest of Canada; the opposite was true for colleges.

1. Total educational spending includes operating and capital expenses, research costs (for universities) and interest on debt service (but not repayment of principal), as well as other teaching expenses. Because of the availability of certain data, the concept of total spending in this section differs slightly from one level of education to another. See Sections 1.8 and 1.14 for more comprehensive definitions of total spending for school boards and universities.
2. See Section 1.4 for the organizational differences at the college level.
3. Tuition fees are much higher for some programs.
4. See Section 1.16 for a comparison of tuition fees in the various regions of Canada.

Table 1.3a

Total spending per capita in school boards, colleges and universities: Québec and the other regions of Canada, 2010-2011 (in current dollars)

	School boards	Colleges	Universities
Québec	1 485	341	772
Canada, excluding Québec	1 784	267	878
Atlantic Provinces	1 657	251	987
Ontario	1 860	247	842
Western Canada	1 690	286	907
Canada	1 715	284	853

Table 1.3b

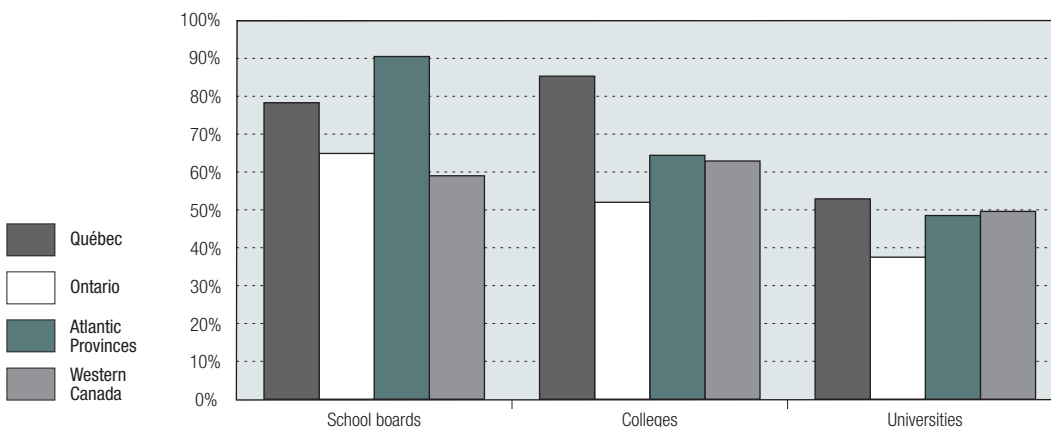
Provincial government contribution to the funding of school boards, colleges and universities: Québec and the other regions of Canada, 2010-2011 (%)

	School boards	Colleges	Universities
Québec	78.3	85.3	52.9
Canada, excluding Québec	64.8	58.1	43.6
Atlantic Provinces	90.5	64.4	48.5
Ontario	64.9	52.0	37.5
Western Canada	59.0	62.9	49.6
Canada	67.6	65.3	45.5

Sources: The basic data used to calculate these indicators were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO).

Graph 1.3

Provincial government contribution to the funding of school boards, colleges and universities: Québec and the other regions of Canada, 2010-2011 (%)



1.4 Total Educational Spending per Student¹ in Relation to Per Capita GDP

Total per-student spending is an indicator of financial investment in education, and the per capita gross domestic product (GDP) is an indicator of collective wealth. Relating the two provides an indicator of the relative financial investment in education, that is, per-student spending expressed as a percentage of per capita GDP. In addition to each region's ability to pay, this ratio takes into account differences in the cost of living.

In 2010-2011, total per-student spending by the school boards was lower in Québec (\$12 098) than in the Atlantic Provinces (\$12 208), Ontario (\$12 730) and Western Canada (\$12 569).²

In 2010-2011, total per-student spending at the college level was also lower in Québec (\$13 652) than in the Atlantic Provinces (\$21 243), Ontario (\$14 803) and Western Canada (\$24 238). The comparisons of spending at the college level are provided as a reference only, since data at this level cannot truly be compared between provinces because of significant organizational differences. For example, in Québec, a Diploma of College Studies in pre-university education is the usual requirement for admission to university, whereas in the other provinces, a secondary school diploma is generally sufficient. In Ontario, college-level technical programs are offered at colleges of applied arts and technology. In some cases, the programs offered can be compared, to a certain extent, with vocational training programs offered by Québec school boards. More often, they are comparable to the technical training programs offered by Québec colleges. Furthermore, in some provinces in Western Canada (especially Alberta and British Columbia), students can do their first two years of university in a college, and then finish their studies at a university.

Total per-student spending at the university level in 2010-2011 was higher in Québec (\$28 545) than in Ontario (\$26 620), but lower than in the Atlantic Provinces (\$30 287) and in Western Canada (\$35 823). The previously mentioned organizational differences partly explain the gaps observed between the regions.³

Table 1.4b shows total per-student spending in relation to per capita GDP. Factoring in collective wealth, as measured by per capita GDP, reveals that Québec's collective financial investment in education is, on average, higher than in the rest of Canada for school boards and universities, but relatively lower for colleges. As mentioned earlier, these gaps can be explained in part by organizational differences.

Québec's collective investment in education is higher than the average for the rest of Canada.

1. Total educational spending includes operating and capital expenses and research costs (for universities). Because of the availability of certain data, the concept of total spending in this section differs slightly from one level of education to another. See Sections 1.8 and 1.14 for more comprehensive definitions of total spending for school boards and universities. Moreover, in the calculation of total per-student spending at the college and university levels, a standardized accounting of student enrollments for all the provinces based on the following convention has been used: part-time enrollments are converted into full-time equivalents by dividing them by 3.5, and are then added to full-time enrollments.
2. See Sections 1.8 to 1.10 for additional explanations on comparisons between school boards in Québec and in the rest of Canada.
3. See Section 1.14 for additional explanations.

Table 1.4a

**Total per-student
educational spending:
Québec and the other
regions of Canada,
2010-2011
(in current dollars)**

	School boards	Colleges	Universities
Québec	12 098	13 652	28 545
Canada, excluding Québec	12 677	18 723	30 213
Atlantic Provinces	12 208	21 243	30 287
Ontario	12 730	14 803	26 620
Western Canada	12 569	24 238	35 823
Canada	12 557	16 972	29 848

Table 1.4b

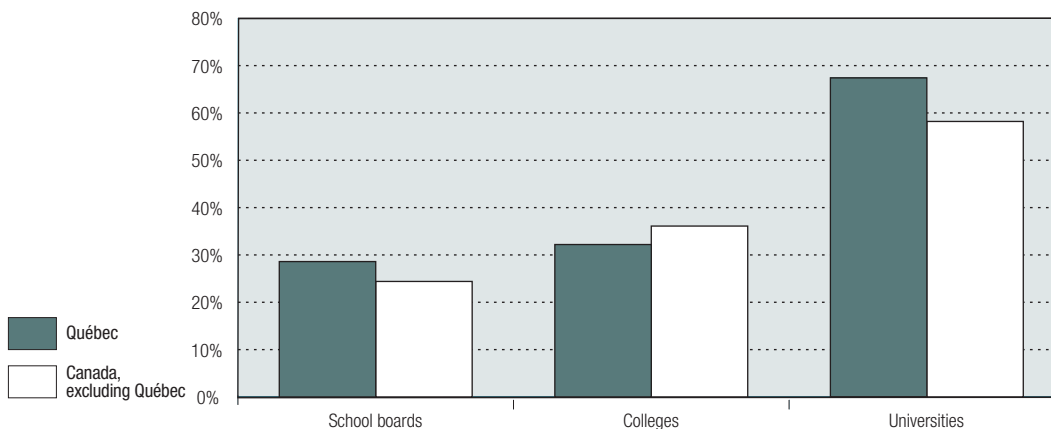
**Total per-student
educational spending
in relation to per capita
GDP: Québec and the
other regions of Canada,
2010-2011 (%)**

	School boards	Colleges	Universities
Québec	28.6	32.2	67.4
Canada, excluding Québec	24.4	36.1	58.2
Atlantic Provinces	27.5	47.9	68.2
Ontario	26.6	30.9	55.6
Western Canada	21.6	41.6	61.5
Canada	25.3	34.2	60.1

Sources: The basic data used to calculate these indicators were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO).

Graph 1.4

**Total per-student
educational spending
in relation to per capita
GDP: Québec and Canada
excluding Québec,
2010-2011 (%)**



1.5 Cost of Educating Graduates

In 2010-2011, the total cost of a Secondary School Diploma (SSD) in Québec was estimated at \$147 596, that of a college-level pre-university or technical diploma at \$176 818 and \$214 658, respectively, and that of a bachelor's degree at \$254 725.

The concept of cost used here includes operating expenses (excluding funded research), capital expenses, the Ministère's administrative expenses and the cost of the student financial assistance program. For graduates with a Secondary School Diploma (SSD), the cost is based on all the years during which school was attended at the preschool, elementary (regular) and secondary (general) levels. For students graduating with a Diploma of College Studies (DCS) in pre-university education, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (pre-university) levels. For students graduating with a DCS in technical training, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general) and college (technical) levels. For graduates with a bachelor's degree, the cost is based on all the years attended at the preschool, elementary (regular), secondary (general), college (pre-university) and undergraduate levels.

To calculate the cost of educating a graduate, an estimate of the annual spending per student at each level of education in 2010-2011¹ and the average duration of studies completed by students who obtained the diploma or degree were used.² The expenses generated by students leaving school without a diploma or degree were not taken into account.

As noted in Section 1.3, government subsidies make up a large part of the funding for education. However, the government also reaps a large portion of the benefits related to these diplomas or degrees.

When we compare the income of two individuals with different levels of schooling, we usually observe that the person with the higher level of education is the one with the higher income (see Graph 1.5). This extra income benefits not only the person with the higher level of education, but society as well. In fact, through taxation, governments recover a large portion of the extra income earned by the individual with the higher level of education. There are, however, a number of other public benefits in addition to the supplementary tax income produced by an increase in the number of graduates. For example, people with a higher level of education cost less to society in terms of the use of certain public services (such as last resort financial assistance and costs related to criminal activity). There is also a positive correlation between a person's level of education and state of health.³

In 2010-2011, the total cost of a bachelor's degree was approximately \$255 000 in Québec.

1. Here, the university level encompasses undergraduate, graduate and doctoral studies. The cost of studies leading to a bachelor's degree is therefore slightly overestimated.
2. At the university level, one year of studies equals two full-time terms. A part-time term is counted as one third of a full-time term at the university level and one quarter at the college level. See Note 1 at the bottom of Table 1.5.
3. See Marius Demers, "Rate of Return on a Bachelor's Degree: for Individuals and for the State," *Education Statistics Bulletin 38* (December 2008). This document, which was published by the Direction de la recherche, des statistiques et de l'information of the Ministère de l'Éducation, du Loisir et du Sport, is available at http://www.mels.gouv.qc.ca/fileadmin/site_web/documents/PSG/statistiques_info_decisionnelle/BulletinStatistiqueNo38_a.pdf.

Table 1.5

Cost of educating graduates, 2010-2011

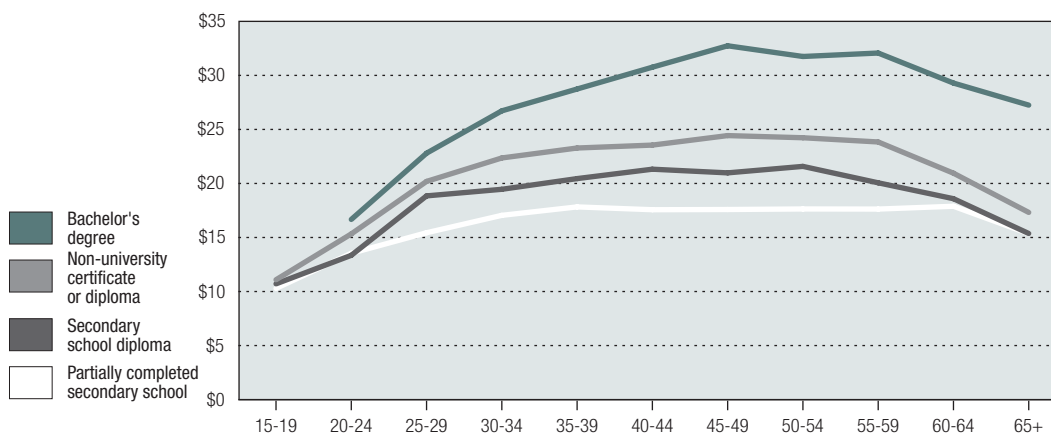
	Average duration of studies ¹ (years)	Cost of education (\$)°
Secondary School Diploma	11.2	147 596
Diploma of College Studies		
Pre-university education	13.6	176 818
Technical training	15.0	214 658
Bachelor's degree	17.2	254 725

Sources: The basic data used to calculate these indicators were obtained from Statistics Canada, the Canadian Association of University Business Officers (CAUBO) and various information systems of the Ministère de l'Éducation, du Loisir et du Sport.

e: Estimates made by the Ministère de l'Éducation supérieure, de la Recherche et de la Science

1. Preschool education is not included in the average duration of studies indicated in the table as it is not generally recognized as an academic pursuit. However, in calculating the cost of educating graduates, one year is added to take preschool education into account. The actual durations indicated in the table are longer than the theoretical durations for a number of reasons, including students having to retake a course after failing it and changing programs in the course of their studies.

Graph 1.5

Average hourly salary, by age group, by highest level of education, 2012 (in current dollars)

1.6 Total Spending on Elementary and Secondary Education in Relation to the GDP

In 2008-2009, 3.9% of Québec's gross domestic product (GDP) was spent on elementary and secondary education, compared with Ontario at 4.0% and the rest of Canada at 3.6%.¹ Québec therefore spent essentially as much of its GDP on elementary and secondary education as did Ontario and more than the average for the rest of Canada, even though the duration of elementary and secondary education in Québec is shorter.²

Furthermore, when the share of Québec's GDP spent on elementary and secondary education is compared with the 4% spent by the Organisation for Economic Co-operation and Development (OECD) countries in 2008-2009, Québec ranked close to the average for the countries considered.³ It should be noted that there are organizational differences between the education systems that can affect the rankings. For example, in Québec the duration of elementary and secondary education is shorter than in the rest of the world.⁴ If it were possible to standardize the data to take these types of factors into account, Québec would probably rank higher.

Table 1.6 includes data for selected OECD member countries.⁵ There are major differences among the countries with regard to the share of the GDP allocated to elementary and secondary education. Two factors are of particular importance in explaining these differences: the per-student spending for elementary and secondary education and the collective wealth as measured by the per-capita GDP.

According to Statistics Canada, Québec's per-student spending on elementary education was very close to the Canadian average and higher than the average for the OECD countries in 2008-2009. Conversely, Québec's per-student spending on secondary education (second cycle) was lower than the Canadian average and the OECD average.⁶ For preschool, elementary and secondary education combined, Québec's per-student spending was a little less than the Canadian average and the OECD average.

It should be noted, however, that Statistics Canada did not take into account the differences in the cost of living in the different regions of Canada. In 2008, the cost of living in Québec was 7.5% lower than the cost of living in the rest of Canada. If the figures were adjusted to take this into account, the per-student spending for preschool, elementary and secondary education would be essentially the same for Québec and the rest of Canada (in real terms).⁷ Québec's per-student spending would be a little higher than that of the OECD countries.

Québec's collective wealth (measured by the per-capita GDP) is less than the Canadian average but essentially the same as the OECD average.

In 2008-2009, Québec spent more of its GDP on elementary and secondary education than the rest of Canada did on average.

1. The data provided in this section are not comparable to the data provided in previous editions of the *Education Indicators* (Section 1.6), due to the different concepts used. In this section of the present edition, the concepts are those defined by the OECD. See the sources given at the bottom of Table 1.6.
2. The duration of elementary and secondary education is 11 years in Québec and normally 12 years in the other regions considered.
3. See Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective* (Catalogue no. 81-604, September 2012).
4. Québec's college network also has unique characteristics (including the mandatory two years of college before entering university). This compensates for the shorter total duration of elementary and secondary education in Québec.
5. The information for all the participating countries can be found in *Education at a Glance 2012: OECD Indicators*, Chart B2.2.
6. For the comparative data, see Charts B.1.1.1 and B.1.2.2 in *Education Indicators in Canada: An International Perspective* (Catalogue no. 81-604, September 2012).
7. See Section 1.8 for an interprovincial comparison of the total spending per student in the school boards.

Table 1.6

Total spending on elementary and secondary education¹ in relation to the GDP: Québec, Ontario, Canada and selected OECD countries, 2006-2007 to 2008-2009 (%)

	2006-2007	2007-2008	2008-2009
Québec	3.9	3.9	3.9
Ontario	3.8	3.8	4.0
Canada	3.5	3.5	3.6
United States	4.0	4.1	4.3
Japan	2.8	2.8	3.0
Germany	3.0	3.0	3.3
France	3.9	3.9	4.1
United Kingdom	4.2	4.2	4.5
Italy	3.1	3.3	3.4
OECD average	3.6	3.8	4.0

Sources:

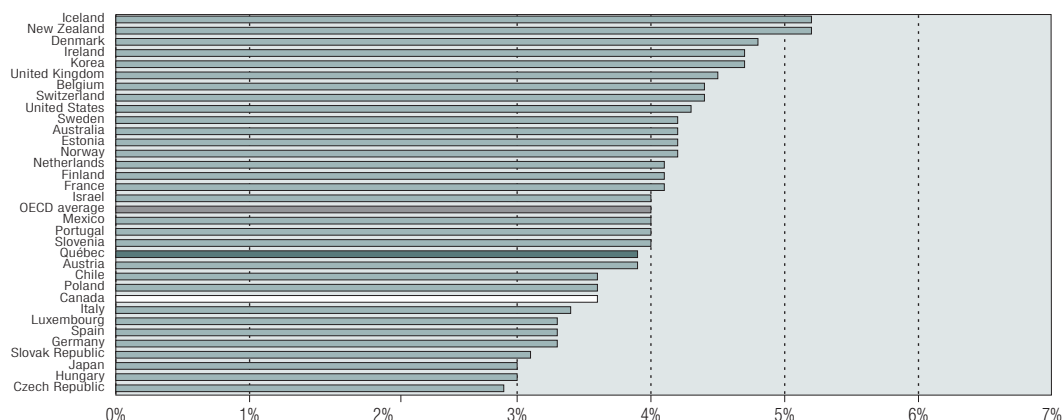
For Québec and Ontario: Statistics Canada, *Education Indicators in Canada: An International Perspective* (annual publication)

For OECD countries: *Education at a Glance: OECD Indicators* (annual publication)

1. The data provided in this section are not comparable to the data provided in previous editions of the *Education Indicators* (Section 1.6), due to the different concepts used. In this section of the present edition, the concepts are those defined by the OECD. The data for the OECD countries include elementary, secondary and postsecondary non-tertiary education.

Graph 1.6

Total spending on elementary and secondary education in relation to the GDP: Québec and OECD member countries, 2008-2009 (%)



1.7 Total School Board Spending in Current and Constant Dollars

In 2010-2011, total school board spending in Québec was \$11.9 billion, student enrollments were slightly less than one million and per-student spending in current dollars was \$12 098.¹

Spending can also be expressed in constant dollars, so as to factor in the rise in the price of goods and services used to provide educational services.² Previous editions of the *Education Indicators* showed that, in the 1990s, there was a downward trend in per-student spending in constant dollars. This decrease can be explained by budget cutbacks to reduce the deficit and the application of major cost-cutting measures in Québec school boards. The introduction of full-time kindergarten in Québec in 1997-1998 also contributed to the drop in per-student school board spending.³

Between 1998 and 2002, there was a 27% increase in per-student spending in current dollars and a 17% increase in constant dollars. These increases can be explained for the most part by the agreement reached in April 2000 between the Québec government and the unions that established a new salary structure for teachers by the coming into force of a new collective agreement, the adoption of support measures for school boards (additional funding for childcare services,⁴ the implementation of the education reform, the adoption of the policy on special education, teacher training and the hiring of technicians for the development of information technologies, support for disadvantaged areas, payment of allowances to decrease the fees payable by parents, etc.) and, more generally, by the sums reinvested by the Québec government in education.

Between 2002 and 2006, per-student spending in constant dollars remained relatively stable. This can be explained in part by the fact that the salaries of school board personnel were frozen during this period.⁵

Between 2006 and 2010, per-student spending increased by 19% in current dollars and by 13% in constant dollars. These increases can largely be explained by new reinvestment and development measures (programs to reduce the dropout rate,⁶ smaller classes; support for at-risk students and students with handicaps, social maladjustments or learning difficulties,⁷ the *Éducation, emploi et productivité* action plan in vocational and technical training and adult education, the *Action Plan to Prevent and Deal With Violence in the Schools* and the *Action Plan on Reading in School*).

These school board support measures also resulted in a decrease in the average number of students per teacher, which dropped from 14.9 in 2004-2005 to 14.2 in 2010-2011.⁸

Between 2006 and 2010, per-student spending increased by 13% in constant dollars.

1. See Note 1 at the bottom on Table 1.7. The concept of total spending is the same as that used in Section 1.8.
2. The consumer price index (CPI) is used to express spending in constant dollars.
3. The introduction of full-time kindergarten resulted in an increase in the "relative weight" of a relatively inexpensive sector of enrollments.
4. Following a policy limiting the financial contribution of parents to \$5 for each child enrolled on a regular basis in child-care services. In 2003, this amount rose to \$7 per day.
5. The Québec government adopted Bill 142, which defined the salary rates and scales for school board personnel until 2010. Salaries were frozen in 2004 and 2005 and, on April 1 of 2006, 2007, 2008 and 2009, the Bill provided for a 2% salary increase.
6. For example, in September 2009, the Québec government launched an action strategy on student retention and student success known as "I care about school!".
7. Significant amounts were paid out for the *Agir tôt pour réussir* program, which recognizes the need for early intervention at the first sign of difficulty, as well as the need to adapt services to students' needs.
8. See Section 1.9.

Table 1.7

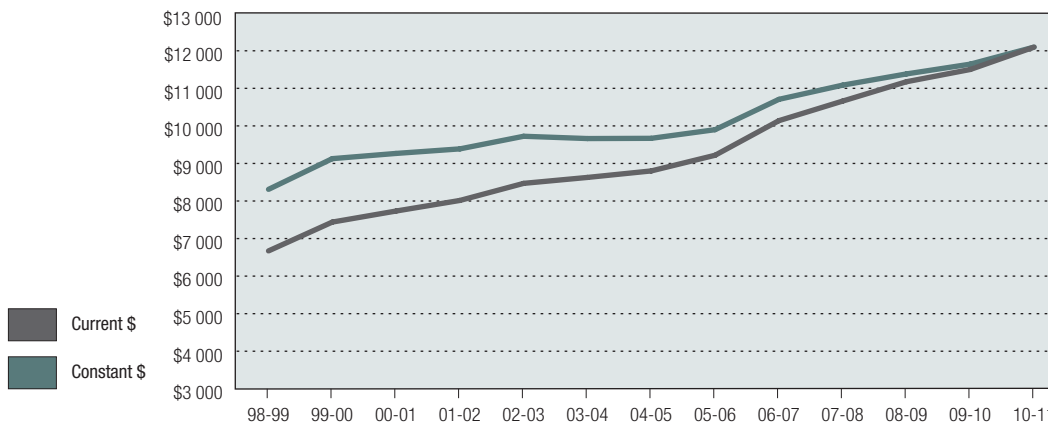
**Total school board
spending¹**

	1998- 1999	2002- 2003 ²	2006- 2007	2008- 2009 ²	2009- 2010 ²	2010- 2011
Total spending (in millions of dollars)						
In current dollars	7 446.9	9 174.2	10 532.9	11 153.3	11 388.1	11 851.1
In constant 2010-2011 ³ dollars	9 276.2	10 531.8	11 123.6	11 361.3	11 528.7	11 851.1
Spending per student (\$)						
In current dollars	6 671	8 470	10 139	11 176	11 502	12 098
In constant 2010-2011 ³ dollars	8 310	9 724	10 707	11 384	11 644	12 098

Sources: The basic data used to calculate these indicators were obtained from various information systems of the Ministère de l'Éducation, du Loisir et du Sport and from Statistics Canada.

1. Total spending includes operating and capital expenses, direct government contributions to school board employee pension plans and interest on the debt service (but not repayment of principal). This concept was defined by Statistics Canada and figures on spending were taken from Statistics Canada's *Elementary-Secondary Education Survey* (ESES), which includes data compiled by the Ministère de l'Éducation, du Loisir et du Sport. The concept of spending in this section is the same as that used in Section 1.8.
2. Revised data
3. See Note 2 at the bottom of the text.

Graph 1.7

**Total school board
spending per student
in current dollars and
in constant 2010-2011
dollars**

1.8 Comparison of Total School Board Spending per Student

In 2010-2011, total spending per student by Québec school boards was \$12 098, compared with the Atlantic Provinces at \$12 208, Ontario at \$12 730 and Western Canada at \$12 569.¹

Previous editions of the *Education Indicators* showed that, in the 1990s, per-student spending varied in Canada and that, at the beginning of the 2000s, it was slightly higher in Québec than the Canadian average. However, starting in 2003-2004, per-student spending was lower in Québec than in the rest of Canada until 2010-2011 (most recent data available).

In 2010-2011, per-student spending in Québec (\$12 098) was 5% less than the average for the rest of Canada (\$12 677). It should be noted, however, that the comparison of per-student spending in the different provinces does not take into account regional differences in terms of the cost of living, which is lower in Québec than in the rest of Canada (7% lower in 2010). If the data were adjusted to take the cost of living into account, per-student spending would be slightly higher in Québec than in the rest of Canada (in real terms).

Moreover, when the individual factors making up total spending per student are compared, it appears that some factors are higher in Québec than in Ontario, while others are lower. Salaries for school personnel² and capital expenses are lower in Québec than in Ontario, while student-teacher ratios,³ vocational training, childcare services and school transportation are more expensive in Québec school boards than in Ontario.

In 2010-2011, total school board spending per student in Québec was 5% lower than the Canadian average.

1. The data on total per-student spending were taken from Statistics Canada's annual *Elementary-Secondary Education Survey* (ESES) of all Canadian provinces. The Ministère de l'Éducation, du Loisir et du Sport participated in this study. The concept of total spending is the same as that used in Section 1.7.
2. See Section 1.10 for a comparison of teachers' salaries.
3. See Section 1.9.

Table 1.8

**Total school board
spending per student:¹
Québec and the other
regions of Canada
(in current dollars)**

	1998- 1999	2002- 2003	2006- 2007	2008- 2009 ²	2009- 2010 ²	2010- 2011
Québec	6 671	8 397	10 139	11 176	11 502	12 098
Canada, excluding Québec	7 192	8 202	10 371	11 742	12 316	12 677
Atlantic Provinces	5 957	7 401	9 432	11 005	11 847	12 208
Ontario	7 559	8 028	10 393	11 480	12 187	12 730
Western Canada	6 985	8 569	10 465	12 154	12 448	12 569
Canada	7 077	8 244	10 321	11 622	12 145	12 557

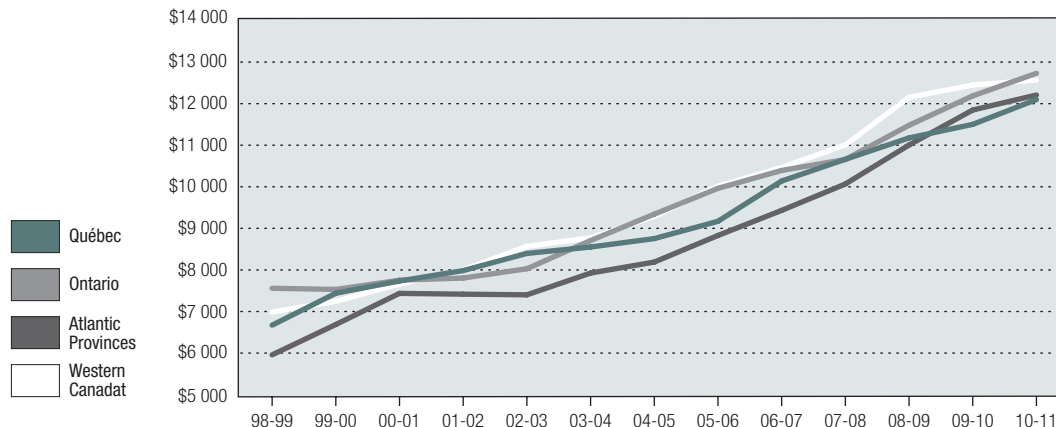
Source: See Note 1 at the bottom of the text.

1. Total spending includes operating and capital expenses, direct government contributions to school board employee pension plans and interest on the debt service (but not repayment of principal). This concept of spending was defined by Statistics Canada.

2. Revised data

Graph 1.8

**Total school board
spending per student:
Québec and the other
regions of Canada
(in current dollars)**



1.9 Student-Teacher Ratio in School Boards

In 2010-2011, the average number of students per teacher in school boards was 14.1 in Québec. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the school boards. Data on enrollments and teaching personnel are expressed in full-time equivalents. The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

The data available for the other provinces refer to a broader concept of teaching personnel. In addition to regular teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants and guidance counsellors). To avoid any confusion, we will refer here to the student-educator ratio rather than the student-teacher ratio. Table 1.9b contains data on the student-educator ratio.¹ In 2010-2011, this ratio was lower in Québec (12.7) than in the Atlantic Provinces (12.8), Ontario (13.5) and Western Canada (15.6). The lower number of students per educator in Québec than in Ontario is due in part to the average teaching time of teachers, which is lower in Québec.

Previous editions of the *Education Indicators* showed that, in the 1990s, the student-educator ratio in Québec and in the rest of Canada was on the rise, particularly in Ontario. The increase in Ontario was due to job cuts resulting from the application of the 1993 Social Contract legislation. One of the objectives of this legislation was to reduce the number of teachers in school boards. There were also budget cuts in Québec in the 1990s, but they affected mostly salaries. It should also be noted that, in their contract negotiations, Québec unions have always given priority to employment levels and teaching loads.

However, since the later 1990s, this trend has been reversed in Québec and in the rest of Canada. Between 1998-1999 and 2010-2011, the student-educator ratio in Québec school boards dropped from 15.0 to 12.7. This decrease was largely due to various measures implemented by the Ministère de l'Éducation, du Loisir et du Sport in recent years to support academic success for all students. For example, the number of students per group in the first years of elementary school was reduced, and schools in disadvantaged communities benefited from further reductions.² The teaching time at the elementary level also increased by 90 minutes in 2006-2007 (from 23.5 to 25.0 hours per week), which necessitated

the hiring of specialists to teach English as a Second Language starting in the first year of elementary school, the Physical Education and Health program, and the arts. Lastly, starting in 2006-2007, resource persons were hired to provide support for at-risk students and students with handicaps, social maladjustments or learning difficulties.

Table 1.9a presents a comparison between the student-teacher ratio in Québec school boards and the average for educational institutions in Organisation for Economic Co-operation and Development (OECD) countries in 2009-2010 (most recent data available). The student-teacher ratio was higher in preschool in Québec (19.5 in comparison with 14.4), but lower in elementary education (14.4 in comparison with 15.8) and secondary education (13.7 in comparison with 13.8).³

The average number of students per teacher in Québec dropped from 16.3 in 1998-1999 to 14.1 in 2010-2011.

1. Data on the student-educator ratio are taken from an annual survey conducted by Statistics Canada among all Canadian provinces (*Elementary-Secondary Education Survey-ESES*). The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.
2. In 2002-2003, the average number of students per group was reduced from 23 to 20 for the first year of elementary school, and in 2003-2004, from 25 to 22 for the second year of elementary school. In 2009-2010, the average number of students per group was reduced from 25 to 24 for the third year of elementary school. In schools in disadvantaged communities, it was reduced to 18 for the first two cycles of elementary education. In the future, the latter measure will be extended to the other years of elementary school as well.
3. Source for data on OECD countries: *Education at a Glance 2012: OECD Indicators*, Chart D2.2.

Table 1.9a

**Student-teacher ratio
in school boards: Québec
and OECD average,
2009-2010**

	Preschool	Elementary	Secondary
Québec	19.5	14.4	13.7
OECD average	14.4	15.8	13.8

Table 1.9b

**Student-educator ratio¹
in school boards: Québec
and the other regions
of Canada**

	1998- 1999	2002- 2003	2006- 2007 ²	2008- 2009	2009- 2010 ²	2010- 2011
Québec	15.0	14.2	13.5	13.0	12.8	12.7
Canada, excluding Québec	N/A	16.3	15.0	14.4	14.2	14.2
Atlantic Provinces	16.2	15.6	14.3	13.3	13.0	12.8
Ontario	N/A	16.2	14.5	13.8	13.6	13.5
Western Canada	17.4	16.8	16.0	15.8	15.5	15.6
Canada	N/A	15.8	14.7	14.1	13.9	13.8

Sources: See Notes 1 and 3 at the bottom of the text.

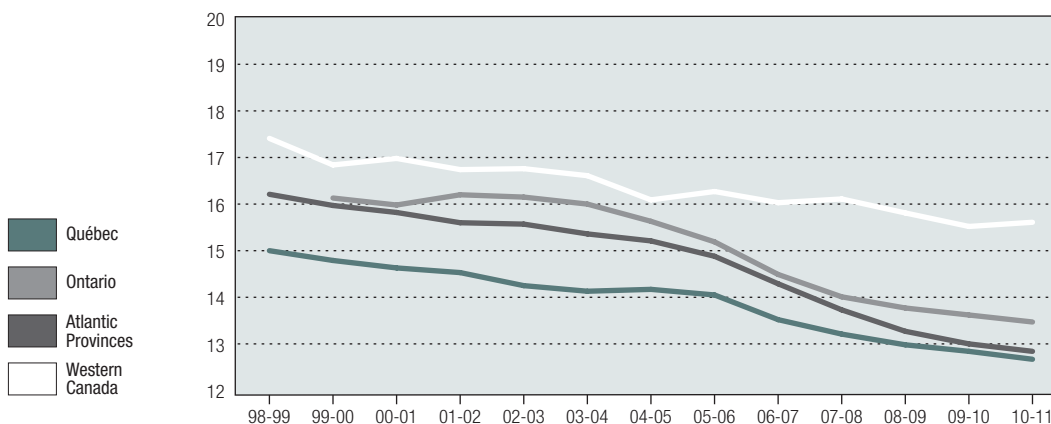
N/A: Data not available

1. See definition in the text.

2. Revised data

Graph 1.9

**Student-educator ratio
in school boards: Québec
and the other regions
of Canada**



1.10 Average Salary of Teachers in School Boards

In Québec, the basic salary of teachers in school boards is based on their schooling and work experience. There are 17 steps in the salary scale and a new teacher with a bachelor's degree enters at the third step (starting salary of \$39 742 in 2010-2011).¹ The maximum salary on the scale was \$71 255, while the average salary was \$59 850.²

The data available for the other provinces refer to a broader concept of teaching personnel. In addition to regular teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants and guidance counsellors).³ To avoid any confusion, we will refer here to educators. Table 1.10b contains data on the average salary of educators. In 2010-2011, the average salary of educators in Québec was lower than in the rest of Canada.

Throughout most of the 1990s, the average salary of educators increased more slowly in Québec than in the rest of Canada. In Québec, in a battle against budget deficits, agreements between the government and unions resulted in the average salary of teachers rising more slowly. Also, in 1997, a vast program of voluntary retirement resulted in a younger average age of teachers in Québec and, consequently, a decrease in the average salary because of less seniority.⁴

Between 2002-2003 and 2010-2011, the increase in the average salary of educators in Québec (22%) was lower than in the rest of Canada (28%). In 2010-2011, the average salary of teachers in Québec (\$62 259) was still lower than that of their counterparts in the rest of Canada (\$79 623), a difference of 22%. It must be noted, however, that relative wealth (measured in terms of per capita GDP) and the cost of living are both lower in Québec than in the rest of Canada.

Furthermore, the salaries of teachers in Québec school boards can also be ranked using indicators such as starting salary, salary after 15 years of seniority and maximum salary. In terms of salary after 15 years of seniority and maximum salary, Québec ranks very near the average for the other provinces, and far higher than the average for the OECD countries.⁵

Table 1.10a shows a comparison of the statutory annual salary of Secondary Cycle Two teachers in public schools in Québec with that of Ontario and the average for OECD countries in 2009-2010 (most recent data available). The starting salary is lower in Québec (\$39 238) than in Ontario (\$42 440) and in the OECD countries (average of \$40 169). However, the maximum salary of Québec teachers

(\$70 458) is almost the same as that of Ontario teachers (\$71 704) and well above the average salary of teachers in OECD countries (\$64 637).

It is also important to point out that teachers in Québec reach the maximum salary scale after their 15th year of recognized experience, whereas in OECD countries, the maximum salary is reached on average after 24 years.⁶

Teachers in Québec earn less than teachers in neighbouring regions, but the cost of living in Québec is also lower.

1. Data on starting and maximum salaries of teachers in 2010-2011 are weighted averages calculated using the salary scales in effect as at April 1, 2010, December 31, 2010 and April 1, 2011.
2. This is the average salary for all categories of teachers (full-time, part-time, teachers-by-the-lesson, supply teachers, etc.). The basic data used to calculate average salaries were taken from the *Système d'information sur le personnel des commissions scolaires* (PERCOS). The average salary of regular full-time teachers was \$64 864 in 2010-2011.
3. Data on the student-educator ratio were taken from an annual survey conducted by Statistics Canada among all Canadian provinces (*Elementary-Secondary Education Survey—ESES*). The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.
4. In Québec, the basic salary of teachers in school boards is determined by collective agreements.
5. See Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective* (Catalogue no. 81-604, September 2012).
6. In the other provinces, teachers reach the maximum salary scale sooner than in Québec (after 9 to 14 years). In Ontario, teachers reach the maximum salary scale after 10 years. See Note 5.

Table 1.10a

**Statutory annual salary of
Secondary Cycle Two teachers
in public schools: Québec,
Ontario and OECD countries,
2009-2010 (in current dollars)**

	Starting salary	Salary after 15 years	Maximum salary
Québec	39 238	70 458	70 458
Ontario	42 440	71 704	71 704
OECD average	40 169	53 537	64 637

Table 1.10b

**Average salary of
educators in school
boards: Québec and the
other regions of Canada
(in current dollars)**

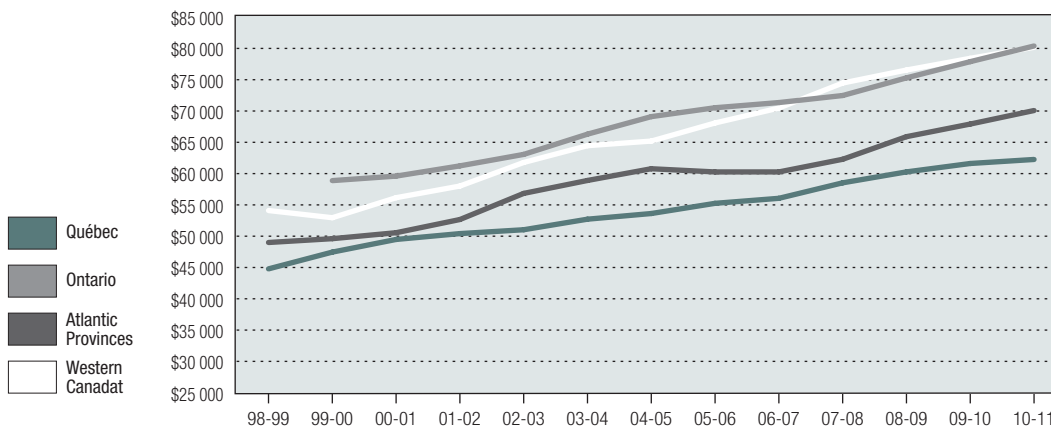
	1998- 1999	2002- 2003	2006- 2007	2008- 2009	2009- 2010	2010- 2011
Québec	44 779	51 030	56 051	60 273	61 615	62 259
Canada, excluding Québec	N/A	62 096	70 087	74 963	77 258	79 623
Atlantic Provinces	48 993	56 837	60 269	65 900	67 917	70 077
Ontario	N/A	63 067	71 350	75 294	77 886	80 389
Western Canada	54 100	61 777	70 474	76 546	78 419	80 178
Canada	N/A	59 446	66 817	71 602	73 698	75 678

Sources: See Notes 3 and 5 at the bottom of the text.

N/A: Data not available

Graph 1.10

**Average salary of
educators in school
boards: Québec and the
other regions of Canada
(in current dollars)**



1.11 CEGEP Operating Expenses for Regular Education

In 2010-2011, CEGEP operating expenses for regular education were over \$1.6 billion, a 33% increase over 2002-2003. This increase can be explained by higher enrollments and an increase in resources allocated to CEGEPs.

Previous editions of the *Education Indicators* showed that CEGEP operating expenses grew more slowly in the 1980s and 1990s than in the 1970s. This was a result of a slowdown in the inflation rate, as well as budget cutbacks and the application of cost-cutting measures in CEGEPs.

Between 1998-1999 and 2002-2003, there was a 27% increase in per-student spending in current dollars and a 17% increase in constant dollars.¹ These increases were due primarily to new collective agreements for all CEGEP employees and support measures for CEGEPs for the development of new information technologies, for careers in science and for success measures.

Between 2002-2003 and 2010-2011, per-student spending in constant dollars fluctuated, but trended upwards slightly. The slight increase in per-student spending can be explained mainly by the government policy on salaries, including a freeze on the salaries of CEGEP employees in 2004 and 2005.² The rise is due to various government reinvestment measures in higher education. Thus, the Ministère de l'Éducation, du Loisir et du Sport increased the annual resources allocated to CEGEPs to promote student retention and foster student success.

Per-student operating expenses in the CEGEPs was \$10 060 (in current dollars) in 2010-2011. This amount is an average for all types of regular education programs. The estimated per-student spending on pre-university programs was \$8 000, while that on technical programs was \$12 000. The higher estimated cost of technical training (50% more) is due primarily to the higher cost of personnel and the use of more costly equipment. The higher cost of personnel is attributable for the most part to the fact that the average number of students per teacher is far lower in technical training than in general education.

In 2010-2011, 94%³ of CEGEP operating expenses for regular education was provided by the Québec government. This percentage is much higher than the corresponding percentage for community colleges in the other provinces, mainly because college is free for Québec students, while students attending community colleges in the other provinces must generally pay tuition fees.⁴ In Ontario, for example, students in regular programs pay annual tuition fees of more than \$2 000.

CEGEP operating expenses rose by 33% between 2002-2003 and 2010-2011.

1. The consumer price index (CPI) is used to express operating expenses in constant dollars.
2. In December 2005, the Québec government adopted the *Act respecting conditions of employment in the public sector*, which defined the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and the Act provided for a 2% salary increase on April 1 of 2006, 2007, 2008 and 2009.
3. If the total expenses for all Québec colleges, public and private, are taken into consideration, the percentage of government funding is 85%. In the other provinces, the corresponding percentage is 58%. See Section 1.3.
4. Québec CEGEP students (in regular education) do not pay tuition fees. There are, however, certain other mandatory fees, and students must pay for their textbooks and other supplies.

Table 1.11

CEGEP operating expenses¹ for regular education

	1998-1999	2002-2003	2006-2007	2008-2009	2009-2010 ²	2010-2011
Total spending in current dollars (in millions of dollars)	1 035.7	1 230.4	1 358.3	1 511.6	1 572.9	1 632.1
Per-student spending in current dollars	6 688	8 469	9 457	9 772	9 875	10 060
Per-student spending in constant 2010-2011 ³ dollars	8 330	9 722	9 987	9 954	9 997	10 060

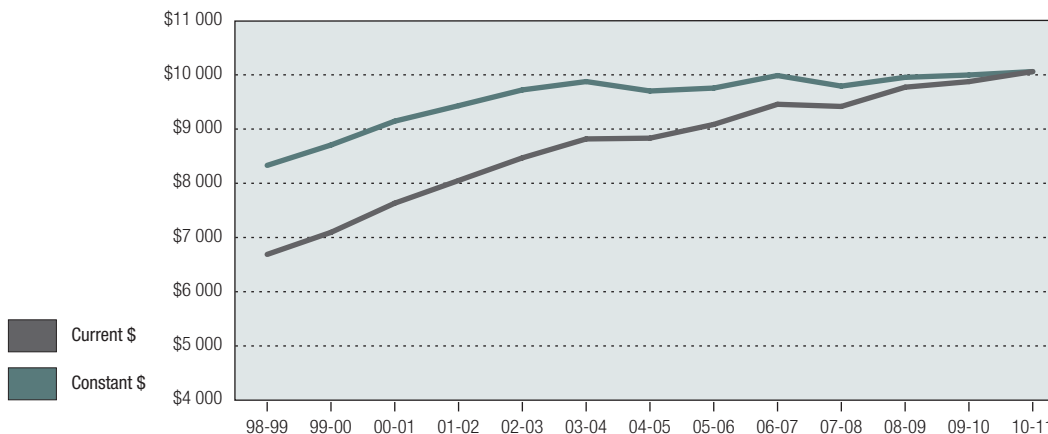
Sources: The basic data used to calculate these indicators were obtained from various information systems of the Ministère de l'Enseignement supérieur, de la Recherche et de la Science and from Statistics Canada (for the consumer price indexes used to express per-student spending in constant dollars).

1. Operating expenses exclude debt service (long-term and current liabilities) and capital expenses financed directly from current revenues.

2. Revised data

3. See Note 1 at the bottom of the text.

Graph 1.11

CEGEP operating expenses per student in current dollars and constant 2010-2011 dollars

1.12 Student-Teacher Ratio, Average Teacher Salary and Cost of Teachers per Student in CEGEPs

This section is a complement to Section 1.11, which analyzed changes in CEGEP operating expenses. Salary costs for teachers accounted for more than half of total CEGEP operating expenses in 2010-2011, and the adjustments in these costs were a determining factor in the changes in operating expenses.¹ Two factors determine the cost of teachers per student:² the student-teacher ratio and the average salary of teachers in CEGEPs.

The student-teacher ratio is calculated by dividing the number of students by the number of teachers in CEGEPs.³ The ratio therefore does not indicate the average number of students per class. To understand the difference between these two ratios, the student-teacher ratio must be considered as a composite indicator that is the result of three variables: the average number of students per class, the average teaching time of teachers and the average instruction time for students.

Previous editions of the *Education Indicators* revealed that the cost of teachers per student in constant dollars decreased during the 1980s and 1990s. This can be explained primarily by the fact that, because of budget cutbacks, the average salary of teachers increased more slowly than the rate of inflation. Cost-cutting measures were carried out by the Québec government in an effort to reduce the budget deficit during the 1990s.

However, between 1998 and 2002, there was a 13% increase in the cost of teachers per student in constant dollars,⁴ primarily because of new collective agreements for all CEGEP employees and a decrease in the student-teacher ratio, from 13.8 in 1998-1999 to 12.5 in 2002-2003.

However, between 2002 and 2010, the cost of teachers per student in constant dollars remained relatively stable, mostly because of the government's salary policy during that period.⁵

In 2010-2011, the student-teacher ratio in CEGEPs was 12.7, while the average salary of teachers was \$65 502. The salary scale for CEGEP teachers comprises 20 steps, as well as different entry levels depending on the number of years of recognized education for the purpose of determining starting salary. In 2010-2011, the starting salary for teachers with the minimum education (17 years) was \$39 742, while the maximum salary was \$71 255.⁶

In 2010-2011, the student-teacher ratio in CEGEPs was 12.7 and the average teacher's salary was \$65 502.

1. The salary costs considered in this section do not include employee benefits. If these were included, salary costs for teachers would account for more than 60% of total CEGEP operating expenses.
2. The cost of teachers per student is calculated by dividing the total payroll for teachers by the number of students.
3. Data on enrollments (fall registration) are taken from the *Système de gestion des données d'élèves au collégial* (Socrate) of the Ministère de l'enseignement supérieur, de la Recherche et de la Science, while data on teaching personnel are taken from the financial statements of CEGEPs and are expressed in full-time equivalents.
4. The consumer price index (CPI) is used to express operating expenses in constant dollars.
5. The Québec government adopted Bill 142, which defined the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and the Bill provided for a 2% salary increase on April 1 of 2006, 2007, 2008 and 2009.
6. In 2010-2011, the data available for starting salaries and maximum salaries for teachers with 17 years of recognized education were weighted averages, based on the salary scales of teachers on April 1, 2010, December 31, 2010 and April 1, 2011.

Table 1.12

**Student-teacher ratio,¹
average salary of
teachers and cost of
teachers per student in
CEGEPs**

	1998- 1999	2002- 2003	2006- 2007	2008- 2009	2009- 2010	2010- 2011
Student-teacher ratio	13.8	12.5	12.3	12.6	12.7	12.7
Average salary in current dollars	50 399	55 877	61 020	63 609	64 343	65 502
Cost of teachers per student						
In current dollars	3 659	4 473	4 948	5 042	5 051	5 149
In constant dollars (2010-2011) ²	4 557	5 135	5 226	5 136	5 114	5 149

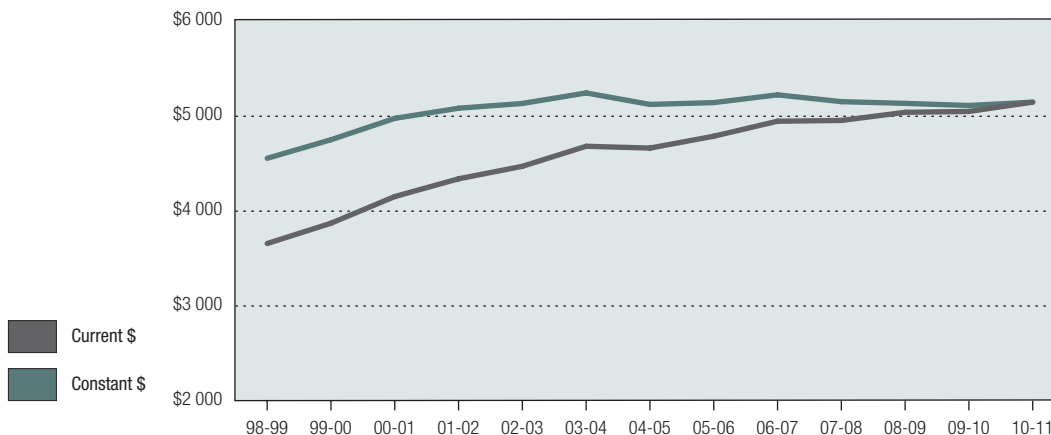
Sources: The basic data used to calculate these indicators were obtained from various information systems of the Ministère de l'Enseignement supérieur, de la Recherche et de la Science and from Statistics Canada.

1. See Note 3 at the bottom of the text.

2. See Note 4 at the bottom of the text.

Graph 1.12

**Cost of teachers per
student in CEGEPs
in current dollars and
in constant 2010-2011
dollars**



1.13 Total University Spending in Relation to the GDP

In 2010-2011, 1.82% of the gross domestic product (GDP) was allocated to university education in Québec;¹ compared with 2.22% in the Atlantic Provinces, 1.76% in Ontario and 1.56% in Western Canada.²

Between 1998 and 2002, the share of the GDP allocated to university education increased both in Québec and in the rest of Canada but fluctuated over the following years. In 2010-2011, investment in university education remained higher in Québec than in the rest of Canada. To explain why Québec invested more of its GDP in university education, it is necessary to consider four major factors: per-student spending; the collective wealth (as defined by per capita GDP); the rate of participation (the proportion of the student population with respect to the population aged 18 to 24) and the demographic factor (the proportion of 18-to-24-year-olds with respect to the total population).³

The main factor in the greater spending on universities in Québec was that Québec's per capita GDP (\$42 373) was 18% lower than the average recorded for the other Canadian provinces (\$51 870) in 2010-2011. Two other factors, total per-student spending (slightly lower in Québec than in the rest of Canada) and the demographic factor (relatively fewer young people in Québec) had the opposite effect.

In 2010-2011, total per-student spending in Québec universities (\$28 545) was 6% lower than in universities in the rest of Canada (\$30 213).⁴ However, organizational differences between the education systems can affect the relative level of per-student spending. Another problem involves differences in the cost of living, which was 7% lower in Québec than in the rest of Canada in 2010. In addition, there are other adjustments that would make the data more comparable. If the organizational differences, cost of living and other possible adjustments were taken into account, per-student spending in Québec would be more or less comparable to the average for the rest of Canada in 2010-2011.⁵

In 2010-2011, the participation rate was essentially the same for Québec (30.5%) as for the rest of Canada (30.6%).

When compared with the member countries of the Organisation for Economic Co-operation and Development (OECD), Québec ranked among the countries with the largest share of the GDP allocated to university education in 2008-2009.⁶ In fact, only a few countries allocated a larger share of their GDP to university education. This can be explained primarily by the fact that per-student spending is relatively higher in Québec than the OECD average. In addition, the schooling rate of young people is estimated to be higher in Québec than the average for OECD countries, and this factor contributed to the larger investment in university education.

Investment in university education is higher in Québec than in the rest of Canada and in most OECD countries.

1. In 2010-2011, Québec spent \$6.2 billion of its \$338.1-billion GDP on university education.
2. The data on universities presented here have not been adjusted to take into account the organizational differences in the education systems.
3. See Marius Demers, "Financial Investment in Universities in 2008-2009: Comparison between Québec and the Other Canadian Provinces," *Education Statistics Bulletin 40* (March 2011). This document, which was published by the Direction de la recherche, des statistiques et de l'information of the Ministère de l'Éducation, du Loisir et du Sport, is available at http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/education-statistics-bulletin-nspop-40-financial-investment-in-universities-in-2008-2009/?tx_ttnews%5Blang%5D=1.
4. See Section 1.14.
5. See Section 1.14. See also Note 3 above.
6. For more information on comparisons between the provinces and with OECD countries for this indicator, see Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective* (Catalogue no. 81-604, September 2011), Chapter B; and OECD, *Education at a Glance 2011: OECD Indicators, 2011*, Chapter B. The concept of overall spending used in these publications is slightly different than the one used in this section.

Table 1.13

Total university spending¹ in relation to the GDP: Québec and the other regions of Canada (%)

	1998-1999	2002-2003 ²	2006-2007	2008-2009 ²	2009-2010 ²	2010-2011
Québec	1.37	1.79	1.74	1.86	1.81	1.82
Canada, excluding Québec	1.13	1.39	1.42	1.59	1.69	1.69
Atlantic Provinces	1.81	1.99	1.86	2.04	2.18	2.22
Ontario	1.06	1.34	1.52	1.72	1.75	1.76
Western Canada	1.12	1.37	1.26	1.41	1.57	1.56
Canada	1.18	1.47	1.48	1.64	1.72	1.72

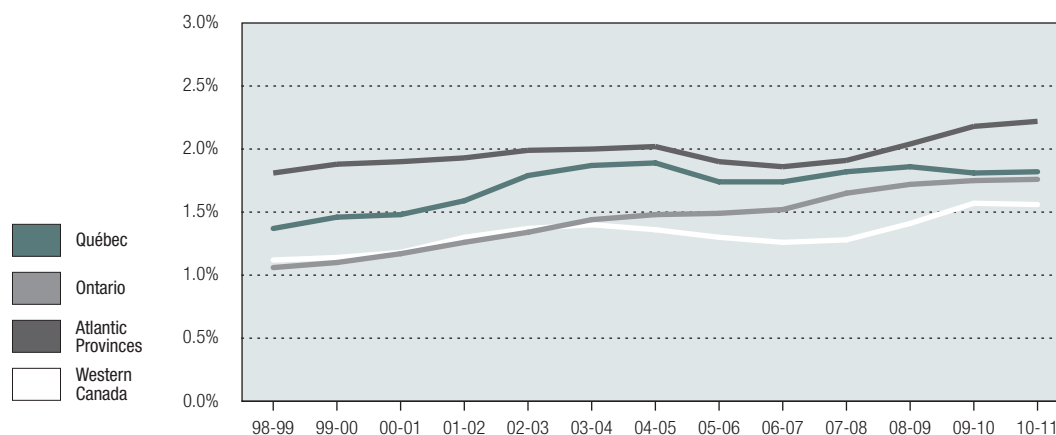
Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO). However, the 2010-2011 data for Québec were adjusted by the Ministère de l'Enseignement supérieur, de la Recherche et de la Science to reflect a 12-month fiscal year. This adjustment was necessitated by the change in the fiscal year-end date for institutions in Québec, starting in 2010-2011. The fiscal year-end date of May 31 was replaced with April 30 for all Québec universities. As a result, the financial statements of these institutions and CAUBO data cover an 11-month period (10 months for Bishop's University).

1. Total university spending includes the general operating fund, endowment fund, subsidized research fund and capital fund, but excludes auxiliary undertakings. Also see Note 2 at the bottom of the text.

2. Revised data

Graph 1.13

Total university spending in relation to the GDP: Québec and the other regions of Canada (%)



1.14 Total University Spending per Student

In 2010-2011, total spending per student by Québec universities was \$28 545, compared with \$30 287 in the Atlantic Provinces, \$26 620 in Ontario and \$35 823 in Western Canada.

Universities in Québec and the rest of Canada do not account for expenses in the same way.¹ For interprovincial comparisons, it was necessary to use the concept of total spending. Total university spending includes the general operating fund, the endowment fund, the subsidized research fund and the capital fund, but excludes auxiliary undertakings. This comparison must nonetheless be qualified by two important factors: organizational differences among education systems and differences in the cost of living.

Differences between the provinces' total per-student spending can be explained in part by the organizational differences among education systems, including those related to the composition of the student body at each level and in each field of study. Thus, the fact that Québec universities have a higher proportion of students in costlier fields of study and at higher levels of study explains in part why their per-student spending is higher than in Ontario.

It is important to take this factor into account when comparing financial data, since for the same dollar amount, buying power is not the same from one province to the next. The factor (lower cost of living in Québec) decreases per-student spending in Québec by 7%.

In addition, there are other adjustments that would make the data more comparable.² If the organizational differences, cost of living and other possible adjustments were taken into account, per-student spending in Québec would be more or less comparable to the average for the rest of Canada in 2010-2011.³ It should also be noted that the relative collective wealth of the provinces affects comparisons of per-student spending. Thus the collective wealth of the Western provinces partly explains why their per-student spending is higher than the rest of Canada. Nevertheless, the total university spending per student by Québec universities (\$28 545) was higher than that of Ontario universities (\$26 620), despite the lower per-capita GDP in Québec.

A comparison of the sources of university revenues in 2010-2011 shows that public funding is higher in Québec (70%) than in the rest of Canada (57%), while the opposite is true for private funding (30% versus 43%). Public funding includes revenues from provincial governments (53% in Québec compared with 44% in the rest of Canada). Private funding includes revenues from tuition fees which represent a much smaller proportion (14%) in Québec than in the rest of Canada (26%).

In 2010-2011, total spending per student by Québec universities was higher than in Ontario, but lower than the average in the other provinces.

- Two examples illustrate how expenses (and revenues) are recorded differently in the various funds. In Québec universities, some expenses related to furniture and equipment purchases are entered in the capital fund, while in universities in the rest of Canada, these expenses are included in the operating fund. In Québec universities, teaching and research expenses in university hospitals are entered in the subsidized research fund, while in universities in the rest of Canada, they are included in the operating fund.
- One example is tax offsets. In Québec, the Ministère des Affaires municipales, et de l'Occupation du territoire pays the tax offsets directly to the cities and municipalities on behalf of the universities. These amounts do not appear in either the financial statements of the universities or the data from the Canadian Association of University Business Officers (CAUBO). In CAUBO data, everything indicates that, in the other provinces, this expense item is accounted for in the operating funds. In 2010-2011, the government paid approximately \$100 million in tax offsets but this amount is not taken into consideration in the comparative evaluation of resources allocated to the universities. Another example: bursaries given by the universities which are much higher in the other provinces because their tuition fees are also much higher, but a portion of the fees collected are returned to the students in the form of bursaries.
- See also Marius Demers, "Financial Investment in Universities in 2008-2009: Comparison between Québec and the Other Canadian Provinces," *Education Statistics Bulletin* 40 (March 2011). This document, which was published by the Direction de la recherche, des statistiques et de l'information of the Ministère de l'Éducation, du Loisir et du Sport, is available at http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/education-statistics-bulletin-nspopup-40-financial-investment-in-universities-in-2008-2009/?tx_ttnews%5Blang%5D=1.

Table 1.14

**Total university
spending per student:¹
Québec and the other
regions of Canada
(in current dollars)**

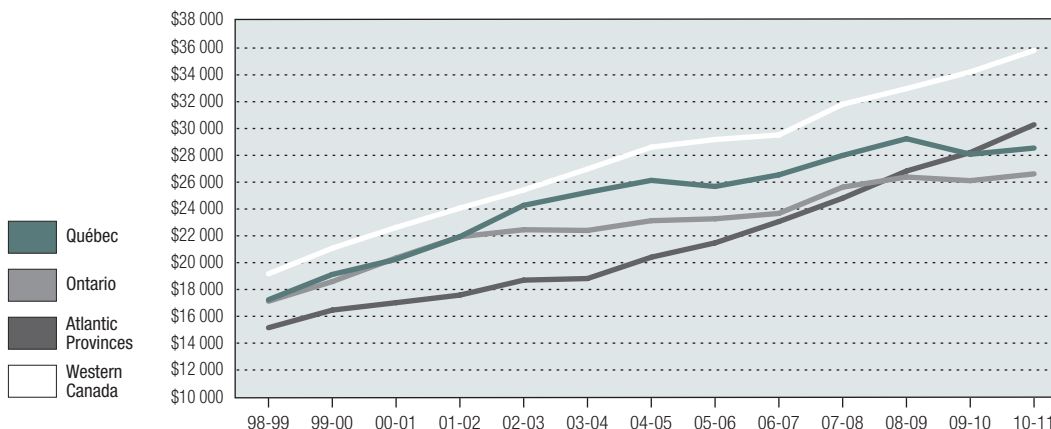
	1998- 1999	2002- 2003	2006- 2007	2008- 2009	2009- 2010	2010- 2011
Québec	17 235	24 273	26 546	29 242	28 085	28 545
Canada, excluding Québec	17 575	23 015	25 599	28 735	29 184	30 213
Atlantic Provinces	15 149	18 697	23 064	26 831	28 211	30 287
Ontario	17 120	22 454	23 673	26 383	26 113	26 620
Western Canada	19 168	25 419	29 519	32 976	34 217	35 823
Canada	17 489	23 320	25 809	28 846	28 945	29 848

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO). However, the 2010-2011 data for Québec were adjusted by the Ministère de l'Enseignement supérieur, de la Recherche et de la Science to reflect a 12-month fiscal year. This adjustment was necessitated by the change in the fiscal year-end date for institutions in Québec, starting in 2010-2011. The fiscal year-end date of May 31 was replaced with April 30 for all Québec universities. As a result, the financial statements of these institutions and CAUBO data cover an 11-month period (10 months for Bishop's University).

1. Total university spending includes the general operating fund, endowment fund, subsidized research fund and capital fund, but excludes auxiliary undertakings. In addition, the calculation of per-student spending is based on a standard method for counting student enrollments in all provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.

Graph 1.14

**Total university
spending per student:
Québec and the other
regions of Canada
(in current dollars)**



1.15 Salary Costs of University Professors

Salary spending (including employee benefits) for all categories of personnel accounts for more than half of the total university spending in Québec and in the rest of Canada. Professors' salaries are the largest component of payroll expenditure. When the total payroll for professors is divided by the number of students expressed in full-time equivalents, the result is the cost of professors per student.¹ In 2010-2011, this cost was lower in Québec (\$7 455) than in the Atlantic Provinces (\$8 108), Ontario (\$7 689) and Western Canada (\$9 595). Because of the high cost in Western Canada, the cost of professors per student in Québec was 11% below the average for the rest of Canada (\$8 399). However, if we take into account the cost of living, which is lower in Québec than in the rest of Canada, the (actual) cost of professors per student is higher in Québec than in Ontario and the difference between Québec and the rest of Canada is significantly reduced.

The total payroll considered in the calculation of per-student spending for professors includes the salaries of deans, department heads, research professors and lecturers, as well as amounts paid to all other personnel employed in teaching positions (as defined by Statistics Canada).² Of the factors that explain the differences observed in per-student spending for professors, two are particularly significant: the average number of students per professor and the average salary of professors. Table 1.15 presents data on the average salary of full-time professors.³

In 2010-2011, the average salary of professors in Québec (\$107 673) was 3% higher than in the Atlantic Provinces (\$104 671), but 12% lower than in Ontario (\$122 952) and 7% lower than in Western Canada (\$115 534). However, it must be noted that the cost of living is lower in Québec than the average for the rest of Canada (7% lower in 2010). If differences in the cost of living are taken into account, full-time university professors in Québec actually had nearly the same purchasing power as their counterparts in the other provinces in 2010-2011.

It should also be noted that, although the average salary of professors in Québec is lower than in Ontario (by 12% in 2010-2011), the per-student cost of professors is still higher in Québec when the difference in the cost of living is taken into consideration.⁴ This is primarily because the average number of students per professor was lower in Québec than in Ontario in 2010-2011.

In 2010-2011, the average number of students per full-time professor in Québec (22.3) was much lower than in Ontario (26.0).⁵ Lecturers and part-time professors were not included in this calculation. Lecturers are responsible for a large part of the teaching in university (about 50% in Québec). The data available do not

permit a precise calculation of student-teacher ratios that would include all categories of teachers.

The high number of lecturers in Québec universities can be partly explained by the large amount of time professors are released from their teaching duties to carry out other tasks (e.g. to do research, hold administrative positions related to academic affairs, carry out internal service tasks). There is, however, little recent data on the topic.

Although the average salary of university professors is lower in Québec than in the rest of Canada, their purchasing power is nearly the same when the cost of living is considered.

1. The calculation of per-student spending for professors is based on a standard method for counting student enrollments in all the provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents and are then added to the full-time enrollments. The basic data used to calculate this indicator were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO). The 2010-2011 data for Québec were estimated by the Ministère de l'Enseignement supérieur, de la Recherche et de la Science (see data sources at the bottom of Table 1.14).
2. Employee benefits are not included in the total payroll used for this calculation.
3. Average salary includes basic salary as well as additional fees paid for administrative functions.
4. In 2010-2011, the per-student cost of professors was 3% higher in Ontario than in Québec, but the cost of living was 11% higher in Ontario.
5. This is an update of the data in Marius Demers, "Financial Investment in Universities in 2008-2009: Comparison between Québec and the Other Canadian Provinces," *Education Statistics Bulletin* 40 (March 2011). This document, which was published by the Direction de la recherche, des statistiques et de l'information of the Ministère de l'Éducation, du Loisir et du Sport, is available at http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/education-statistics-bulletin-nsuposup-40-financial-investment-in-universities-in-2008-2009/?tx_ttnews%5Blang%5D=1.

Table 1.15

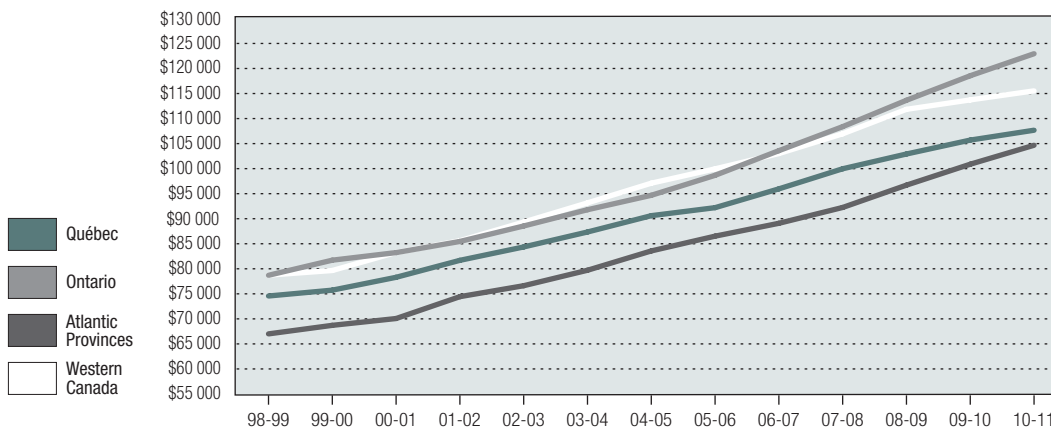
Average salary of full-time university professors: Québec and the other regions of Canada
(in current dollars)

	1998-1999	2002-2003	2006-2007	2008-2009	2009-2010	2010-2011
Québec	74 566	84 364	95 962	102 925	105 704	107 673
Canada, excluding Québec	76 838	86 916	101 292	110 629	114 296	117 548
Atlantic Provinces	67 001	76 621	89 084	96 705	100 886	104 671
Ontario	78 704	88 549	103 590	113 656	118 557	122 952
Western Canada	78 729	89 334	103 013	111 846	113 727	115 534
Canada	76 284	86 294	100 056	108 863	112 424	115 405

Source: The basic data used to calculate this indicator were obtained from Statistics Canada, *University and College Academic Staff Survey* (special compilation).

Graph 1.15

Average salary of university research professors: Québec and the other regions of Canada
(in current dollars)



1.16 Student Financial Assistance and Tuition Fees

In Québec, financial assistance is available to students in full-time postsecondary education and in secondary-level vocational training programs. The loans and bursaries awarded under Québec's student financial assistance program are intended to supplement the contribution of the student, and his or her parents, sponsor or spouse, since responsibility for the cost of education lies with them first and foremost. Government assistance covers the difference between the allowable expenses and the contribution of the student and, where applicable, of his or her parents, sponsor or spouse.

In 2011-2012, 24.2% of full-time students in secondary vocational training, 21.3% of full-time college students and 41.4% of full-time university students received some form of financial assistance. A total of 156 564 students benefitted from the Loans and Bursaries Program. Of these, 55 402 received only a loan, 98 988 received a loan and a bursary and 2 174 received only a bursary. A total of \$538.5 million was granted in the form of loans and \$459.4 million, in bursaries.

In 2011-2012, of the university students who received financial assistance, 33.9% obtained only a loan, which averaged \$3 828, whereas 64.8% obtained a loan and a bursary totalling an average of \$8 715. Those who received a loan and a bursary obtained on average slightly more than half of the assistance in the form of a bursary.

A look at the historical data on the breakdown of financial assistance awarded to Québec students attending university shows that the portion of assistance granted in the form of loans and bursaries fluctuated between 1990 and 2011 (see Table 1.16b). In 2011-2012, loans accounted for 52.5% of the total assistance awarded, and bursaries, 47.5%.

In 2011-2012, upon completion of their undergraduate studies, Québec students who had received loans owed on average \$12 701. The average debt for graduate studies was \$15 985 and for doctoral studies, \$23 822.

Student loans contracted for college and undergraduate studies averaged \$16 154 in 2011-2012; for college through graduate studies, it averaged \$25 506; and for college through to doctoral studies, it was \$36 154.

It is important to note that debt levels for Québec students are significantly lower than those for students in the rest of Canada. This can be explained in part by three factors. First, Québec's tuition fees are the lowest in Canada. Second, on average, Québec awards more bursaries than the other provinces, and third, CEGEPs shorten the duration of many university programs. Since CEGEPs do not

charge tuition fees, shortening the duration of university programs can reduce the amount of debt students incur to pay university tuition fees.

Tuition fees in Québec universities are set according to students' status. In addition to the basic amount payable by residents of Québec, Canadian students who are not residents of Québec and foreign students must pay an amount determined by the universities' budget rules. Thus, tuition fees in Québec universities in 2012-2013 were \$2 168 for Québec residents, \$5 858 for Canadian students who are not Québec residents, and significantly higher for international students, depending on the level and field of study.¹

Table 1.16a presents data on the average tuition fees for Canadian students enrolled full-time in an undergraduate program, by region of Canada. In Québec, these fees (\$2 565) represented 41% of the amount charged in the rest of Canada (\$6 246) in 2012-2013. This situation can be explained by the long periods of time (1969 to 1989 and 1995 to 2006) during which tuition fees were frozen in Québec universities.

In 2012-2013, average tuition fees were \$2 565 in Québec and \$6 246 in the rest of Canada.

1. In addition to tuition fees, universities can charge foreign students special fees in accordance with their regulations. Moreover, various categories of students may be exempted from the amount normally payable by foreign students. See the following document, produced by the Direction des affaires internationales et canadiennes of the Ministère de l'Éducation, du Loisir et du Sport: *Politique relative aux droits de scolarité exigés des étudiantes et des étudiants étrangers par les universités du Québec*, May 2008. This document is available, in French only, at <http://www.mesrs.gouv.qc.ca/universites/personnel-duniversite/regles-budgetaires-et-reddition-de-comptes/droits-de-scolarite-exiges-des-etudiants-et-rangers-et-non-residents-du-quebec/>.

Table 1.16a

Average tuition fees for full-time undergraduate university students: Québec and the other regions of Canada (in current dollars)

	1989-1990	1991-1992	1996-1997	2006-2007	2011-2012	2012-2013
Québec	519	1 311	1 705	1 932	2 520	2 565
Canada, excluding Québec	1 537	1 842	2 939	4 565	6 020	6 246
Atlantic Provinces	1 728	2 075	3 148	5 537	5 167	5 319
Ontario	1 561	1 818	2 992	5 155	6 815	6 975
Western Canada	1 409	1 780	2 755	4 542	5 085	5 185
Canada	1 271	1 706	2 648	4 400	5 313	5 586

Table 1.16b

Proportion of financial assistance given to Québec university students in the form of loans and bursaries (%)

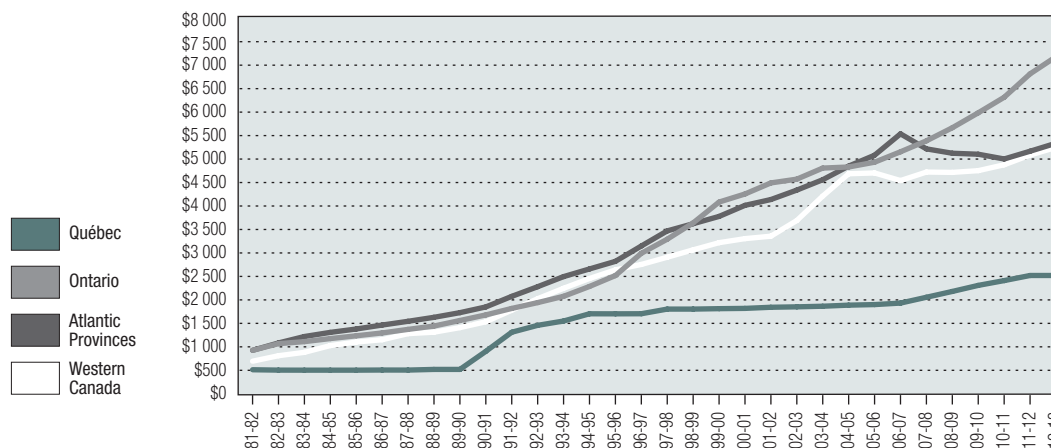
	1990-1991	1995-1996	2000-2001	2005-2006	2008-2009	2009-2010	2010-2011	2011-2012 ^p
Loans	59.4	66.4	59.3	61.2	54.6	52.7	52.1	52.5
Bursaries	40.6	33.6	40.7	38.8	45.4	47.3	47.9	47.5

Sources: The basic data used to calculate these indicators were obtained from Statistics Canada and various information systems of the Ministère de l'Éducation, du Loisir et du Sport.

p: Preliminary data

Graph 1.16

Average tuition fees for full-time undergraduate university students: Québec and the other regions of Canada (in current dollars)



1.17 Funded and Sponsored Research in Universities

In 2010-2011, the amount of funding through research grants and contracts was over \$1.7 billion or an average amount of more than \$180 000 per professor.

Between 1999 and 2006, research grants and contracts increased by 67%. This sharp increase is explained in part by important sums allocated by the Québec and Canadian government to the Canadian Foundation for Innovation (CFI).

From 2006 to 2010, the amount allocated to research rose from \$1.377 billion to \$1.742 billion, a 27% increase. During this period, the contribution of the federal government rose by 22%, while that of the Québec government, by 69%. Private sector grants and contracts increased by 5% and those from other sources,¹ by 29%.

In 2010-2011, about half the funding for funded and sponsored research in universities came from the federal government, while 22% came from the Québec government. The rest of the funding came from private sector grants and contracts (19%) and from other sources (10%).

In 2010-2011, the average value of research grants and contracts per professor in Québec (\$181 376) was higher than the average for the rest of Canada (\$140 182). This difference can largely be explained by the fact that professors in Québec receive on average more federal funding (\$87 341) than their counterparts in the other provinces (\$67 830).²

Because the federal research funds award grants based on merit, the performance of Québec's university researchers in obtaining federal research funds can be shown by comparing the percentage of research grants from federal funds obtained by university researchers in Québec (26.3% in 2010-2011) with the weight of the Québec population in Canada (23.1% in 2011). Québec therefore appears to have obtained more than its share of federal funding for university research.

However, Québec universities are under-represented in terms of research commercialization when compared with universities in Ontario or the other provinces. In 2008, Québec universities and research centres filed 15% of all "new licences and options"³ issued to Canadian universities and research centres. Moreover, in 2008, Québec universities launched slightly more than 16% of all the spin-off companies created by Canadian universities based on inventions, which is significantly lower than the weight of Québec's population within Canada (23.3% in 2008).⁴

It is possible to obtain a breakdown of funded and sponsored research by field of study, using data from the *Système d'information sur la recherche universitaire*

(SIRU) for 2010-2011. Health sciences, pure sciences and applied sciences received 76.2% of the research grants and contracts, or 45.4%, 19.5% and 11.3%, respectively (see Graph 1.17). The social sciences received 14.3%, and the other fields, 9.5%.

In 2010-2011, the average value of research grants and contracts per professor in Québec was higher than the average for the rest of Canada.

1. This includes gifts from private businesses and non-profit organizations.
2. This is an update of the data in Marius Demers, "Financial Investment in Universities in 2008-2009: Comparison between Québec and the Other Canadian Provinces," *Education Statistics Bulletin 40* (March 2011). This document, which was published by the Direction de la recherche, des statistiques et de l'information of the Ministère de l'Éducation, du Loisir et du Sport, is available at http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/education-statistics-bulletin-nsuposup-40-financial-investment-in-universities-in-2008-2009/?tx_ttnews%5Blang%5D=1.
3. A licence is an agreement with a client to use the institution's intellectual property for a fee or other consideration. An option is the right to negotiate for a licence.
4. Statistics Canada, *Survey of Intellectual Property Commercialization in the Higher Education Sector, 2008*, August 2010.

Table 1.17

Funded and sponsored research,¹ by source of funding and per research professor

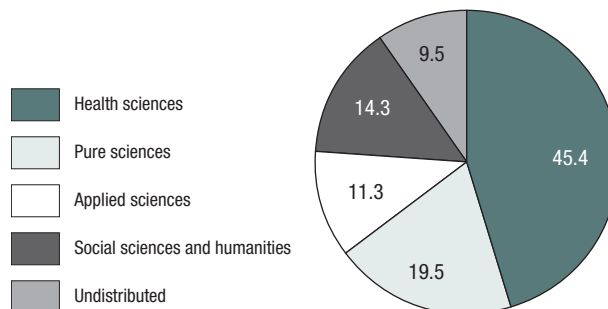
	1999- 2000	2002- 2003	2006- 2007	2008- 2009	2009- 2010	2010- 2011
Research grants and contracts (in millions of dollars), by source						
Government of Canada	350.1	577.0	687.4	753.1	831.4	839.0
Government of Québec	156.8	285.1	230.2	250.6	376.2	388.3
Private sector grants and contracts	122.8	299.6	320.1	280.6	335.5	335.0
Other sources	196.4	117.1	139.1	260.7	177.1	180.0
Total	826.1	1 278.8	1 376.8	1 545.0	1 720.2	1 742.3
Number of research professors²	8 005	8 292	9 267	9 447	9 516	9 606
Amount per research professor (\$)	103 198	154 221	148 570	163 544	180 769	181 376

Sources: The basic data used to calculate this indicator were obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO). However, the 2010-2011 data for Québec were adjusted by the Ministère de l'Enseignement supérieur, de la Recherche et de la Science to reflect a 12-month fiscal year. This adjustment was necessitated by the change in the fiscal year-end date for institutions in Québec, starting in 2010-2011. The fiscal year-end date of May 31 was replaced with April 30 for all Québec universities. As a result, the financial statements of these institutions and CAUBO data cover an 11-month period (10 months for Bishop's University).

1. This refers to all research receiving direct assistance (grants, contracts, sponsorships, etc.) from either the university itself or outside organizations. Included are research projects conducted under the supervision of university research professors, for which funds have been put into specific accounts managed by the financial services or accounting department of the university, a hospital or a university-affiliated centre.
2. This refers to career professors who occupy permanent positions in Québec universities, regardless of whether they are currently involved full-time in teaching-related activities or on sabbatical or career development leave. They may also assume certain administrative tasks. For example, department heads, deans and assistant deans often continue to be active in teaching or research.

Graph 1.17

Funded and sponsored research, by field of research, 2010-2011 (%)



2.1 School Life Expectancy

A child who began elementary school in 2011-2012 can expect to spend 15.5 years in the education system.¹ Since 1988-1989, the expected duration of school attendance has increased by 0.6 years for male students and 1.6 years for female students. School life expectancy has not increased, however, from the 15.7 years observed in 1993-1994. For male students, it has even decreased by approximately 0.6 years since then, standing now at 14.8 years.

A breakdown by level of education reveals that all increases since 1987-1988 are attributable to either adult education or postsecondary education. More than half of the additional schooling is a result of college and university studies. At the elementary and secondary levels, schooling rose by 0.30 years as a result of an increase of 0.33 years in the adult sector and a drop of 0.40 years in the youth sector.

At the elementary and secondary levels, the actual duration of schooling more or less corresponds to the projected length of studies. Enrollment at these levels of education is virtually universal and compulsory until the age of 16. At the college and university levels, the reason why the average duration of schooling is less than the length of programs is primarily because not all students go on to postsecondary education.

School life expectancy does not necessarily correspond to the number of years of study begun and successfully completed, because grades repeated are included in the average duration. The slight decline since 1992-1993 in the duration of schooling at the elementary and secondary levels can be explained by the decrease in the number of grades that are repeated at this age. At the college and university levels, women tend to stay in school longer because more of them enroll in postsecondary education than men. Women attend postsecondary school for an average of 4.8 years, compared with 3.4 years for men.

From elementary school to university, in 2011-2012, school-aged Quebecers could expect to stay in school for an average of 15.5 years.

1. Technically speaking, school life expectancy for a school year is equal to the sum of the schooling rates (or school attendance rates) for full-time studies (or the equivalent) per year of age. A schooling rate is equivalent to the average number of years of schooling per person. The sum of the rates per age indicates the hypothetical duration of studies for a child who begins elementary school and who, throughout his or her progression through school, is in the schooling situation observed for a given year at various ages.

Table 2.1

**School life expectancy
for a child entering
elementary school,
by gender and level of
education (in years)**

	1987- 1988	1988- 1989	1993- 1994	1998- 1999	2010- 2011	2011- 2012 ^e
All levels of education by gender						
Male	N/A	14.2	15.4	15.1	14.7	14.8
Female	N/A	14.8	16.0	15.9	16.3	16.4
Total	14.5	14.5	15.7	15.5	15.5	15.5
Both genders by level of education						
Elementary (youth sector)	6.14	6.16	6.12	6.08	5.93	5.94
Secondary (youth sector)	5.09	5.03	5.01	5.00	4.89	4.89
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.88	0.67	0.63
College	1.74	1.74	2.07	1.99	2.00	2.02
University	1.28	1.34	1.64	1.53	2.04	2.10

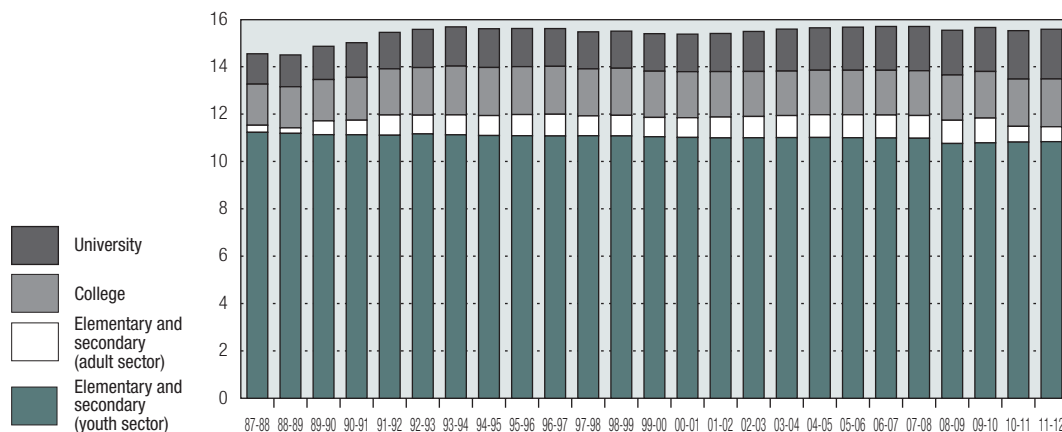
Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

N/A: Data not available

Graph 2.1

**School life expectancy
for a child entering
elementary school
(in years)**



2.2 Enrollment in Preschool Education

Enrollment in kindergarten for 5-year-olds¹ has varied between 97% and 99% for a number of years. There is no significant difference between the enrollment of boys and girls in either kindergarten for 5-year-olds or kindergarten for 4-year-olds. In the past, enrollment in kindergarten for 4-year-olds varied between 6% and 9%; this rate has been significantly higher since 1994-1995 because children in Passe-Partout play groups are now included. In 2011-2012, this rate stood at 20.6%.

Around the world, daycare centres, kindergartens, regular schools and families participate to varying degrees in the education of young children. In Québec, a relatively large portion of educational activities are entrusted to daycare centres, while the official education system becomes involved later in the child's life. Thus, in Québec, 5-year-olds are about as likely to attend kindergarten or elementary school as children in the G7 countries.² In 2011-2012, most of the G7 countries had universal access to school for 5-year-olds. On the other hand, with respect to educational activities for 4-year-olds, Québec is far behind those countries in which the enrollment of 4-year-olds is almost identical to that of 5-year-olds. Similarly, in Québec and the rest of Canada, 3-year-olds do not attend school; this is a rare exception among the G7 countries. Moreover, the majority of children enrolled in kindergarten for 4-year-olds in Québec are in a Passe-Partout play group. Children officially enter the Québec school system in kindergarten for 5-year-olds.

Children with handicaps, social maladjustments or learning difficulties account for 2.7% of students in kindergarten for 5-year-olds. For girls, the proportion is 1.6% and, for boys, it is 3.7%, more than double.

In 2011-2012, 98.2% of children attended kindergarten for 5-year-olds.

1. This refers to the number of children in kindergarten for 5-year-olds (regardless of their age) in proportion to the population of 5-year-olds, or 4-year-olds in the case of kindergarten for 4-year-olds. Very few children who are not 5 years of age on September 30 are enrolled in kindergarten for 5-year-olds, and even fewer children in kindergarten for 4-year-olds are not 4 years of age. Variations in the estimates of the population aged 4 or 5 may affect the calculation of these rates, probably more so than any other factor.
2. The OECD calculates net enrollment rates, that is, the proportion of children of a given age who attend kindergarten or elementary school. These two levels are combined, since there are major differences among countries. The net enrollment rate does not take into account whether children attend school part-time or full-time, or their hours or days of attendance. Here too, major differences can be seen among countries.

Table 2.2

Proportion of children enrolled in kindergarten for 4-year-olds and for 5-year-olds (%)

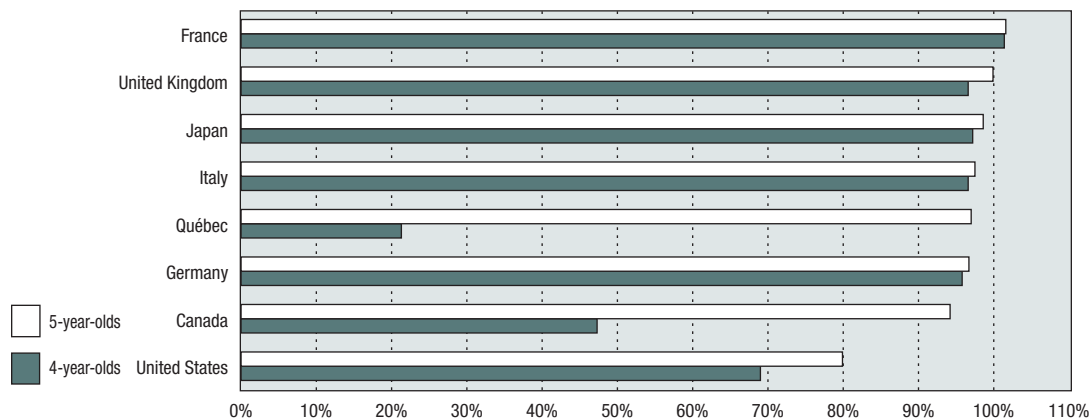
	1982-1983	1992-1993	2002-2003	2009-2010	2010-2011	2011-2012
Kindergarten for 4-year-olds	8.0	9.2	19.6	20.5	20.6	20.6
Passe-Partout play groups	—	—	11.0	12.9	12.9	13.3
Other categories	—	—	8.5	7.6	7.6	7.3
Kindergarten for 5-year-olds	97.4	96.7	98.1	97.9	98.4	98.2

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

—: Not applicable

Graph 2.2

Net enrollment rates for 4-year-olds and for 5-year-olds: Québec and G7 countries, 2009-2010 (%)



2.3 Enrollment in Secondary General Education—Youth Sector

In 2011-2012, 76.4% of young people in secondary general education in the youth sector were enrolled in Secondary V, 85.4% were enrolled in Secondary IV, and 98.1% were enrolled in Secondary III.

From a more historical perspective, Graph 2.3 shows that enrollment in Secondary IV and V increased appreciably in the 1980s. This trend can be explained by the fact that admission to vocational training was delayed to ensure that students spent an extra year in general education. On the other hand, the drop observed in 1985-1986 (in Secondary IV) and in 1986-1987 (in Secondary V) was due to the raising of the pass mark.¹ There was a temporary decline in student retention, but it was not long before an upward trend took hold once again. For the past twenty years, the situation has remained relatively stable.

In 2011-2012, differences in enrollment between female and male students were observed in Secondary III, where female students were ahead of the male students by 1 percentage point. The gap widened in Secondary IV to 9 percentage points in favour of female students, and in Secondary V, to 12 percentage points.

In 2011-2012, 76.4% of young people in secondary general education in the youth sector were enrolled in Secondary V.

1. The new, higher pass mark was applied to students entering secondary school in 1982-1983.

Table 2.3

Proportion of young people enrolling in Secondary Cycle Two general education, public and private systems combined, by gender (%)

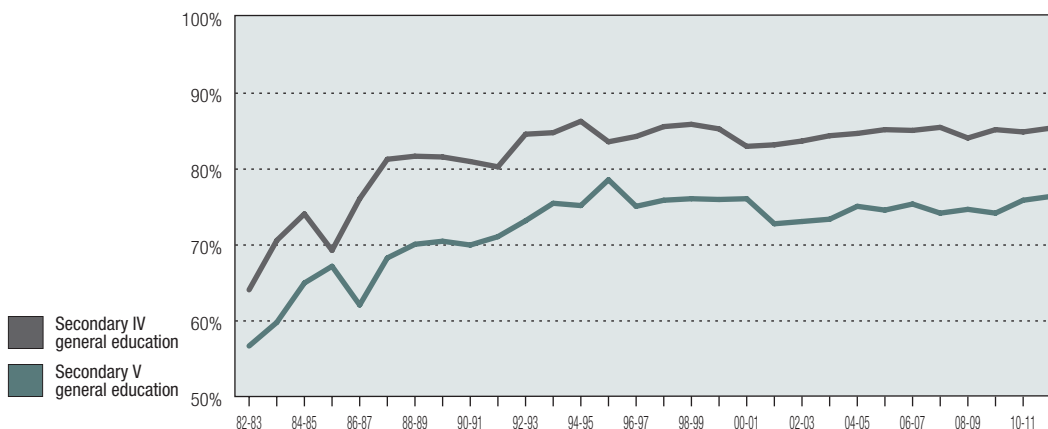
	1982-1983	1992-1993	2002-2003	2009-2010	2010-2011	2011-2012 ^p
Secondary III	86.3	91.7	91.6	96.6	96.9	98.1
Male	82.5	89.9	90.1	96.1	96.3	97.6
Female	90.3	93.6	93.1	97.1	97.5	98.7
Secondary IV	64.1	84.6	83.7	85.2	84.9	85.4
Male	59.9	81.6	80.5	81.3	80.9	81.2
Female	68.6	87.7	87.1	89.3	89.0	89.8
Secondary V	56.7	73.2	73.1	74.2	75.9	76.4
Male	53.6	68.5	66.8	67.8	69.8	70.4
Female	59.9	78.2	79.7	80.9	82.2	82.6

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

p: Preliminary data

Graph 2.3

Proportion of young people enrolling in Secondary IV and V general education, youth and adult sectors combined (%)



2.4 Enrollment in Secondary Vocational Training— Youth and Adult Sectors

The proportion of young people under 20 years old who were enrolled in vocational training programs in 2011-2012 was 18.6%. Since 1998-1999, enrollment of students already holding a Secondary School Diploma (SSD) has been relatively stable, varying between 9% and 10%. In 2011-2012, it stood at 10.3%.

Since short vocational programs were phased out in 1989-1990, most students who would normally have opted for these programs in the past are now enrolled in individualized paths for learning or, more likely, in work skills and life skills education programs, which are a part of general education. Enrollment of students without diplomas was 8.3% in 2011-2012 and represented 45% of all people under the age of 20 enrolling in a vocational training program.

Vocational training programs attract more male than female students. Thus, in 2011-2012, 23.7% of male students opted for this path, compared with 13.2% of female students. This situation applies equally to students who had a diploma and those who did not. This is the opposite of the trend in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer.

In 2011-2012, 18.6% of young people under 20 years old, more than half of whom already held a Secondary School Diploma (SSD), were enrolled in vocational training.

Table 2.4

Enrollment rate in vocational training of students under 20 years old, youth and adult sectors combined (%)

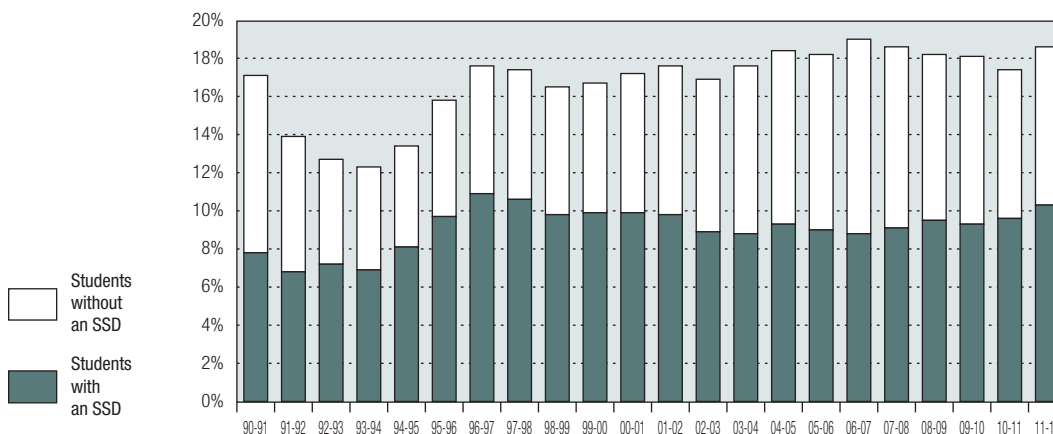
	1990-1991	2000-2001	2005-2006	2009-2010	2010-2011	2011-2012 ^p
Total	17.1	17.2	18.2	18.1	17.5	18.6
Students without an SSD	9.3	7.3	9.2	8.8	7.8	8.3
Students with an SSD	7.8	9.9	9.0	9.3	9.6	10.3
Male	21.3	20.9	23.2	22.6	21.7	23.7
Students without an SSD	13.0	9.8	12.4	11.7	10.4	11.3
Students with an SSD	8.3	11.1	10.8	10.8	11.2	12.4
Female	12.7	13.3	13.0	13.3	13.0	13.2
Students without an SSD	5.6	4.7	5.8	5.7	5.1	5.2
Students with an SSD	7.2	8.6	7.2	7.6	8.0	8.1

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

p: Preliminary and incomplete data

Graph 2.4

Enrollment in vocational training of students under 20 years old, youth and adult sectors combined (%)



2.5 Enrollment in Secondary General Education—Adult Sector¹

Students who do not obtain a Secondary School Diploma (SSD) in the youth sector are not all dropouts. Many of them choose to pursue their studies in the adult sector.

In 2007-2008, 16.4% of school-aged youth under 20 years old went directly from the youth sector to the adult sector in general education without interrupting their studies. In 1984-1985, the rate was only 1.3%, and has since increased twelve-fold. In view of this, the relatively low rate of 5.0% observed in 1992-1993 (see Graph 2.5) can be attributed to the changes made in the funding of educational activities for adult students in general education; at the time, this funding was part of a restricted envelope.² The increase observed in 1993-1994 (from 5% to 9%) was undoubtedly due in part to the fact that the envelope was once again opened for students 16 to 18 years of age.

An analysis of the proportion of students who, after interrupting their studies, return to school in general education in the adult sector reveals that the number of students aged 15 to 19 who returned to the adult sector was higher, until 1986-1987, than the number of students who transferred directly from the youth sector. Since then, however, the latter path has grown in popularity, and in 2007-2008, accounted for close to four fifths of all new enrollments of students under 20 years old in the adult sector.

The adult sector does not limit its services to providing students leaving the youth sector with the opportunity to earn their diploma through an alternative system. Adult education is also open to those who already have a secondary school diploma but wish to add to their education. And even among students without a diploma who enroll in the adult sector, some simply wish to meet a short-term need, such as acquiring the knowledge or skills taught in a specific course.

In 2007-2008, 16.4% of students under 20 years old transferred directly from the youth sector to the adult sector.

1. Because technological changes at the Ministère created instability in the data required for this section, it has not been updated since the 2009 edition of the *Education Indicators*. This indicator is currently being reviewed.
2. As a result, the school boards had to encourage students to stay in the youth sector (whose envelope is always open), since funding for the adult sector was reduced in 1992-1993.

Table 2.5

**Enrollment rate in
general education in the
adult sector of students
under 20 years old
without a Secondary
School Diploma,
by gender (%)**

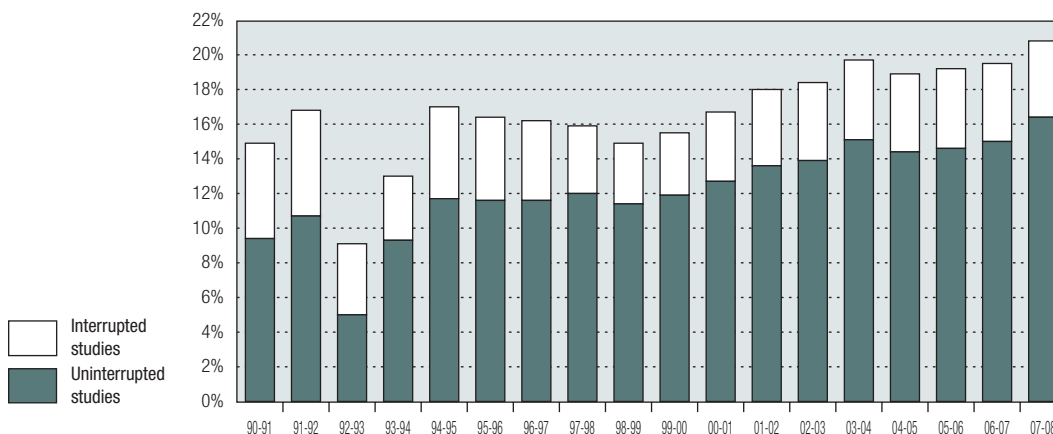
	1984- 1985	1994- 1995	2004- 2005	2005- 2006	2006- 2007	2007- 2008
Total	3.2	17.0	18.9	19.2	19.4	20.8
Uninterrupted studies ¹ (directly from the youth sector)	1.3	11.7	14.4	14.6	15.0	16.4
Interrupted studies	2.0	5.3	4.5	4.6	4.5	4.4
Male	3.3	19.4	21.1	21.3	21.6	22.2
Uninterrupted studies ¹ (directly from the youth sector)	1.4	13.7	16.2	16.2	16.5	17.4
Interrupted studies	1.9	5.8	4.9	5.1	5.0	4.8
Female	3.1	14.6	16.7	17.1	17.2	19.3
Uninterrupted studies ¹ (directly from the youth sector)	1.1	9.7	12.6	13.0	13.3	15.4
Interrupted studies	2.0	4.9	4.1	4.1	3.9	3.9

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

1. Refers to students enrolled in the youth sector on September 30 of the preceding year.

Graph 2.5

**Enrollment in general
education in the adult
sector of students under
20 years old without
a Secondary School
Diploma (%)**



2.6 Dropping Out of Secondary School

In 2010-2011, the percentage of students who left secondary school (general education in the youth sector) without a diploma or qualification (annual dropout rate¹) was 16.2%, a decline of more than one percentage point in comparison with the previous year (17.4% in 2009-2010).

The annual dropout rate for general education in the youth sector has been steadily declining since 2002-2003. Until 2005-2006, the rate decreased slowly, from 22.2% to 20.7%. In recent years, it dropped from 20.7% in 2006-2007 to 16.2% in 2010-2011. This considerable decline in recent years can be explained in part by the addition of new training paths in Secondary Cycle Two that have made it possible for more people to obtain a secondary school diploma or qualification. It can be hypothesized that, prior to the introduction of the new paths and new types of certification, most of these people would have simply dropped out. This recent downward trend in the annual dropout rate can also be attributed to a larger number of students who stay in school, continuing their studies in vocational training or adult general education.

More male students than female students drop out of general education in the youth sector. In 2010-2011, the dropout rate was 20.1% for male students, compared with 12.6% for female students, a difference of 7.5 percentage points. This gender gap has tended to close over the years. Ten years earlier, in 2000-2001, it was 11.4 percentage points and then narrowed to 10.4 in 2006-2007 and to 8.3 in 2008-2009. It is worth noting that, since 2007-2008, most of the new certifications have been earned by male students and this has helped reduce the gender gap slightly.

In 2010-2011, the percentage of students who left secondary school (general education in the youth sector) without a diploma or qualification (annual dropout rate) was 16.2%, a decline of 5.3 percentage points in comparison with the situation 10 years earlier (21.5% in 2000-2001).

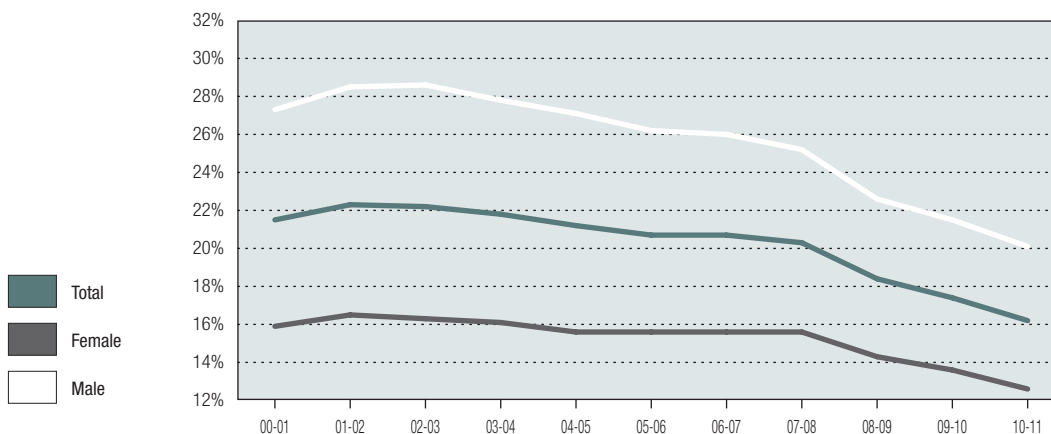
1. This indicator refers to the number of cases per year of dropping out from general education in the youth sector and appeared for the first time in the 2012 edition of the Education Indicators. It replaces Section 2.6, Dropping Out of Secondary School in the previous editions of the Education Indicators. The previous indicator, which represented the dropout situation in secondary school for a given age in the population, can no longer be calculated due to certain methodological difficulties. It had been used because it made interprovincial comparisons possible, but Statistics Canada's dropout rate for the provinces is now measured by means of the Labour Force Survey (LFS). However, Statistics Canada's results are no longer comparable to those of dropout rates by age, and the annual dropout rate better reflects the actual situation of Québec's educational institutions. The annual dropout rate is familiar to people in the education system, and it can be calculated for each school, school board and administrative region. The previous indicator could be calculated only for the province as a whole. The current indicator represents the proportion of all secondary students leaving general education in the youth sector who have not obtained a diploma or qualification in the year considered and who have not re-enrolled for the following year anywhere in the Québec education system. In addition to these students leaving without a diploma or qualification, school leavers as a whole also include students who obtain a diploma or qualification in the year in question. The diplomas and qualifications considered here are the Secondary School Diploma (SSD) in general education, the Diploma of Vocational Studies (DVS), the Attestation of Vocational Specialization (AVS), the Certificate in On-the-Job Training in a Recycling Facility (CFER), the Certificate in Life Skills and Work Skills Education (ISPJ), the Attestation of Vocational Education (AVE) and, since 2007-2008, the Training Certificate for a Semiskilled Trade (TCST) and the Prework Training Certificate (PTC).

Table 2.6
**Dropout rate for
 general education
 (youth sector),
 by gender (%)**

	2000- 2001	2003- 2004	2006- 2007	2008- 2009	2009- 2010	2010- 2011
Total	21.5	21.8	20.7	18.4	17.4	16.2
Male	27.3	27.8	26.0	22.6	21.5	20.1
Female	15.9	16.1	15.6	14.3	13.6	12.6

Source: Ministère de l'Éducation, du Loisir et du Sport

Graph 2.6
**Annual dropout rate
 for general education,
 by gender, Québec,
 from 2000-2001 to
 2010-2011**



2.7 College Enrollment¹—Regular Education

In 2011-2012, 63.9% of young Quebecers went on to college in regular education. College enrollment in regular education has therefore risen by 24.6 percentage points since 1975-1976. The 2011-2012 college enrollment rate is the highest since that observed in 1996-1997, just before the drop in the secondary school graduation rate and the tightening of the criteria for admission to CEGEP.²

Since the late 1970s, changes in college enrollment can be largely explained by trends observed at the secondary level in the youth sector. There is a correlation between obtaining a secondary school diploma in general education in the youth sector or before the age of 20 in the adult sector, and enrolling in college. This correlation would seem to indicate that the majority of general education graduates, as well as a certain number of vocational training graduates, eventually go on to college.

Since the mid-1970s, the gender gap in college enrollment has widened steadily. Although less than 1 percentage point in 1975-1976, the difference reached 17.8 percentage points in favour of women in 2011-2012.

College enrollment also varies depending on the type of education involved. Although the probability of enrolling in a pre-university college program decreased in 2002-2003, it rebounded to 36.9% in 2011-2012; however, it did not reach the peak of 43.9% observed in 1992-1993.

College enrollment rates in technical training declined from 20.8% (1985-1986) to 14.8% (2006-2007) and have been climbing in recent years, reaching 17.3% in 2011-2012.

In recent years, enrollment has also increased in the regular education program Explorations. In 1993-1994, 4.9% of students undertook college studies in this type of program; in 2011-2012, this proportion was 9.7%, which represents more than one in ten new college enrollments.

In 2011-2012, the college enrollment rate stood at 63.9%, which is a return to the situation that prevailed 15 years ago.

1. The figures mentioned here include only students enrolled for the first time in programs leading to a Diploma of College Studies (DCS) in regular education.
2. Since the fall of 1997, students who enroll in CEGEP must not only have a Secondary School Diploma (SSD) or a Diploma of Vocational Studies (DVS), but must also have successfully completed the following courses: Secondary V language of instruction and second language, Secondary IV History and Physical Science, and Secondary V or comparable Secondary IV Mathematics.

Table 2.7

Full-time or part-time enrollment rates in regular education in public or private colleges, by gender and type of education (%)

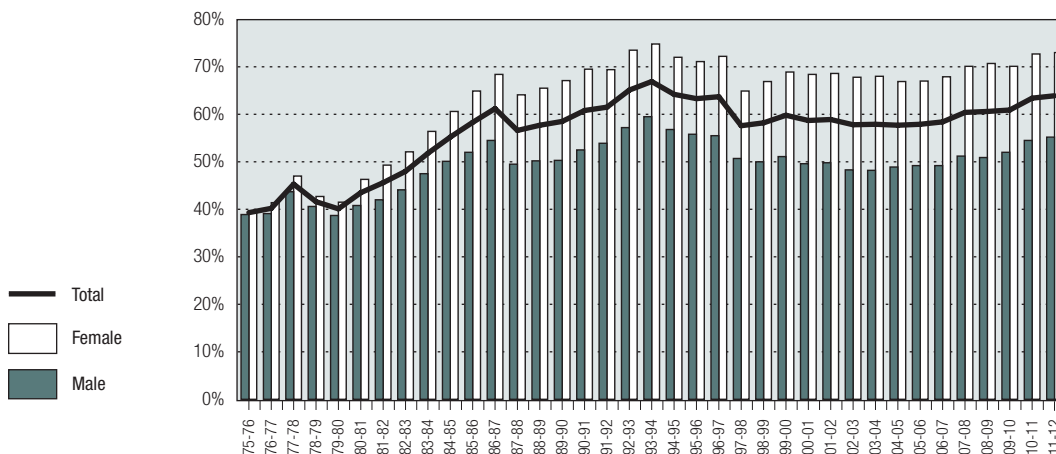
	1975- 1976	1985- 1986	1995- 1996	2005- 2006	2010- 2011	2011- 2012
Male	38.9	52.0	55.8	49.2	54.5	55.2
Pre-university education	25.4	34.2	31.5	29.0	29.6	30.2
Technical training	13.4	17.7	18.5	13.8	14.5	14.7
Explorations	—	—	5.9	7.6	10.4	10.3
Female	39.7	64.9	71.1	67.0	72.7	73.0
Pre-university education	22.5	41.0	44.7	42.5	44.0	43.9
Technical training	17.1	23.9	20.3	19.3	19.7	20.1
Explorations	—	—	6.1	7.7	9.0	9.1
Total	39.3	58.3	63.3	57.9	63.4	63.9
Pre-university education	24.0	37.5	37.9	35.6	36.6	36.9
Technical training	15.3	20.8	19.3	16.5	17.0	17.3
Explorations	—	—	6.0	7.7	9.7	9.7

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

—: Not applicable

Graph 2.7

Full-time or part-time enrollment in regular education in public or private colleges, by gender (%)



2.8 Immediate Transition From College to University

The main objective of college pre-university education is to prepare students for university. In the fall of 2011, 80.8% of the 2011 graduates aged 24 or under¹ with a Diploma of College Studies (DCS)² in a pre-university program were enrolled full-time in a Québec university.

Immediate transition rates for graduates of pre-university education to university have been constantly on the rise in recent years. In the fall of 2011, this rate was more than 4.3 percentage points higher than that of 2001. As Table 2.8 shows, the profiles of male and female graduates in this regard are quite similar. In the fall of 2011, 81.0% of female graduates and 80.6% of male graduates with a DCS in a pre-university program enrolled in Québec universities.

In the fall of 2011, 30.8% of graduates aged 24 or under with a DCS in a technical program were enrolled full-time in university. Although far lower than that of graduates in pre-university programs, this percentage is not negligible, given that the main purpose of technical training is to prepare students for the job market. The immediate transition rate for 2011 graduates of technical programs is the highest ever, confirming the importance of technical training as an alternative path to university.

Although transition rates among male and female graduates from pre-university programs are quite similar, the same cannot be said of graduates from technical programs. Significantly more male graduates than female graduates are enrolling in university immediately upon completion of a technical program. In 2011-2012, the transition rate was 34.5% for male graduates, 6 percentage points higher than that of female graduates (28.5%).

The social sciences attracted the most students (25.5%) who obtained a DCS in pre-university programs. Business administration was in second place with 15.1%, followed by applied sciences at 13.4% and education at 11.5%. Graduates who obtained a DCS in a technical program opted mainly for applied sciences (27.1%) and business administration (24.5%), with health sciences a distant third (17.4%).

Breaking down the number of graduates from pre-university programs registered full-time at university by gender and field of study reveals that the two fields of study selected by the largest number of male graduates aged 24 or under are applied sciences (22.8%) and social sciences (22.0 %), while the largest number of female graduates in the same age group enrolled in social sciences (27.7%) and business administration (15.1%). The majority of male graduates from technical programs enrolled in the applied sciences (electrical engineering,

mechanical engineering and computer science, among others) and business administration (especially business management) while the female graduates enrolled mainly in health sciences (mostly nursing sciences and nursing) and business administration (especially business management and accounting).

From the class of 2010-2011, 80.8% of students with a DCS in a pre-university program and 30.8% of those with a DCS in a technical program went on to study full-time at university in the fall of 2011.

1. Ages were calculated as of July 1 of the year of graduation.
2. This refers to students who obtained a DCS between the months of September and August of a given school year. *Education Statistics Bulletin 28*, "Student Flow from College to University" (June 2003), presents the figures for the immediate transition from college to university in 2000-2001. It can be consulted on the Ministère's Web site at http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/education-statistics-bulletin-n-28-student-flow-from-college-to-university/?tx_ttnews%5Blang%5D=1.

Table 2.8

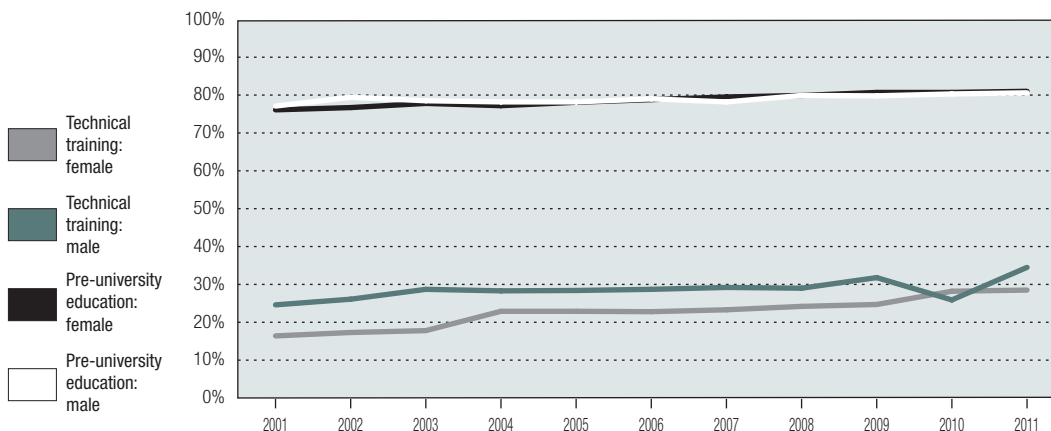
Proportion of college graduates (24 years old or under) enrolled full-time in university in the fall without interrupting their studies, by type of education and gender (%)

	2001	2007	2008	2009	2010	2011
Pre-university education	76.4	79.0	79.9	80.3	80.6	80.8
Male	77.1	78.2	79.9	79.8	80.3	80.6
Female	76.1	79.5	79.9	80.7	80.7	81.0
Technical training	19.8	25.5	26.0	27.4	28.2	30.8
Male	24.6	29.2	29.0	31.8	32.0	34.5
Female	16.4	23.3	24.2	24.7	25.9	28.5

Source: Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 2.8

Proportion of college graduates (24 years old or under), enrolled full-time in university in the fall without interrupting their studies, by type of education and gender (%)



2.9 University Enrollment

This section concerns enrollment in programs leading to a university degree at the bachelor's, master's or doctoral level. Enrollment in certificate programs and in independent studies is not measured here.

In 2005-2006, the proportion of a generation enrolled for the first time in programs leading to a bachelor's degree increased by one third over almost 20 years, climbing to 41.7%, from 30.1% in 1984-1985. The rate of enrollment in bachelor's programs has continued to increase during the 2000s, reaching 44.4% in 2011-2012. Women posted an even higher enrollment rate in programs leading to a bachelor's degree at 52.5% in 2011-2012.

From 1984 to 2011, only women showed veritable gains in enrollment in bachelor's programs: the rate for women increased by 21.2 percentage points, whereas the enrollment rate for men (36.7%) was 7.7 percentage points above the level observed in 1984-1985. The gender gap was 15.8 percentage points in 2011-2012, whereas it had been 2.3 percentage points in 1984-1985, also in favour of women.

With respect to master's programs, enrollment rose progressively over the past 25 years to 13.3% in 2011-2012, after having slowed in 2008-2009. Here too, gains were more favourable for women, whose enrollment rate was 14.4% in 2011-2012, compared with 12.2% for men. In 1984-1985, the difference was 1.5 percentage points in favour of men, compared with 2.2 percentage points in favour of women in 2011-2012. Throughout the 1990s, women made gains and this trend has continued.

The growing interest in doctoral studies is significant even though it still applies to only a very small portion of the population. Enrollment rose from 1.1% in 1984-1985 to 3.1% in 2011-2012. Men continue to enroll in doctoral studies at a greater rate (3.3%) than women (2.9%), but the number of women enrolling at this level has increased much more rapidly over the past two decades.

In 2011-2012, the proportion of students enrolling in university was estimated at 44.4% for bachelor's programs, 13.3% for master's programs and 3.1% for doctoral programs.

Table 2.9

Enrollment in programs leading to a university degree, by gender (%)

	1984-1985	1995-1996	2005-2006	2009-2010	2010-2011	2011-2012
Bachelor's programs						
Male	29.0	30.6	34.4	35.8	36.8	36.7
Female	31.3	40.3	49.3	50.3	52.0	52.5
Total	30.1	35.3	41.7	42.9	44.2	44.4
Master's programs						
Male	7.5	8.1	11.1	11.7	11.9	12.2
Female	6.0	8.8	11.6	12.8	13.9	14.4
Total	6.8	8.4	11.3	12.3	12.9	13.3
Doctoral programs						
Male	1.4	2.1	2.9	3.3	3.3	3.3
Female	0.8	1.6	2.4	2.9	3.2	2.9
Total	1.1	1.9	2.7	3.1	3.2	3.1

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

Graph 2.9

Enrollment in programs leading to a university degree (%)



2.10 Training of Researchers

Students enrolled in a program leading to a doctorate are most likely to go into university research. In the fall of 2011, there were 14 776 registrations in the different doctoral programs, an increase of 3.5% compared with the previous fall. This total comprised 7 618 men (51.6%) and 7 158 women (48.4%).

Between the fall of 2001 and the fall of 2011, enrollments in doctoral programs rose steadily at a rate of close to 5.0% a year. These increases indicate that this trend will continue for the next several years. The proportion of male doctoral students decreased from 53.7% to 51.6% during the same period. However, in little more than a decade, the number of women registered in doctoral programs increased 78%, representing, in 2011, 48.4% of the total of 14 776 students. Although more than half the doctoral students are men, their numbers have risen more slowly than those of women, which has narrowed the gender gap over the years.

In 2011, the most popular fields of study at the doctoral level were social sciences (28.6% of total registrations), applied sciences (23.5%) and pure sciences (15.2%). In total, they accounted for more than two thirds of all enrollments in 2011. These three fields of study have headed the list of most popular fields of study since 1986 and, between 2010 and 2011, registrations increased by 3.8%. However, the pure sciences have seen the greatest increase in enrollments (4.9%).

Although significant gender gaps remain in certain fields of study, according to data observed since 2001, women have increased their presence in all doctoral programs. In 2011, there were almost as many men as women in arts and law. Women were in the majority in education (68.9%), literature (62.8%), social sciences (62.0%) and health sciences (59.2%) while men continued to be in the majority in applied sciences (74.9%), pure sciences (58.5%) and business administration (56.0%).

In the fall term of 2011, enrollments in doctoral programs grew by 3.5%, compared with the fall of 2010. Although still in the minority, the proportion of women rose from 47.9% of the total enrollments in 2010 to 48.4% in 2011.

Table 2.10

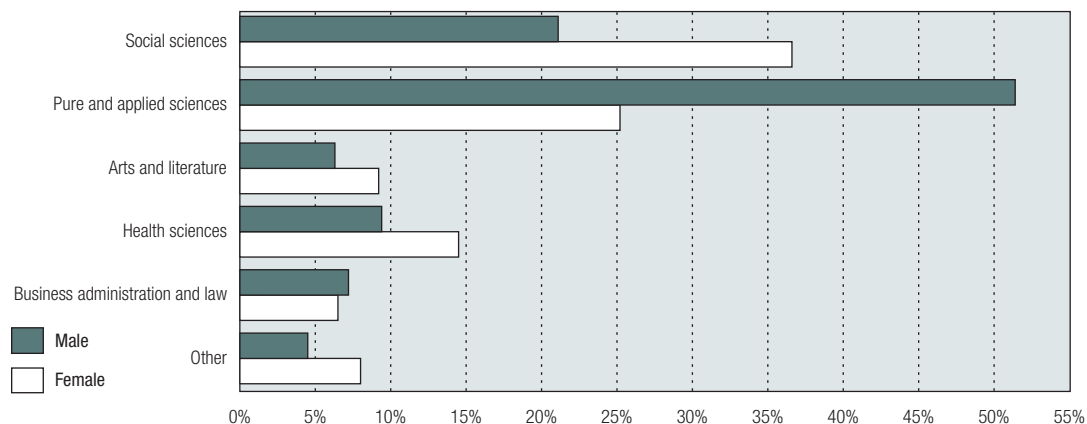
Enrollment in doctoral programs, by field of study (fall term)

	2001	2006	2007	2008	2009	2010	2011
Arts	209	367	424	446	441	466	493
Literature	583	651	631	647	648	642	646
Business administration	508	720	724	713	732	747	762
Law	110	188	211	214	241	224	252
Education	504	636	613	628	654	629	656
Social sciences	2 685	3 596	3 810	3 938	4 017	4 120	4 232
Pure sciences	1 355	1 867	1 923	1 990	2 065	2 154	2 247
Applied sciences	1 446	2 628	2 724	2 840	2 994	3 315	3 478
Health sciences	1 449	1 539	1 579	1 598	1 639	1 727	1 751
Multidisciplinary studies	87	207	204	207	238	225	234
Not applicable ¹	23	28	20	24	18	21	25
Total	8 659	12 427	12 863	13 245	13 687	14 270	14 776

Source: Ministère de l'Éducation, du Loisir et du Sport, Gestion des données sur l'effectif universitaire (GDEU)

1. All situations for which there is no indication of the student's discipline or for which the Ministère has decided not to indicate a discipline.

Graph 2.10

Enrollment in doctoral programs, by gender and by field of study, fall 2011 (%)

2.11 The Proportion of Foreign Students in Postsecondary Education

Postsecondary education has always been open to foreign students. However, in recent years, the world has experienced a major trend in increased globalization of economies and societies, accompanied by a sharp rise in the numbers of foreign students. Québec is no exception.

According to the Organisation for Economic Co-operation and Development, the number of students enrolled outside their country of citizenship rose by 215%, from 1.3 million in 1990 to 4.1 million in 2010.¹ During this period, the number of foreign university students in Québec rose from 9 135 to 26 189, an increase of 187%, which is slightly lower than the global growth rate.²

In the Québec college system, the number of foreign students has risen sharply since 2007 (34.2%) in relation to an overall increase in the total number of enrollments of 10.7% (see Table 2.11a). However, it must be noted that, in the fall of 2011, foreign students represented only 1.6% of college enrollments. This may be due to the unique nature of the Québec college system, which has no equivalent outside of Québec.

At the university level, the number of foreign students is growing 2.5 times faster than the total number of enrollments. The proportion of foreign students is rising steadily, from 8.5% in 2007 to 9.7% in 2011. Looking at the situation by level of studies, the ratio of foreign students to total enrollments increases as the level of studies increases: 7.8% at the undergraduate level, 12.9% at the graduate level and 26.6% at the doctoral level (see Table 2.11b).

In the fall of 2011, foreign university students hailed from 171 countries but most of them (59.0%) came from five different countries. The largest group by far was from France (35.9%), followed by the United States (9.6%), China (7.0%), Iran (3.3%) and Morocco (3.2%). The other 41.0% came from 166 other countries around the world (see Graph 2.11).

In the fall of 2011, foreign students accounted for 9.7% of all enrollments in Québec universities.

1. Organisation for Economic Co-operation and Development, *Education at a Glance 2012: OECD Indicators*, Table C4.1.
2. Ministère de l'Éducation, du Loisir et du Sport, information portal, GDEU system, 2012. Note that, in Québec, a foreign student is someone enrolled in an educational institution who is not a Canadian citizen, a permanent resident or an Indian as defined in the *Indian Act*.

Table 2.11a

Foreign students in the Québec education system

	Fall 2007	Fall 2011	Variation 2011/2007
College			
Foreign students	2 569	3 447	34.2%
Total enrollments	198 684	219 860	10.7%
Foreign students/ total enrollments (%)	1.3	1.6	
University			
Foreign students	22 289	28 006	25.6%
Total enrollments	263 110	288 820	9.8%
Foreign students/ total enrollments (%)	8.5	9.7	

Source: Ministère de l'Éducation, du Loisir et du Sport, information portal, Socrate system, February 2012 and the GDEU system, May 2012

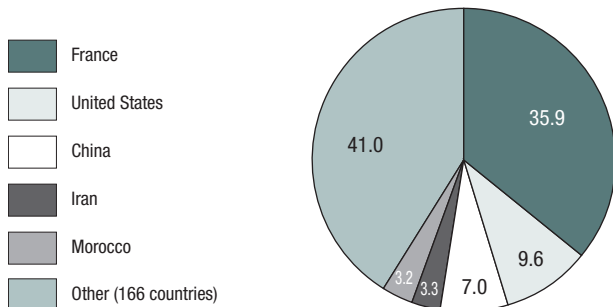
Table 2.11b

Proportion of foreign students at the different levels of university, fall 2011

	Undergraduate	Graduate	Doctoral	Total
Foreign students	17 208	6 770	4 028	28 006
Total enrollments	221 264	52 425	15 131	288 820
Foreign students/ total enrollments (%)	7.8	12.9	26.6	9.7

Source: Ministère de l'Éducation, du Loisir et du Sport, information portal, GDEU system, May 2012

Graph 2.11

Countries of origin of foreign university students, fall 2011 (%)

3.1 Success in Secondary Cycle Two of General Education—Adult Sector¹

In 2010-2011, in general education in the adult sector, 48.9% of students who left Secondary Cycle Two obtained a diploma or qualification. In 1988-1989, the first year for which figures on new enrollments in this sector were available, the success rate was 23.2%; the rate has therefore doubled since then.

Of the various instructional services available in general education in the adult sector, only Secondary Cycle Two leads to a Secondary School Diploma (SSD). The aim of the other services is to complete the students' education in order to enable them to eventually enter Secondary Cycle Two or acquire the prerequisites for vocational training or postsecondary education.²

Among students leaving school, the proportion leaving with a diploma is higher for those under 20 years old than for all ages combined. Thus, in Secondary Cycle Two, 61.2% of the students leaving school in 2010-2011 before the age of 20 did so with a diploma or qualification; progress has been considerable in this respect because the corresponding proportion for 1988-1989 was 36.3%.

Since 1988-1989, the success rate has been higher for female students than for male students. Between 1988-1989 and 2010-2011, the gender gap widened from 0.9 to 6.8 percentage points for all ages combined. For those under 20 years old, it grew from 0.2 to 5.9 percentage points in the same period.

In 2010-2011, of the students under 20 years old enrolled in Secondary Cycle Two in the adult sector, 61.2% left school with a diploma or qualification.

1. Success in general education is measured here by the proportion of new graduates among all general education students leaving secondary school with or without a diploma or qualification. The diplomas or qualifications counted are those obtained during or at the end of the last year of enrollment or the following year if the student has not re-enrolled. Students are considered to have left school without a diploma or qualification when they have been absent for a period of at least two years following the last year of enrollment.
2. The following instructional services are offered in general education in the adult sector: pedagogical support services, literacy services, preparatory services for secondary education, Secondary Cycle One education services, Secondary Cycle Two education services, social integration services, sociovocational integration services, francization services, vocational training preparation services, and preparatory services for postsecondary education.

Table 3.1

Proportion of students leaving Secondary Cycle Two of general education in the adult sector with a diploma or qualification, by gender, age and last year of enrollment (%)¹

	1988-1989	1995-1996	2000-2001	2008-2009*	2009-2010 ^e	2010-2011 ^e
Male						
All ages	22.7	50.2	44.8	45.1	45.6	45.7
Under 20 years old	36.2	61.0	53.3	56.2	57.2	58.4
Female						
All ages	23.6	55.9	51.3	52.3	55.8	55.3
Under 20 years old	36.4	67.5	62.3	63.6	66.0	64.3
Total						
All ages	23.2	53.2	48.0	48.7	50.7	48.9
Under 20 years old	36.3	64.3	57.5	59.7	61.5	61.2

Source: Ministère de l'Éducation, du Loisir et du Sport

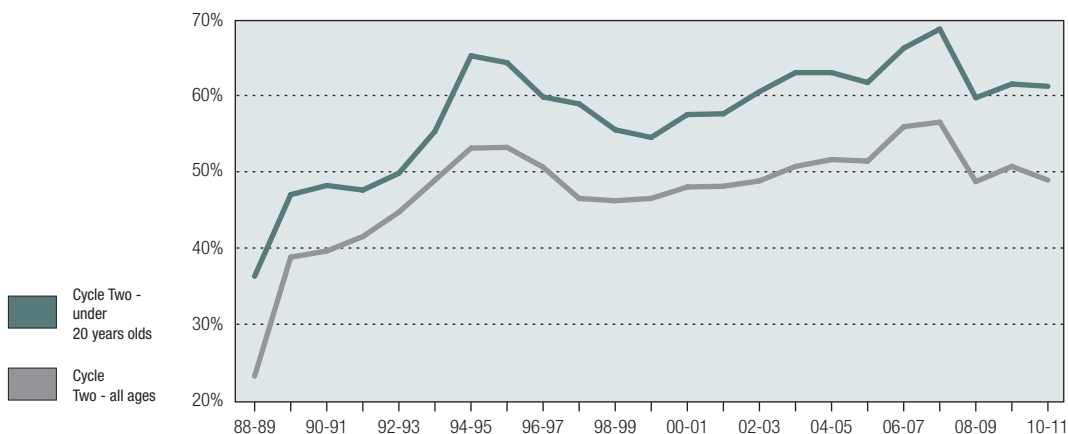
e: Estimates

* Revised data

1. Prior to 2008-2009, Secondary III was included in Secondary Cycle One; since then, it has been included in Secondary Cycle Two.

Graph 3.1

Proportion of students leaving Secondary Cycle Two of general education in the adult sector with a diploma, by gender, age and last year of enrollment (%)



3.2 Success in Secondary Vocational Training¹

Of the students in vocational training² who left secondary school in 2010-2011, 69.1% obtained a diploma or qualification. If only those students who were actually working toward a diploma (i.e. full-time students)³ are considered, the proportion of graduates climbs to 87.6%.

Since the beginning of the vocational training reform in 1987-1988, the percentage of graduates has increased appreciably. For example, at the end of 2010-2011, the proportion of students graduating from programs leading to a Diploma of Vocational Studies (DVS) was 75.4%, compared with 54.4% in 1990-1991. The success rate for long vocational programs does not seem to have increased much since the mid-1980s, but it should be noted that the data then available on these programs concerned only the youth sector. If only full-time students³ are considered, progress is more evident. As noted earlier, the proportion of full-time students who left school with a diploma or qualification in 2010-2011 was 87.6%, compared with 56.3% in 1980-1981.

If we consider all school leavers, without taking into account the sector or whether enrollment is full-time or part-time, the proportion of students leaving with a diploma or qualification has also increased since the early 1980s. Thus, the success rate of persons enrolled in vocational training for the last time in 1980-1981 was 46.6%. This figure rose to 69.1% in 2010-2011.

There was a significant decline in the number of new enrollments in vocational training during the 1980s (see Section 2.4). Students are now required to have a more extensive general education before being admitted into vocational training. This explains in large part, the higher success rate observed for all school leavers in recent years. Students who leave general education with a diploma or qualification still have higher success rates in vocational training than students who do not already have a diploma or qualification.

The differences in the results of male and female students have varied over the years. In 1999-2000, there was a reversal in trends relating to graduation from programs leading to a DVS, when the success rate of female students surpassed that of male students (70.2% compared with 63.9%). In the past, the success rate for male students was 2 to 10 percentage points higher than that for female students. However, when only the overall success rate by gender is considered, without taking into account the sector or whether enrollment is full-time or part-time, the success rate for female students has been higher for a long time. In 1985-1986, the proportion of female students graduating from vocational training was 36.2%, compared with 28.7% for male students; in 2010-2011, the proportions were 73.8% and 65.7%, respectively.

In 2010-2011, the success rates for male and female students in programs leading to a Diploma of Vocational Studies (DVS) were 76.8% and 73.8%, respectively.

1. Success in vocational training is measured here by the proportion of new graduates among all vocational training students leaving secondary school with or without a diploma or qualification. The diplomas or qualifications counted are those obtained during or at the end of the last year of enrollment or the following year if the student has not re-enrolled. Students are considered to have left school without a diploma or qualification when they have been absent for a period of at least two years following the last year of enrollment.
2. Because school boards are not required to transmit vocational training enrollment data when a diploma, attestation or certificate is not awarded, the denominator for the success rate may be incomplete.
3. Students enrolled for 270 course hours or more per year are considered full-time.

Table 3.2

Proportion of students leaving secondary vocational training with a diploma or qualification,¹ by gender, category and last year of enrollment (%)

	1980-1981	1985-1986	1990-1991	1995-1996	1999-2000	2009-2010	2010-2011 ^e
Male							
Long vocational or DVS ²	57.1	58.3	60.0	67.7	63.9	76.1	76.8
Full-time ³	51.8	51.4	81.1	79.5	81.6	87.2	87.6
All male school leavers	48.3	28.7	21.7	46.2	50.7	65.1	65.7
Female							
Long vocational or DVS ²	65.5	69.5	50.3	64.5	70.2	74.9	73.8
Full-time ³	61.3	62.0	80.0	78.3	82.4	87.8	87.7
All female school leavers	45.2	36.2	39.3	54.0	65.7	74.4	73.8
Total							
Long vocational or DVS ²	61.7	64.1	54.4	66.1	66.6	75.6	75.4
Full-time ³	56.3	56.6	80.6	78.9	82.0	87.4	87.6
All school leavers	46.6	32.1	27.9	49.5	56.6	69.0	69.1

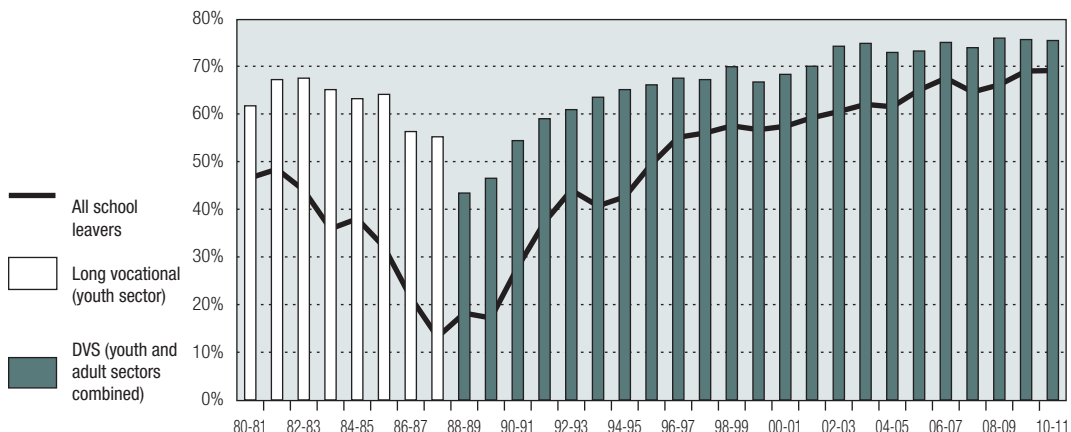
Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

1. All secondary school diplomas and qualifications are taken into account.
2. Figures for 1980-1981 and 1985-1986 cover enrollment in long vocational programs in the youth sector only. After 1988-1989, figures take into account DVSs in both the youth and adult sectors.
3. Students enrolled in 270 course hours or more per year are considered full-time.

Graph 3.2

Proportion of students leaving secondary vocational training with a diploma, by last year of enrollment (%)



3.3 Success in College Pre-University Programs—Regular Education¹

Of the students in regular pre-university programs who left college at the end of 2010-2011, 71.2% earned a Diploma of College Studies (DCS). In the past two decades, this rate has fluctuated between 63.9% and 73.5%. The success rate has increased markedly since 1999-2000, when it stood at 69.3%. Before the drop in 1999-2000, an increase in success rates had been observed: from 64.7% in 1995-1996 to 70.2% in 1998-1999. The stricter admission criteria that came into effect in the fall of 1997 (see Section 2.7) largely explain this increase, because fewer of the students who are most likely to quit their studies are now able to enroll in college.

Women tend to do better than men in pre-university programs, and the gap has widened in their favour over the years. In 1980-1981, the proportion of women finishing their pre-university education with a DCS surpassed that of men by 3.9 percentage points. In 2010-2011, the difference was 12.1 percentage points in favour of women, whereas it was 10.8 percentage points in 1995-1996. This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.7), explains the gender gap with respect to graduation rates (see Section 5.5).

When the type of initial college program is taken into account, the success rate is slightly above average for students who began their studies in pre-university programs: in 2010-2011, it was 73.9%. Students arriving from technical programs had markedly lower success rates. In addition, since 1994-1995, some graduates have begun college in Explorations programs. The success rate, however, has remained lower for pre-university program students who came from another type of program. This rate did not clear the 50% mark until 1998-1999, and reached 53.7% in 2010-2011.

In theory, it takes two years to obtain a DCS in a pre-university program, but few students do so within this time frame. In fact, the rate of completion within two years (that is, the time elapsed from initial enrollment in a program leading to a DCS) was 42.2% in 2010-2011 for students who began their studies in a pre-university program. This rate was at its lowest point, 35.0%, in 1986-1987. If all pre-university program graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for two-year completion will be slightly lower because students who transfer from other programs spend more time in school. Generally, the majority of pre-university DCSs are obtained within five years of the start of college studies; in 2010-2011, the corresponding success rate was 70.8%.

Of the students in pre-university education who left college in 2010-2011, 71.2% graduated with a DCS—an increase of 1.9 percentage points since 1999-2000.

1. Success in college pre-university programs in regular education is measured here by the proportion of new graduates among all students in pre-university programs in regular education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are considered, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.

Table 3.3

Proportion of students leaving a pre-university program with a DCS, by last year of enrollment in regular education of college, gender, type of initial program, and time elapsed¹ since initial enrollment (%)

	1980-1981	1990-1991	1995-1996	1999-2000	2009-2010 ^e	2010-2011 ^e
Male and female						
Same type of initial program						
2 years or less ¹	N/A	40.5	36.6	42.6	43.7	42.2
5 years or less ¹	N/A	70.8	65.2	70.0	73.3	70.8
All durations	N/A	72.0	66.5	71.3	74.6	73.9
Other type of initial program ²						
All durations	N/A	61.3	47.5	53.7	54.2	53.7
All types of initial programs—all durations						
Male and female	66.8	71.4	64.7	69.3	72.1	71.2
Male	64.9	66.2	58.7	61.7	65.0	64.3
Female	68.8	75.8	69.5	74.7	77.5	76.4

Source: Ministère de l'Éducation, du Loisir et du Sport

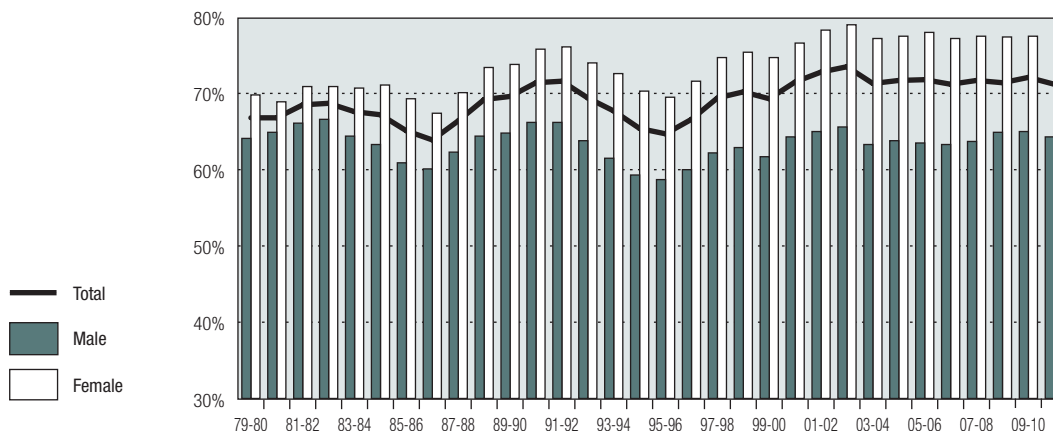
e: Estimates

N/A: Data not available

1. The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-1994, this category referred to students who began their studies in a technical program. As of 1994-1995, this category also includes students who leave pre-university education (with or without a diploma) after having begun in an Explorations program the previous year.

Graph 3.3

Proportion of students leaving a pre-university program with a DCS, by gender and last year of enrollment in regular education of college (%)



3.4 Success in College Technical Programs—Regular Education¹

If the students attending college in regular education who left technical programs at the end of 2010-2011, 61.4% earned a Diploma of College Studies (DCS). Over the past two decades, this figure has fluctuated between 52.9% and 63.7%.

In this area, women still fare better than men. The gender gap was at its greatest (17.1 percentage points) in 1997-1998. In 2010-2011, the success rate for women was 65.4%, compared with 55.8% for men, a difference of 9.6 percentage points in favour of women. This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.7), explains the gender gap with respect to graduation rates (see Section 5.5).

When the type of initial college program is taken into account, in 2010-2011, the success rate for students who began their studies in technical programs was slightly below the average. Moreover, until 1993-1994, students who began in pre-university programs and who transferred to technical programs had markedly higher success rates. Since 1994-1995, the success rates of students who began their college studies in programs other than technical programs have been brought down by the rates of students in Explorations programs (introduced in 1993-1994).

In theory, it takes three years to earn a DCS in a technical program, but few students do so within this time frame. In fact, the rate of completion within three years (that is, the time elapsed from initial enrollment in a program leading to a DCS) was 32.1% in 2010-2011 for students who began and completed their studies in technical programs. If all technical training graduates are considered, regardless of the program in which they were initially enrolled, the success rate for three-year completion will be slightly lower because students who transfer from other programs spend more time in school. Generally, a high proportion of technical DCSs are obtained within five years of the start of college studies; in 2010-2011, the corresponding success rate was 52.9%.

Of the students in college technical programs who left their studies in 2010-2011, 61.4% earned a DCS.

1. Success in college technical programs in regular education is measured here by the proportion of new graduates among all students in technical programs in regular education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are considered, whether they were obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a program leading to a DCS. Students are considered to have left school without a diploma when they have been absent for a period of at least two years following the last year of enrollment.

Table 3.4

Proportion of students leaving a technical program with a DCS, by last year of enrollment in regular education of college, gender, type of initial program, and time elapsed since initial enrollment¹ (%)

	1980-1981	1990-1991	1995-1996	1999-2000	2009-2010 ^e	2010-2011 ^e
Male and female						
Same type of initial program						
3 years or less ¹	N/A	29.6	26.8	31.6	33.1	32.1
5 years or less ¹	N/A	51.1	47.8	52.4	53.2	52.9
All durations	N/A	56.6	53.1	57.6	60.7	59.7
Other type of initial program ²						
All durations	N/A	64.4	55.7	57.8	63.5	64.6
All types of initial programs—all durations						
Male and female	59.0	58.6	53.9	57.7	61.7	61.4
Male	53.9	54.7	46.1	50.1	56.6	55.8
Female	63.0	61.3	60.9	64.6	65.3	65.4

Source: Ministère de l'Éducation, du Loisir et du Sport

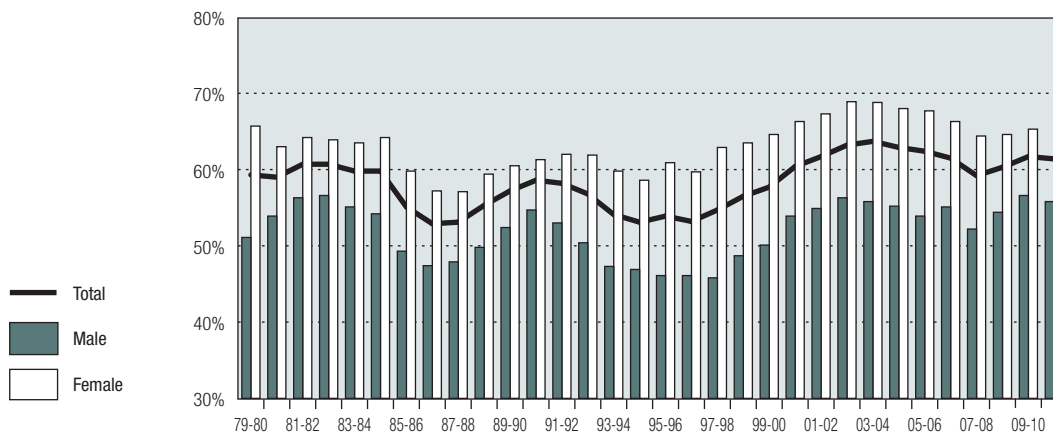
e: Estimates

N/A: Data not available

1. The time elapsed since initial enrollment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-1994, this category referred to students who began their studies in a pre-university program. As of 1994-1995, this category also includes students who leave technical training (with or without a diploma) after having begun in an Explorations program the previous year.

Graph 3.4

Proportion of students leaving a technical program with a DCS, by gender and last year of enrollment in regular education of college (%)



3.5 Duration of College Studies—Regular Education

The duration of studies for graduates with a Diploma of College Studies (DCS) and for all students (regardless of whether or not they obtain a DCS) has changed very little over the years.¹

Graduates from pre-university education study for an average of 2.4 years. For those who leave college without a diploma, the total duration of studies is still an average of 1.7 years. The average duration of studies, whether students leave with or without a diploma, is 2.2 years.² Students who transfer from another type of program take 3.2 years to obtain their DCS in pre-university education.

Students in technical programs take an average of 3.9 years to earn a DCS, while those who leave without a diploma do so after 2.3 years. The average duration of studies in technical programs, whether students leave with or without a diploma, is 3.3 years. Here, too, those students who enroll in technical programs right from the beginning of their college studies leave in a shorter time: those leaving with a DCS do so in 3.6 years and those leaving without a diploma do so after 1.9 years. By contrast, students who initially enrolled in pre-university programs (where the success rate is higher) or in Explorations programs take 4.5 years to obtain a DCS in technical training.

Very slight differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. In pre-university education, women who obtain a DCS do so 0.1 years sooner than men. There are no differences, however, when college leavers overall are considered by gender because more women than men obtain a diploma, thereby raising the average duration of studies for women overall. In technical training, female graduates take 0.1 years less than their male counterparts to obtain a diploma, or to leave their studies before obtaining a diploma.

On average, a DCS in pre-university education is obtained after 2.4 years of full-time equivalent study, and a DCS in technical training, after 3.9 years.

1. This is why the results provided in this section are the averages for college leavers for the last five years observed (that is, the averages for students enrolled for the last time from 2006-2007 to 2010-2011). However, in the case of students leaving without a diploma, over a 10-year period, the duration of studies before dropping out has lengthened, by 0.4 of a full-time term for pre-university education and by 1 full-time term for technical training.
2. The duration of studies for all college leavers depends, on the one hand, on the respective duration of studies of students with a DCS and college leavers without a diploma; and on the other hand, on the weighting of these two categories of students, that is, the success rate. This can be explained by the fact that the duration of studies for all students, whether or not they leave with a diploma, has remained stable, even though the success rates have been dropping and the duration of studies for those leaving without a diploma has been getting longer.

Table 3.5

Average number of years¹ of study completed before leaving college in regular education (average for all college leavers after 2006-2007), by gender and type of program enrolled in at the start and at the end of their studies

	With Diploma		Without Diploma ²		Total	
	Pre-university education	Technical training	Pre-university education	Technical training	Pre-university education	Technical training
Male	2.5	4.0	1.7	2.3	2.2	3.2
Female	2.4	3.9	1.7	2.2	2.2	3.3
Total³	2.4	3.9	1.7	2.3	2.2	3.3
Type of initial program						
Same	2.3	3.6	1.6	1.9	2.1	2.9
Different ³	3.2	4.5	2.2	3.1	2.7	4.0

Source: Ministère de l'Éducation, du Loisir et du Sport

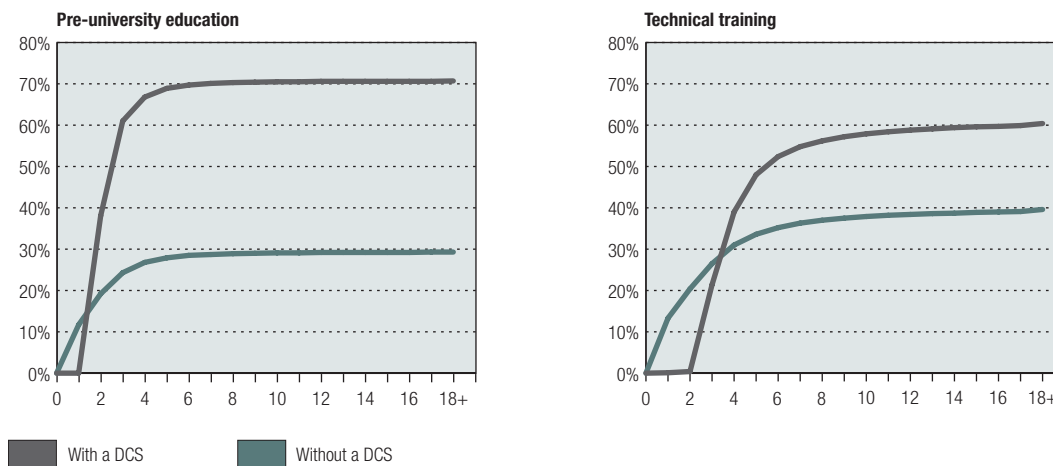
1. One year of full-time study is equivalent here to two full-time terms or eight part-time terms.

2. Refers to students who have interrupted their studies for at least six consecutive terms.

3. Refers to the total duration, including studies undertaken previously in other types of programs.

Graph 3.5

Cumulative school leaving rates for regular college education between 2006-2007 and 2010-2011, by number of years elapsed since initial enrollment in a program leading to a DCS (%)



3.6 Success and Duration of Studies in Bachelor's Programs¹

At the end of 2010-2011, 67.2% of students leaving a bachelor's program earned their degree. In the 20-year period observed, the graduation rate has increased, from 55.9% for students enrolled for the last time in 1987-1988.

From the beginning of the period under observation, female students have had higher success rates than male students, with the difference rising from 0.7 percentage points in 1987-1988 to 6.4 percentage points in 2010-2011, and a maximum gap of 7.7 percentage points in 1996-1997. In the last year observed, 69.9% of female students who left a bachelor's program did so with a degree, compared with 63.5% of their male counterparts. This phenomenon, coupled with the fact that more women than men enroll in bachelor's programs (see Section 2.9), may explain the gender gap with respect to graduation rates (see Section 5.6).

Graduates of bachelor's programs studied an average of 6.7 full-time terms, or 9.0 terms if status is not taken into account. Those who left without a degree studied an average of 2.4 terms, or slightly more than one year, full-time. For all students leaving bachelor's programs, the average duration of studies was 7.4 terms, 5.3 of which were full-time.

Differences in the duration of studies are apparent in the figures for male and female students, and according to the attendance status upon leaving. Whether women obtain a bachelor's degree or leave without a degree, they do so more quickly than men. Women who obtain a bachelor's degree spend 0.5 terms less in full-time studies than do men, while women who leave their program without a degree do so 0.4 terms sooner than men. Nevertheless, when the duration of studies is considered, regardless of full- or part-time status, the gender gap is not as pronounced, because more women than men study part-time. For all students leaving bachelor's programs, the gender gap is less evident, mainly because more women than men obtain a degree, which raises the average duration of studies for women overall.

Of students enrolled in bachelor's programs and completing their studies at the end of 2010-2011, 67.2% earned their degree.

1. Success in university bachelor's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are bachelor's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in an undergraduate program leading to a bachelor's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two academic years following the last year of enrollment.

Table 3.6a

Proportion of students leaving a bachelor's program with a degree, by gender and last year of enrollment (%)

	1987-1988	1995-1996	2000-2001	2005-2006	2009-2010	2010-2011 ^e
Male	55.5	61.7	64.4	64.0	63.6	63.5
Female	56.2	69.0	68.7	70.6	69.6	69.9
Total	55.9	65.9	66.9	67.9	67.1	67.2

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.6b

Average number of terms completed before leaving a bachelor's program (average for all leavers since 2006-2007), by gender

	With Degree		Without Degree ¹		Total	
	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²
Male	7.0	9.4	2.6	4.3	5.4	7.5
Female	6.5	8.8	2.2	4.2	5.2	7.3
Total	6.7	9.0	2.4	4.2	5.3	7.4

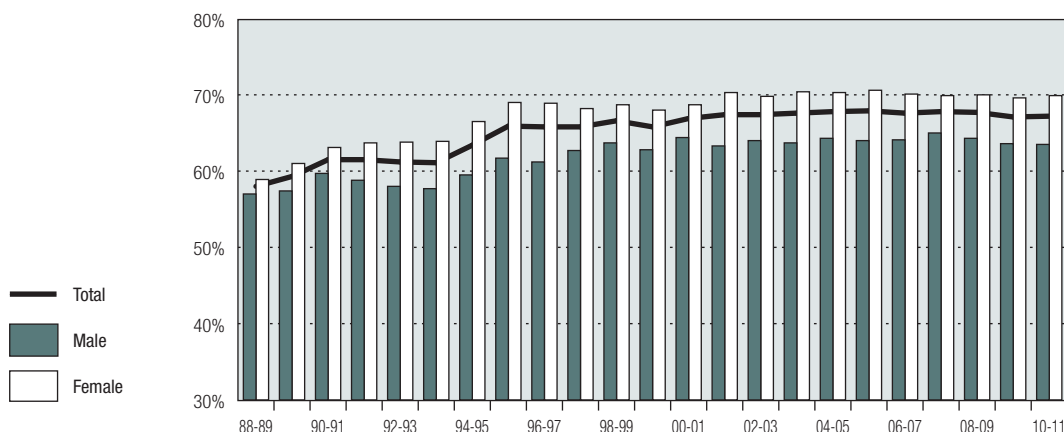
Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive terms.

2. Refers to the total duration of full- and part-time studies.

Graph 3.6

Proportion of students leaving a bachelor's program with a degree, by gender and last year of enrollment (%)



3.7 Success and Duration of Studies in Master's Programs¹

At the end of 2010-2011, 73.2% of students leaving a master's program earned their degree. This is a gain of 17.1 percentage points since 1987-1988.

In 1987-1988, relatively fewer women than men seeking a master's degree pursued their studies to graduation. Since then, women have taken the lead and now have a higher success rate than their male counterparts. In 2010-2011, 74.4% of women leaving a master's program did so with a degree, an increase of 19.4 percentage points since 1987-1988. The corresponding increase for men was 14.9 percentage points, as 71.9% of men leaving a master's program did so with a degree in 2010-2011. This phenomenon, coupled with the fact that more women than men enroll in master's programs (see Section 2.9), may explain the gender gap with respect to graduation rates (see Section 5.6).

Graduates of master's programs were enrolled for an average of 6.7 terms, regardless of whether they studied on a full-time or part-time basis. On average, students spent 4.7 terms in full-time studies. The total average duration of studies for students who left without a degree was 4.6 terms, whether full-time or part-time. For all students leaving master's programs, the average duration of studies was 6.1 terms, 4.1 of which were full-time.

The duration of studies referred to here is the actual duration and is not compatible with the calculation of full-time equivalents (FTEs) for funding purposes, where a standardized duration is generally recognized for a master's program with a thesis. In these cases, the "funded" duration is a maximum of 4.0 terms (1.5 years in FTEs) for master's programs. However, the actual duration of studies exceeds this standard for all types of attendance status. This means that students who leave without a master's degree are in practice fully funded, with the exception of a supplementary amount of \$1 000 that is allocated to universities when the degree is awarded.

Contrary to what was observed at the college level and in bachelor's programs, women enrolled in master's programs do not take less time than men to obtain their degree.

Of students enrolled in master's programs and completing their studies at the end of 2010-2011, 73.2% earned their degree, after an average of 6.7 terms of study.

1. Success in university master's programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are master's degrees obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a graduate program leading to a master's degree. Students are considered to have left school without a degree when they have been absent for a period of at least two years following the last year of enrollment.

Table 3.7a

Proportion of students leaving a master's program with a degree, by gender and last year of enrollment (%)

	1987-1988	1995-1996	2000-2001	2005-2006	2009-2010	2010-2011 ^e
Male	57.0	63.5	67.9	70.8	71.6	71.9
Female	55.0	67.4	71.2	73.1	74.9	74.4
Total	56.1	65.4	69.6	71.9	73.2	73.2

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.7b

Average number of terms completed before leaving a master's program (average for all leavers since 2006-2007), by gender

	With Degree		Without Degree ¹		Total	
	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²
Male	4.7	6.6	2.6	4.5	4.1	6.0
Female	4.7	6.8	2.6	4.7	4.1	6.2
Total	4.7	6.7	2.6	4.6	4.1	6.1

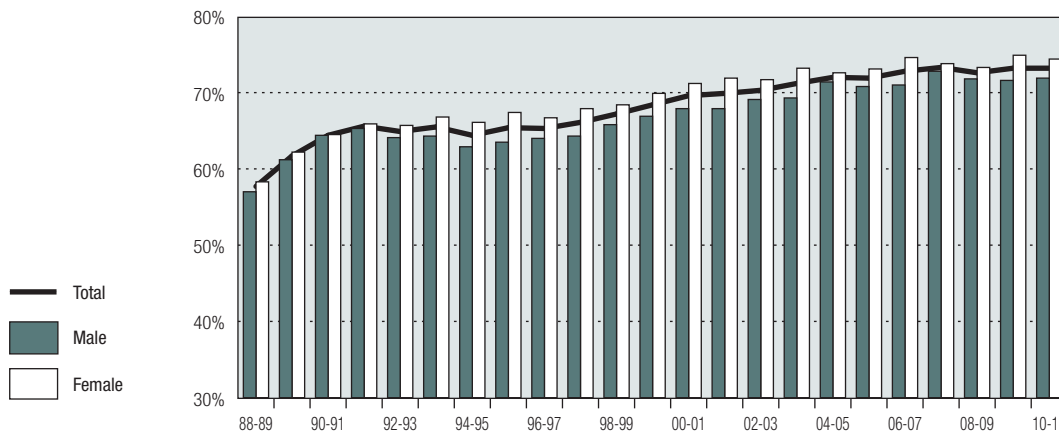
Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive terms.

2. Refers to the total duration of full- and part-time studies.

Graph 3.7

Proportion of students leaving a master's program with a degree, by gender and last year of enrollment (%)



3.8 Success and Duration of Studies in Doctoral Programs¹

At the end of 2010-2011, 61.2% of students leaving a doctoral program earned their degree. Since 1987-1988, this proportion has increased by 12.5 percentage points.

Although traditionally fewer women than men in doctoral programs have obtained their degree, in 2000-2001, for the first time, the success rate for women was 1.7 percentage points higher than that for men. Of the women who left doctoral programs at the end of 2010-2011, 62.3% did so with their degree, an increase of 22.0 percentage points compared with 23 years earlier. The proportion of male candidates who completed their studies in 2010-2011 was 60.2%, or 2.1 percentage points less than for female candidates. For women, success rates have been steadily rising since 1995-1996. Nevertheless, more men than women enroll in doctoral programs (see Section 2.9), and there are still more men than women who obtain a doctorate (see Section 5.6).

Graduates of doctoral programs were enrolled for an average of 15.8 terms, regardless of whether they studied on a full-time or part-time basis. The duration of studies for students who left without a degree was 8.9 terms, whether full-time or part-time. For students overall, whether they left a doctoral program with or without a degree, they did so after 13.0 terms, 12.3 of which were full-time.

The duration of studies referred to here is the actual duration and is not compatible with the calculation of full-time equivalents (FTEs) for funding purposes, where only a standardized duration is recognized. The “funded” duration is a maximum of 8.0 terms (3 years in FTEs) for doctoral programs. However, the actual duration of studies exceeds this standard for all types of attendance status. This means that students who leave without a doctorate are in practice fully funded, with the exception of a supplementary amount of \$7 000 that is allocated to universities when the degree is awarded.

Differences in the duration of studies are apparent in the figures for male and female students, and according to the attendance status upon leaving. Contrary to what was observed in bachelor's programs, women enrolled in doctoral programs do not take less time than men to obtain their degree or to leave without one.

Of the students enrolled in a doctoral program and completing their studies at the end of 2010-2011, 61.2% earned their degree, on average after 15.8 terms.

1. Success in university doctoral programs is measured here by the proportion of new graduates among all students leaving the programs with or without a degree. The degrees taken into account are doctorates obtained during or at the end of the school year in which the student was last enrolled, or the following year if the student has not re-enrolled in a doctoral program. Students are considered to have left school without a degree when they have been absent for a period of at least two academic years following the last year of enrollment.

Table 3.8a

Proportion of students leaving a doctoral's program with a degree, by gender and last year of enrollment (%)

	1987-1988	1995-1996	2000-2001	2005-2006	2009-2010 ^e	2010-2011 ^e
Male	53.1	60.9	53.0	57.0	60.3	60.2
Female	40.3	48.4	54.7	55.5	62.7	62.3
Total	48.7	56.3	53.8	56.4	61.4	61.2

Source: Ministère de l'Éducation, du Loisir et du Sport

e: Estimates

Table 3.8b

Average number of terms completed before leaving a doctoral program (average for all leavers since 2006-2007), by gender

	With Degree		Without Degree ¹		Total	
	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²	Full-time attendance	All attendance ²
Male	14.8	15.4	7.8	8.6	11.9	12.6
Female	15.6	16.3	8.2	9.4	12.7	13.5
Total	15.2	15.8	8.0	8.9	12.3	13.0

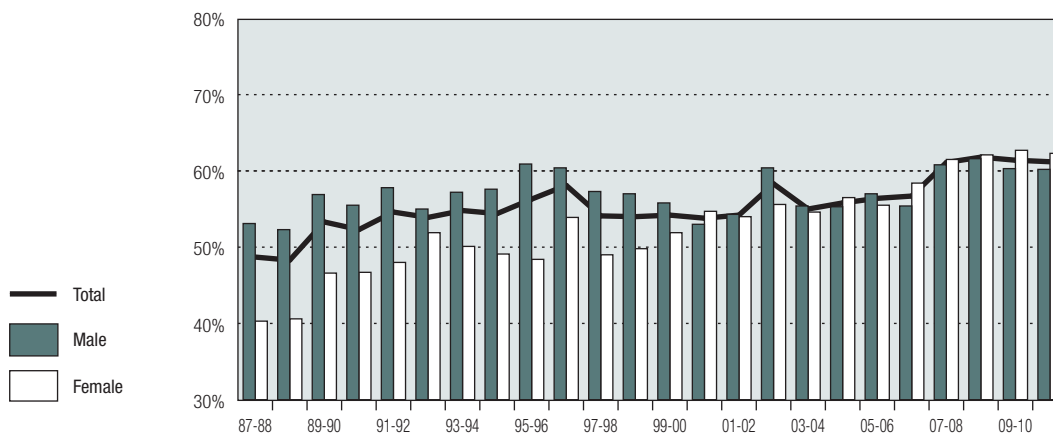
Source: Ministère de l'Éducation, du Loisir et du Sport

1. Refers to students who have interrupted their studies for at least six consecutive terms.

2. Refers to the total duration of full- and part-time studies.

Graph 3.8

Proportion of students leaving a doctoral's program with a degree, by gender and last year of enrollment (%)



4.1 Secondary School Examination Results, by Several Variables—Youth Sector

The Ministère de l'Éducation, du Loisir et du Sport administers uniform examinations to students in Secondary IV and Secondary V for purposes of certification. The average mark on the June 2012 uniform examinations was 70.5%¹ and the success rate was 83.4%.

While female students have a much better record than male students for staying in school, they have no clear advantage over male students with regard to their results on uniform examinations. The slight difference may be explained by the higher dropout rate among male students, as it is usually the weaker students who leave school before graduation.

The average mark obtained by students in private schools was 77.8%, 9.3 percentage points higher than the average mark in the public system (68.5%). The success rate was 80.1% in the public system, compared with 95.3% in the private system. One of the factors likely to explain these differences² is that private schools can impose selection criteria when admitting students.

Students who received instruction in French did better results on the examinations than students who studied in English. The average mark of students studying in French was 2.1 percentage points higher than that of students studying in English. In addition, the success rate of students studying in French was 4.5 percentage points higher than that of students studying in English.

The best results were obtained in Secondary V English, second language (enriched program), and the poorest, in Secondary IV Mathematics: Cultural, Social and Technical option. The success rate was 90.7% for the Secondary V French, language of instruction, examination and 96.3% for the Secondary V English, language of instruction, examination.

Female students outperformed male students in French and English language of instruction. In the other subjects, there was a slight difference between the results of female and male students.

The success rate on the Ministère's June 2012 secondary school uniform examinations was 83.4%.

1. This figure is calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.
2. "The performance disadvantage observed in public schools largely disappeared after other school factors were taken into consideration. . . . In other words, after taking the effect of other school characteristics into consideration, including school average parental SES, public school attendance was associated with higher individual performance." See Statistics Canada, *Measuring Up: The Performance of Canada's Youth in Reading, Mathematics and Science—OECD PISA Study: First Results for Canadians Aged 15* (Ottawa: Statistics Canada, No. 81-590-XPE, December 2001), 44.

Table 4.1

Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 2012 (%)

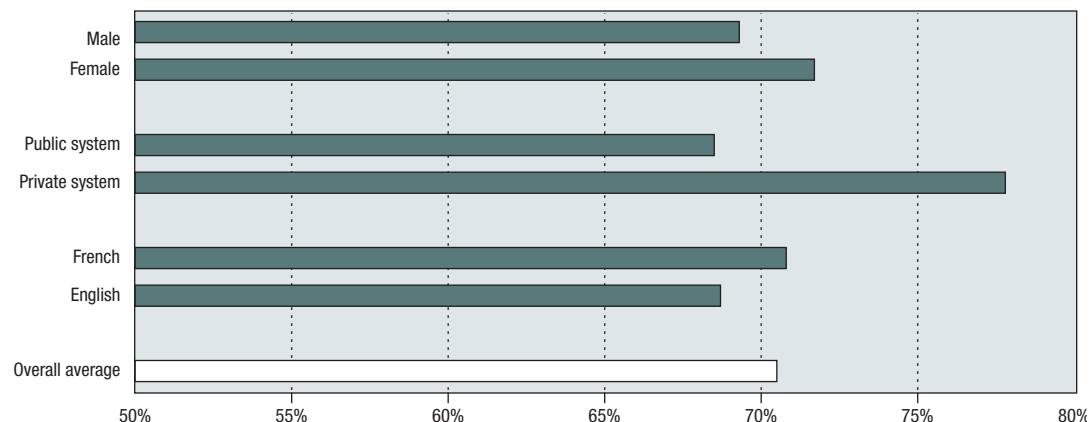
	Average mark	Success Rate
Male	69.2	81.7
Female	71.6	85.0
Public system ¹	68.5	80.1
Private system	77.8	95.3
Language of instruction: French	70.8	84.0
Language of instruction: English	68.7	79.5
English, language of instruction (Secondary V)	76.1	96.3
English, second language, basic program (Secondary V)	76.4	94.6
English, second language, enriched program (Secondary V)	82.0	98.8
French, language of instruction (Secondary V)	72.9	90.7
French, second language (Secondary V)	72.5	88.0
History and Citizenship Education (Secondary IV)	68.1	77.5
Mathematics: Cultural, Social and Technical option (Secondary IV)	61.3	68.5
Mathematics: Science option (Secondary V)	74.4	86.9
Mathematics: Technical and Scientific option (Secondary IV)	65.7	75.5
Science and Technology (Secondary IV)	69.1	81.0
Overall average result	70.5	83.4

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation, du Loisir et du Sport.

Graph 4.1

Average marks on secondary school uniform examinations in the youth sector, by gender, school system and language of instruction: June 2012 (%)



4.2 Regional Disparities in Secondary School Examination Results—Youth Sector

Eight administrative regions recorded higher average marks and success rates than the overall provincial results on the Ministère de l'Éducation, du Loisir et du Sport's June 2012 uniform examinations.¹ These regions are: Capitale-Nationale, Chaudière-Appalaches, Centre-du-Québec, Estrie, Montérégie, Mauricie, Laval and Montréal. The two regions with the lowest averages and success rates were Côte-Nord and Nord-du-Québec.

Regional disparities varied somewhat from 2011 to 2012; however, the difference between the highest and lowest average marks jumped from 4.2 percentage points to 18 percentage points, while the gap in the success rates widened from 6.6 percentage points in 2011 to 31.5 percentage points in 2012. These changes are due mostly to a decrease in the average mark and success rate observed in the Nord-du-Québec region.

The results on uniform examinations are not necessarily indicative of the probability of obtaining a secondary school diploma. In some regions, it is possible that a low student retention rate contributes to higher marks on the uniform examinations because the weakest students have dropped out.

The results on the Ministère's June 2012 uniform examinations showed a gap of 31.5 percentage points between the success rates of students in the region with the best performance (87.3%) and those in the region with the poorest performance (55.8%).

1. Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.

Table 4.2

Results on secondary school uniform examinations in the youth sector, by school administrative region: June 2012 (%)

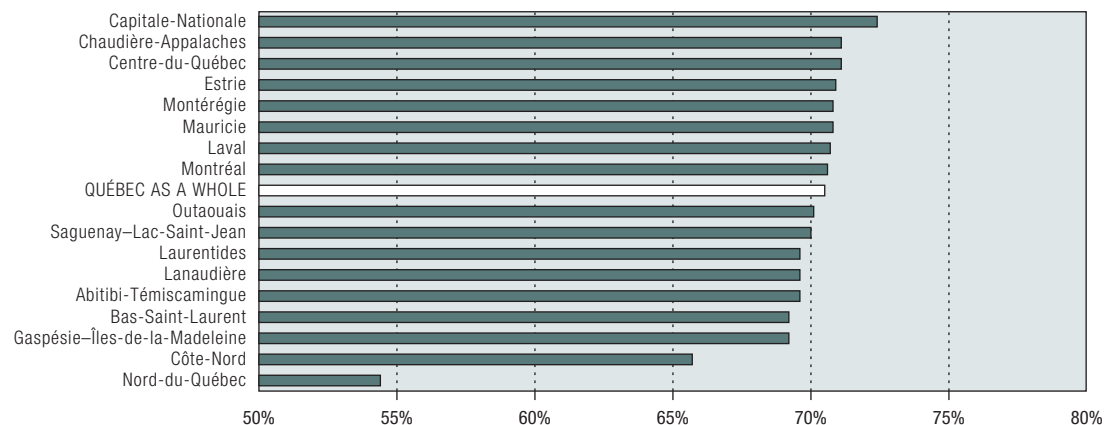
Administrative region	Average mark	Success rate
Gaspésie-Îles-de-la-Madeleine	69.2	82.1
Bas-Saint-Laurent	69.2	81.1
Saguenay-Lac-Saint-Jean	70.0	83.0
Capitale-Nationale	72.4	87.3
Chaudière-Appalaches	71.1	85.4
Mauricie	70.8	84.2
Centre-du-Québec	71.1	85.6
Estrie	70.9	84.6
Montréal	70.8	84.6
Montréal	70.6	81.9
Laval	70.7	84.2
Lanaudière	69.6	82.1
Laurentides	69.6	81.7
Outaouais	70.1	84.0
Abitibi-Témiscamingue	69.6	84.3
Côte-Nord	65.7	74.6
Nord-du-Québec ¹	54.4	55.8
Overall average result	70.5	83.4

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Results for this region include those of the Commission scolaire de la Baie-James, whose average mark and success rate were 69.5% and 85.5%, respectively.

Graph 4.2

Average marks on secondary school uniform examinations in the youth sector, by school administrative region: June 2012 (%)



4.3 Secondary V French, Language of Instruction, Examination—Youth Sector

Students who took the June 2012 Secondary V French, language of instruction, examination obtained an average mark of 72.9%. The success rate was 90.7%.¹

The examination consisted of three components: a written production, a reading comprehension exercise and an oral expression test. The reading comprehension and oral expression components were under the responsibility of the educational institutions. The results obtained in these sections are not included in Table 4.3; they were, however, considered in the calculation of the overall results on the French examination. For the written production component, which was under the responsibility of the Ministère de l'Éducation, du Loisir et du Sport, students obtained an average mark of 73.2% and a success rate of 83.6%.

Whereas there was no significant difference overall between the results obtained by male and female students on the examinations used for purposes of certification, female students clearly outperformed male students (see Section 4.1) on the French examination. The average mark for female students was 5.5 percentage points above that for male students, and the success rate was 7.5 points in favour of female students. In written production, the female students' average mark was 5.5 percentage points higher than that of male students, and their success rate was 9.4 percentage points higher.

The average mark of private school students surpassed that of public school students by 6.3 percentage points. In the public system, 11.5% of the students failed the ministerial examination, compared with 2.6% in the private system. In written production, students in private schools scored 7.7 percentage points higher than students in public schools. Compared with the June 2011 examination, the success rate for the written production component went from 83.5% to 83.6%. For the examination as a whole, the success rate decreased from 91.1% to 90.7%.

The success rate on the Ministère's June 2012 Secondary V French, language of instruction, examination was 90.7%. Female students obtained significantly higher marks than male students.

1. Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using the results of the uniform examination for each student group as the basis of comparison.

Table 4.3

**Results on the
Secondary V French,
language of instruction,
examination in the youth
sector, by gender
and school system:
June 2012 (%)**

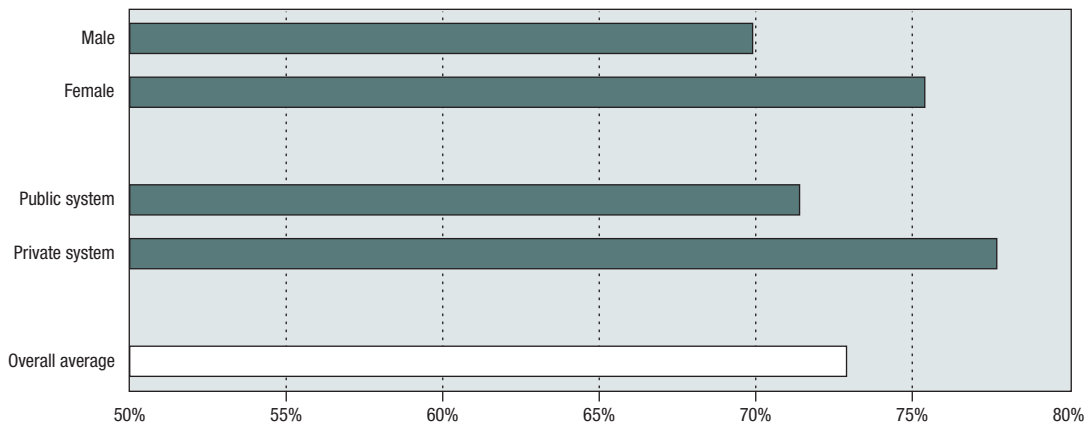
	Written Production		Overall Results	
	Average mark	Success Rate	Average mark	Success Rate
Male	70.2	78.5	69.9	86.6
Female	75.7	87.9	75.4	94.1
Public system ¹	71.3	80.5	71.4	88.5
Private system	79.0	93.1	77.7	97.4
Overall average result	73.2	83.6	72.9	90.7

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Excludes the Cree School Board, the Kativik School Board and institutions outside the jurisdiction of the Ministère de l'Éducation, du Loisir et du Sport

Graph 4.3

**Average marks on the
Secondary V French,
language of instruction,
examination in the youth
sector, by gender and
school system:
June 2012 (%)**



4.4 Reading Competencies of Elementary 4 Students (4th Grade)

The Progress in International Reading Literacy Study (PIRLS) is conducted by the International Association for the Evaluation of Educational Achievement (IEA) and focuses on students in the 4th grade, who are on average 10 years old. In Québec, this means students in the second year of Elementary Cycle Two, or in Elementary 4.

Forty-five countries, including Canada, participated in the PIRLS 2011 study. The Canadian sample comprised nine provinces, three of which (Alberta, Ontario and Québec) were benchmarking participants; in other words, a large enough sample to make comparisons between the performance of students in these provinces with the rest of the participating countries. This was the third PIRLS study in which Ontario and Québec participated; the first two were in 2001 and 2006. The level of participation by British Columbia, New Brunswick (French), Nova Scotia and Newfoundland and Labrador in PIRLS 2011 is referred to as oversampling, which allows their students' results to be compared with those of other participating countries and Canadian provinces but without their results being published in the international report. Last, the level of participation by Saskatchewan and Manitoba enabled the Canadian average to be calculated, but the sample sizes were not large enough to provide reliable data for these two provinces.

The results presented here are taken from the 2011 study in which 190 Québec classes, or 4 244 students participated.

PIRLS examines three aspects of student reading literacy: processes of comprehension (focusing and retrieving explicitly stated information; making straightforward inferences; interpreting and integrating ideas and information; and examining and evaluating content, language, and textual elements); the purposes of reading (reading for literary experience and reading to acquire and use information); and behaviours and attitudes toward reading. The first two aspects are evaluated through an examination, while behaviours and attitudes are evaluated through a questionnaire completed by the students. The examination is composed of different text-related questions and is used to evaluate two objectives: reading for literary experience (narrative fiction) and reading to acquire and use information (e.g. texts, lists, tables, graphs, diagrams). The results are published for each of these two aspects and for the examination as a whole. These results are expressed on a scale with an international average set at 500 points based on the results from PIRLS 2001 and have a standard deviation of 100.

On PIRLS 2011, Québec Elementary 4 students obtained a score of 538, statistically comparable to that obtained on PIRLS 2006 (533) and PIRLS 2001 (537). In comparison with the 45 participating countries, excluding the other participating Canadian provinces, Québec's average score is statistically lower than that of 14 countries and statistically higher than that of 23 others, notably France and Belgium (French).

In comparison with the other participating Canadian provinces, the average overall score of students in Québec on PIRLS 2011 is statistically lower than that of students in British Columbia (556), Ontario (552), Nova Scotia (549) and Alberta (548), statistically similar to that of students in Newfoundland and Labrador (546), but higher than that of students in New Brunswick (French) (514). In Québec, the average score obtained by female students (544) is statistically higher than that obtained by male students (531). In fact, in all the participating provinces, the gender gaps are definite and statistically significant, in favour of female students.

Québec was the only one of the four provinces that assessed both linguistic populations to show no significant statistical difference between the overall reading achievement of its francophone and anglophone students, although the results obtained by anglophone students were higher than those obtained by francophone students.

On the international scale, Québec Elementary 4 students have maintained their PIRLS 2006 position. On the Canadian scale, however, Québec students fall significantly below the Canadian average.

Table 4.4

Overall scores obtained by Elementary 4 students on PIRLS 2011, by reading purpose and province

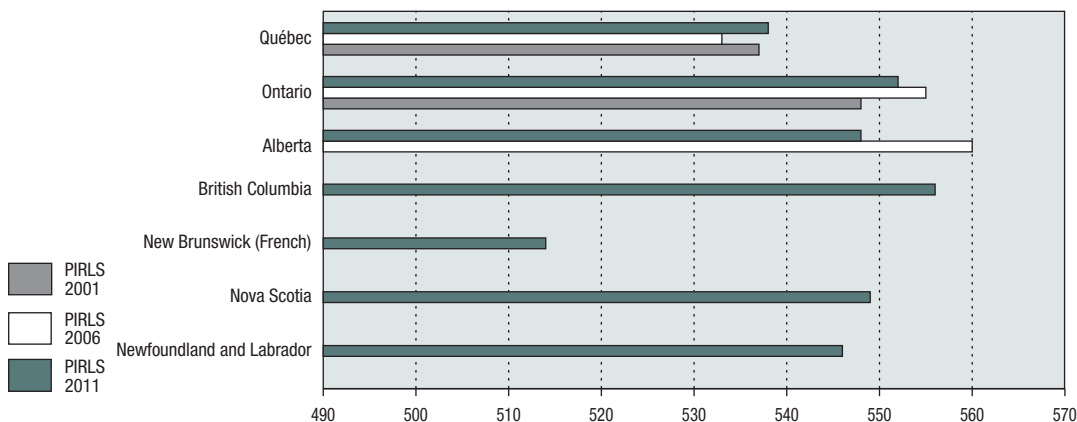
Province	Reading – Overall Score ¹		Reading Purpose			
			Literary		Informational	
	Average score	Confidence interval ¹	Average score	Confidence interval ¹	Average score	Confidence interval ¹
British Columbia	556	± 6.3	561	± 6.7	552	± 6.3
Ontario	552	± 5.1	558	± 5.1	549	± 5.3
Nova Scotia	549	± 4.7	555	± 5.1	545	± 4.9
Alberta	548	± 5.7	552	± 5.9	545	± 5.5
Canada	548	± 3.1	553	± 3.3	545	± 3.3
Newfoundland and Labrador	546	± 5.5	552	± 5.7	543	± 6.1
Québec	538	± 4.1	539	± 3.9	536	± 4.7
New Brunswick (French)	514	± 5.3	516	± 6.7	510	± 6.3

1. A confidence interval of 95% represents 1.96 standard errors around the average of a normal population distribution.

Shaded area: Provinces with an average score that is statistically similar to that of Québec

Graph 4.4

Trends in the overall scores on the PIRLS reading assessment for participating Canadian provinces



4.5 Mathematics Competencies of Elementary 4 Students (4th Grade)

Some 4 235 Québec students in the second year of Elementary Cycle Two (Elementary 4, or the 4th grade) in 190 public and private schools participated in the mathematics assessment held in the spring of 2011 as part of the Trends in International Mathematics and Science Study (TIMSS), conducted by the International Association for the Evaluation of Educational Achievement (IEA). The students were, on average, 10 years old in most of the education systems of 52 countries and seven benchmarking participants, including Québec. Canada, as a country, did not participate but two other provinces, Alberta and Ontario, did.

There were three content domains for the TIMSS 2011 Elementary 4 mathematics assessment: number; geometric shapes and measures; and data display. The following three cognitive domains were also assessed: knowing; applying; and reasoning. In addition to multiple-choice and short- and long-answer questions, the assessment contained problems to be solved.

Québec Elementary 4 students obtained a score of 533 on the TIMSS 2011 mathematics assessment, statistically higher than the 519 obtained on the 2007 assessment. The score obtained by Québec students is statistically lower than the scores of students in 14 of the 59 participating countries and benchmarking participants. In addition, students in Québec outperformed students in Ontario (518) and Alberta (507).

In Québec, the average score of male students (538) is statistically higher than that of female students (527). A similar trend is observed in Alberta and Ontario.

Students in Québec's French school system performed better (535) than their counterparts in the English system (515) and this difference is statistically significant. Both linguistic groups obtained higher scores than they did in 2007, but only the improvement observed in students in the French school system is statistically significant.

In comparison with the TIMSS 2007 mathematics study, Québec Elementary 4 students posted improved scores in the 2011 study. They also scored higher than students in Ontario and Alberta.

Table 4.5

Scores obtained by Elementary 4 students on the TIMSS 2011 mathematics assessment, for the 10 top-ranking countries and for the Canadian benchmarking participants

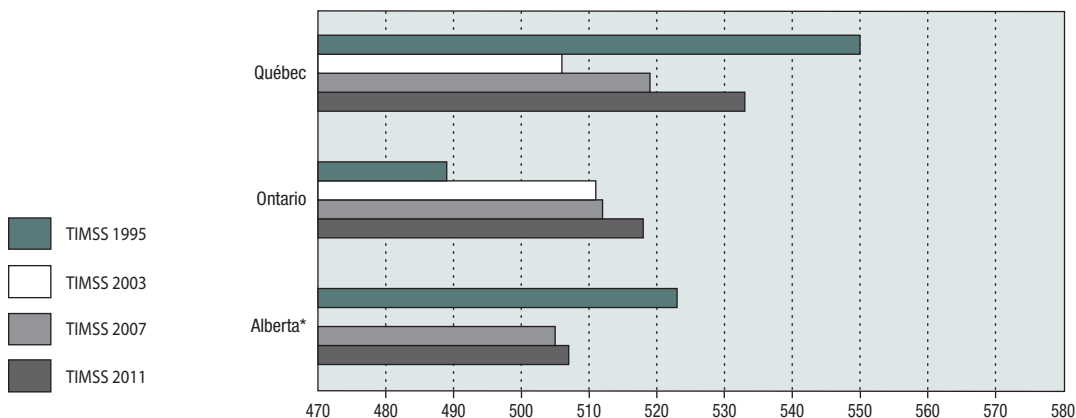
Country	Average score	Confidence interval ¹
Singapore	606	± 6.3
Republic of Korea	605	± 3.7
Hong Kong (SAR)	602	± 6.7
Chinese Taipei	591	± 3.9
Japan	585	± 3.3
Northern Ireland	562	± 5.7
Belgium (Flemish)	549	± 3.7
Finland	545	± 4.5
England	542	± 6.7
Russian Federation	542	± 7.3
<i>Canadian benchmarking participants</i>		
Québec	533	± 4.7
Ontario	518	± 6.1
Alberta	507	± 4.9

1. A confidence interval of 95% represents 1.96 standard errors around the average of a normal population distribution.

Shaded area: Provinces with an average score that is statistically similar to that of Québec

Graph 4.5

Trends in the scores on the TIMSS Elementary 4 mathematics assessment for participating Canadian provinces



* Alberta did not participate in TIMSS 2003.

4.6 Mathematics Competencies of Secondary II Students (8th Grade)

Some 6 149 Québec students in Secondary II (8th grade) in 189 schools participated in the mathematics assessment held in the spring of 2011 as part of the Trends in International Mathematics and Science Study (TIMSS), conducted by the International Association for the Evaluation of Educational Achievement (IEA). The students were 14 years old on average in most of the education systems of the 45 countries and 14 benchmarking participants, including Québec. Canada, as a country, did not participate, but two other provinces, Alberta and Ontario, did.

There were four content domains for the TIMSS 2011 Secondary II mathematics assessment: number; algebra; geometry; and data and chance. The following three cognitive domains were also assessed: knowing; applying; and reasoning. In addition to multiple-choice and short- and long-answer questions, the assessment contained problems to be solved.

With an overall average score of 532 on the TIMSS 2011 mathematics assessment, Québec Secondary II students retained their 2007 position among the best. Despite the addition of countries and benchmarking participants, Québec continues to stay right behind the Asian countries, which are renowned for their excellence in mathematics. Only five countries and one benchmarking participant obtained an average score that was statistically higher than Québec's.

The score obtained by Québec students is also statistically higher than that obtained by students in Ontario (512) and Alberta (505).

In Québec, the average scores of female students (531) and male students (532) are statistically similar. The same trend is observed in the other two participating Canadian provinces and in most of the other countries where the students outperformed Québec students.

There is no significant statistical difference in the overall scores of Québec students in the English school system (530) and the French system (532).

On the TIMSS 2011 study, Québec Secondary II students again obtained an excellent score in mathematics, similar to their 2007 performance. Only seven of the 59 countries and benchmarking participants had an average score that was statistically higher than Québec's.

Table 4.6

Scores obtained by Secondary II students on the TIMSS 2011 mathematics assessment, for the 10 top-ranking countries and for the Canadian benchmarking participants

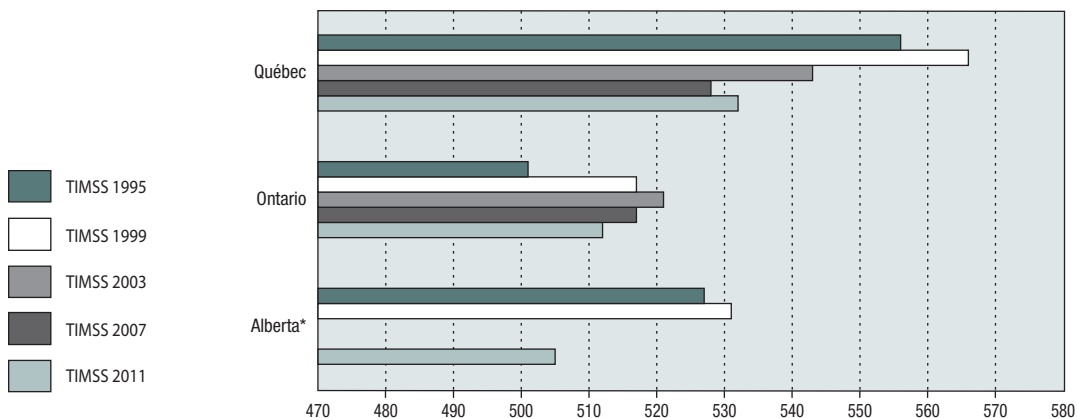
Country	Average score	Confidence interval ¹
Republic of Korea	613	± 5.7
Singapore	611	± 7.4
Chinese Taipei	609	± 6.3
Hong Kong (SAR)	586	± 7.4
Japan	570	± 5.1
Russian Federation	539	± 7.1
Israel	516	± 8.0
Finland	514	± 4.9
United States	509	± 5.1
England	507	± 10.8
<i>Canadian benchmarking participants</i>		
Québec	532	± 4.5
Ontario	512	± 4.9
Alberta	505	± 5.1

1. A confidence interval of 95% corresponds to ± 1.96 standard errors around the average of a normal population distribution.

Shaded area: Country or province with an average score that is statistically similar to that of Québec

Graph 4.6

Trends in the scores on the TIMSS Secondary II mathematics assessment for participating Canadian provinces



* Alberta Grade 8 students did not participate in TIMSS 2003 or 2007.

4.7 Science Competencies of Elementary 4 Students (4th Grade)

Some 4 235 Québec students in the second year of Elementary Cycle Two (Elementary 4, or the 4th grade) from 190 public and private schools participated in the science assessment held in the spring of 2011 as part of the Trends in International Mathematics and Science Study (TIMSS), conducted by the International Association for the Evaluation of Educational Achievement (IEA). The students were, on average, 10 years old in most of the education systems of the 52 countries and seven benchmarking participants, including Québec. Canada, as a country, did not participate, but two other Canadian provinces, Alberta and Ontario, did.

There were three content domains for the TIMSS 2011 Elementary 4 science assessment: life science; earth science; and physical science. The following three cognitive domains were also assessed: knowing; applying; and reasoning. In addition to multiple-choice and short- and long-answer questions, the assessment contained problems to be solved.

Québec Elementary 4 students had an average score of 516 points on the TIMSS 2011 science assessment. Twenty-one countries and benchmarking participants obtained scores that were significantly higher, including Ontario (528) and Alberta (541). Québec's score is similar to that obtained in 2007 (517).

In science, male students in Québec obtained an average result that was statistically higher than that of girls (520 and 512 points, respectively). A similar trend is observed in Alberta, while the gender gap in Ontario is not statistically significant.

There is also no statistically significant difference between the average scores of Québec students in the English school system (518) and the French system (516).

Québec Elementary 4 students obtained an average score of 516 points on the TIMSS 2011 science assessment, a score similar to what they obtained in 2007. Students from Québec did not score as high as students from Ontario and Alberta.

Table 4.7

Scores obtained by Elementary 4 students on the TIMSS 2011 science assessment, for the 10 top-ranking countries and for the Canadian benchmarking participants

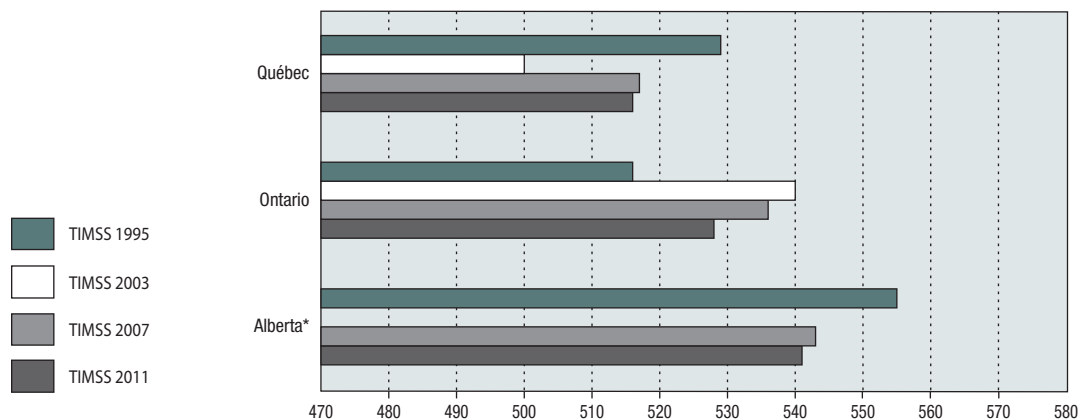
Country	Average score	Confidence interval ¹
Republic of Korea	587	± 3.9
Singapore	583	± 6.7
Finland	570	± 5.1
Japan	559	± 3.7
Russian Federation	552	± 6.7
Chinese Taipei	552	± 4.3
United States	544	± 4.1
Czech Republic	536	± 4.9
Hong Kong (SAR)	535	± 7.4
Hungary	534	± 7.3
<i>Canadian benchmarking participants</i>		
Alberta	541	± 4.7
Ontario	528	± 5.9
Québec	516	± 5.3

1. A confidence interval of 95% corresponds to ± 1.96 standard errors around the average of a normal population distribution.

Shaded area: Country or province with an average score that is statistically similar to that of Québec

Graph 4.7

Trends in the scores on the TIMSS Elementary 4 science assessment for participating Canadian provinces



* Alberta did not participate in TIMSS 2003.

4.8 Science Competencies of Secondary II Students (8th Grade)

Some 6 149 Québec students in Secondary II (8th grade) in 189 schools participated in the science assessment held in the spring of 2011 as part of the Trends in International Mathematics and Science Study (TIMSS), conducted by the International Association for the Evaluation of Educational Achievement (IEA). The students were 14 years old on average in most of the education systems of the 45 countries and 14 benchmarking participants, including Québec. Canada, as a country, did not participate, but two other provinces, Alberta and Ontario, did.

There were four content domains for the TIMSS 2011 Secondary II science assessment: chemistry; earth science; biology; and physics. The following three cognitive domains were also assessed: knowing; applying; and reasoning. In addition to multiple-choice and short- and long-answer questions, the assessment contained problems to be solved.

With an overall average score of 520, Québec students performed better on the TIMSS 2011 science assessment than they did on TIMSS 2007 (507). The average science score of Québec students is statistically lower than the scores of 15 of the 59 countries and benchmarking participants, including Alberta (546), but statistically similar to that obtained by students in Ontario (521).

In science, Québec's male and female Secondary II students obtained average scores that are statistically similar, 518 and 522, respectively. This same trend is observed in Ontario, but not in Alberta where there is a statistically significant difference between the average score of female students and that of their male counterparts, in favour of the latter.

There is no statistically significant difference between the average science scores of Québec students in the French school system (526) and the English system (519).

In science, Québec's Secondary II students performed better on the TIMSS 2011 study than they did on the 2007 study. Their score is similar to that obtained by students in Ontario but lower than that obtained by Albertans.

Table 4.8

**Scores obtained by
Secondary II students
on the TIMSS 2011
science assessment,
for the 10 top-ranking
countries and for the
Canadian benchmarking
participants**

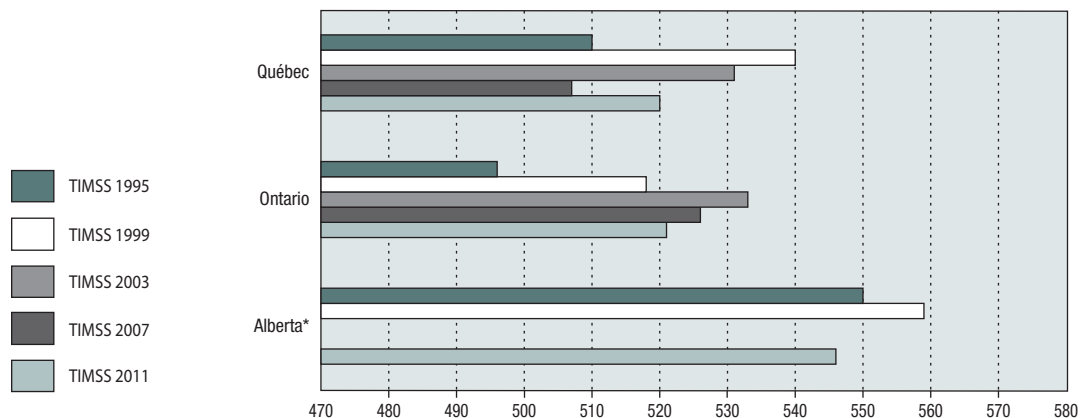
Country	Average score	Confidence interval ¹
Singapore	590	± 8.4
Chinese Taipei	564	± 4.5
Republic of Korea	560	± 3.9
Japan	558	± 4.7
Finland	552	± 4.9
Slovenia	543	± 5.3
Russian Federation	542	± 6.3
Hong Kong (SAR)	532	± 6.7
England	533	± 9.6
United States	525	± 5.1
Canadian benchmarking participants		
Alberta	546	± 4.7
Ontario	521	± 4.9
Québec	520	± 4.9

1. A confidence interval of 95% corresponds to ± 1.96 standard errors around the average of a normal population distribution.

Shaded area: Country or province with an average score that is statistically similar to that of Québec

Graph 4.8

**Trends in the scores on
the TIMSS Secondary II
science assessment for
participating Canadian
provinces in 2011**



* Alberta Grade 8 students did not participate in TIMSS 2003 or 2007.

4.9 Ministerial Examination of College French

In 2011-2012, 43 434 college students wrote the ministerial examination of college French, language of instruction and literature.

Since January 1, 1998,¹ students in French CEGEPs have been required to pass this examination to obtain a Diploma of College Studies (DCS). The students must read a series of literary texts and write a 900-word essay on them, thereby demonstrating their ability to understand a variety of texts and produce a structured essay using correct language.

There are three major evaluation criteria for the ministerial examination: I-Comprehension and insight; II-Organization of response; and III-Expression. The first two criteria contain specific subcriteria that are evaluated using a seven-level rating scale: A (very good), B (good), C+ (fair), C (adequate), D (weak), E (very poor) and F (unacceptable). In the Expression criterion, the “appropriate use of words” subcriterion is evaluated using the same rating scale, while sentence structure, punctuation, spelling and grammar are evaluated quantitatively, by counting errors. Students must obtain a C or better for each of the three major criteria. A grade of C represents an adequate level of competence. Therefore, students who obtain a D or worse on any one of the three criteria automatically fail the examination.

In 2011-2012, the overall success rate for the ministerial examination of college French was 84.3%, compared with 84.2% in 2010-2011.

The distribution of students according to the mark obtained for each criterion indicates that 52.0% earned a B for Comprehension and insight, 46.3% earned an A for Organization of response and 38.1% earned a C for Expression.

The lowest rate of success was in Expression (86.2%); the success rate was 96.7% for Comprehension and insight and 99.5% for Organization of response.

In 2011-2012, the success rate for women was 86.8%, compared with 80.6% for men.

Of the college students who took the ministerial examination of college French in 2011-2012, 84.3% passed.

¹ This requirement was postponed until January 1, 2003, for students who passed at least one language and literature course in the old system. Students may retake the examination until they pass it.

Table 4.9a

Success rate for the ministerial examination of college French, by gender (%)

	Success rate			
	2008-2009	2009-2010	2010-2011	2011-2012
Female	84.9	85.0	86.6	86.8
Male	79.8	78.5	80.7	80.6
Overall examination	82.8	82.4	84.2	84.3

Source: Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Table 4.9b

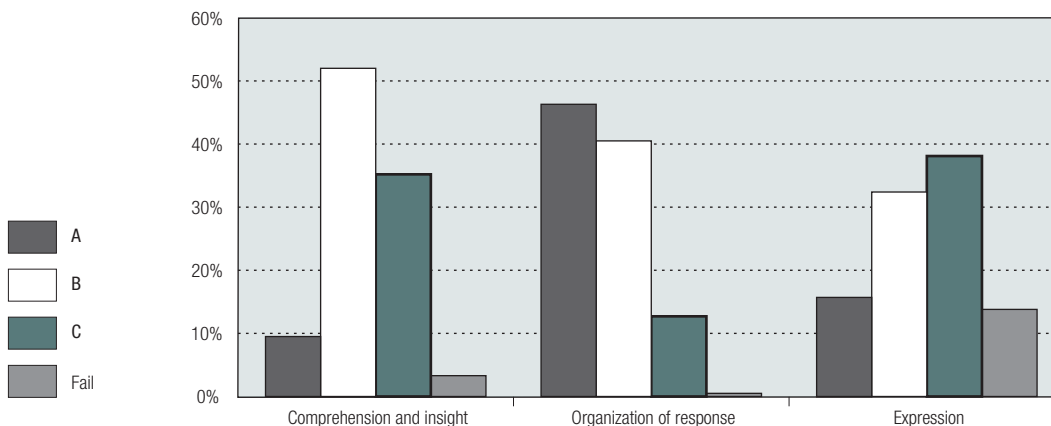
Distribution of students by grade obtained on each of the correction criteria for the ministerial examination of college French, 2011-2012 (%)

Correction criteria examination for the 2011-2012	Distribution of students (%)				Success rate
	A	B	C	Fail	
Comprehension and insight	9.5	52.0	35.2	3.3	96.7
Organization of response	46.3	40.5	12.7	0.5	99.5
Expression	15.7	32.4	38.1	13.8	86.2

Source: Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 4.9

Distribution of students by grade obtained on each of the correction criteria for the ministerial examination of college French, 2011-2012 (%)



5.1 Highest Diploma or Degree Earned

The main data pertaining to diplomas and degrees earned at the various levels of education appear in the diagram on student retention included in the introduction and are presented in more detail in the following sections. Organized in a different way,¹ these data may also show the distribution of a cohort of school leavers according to the highest diploma or degree earned.²

Between 1975-1976 and 2010-2011, graduation rates at the secondary and university levels rose sharply for both men and women. During this period, the increase in the proportion of new graduates with bachelor's degrees (from 14.9% to 33.2%) was accompanied by a drop of nearly 90% in the proportion of those leaving school without a diploma (from 43.0% to 4.8%). This decline has resulted in an increase in all the other categories.

Thus, the proportion of school leavers who are not prepared for the labour market—that is, persons without a diploma or with only a Secondary School Diploma (SSD) in general education or a pre-university Diploma of College Studies (DCS) (including DCSs without mention)—dropped from 63.2% in 1975-1976 to 20.9% in 2010-2011. This decline of 42.3 percentage points is reflected by increases of 18.3 percentage points in the proportion of graduates with a bachelor's degree and 24.0 percentage points in the proportion of holders of vocational (+ 21.5 percentage points) or technical training diplomas (+ 2.5 percentage points).

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. In 2010-2011, over one and a half times more women than men graduated with a bachelor's degree or with a college diploma in technical training (53.7% compared with 33.0%). While virtually no women left school without a diploma (0.2%), 9.2% of men did.

In 2010-2011, 79.1% of those leaving the education system graduated with a bachelor's degree or a diploma in vocational or technical training.

1. It is assumed that the diplomas or degrees awarded at a given level are preceded by a diploma at a lower level. For example, the number of bachelor's degrees should be a subset of the number of DCSs; it follows that the surplus of DCSs in relation to the bachelor's degrees would represent the number of DCSs that are not followed by a university degree. For this reason, there are no persons with a DCS in pre-university education or a DCS without mention as a last diploma in 1975-1976 and 1995-1996. An additional hypothesis makes it possible to estimate the number of DCSs in technical training that are followed by a bachelor's degree. It is also assumed that secondary school vocational training diplomas are not followed by another higher-level diploma. Partial studies at a given level are grouped with the diploma immediately below: for example, uncompleted college studies are considered with the SSDs in general education.
2. This level of schooling is different from the level for the general population as indicated in the census, the latter being primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system. It also shows what the general state of schooling would be if current trends were to continue.

Table 5.1

Distribution of school leavers, by highest diploma or degree earned (%)

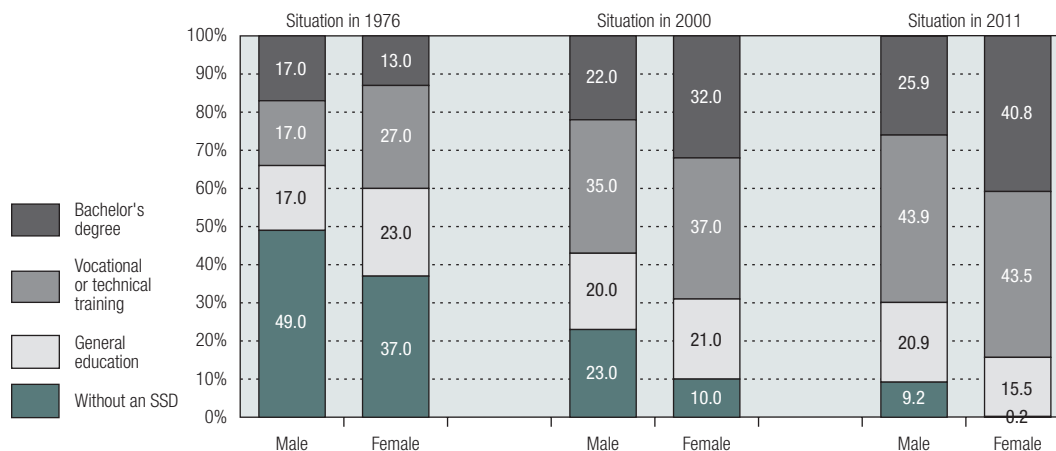
	1975- 1976	1985- 1986	1995- 1996	2005- 2006	2009- 2010	2010- 2011
Bachelor's degree ¹	14.9	19.0	29.0	31.4	33.2	33.2
College diploma in technical training ²	7.4	11.2	11.2	11.0	9.6	9.9
Secondary school vocational diploma ³	14.5	17.7	19.4	30.6	34.8	36.0
General education (DCS or SSD)	20.2	31.3	28.6	12.5	16.8	16.1
No diploma	43.0	20.8	11.8	14.5	5.6	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministère de l'Éducation, du Loisir et du Sport

1. Figures for university are based on the calendar year in which the school year ends.
2. Figures include the Diploma of College Studies (DCS) in technical training, the Attestation of College Studies (ACS) and, until 1994, the Certificat d'études collégiales (CEC—certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC—diploma of advanced college studies).
3. Figures include the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.

Graph 5.1

Distribution of school leavers, by highest diploma or degree earned (%)



5.2 Graduation From Secondary School— Youth and Adult Sectors

The probability of obtaining a secondary school diploma or qualification¹ in 2011-2012 was 93.2%. This rate is lower than that of the previous year (95.3% in 2010-2011). This decrease is due mainly to the reintroduction of the ministerial uniform examinations in several subjects in June 2012 and the fact that there was a lower success rate on these new examinations (see Section 4.1), which reduced the number of those who obtained their Secondary School Diplomas (SSDs). In thus seeking to upgrade the quality of the SSD, the ministerial standards made it harder to obtain. A similar phenomenon was observed in the mid-1980s (see Graph 5.2) when the pass mark was raised from 50% to 60%.

In 2011-2012, for students in the youth sector and for students under 20 years old in the adult sector in Québec, the probability of obtaining a secondary school diploma or qualification was 74.6%. The probability of obtaining a diploma or qualification for adults 20 years old or over decreased from 20.5% in 2010-2011 to 18.7% in 2011-2012.

The graduation rate discussed here applies mainly to general education. This section is primarily concerned with the first diplomas or qualifications earned.² It is interesting to note that, in 2011-2012, 82.2% of all the diplomas or qualifications earned were first diplomas or qualifications obtained in general education. This proportion was 97.5% if only diplomas or qualifications obtained in the youth sector or by students under 20 years old in the adult sector are considered.

The probability of graduating from secondary school is greater for female students than for male students. The gender gap was 8.4 percentage points in 2011-2012.

The graduation rate for female students has remained above 90% since 2003-2004 (90.9%) and was 97.5% in 2011-2012. For male students, it passed the 80% mark in 2007-2008 and stood at 89.1% in 2011-2012.

The dropout rate is the proportion of the population who would never earn a diploma or qualification during their lifetime if the situation observed in a given year were to continue indefinitely. It is the complement to the probability of obtaining a secondary school diploma or qualification, presented in this section. The dropout rate was 6.8% in 2011-2012.

In 2011-2012, the probability of obtaining a first secondary school diploma or qualification in the youth or adult sector was 93.2%.

1. The probability of obtaining a first secondary school diploma or qualification is determined by grouping the first diplomas obtained at the secondary level in general education and vocational training. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma or qualification is earned.
2. Figures do not include the second or third vocational training diploma that a student may have earned, vocational training diplomas received after a general SSD, or SSDs obtained after a diploma in vocational training.

Table 5.2

Probability of obtaining a secondary school diploma or qualification in either the youth or the adult sector, by gender (%)

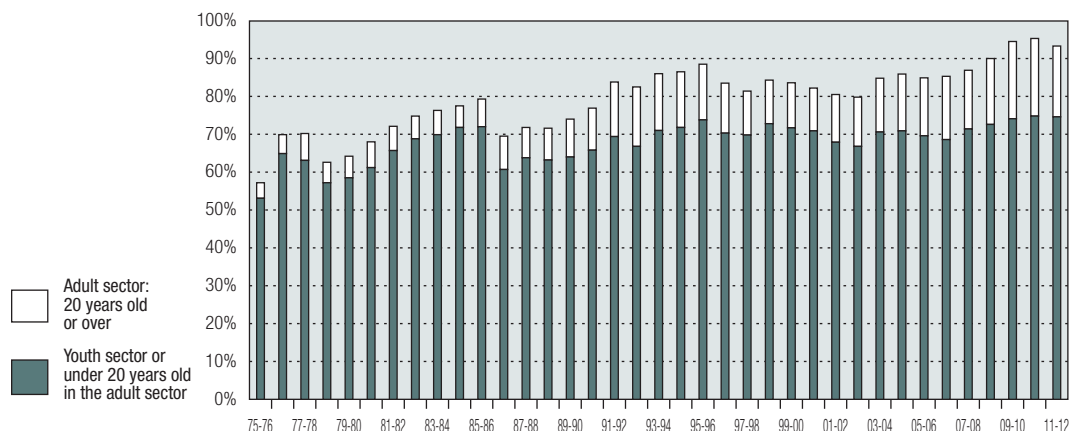
	1975- 1976	1985- 1986	1995- 1996	2005- 2006	2010- 2011	2011- 2012 ^e
Total	57.2	79.3	88.5	84.9	95.3	93.2
Adult sector: 20 years old or over	4.1	7.3	14.7	15.3	20.5	18.7
Youth sector or under 20 years old in the adult sector	53.1	72.0	73.8	69.6	74.8	74.6
Male	51.3	73.2	81.9	78.0	91.0	89.1
Adult sector: 20 years old or over	3.6	6.5	14.4	15.4	21.5	19.6
Youth sector or under 20 years old in the adult sector	47.6	66.7	67.5	62.6	69.5	69.6
Female	63.2	85.7	95.5	92.1	99.9	97.5
Adult sector: 20 years old or over	4.5	8.1	14.9	15.2	19.5	17.8
Youth sector or under 20 years old in the adult sector	58.7	77.6	80.5	76.9	80.3	79.7

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

Graph 5.2

Probability of obtaining a secondary school diploma or qualification in either the youth or the adult sector (%)



5.3 Graduation From Secondary School Vocational Training—Youth and Adult Sectors

Based on behaviours observed in 2011-2012, 37 out of 100 Quebecers can expect to obtain a vocational training diploma or qualification¹ in secondary school. This group includes 20 persons who already have a first Secondary School Diploma (SSD) in general education. Since 1997-1998, this proportion has varied between 16 and 20.

Moreover, the probability of obtaining a first secondary school diploma or qualification either in the youth sector or under 20 years old in the adult sector in vocational training was 1.9% in 2011-2012; this rate was over 15% in 1977-1978 and has remained relatively stable since 1996-1997. Students in the youth sector or under 20 years old in the adult sector who obtain a first secondary school diploma or qualification (74.6% in 2011-2012) remain most likely to do so in general education (see Section 5.2).

The very nature of vocational training diplomas or qualifications has also changed. Short vocational programs have been phased out in favour of general education. The basic difference between the Diploma of Vocational Studies (DVS) and its predecessor, the Long Vocational Diploma, is that the DVS deals exclusively with vocational training, since all the components of the vocational programs dealing with general education have been transferred to the SSD.

The difference between male and female students is much less pronounced than in general education. Nevertheless, vocational training represents a larger share of the graduation rate for male students (40.0%) than for female students (33.1%).

The proportion of a generation of students obtaining a secondary school vocational training diploma or qualification was 36.6% in 2011-2012.

1. This refers to the probability of obtaining a first secondary school diploma or qualification. This rate is determined by counting only the first secondary school diplomas or qualifications in vocational training. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma is earned in vocational training.

Table 5.3

**Probability of obtaining
a vocational training
diploma or qualification,
by sector, age and
gender (%)**

	1975- 1976	1985- 1986	1995- 1996	2005- 2006	2010- 2011	2011- 2012 ^e
Total	14.6	17.7	19.6	30.8	36.1	36.6
Male	12.0	17.0	21.2	33.7	39.8	40.0
Female	17.2	18.4	17.9	27.7	32.3	33.1
First diploma	12.4	10.7	6.3	11.9	15.9	16.6
After an SSD ¹	2.2	7.0	13.3	18.9	20.2	20.0
Youth sector or under 20 years old in the adult sector	12.0	14.2	4.8	6.5	6.1	6.2
First diploma	10.5	8.3	1.3	2.2	1.9	1.9
After an SSD ¹	1.6	5.8	3.5	4.3	4.2	4.3
Adult sector: 20 years old or over	2.6	3.5	14.9	24.2	30.0	30.4
First diploma	1.9	2.4	5.0	9.6	14.1	14.7
After an SSD ¹	0.6	1.1	9.8	14.6	15.9	15.6

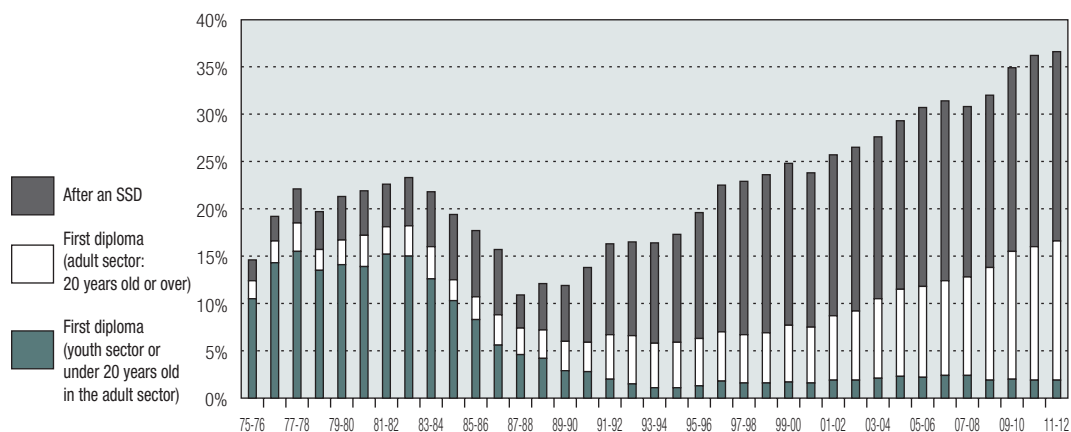
Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

e: Estimates

1. SSD: Secondary School Diploma

Graph 5.3

**Probability of obtaining
a vocational training
diploma or qualification,
by sector and age (%)**



5.4 Graduation From Secondary School in Québec and OECD Countries, 2010

In 2012, the Organisation for Economic Co-operation and Development (OECD) published *Education at a Glance*, which contains indicators on graduation from secondary school in OECD countries in 2010. The same day, Statistics Canada and the Council of Ministers of Education, Canada (CMEC) published similar data for the country's provinces and territories in *Education Indicators in Canada: An International Perspective*.

Table 5.4 compares the situation in Québec with that in a number of industrialized OECD nations with respect to the proportion of graduates from public and private secondary schools. In 2010, the secondary school graduation rate in Québec (88%) remained higher than the average for OECD countries.

Of the 26 OECD countries listed in the table,² nine had higher secondary school graduation rates than Québec. Québec's rate was lower than that of Portugal, Japan, South Korea, Greece, Ireland, Slovenia, Finland, Israel and the United Kingdom, the same as that of Iceland, and higher than that of Germany, Norway, Denmark, Hungary, the Slovak Republic, Poland, Chile, Italy, Canada, Spain, the Czech Republic, the United States, Sweden, Luxembourg, Turkey and Mexico.

Except for Germany, where the secondary school graduation rate for male students is higher than that for female students, female students are generally more likely to graduate than male students. The greatest gender gaps are observed in Iceland (25 percentage points), Portugal (24 percentage points), Spain (9 points) and the United States, Israel, Mexico and Poland (8 percentage points). Québec, with a difference of 8 percentage points, ranks among the group of states where the graduation of female students is more marked. In other countries, for example in South Korea, graduation rates for male and female students differ less (see Table 5.4).

The graduation rate observed for male students in Québec (84%) was higher than the average for male students in OECD countries. The rate for female students in Québec was 92%, or 5 percentage points higher than the OECD average for female students.

In Québec, there are far more students in general education than in vocational training, and this holds true for both male and female students. With a probability of obtaining a diploma in general education of 76% for all students, Québec ranks second among the OECD countries, with a rate 26 percentage points higher than the OECD average.

The reverse is true in vocational training. The probability of obtaining a diploma in vocational training in Québec is 14%, while the average of the OECD countries is 46%. A number of countries obtained very good results in these types of programs, including Finland (94%), the Netherlands (85%), Austria (76%), Switzerland (74%), Slovenia (73%) and Ireland (68%).

The probability of obtaining a diploma in vocational training in Québec is only slightly higher for male students (16%) than for female students (11%). It is the sectors of activity in which they enroll that differs for female and male students.

In 2010, the probability of obtaining a secondary school diploma was 88%, 4 percentage points above the average for all OECD countries.¹

1. The data for the other countries are for 2010, whereas the data for Québec and Canada are for 2009.
2. The countries included in the table are those for which the OECD report provides totals and whose number of students per cohort is significant.

Table 5.4

Probability of obtaining a secondary school diploma, by gender and type of program: Québec and OECD countries, 2010 (%)

	Total (without double counting)			General education		Vocational training	
	M + F	Male	Female	M + F	Female	M + F	Female
Portugal ¹	100	92	116	68	76	36	39
Japan	96	95	96	73	76	23	20
South Korea	94	93	95	71	72	23	23
Greece	94	92	96	66	75	28	22
Ireland	94	93	95	72	71	68	83
Slovenia	94	92	96	37	46	73	65
Finland	93	90	97	46	55	94	99
Israel	92	88	96	58	65	34	32
United Kingdom	92	90	94	m	m	m	m
Iceland	88	76	101	69	81	54	55
Québec²	88	84	92	76	83	14	11
Germany	87	87	86	40	45	47	42
Norway	87	84	91	60	71	36	27
Denmark	86	84	89	57	66	47	44
Hungary	86	82	89	69	77	17	13
Slovak Republic	86	83	88	26	31	67	64
Poland	84	80	88	52	65	38	29
Chile	83	80	86	53	56	30	31
Italy	83	81	86	36	46	60	53
Canada ²	81	77	84	78	82	3	2
Spain	80	76	85	48	56	43	43
Czech Republic	79	76	82	22	28	57	55
United States	77	73	81	m	m	m	m
Sweden	75	73	77	31	36	44	41
Luxembourg	70	67	73	30	34	41	41
Turkey	54	54	54	33	35	22	19
Mexico	47	43	51	43	47	4	4
OECD average	84	81	87	50	56	46	44

Sources: OECD, *Education at a Glance 2012: OECD Indicators*, Chart A2.1

Council of Ministers of Education, Canada and Statistics Canada, *Education Indicators in Canada: An International Perspective*, Ottawa, 2012, Table A.2.1

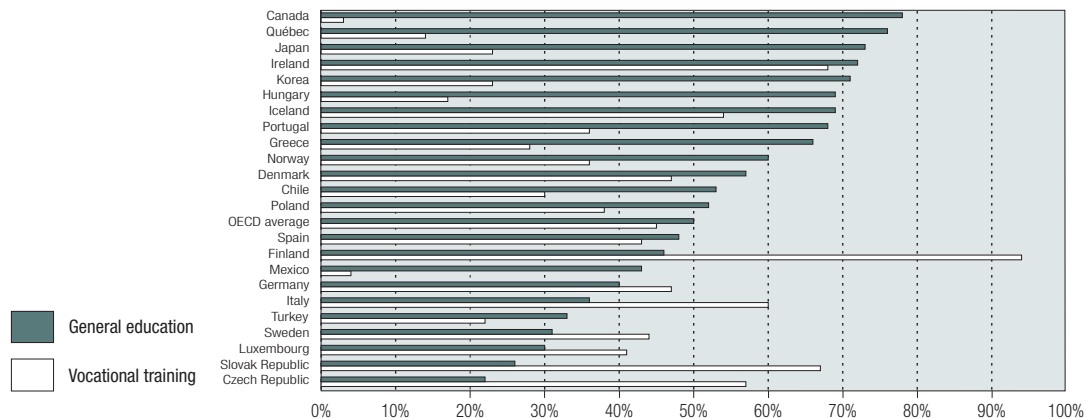
m: Missing data

1. An exceptional and temporary situation resulting from a program under which many individuals returned to school and graduated

2. Reference year: 2009

Graph 5.4

Probability of obtaining a secondary school diploma, general education and vocational training: Québec and OECD countries, 2010



5.5 Graduation From College

In 2010-2011, the proportion of a generation who could expect to obtain a first college diploma¹ (all diplomas combined) was 49.1%. This represents an increase of 26.9 percentage points since 1975-1976, when it stood at 22.2%. The proportion of a generation who could expect to obtain a first Diploma of College Studies (DCS) rose from 21.0% to 40.2%, an increase of 19.2 percentage points.

The more pronounced increase for all diplomas combined is a result of the increase in the official number of graduates holding an Attestation of College Studies (ACS), whose declaration has been mandatory since 2000. Two other contributing factors are the larger proportion of a generation who are admitted to college (see Section 2.7) and the larger proportion of students who obtain a diploma upon leaving college (see Sections 3.3 and 3.4).

The probability of obtaining a diploma was one and a half times greater for women than for men (60.2% compared with 38.5%). In 1975-1976, the probability of obtaining a college diploma was only 2.7 percentage points higher for women than for men. This gender gap grew steadily during the 1980s and 1990s. Since then, the probability has continued to rise more sharply for women, and the gap now stands at 21.7 percentage points.

The probability of obtaining a diploma rose most sharply for the pre-university DCS, going from 13.5% to 25.2% between 1975-1976 and 2010-2011, an increase of 11.7 percentage points. Most of the credit for this increase goes to women because their rate of obtaining a pre-university DCS has increased 18.9 percentage points since 1975-1976, compared with 4.8 percentage points for men. The gender gap went from 1.6 percentage points in favour of men in 1975-1976 to 12.5 percentage points in favour of women in 2010-2011.

In technical training, the number of women graduating exceeded the number of men. Between 1975-1976 and 2010-2011, the increase in the probability of obtaining a DEC in technical training was slightly more pronounced for women (+ 8.6 percentage points) than for men (+ 5.2 percentage points). The increase for both genders combined is 6.8 percentage points during the same period.

In 2010-2011, the proportion of female Quebecers who could expect to obtain a Diploma of College Studies (DCS) was 50.6%, compared with 30.4% of male Quebecers.

1. The probability of obtaining a first college diploma measures the proportion of a generation that stays in school until a college diploma is earned.

Table 5.5

**Probability of obtaining
a first college diploma,
by gender and type
of education (%)**

	1975- 1976	1985- 1986	1995- 1996	2005- 2006	2009- 2010	2010- 2011 ⁱ
Male						
All diplomas ¹	20.8	29.7	31.7	37.9	40.6	38.5
DCS²	19.8	28.0	30.5	29.4	30.3	30.4
Pre-university education	14.3	18.7	19.4	18.6	19.3	19.1
Technical training	5.5	9.0	10.9	10.7	10.6	10.7
Female						
All diplomas ¹	23.5	39.3	47.4	60.9	61.3	60.2
DCS²	22.2	37.9	46.3	50.9	50.3	50.6
Pre-university education	12.7	23.6	29.8	32.2	32.0	31.6
Technical training	9.5	14.0	16.2	18.7	17.8	18.1
Total						
All diplomas ¹	22.2	34.4	39.4	49.2	50.7	49.1
DCS²	21.0	32.8	38.2	39.9	40.1	40.2
Pre-university education	13.5	21.1	24.5	25.3	25.5	25.2
Technical training	7.5	11.4	13.5	14.6	14.1	14.3

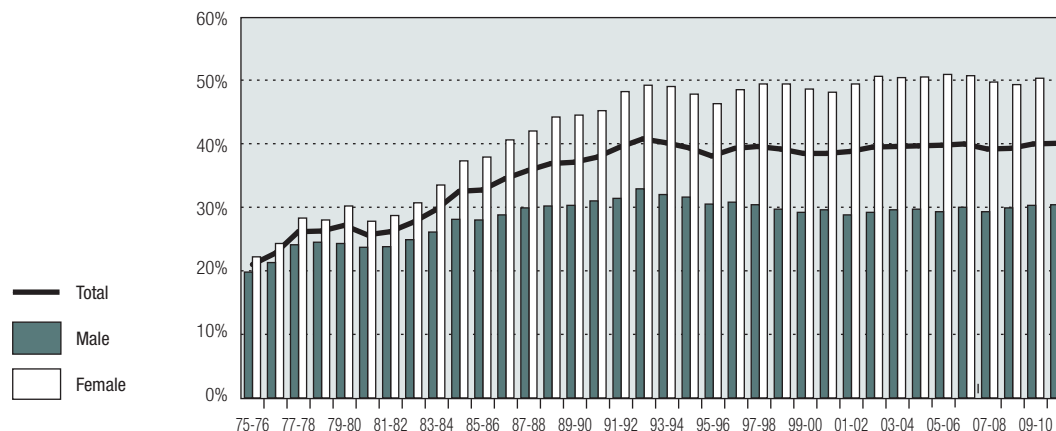
Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

i: Incomplete data. Some colleges are behind in declaring certain Attestations of College Studies (ACSs).

1. The diplomas considered here are the Diploma of College Studies (DCS), the Attestation of College Studies (ACS), the Certificat d'études collégiales (CEC—certificate of college studies) and the Diplôme de perfectionnement de l'enseignement collégial (DPEC—diploma of advanced college studies). Since 1994, there have been no new enrollments in programs leading to a CEC or to a DPEC. The more pronounced increase for all diplomas combined is a result of the rise in the official number of graduates holding an ACS when it became mandatory to declare ACSs in 2000.
2. These figures include DCSs without mention of specialty.

Graph 5.5

**Probability of obtaining
a first DCS, by gender (%)**



5.6 Graduation From University¹

Based on behaviours observed in 2011, 33.2% of Quebecers could expect to obtain a bachelor's degree. In the past several years, the number of women enrolling in university has grown more rapidly than the number of men (see Section 2.9). The situation has changed drastically since 1976, when the probability of obtaining a bachelor's degree was 13.1% for women and 16.7% for men. In 1983, the probability for both groups was more or less similar and, since then, the increase in probability has been in favour of women. In 2011, the probability of obtaining a bachelor's degree was 40.8% for women and 25.9% for men. Since 1976, there has been an increase of 27.7 percentage points for women and 9.2 percentage points for men.

The current rate (33.2%) shows an increase despite a series of drops in university enrollment from 1992-1993 to 1997-1998 (see Section 2.9). The recovery of the university enrollment rate in the past several years has therefore made it possible to attain the Ministère's objective.

With regard to obtaining a master's degree, the results have continued to increase, and reached 11.1% for women and 9.3% for men. For both sexes, the rate of 10.2% represents more than triple the 1976 rate of 2.7%. A rise in enrollment at the master's level (see Section 2.9) points to a continued increase in the number of master's degrees awarded for at least a few years to come. The gender gap for master's degrees disappeared in 2003. Since 1976, the situation of men in relation to women has reversed; whereas the initial gap was 1.6 percentage points in favour of men, in 2011 it was 1.5 percentage points in favour of women.

Doctorates are still earned by only a very small fraction of the population (1.7%). This last phase in the education system is perhaps the only one in which men continue to outnumber women, although the gap has been narrowing in recent years. The probabilities, however, are minimal for both sexes: 1.8% of men obtain a doctorate, compared with 1.6% of women. In view of developments at the master's level and the trend at the doctoral level (see Section 3.8), the pool of aspiring doctoral candidates is also likely to increase for some time to come.

In 2011, the probability of obtaining a bachelor's, master's or doctoral degree was 33.2%, 10.2% and 1.7%, respectively. These are the highest rates ever observed for university degrees.

1. Only university degrees (bachelor's, master's and doctoral degrees) awarded by Québec universities are considered here, including those earned by foreign students. Degrees earned by Quebecers outside the province are not taken into account.

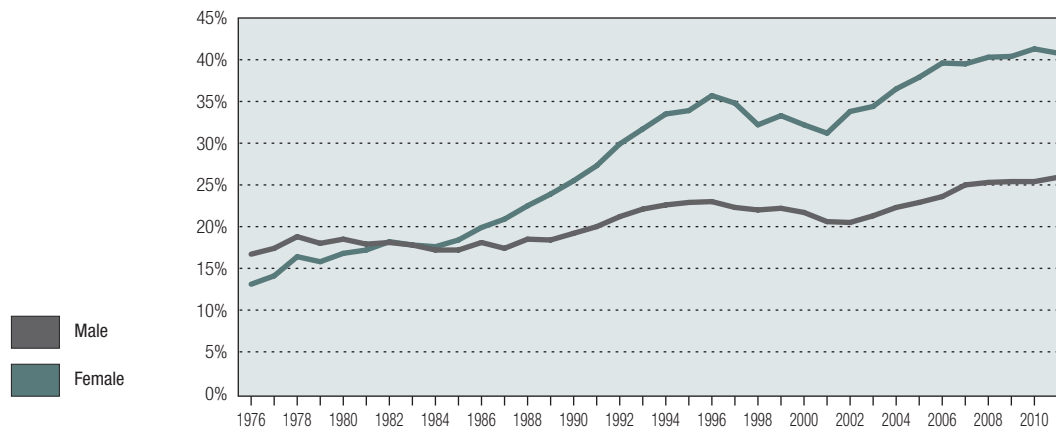
Table 5.6

**Probability of obtaining
a university degree,
by gender (%)**

	1976	1986	1996	2006	2009	2010	2011
Bachelor's degree	14.9	19.0	29.3	31.4	32.8	33.2	33.2
Male	16.7	18.1	23.0	23.6	25.4	25.4	25.9
Female	13.1	19.9	35.7	39.6	40.4	41.3	40.8
Master's degree	2.7	3.9	6.1	9.1	9.3	9.8	10.2
Male	3.5	4.4	5.8	9.3	8.8	9.1	9.4
Female	1.9	3.4	6.3	8.9	9.9	10.5	11.1
Doctorate	0.4	0.5	0.9	1.2	1.5	1.5	1.7
Male	0.6	0.7	1.2	1.3	1.7	1.6	1.8
Female	0.2	0.3	0.6	1.0	1.4	1.4	1.6

Sources: Ministère de l'Éducation, du Loisir et du Sport and Statistics Canada

Graph 5.6

**Probability of obtaining
a bachelor's degree,
by gender (%)**

5.7 University Degrees¹ by Field of Study

In 2011, the largest proportion (23.3%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in business administration, followed by social sciences (20.9%), applied sciences (15.1%), health sciences (11.7%), education (8.6%) and pure sciences (5.9%). The arts represented 4.3%, literature, 3.7%, law, 3.1%, and multidisciplinary studies, 3.3%, of all degrees awarded.

Compared with 2001, there is a minor change in the distribution of degrees in the different fields of study in 2011. The most significant increase in the proportion of degrees earned was in the health sciences (3.5 percentage points) followed by business administration (2.1 percentage points). In contrast, there was a decline of 2.4 percentage points in the proportion of degrees awarded in education and of 1.4 percentage points in pure sciences.

In 2011, universities in Québec awarded 2.3% more degrees (1 053) than in the previous year. This increase is primarily the result of a rise in the number of degrees awarded in health sciences (10.2%) and applied sciences. On the other hand, these gains were partially cancelled out by the low number of degrees awarded in multidisciplinary studies and education. Since 2001, the number of degrees awarded in education, pure sciences and literature has increased very slightly in comparison with the stronger upward trend in other fields of study.

In 2011, women earned 57.9% of the total number of university degrees issued that year. In most fields of study, the majority of degrees were awarded to women, who earned 80.5% of the degrees in education, 76.6% in health sciences, 71.9% in literature, 65.7% in social sciences, 62.9% in law and 63.8% in arts. Men earned 71.5% of the degrees in applied sciences, 53.7% in pure sciences and 50.2% in business administration. It is in law (6.0 percentage points), health sciences (2.6 percentage points) and education (1.4 percentage points) that the proportion of degrees awarded to women has most increased since 2001; the opposite is observed in pure sciences and in arts with declines of 5.9 percentage points and 1.6 percentage points, respectively.

In 2011, the largest proportion of all degrees issued were earned in business administration (23.3%). Also in 2011, 57.9% of all university degrees were awarded to women.

1. This refers only students who earned a first university degree (bachelor's, master's or doctoral degree) during the year in question.

Table 5.7

Distribution of university degrees, by field of study and gender¹ (%)

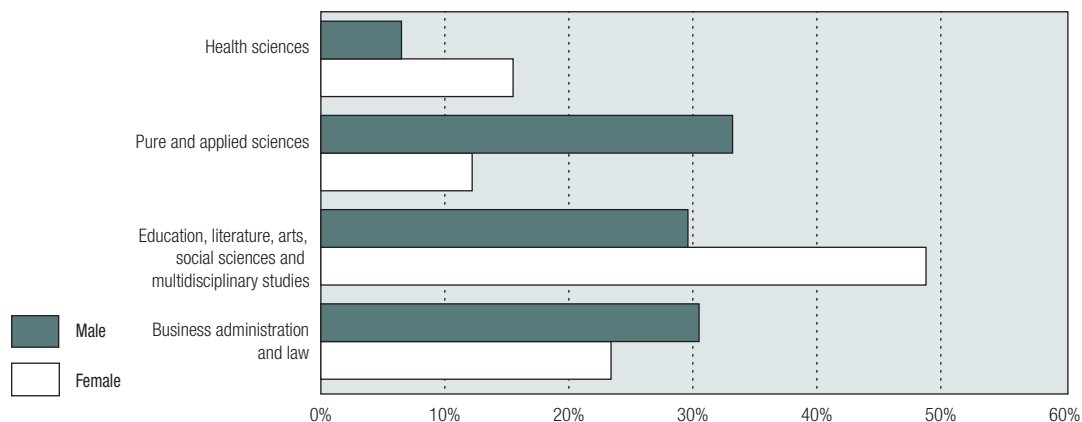
	2001	2004	2007	2008	2009	2010	2011
Health sciences	8.2	9.1	10.5	10.1	10.9	10.9	11.7
Pure sciences	7.3	6.5	6.5	6.4	6.3	6.2	5.9
Applied sciences	16.3	17.1	15.8	15.6	15.0	14.6	15.1
Social sciences	21.2	20.6	21.1	21.6	21.3	20.8	20.9
Literature	4.4	3.9	3.7	3.8	3.7	3.8	3.7
Law	3.3	2.6	2.8	2.8	3.0	3.0	3.1
Education	11.0	10.2	9.2	9.1	9.0	9.1	8.6
Business administration	21.2	22.3	22.1	22.8	22.8	23.8	23.3
Arts	4.3	4.3	4.4	4.1	4.1	4.1	4.3
Multidisciplinary studies	2.8	3.3	3.8	3.6	3.7	3.7	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female	57.2	57.6	57.5	57.6	57.9	58.4	57.9
Male	42.8	42.4	42.5	42.4	42.1	41.6	42.1

Source: Ministère de l'Éducation, du Loisir et du Sport, Gestion des données sur l'effectif universitaire (GDEU system), 2013-05-22

1. Only holders of bachelor's, master's or doctoral degrees who obtained their degree in the calendar year in question are considered. Because figures are rounded off, they may not add up to 100.

Graph 5.7

Distribution of university degrees, by field of study and gender, 2011 (%)



5.8 University Degrees by Level of Study¹

In 2011, Québec universities awarded 71 884 degrees, 3.2% more than in 2010 and 42.2% more than in 2000, when 50 563 degrees were awarded. Among those awarded in 2011, 53 252 (74.1%) were undergraduate degrees, 16 745 (23.3%) were graduate degrees and 1 887 (2.6%) were doctoral degrees.

Just under two thirds of these degrees (47 480) were actual bachelor's, master's and doctoral degrees.

However, Québec universities also award other types of degrees for shorter programs, which make it possible for students to enroll in university full-time or part-time, according to schedules that are more convenient. Often, these programs meet specific business or continuing education needs.

These “other degrees” include attestations (short programs generally fewer than 30 credits), certificates (30 to 45 credits) and diplomas (specialized programs of 30 credits or more). These degrees are found at all university levels, although most often at the undergraduate level. It should be noted that a bachelor's degree can be obtained after completing three certificates, an option that some students seem to prefer.

The number of “other degrees” rose sharply from 14 108 in 2000 to 24 404 in 2011, an increase of 73.0%. In 2011, they represented more than one third of all degrees granted by Québec universities.

Elsewhere in Canada, the situation is very different, as very few “other degrees” are granted at the university level. According to Statistics Canada,² 18 432 “other university degrees” were awarded in Québec in 2008, compared with 24 405 in the rest of Canada. That same year, Québec universities awarded 27.0% of all university degrees in Canada and 75.5% of all “other degrees”.

In 2008, “other degrees” accounted for 10.2% of all degrees awarded in Canada, 28.6% of those awarded in Québec, 9.4% of those in Prince Edward Island, 8.2% of those in British Columbia, 1.9% of those in Ontario and 0.9% of those in Alberta.

From 2000 to 2011, the number of degrees awarded by Québec universities increased from 50 563 to 71 884, a 42.2% increase. These gains were largely due to “other degrees” such as attestations, certificates and diplomas awarded by universities, which rose by 73.0%. In 2011, they represented more than one third of all degrees awarded by Québec universities.

1. This refers to students who earned a first university degree (bachelor's, master's or doctoral degree) during the year in question.
2. Statistics Canada, CANSIM 477-0014. Note that Statistics Canada figures on university degrees do not include attestations.

Table 5.8

Distribution of university degrees,¹ by level of study

	2000	2005	2008	2009	2010	2011	Variation (2000 to 2011)
Undergraduate level	40 060	48 896	51 183	51 148	51 670	53 252	32.9%
Attestation	N/A	570	3 145	3 058	3 216	3 422	N/A
Certificate and diploma	12 238	16 209	14 403	14 090	14 288	15 174	20.7%
Bachelor's	27 822	32 177	34 035	34 000	34 166	34 656	24.6%
Graduate level	9 338	14 178	15 131	15 263	16 262	16 745	79.3%
Attestation	N/A	819	802	1 117	1 330	1 468	N/A
Certificate and diploma	1 870	3 358	4 004	3 978	4 312	4 304	130.2%
Master's	7 468	10 001	10 325	10 168	10 620	10 973	46.9%
Postgraduate level	1 165	1 291	1 640	1 754	1 695	1 887	62.0%
Attestation	N/A	N/A	N/A	25	27	14	N/A
Diploma	N/A	13	24	37	27	22	N/A
Doctorate	1 165	1 278	1 616	1 692	1 641	1 851	58.9%
Degrees ²	36 455	43 396	45 976	45 860	46 427	47 480	30.2%
Other degrees	14 108	20 969	22 378	22 305	23 200	24 404	73.0%
Total	50 563	64 365	68 354	68 165	69 627	71 884	42.2%

Source: Ministère de l'Éducation, du Loisir et du Sport, Information portal, Gestion des données sur l'effectif universitaire (GDEU) system, May 2012

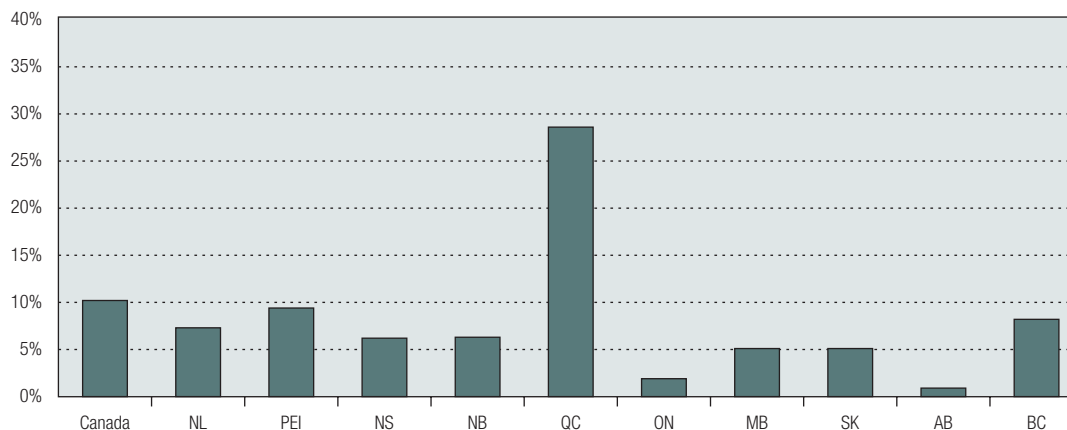
N/A: Data not available

1. By year awarded

2. Refers to bachelor's, master's and doctoral degrees.

Graph 5.8

Percentage of "other" university degrees awarded by province, 2008 (%)



6.1 Changes in Educational Attainment in the Labour Force

In 2012, Québec regained a total of 31 000 jobs. These gains did not benefit the labour force evenly—they mainly favoured those who had completed postsecondary studies (+ 16 000 jobs) and those with university degrees (+ 59 000 jobs). On the other hand, the number of jobs held by those without a secondary school diploma decreased by 15 000.

The results for 2012 are similar to those of the preceding years and confirm the fact that more and more jobs are held by people with higher levels of education. In recent decades, there has been a significant increase in the level of education of the labour force,¹ both in Québec and in Canada as a whole, a trend that has been supported by results since 2000.

The data presented in this section are from Statistics Canada. The levels of education considered here correspond to the highest level of education attained by employed individuals in a given year.² It should be noted, however, that these levels do not necessarily correspond to employment requirements.

In 2012, there were 583 000 more jobs than in 2000. This 17.1% growth in employment, however, did not benefit all workers. Those who did not finish secondary school or those with only a secondary school diploma had fewer jobs, while those who successfully completed postsecondary or university studies made gains. Thus, 352 000 more jobs were held by individuals with a university education, an increase of 53.5%. Those with a postsecondary diploma held 432 000 more jobs (+ 34.8%) in 2012 than in 2000. In short, individuals with a postsecondary diploma or a university degree held 783 000 more jobs in 2012 than in 2000, which by far exceeds the total increase in the number of jobs during this period (583 000).

By comparison, the number of jobs held by those who began postsecondary studies without completing them decreased by 3.6%.

The situation is very different for those without a secondary school diploma or with only a secondary education. In all, these individuals held 190 000 fewer jobs than in 2000. In 2012, those with only a secondary school diploma held 15 000 (– 2.5%) fewer jobs, while those without a secondary school diploma fared even worse: from 2000 to 2012, they held 175 000 fewer jobs, a decrease of 27.8%.

In 2012, the total number of jobs increased by 31 000. These jobs were held mostly by individuals who had completed postsecondary studies and those with university degrees.

1. According to Statistics Canada terminology, elementary school also includes the first two years of secondary education. Postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies—DVS), college diplomas and certificates, and university certificates below the bachelor's level. The university sector begins with programs leading to at least a bachelor's degree.
2. The level of education attained by a person may increase over time. It is therefore possible that the same job, held by the same person, will be considered to be held by a person with a higher level of education in a given year compared with an earlier year.

Table 6.1

**Number of jobs in
Québec, by level
of education¹
(in thousands)**

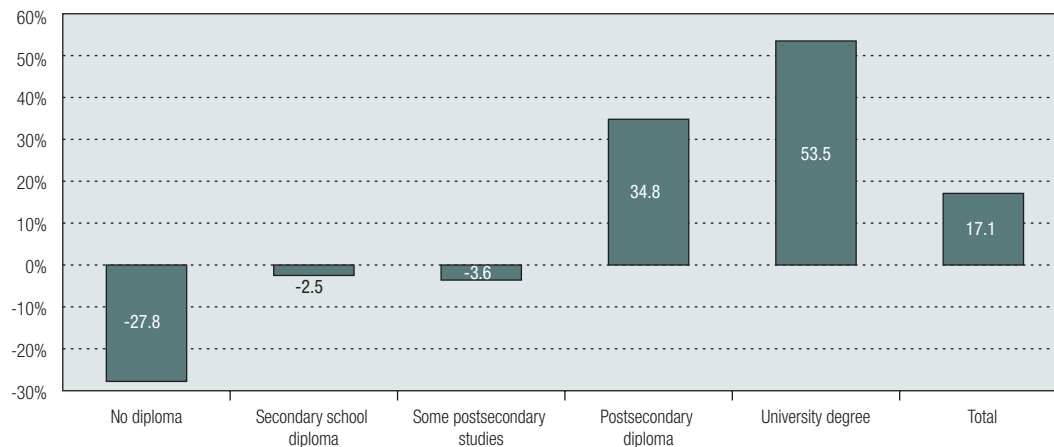
Year	No secondary school diploma	Secondary school diploma	Some postsecondary studies	Postsecondary diploma	University degree	Total
2000	631	595	276	1 242	657	3 402
2001	614	585	281	1 270	690	3 440
2002	625	595	289	1 364	692	3 565
2003	600	580	315	1 408	717	3 620
2004	593	586	312	1 432	751	3 673
2005	549	608	280	1 475	790	3 701
2006	550	599	260	1 519	814	3 743
2007	535	614	269	1 555	861	3 834
2008	537	593	318	1 594	839	3 880
2009	511	601	287	1 575	875	3 848
2010	493	586	285	1 631	920	3 915
2011	471	587	290	1 657	950	3 954
2012	456	580	266	1 673	1 009	3 984
Change from 2000 to 2012	- 27.8%	- 2.5%	- 3.6%	34.8%	53.5%	17.1%

Source: Statistics Canada, *Labour Force Survey* (LFS), January 2013

1. See notes at the bottom of the text.

Graph 6.1

**Employment trends in
Québec from 2000 to
2012, by highest level
of education (%)**



6.2 Labour Force Participation by Level of Education¹

As indicated in Section 6.1, the trend toward rising levels of education observed in recent decades continued through the past decade. In 2000, 18.6% of jobs were held by employees who did not have a secondary school diploma, whereas in 2012, this rate was only 11.5%. This situation was not limited to Québec; it was seen in Ontario and the other provinces as well. In Ontario, individuals without a diploma held 16.3% of all jobs in 2000, and only 9.0% in 2012. In the other provinces, the rates were 16.5% in 2000 and 10.9% in 2012.

The proportion of individuals with only a secondary school diploma is also declining, but less quickly.

The percentage of those who started postsecondary studies but did not graduate declined everywhere. From 2000 to 2012, this rate dropped from 8.1% to 6.7% in Québec, from 10.0% to 6.8% in Ontario and from 10.6% to 8.1% in the other provinces.

Conversely, the proportion of employees with a postsecondary diploma or university degree has increased considerably. In 2000, these employees held approximately 50.0% to 55.0% of the jobs in each province. In 2012, the proportions were 67.3% for Québec, 63.9% for Ontario and 58.8% for the other provinces.

Rapid growth was also observed in the employment rate of university graduates: in 2000, university graduates held 19.3% of the jobs in Québec whereas, in 2012, they held one in four jobs (25.3%). In Ontario, this proportion is even higher (30.3%), while in the other provinces, the proportion (24.4%) is slightly lower than in Québec.

If the rates for the number of jobs held by graduates with different diplomas or degrees are compared for Québec, Ontario and the other provinces, it can be noted that Québec has been following the same trends as the other regions, given their respective weights.

The percentage of jobs held by individuals without a secondary school diploma fell everywhere. However, there is still a significant gap with respect to Ontario (2.5 percentage points) and a narrower gap with respect to the other provinces (0.6 percentage points).

Although the proportion of jobs held by individuals with only a secondary school diploma declined everywhere, it is lower in Québec. It should be noted, however, that it takes one year less schooling to earn a secondary school diploma in Québec than elsewhere in Canada.

The proportion of employees with a postsecondary diploma increased everywhere, but remained the highest in Québec, no doubt because the college education system is more developed in Québec.

In 2012, individuals with a postsecondary diploma or university degree held 67.3% of all jobs in Québec.

1. According to Statistics Canada terminology, postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies—DVS), non-university college diplomas and certificates, and university certificates below the bachelor's level. The university sector begins with programs leading to at least a bachelor's degree.

Table 6.2

Employment by highest level of education attained: Québec, Ontario and the other provinces, 2000 and 2012¹ (%)

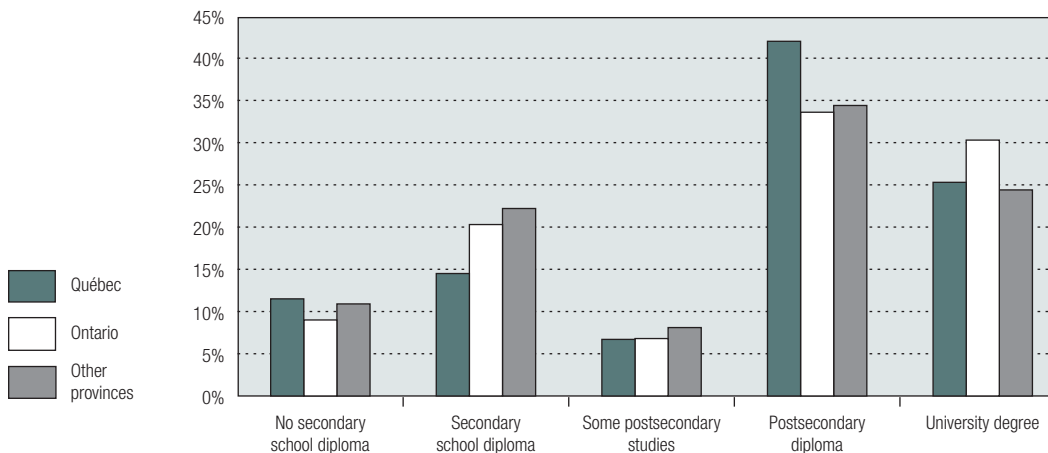
	Québec		Ontario		Other provinces	
	2000	2012	2000	2012	2000	2012
No secondary school diploma	18.6	11.5	16.3	9.0	16.5	10.9
Secondary school diploma	17.5	14.5	21.8	20.3	22.5	22.2
Some postsecondary studies	8.1	6.7	10.0	6.8	10.6	8.1
Postsecondary diploma	36.5	42.0	29.9	33.6	32.7	34.4
University degree	19.3	25.3	22.0	30.3	17.7	24.4
Bachelor's degree	13.2	17.7	14.4	19.9	12.1	17.0
Higher degree	6.1	7.6	7.6	10.4	5.6	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Canada, *Labour Force Survey* (LFS), January 2013

1. See note at the bottom of the text.

Graph 6.2

Distribution of employment, by highest level of education: Québec, Ontario and the other provinces, 2012 (%)



6.3 Labour Market Integration of Graduates

Each year, a large proportion of secondary school, college and university graduates enter the labour force. The data obtained through the Québec government *Relance surveys* provide a picture of the situation of secondary school vocational training, college technical training and university graduates several months after they obtain their diploma or degree.¹ In 2012, the surveys provided data on more than 80 000 persons.²

The results of the 2012 *Relance Survey of Vocational Training at the Secondary Level* reveal that, approximately nine months after obtaining their Diploma of Vocational Studies (DVS), 75.5% of vocational training graduates were working, a decline of 1.9 percentage points in comparison with 2011 (77.4%). In 2012, the employment rate for graduates with an Attestation of Vocational Specialization (AVS) was 79.9%.

In 2012, the unemployment rate for graduates with a DVS was 10.1%, the lowest rate recorded since 2009. The corresponding rates were 10.3% and 12.5% in 2011 and 2010, respectively. The unemployment rate for graduates with an AVS also fell, from 9.5% in 2010 to 8.7% in 2011 and then to 7.7% in 2012.

The employment rate of graduates with a Diploma of College Studies (DCS) in technical training was 63.5% in 2012. The proportion of graduates still studying in 2012 remained high at 32.0%, an increase of 2 percentage points, compared with 30.0% in 2011. The unemployment rate for graduates with a DSC in technical training was 3.7%. This rate has remained very low since 2007, fluctuating between 3.4% and 4.4%.

On March 31, 2012, 87.1% of graduates with an Attestation of College Studies (ACS) in technical training were in the labour force. In 2012, the proportion stood at 78.6%. Of those who were employed, 86.3 % were working full-time.

Finally, the unemployment rate of graduates with an ACS in technical training was 9.7% on March 31, 2012.

The proportion of university graduates with a bachelor's degree in the labour force has been relatively stable since 2007, fluctuating between 71.3% and 73.1%. The unemployment rate for these graduates rose from 4.0% in 2007 to 4.5% in 2009, and then dropped to 4.4% in 2011.

In 2011, 82.1% of graduates with a master's degree entered the labour force, the same proportion as in 2009, but higher than the proportion of graduates who entered the labour force in 2007 (78.7%). The employment rate of graduates with

a master's degree was 78.1% in 2011. Of those, 91.5% were working full-time. This proportion has been relatively stable since 2007, fluctuating between 91.1% and 91.6%. The unemployment rate for graduates with a master's degree fell from 4.4% in 2007 to 4.2% in 2009, and then rose to 4.9% in 2011.

In 2012, approximately 20 months after receiving their degrees, 77.6% of doctoral graduates were employed on a full-time or part-time basis. For comparison purposes, this proportion was 68.4% in 2005 and 70.0% in 2010.

Graph 6.3 shows that the unemployment rates of graduates with a DCS in technical training, a bachelor's degree, master's degree or a doctorate in 2012 have remained relatively stable for a number of years. Moreover, these rates were lower than the unemployment rate for the labour force as a whole in Québec. On the other hand, the unemployment rates for graduates with a DVS or an ACS in 2012 were higher than the unemployment rate for the labour force as a whole in Québec. The unemployment rate of graduates with an AVS was similar to that of the labour force as a whole in 2012.

In 2012, the year following their graduation, the unemployment rate for graduates with a DVS or an ACS was higher than the rate for the labour force as a whole while the unemployment rates for holders of a DCS in technical training or of a doctorate were lower.

1. Results refer to students graduating in the year indicated, approximately nine months after the completion of studies for graduates with a DVS or an AVS and roughly 10 months for graduates with a DCS (15 months for those finishing in the fall). The situation for those graduating with a bachelor's, master's or doctoral degree is as of January, approximately 20 months after they earned their degree. In the case of graduates with an ACS, the timeline may vary, since the duration of programs leading to an ACS is variable, and the programs can begin at different times of the year. However, the survey of graduates with an ACS takes place within a year after the completion of studies.
2. This number is valid for 2012. In 2012, the university-level *Relance survey* concentrated on 1 213 graduates with a doctoral degree and 78 971 graduates were targeted by the secondary vocational training *Relance survey* (DVS, AVS and TCST) and the college technical training *Relance survey* (DCS and ACS).

Table 6.3

Unemployment rates for graduates, by level of education and type of diploma or degree (%)

	2008	2009	2010	2011	2012
Secondary education¹					
DVS	9.6	12.8	12.5	10.3	10.1
AVS	6.5	8.7	9.5	8.7	7.7
College¹					
Technical training (ACS)	7.6	10.1	12.0	10.2	9.7
Technical training (DCS)	3.6	4.4	3.9	3.4	3.7
University¹					
Bachelor's degree	–	4.5	–	4.4	–
Master's degree	–	4.2	–	4.9	–
Doctorate	–	–	5.2	–	5.5
Unemployment rate in Québec²					
15- to 19-year-olds	15.6	21.2	24.3	20.3	20.1
20- to 24-year-olds	10.2	12.8	11.6	10.7	10.9
25- to 29-year-olds	5.9	8.0	8.9	9.2	8.4
Total labour force	10.2	9.7	9.0	8.7	7.7

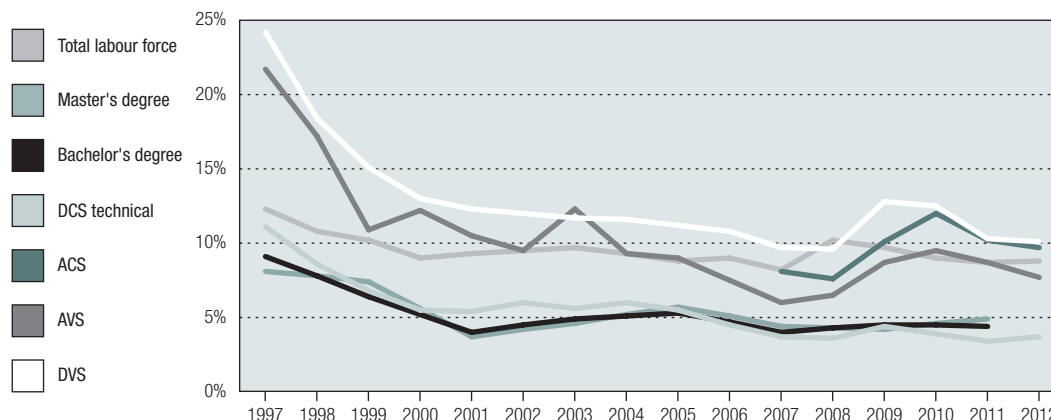
1. Source: *Relance surveys*, Direction des politiques en enseignement supérieur, Ministère de l'Enseignement supérieur, de la Recherche et de la Science

2. Data are obtained from Statistics Canada and include the total labour force, regardless of level of education and work experience. The unemployment rates are those for March of the year in question (unadjusted data). Source: Statistics Canada, *Labour Force Survey* (LFS), Table 282-0001.

–: There are no data for these years. The *Relance surveys* of university graduates (bachelor's and master's degrees) are conducted every two years and, since 2010, on alternate years with the *Relance survey* of university graduates with a doctorate.

Graph 6.3

Unemployment rates for graduates, by type of diploma or degree (%)



6.4 Labour Market Integration of Secondary Vocational Training Graduates

On March 31, 2012, about nine months after graduation, 75.5% of graduates with a Diploma of Vocational Studies (DVS) were employed, as were 79.9% of those with an Attestation of Vocational Specialization (AVS).

On March 31, 2012, 75.5% of DVS graduates from the class of 2010-2011 were employed, 8.5% were looking for a job, 11.8% were studying and 4.2% were inactive. The proportion of individuals with a DVS who were in the labour force (those working or looking for work) was 84.0%. The unemployment rate for DVS graduates dropped from 12.5% in 2010 to 10.3% in 2011, and again to 10.1% in 2012.

Among DVS graduates who were employed, 87.6% were working full-time on March 31, 2012. This rate has fluctuated little over the past few years and has remained above 87.0% since 2007. However, more men than women were employed full-time. Men were 15.7 percentage points ahead in 2012 (93.9% compared with 78.2% for women). Male DVS graduates also spent on average more time per week at work (42.2 hours) than women did (37 hours), a difference of slightly more than five hours.

In 2012, 78.9% of DVS graduates working full-time held jobs that were related to their field of study. More precisely, in March 2012, 79.5% of the women and 78.5% of the men who were working full-time held jobs in their field of study.

On March 31, 2012, 79.9% of AVS graduates from the class of 2010-2011 were employed, 6.7% were looking for a job, 9.3% were studying and 4.0% were inactive. The labour force participation rate of AVS graduates dropped slightly from 87.0% in 2011 to 86.6% in 2012. The unemployment rate stood at 8.7% in 2011 and dropped to 7.7% in 2012.

In 2012, 87.6% of AVS graduates were working full-time. There is a large gap between the full-time employment rate of 81.3% for women and 92.7% for men. But this gap narrowed, going from 18.1 percentage points (76.2% for women and 94.3% for men) in 2011 to 11.4 percentage points in 2012.

Among DVS graduates who were employed, 87.6% were working full-time on March 31, 2012. This rate has fluctuated little since 2007, remaining above 87.0%.

Table 6.4

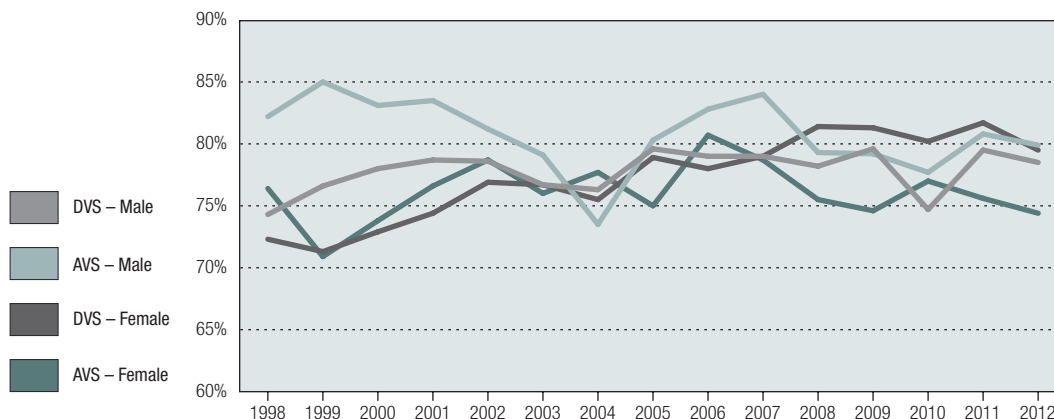
Employment situation of secondary school vocational training graduates, by graduating class, as of March 31 of the year following their graduation (%)

	2008	2009	2010	2011	2012
Graduates with a DVS					
Employed	77.8	73.5	73.8	77.4	75.5
Seeking employment	8.3	10.7	10.6	8.9	8.5
Studying	9.6	11.2	11.2	9.8	11.8
Inactive	4.3	4.5	4.4	3.9	4.2
Total	100.0	100.0	100.0	100.0	100.0
Unemployment rate	9.6	12.8	12.5	10.3	10.1
Graduates with an AVS					
Employed	82.9	79.4	78.8	79.5	79.9
Seeking employment	5.8	7.6	8.3	7.5	6.7
Studying	7.8	8.8	9.5	8.0	9.3
Inactive	3.5	4.3	3.4	4.9	4.0
Total	100.0	100.0	100.0	100.0	100.0
Unemployment rate	6.5	8.7	9.5	8.7	7.7

Source: *Relance surveys* of secondary school graduates in vocational training, Direction des politiques en enseignement supérieur, Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 6.4

Proportion of jobs in the field of study among DVS and AVS graduates working full-time, as of March 31 of the year following their graduation, by gender (%)



6.5 Labour Market Integration of Graduates With an Attestation of College Studies

Since 2007, the Ministère de l'Enseignement supérieur, de la Recherche et de la Science has been conducting *Relance* surveys of all graduates with an Attestation of College Studies (ACS).¹ This section presents the data from these surveys.

The proportion of graduates with an ACS who were employed on March 31, 2012, was 78.6%. In 2012, 77.1% of male graduates were employed, while 79.9% of their female counterparts held jobs, a difference of 2.8 percentage points.

On March 31, 2012, 87.1% of graduates who obtained an ACS in 2010-2011 were in the labour force (those working or looking for work). This rate was lower than the 88.1% observed in 2011 for the class of 2009-2010. The unemployment rate of graduates with an ACS fell from 12.0% in 2010 to 10.2% in 2011 and again to 9.7% in 2012. That same year, 7.4% of women (8.5% in 2011) and 12.3% of men (12.1% in 2011) were unemployed.

After receiving their ACS, 8.6% of graduates were still in school on March 31, 2012. Of all those surveyed, 9.2% of men and 8.0% of women were considered to be pursuing their studies. In 2011, the corresponding proportions were 8.9% and 6.2%, respectively.

Only 26.4% of those still in school on March 31, 2012, were there because they could not find a job. The corresponding proportion was 30.4% in 2011.

On March 31, 2012, 41.5% of graduates were employed part-time because they could not find full-time work, compared with 38.1% in 2011.

In 2012, 86.3% of graduates with an ACS who were employed were working full-time (30 hours or more per week). However, as in previous years, men were more likely to be working full-time (90.0%) than women (83.2%). Since 2008, the proportion of women working full-time has fluctuated between 81.0% and 83.8%, while the proportion of men working full-time has stood between 88.8% and 91.6%. Of those working full-time in 2012, 84.3% had a permanent position (i.e. they were employed for an indefinite period of time).

Of the graduates with an ACS working full-time, 74.6% held a job in their field of study in 2012, compared with 75.2% in 2011. This rate decreased for men, going from 71.0% in 2011 to 69.5% in 2012, while it remained unchanged at 79.2% for women.

On March 31, 2012, the average gross weekly earnings of graduates with an ACS were 0.6% higher than those of the previous year, going from \$723 in 2011 to \$727 in 2012.

The unemployment rate of graduates with an ACS stood at 12.0% in 2010 and then dropped 2.3 percentage points to 9.7% in 2012.

1. Some college programs lead to a Diploma of College Studies (DCS), while others lead to an Attestation of College Studies (ACS). The latter are developed and certified by the college, while programs leading to a DCS are certified by the Ministère de l'Enseignement supérieur, de la Recherche et de la Science.

Under the *College Education Regulations* (CER), colleges are responsible for developing and implementing programs leading to an ACS. These programs must meet the short-term training needs expressed by businesses in every sector of economic activity. Because of the flexibility with respect to the development of programs leading to an ACS afforded by the CER, colleges can respond more quickly to labour market training needs and ensure the harmonization of training and employment. These programs may be offered full- or part-time.

Table 6.5

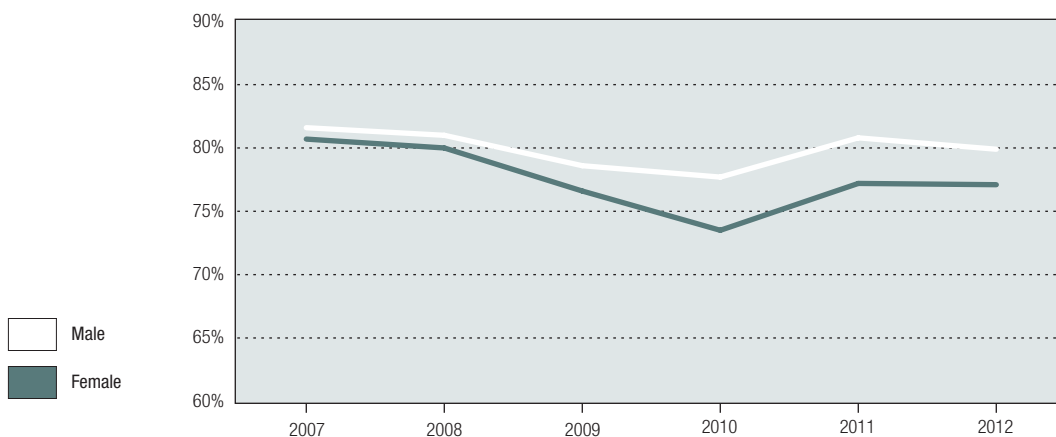
**Employment situation
of graduates with an
ACS as of March 31 of
the year following their
graduation (%)**

	2008	2009	2010	2011	2012
Graduates with an ACS					
Employed	80.6	77.8	75.7	79.1	78.6
Seeking employment	6.6	8.7	10.3	9.0	8.5
Studying	7.7	8.0	9.2	7.5	8.6
Inactive	5.1	5.5	4.8	4.4	4.4
Total	100.0	100.0	100.0	100.0	100.0
Unemployment rate	7.6	10.1	12.0	10.2	9.7

Source: *Relance surveys*, Direction des politiques en enseignement supérieur, Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 6.5

**Proportion of ACS
graduates working as
of March 31 of the
year following their
graduation, by gender
(%)**



6.6 Labour Market Integration of Graduates With a Diploma of College Studies in Technical Training

The proportion of graduates of technical programs who were employed on March 31, 2012, approximately ten months after they obtained a Diploma of College Studies (DCS), was 63.5%. That year, the proportion of male graduates who were employed was 57.3%, while the proportion of female graduates in the same position was 67.2%, a difference of 9.9 percentage points.

On March 31, 2012, 66.0% of graduates with a DCS in technical training from the class of 2010-2011 were part of the labour force (i.e. those working or looking for work), comparable to the numbers observed in 2011 for the class of 2009-2010 (68.3%). The unemployment rate for graduates with a DCS in technical training remains low, rising from 3.4% in 2011 to 3.7% in 2012. In 2012, the unemployment rate was 2.9% for women and 5.3% for men.

Ten months after earning their diploma, 32.0% of graduates with a DCS in technical training were still in school on March 31, 2012. This is in sharp contrast to the 19.6% rate observed 12 years earlier in the 2000 *Relance survey of college graduates with a DCS in technical training*. Between 1995 and 2011, the proportion of graduates who continued their schooling gradually increased from 17.2% to 32.0%, a new high.¹ Of the graduates surveyed in 2012, 37.9% of men and 28.5% of women were still in school. In 2011, the proportions for men and women were 35.6% and 26.5%, respectively.

Only 5.8% of those still in school on March 31, 2012 were pursuing their studies because they could not find a job. The corresponding percentages were 7.0% in 2010 and 5.9% in 2011.

Of all the graduates who were still in school on March 31, 2012, 89.7% were enrolled in a field related to their technical DCS, compared with 86.7% in 2011, an increase of 3 percentage points. The vast majority of them (84.3%) were in university, among which 91.6% were enrolled in a field related to the diploma they obtained in 2010-2011.

On March 31, 2012, 32.0% were working part-time because they could not find full-time employment, compared with 32.8% in 2011.

In 2012, 84.7% of graduates with a DCS in technical training who were working were employed full-time (30 hours or more a week). However, as was the case in previous years, men were more likely to be employed full-time (89.5%) than women (82.2%). Of those employed full-time in 2012, 80.4% had a permanent position (i.e. they were employed for an indefinite period of time).

Of the DCS technical graduates working full-time, 83.4% held a job in their field of study in 2012. For men, this rate was 77.7%, compared with 86.4% for women.

On March 31, 2012, the average gross weekly earnings of DCS technical graduates were 1.9% higher than those of the previous year, going from \$686 in 2011 to \$699 in 2012.

In 2012, the unemployment rates among graduates with a DCS in technical training stood at 2.9% for women and 5.3% for men.

1. See the 1999 to 2012 editions of the *Education Indicators*.

Table 6.6

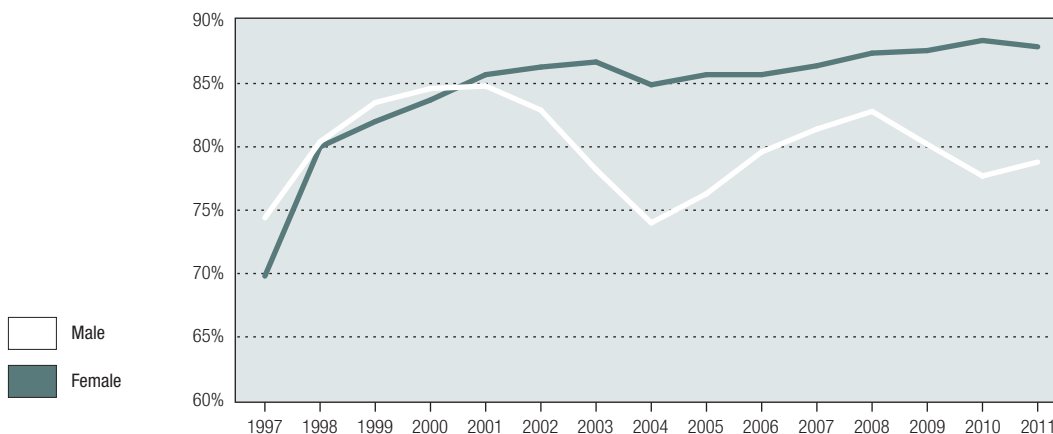
Employment situation of graduates with a DCS in technical training, as of March 31 of the year following their graduation (%)

	2008	2009	2010	2011	2012
Graduates with a DCS					
Employed	68.2	64.8	65.7	66.0	63.5
Seeking employment	2.6	3.0	2.7	2.3	2.5
Studying	26.8	29.8	29.3	30.0	32.0
Inactive	2.3	2.5	2.3	1.7	2.0
Total	100.0	100.0	100.0	100.0	100.0
Unemployment rate	3.6	4.4	3.9	3.4	3.7

Source: *Relance surveys* of college technical training graduates, Direction des politiques en enseignement supérieur, Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 6.6

Proportion of jobs in the field of study among graduates with a DCS in technical training working full-time, as of March 31 of the year following their graduation, by gender (%)



6.7 Labour Market Integration of Doctoral Graduates

During the week of January 15 to 21, 2012, approximately 20 months after they obtained their degrees, 77.6% of doctoral graduates from the class of 2010 were working, 11.6% were doing a postdoctoral fellowship, 4.6% were seeking employment, 4.6% were pursuing their studies and 1.7% were considered inactive.

Of those graduates, 77.6% were working full-time or part-time and more women (78.7%) than men (76.4%) had jobs. The results are very revealing if these numbers are broken down by the graduates' fields of study. In January 2012, the largest proportion were working in education (90.9%), followed by social sciences (88.9%) and business administration (86.2%). Graduates in the field of arts had a below-average employment rate of 61.1%.

In 2012, most (82.2%) doctoral graduates were part of the labour force (those working or looking for work). This proportion is higher than that observed in 2010 (73.8%), approximately 20 months after receiving their degree. Also in 2012, the proportion of female doctoral graduates (82.3%) who were part of the labour force was comparable to that of their male counterparts (82.0%).

In January 2012, the unemployment rate, defined as the ratio between those looking for work and those in the labour force, for the doctoral graduates of the class of 2010 was 5.5%, slightly below that of their counterparts from the class of 2008 in January 2010 (5.2%). The gender gap also narrowed from 3.9 percentage points in 2010 to 2.4 percentage points in 2012.

The proportion of doctoral graduates, who, approximately 20 months after receiving their degree, were working in a job that required a doctorate increased from 54% in 2010 to 56% in 2012. Of all the fields of study, the connection between the job occupied and the level of education is the closest in business administration, where more than 8 doctoral graduates out of 10 were in a position suited to their level of education.

Among doctoral graduates who were employed, 86.1% worked full-time. This figure has remained practically unchanged from that observed in 2010. In 2012, 93.0% of those who were employed full-time worked in their field of study, a slight increase over the proportion observed in 2010 (91.7%).

In 2012, doctoral graduates earned an average gross weekly salary of \$1 251. There was, however, no significant difference between the earnings of female graduates (\$1 249) and those of male graduates (\$1 253). In 2010, women earned \$1 271 and men earned \$1 294.

Approximately 20 months after receiving their degrees, 77.6% of graduates with a doctorate were working and more women (78.7%) than men (76.4%) had jobs.

Table 6.7

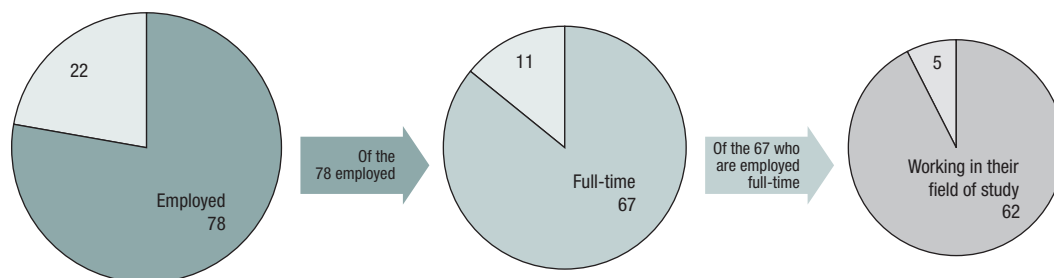
**Employment situation
of doctoral graduates, in
January, approximately
20 months after they
obtained their degree (%)**

	2010	2012
Graduates with a doctorate		
Employed	70.0	77.6
Postdoctoral fellowships	16.9	11.6
Seeking employment	3.8	4.6
Studying	4.9	4.6
Inactive	4.4	1.7
Total	100.0	100.0
Unemployment rate	5.2	5.5

Source: *Relance surveys* of university graduates, Ministère de l'Enseignement supérieur, de la Recherche et de la Science

Graph 6.7

**Employment situation
of 100 graduates with a
doctorate, in January 2012**



Statistical Appendix

Table 1	
Full-time and part-time enrollment, by level of education and sector, 2002-2003 to 2011-2012	137
Table 2	
Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2011-2012	138
Table 3	
Enrollment in secondary vocational training and college technical training, 2002-2003 to 2011-2012	139
Table 4	
Personnel in school boards and CEGEPs by job category, based on full-time equivalents, 2003-2004 to 2011-2012	140
Table 5	
Number of diplomas awarded, by level of education and type of diploma, 2002 to 2011	141
Table 6	
Schooling rates by age, gender, level of education and attendance status, 2010-2011 (%)	142

Table 1

**Full-time and part-time enrollment, by level of education and sector,
2002-2003 to 2011-2012^p**

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012 ^p
Preschool (4-year-olds)	15 240	14 701	15 000	14 811	14 642	14 990	15 123	15 958	16 910	17 950
Preschool (5-year-olds)	80 972	76 839	74 807	74 127	73 984	73 970	74 417	75 457	77 368	81 533
Elementary (youth sector)	564 555	549 078	529 865	510 340	492 624	478 533	467 665	463 212	462 753	465 943
Secondary (youth sector)	455 438	467 541	480 263	488 992	491 802	485 005	472 747	459 294	445 975	432 178
Elementary and secondary (adult sector)	247 459	254 919	258 547	257 145	261 019	267 465	288 610	308 804	310 262	306 574
College ¹	200 793	195 818	193 539	189 400	191 713	198 690	205 818	213 956	218 097	220 132
Regular education	163 084	160 970	159 964	159 349	162 288	169 475	174 903	180 440	184 195	186 827
Continuing education	37 709	34 848	33 575	30 051	29 425	29 215	30 915	33 516	33 902	33 305
University ^{1,2}	249 175	258 323	261 676	264 242	265 085	266 195	267 296	275 493	285 596	292 710
Undergraduate studies	195 131	201 128	202 070	203 312	203 209	203 622	203 836	209 102	216 375	221 262
Graduate studies	44 591	46 735	48 197	48 740	49 217	49 436	49 938	52 378	54 614	56 317
Doctoral studies	9 453	10 460	11 409	12 190	12 659	13 137	13 522	14 013	14 607	15 131
Total	1 813 632	1 817 219	1 813 697	1 799 057	1 790 869	1 784 848	1 791 676	1 812 174	1 816 961	1 817 020

Sources: MELS, DSID, information portal, Charlemagne system (data as at 2013-01-25)

MELS, DSID, information portal, Socrate system (data as at 2013-02-23)

MELS, DSID, information portal, GDEU system (data as at 2013-05-22)

p: Preliminary data

1. Fall term

2. These figures include resident physicians, but exclude auditors, postdoctoral fellows and students in Exploration programs.

Table 2

Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2011-2012^p

	Preschool 4-year-olds	Preschool 5-year-olds	Elementary (Youth sector)	Secondary (Youth sector)	Elementary and secondary (Adult sector)	College ¹ Regular education	University ^{1, 2} Adult education	Total	
School boards	17 784	75 929	432 086	343 633	299 854			1 169 286	
French	16 686	68 578	387 484	302 122	269 412			1 044 282	
English	794	6 844	42 500	40 082	30 145			120 365	
Aboriginal languages	304	507	2 102	1 429	297			4 639	
Private institutions	27	5 416	32 835	87 559	5 987	13 864	7 113	152 801	
French	9	4 472	26 835	79 752	5 297	10 011	5 888	132 264	
English	18	944	6 000	7 807	690	3 853	1 225	20 537	
Public institutions outside MELS jurisdiction	139	188	1 022	986	717	1 681	220	4 953	
French	139	149	911	897	717	1 578	220	4 611	
English		12	88	89		103		292	
Aboriginal languages		27	23					50	
CEGEPs and campuses						171 282	25 972	197 254	
French						144 168	20 389	164 557	
English						27 114	5 583	32 697	
Universities and branches							292 710	292 710	
French							218 186	218 186	
English							74 524	74 524	
Total	17 950	81 533	465 943	432 178	306 574	186 827	33 305	292 710	1 817 020
French	16 834	73 199	415 230	382 771	275 435 ³	155 757	26 497	218 186	1 563 909
English	812	7 800	48 588	47 978	30 842 ⁴	31 070	6 808	74 524	248 422
Aboriginal languages	304	534	2 125	1 429	297				4 689

Sources: MELS, DSID, information portal, Charlemagne system (data as at 2013-01-25)

MELS, DSID, information portal, Socrate system (data as at 2013-02-23)

MELS, DSID, information portal, GDEU system (data as at 2013-05-22)

p: Preliminary data

1. Fall term

2. These figures include resident physicians, but exclude auditors, postdoctoral fellows and students in Exploration programs.

3. The total includes 9 persons for whom the school system is not specified.

4. The total includes 7 persons for whom the school system is not specified.

Table 3

Enrollment in secondary vocational training and college technical training, 2002-2003 to 2011-2012^p

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012 ^p
SECONDARY EDUCATION	100,649	104 302	108 404	106 460	105 736	108 828	112 189	118 073	120 206	122 576
Youth sector or under 20 years old in adult sector	24 919	25 555	26 226	26 248	27 514	29 048	29 395	30 134	28 960	29 170
20 years old or over in adult sector	75 730	78 747	82 178	80 212	78 222	79 780	82 794	87 939	91 246	93 406
Regular paths (DVS, AVS and AVE)	80 229	84 476	90 232	92 415	92 211	94 565	97 909	106 118	108 833	110 192
Youth sector or under 20 years old in adult sector	23 244	23 836	24 550	24 731	26 025	27 113	27 500	28 381	27 376	27 577
20 years old or over in adult sector	56 985	60 640	65 682	67 684	66 186	67 452	70 409	77 737	81 457	82 615
Other programs	20 420	19 826	18 172	14 045	13 525	14 263	14 280	11 955	11 373	12 384
Youth sector or under 20 years old in adult sector	1 675	1 719	1 676	1 517	1 489	1 935	1 895	1 753	1 584	1 593
20 years old or over in adult sector	18 745	18 107	16 496	12 528	12 036	12 328	12 385	10 202	9 789	10 791
COLLEGE EDUCATION¹	111 039	105 928	102 986	99 417	98 397	99 588	102 650	107 858	110 450	111 637
Diploma of College Studies (DCS technical)	84 692	81 569	80 075	78 218	77 014	78 334	80 112	83 281	87 083	90 012
Attestation of College Studies (ACS)	26 347	24 359	22 911	21 199	21 383	21 254	22 538	24 577	23 367	21 625

Sources: MELs, DSID, information portal, Charlemagne system (data as at 2013-01-25)

MELs, DSID, information portal, Socrate system (data as at 2013-02-23)

p: Preliminary data

DVS: Diploma of Vocational Studies; AVS: Attestation of Vocational Specialization; AVE: Attestation of Vocational Education

Persons enrolled in more than one program in the same year are counted only once.

1. Fall term

Table 4

**Personnel in school boards and CEGEPs by job category, based on full-time equivalents,¹
2003-2004 to 2011-2012**

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
School boards	116 203	115 206	114 552	118 204	118 890	119 847	120 904	122 365	123 969
Youth and adult sectors									
Teaching staff	72 606	71 596	71 136	73 684	73 389	73 017	73 086	73 545	74 174
Administrative staff	1 143	1 166	1 154	1 207	1 241	1 287	1 321	1 350	1 346
School principals	3 807	3 796	3 681	3 722	3 727	3 743	3 752	3 773	3 788
Managerial staff	730	735	745	770	782	812	865	898	882
Nonteaching professionals	4 926	4 992	5 111	5 275	5 484	5 859	6 083	6 296	6 490
Support staff	32 991	32 921	32 725	33 546	34 267	35 129	35 797	36 503	37 289
CEGEPs	20 609	20 319	20 093	20 521	21 127	22 097	22 872	23 130	23 280
Regular education and adult education									
Teaching staff	13 214	13 005	12 817	13 151	13 502	14 045	14 517	14 658	14 784
Administrative staff	724	729	718	719	748	792	819	827	837
Managerial staff	225	217	216	227	239	248	267	265	266
Nonteaching professionals	1 185	1 178	1 220	1 249	1 326	1 460	1 571	1 620	1 642
Support staff	5 261	5 190	5 122	5 175	5 312	5 552	5 698	5 760	5 751

Sources: MELS, DSID, PERCOS system, September 2013

MELS, Système d'information sur le personnel des organismes collégiaux (SPOC-RFA, Spring 2013)

1. All activities carried out by personnel during the school year are included in the calculation of full-time equivalents for each job category.

Table 5

Number of diplomas awarded, by level of education and type of diploma, 2002 to 2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Secondary¹	102 092	101 002	104 402	106 561	110 651	115 777	117 517	121 098	127 610	128 120
General education	69 057	67 092	68 984	69 504	71 740	75 901	77 349	78 889	80 862	79 394
Vocational training	33 035	33 910	35 418	37 057	38 911	39 876	40 168	42 209	46 748	48 726
College	54 108	53 993	54 126	53 901	52 860	53 446	54 405	57 255	60 156	57 080
DCS (pre-university training)	23 319	23 475	23 472	23 601	23 817	24 309	24 976	26 322	27 422	26 737
DCS (technical training)	18 778	18 216	18 126	17 483	17 107	16 713	16 448	16 627	17 387	17 933
DCS without mention	1	6					112	293	595	833
ACS, TTM and CEC ²	12 010	12 296	12 528	12 817	11 936	12 424	12 869	14 013	14 752	11 577
University³	54 459	58 854	62 360	64 365	64 206	65 439	68 354	68 165	69 627	71 884
Bachelor's degree	28 897	29 818	31 554	32 117	32 988	33 438	34 035	34 000	34 166	34 656
Master's degree	7 946	9 003	9 516	10 001	9 925	9 974	10 325	10 168	10 620	10 973
Doctorate	1 036	1 134	1 217	1 278	1 256	1 427	1 616	1 692	1 641	1 851
Certificates and diplomas	16 139	17 839	18 931	19 580	18 674	18 846	18 431	18 105	18 627	19 500
Attestations and microprograms	441	1 060	1 142	1 389	1 363	1 754	3 947	4 200	4 573	4 904

Sources: MELS, DSID, information portal, Charlemagne system (data as at 2013-02-09)

MELS, DSID, information portal, Socrate system (data as at 2013-02-23)

MELS, DSID, information portal, GDEU system (data as at 2013-05-22)

DCS: Diploma of College Studies; ACS: Attestation of College Studies; TTM: Technical Training Module; CEC: Certificat d'études collégiales (certificate of college studies)

1. 2001-2002 to 2010-2011 school years

2. Since 1994, there have been no new enrollments in programs leading to CECs. ACSs are counted starting in 2001.

3. Excludes diplomas awarded by the Royal Military College, Saint-Jean and degrees issued to resident physicians

Table 6

Schooling rates,¹ by age, gender, level of education and attendance status 2010-2011 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full- time	Part- time	Full- time	Part- time	Full- time	Part- time	Full- time	Part- time	All attendance
4-year-olds										
Male	21.6	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	21.6
Female	21.7	0.0	0.0	0.0	0.0	0.0	0.0	21.7	0.0	21.7
Total	21.6	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0	21.6
5-year-olds										
Male	98.1	0.0	0.0	0.0	0.0	0.0	0.0	98.1	0.0	98.1
Female	99.2	0.0	0.0	0.0	0.0	0.0	0.0	99.2	0.0	99.2
Total	98.6	0.0	0.0	0.0	0.0	0.0	0.0	98.6	0.0	98.6
15-year-olds										
Male	0.0	94.6	0.3	0.1	0.0	0.0	0.0	94.7	0.4	95.0
Female	0.0	96.2	0.1	0.1	0.0	0.0	0.0	96.3	0.2	96.5
Total	0.0	95.4	0.2	0.1	0.0	0.0	0.0	95.5	0.3	95.7
16-year-olds										
Male	0.3	87.6	4.1	1.2	0.1	0.0	0.0	89.0	4.2	94.6
Female	0.2	91.1	2.7	2.1	0.0	0.1	0.0	93.4	2.8	97.5
Total	0.2	89.3	3.4	1.7	0.1	0.0	0.0	91.2	3.5	96.0
17-year-olds										
Male	0.3	32.7	12.0	39.2	0.6	0.8	0.1	73.0	12.7	89.6
Female	0.2	22.8	8.9	56.8	0.5	1.1	0.1	80.9	9.5	93.8
Total	0.3	27.9	10.5	47.8	0.5	1.0	0.1	76.8	11.2	91.7
18-year-olds										
Male	0.4	20.6	10.6	37.8	1.0	3.9	0.2	62.7	11.9	79.0
Female	0.3	14.4	8.3	55.5	1.0	5.7	0.2	75.8	9.6	89.3
Total	0.3	17.6	9.5	46.5	1.0	4.8	0.2	69.1	10.8	84.0
19-year-olds										
Male	0.3	14.9	7.7	24.6	1.9	12.7	0.5	52.4	10.2	66.3
Female	0.2	10.9	5.8	34.7	2.1	21.2	0.6	66.9	8.5	78.8
Total	0.3	12.9	6.8	29.5	2.0	16.9	0.5	59.5	9.4	72.4

1. Schooling rates are calculated by dividing the school population of a given age on September 30, 2010, by the population of the same age on the same date. The rates for 4-year-olds and 5-year-olds differ from the results published in Section 2.2 (see notes on this subject).

Table 6 (cont.)

Schooling rates,¹ by age, gender, level of education and attendance status 2010-2011 (%)

	Preschool and Elementary Education	Secondary		College		University		Total		
		Full- time	Part- time	Full- time	Part- time	Full- time	Part- time	Full- time	Part- time	All attendance
20- to 24-year-olds										
Male	0.2	7.9	4.6	7.3	1.4	17.5	3.2	32.8	9.2	44.4
Female	0.2	6.7	3.6	10.0	1.5	25.1	4.7	41.9	9.9	54.1
Total	0.2	7.3	4.1	8.6	1.5	21.2	3.9	37.3	9.6	49.2
25- to 29-year-olds										
Male	0.2	3.4	2.4	1.4	0.4	5.5	3.3	10.4	6.2	17.9
Female	0.4	3.5	2.1	2.3	0.7	5.9	5.7	11.9	8.6	21.7
Total	0.3	3.4	2.2	1.8	0.5	5.7	4.5	11.1	7.4	19.8
30- to 39-year-olds										
Male	0.4	2.2	1.6	0.7	0.3	1.7	2.3	4.8	4.3	10.0
Female	0.4	2.7	1.6	1.1	0.5	1.7	3.8	5.8	6.0	12.7
Total	0.4	2.4	1.6	0.9	0.4	1.7	3.0	5.3	5.1	11.3
40- to 49-year-olds										
Male	0.2	1.1	0.9	0.3	0.2	0.4	1.0	1.9	2.2	4.5
Female	0.2	1.5	1.1	0.4	0.3	0.4	1.8	2.4	3.2	6.1
Total	0.2	1.3	1.0	0.4	0.2	0.4	1.4	2.2	2.7	5.3
50- to 59-year-olds										
Male	0.1	0.5	0.6	0.1	0.1	0.1	0.4	0.7	1.1	2.0
Female	0.1	0.6	0.9	0.1	0.1	0.1	0.6	0.8	1.7	2.7
Total	0.1	0.5	0.7	0.1	0.1	0.1	0.5	0.8	1.4	2.3
60-year-olds and over										
Male	0.0	0.1	0.4	0.0	0.0	0.0	0.1	0.1	0.5	0.7
Female	0.1	0.1	0.9	0.0	0.0	0.0	0.1	0.1	1.1	1.2
Total	0.1	0.1	0.7	0.0	0.0	0.0	0.1	0.1	0.9	1.0

1. Schooling rates are calculated by dividing the school population of a given age on September 30, 2010, by the population of the same age on the same date. The rates for 4-year-olds and 5-year-olds differ from the results published in Section 2.2 (see notes on this subject).

Definition of Concepts

1. Schooling rate

The schooling rate for a given level of education or a specific age group is the proportion of students who are attending school in relation to the total population for that age group.

Schooling rates are calculated by dividing school enrollments for a given age group by the total population for that age group on the same date.

This rate is presented in Table 6 of the *Education Indicators*.

2. School life expectancy

School life expectancy is the number of years a person, i.e. a child beginning elementary school, can expect to spend in the education system.

School life expectancy is equal to the sum of the schooling rates per year of age, where the numerator is expressed as a full-time equivalent (FTE). This indicator applies to all levels of education, but does not include preschool.

This indicator is presented in Section 2.1 of the *Education Indicators*.

3. Enrollment rate

The enrollment rate measures the likelihood of enrolling in school. It is the proportion of the population that enrolls in a given type or level of education.

To obtain the enrollment rate for a given level of education, we first obtain the ratio between the number of new enrollments in a given age group and the total population for that age group (on September 30). The result is the enrollment rates by age group, which are then added together to obtain the proportion of a cohort enrolled in studies leading to the diploma or degree in question.

At the university level, only programs leading to a bachelor's degree, master's degree or doctorate are considered. Enrollment in programs leading to a certificate, other short programs and independent studies are excluded.

Enrollment rates are presented in Sections 2.2, 2.3, 2.4, 2.5, 2.7 and 2.9 of the *Education Indicators*.

4. Probability of obtaining a diploma

The probability of obtaining a diploma is the proportion of the population that obtains a first diploma in a given level of education in a given year. In general, the probability of obtaining a first diploma is calculated by adding the rates for each age or age group. The concept of first diploma means that students who obtain more than one diploma are counted only once.

Probability of obtaining a secondary school diploma

The number of first diplomas obtained at each age group is divided by the total population for the corresponding age group. Adding up the rates for each age group results in the proportion (%) of a cohort that will obtain a secondary school diploma in the youth or adult sector.

See Section 5.2 of the *Education Indicators*.

Comparison with OECD countries

The Organisation for Economic Co-operation and Development (OECD) uses a simple method of calculating the probability of obtaining a secondary school diploma. The method consists in dividing the total number of diplomas obtained, regardless of age, by the total population for the age at which the diploma is normally awarded.

In Québec, this rate is obtained by dividing the number of first diplomas awarded in a given year by the total population for the age at which the secondary school diploma is theoretically awarded in Québec (17 years of age).

The average for the OECD countries is the arithmetic mean of all OECD countries for which data are available or can be estimated. The number of countries varies from one year to the next.

See Section 5.4 of the *Education Indicators*.

5. Dropout rate (school leavers without a diploma or qualification)

The **dropout rate (annual dropout)** is defined as the proportion of the student population in a given school year that leaves school without obtaining a diploma or qualification. This indicator is calculated for school leavers in general education in the youth sector only.

The total number of school leavers is composed of students who dropped out that year and of students who obtained a first diploma or qualification recognized by the Ministère de l'Éducation, du Loisir et du Sport.

Students who leave school without a diploma or qualification are those who meet the following two criteria: they do not obtain a diploma or qualification during the given year and are not enrolled anywhere in the Québec education system during the following year.

See Section 2.6 of the *Education Indicators*.

6. Academic success rate

The academic success rate measures the proportion of students enrolled in school who obtain a diploma.

Currently, the Ministère uses two ways of calculating the academic success rate: an observation of cohorts (longitudinal study) and an analysis of annual fluctuations in the number of school leavers. The *Education Indicators* uses the second approach since it is a means of rendering accounts to the public and the National Assembly. A Ministère that wants to account for the performance of the school system must have access to the most recent results, which is what an analysis of fluctuations provides. The longitudinal approach, although easier to explain and understand, does not provide such information. The data it provides are old or incomplete and require a longer follow-up period. Moreover, it would be difficult to compare on an international level. Nevertheless, the longitudinal approach does have advantages, as illustrated in the document on student flow.¹

The method used consists in analyzing annual fluctuations in the number of school leavers instead of following a cohort over a period of years. This methodology is applicable to each level of education and makes it possible to present results for each year. These results give the same values as those provided by the observation of cohorts, despite differences in the concepts.

The proposed concept therefore consists in measuring the success rate in a given level or cycle of education by calculating the proportion of new graduates among all students leaving school with or without a diploma.

Sections 3.1 to 3.8 of the *Education Indicators* measure academic success in various levels of education.

7. Examination results

Sections 4.1, 4.2 and 4.3 present the averages and results obtained on secondary school uniform examinations administered in June. Two types of data are included in these sections: the average mark and the success rate on secondary school examinations. This is a complement to the information contained in the annual document that provides results on the June uniform ministerial examinations.

The average mark is calculated by dividing the sum of the final marks by the number of students writing the examination. The success rate is calculated by dividing the number of students who passed the examination by the number of students writing the examination.

1. Ministère de l'Éducation du Québec, *Student Flow From Secondary School to University* (Québec: Gouvernement du Québec, 2004).



A word cloud featuring various terms related to education and sports, including: Achieve, Share, Exercise, Succeed, Read, Learn, Persevere, and Success. The words are arranged in a dense, overlapping manner, with some words appearing larger and more prominent than others.