EDUCATION **INDICATORS** – 2008 edition

Québec

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Ministère de l'Éducation,
du Loisir et du Sport
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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 data that helps 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.

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 booklet.

Financial Resources Allocated to Education

In 2006-2007, Québec's total educational spending was estimated at 7.9% of the gross domestic product (GDP). The share of the GDP allocated to education in the rest of Canada was estimated at 6.4%.

Total school board spending amounted to $1 358 per capita in 2006-2007, or 13.4% less than the average for the rest of Canada ($1 569). However, total per capita spending was higher in Québec's postsecondary institutions: $249 and $708 respectively, compared with $230 and $689 in the rest of Canada. In Québec, the provincial government provides a large part of the funds for total spending (almost 70%), whereas elsewhere in Canada, this proportion is much lower (slightly over 50%). In recent years, the Québec government has devoted approximately a quarter of its program spending to education.

Another indicator that is often used to compare Québec with neighbouring regions is total per-student spending. In 2004-2005, total per-student spending in Québec school boards ($8 663) was lower than in the rest of Canada ($9 145). This can be explained in large part by the fact that educators' salaries are lower in Québec, as are capital expenditures. Thus, the average salary of educators in Québec ($55 207) is considerably lower than the average for the other provinces ($67 553). However, the student-educator ratio is lower in Québec (14.2) than in the rest of Canada (16.4). This 2.2 difference between the two ratios has had a major impact on the salary cost of educators in Québec.

Per-student operating expenses in CEGEPs were estimated at $9 241 in 2006-2007, 38% higher than in 1998-1999. This major increase can be explained in large part by the decline in the student-teacher ratio, which went from 13.8 in 1998-1999 to 12.6 in 2006-2007. In addition, total per-student spending in Québec universities was estimated at $27 495 in 2006-2007, 4.8% more than the average for the rest of Canada. The average salary of full-time university professors in Québec was lower than in the rest of Canada ($92 383, compared with $97 098), but this is partially offset by the lower average number of students per professor in Québec.

In 2006-2007, 135 336 persons benefited from Québec's Loans and Bursaries Program. Of the financial assistance granted, 54.4% was in the form of loans and 45.6%, in the form of bursaries. Tuition fees in 2007-2008 averaged $2 025 in Québec for full-time undergraduate studies ($1 768 for Québec residents), compared with $5 124 in the rest of Canada.

Student Retention From Elementary School to University

Student retention in Québec's education system for 2006-2007 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 of education. The diagram shows that, in a generation of 100 persons, 100 could be expected to reach the secondary level and 85 to obtain a first secondary school diploma, 40 to obtain a Diploma of College Studies (DCS), 31 to earn a bachelor's degree, 9 to be awarded a master's degree, and 1 to obtain a doctorate. Of the 86 students to obtain a secondary school diploma, 29 would do so in vocational training. However, the educational playing field was far from level for the sexes in 2006-2007: more male students than female students (21% compared with 7%) left their studies before earning a diploma or degree. At the other extreme, in 2006, 39% of women obtained at least a bachelor's degree, compared with only 24% of men.

Objectives for the educational success of a greater number of Quebeckers have been set: to have 85% of the students in a generation earn a secondary school diploma before the age of 20; 60%, a DCS; and 30%, a bachelor's degree.

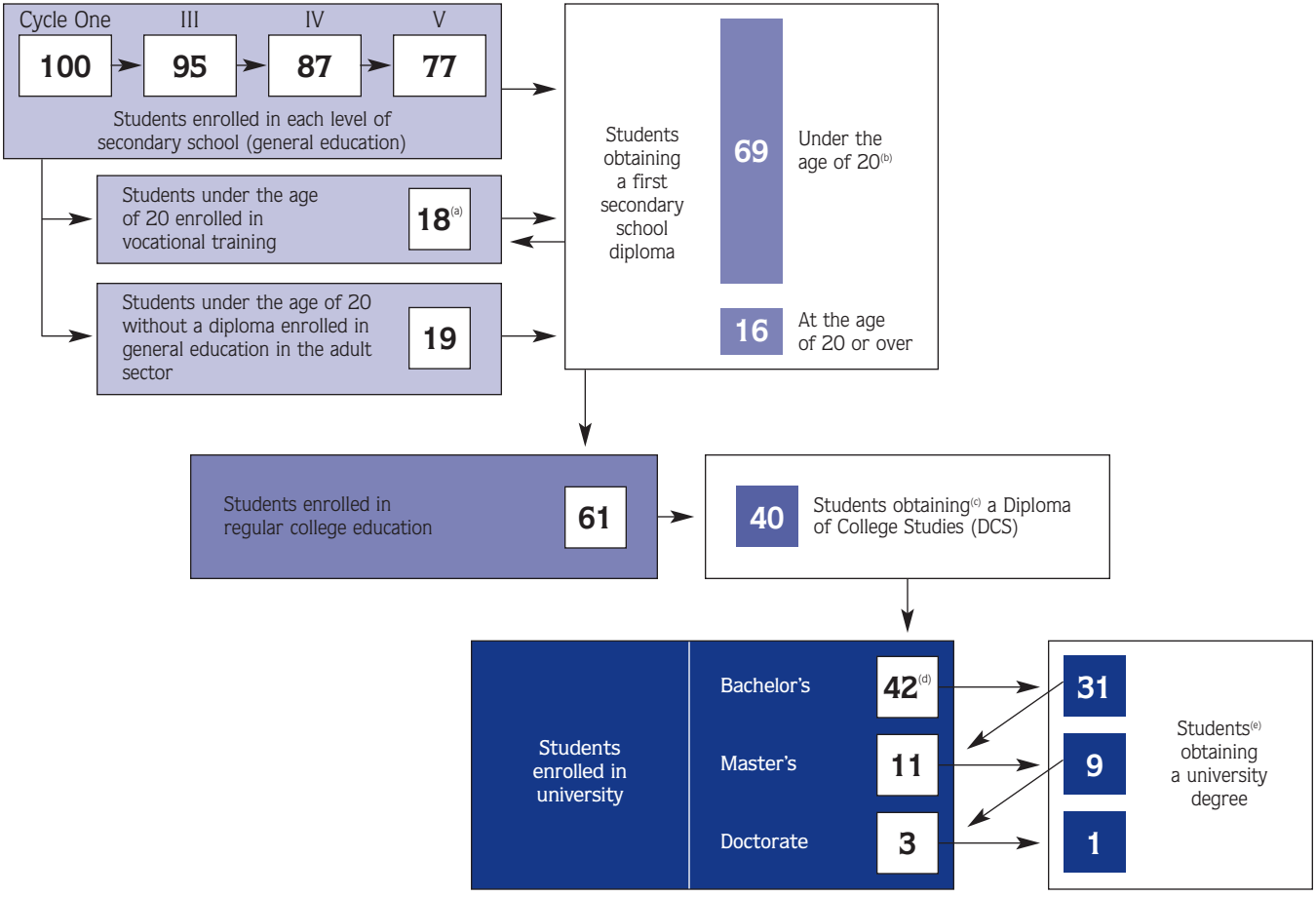
Children who began elementary school in 2006-2007 can expect to be in school for 15.6 years (assuming that the success rates and retention rates prevailing in the education system in 2006-2007 do not change). Secondary school graduates will have been in school for 11.2 years, at an estimated cost of $111 520 in 2005-2006; those obtaining a bachelor's degree will have studied for 17.2 years, at an estimated total cost of $210 037.

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. The proportion of 19-year-olds who left school without a secondary school diploma was 19.0% in 2006.

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

Student Retention of 100 Quebeckers in the Education System, Based on Findings for 2006-2007



(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 is available is 2005-2006.
(d) Students who enroll in university are not limited to those who hold a DCS.
(e) The most recent year for which data is available is 2006.

year. Thus, of the students in Secondary Cycle Two in the adult sector who quit their studies before the age of 20, 61.1% 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) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) and who left secondary school, 72 did so with a diploma. At the college level, 72.2% of students in pre-university programs leading to a DCS obtained a diploma; in technical training, 62% of students obtained a DCS. At the university level, 68% of students leaving bachelor's programs did so with a degree. Of the students enrolled in master's and doctoral programs, 73% and 57%, respectively, earned their degree.

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 2007, students in Secondary IV and V obtained an average mark of 73.2% and had a success rate of 84.4%. The male students' average was 72.6% and the female students', 73.8%. Students obtained an average final mark of 72.6% on the examination in Secondary V French, language of instruction, and 86.6% passed. In 2006-2007, 83.3% of college students passed the ministerial examination of college French, language of instruction.

Moreover, 15-year-old students in Québec did well in the Programme for International Student Assessment (PISA) in the spring of 2006. Québec competitors also brought back more medals from WorldSkills in 2007 than ever before: two gold, one silver and two bronze.

What Becomes of 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. In 2004-2005, at the end of their college studies, 77.9% of pre-university program graduates under the age of 25 went on to university the following year, compared with 25.0% of graduates from technical programs.

The unemployment rate in March 2007 was 9.7% and 8.6%, respectively, for graduates with a DVS or AVS, and 3.7% for graduates of college technical programs. Since 1990, the profile of the labour force in Québec has changed significantly. In 2007, the increase in the number of jobs was more beneficial to those who graduated from postsecondary or university studies. During the same period, the number of employed people who did not have a secondary school diploma dropped by 41.8%

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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. The Ministère de l'Éducation, du Loisir et du Sport and the Conseil supérieur de l'éducation also 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

– *2005-2008 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, at <www.mels.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 6 years of age by October 1. Kindergarten is not compulsory, but, as of the fall of 1997, almost all 5-year-olds attend full-time. 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 of age, which normally corresponds to Secondary IV.

Elementary education is offered in French, English or a Native 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 in the territory under the school board's jurisdiction. The school boards hire the staff they need to provide educational services. In 2006-2007, the Québec government funded 76% of school board operating expenses, while local taxes accounted for 15% of school board revenues, and other sources provided the remaining 9%.

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 725 to 72 000, for a median size of approximately 8 700 students. The special-status school boards serve French-speaking and English-speaking students in the Côte-Nord region (Commission scolaire du Littoral) and Native 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 6% of elementary students and approximately 18% of secondary students in the youth sector. About half 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 college.[1] A Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) 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 aim primarily at 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 of the socio-economic community 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 2006-2007, the Québec government funded 87% of CEGEP operating expenses. Private educational institutions served 7% of college students, and 56% of their expenses were funded by the government. College education is also available at a few institutions associated with ministries other than the Ministère de l'Éducation, du Loisir et du Sport and by the Macdonald Campus of McGill University.

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

University Education

Québec has English and French universities; students are free to attend the university of their choice. University education is divided into three levels of studies. The first leads to a bachelor's degree (generally after three years or, less frequently, four years in certain programs), the second to a master's degree, and the third to a doctoral degree. Universities also award certificates, diplomas and other forms of attestation to certify the successful completion of short programs. In 2006-2007, 53% of university expenses were subsidized by the Québec government.

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. In the case of certain programs leading to a DCS determined by the Minister, graduates with a DVS may be admitted to college in order to pursue their studies without interruption. Finally, the Minister sets specific secondary level prerequisites for some programs leading to a DCS.

Ministère de l'Éducation, du Loisir et du Sport

The Ministère de l'Éducation, du Loisir et du Sport fulfills different functions for the various levels of education. For preschool, elementary, secondary and college education, the Ministère develops programs and determines objectives and often content or standards. In terms of labour relations, it negotiates and signs provincial agreements. In terms of financing, it establishes a standard framework and provides the largest share of resources. At the university level, it promotes the advancement of teaching and research by providing universities with the resources required for operation and development while respecting their autonomy and fostering collaboration among the various partners.

1.1 Government Spending on Education, Recreation and Sports in Québec

Spending on education, recreation and sports in Québec was estimated at $13.4 billion in 2007-2008, accounting for 24.9% of government program spending.[1]

Québec government program spending rose from $43.9 billion to $53.8 billion between 2002-2003 and 2007-2008, an increase of $9.9 billion.

Table 1.1 presents Québec government program spending in the four major sectors: education, recreation and sports; health and social services; employment and social solidarity; and families, seniors and the status of women. 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 allocated to education, recreation and sports with those in the other major sectors.

A comparison of program spending in the major sectors during the period considered reveals significant changes in the portion of spending allocated to each sector. The portion allocated to health and social services increased from 36.4% in 1993-1994 to 44.3% in 2007-2008, while the portion allocated to families, seniors and the status of women rose from 1.0% to 3.3% during the same period.

The portion of spending allocated to employment and social solidarity rose during the 1990s, then decreased to settle at 7.7% in 2007-2008. Education, recreation and sports and other portfolios also saw a decrease in the portion of program spending allocated to them. Between 1993 and 1998, the portion of government program spending allocated to education, recreation and sports dropped 2.8 percentage points, from 28.7% to 25.9%. This decrease was in large part due to budget cuts and strict cost-cutting measures in educational institutions.

The portion of program spending allocated to education, recreation and sports dropped between 1998 and 2007, and was 24.9% in 2007-2008. While this proportion is slightly lower than that observed in 1998-1999 (25.9%), it is important to note that the actual amount of financial resources allocated to education, recreation and sports in 2007-2008 was $13.4 billion, or $3.8 billion more than in 1998-1999 (a 39% increase).

The $3.8-billion increase in spending on education, recreation and sports since 1998 can be partly explained by additional government spending on education, agreements between the Québec government and the unions concerning the gradual restructuring of salary scales for school personnel (pay equity) and the numerous support measures for educational institutions.[2] Note that the considerable increase in university enrollments during this period contributed significantly to the increase in spending on education.

Government spending on education, recreation and sports in Québec was estimated at $13.4 billion in 2007-2008, $2.2 billion more than in 2002-2003.

1. *The amount allocated to the development of recreation and sports was $63 million in 2007-2008.*
2. *See Sections 1.7 and 1.11.*

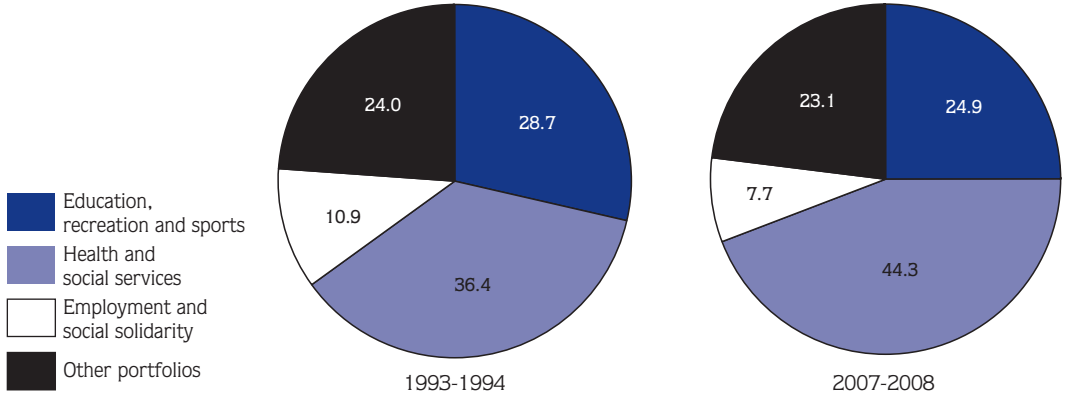
Table 1.1
Québec government program spending, by sector[1] (%)

	1993-1994	1998-1999	2002-2003	2005-2006	2006-2007	2007-2008[e]
Education, recreation and sports	**28.7**	**25.9**	**25.4**	**24.9**	**24.6**	**24.9**
Health and social services	36.4	39.4	40.8	43.1	43.5	44.3
Employment and social solidarity	10.9	11.2	9.6	8.2	7.9	7.7
Families, seniors and the status of women	1.0	1.6	2.9	3.3	3.3	3.3
Other portfolios	23.0	21.9	21.3	20.5	20.7	19.8
Program spending	100.0	100.0	100.0	100.0	100.0	100.0

e: Estimates

1. Data related to program spending is presented according to the 2007-2008 budgetary structure.

Graph 1.1
Distribution of Québec government program spending, by sector (%)



1.2 Total Educational Spending in Relation to the GDP

In 2006-2007, Québec allocated an estimated 7.9% of its gross domestic product (GDP) to education,[1] compared with the Atlantic Provinces at 7.6%, Ontario at 6.5% and Western Canada at 6.0%. When this indicator is considered, it is evident that Québec educational spending remains higher than the average for the other provinces.

Between 1993 and 2000, the share of the GDP spent on education decreased in all regions of Canada, in particular because of budget cuts. In Québec it dropped from 8.9% to 7.7%, and in the rest of Canada, from 7.6% to 6.3%.

If the share of the GDP allocated to education in Québec is compared with that allocated by the member countries of the Organisation for Economic Co-operation and Development (OECD) in 2004, Québec is among those with the highest educational spending. This is primarily because teaching costs are relatively higher in Québec than the OECD average. The fact that postsecondary education is more developed in Québec than in the OECD countries also helps explain Québec's higher level of educational spending.[2]

To explain why Québec invested a greater share of its GDP in education than the rest of Canada in 2006-2007, the following four factors can be considered: per-student spending; collective wealth (defined by the 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 5-24 age group to the total population). Three of these factors help explain why Québec invests a greater share of its GDP in education: per-student spending, which is higher in Québec than in the rest of Canada; the slightly higher school attendance rate in Québec; and Québec's lesser collective wealth. Only the demographic factor (older population in Québec) had the opposite effect.

The higher per-student spending in Québec is due mainly to lower student-teacher ratios; greater school childcare services and transportation expenses in the school boards; and greater capital expenses and financing and research costs in universities. The costly composition of the student body in Québec universities also helps explain the higher per-student spending.[3] Nominal wages, which are lower in Québec, help bridge the gap.

There is, however, an important point to be made about the difference between per-student spending in Québec and in the rest of Canada; it concerns differences in the cost of living. The cost of living is lower in Québec than in the rest of Canada (about 10% lower in 2006-2007) and, if expenses are adjusted to take this into account, the difference is even more marked.

In 2006-2007, the share of the GDP allocated to education was higher in Québec than in the rest of Canada.

1. *In 2006-2007, Québec spent $22.3 billion of its $282.8-billion GDP on education. The concept of total spending used in this section is defined at the bottom of Table 1.2. This concept is more inclusive than the one used in Section 1.1, which takes into account only government spending.*
2. *See Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(Québec: Ministère de l'Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et des indicateurs), December 2007. This document is available on the Internet at <http://www.meq.gouv.qc.ca/stat/index.htm>.*
3. *Québec universities have a higher proportion of students enrolled in costlier sectors and higher levels of study.*

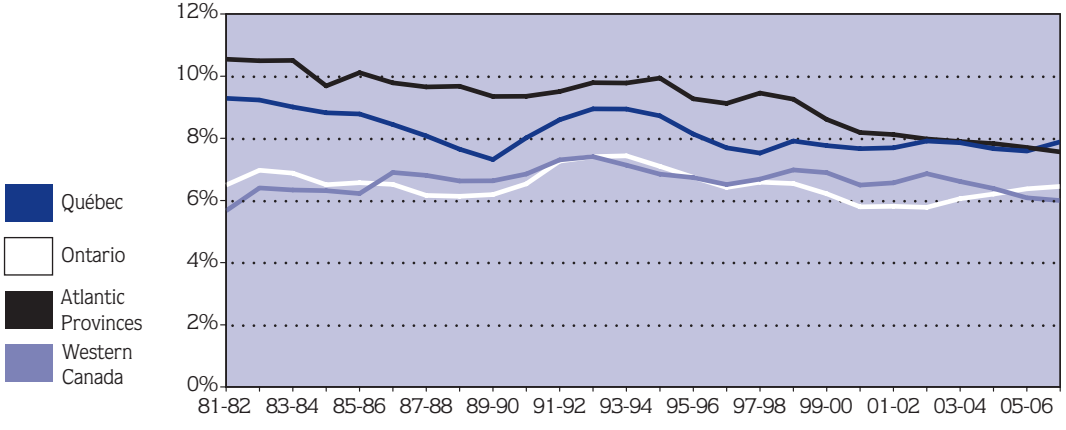
Table 1.2
Total educational spending[1] in relation to the GDP: Québec and the other regions of Canada (%)

	1993-1994	1996-1997	1999-2000	2002-2003	2005-2006[e]	2006-2007[e]
Québec	**8.9**	**7.9**	**7.8**	**7.9**	**7.6**	**7.9**
Canada, excluding Québec	**7.6**	**6.7**	**6.7**	**6.4**	**6.4**	**6.4**
Atlantic Provinces	9.8	9.1	8.6	8.0	7.7	7.6
Ontario	7.4	6.4	6.2	5.8	6.4	6.5
Western Canada	7.1	6.5	6.9	6.9	6.1	6.0
Canada	**7.9**	**7.0**	**6.9**	**6.7**	**6.6**	**6.7**

e: Estimates

1. Total educational spending includes the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of student financial assistance and other education expenses (as defined by Statistics Canada).

Graph 1.2
Total educational spending in relation to the GDP: Québec and the other regions of Canada (%)



1.3 Total Educational Spending[1] Per Capita in School Boards, Colleges and Universities

In 2006-2007, total spending per capita was lower in Québec school boards ($1 358) than in the rest of Canada ($1 569), but higher in Québec colleges ($294) than in the rest of Canada ($230). It was also higher in Québec universities ($708 compared with $689).

Table 1.3a shows the data on total spending per capita by level of education in 2006-2007. The differences in total per capita spending observed between regions for a given level of education 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 (with the exception of the Atlantic Provinces), 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 direct sources of funds for total educational spending in 2002-2003 (the most recent data available). These figures indicate that, in Québec, provincial subsidies make up a large part of the financing for education (68.8%). This percentage is higher than in the Atlantic Provinces (66.7%), Ontario (49.5%) and Western Canada (54.3%).

In the other provinces, financing sources other than the government play a larger role for one or more of the following reasons: local funding is more significant, tuition fees are higher, or the educational institutions in the other regions are in a better position to obtain other sources of funding.[3]

In 2007-2008, university students in Québec paid tuition fees that were 40% ($2 025) of the amount charged in Ontario ($5 124).[4] Furthermore, unlike in Québec, students in the other provinces enrolled at a level equivalent to college are usually required to pay tuition fees. Thus, on average in 2004-2005, most students enrolled full-time in programs leading to a diploma or certificate in a technical college in Ontario were required to pay approximately $1 900 a year in tuition fees.[5] This amount does not include other compulsory fees, textbooks or supplies.

In 2006-2007, total spending per capita in Québec school boards was lower than in the rest of Canada; the reverse was true for colleges and universities.

1. *Total educational spending includes the 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 expenses in this section differs slightly from one level of education to another. See Sections 1.6 and 1.13 for more complete definitions of total expenses for school boards and universities.*
2. *Regarding the organizational differences at the college level, see Section 1.4.*
3. *It must be noted, however, that there are comparatively more private schools in Québec than in the rest of Canada, and that tuition fees paid to the schools are included in the other sources of funding.*
4. *Tuition fees for students residing in Québec are $1 768 per year (2007-2008). See Note 1 at the bottom of Table 1.16.*
5. *Some programs involve higher tuition fees (14% of students pay between $2 000 and $6 000, while less than 1% pay between $6 000 and $11 000).*

Table 1.3a
Total spending per capita in school boards, colleges and universities: Québec and the other regions of Canada, 2006-2007[e] (in current dollars)

	School boards	Colleges[1]	Universities
Québec	**1 358**	**294**	**708**
Canada, excluding Québec	**1 569**	**230**	**689**
Atlantic Provinces	1 352	199	766
Ontario	1 643	198	694
Western Canada	1 502	274	672
Canada	**1 519**	**245**	**694**

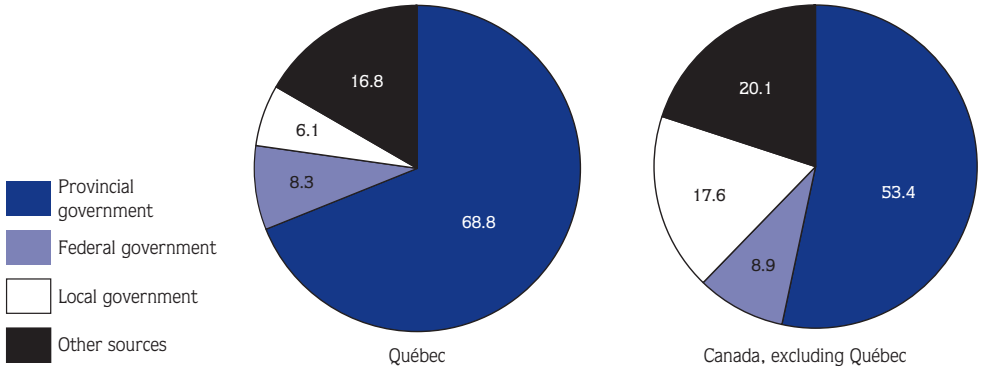
Table 1.3b
Direct sources of funds for total educational spending: Québec and the other regions of Canada, 2002-2003 (%)

	Provincial government	Federal government	Local government	Other sources	Total
Québec	**68.8**	**8.3**	**6.1**	**16.8**	**100.0**
Canada, excluding Québec	**53.4**	**8.9**	**17.6**	**20.1**	**100.0**
Atlantic Provinces	66.7	12.1	3.0	18.2	100.0
Ontario	49.5	6.9	21.7	21.9	100.0
Western Canada	54.3	10.0	16.7	19.0	100.0
Canada	**57.0**	**8.8**	**14.9**	**19.3**	**100.0**

e: Estimates

1. Regarding the organizational differences at the college level, see Section 1.4.

Graph 1.3
Direct sources of funds for total educational spending: Québec, and Canada excluding Québec, 2002-2003 (%)



1.4 Total Educational Spending per Student[1] 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 the per capita GDP. In addition to each region's ability to pay, this ratio takes into account differences in the cost of living.

In 2004-2005, total per-student spending at the elementary and secondary levels was higher in Québec ($8 663) than in the Atlantic Provinces ($8 092), but lower than in Ontario ($9 267) and in Western Canada ($9 162). Per-student spending was therefore slightly lower in Québec than the average for the rest of Canada. This is due mainly to lower salaries for teachers in Québec, as well as lower capital expenses. However, it is important to note that these data are expressed in current dollars and do not take into account differences in the cost of living. The cost of living in the different provinces varies considerably and, overall, it is approximately 10% lower in Québec than in the rest of Canada.

There are also factors that are more expensive in Québec, such as student-teacher ratios, vocational training, childcare services and school transportation.[2]

In 2004-2005, total per-student spending at the college level was lower in Québec ($12 063) than in the Atlantic Provinces ($16 399), Ontario ($15 021) and Western Canada ($13 828). The comparisons of spending at the college level are provided as a reference only, since 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 CEGEPs. Furthermore, in some provinces in Western Canada (especially Alberta and British Columbia), students can do their first two years of university studies in a college, and then finish their studies at a university.

Total per-student spending at the university level in 2006-2007 was higher in Québec ($27 495) than in Ontario ($23 742) and in the Atlantic Provinces ($22 850), but lower than in Western Canada ($31 956). 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 the per capita GDP. Factoring in collective wealth, as measured by the per capita GDP, reveals that Québec's collective financial investment in education is higher than the average for the rest of Canada.

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

1. *Total educational spending includes the operating and capital expenses, research costs (for universities) and interest on debt service (but not repayment of principal), as defined by Statistics Canada. Because of the availability of certain data, the concept of total expenses in this section differs slightly from one level of education to another. See Sections 1.6 and 1.13 for more complete definitions of total expenses 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 enrollment 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 they are then added to the full-time enrollments.*
2. *See Sections 1.8 to 1.10 for additional explanations.*
3. *See Section 1.14 for additional explanations.*

Table 1.4a
Total per-student educational spending: Québec and the other regions of Canada ($)

	School boards 2004-2005	Colleges 2004-2005[e]	Universities 2006-2007[e]
Québec	**8 663**	**12 063**	**27 495**
Canada, excluding Québec	**9 145**	**14 689**	**26 226**
Atlantic Provinces	8 092	16 399	22 850
Ontario	9 267	15 021	23 742
Western Canada	9 162	13 828	31 956
Canada	**9 040**	**13 827**	**26 519**

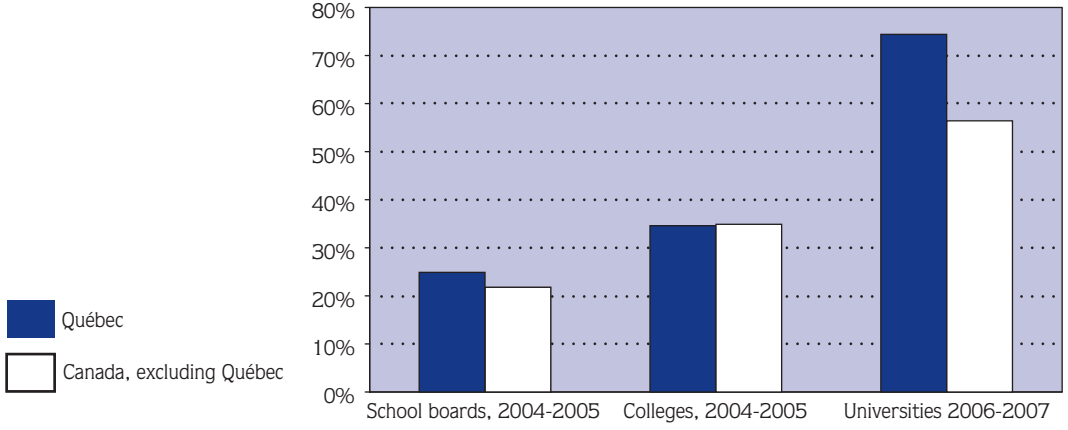
e: Estimates

Table 1.4b
Total per-student educational spending in relation to the per capita GDP: Québec and the other regions of Canada (%)

	School boards 2004-2005	Colleges 2004-2005[e]	Universities 2006-2007[e]
Québec	**24.9**	**34.6**	**74.4**
Canada, excluding Québec	**21.8**	**34.9**	**56.4**
Atlantic Provinces	24.7	50.0	61.1
Ontario	22.3	36.1	54.1
Western Canada	20.5	31.0	61.6
Canada	**22.5**	**34.3**	**59.9**

e: Estimates

Graph 1.4
Total per-student educational spending in relation to the per capita GDP: Québec, and Canada excluding Québec (%)



1.5 Cost of Educating Graduates

In 2005-2006, the total cost of a secondary school diploma was estimated at $111 520, of a college-level pre-university or technical diploma, at $136 184 and $170 097, respectively, and of a bachelor's degree, at $210 037.

The concept of cost used here includes operating expenses (excluding funded research), capital expenses and interest on debt service of educational institutions. 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 2005-2006,[1] as well as the average duration of studies completed by students who obtained the diploma or degree, was used.[2] The expenses incurred 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 the earning of 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 relationship between a person's level of education and state of health.[3]

In 2005-2006, the total cost of a bachelor's degree was approximately $210 000 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, "The Return on a Bachelor's Degree," Education Statistics Bulletin 32 (Québec: Ministère de l'Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et des indicateurs), September 2005. This document is available on the Internet at <http://www.meq.gouv.qc.ca/stat/index.htm>.*

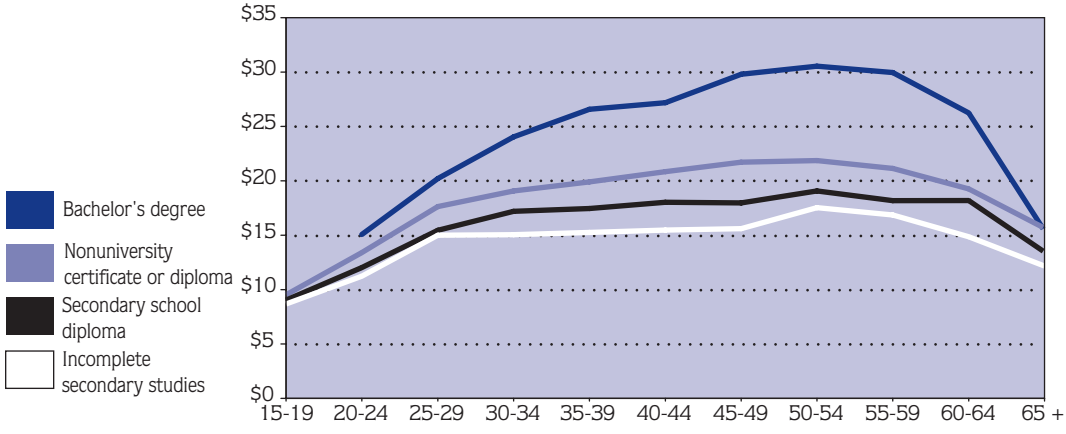
Table 1.5
Cost of educating graduates, 2005-2006

	Average duration of studies[1] (years)	Cost of education ($)[e]
Secondary School Diploma	**11.2**	**111 520**
Diploma of College Studies		
Pre-university education	13.6	136 184
Technical training	15.0	170 097
Bachelor's degree	**17.2**	**210 037**

e: Estimates

1. Preschool education is included in the cost but not in the average duration of studies indicated in the table, since it is not generally recognized as a year of academic pursuit. 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 changes made to a program while students are enrolled in it.

Graph 1.5
Average hourly wage, by age group and highest level of education achieved (averages, in $, for the first 11 months of 2007)



1.6 Total School Board Spending in Relation to the GDP

In 2006-2007, it was estimated that 3.7% of Québec's gross domestic product (GDP) was spent in school boards,[1] compared with the Atlantic Provinces at 3.6%, Ontario at 3.7% and Western Canada at 2.9%. In the United States, the share of the GDP allocated to public elementary and secondary education was estimated at 4.1%. Québec therefore spent a larger share of its GDP in school boards than the average for the rest of Canada, even though the duration of elementary and secondary education in Québec is shorter.[2]

Previous editions of the *Education Indicators* showed that, during the 1980s, the share of the GDP allocated to elementary and secondary education decreased in Québec, while it remained stable in the rest of Canada (as a whole) and rose in the United States. The gap of 1.7 percentage points recorded in 1981-1982 between Québec and the rest of Canada narrowed steadily in subsequent years and disappeared almost entirely in 1989-1990. That same year, the share of the GDP spent on elementary and secondary education in Québec was slightly higher than in the United States. Québec then reached the North American average largely because of the more restrictive measures adopted by the Québec government to control spending during that period.

Between 1989 and 1993, a period of economic recession, the share of the GDP allocated to education rose almost everywhere in Canada and the United States, such that, in 1993-1994, Québec spent a slightly higher percentage of its GDP on elementary and secondary education than the rest of Canada.

Between 1993 and 1997, the share of the GDP spent on elementary and secondary education decreased in Québec and the other provinces, following budget cuts to school boards. In the United States, it remained essentially stable.

Since 1997-1998, in spite of a major reinvestment in education in Québec, the share of the GDP spent in school boards decreased (see Table 1.6). This is due primarily to the fact that, despite a large increase in Québec's per-student spending, the per capita GDP also rose significantly. During this period, Québec's student enrollments also dropped. Elsewhere in Canada, per-student spending rose at a slower rate than the per capita GDP and this in large part explains why the GDP allocated to elementary and secondary education decreased in the other provinces. In the United States, spending on public elementary and secondary education in relation to the GDP fluctuated a little during this period, but remained above 4%.

When the share of Québec's GDP spent on elementary and secondary education is compared with that of the OECD countries in 2004, Québec ranked slightly below the average for the OECD countries considered.[3] This can be explained primarily by the structural differences between education systems. For example, preschool services are more extensive in many OECD countries (children are admitted at the age of three) than in Québec, and the duration of elementary and secondary education in Québec is shorter than in the rest of the world.[4]

In 2006-2007, Québec spent a slightly larger share of its GDP in school boards than the rest of Canada.

1. *In 2006-2007, Québec spent $10.4 billion of its $282.8-billion GDP in school boards. The concept of total spending used in this section is defined 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. The private school system is also more developed in Québec than elsewhere in Canada.*
3. *See Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(Québec: Ministère de l'Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et des indicateurs), December 2007. This document is available on the Internet at <http://www.meq.gouv.qc.ca/stat/index.htm>.*
4. *Québec's college network also has unique characteristics (including the mandatory two years of college before entering university). This compensates for the shorter duration of elementary and secondary education in Québec.*

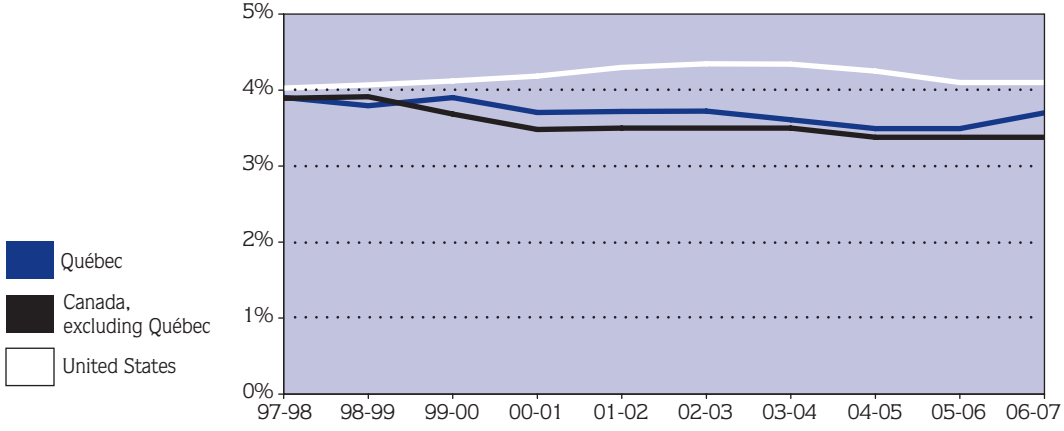
Table 1.6
Total school board spending[1] in relation to the GDP: Québec, the other regions of Canada, and the United States (%)

	1997-1998	1999-2000	2001-2002	2003-2004	2005-2006[e]	2006-2007[e]
Québec	**3.9**	**3.9**	**3.7**	**3.6**	**3.5**	**3.7**
Canada, excluding Québec	**3.9**	**3.7**	**3.5**	**3.5**	**3.4**	**3.4**
Atlantic Provinces	4.8	4.5	4.2	3.9	3.7	3.6
Ontario	4.0	3.7	3.5	3.5	3.7	3.7
Western Canada	3.5	3.6	3.3	3.2	2.9	2.9
Canada	**3.9**	**3.7**	**3.5**	**3.5**	**3.4**	**3.4**
United States	**4.0**	**4.1**	**4.3**	**4.3**	**4.1**	**4.1**

e: Estimates

1. Total spending includes operating and capital expenses, government contributions to employee pension plans and interest on the debt service (but not repayment of principal) (as defined by Statistics Canada). Figures on spending for 1997 to 2004 are taken from Statistics Canada's Elementary-Secondary Education Statistics Project (ESESP), *in which the Ministère de l'Éducation, du Loisir et du Sport participates. Also see Note 1 at the bottom of the text.*

Graph 1.6
Total school board spending in relation to the GDP: Québec, Canada excluding Québec, and the United States (%)



1.7 Total School Board Spending in Current and Constant Dollars

In 2006-2007, total school board spending in Québec was estimated at $10.4 billion, student enrollments at slightly more than one million, and per-student spending in current dollars at $10 033.[1]

Previous editions of the *Education Indicators* showed that, during the 1970s, school board spending rose significantly in Québec in a context of high inflation. 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] The figures show that spending in constant dollars remained relatively stable between 1976 and 1981, while enrollments declined by 17%. This resulted in a significant increase in real funds available per student. The following factors contributed to this rise: a lower student-teacher ratio, an increase in teacher qualifications recognized for salary purposes, and the higher cost of job security for teachers.

In the 1980s, a lower inflation rate, salary restrictions and generally more conservative budget policies considerably curbed the rapid rise in school board spending (in current and constant dollars).

Between 1990 and 1998, per-student spending in constant dollars also fell, so that in 1998-1999, it was 10% lower than in 1990-1991. This decrease can be explained by budget cutbacks and the application of cost-cutting measures in Québec school boards. The introduction of full-time kindergarten in 1997-1998 also contributed to the drop in per-student spending.[3]

Between 1998 and 2006, there was a 50% increase in per-student spending in current dollars and a 27% increase in constant dollars. These increases are primarily the result of the agreements concluded in 2000 and 2002 between the Québec government and the unions regarding a new salary structure for teachers,[4] and of support measures for school boards (additional funding for childcare services,[5] programs to reduce the dropout rate, smaller classes in preschool and the first cycle of elementary school, the increase in the amount of compulsory instruction at the elementary level, support for at-risk students or students with learning or adjustment difficulties,[6] implementation of the education reform, support for economically disadvantaged areas, various measures to counteract the effect of lower enrollments and to maintain services in the different regions of Québec, additional resources for vocational training, etc.).

These support measures for school boards also resulted in a decrease in the average number of students per teacher, which dropped from 16.3 in 1998-1999 to 15.1 in 2006-2007. This factor contributed significantly to the increase in per-student spending.[7]

From 1998 to 2006, school board spending per student increased by 27% in constant dollars.

1. *See Note 1 at the bottom of Table 1.7. The concept of 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. Editions of the* Education Indicators *prior to 2005 used the school boards' education price index.*
3. *The introduction of full-time kindergarten resulted in an increase in the "relative weight" of a relatively inexpensive sector of enrollments.*
4. *In the first agreement (April 2000), salary scales were adjusted retroactively to 1995-1996 but the school boards' financial statements do not take them into account until 1999-2000.*
5. *Following a policy limiting the financial contribution of parents to $5, then $7, a day for each child enrolled on a regular basis in child-care services.*
6. *For example, 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.*
7. *See Sections 1.8 and 1.9.*

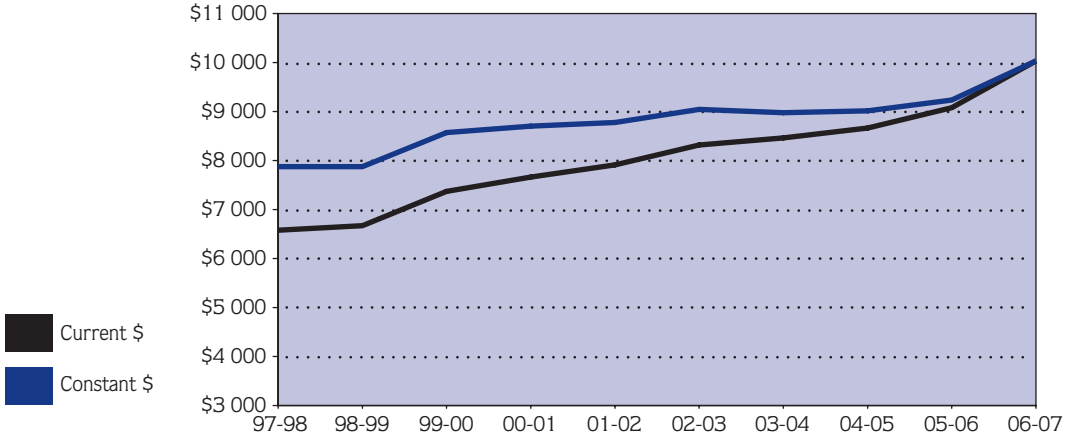
Table 1.7
Total school board spending[1]

	1997-1998	1998-1999	2000-2001	2002-2003	2005-2006	2006-2007[e]
Total spending (in millions of dollars)						
In current dollars	7 357.5	7 446.9	8 387.2	9 018.8	9 559.7	10 393.1
In constant 2006-2007[2] dollars	8 809.3	8 791.1	9 524.5	9 807.3	9 722.1	10 393.1
Spending per student ($)						
In current dollars	6 575	6 671	7 663	8 317	9 079	10 033
In constant 2006-2007[2] dollars	7 876	7 876	8 702	9 043	9 233	10 033

e: Estimates

1. *Total spending includes the operating and capital expenses, government contributions to employee pension plans and interest on the debt service (but not repayment of principal). This concept was defined by Statistics Canada* (Elementary-Secondary Education Statistics Project—(ESESP). *The concept of spending in this section is the same as that used in Section 1.8.*
2. *See Note 2 at the bottom of the text.*

Graph 1.7
Total school board spending per student in current dollars and in constant 2006-2007 dollars



1.8 Total School Board Spending per Student

In 2004-2005, total spending per student[1] by Québec school boards was $8 663, compared with the Atlantic Provinces at $8 092, Ontario at $9 267 and Western Canada at $9 162. In the United States, per-student spending was $12 792.[2]

Previous editions of the *Education Indicators* showed that spending per student rose more rapidly in Québec than in the rest of Canada and the United States in the 1970s. The sharper decline in Québec enrollments accounted for a large increase in per-student spending, owing to constraints that prevented expenses from being slashed in proportion to the drop in enrollments. More costly salary policies, a greater decrease in the student-teacher ratio and the higher cost of job-security policies also contributed to the more rapid rise of per-student spending in Québec during this period.

In the 1980s, a reversal occurred: per-student spending rose more slowly in Québec than in the rest of Canada and the United States. In Québec, the slower growth in spending was a result of salary-restriction measures applied to school board employees. During that time, the working conditions of school board employees were improving significantly in Ontario and in the United States, with the result that per-student costs increased at a faster pace in these regions than in Québec.

In the 1990s, per-student spending varied in Canada and, at the beginning of the next decade, it was slightly higher in Québec than the Canadian average. However, in 2003-2004 and 2004-2005, per-student spending was lower in Québec than in the rest of Canada.

The fact that per-student spending was lower in Québec ($8 663) than the average for the rest of Canada ($9 145) in 2004-2005 is due primarily to the fact that salaries for school personnel are lower in Québec,[3] as are capital expenses. 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 the average for the rest of Canada (about 10% lower in 2004-2005). If the data were adjusted to take the cost of living into account, per-student spending would be even higher in Québec (in absolute terms).

In 2004-2005, there were also factors that were more expensive in Québec school boards than in the rest of Canada, such as student-teacher ratios,[4] vocational training, childcare services and school transportation.

In the United States, per-student spending in 2004-2005 was 48% higher than in Québec. A comparison with the United States as a whole for 2004-2005 reveals that per-student spending was higher in 43 U.S. states[5] than in Québec, and lower in 8 states.

In 2004-2005, total school board spending per student in Québec was lower than the Canadian average and lower than in the United States.

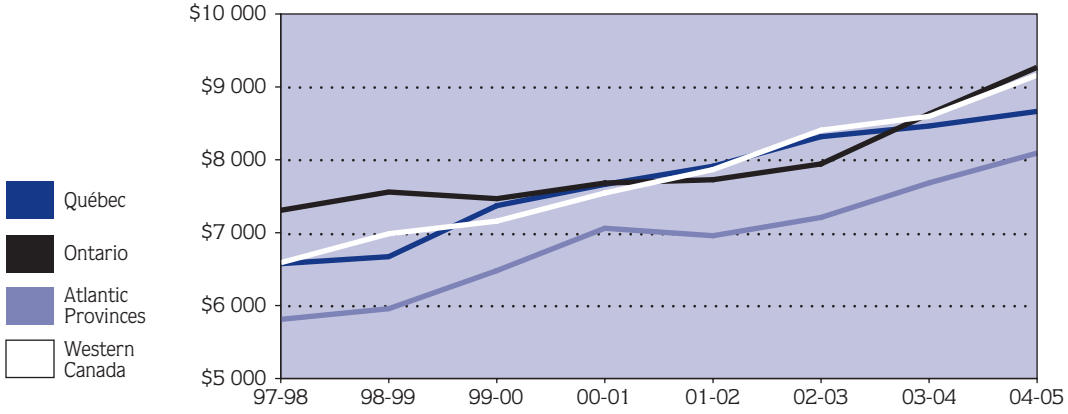
1. *The basic data used in this section is taken from an annual survey conducted by Statistics Canada among all Canadian provinces* (Elementary-Secondary Education Statistics Project–ESESP). *The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.*
2. *For the purposes of this comparison, per-student spending in the United States is expressed in Canadian dollars. American dollars are converted to Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. "Purchasing Power Parities (PPPs) are the rates of currency conversion that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries. Thus, PPPs are the rates of currency conversion which eliminate differences in price levels between countries." (OECD,* National Accounts*).*
3. *See Section 1.10 for a comparison of teachers' salaries.*
4. *See Section 1.9.*
5. *Including the District of Columbia.*

Table 1.8
Total school board spending per student:[1] Québec, the other regions of Canada, and the United States (in current dollars[2])

	1997-1998	1998-1999	2000-2001	2002-2003	2003-2004	2004-2005
Québec	**6 575**	**6 671**	**7 663**	**8 317**	**8 463**	**8 663**
Canada, excluding Québec	**6 897**	**7 192**	**7 566**	**8 076**	**8 556**	**9 145**
Atlantic Provinces	5 813	5 957	7 061	7 210	7 685	8 092
Ontario	7 307	7 559	7 681	7 943	8 629	9 267
Western Canada	6 589	6 985	7 545	8 406	8 596	9 162
Canada	**6 826**	**7 077**	**7 587**	**8 128**	**8 536**	**9 040**
United States	**8 985**	**9 319**	**11 000**	**11 887**	**12 272**	**12 792**

1. *Total spending includes the operating and capital expenses, government contributions to employee pension plans and interest on the debt service (but not repayment of principal). This concept was defined by Statistics Canada* (Elementary-Secondary Education Statistics Project—ESESP). *The concept of spending in this section is the same as that used in Section 1.7.*
2. *See Note 2 at the bottom of the text.*

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 2006-2007, the average number of students per teacher in school boards was estimated at 15.1 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 is 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.

In 2006-2007, the student-teacher ratio in the United States was also 15.1. A comparison of Québec with the United States as a whole reveals that the student-teacher ratio was higher in 21 U.S. states[1] and lower in 30 states.

The data available for the other provinces uses a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants, guidance counsellors and pastoral animators). Table 1.9b contains data on the student-educator ratio.[2] In 2004-2005, this ratio was lower in Québec (14.2) than in the Atlantic Provinces (15.2), Ontario (16.6) and Western Canada (16.6). The lower number of students per educator in Québec than in Ontario is largely due to the average teaching time of teachers and class size, which are lower in Québec. For example, the average teaching time of teachers in Québec was 615 hours per year at the secondary level, while that of their counterparts in Ontario was 740 hours. Class size at the secondary level is estimated at 22 students in Québec and 23 students in Ontario.[3]

In the 1990s, the student-educator ratio in Québec and the rest of Canada tended to increase, rising the most 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 cutbacks 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 job descriptions.

Moreover, the gap between the student-educator ratio in Québec and the rest of Canada is due in part to differences in clientele. For example, vocational training is given at the secondary level in Québec school boards, while there is no real equivalent in Ontario school boards. The fact that the average number of students per class is far lower in vocational training than in general education partly explains the lower average number of students per educator in Québec.

From 1997-1998 to 2004-2005, the student-educator ratio in Québec school boards dropped from 15.2 to 14.2. This decrease is partly 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 Elementary Cycle One was reduced, and schools in disadvantaged communities benefited from further reductions.[4]

The average number of students per teacher in Québec dropped from 16.3 in 1998-1999 to 15.1 in 2006-2007.

1. *Including the District of Columbia.*
2. *Data on the student-teacher ratio is taken from an annual survey conducted by Statistics Canada among all Canadian provinces* (Elementary-Secondary Education Statistics Project–ESESP). *The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.*
3. *The instruction time for students is 900 hours in Québec and 950 hours in Ontario.*
4. *The average number of students per group was reduced from 23 to 20 for the first year of Cycle One and from 25 to 22 for the second year in regular classes. In schools in disadvantaged communities, the average number of students per group was reduced to 18 in both years of Cycle One.*

Table 1.9a
Student-teacher ratio in school boards: Québec and the United States

	1997-1998	1998-1999	2000-2001	2002-2003	2005-2006	2006-2007[e]
Québec	16.5	16.3	16.0	15.7	15.6	15.1
United States	16.3	16.0	15.7	15.5	15.2	15.1

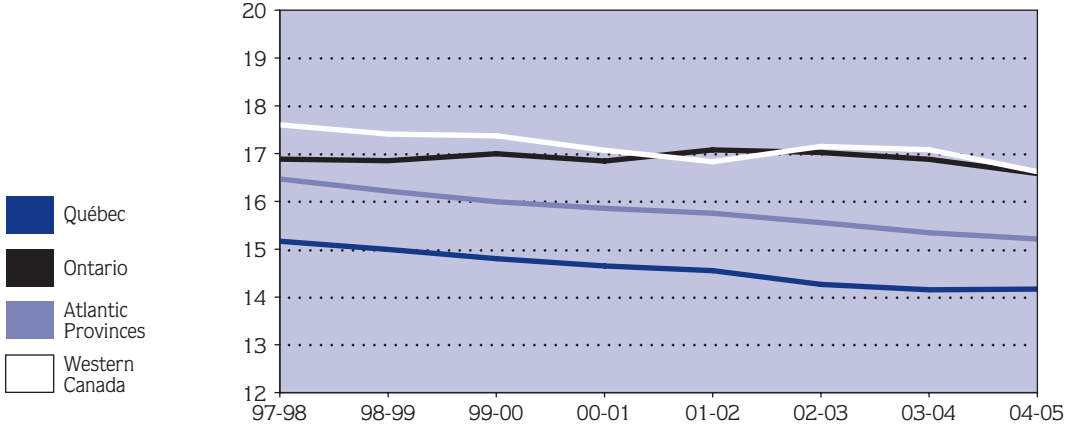
Table 1.9b
Student-educator ratio[1] in school boards: Québec and the other regions of Canada

	1997-1998	1998-1999	2000-2001	2002-2003	2003-2004	2004-2005
Québec	**15.2**	**15.0**	**14.6**	**14.3**	**14.2**	**14.2**
Canada, excluding Québec	**17.1**	**17.0**	**16.8**	**16.9**	**16.8**	**16.4**
Atlantic Provinces	16.5	16.2	15.9	15.6	15.3	15.2
Ontario	16.9	16.9	16.8	17.0	16.9	16.6
Western Canada	17.6	17.4	17.1	17.1	17.1	16.6
Canada	**16.6**	**16.5**	**16.3**	**16.3**	**16.1**	**15.9**

e: Estimates

1. See definition in the text.

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 $37 658 in 2006-2007).[1] The maximum salary was $67 242 in 2006-2007, while the average salary was $53 833.[2]

In the United States, the average salary of teachers was $60 102.[3] A comparison of Québec with the United States as a whole for 2006-2007 reveals 31 U.S. states[4] where the average salary of teachers was higher than in Québec and 20 states where it was lower.

The data available for the other provinces uses a broader concept of personnel. In addition to teachers, educators also include school administrators and nonteaching professionals who work with students (e.g. education consultants, guidance counsellors and pastoral animators).[5] Table 1.10b contains data on the average salary of educators. In 2004-2005, 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 have resulted in the average salary of teachers rising very little. 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.[6]

Between 1998-1999 and 2004-2005, the increase in the average salary of educators in Québec (23.3%) was slightly higher than in the rest of Canada (19.8%). In 2004-2005, the average salary of teachers in Québec ($55 207) was still lower than that of their counterparts in the rest of Canada ($67 533), a difference of 18%. 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.

The salary of teachers in Québec school boards can be compared with that of the member countries of the Organisation for Economic Co-operation and Development (OECD) using indicators such as starting salary, salary after 15 years of seniority and maximum salary.[7] Overall, in 2004-2005, the starting salary and maximum salary of teachers in Québec school boards were lower than the adjusted average for the OECD countries.[8] However, the salary of teachers after 15 years of seniority was higher in Québec. This is mainly due to the fact that teachers in Québec reach the maximum salary scale their 15th year of recognized experience, whereas in the OECD countries considered, the maximum salary is reached on average after 23 years.

Teachers in Québec earned less than teachers in neighbouring regions, although the cost of living in Québec is lower as well.

1. *According to the salary scale as at April 1, 2007.*
2. *This is the average salary for all categories of teachers (full-time, part-time, teachers-by-the-lesson, supply teachers, etc.). The average salary of regular full-time teachers was $58 138.*
3. *The average salary of American teachers was determined on the basis of data from the National Education Association; this data was then converted into Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. See Note 2 in Section 1.8.*
4. *Including the District of Columbia.*
5. *Data on the student-teacher ratio is taken from an annual survey conducted by Statistics Canada among all Canadian provinces* (Elementary-Secondary Education Statistics Project–ESESP). *The Ministère de l'Éducation, du Loisir et du Sport participates in this survey.*
6. *In Québec, the basic salary of teachers in school boards is determined by the collective agreements. Teachers' salaries are based on their schooling and work experience.*
7. *See Marius Demers, "Cost of Statutory Salaries of Teachers per Student for Elementary and Secondary School Levels in 2000-2001. A comparison of Québec and OECD Countries,"* Education Statistics Bulletin 29 *(Québec: Ministère de l'Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et des indicateurs), November 2003. This document is available on the Internet at <http://www.mels.gouv.qc.ca/stat/index.htm>. An update to 2004-2005 is now available, and an update of Bulletin 29 should be available later this year.*
8. *Certain countries, such as Mexico and Turkey, were excluded from the comparison because of their relatively low collective wealth (as measured by the per capita GDP).*

Table 1.10a
Average salary of teachers in school boards: Québec and the United States (in current dollars[1])

	1997-1998	1998-1999	2000-2001	2002-2003	2005-2006	2006-2007[e]
Québec	41 595	42 908	46 992	48 635	52 951	53 833
United States	47 443	48 138	53 520	56 274	58 902	60 102

Table 1.10b
Average salary of educators[2] in school boards: Québec and the other regions of Canada (in current dollars)

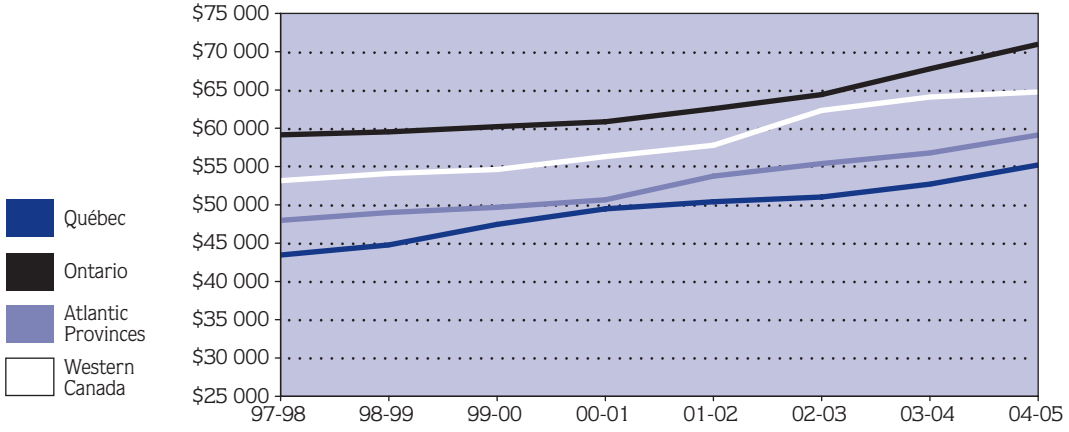
	1997-1998	1998-1999	2000-2001	2002-2003	2003-2004	2004-2005
Québec	**43 446**	**44 779**	**49 479**	**51 030**	**52 717**	**55 207**
Canada, excluding Québec	**55 723**	**56 394**	**57 969**	**62 816**	**65 380**	**67 553**
Atlantic Provinces	47 987	48 993	50 661	55 397	56 781	59 113
Ontario	59 144	58 529	60 850	64 392	67 760	70 977
Western Canada	53 152	54 099	56 295	62 334	64 083	64 752
Canada	**52 732**	**53 569**	**55 919**	**59 914**	**62 245**	**64 553**

e: Estimates

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

2. See definition in the text.

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 2006-2007, CEGEP spending on regular education was estimated at approximately $1.4 billion, with student enrollments at roughly 147 000.[1] Per-student spending was an estimated $9 241.

Previous editions of the *Education Indicators* showed that CEGEP spending grew more slowly in the 1980s than in the 1970s. This was a result of a curtailment of the inflation rate, as well as budget cutbacks adopted by the Québec government. Enrollments also continued to rise until the mid-1980s, but then declined. Per-student spending in constant dollars was lower in 1989-1990 than in 1981-1982.[2]

In 1990-1991, per-student spending in current dollars was $6 920, or 8.6% higher than in 1989-1990 (which corresponds to a growth of 4.1% in constant dollars). This increase can be explained primarily by a decline in the student-teacher ratio following the addition of new positions as part of a collective agreement. The increase in the number of teachers applies to activities such as departmental committees, practicums, professional development, and student support services.

In the 1990s, per-student spending in constant dollars followed a downward trend. This can be explained by budget cutbacks and the application of cost-cutting measures in CEGEPs. These measures were largely the result of agreements between the government and unions, which made it possible to lower labour costs. Thus, between 1990 and 1998, per-student spending in constant dollars decreased by 17%.

Between 1998-1999 and 2003-2004, there was a 30% increase in per-student spending in current dollars and a 17% increase in constant dollars. 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, for success measures, etc.). Since then, per-student spending in constant dollars has remained stable. However, in 2006, the Québec government announced a significant investment in CEGEPs over the coming years; this should translate into an increase in per-student spending in constant dollars.

Per-student spending in CEGEPs was therefore $9 241 in 2006-2007. This amount is an average for all types of regular education programs: per-student spending on pre-university programs was $7 348, while spending on technical programs was $11 024. 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 2006-2007, 93% of CEGEP spending on regular education was provided by the Québec government. This percentage is much higher than the corresponding percentage for community colleges in the other provinces. This is because college is free in Québec, while students attending community colleges in the other provinces must generally pay tuition.[3] In Ontario, for example, students in regular programs pay annual tuition fees of approximately $1 900.[4]

Between 1998-1999 and 2006-2007, CEGEP spending on regular education increased by 31%, in spite of a 5% decrease in enrollments. This resulted in a significant increase in per-student spending.

1. *Data on enrollments is based on fall registration recognized for the purpose of estimating costs.*
2. *In this section, the Consumer Price Index (CPI) is used to express spending in constant dollars. Editions of the* Education Indicators *prior to 2005 used the CEGEPs' education price index.*
3. *CEGEP students (in regular education) do not pay tuition. There are, however, certain mandatory expenses, and students must pay for their textbooks and other supplies.*
4. *Tuition fees for some programs are higher (14% of students pay between $2 000 and $6 000, while less than 1% pay between $6 000 and $11 000). These data are for 2003-2004. Source: Bob Rae,* Ontario: A Leader in Learning–Report and Recommendations, *February 2005.*

Table 1.11
CEGEP operating expenses[1] for regular education

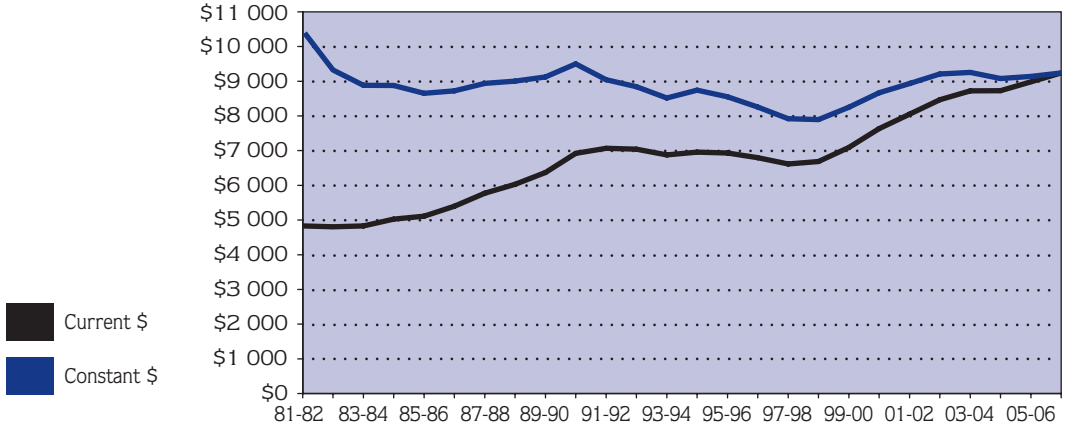
	1990-1991	1993-1994	1998-1999	2003-2004	2005-2006	2006-2007[e]
Total spending in current dollars (in millions of dollars)	909.0	1 074.9	1 035.7	1 258.8	1 284.6	1 358.3
Per-student spending in current dollars	6 920	6 876	6 688	8 725	8 985	9 241
Per-student spending in constant 2006-2007[2] dollars	9 499	8 517	7 895	9 255	9 138	9 241

e: Estimates

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

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

Graph 1.11
CEGEP operating expenses per student in current dollars and in constant 2006-2007 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 the changes in CEGEP spending. Salary costs for teachers accounted for more than half the total of CEGEP spending in 2006-2007, and the changes 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.

In 2006-2007, the average number of students per teacher in CEGEPs was estimated at 12.6 and the average teacher's salary, at $61 009. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the 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. During the same period, the student-teacher ratio increased and the average teacher salary (in constant dollars) decreased. These changes occurred in the context of more conservative budget policies.

Between 1989 and 1990, the cost of teachers per student increased by 11.2% (6.6% in constant dollars). As mentioned in Section 1.11, this increase is mainly due to a decrease in the average number of students per teacher following the addition of new positions as part of a collective agreement. The increase in the number of teachers applies to activities such as departmental committees, practicums, professional development, and student support services.

Between 1990 and 1998, per-student spending in constant dollars decreased. The labour cost reduction measures mentioned in Section 1.11 contributed to this result. Of particular note is the program of voluntary retirement that resulted in a younger average age of teachers. These measures were taken as part of the battle against budget deficits undertaken by the Québec government in the 1990s.

However, between 1998 and 2003, there was a 14% increase in the cost of teachers per student in constant dollars, 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 12.4 in 2002-2003. However, the cost of teachers per student in constant dollars has been slightly lower in recent years, despite a slight increase in the average number of students per teacher. This can be explained in large part by the fact that salaries were underindexed during this period.[4]

In 2006-2007, the average number of students per teacher in CEGEPs was estimated at 12.6 and the average teacher's salary, at $61 009.

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 is based on fall registration recognized for the purpose of estimating costs, and data on teaching personnel is expressed in full-time equivalents.*
4. *The Québec government adopted Bill 142, which defines the salary rates and scales for CEGEP personnel until 2010. Salaries were frozen in 2004 and 2005 and, on April 1 of 2006, 2007, 2008 and 2009, the Bill provides for a 2% salary increase.*

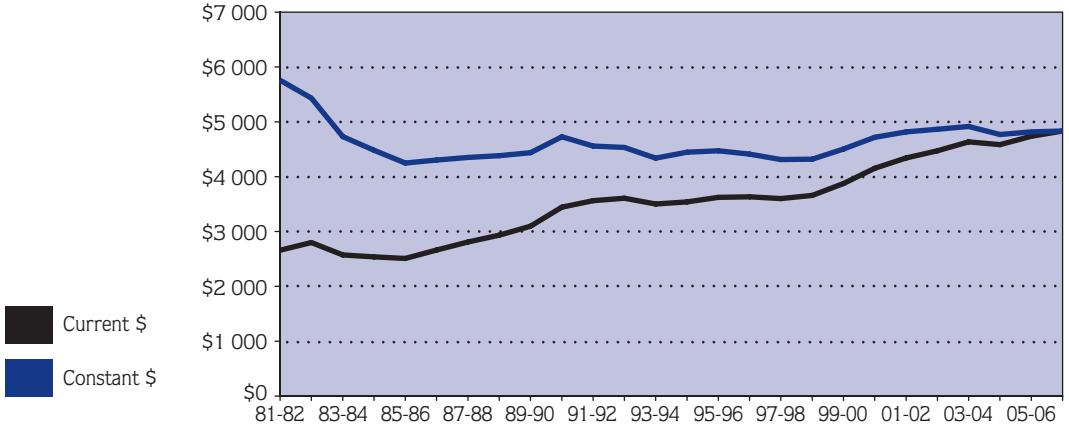
Table 1.12
Student-teacher ratio,[1] average salary of teachers and cost of teachers per student in CEGEPs

	1990-1991	1993-1994	1998-1999	2003-2004	2005-2006	2006-2007[e]
Student-teacher ratio	13.5	13.9	13.8	12.4	12.6	12.6
Average salary in current dollars	46 512	48 789	50 399	57 489	59 825	61 009
Cost of teachers per student						
In current dollars	3 444	3 503	3 659	4 634	4 737	4 834
In constant dollars (2006-2007)	4 728	4 339	4 319	4 916	4 818	4 834

e: Estimates

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

Graph 1.12
Cost of teachers per student in CEGEPs in current dollars and in constant 2006-2007 dollars



1.13 Total University Spending in Relation to the GDP

In 2006-2007, 1.92% of the GDP was allocated to university education in Québec,[1] compared with 2.05% in the Atlantic Provinces, 1.58% in Ontario and 1.30% in Western Canada.[2]

Previous editions of the *Education Indicators* showed that, during the 1980s, the share of the GDP allocated to university education dropped slightly in Québec, Ontario and the Atlantic Provinces, whereas it increased in Western Canada. However, in the early 1990s the share of the GDP allocated to university education increased significantly in Québec, whereas the increase was less marked in the rest of Canada. Québec's higher spending is partly explained by strong growth in research at its universities,[3] but also by a more rapid increase in real funds allocated to education. Between 1993 and 1999, the share of the GDP allocated to university education dropped in Québec as a result of budget cuts and a reduction in labour costs. In the rest of Canada, the share of the GDP allocated to university education went down as well, although not as significantly.

Between 1999 and 2004, the share of the GDP allocated to university education increased slightly both in Québec and in the rest of Canada and has varied since then. In 2006-2007, investment in university education remained higher in Québec than in the rest of Canada (except in the Atlantic Provinces). To explain why Québec invested more of its GDP in university education, it is necessary to consider the following four factors: per-student spending; the collective wealth (as defined by the per capita GDP); the participation rate (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). Three of these four factors contributed to greater spending in Québec: higher per-student spending in Québec than in the rest of Canada,[4] the slightly higher participation rate in Québec and, most of all, the fact that the collective wealth is lower in Québec. Only the demographic factor (relatively fewer young people in Québec) had the opposite effect.

Another indicator is used to determine the relative investment of the regions under consideration. It combines two of the factors: per-student spending and the per capita GDP. In addition to the regions' ability to pay, this ratio takes into account differences in the cost of living (in 2006-2007, the cost of living in Québec was about 10% lower than in the rest of Canada). The relationship between per-student spending and the per capita GDP is considerably higher in Québec than in the rest of Canada.[5]

When compared with the member countries of the Organisation for Economic Co-operation and Development (OECD), Québec ranks among the countries with the largest share of its GDP allocated to university education in 2004.[6] This can be explained primarily by the fact that the cost of per-student spending is much higher in Québec than the OECD average. In addition, the schooling rate of young people is higher in Québec than on average in 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 2006-2007, Québec spent $5.4 billion of its $282.8-billion GDP on university education.*
2. *The data on universities presented here has not been adjusted to take into account the organizational differences in the education systems.*
3. *See Section 1.17.*
4. *See Section 1.14.*
5. *See Section 1.4.*
6. *See Marius Demers, "Educational Spending Relative to the Gross Domestic Product (GDP) in 2004. A comparison of Québec and the OECD Countries,"* Education Statistics Bulletin 35 *(Québec: Ministère de l'Éducation, du Loisir et du Sport, Direction de la recherche, des statistiques et des indicateurs), December 2007. This document is available on the Internet at <http://www.meq.gouv.qc.ca/stat/index.htm>.*

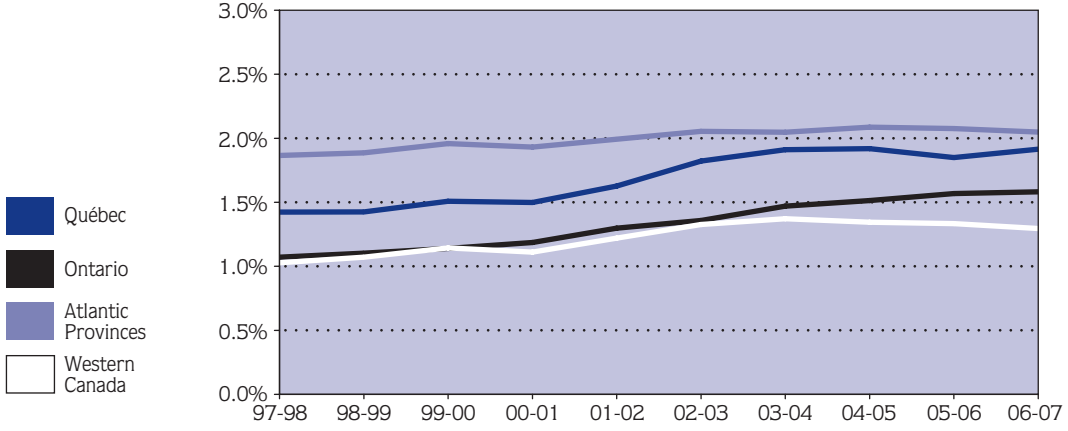
Table 1.13
Total spending allocated to university education[1] in relation to the GDP: Québec and the other regions of Canada (%)

	1997-1998	1999-2000	2001-2002	2003-2004	2005-2006	2006-2007[e]
Québec	**1.42**	**1.51**	**1.63**	**1.90**	**1.85**	**1.92**
Canada, excluding Québec	**1.11**	**1.20**	**1.31**	**1.46**	**1.49**	**1.48**
Atlantic Provinces	1.87	1.96	1.99	2.05	2.08	2.05
Ontario	1.07	1.14	1.30	1.47	1.57	1.58
Western Canada	1.03	1.14	1.22	1.37	1.33	1.30
Canada	**1.17**	**1.26**	**1.38**	**1.56**	**1.56**	**1.57**

e: Estimates

1. Total university spending includes the general operating fund, endowment fund, research fund and capital fund. The basic data used to calculate total university spending in relation to the GDP was obtained from the Canadian Association of University Business Officers (CAUBO) and Statistics Canada for 1997 to 2005. Also see Note 2 in the text.

Graph 1.13
Total university spending in relation to the GDP: Québec and the other regions of Canada (%)



1.14 Total Per-Student University Spending

In 2006-2007, total spending per student by Québec universities was estimated at $27 495, compared with $22 850 in the Atlantic Provinces, $23 742 in Ontario and $31 956 in Western Canada.

Because of problems inherent in the comparison of these data, it is preferable to use the concept of total spending.[1] Total university spending includes the general operating fund, endowment fund, research fund and capital fund.

Between 1997 and 2001, the gap between total per-student spending in Québec and in the rest of Canada narrowed, and in 2001-2002, it was essentially the same. However, in subsequent years, it rose at a faster rate than in the rest of Canada, such that in 2006-2007, per-student spending was 5% higher in Québec ($27 495) than in the rest of Canada ($26 226).

The more rapid growth in spending in Québec in recent years is primarily a result of a more substantial operating subsidy (reinvestment in Québec universities and 100% funding of the growth in student enrollments).

The higher total per-student spending in Québec universities in 2006-2007 can be partly explained by the organizational differences among education systems, such as differences in the composition of the student body according to level and field of study. For example, because Québec universities have a higher proportion of students in costlier fields of study and higher levels of study, per-student spending is also higher. If the data were adjusted to take this factor into account, per-student spending would be more or less the same in Québec and the rest of Canada.

Another adjustment may also be made to take into account differences in the cost of living from one province to another (the cost of living was approximately 10% lower in Québec than in the rest of Canada in 2006-2007). If the data were adjusted to consider both the costlier student body composition of Québec universities and Québec's lower cost of living, per-student spending in Québec universities would be approximately 9% higher than in the rest of Canada.

Unadjusted data show that in 2006-2007, total spending per student by Québec universities ($27 495) was higher than in the rest of Canada ($26 226). This gap can be explained primarily by higher per-student spending on teaching personnel,[2] administration, activities related to computers and communications, research and financing costs.[3] Conversely, there is less spending in Québec than in the rest of Canada on student services (including bursaries[4]), external relations and libraries.

In 2006-2007, total spending per student by Québec universities was higher than in the rest of Canada.

1. *In 2004, the Canadian Association of University Business Officers (CAUBO) formed a task force responsible for identifying the factors behind the differences in financial reporting from one university to another. Experts have indicated that one of the main factors contributing to data comparability problems is the fact that universities record their expenses differently in the various funds. Thus, some expenses are entered in the capital fund and others, in the general operating fund (e.g. the purchase of furniture and equipment). The report also notes problems related to the distribution of certain expenses between the general operating fund and the research fund (e.g. medicine costs), as well as between the general operating fund and the endowment fund (Source:* CAUBO, Report of the Task Force on the Review of CAUBO Financial Reporting, November 2004*).*
2. *See Section 1.15.*
3. *See Note 2 at the bottom of Table 1.14.*
4. *Universities outside Québec award more bursaries because their tuition fees are higher than Québec's, but they are expected to give a portion back to the students in the form of bursaries.*

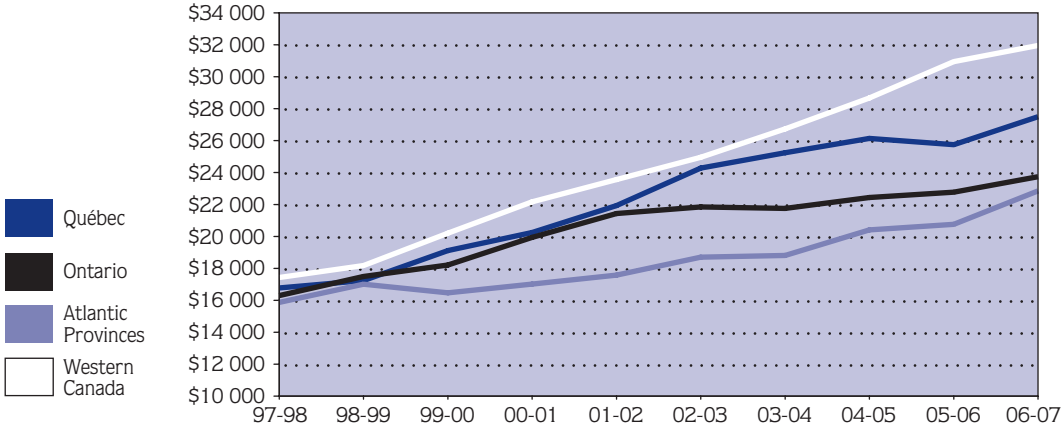
Table 1.14
Total university spending per student:[1] Québec and the other regions of Canada (in current dollars)

	1997-1998	1999-2000	2001-2002	2003-2004	2005-2006[e]	2006-2007[e]
Québec[2]	**16 773**	**19 113**	**21 934**	**25 241**	**25 744**	**27 495**
Canada, excluding Québec	**16 646**	**18 656**	**21 639**	**22 999**	**25 082**	**26 226**
Atlantic Provinces	15 871	16 464	17 579	18 810	20 758	22 850
Ontario	16 297	18 213	21 436	21 755	22 772	23 742
Western Canada	17 425	20 203	23 562	26 738	30 949	31 956
Canada	**16 679**	**18 771**	**21 711**	**23 530**	**25 234**	**26 519**

e: Estimates

1. *Total university spending includes the general operating fund, endowment fund, research fund and capital fund. The basic data used to calculate per-student spending in universities for 1997 to 2005 was obtained from Statistics Canada and the Canadian Association of University Business Officers (CAUBO). 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.*
2. *Since 2003-2004, total university spending per student in Québec has been underestimated because of data unavailable from Statistics Canada and CAUBO (for example, capital expenses for Université du Québec à Montréal).*

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. In 2005-2006, this cost ($7 120) was higher in Québec than in the Atlantic Provinces ($6 189) and Ontario ($6 298), but lower than in Western Canada ($8 643).[1] The cost of professors per student in Québec is higher than the average for the rest of Canada ($7 019).

The total payroll considered in the calculation of per-student spending for professors includes 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 2005-2006, the average salary of professors in Québec ($92 383) was 7% higher than in the Atlantic Provinces ($86 517), but 6% and 7% lower, respectively, than in Ontario ($98 703) and Western Canada ($99 497). However, it should be noted that the cost of living is lower in Québec than the average for the rest of Canada (about 10% lower in 2005-2006). If differences in the cost of living are taken into account, the average salary of professors appears to be slightly higher in Québec (approximately 4%) than in the rest of Canada.

It should also be noted that, although the average salary of professors in Québec is lower than in Ontario (by 6% in 2005-2006), the per-student cost of professors is still higher in Québec (by 13% in 2005-2006). This is primarily because the average number of students per professor (in full-time equivalents) is lower in Québec than in Ontario.

It is difficult to obtain comparable data on the student-professor ratio in universities because of differences in the information systems relating to part-time professors. However, part-time professors (including lecturers) must be included in the calculation of student-professor ratios because they are responsible for much of the teaching in universities (slightly more than 50% in Québec).

Depending on the hypotheses used to convert part-time professors into full-time equivalents, the differences between the student-professor ratio in Québec and Ontario may be larger or smaller, but the data always indicates that, in recent years, the average number of students per professor has been lower in Québec than in Ontario.[4]

The salary costs of university professors in Québec are slightly higher than in the rest of Canada.

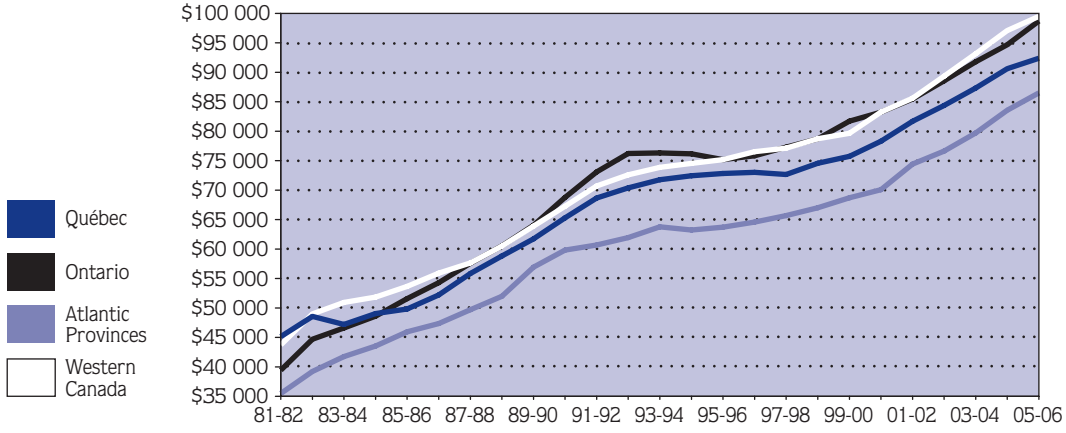
1. *The calculation of per-student spending for professors is based on a standard method for counting student enrollments in all the provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.*
2. *Employee 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. *According to the Council of Ontario Universities, the average number of students per professor in Québec is lower than in Ontario (see* Ontario Universities–2004; Resource Document, *July 2004, Tables 8.5 and 8.6).*

Table 1.15
Average salary of full-time university professors: Québec and the other regions of Canada (in current dollars)

	1990-1991	1993-1994	1998-1999	2002-2003	2004-2005	2005-2006[e]
Québec	**65 284**	**71 766**	**74 566**	**84 364**	**90 609**	**92 383**
Canada, excluding Québec	**66 817**	**73 475**	**76 838**	**86 916**	**93 892**	**97 098**
Atlantic Provinces	59 826	63 764	67 001	76 621	83 566	86 517
Ontario	68 763	76 318	78 704	88 549	94 676	98 703
Western Canada	67 267	73 864	78 729	89 334	97 097	99 497
Canada	**66 464**	**73 050**	**76 284**	**86 294**	**93 121**	**95 957**

e: Estimates

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, where applicable, of his or her parents, sponsor or spouse: 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 2006-2007, 27.7% of full-time students in secondary vocational training, 25.0% of full-time college students and 40.4% of full-time university students received assistance. A total of 135 336 students benefited from the Loans and Bursaries Program. Of these, 44 571 received only a loan, 89 658 received a loan and a bursary, and 1 107 received only a bursary. A total of $428.6 million was granted in the form of loans and $359.8 million, in bursaries.

In 2006-2007, of the university students who received financial assistance, 30.3% obtained only a loan, which averaged $3 266, whereas 68.8% obtained a loan and a bursary totalling an average of $7 756. Those who received a loan and a bursary obtained on average slightly less 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 2006 (Table 1.16b). In 2006-2007, loans accounted for 54.4% of the total assistance awarded and bursaries, 45.6%.

In 2006-2007, upon completion of their undergraduate studies, Québec students who had received loans owed on average $11 688. The average debt for graduate studies was $14 745 and for postgraduate studies, $19 571.

Student loans contracted for college and undergraduate studies averaged $14 162 in 2006-2007; for college through to graduate studies, $22 038; and for college through to postgraduate studies, $30 000.

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 the fact that, on average, Québec awards more bursaries than the other provinces, as well as the fact that Québec's tuition fees are the lowest in Canada.

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. For example, tuition fees in Québec universities in 2007-2008 were $1 768 for Québec residents, $5 141 for Canadian students who are not Québec residents, and between $9 864 and $12 226 for foreign students depending on the field and level of studies.[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 ($2 025) are 40% of the amount charged in the rest of Canada ($5 124) in 2007-2008. This situation can be explained by the long periods of time (1969 to 1989 and 1995 to 2006) during which tuitions fees were frozen in Québec universities.[2] In 2007, the Québec government announced that it was removing the freeze on tuition fees for students residing in Québec. They will increase from $1 668 in 2006-2007 to $2 168 in 2011-2012.

In 2007-2008, average tuition fees were $2 025 in Québec and $5 124 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, *September 2007. This document is available on the Internet at <http://www.mels.gouv.qc.ca/ens/sup/ens-univ/Politique_etudiant_etranger-2007.pdf>.*

2. *See Note 1 at the bottom of Table 1.16b.*

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	2001-2002	2006-2007[p]	2007-2008[p]
Québec[1]	**519**	**1 311**	**1 705**	**1 843**	**1 932**	**2 025**
Canada, excluding Québec	**1 537**	**1 842**	**2 939**	**4 078**	**4 964**	**5 124**
Atlantic Provinces	1 728	2 075	3 148	4 138	5 131	5 086
Ontario	1 561	1 818	2 992	4 492	5 155	5 381
Western Canada	1 409	1 780	2 755	3 357	4 554	4 676
Canada	**1 271**	**1 706**	**2 648**	**3 577**	**4 400**	**4 524**

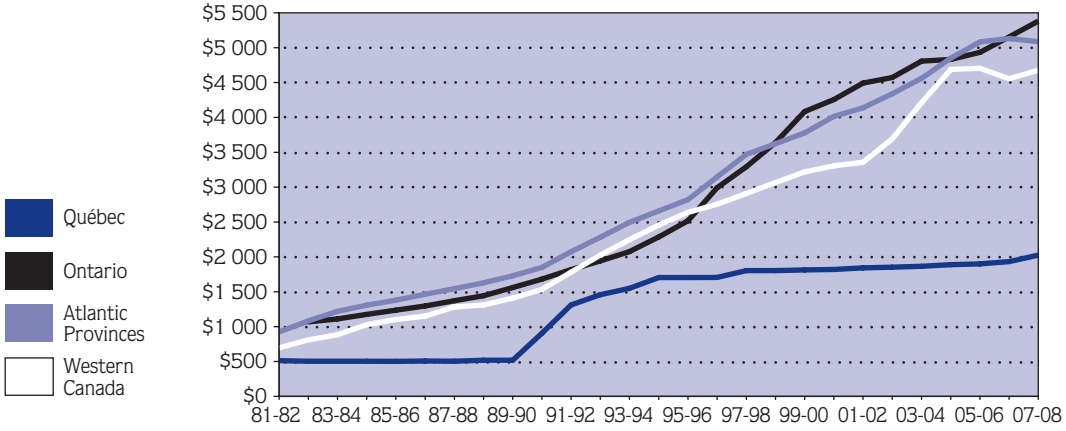
Table 1.16b
Proportion of financial assistance given to Québec university students in the form of loans and bursaries (%)

	1990-1991	1995-1996	2000-2001	2003-2004	2005-2006	2006-2007[p]
Loans	59.4	66.4	59.3	50.4	61.2	54.4
Bursaries	40.6	33.6	40.7	49.6	38.8	45.6

p: Preliminary data

1. In Québec, as of the fall of 1997, Canadian students not residing in Québec must pay an additional amount that has been taken into account in the calculation of the average tuition fees (Statistics Canada data). This explains the increase in tuition fees in recent years, despite the freeze on tuition for Québec residents between 1995-1996 and 2006-2007.

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

The amount of funding through grants and research contracts allocated to universities almost doubled from 1994-1995 to 2004-2005, going from $586.6 million to $1.383 billion. The major increase in the amount allocated to university research from 2002-2003 to 2004-2005 requires some explanation. Two factors contributed significantly to these increases: one was the federal government's payment of indirect costs and the recording of these grants in the Système sur la recherche universitaire (SIRU). The second major change involves the inclusion in the SIRU, in the past two years, of grants awarded by the Canada Foundation for Innovation (CFI) and its partners, for university research infrastructures. Before this, only grants for equipment and from the New Opportunities Fund were recorded. Because of these two factors, in 2004-2005, the amount allocated to university research increased by $122.1 million; this amount is not taken into account in the following analysis.

In the six-year-period ending in 2004-2005, the amount allocated to research rose by 9.8% annually. This spectacular increase can be explained in large part by the investments of the Québec and Canadian governments in CFI projects. During the same period, CFI grants rose by 35.4% annually, from $50.2 million to $309.9 million. The amount of funding per research professor rose from $90 006 to $140 597,[1] representing an average increase of 9.4%.

From 1994-1995 to 2001-2002, the contribution of the Québec government represented 24.0% of total contributions to university research. The two following years, its contribution exceeded 27%, but dropped to 23.4% in 2004-2005. Between 1999-2000 and 2004-2005, the average increase was 9.9%.

During the same six-year period, the Canadian government's contribution[1] increased on average 12.8% per year. In 1999-2000, it represented 38.2% of total contributions, compared with 44.9% in 2004-2005. Contributions from the Canadian private sector grew an average of 6.5% per year from 1999-2000 to 2004-2005.

In 2004-2005, 77.1% of grants and research contracts were awarded in the fields of health sciences (29.6%), pure sciences (30.8%) and applied sciences (16.7%). Next came social sciences (6.6%), business administration (2.3%) and education (1.6%).

Health sciences received 41.9% of its grants and research contracts from the Canadian government, 17.6% from the Québec government and 29.0% from the Canadian private sector. The federal government also funded 46.0% of the research in pure sciences, compared with 26.0% for the Québec government and 19.8% for the Canadian private sector. In applied sciences, the proportions were 52.9% for the federal government, 18.6% for the Québec government and 20.3% for the private sector.

Funding for research in education varied between $12.1 and $22.8 million from 1999-2000 to 2004-2005. The average annual growth was 11.1%.

Since 2001-2002, the amount allocated to university research has exceeded $1 billion, primarily because of the grants awarded by the CFI and its financial partners. During this four-year period ending in 2004-2005, the average increase in the amount allocated to research was 8.0%.

1. *Excludes grants from the CFI and its partners for infrastructures and grants for indirect costs from the federal government.*

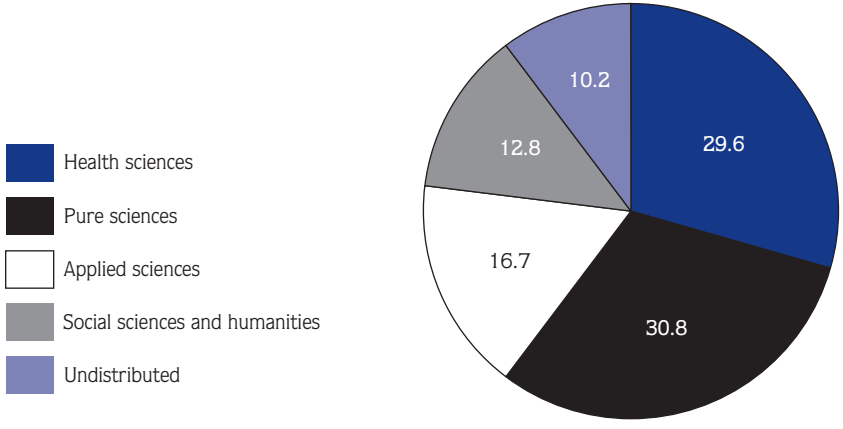
Table 1.17
Funded and sponsored research according to the source of funding and per research professor

	1994-1995	1997-1998	1999-2000	2002-2003	2003-2004	2004-2005
Grants and research contracts (in millions of dollars),[1] by source						
Government of Canada	234.3	210.6	275.4	449.4	643.2	649.1
Government of Québec	141.5	143.5	167.7	293.9	372.1	337.5
Canadian private sector	132.1	165.3	180.8	215.7	232.9	268.8
Other sources	78.7	84.8	96.7	128.2	138.7	127.9
Total	586.6	604.5	720.5	1 088.0	1 386.8	1 383.3
Number of research professors[2]	**8 906**	**8 144**	**8 005**	**8 460**	**8 654**	**8 970**
Amount per research professor ($)	**65 866**	**74 226**	**90 006**	**128 605**	**160 250**	**154 214**

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 (as defined by the Système d'information sur la recherche universitaire [SIRU]).*

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. However, our definition of research professor excludes administrators of services (library directors, registrars, etc.) and senior administrators (rectors and vice-rectors). (Source: Ministère de l'Éducation, du Loisir et du Sport and Conference of Rectors and Principals of Québec Universities,* Enquête sur le personnel enseignant.*)*

Graph 1.17
Funded and sponsored research, according to field of research, 2004-2005 (%)



2.1 School Life Expectancy

A child who began elementary school in 2006-2007 can expect to spend 15.6 years in the education system.[1] Since 1988-1989, 0.8 years of schooling have been added for male students, and 1.5 years for female students. School life expectancy has not improved from the 15.7 years observed in 1993-1994. For male students, it has even decreased by 0.4 years since then, standing now at 15.0 years. In 2005-2006, young people in Québec could expect to spend 15.6 years in school, or about the same amount of time as young people in France.[2]

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 0.46 years, resulting from an increase of 0.65 years in the adult sector and a drop of 0.19 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. This is not surprising given that enrollment at these levels of education is virtually universal and compulsory until almost the end of secondary school. The reason why the average duration of schooling is less than the length of programs at the college and university levels 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 years that are repeated. At the elementary and secondary levels, male students attend school slightly longer than female students (12.0 compared with 11.9 years) precisely because they have more difficulty. 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 4.4 years, compared with 3.1 years for men.

From elementary to university education, in 2006-2007, school-aged Quebeckers could expect to stay in school for an average of 15.6 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.*

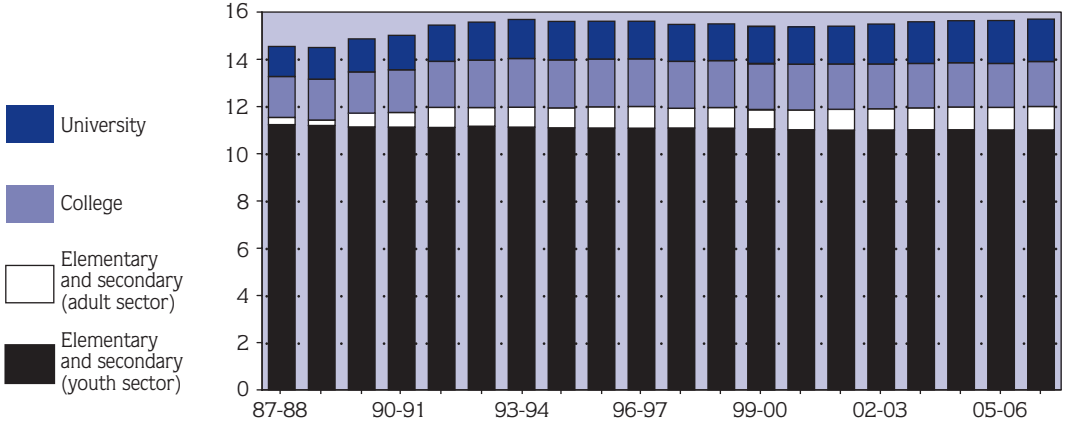
2. *Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, Direction de l'évaluation et de la prospective,* L'état de l'école, *Paris, Vol. 17, October 2007.*

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	2005-2006	2006-2007
All levels of education by gender						
Male	N/A	14.2	15.4	15.1	15.0	15.0
Female	N/A	14.8	16.0	15.9	16.3	16.3
Total	**14.5**	**14.5**	**15.7**	**15.5**	**15.6**	**15.6**
Both genders according to level of education						
Elementary (youth sector)	6.14	6.16	6.12	6.08	6.00	6.00
Secondary (youth sector)	5.09	5.03	5.01	5.00	5.01	5.04
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.88	0.97	0.95
College	1.74	1.74	2.07	1.99	1.88	1.86
University	1.28	1.34	1.64	1.53	1.82	1.84

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-olds[1] 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, and it stood at 19.5% in 2006-2007.

For a long time, children enrolled in part-time kindergarten for 5-year-olds[2] accounted for approximately 87% of all students in kindergarten, and this rate was the same for boys as for girls. In 1997-1998, with the implementation of full-time kindergarten, the situation was completely reversed as almost all boys and girls in kindergarten for 5-year-olds started to attend on a full-time basis.

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 member countries of the Organisation for Economic Co-operation and Development (OECD).[3] In 2004-2005, virtually all developed 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 OECD countries. Moreover, the majority of children enrolled in kindergarten for 4-year-olds in Québec are in a Passe-Partout play group, which means that they are not really part of the school system.

Children with handicaps or with learning or adjustment difficulties account for 2.0% of students in kindergarten for 5-year-olds. For girls, the proportion was 1.2%, but more than double (2.8%) for boys.

In 2006-2007, 98.6% of all eligible children attended kindergarten for 5-year-olds, almost all of them on a full-time basis.

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. *In kindergarten for 5-year-olds, part-time attendance means five half-days per week and full-time attendance, five full days per week. In kindergarten for 4-year-olds, part-time attendance means one to four half-days per week and full-time attendance, five half-days per week.*
3. *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 (%)

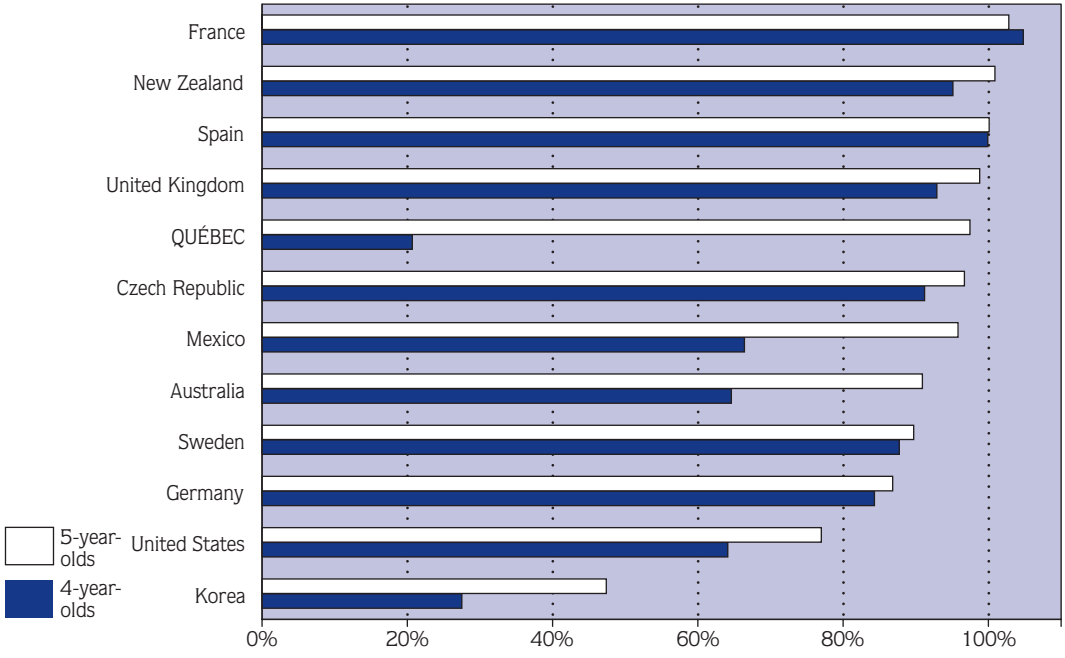
	1982-1983	1992-1993	2002-2003	2004-2005	2005-2006	2006-2007
Kindergarten for 4-year-olds	**8.0**	**9.2**	**19.6**	**19.9**	**19.9**	**19.5**
Passe-Partout play group	—	—	11.0	11.6	11.6	11.9
Other categories	—	—	8.5	8.3	8.3	7.6
Kindergarten for 5-year-olds	**97.4**	**96.7**	**98.1**	**98.1**	**98.1**	**98.6**
Full-time[1]	—	9.2	98.1	98.1	98.1	98.6
Part-time[2]	—	87.6	0.0	0.0	0.0	0.0

—: Not applicable

1. Full-time: five full days

2. Part-time: five half-days

Graph 2.2
Net enrollment rates for 4-year-olds and 5-year-olds: Québec and various OECD countries, 2004-2005 (%)



2.3 Enrollment in Secondary General Education – Youth Sector

Enrollment in Secondary V stood at 77.0% in 2006-2007. Enrollment in Secondary IV was 86.8%, a level equal to the record achieved the previous year, which suggests that enrollment in Secondary V will remain high in 2007-2008. Moreover, in 2006-2007, 94.8% of young people were enrolled in Secondary III.[1]

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.[2] There was a temporary decline in student retention, but it was not long before an upward trend took hold once again.

In 2006-2007, differences in enrollment between female and male students appeared in Secondary III, where female students were ahead of the male students by more than 2 percentage points. The gap widened in Secondary IV to 7 percentage points in favour of the female students, to stand at 11 percentage points in Secondary V.

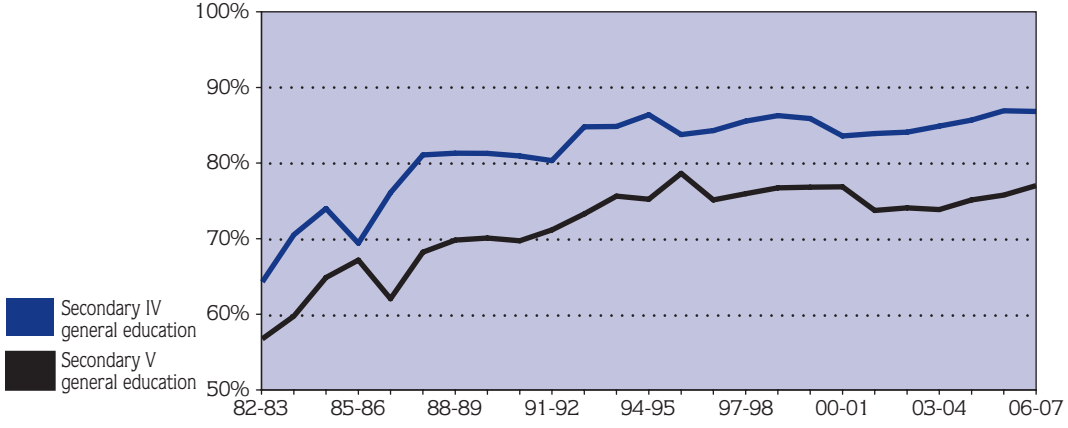
In 2006-2007, in general education in the youth sector, enrollment in Secondary V was 77.0%.

1. *Because of the gradual implementation of the education reform, it is now impossible to calculate student enrollment in Secondary Cycle One classes (Secondary I and II).*
2. *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 in the public and private systems combined, by gender (%)

	1982-1983	1992-1993	2002-2003	2004-2005	2005-2006	2006-2007
Secondary III	**86.3**	**91.8**	**92.0**	**93.9**	**93.7**	**94.8**
Male	82.5	90.0	90.6	91.8	91.8	93.6
Female	90.3	93.9	93.4	96.2	95.6	96.0
Secondary IV	**64.1**	**84.8**	**84.1**	**85.7**	**86.9**	**86.8**
Male	59.9	81.7	80.8	82.0	83.4	83.2
Female	68.6	88.0	87.5	89.6	90.6	90.6
Secondary V	**56.7**	**73.3**	**74.1**	**75.1**	**75.8**	**77.0**
Male	53.6	68.5	67.9	69.5	69.9	71.5
Female	60.0	78.3	80.5	81.0	81.9	82.8

Graph 2.3
Proportion of young people enrolling in Secondary IV and V in general education, public and private systems combined (%)



2.4 Enrollment in Secondary Vocational Education – Youth and Adult Sectors

The proportion of young people under the age of 20 enrolling in vocational training programs was 17.5% in 2006-2007. Since 1999-2000, enrollment of students already holding a Secondary School Diploma (SSD) has been relatively stable, and varied between 9% and 10%; it stood at 8.8% in 2006-2007.

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 8.7% in 2006-2007 and represented 49% 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 2006-2007, 21.7% of male students opted for this path, compared with 13.0% of female students. This situation applies equally to students who had a diploma and to those who did not. This is the opposite of what has been occurring in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer.

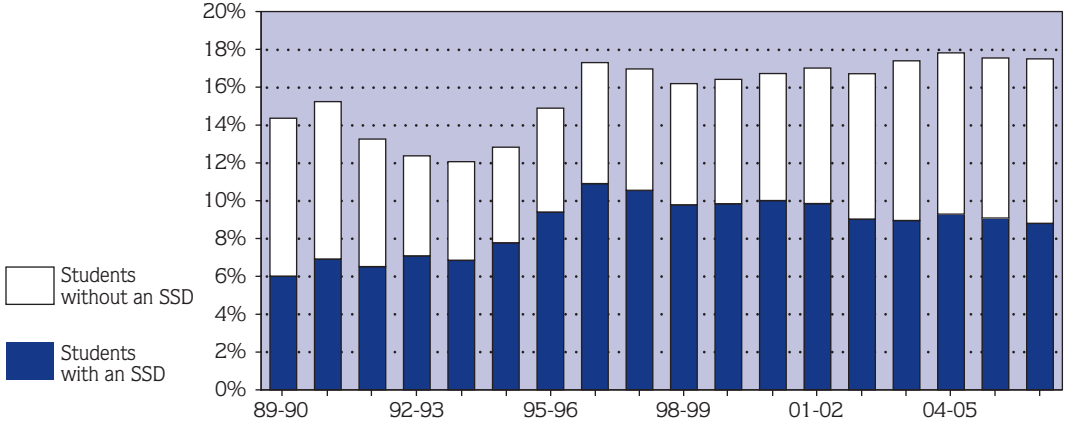
In 2006-2007, 17.5% of young people under the age of 20, more than half of whom already held an SSD, enrolled in vocational training.

Table 2.4
Enrollment in vocational training of students under the age of 20, youth and adult sectors combined (%)

	1989-1990	1994-1995	1999-2000	2004-2005	2005-2006	2006-2007[p]
TOTAL	**14.4**	**12.8**	**16.4**	**17.8**	**17.6**	**17.5**
Students without an SSD	8.4	5.1	6.6	8.5	8.5	8.7
Students with an SSD	6.0	7.8	9.8	9.3	9.1	8.8
MALE	**18.0**	**15.1**	**19.6**	**22.5**	**22.5**	**21.7**
Students without an SSD	11.5	6.6	8.9	11.6	11.6	11.7
Students with an SSD	6.5	8.5	10.8	10.9	10.9	10.0
FEMALE	**10.6**	**10.5**	**13.0**	**12.9**	**12.6**	**13.0**
Students without an SSD	5.0	3.4	4.2	5.3	5.3	5.5
Students with an SSD	5.5	7.1	8.9	7.6	7.3	7.5

p: Preliminary data

Graph 2.4
Enrollment in vocational training of students under the age of 20, youth and adult sectors combined (%)



2.5 Enrollment in Secondary General Education – Adult Sector

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 2006-2007, 15.0% of school-aged youth under 20 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%; there has thus been an eleven-fold increase. 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.[1] 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 2006-2007, accounted for more than three quarters of all new enrollments of students under 20 years of age.

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 2006-2007, 15.0% of students under 20 years of age transferred directly from the youth sector to the adult sector.

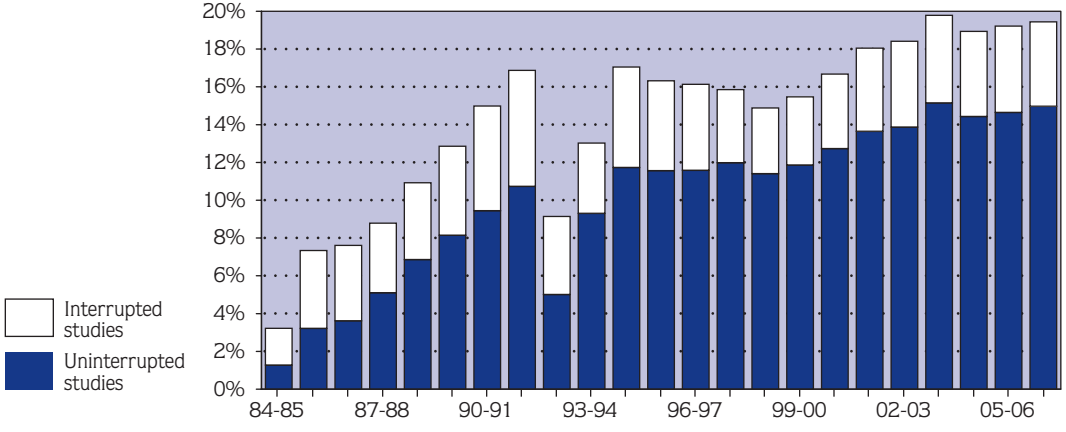
1. *As a result, the school boards had to encourage students to stay in the youth sector (whose envelope is always open), since funding for the adult sector was reduced in 1992-1993.*

Table 2.5
Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma, by gender (%)

	1984-1985	1994-1995	2003-2004	2004-2005	2005-2006	2006-2007
Total	**3.2**	**17.0**	**19.8**	**18.9**	**19.2**	**19.4**
Uninterrupted studies[1] (directly from the youth sector)	1.3	11.7	15.1	14.4	14.6	15.0
Interrupted studies	2.0	5.3	4.6	4.5	4.6	4.5
Male	**3.3**	**19.4**	**22.1**	**21.1**	**21.3**	**21.6**
Uninterrupted studies[1] (directly from the youth sector)	1.4	13.7	16.9	16.2	16.2	16.5
Interrupted studies	1.9	5.8	5.2	4.9	5.1	5.0
Female	**3.1**	**14.6**	**17.4**	**16.7**	**17.1**	**17.2**
Uninterrupted studies[1] (directly from the youth sector)	1.1	9.7	13.3	12.6	13.0	13.3
Interrupted studies	2.0	4.9	4.1	4.1	4.1	3.9

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 the age of 20 without a secondary school diploma (%)



2.6 Dropping Out of Secondary School

This section measures both official successful completion (graduation) and school attendance of those who have not yet received a diploma. The dropout rate is defined as the proportion of the population that does not attend school and has not obtained a secondary school diploma.

The dropout rate by age is obtained by measuring the proportion of the population with a secondary school diploma[1] by age, and the proportion without a diploma but still in school.[2] The two measurements are added together and deducted from 100.

Graph 2.6 shows the downward trend of the dropout rate since 1979. The increase observed in the 1980s is due to the raising of the pass mark, which made it more difficult to obtain a secondary school diploma (see Section 5.2). Results in recent years have been relatively stable.

The dropout rate in 2006 was 20.5% for 20-year-olds, 20.1% for 25-year-olds and 20.5% for 30-year-olds. An analysis of the data for a given age reveals that the dropout rate has declined considerably in the past 30 years: the rate for 17-year-olds went from 26.2% in 1979 to 10.2% in 2006, and the rate for 19-year-olds dropped from 40.5% to 19% during the same period.

Table 2.6 shows the difference in dropout rates for male and female students and indicates that women are less likely to drop out of school. In 1979, the gender gap was relatively small, but was somewhat more pronounced in 2006. For example, for 19-year-olds, the dropout rate for men in 2006 was almost half of what it was in 1979 (24.1% compared with 43.8%); for women, the rate in 2006 was almost one third of what it was in 1979 (13.7% compared with 37.2%). The situation of women has therefore improved more than that of men; this analysis also holds true for the other age groups in Table 2.6.

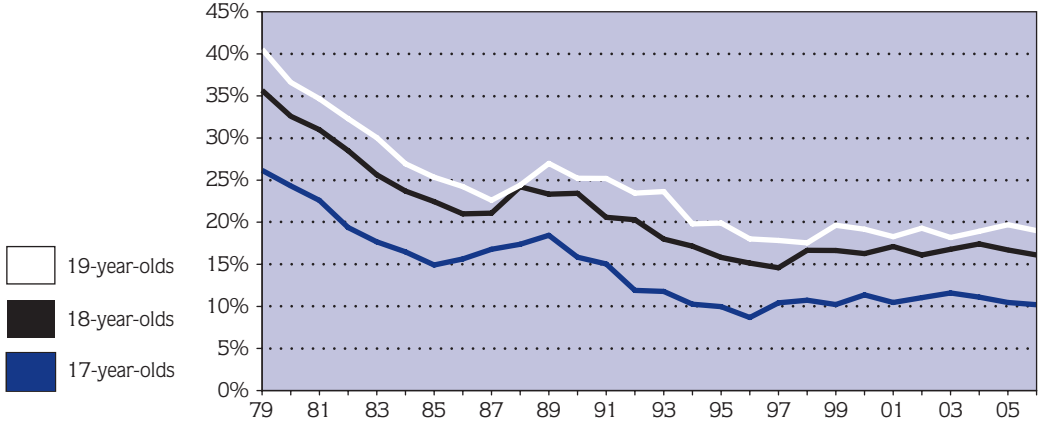
In 2006, 19% of 19-year-olds were without a secondary school diploma and were not attending school. This proportion was 40.5% in 1979.

1. *The diplomas considered here are the Secondary School Diploma (SSD–including the Short Vocational Diploma and the Long Vocational Diploma), the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and certification for on-the-job training in a recycling facility.*
2. *At either the secondary or college level. It is possible–although less and less so in the past few years–for a person without a secondary school diploma to be accepted in college. Persons who enroll in university without a secondary school diploma are not taken into account here.*

Table 2.6
Dropout rate by age and gender (%)

	1979	1989	1999	2004	2005	2006
17-year-olds	**26.2**	**18.5**	**10.2**	**11.1**	**10.5**	**10.2**
Male	27.6	21.3	13.2	13.9	12.9	13.3
Female	24.7	15.5	7.0	8.0	7.9	7.0
18-year-olds	**35.7**	**23.3**	**16.6**	**17.4**	**16.7**	**16.1**
Male	38.0	27.0	20.4	21.8	21.3	19.9
Female	33.2	19.5	12.6	12.8	12.0	12.1
19-year-olds	**40.5**	**27.0**	**19.6**	**18.9**	**19.7**	**19.0**
Male	43.8	31.0	24.5	24.0	24.7	24.1
Female	37.2	22.7	14.5	13.5	14.3	13.7

Graph 2.6
Dropout rate by age (%)



2.7 College Enrollment – Regular Education[1]

In 2006-2007, 61.0% of a generation of young Quebeckers went on to college. This is 2.7 percentage points lower than the rate 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]

College enrollment (regular education) rose by 22 percentage points between 1975-1976 and 1986-1987 (from 39.3% to 61.2%), followed by a drop of 5 percentage points in 1987-1988. In the six years thereafter, it rose by 10 percentage points, reaching a new high of 66.9% in 1993-1994. Since then, enrollment has dropped by 5.9 percentage points for all young Quebeckers.

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 close 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.

Over a period of 20 years or so, the gender gap in college enrollment has widened steadily. Although rather negligible in the mid-1970s, the difference reached 19.8 percentage points in favour of women in 2006-2007, with only women having regained any ground in recent years.

College enrollment also varies depending on the type of education involved. The probability of enrolling in pre-university education dropped from 37.9% in 1995-1996 to 36.3% in 2006-2007, after peaking at 43.9% in 1992-1993. The probability of enrolling in college technical training declined from 21.6% to 18.1% from 1986-1987 to 1989-1990, returning to 23.2% in 1992-1993 and then settling at 16.2% in 2006-2007.

In recent years, the only regular education program where enrollment has increased is Explorations. In 1993-1994, 4.9% of students undertook college studies in this type of program; in 2006-2007, the figure was 8.5%, which, out of a total of 61.0%, represents more than one in ten new enrollments.

In 2006-2007, the college enrollment rate stood at 61.0%, 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 their Secondary School Diploma (SSD), 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 mathematics or comparable Secondary IV mathematics.*

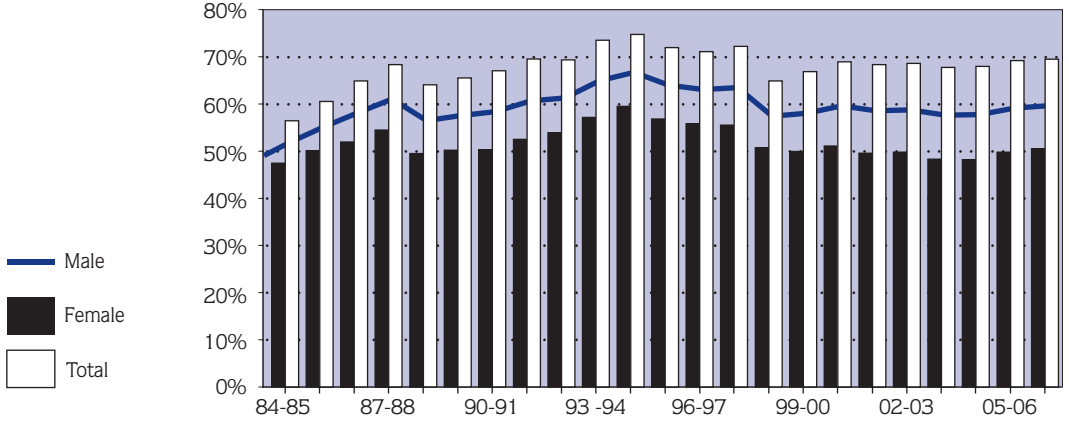
Table 2.7
Full-time or part-time enrollment in regular education in public or private colleges, by gender and type of education (%)

	1975-1976	1985-1986	1995-1996	2004-2005	2005-2006	2006-2007[e]
Male	**38.9**	**52.0**	**55.8**	**49.8**	**50.5**	**51.3**
Pre-university education	25.4	34.2	31.5	28.7	29.0	29.6
Technical training	13.4	17.7	18.5	13.7	13.8	13.1
Explorations	–	–	5.9	7.4	7.6	8.5
Female	**39.7**	**64.9**	**71.1**	**69.2**	**69.5**	**71.1**
Pre-university education	22.5	41.0	44.7	42.2	42.5	43.2
Technical training	17.1	23.9	20.3	19.4	19.3	19.4
Explorations	–	–	6.1	7.6	7.7	8.6
Total	**39.3**	**58.3**	**63.3**	**59.3**	**59.8**	**61.0**
Pre-university education	24.0	37.5	37.9	35.3	35.6	36.3
Technical training	15.3	20.8	19.3	16.5	16.5	16.2
Explorations	–	–	6.0	7.5	7.7	8.5

e: Estimates

–: Not applicable

Graph 2.7
Proportion of college graduates (24 years old or under) enrolling in university without interrupting their studies, by type of education and 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 2005, 77.9% of the class of 2004-2005 aged 24 or under with a Diploma of College Studies (DCS) from a pre-university program[1] were enrolled full-time in university.[2] Also in the fall of 2005, 77.8% of female graduates of pre-university education were enrolled full-time in university, a slightly lower percentage than that of men in the same situation (78.2%).

Between 1993-1994 and 1998-1999, the proportion of pre-university education graduates who went on to university without interrupting their studies was between 78.6% and 84.0%. The rate decreased from 84.0% in 1998-1999 to 75.6% in 2000-2001. Although the method used to estimate the proportion of graduates enrolled in university immediately after completing college has changed somewhat since 2000, the data indicates a slight increase in the following five years. After the fall of 2000, there was a significant increase in the proportion of college graduates who enrolled in university full-time, which went from 75.6% to 77.9% in the fall of 2005. For several years now, the rate has been hovering around 78.0%.

In the fall of 2005, 25.0% of students aged 24 or under who graduated from a technical DCS program in 2004-2005 were enrolled full-time in university the following year, which represents an increase since the fall of 2000. This result is comparable to that observed the preceding year and confirms that more technical training graduates now go on to university; indeed, the proportion of these graduates going on to university has been close to 20% in the past four years, the highest since 1983-1984, despite the fact that these graduates would have little difficulty finding a job. This can be partly explained by the increase in the number of DCS-BAC programs[3] being offered.

More male graduates aged 24 or under with a DCS in a technical program have been enrolling full-time in university applied sciences (electrical engineering, mechanical engineering and computer science among others) and administrative sciences (especially business administration). Women in the same age group normally enroll in health sciences (mostly nursing sciences and nursing), administrative sciences (especially business administration and accounting) and social sciences (a number of fields, including social services). The 5.0-point increase in the proportion of female graduates from a technical program going on to university in 2004-2005[4] can be explained in large part by the transition of graduates from the nursing techniques program (180.A0) to the university nursing program, which also accounts for the overall increase in the proportion of college graduates going on to university this same year. The proportions remained steady in 2005-2006.

Of the class of 2004-2005, 77.9% of pre-university education graduates and 25.0% of technical training graduates went on to study full-time at university in the fall of the year following their graduation from college.

1. *This refers to students who obtained a DCS between the months of September and August of a given school year.* Education Statistics Bulletin 28 *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 the following address: <http://www.mels.gouv.qc.ca/stat/Bulletin>.*

2. *In 2001, the method used to estimate the proportion of college graduates going on to university without interrupting their studies was revised. From 1983-1984 to 1999-2000, estimates were based on the results of the* Relance *surveys conducted by the Ministère de l'Éducation, du Loisir et du Sport, which present the situation of graduates of pre-university and technical programs as of March 31 following their year of graduation. In 2000-2001, the proportion of college graduates going on to university without interrupting their studies was based on administrative data from the Système de gestion des données sur l'effectif universitaire (GDEU). For the purpose of comparing this data with data from the* Relance *surveys, the GDEU system was used to calculate the proportion of students who earned a college diploma in 2000-2001 and who were enrolled full-time in a Québec university in the fall of 2000. Although the data is from different sources, the proportions obtained using both methods are a satisfactory representation of the situation observed between 2000-2001 and 2004-2005.*

3. *A university and college can conclude an agreement on a DCS-BAC program that allows students to avoid course content duplication by recognizing a certain number of college courses in university. The total length of studies is generally shortened by a year. Certain bridges also exist that allow for the recognition of certain college courses in university.*

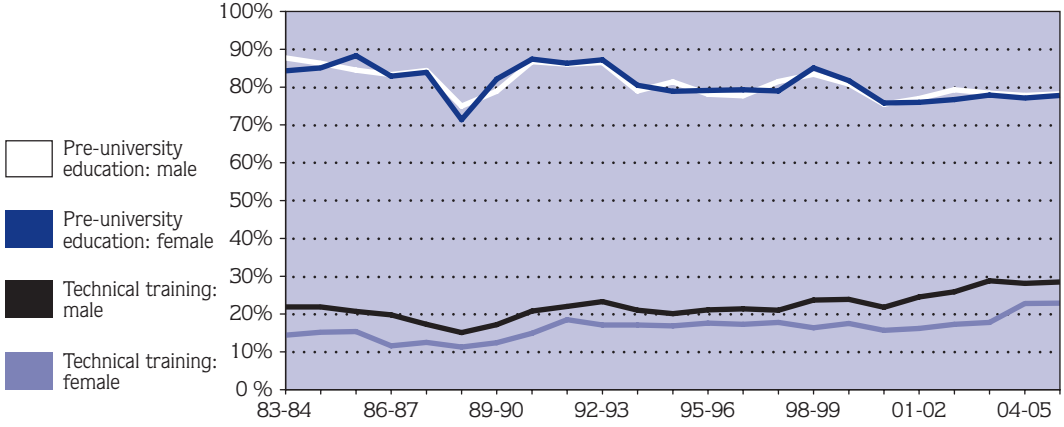
4. *Fall of 2004 is when the first cohort of students enrolled in the five-year integrated nursing program went from college to university; this program was introduced in the fall of 2001 in Québec's college system.*

Table 2.8
Proportion of college graduates (24 years old or under) enrolling full-time1 in university without interrupting their studies, by type of education and gender (%)

	1983-1984	1993-1994	2002-2003	2003-2004	2004-2005	2005-2006
Pre-university education	**86.0**	**79.9**	**77.7**	**78.1**	**77.4**	**77.9**
Male	87.7	79.0	79.3	78.4	77.8	78.2
Female	84.3	80.5	76.7	77.9	77.1	77.8
Technical training	**17.4**	**18.6**	**20.8**	**22.2**	**24.9**	**25.0**
Male	21.9	21.0	25.9	28.8	28.1	28.5
Female	14.4	17.1	17.3	17.8	22.8	22.9

1. *The statistics produced between 1983-1984 and 1999-2000 are based on government* Relance *surveys. They represent the proportion of college graduates who, on March 31 of the reference year, were not employed and were enrolled in university either part-time or full-time. Since 2001, statistics are from the Système de gestion des données sur l'effectif universitaire (GDEU). The statistics for 2000-2001 to 2005-2006 represent the proportion of students who earned a college diploma between 1999-2000 and 2004-2005 and who were enrolled full-time in a Québec university the following fall. In the calculation of the indicator based on the* Relance *surveys, the inclusion of college graduates enrolled part-time in university and the reference date used (March 31) combined to produce a slightly higher result than that of the new indicator used since 2000-2001.*

Graph 2.8
Proportion of college graduates (24 years old or under) enrolling in university without interrupting their studies, by type of education and gender



2.9 University Enrollment

This section concerns enrollment[1] in programs leading to a university degree at the bachelor's, master's or doctoral level. Enrollment in certificate programs and nonprogram studies is not measured here.

In 1992-1993, the proportion of a generation enrolled for the first time in programs leading to a bachelor's degree increased by one third over an 8-year period, climbing to 39.7%, from 30.1% in 1984-1985. From 1992-1993 to 1997-1998, there was a decline of 5.8 percentage points in enrollment in bachelor's programs, and the rate fell to 33.9%. A similar decline was observed in enrollment in pre-university college programs after 1992-1993 (see Section 2.8). Thereafter, the rate began to rise again, reaching 42.1% in 2007-2008. Women posted an even higher rate of enrollment in programs leading to a bachelor's degree at 49.7%.

From 1984 to 2007, only women showed veritable gains in enrollment in bachelor's programs: the rate increased by 18.4 percentage points, whereas men (34.9%) were 5.9 percentage points above the level observed in 1984-1985. The gender gap was 14.8 percentage points, whereas it had been 2.3 percentage points 22 years earlier.

With respect to master's programs, enrollment rose in recent years to 11.4% after having dropped in 1997-1998. Here too, gains were more favourable for women, whose enrollment rate was 12.0% in 2007-2008, compared with 10.9% for men. In 1984-1985, the difference was 1.5 percentage points in favour of men. At the master's level, women began showing definitive gains over men in 1993-1994. The overall increase in enrollment in master's programs between 1984-1985 and 2007-2008 was relatively greater than that observed at the bachelor's level.

The growing interest in doctoral studies is significant even though it applies to only a small portion of the population. Enrollment rose from 1.1% in 1984-1985 to 2.9% in 2007-2008. Men continue to enroll in doctoral studies in slightly greater numbers (3.1%) than women (2.6%), but the number of women enrolling at this level has increased more rapidly in the past 20 years.

In 2007-2008, the proportion of students enrolling in university was estimated at 42.1% for bachelor's programs, 11.4% for master's programs, and 2.9% for doctorate programs.

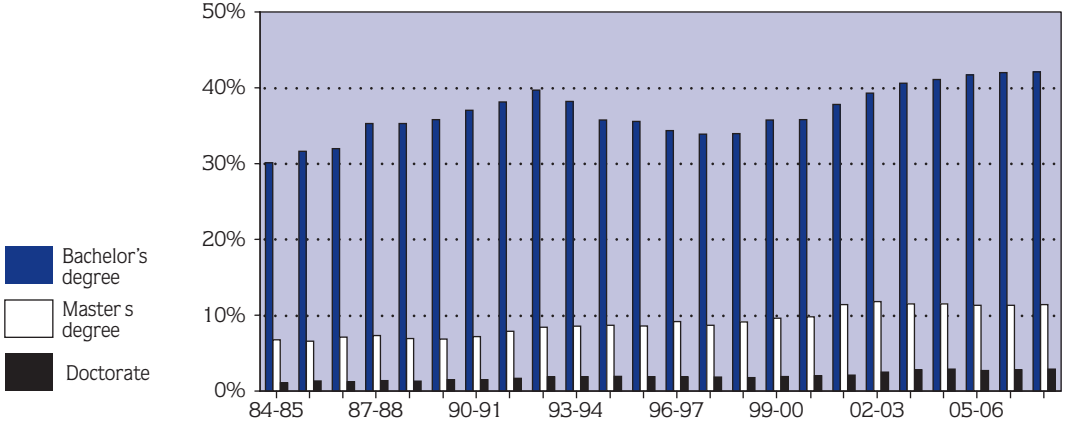
1. *Since the data on new enrollments generally used for this indicator was unavailable at the time of writing, preliminary data on enrollments provided by the Conference of Rectors and Principals of Quebec Universities (CREPUQ) was used for the 2007-2008 figures. More specifically, the annual variation in new full-time enrollments in programs leading to a bachelor's degree was used to estimate enrollment on the basis of the most recent data observed, that is, in 2007-2008. Data for programs leading to a master's degree or doctorate was estimated on the basis of variations in enrollment in these programs.*

Table 2.9
Enrollment in programs leading to a university degree, by gender (%)

	1984-1985	1992-1993	1997-1998	2005-2006	2006-2007	2007-2008[e]
Bachelor's programs						
Male	29.0	34.8	28.9	34.4	34.8	34.9
Female	31.3	44.9	39.1	49.3	49.4	49.7
Total	**30.1**	**39.7**	**33.9**	**41.7**	**42.0**	**42.1**
Master's programs						
Male	7.5	8.5	8.4	11.1	10.9	10.9
Female	6.0	8.3	8.9	11.6	11.8	12.0
Total	**6.8**	**8.4**	**8.7**	**11.3**	**11.3**	**11.4**
Doctoral programs						
Male	1.4	2.3	1.9	2.9	3.0	3.1
Female	0.8	1.4	1.8	2.4	2.5	2.6
Total	**1.1**	**1.9**	**1.9**	**2.7**	**2.8**	**2.9**

e: Estimates (See Note 1 at the bottom of the text.)

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 the most likely to go into university research. In the fall of 2006, these students totalled 12 426, a 3.8% increase over the previous fall.

More than three quarters of enrollment in doctoral programs is concentrated in social sciences, applied sciences, pure sciences and health sciences. In 2006, 28.9% of doctoral candidates were in social sciences, 21.2% in applied sciences, 15.0% in pure sciences and 12.4% in health sciences.

Men accounted for the majority of the students enrolled in a doctoral program (53.2% in the fall of 2006, compared with 46.8% for women). In 1990, the percentages were 64.7% and 35.3%, respectively. From 1990 to 2006, the increase in the number of women enrolled in doctoral programs (134%) was much greater than it was for men (45%).

In 2006, 80.9% of the men in doctoral programs were enrolled in applied sciences (30.9%), social sciences (22.2%), pure sciences (17.9%) and health sciences (9.9%). The number of men enrolled in the arts has increased the most since 1990, that is, by 207.1%, while the number of men enrolled in education and literature decreased by 19.5% and 22.5%, respectively.

The distribution of enrollments in doctoral programs differs for women and men. In the fall of 2006, 36.5% of the female students were in social sciences, 15.2% in health sciences, 11.7% in pure sciences, 10.1% in applied sciences, 7.2% in education and 7.1% in literature. The largest annual increases in female enrollment since 1990 have been in interdisciplinary studies (395.2%), the arts (388.5%), law (378.9%), applied sciences (275.8%), and health sciences (202.7%).

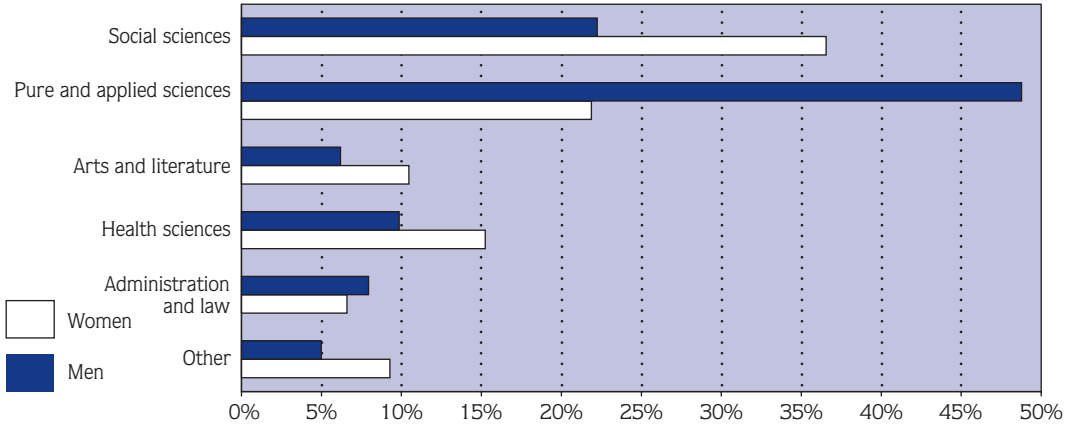
In the fall term of 2006, enrollments in doctoral programs grew by 3.8%, compared with the fall of 2005. This increase appears to be the result of a 4.5% rise in female student enrollment and of a 3.2% rise in male student enrollment.

Table 2.10
Enrollment in doctoral programs, by field of study (fall term)

	1990	2001	2002	2003	2004	2005	2006
Arts	96	209	237	278	311	353	367
Literature	654	583	579	601	631	674	651
Business administration	258	508	558	623	666	706	721
Law	58	110	120	127	153	169	188
Education	549	504	526	553	565	591	635
Social sciences	2 168	2 685	2 749	2 989	3 283	3 492	3 596
Pure sciences	1 229	1 355	1 408	1 522	1 651	1 788	1 866
Applied sciences	1 276	1 446	1 711	2 020	2 294	2 469	2 629
Health sciences	662	1 149	1 246	1 353	1 447	1 512	1 538
Interdisciplinary studies	60	87	121	143	154	187	207
Not applicable[1]	27	23	25	33	19	28	28
Total	**7 037**	**8 659**	**9 280**	**10 242**	**11 174**	**11 969**	**12 426**

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 field of study, fall 2006 (%)



2.11 The Proportion of International Students in Postsecondary Education

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

According to the OECD, the number of students educated in countries not their own rose by 125% from 1.2 million in 1990 to 2.7 million in 2005.[1] During this period, the number of foreign university students in Québec rose by 133%, from 9 135 to 21 319.[2]

In the Québec college system, the number of foreign students has grown sharply in the past five years (+65.2%) in relation to an overall decrease in the total number of enrollments (-7.5%) (see Table 2.11a). However, it must be noted that, in the fall of 2006, foreign students represented only 1.1% of college enrollments. This may be due to the unique nature of the Québec college system, which has no equivalent in other countries.

At the university level, the number of foreign students is growing more rapidly than the number of enrollments, but less rapidly than in the college sector. Thus, the proportion of foreign students is increasing regularly, and grew from 7.3% in 2001 to 8.4% in 2006. If we look at the situation by level of studies, we note that the ratio of foreign students to total enrollments increases as the level of studies increases: it is 7.1% in bachelor's programs, 11.5% in master's programs and 19.2% in doctoral programs (see Table 2.11b).

In the fall of 2006, foreign university students from 167 countries were studying in Québec. However, 56% of them were from five countries. The largest group was from France (29.0%),followed by the United States (12.6%), China (6.9%), Morocco (4.8%), Tunisia (2.5%) and 162 other countries throughout the world (44.1%) (see Graph 2.11).

In the fall of 2006, foreign students accounted for 8.4% of total enrollments in Québec universities.

1. *OECD*, Education at a Glance 2007, *Chapter C3, p. 313.*
2. *Ministère de l'Éducation, du Loisir et du Sport, système GDEU, 2007.*
   Note that, in Québec, a foreign student is a student enrolled in an educational institution and who is not a Canadian citizen, a permanent resident or an Indian as defined in the Indian Act.

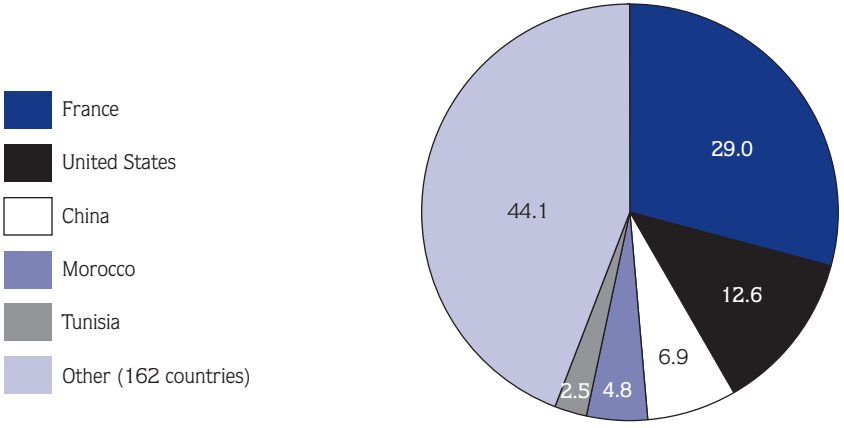
Table 2.11a
Foreign students in the Québec education system

	Fall 2001	Fall 2006	Variation 2006/2001
College			
Foreign students	1 268	2 095	**65.2%**
Total enrollments	206 373	190 978	**-7.5%**
Foreign students/total enrollments (%)	**0.6**	**1.1**	
University			
Foreign students	17 380	22 096	**27.1%**
Total enrollments	236 726	262 137	**10.7%**
Foreign students/total enrollments (%)	**7.3**	**8.4**	

Table 2.11b
Proportion of foreign students in the different levels of university studies

	Bachelor's programs	Master's programs	Doctoral programs	Total
Foreign students	14 339	5 327	2 430	22 096
Total enrollments	203 219	46 262	12 656	262 137
Foreign students/ total enrollments (%)	**7.1**	**11.5**	**19.2**	**8.4**

Graph 2.11
Countries of origin of foreign university students (%)



3.1 Success in Secondary Cycle Two of General Education – Adult Sector[1]

Of the students in general education in the adult sector who left secondary school in 2005-2006, 14.6% obtained a diploma. If only students in Cycle Two are considered, the proportion more than triples, to 49.4%. Of the various instructional services[2] available, only Secondary Cycle Two normally leads to a diploma. Figures for new enrollments broken down according to instructional service are available as of 1988-1989 only. These figures show that the proportion of graduates was 23.2% for students leaving Secondary Cycle Two; the rate has therefore doubled since that time.

Although earning a diploma is not the most appropriate criterion for measuring success in the other instructional services, it can nevertheless be observed that the proportion of graduates is on the rise among students in all the instructional services in the adult sector. Since 1980-1981, this proportion has risen from 11.5% to 14.6%. This increase is due primarily to the fact that fewer students are dropping out of instructional services that do not lead directly to a diploma. Instead of quitting school, students pursue their studies in another instructional service, and thus enter Cycle Two and eventually earn a secondary school diploma.

Among students leaving school, the proportion who hold a diploma is higher for those under 20 years of age than for all ages combined. Thus, in Secondary Cycle Two, 61.1% of the students leaving before the age of 20 did so with a diploma; progress has been considerable in this respect, because the corresponding proportion for 1988-1989 was 36.3%. With respect to instructional services as a whole, the proportion of those under the age of 20 leaving with a diploma grew from 22.0% to 34.0% between 1980-1981 and 2005-2006.

In 1980-1981, the graduation rate was slightly higher for male students than for female students, but the situation has since reversed. In 2005-2006, the graduation rate for female students exceeded that of male students by 2.8 percentage points, with the difference being 10.6 percentage points for those under 20 years of age.

Of the students under the age of 20 who were enrolled in Secondary Cycle Two in the adult sector in 2005-2006, 61.1% earned a diploma.

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. The diplomas 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 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, or were offered in the past, in general education in the adult sector: Integration into Community Life Program (ICLP), sociovocational integration services, pre-employment training activities (PTA), literacy services, francization services, adults educated in the youth sector, study skills and career planning, preparatory services for secondary education, Secondary Cycle One education services, Secondary Cycle Two education services, vocational training preparation services, preparatory services for postsecondary education, and preparatory services for higher education.*

Table 3.1
Proportion of students leaving general education in the adult sector with a diploma,[1] by gender, instructional service, age and last year of enrollment (%)

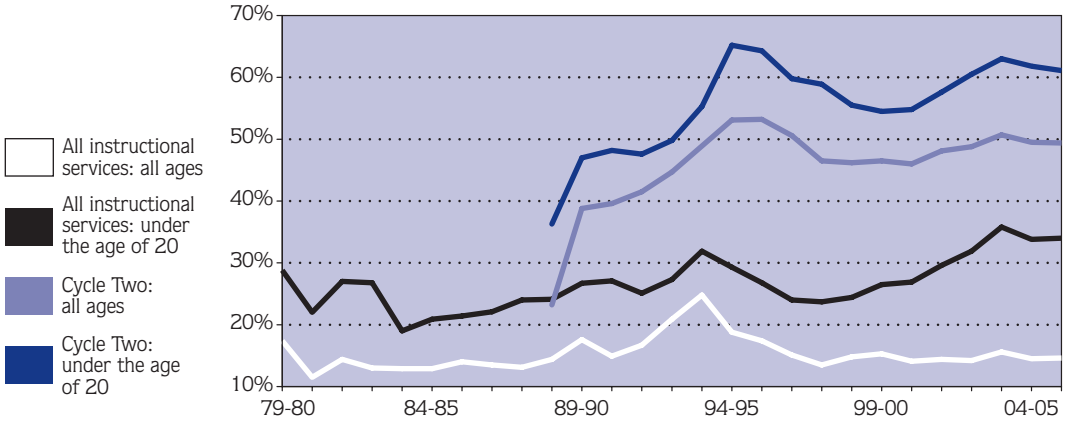
	1980-1981	1988-1989	1995-1996	2003-2004	2004-2005	2005 2006[e]
Male						
Secondary Cycle Two	N/A	22.7	50.2	47.2	45.9	45.9
Under the age of 20	N/A	36.2	61.0	60.3	57.6	57.8
All instructional services	13.1	13.2	14.9	14.0	13.0	13.2
Under the age of 20	23.1	22.4	22.4	31.4	28.3	29.4
Female						
Secondary Cycle Two	N/A	23.6	55.9	54.0	53.0	52.7
Under the age of 20	N/A	36.4	67.5	66.1	66.3	64.6
All instructional services	10.3	15.3	20.0	17.2	16.2	16.0
Under the age of 20	20.8	25.8	33.2	42.0	41.5	40.0
Total						
Secondary Cycle Two	N/A	23.2	53.2	50.7	49.5	49.4
Under the age of 20	N/A	36.3	64.3	63.0	61.8	61.1
All instructional services	11.5	14.4	17.4	15.6	14.5	14.6
Under the age of 20	22.0	24.1	26.8	35.8	33.8	34.0

N/A: Data not available

e: Estimates

1. All secondary school diplomas are taken into account.

Graph 3.1
Proportion of students leaving general education in the adult sector with a diploma, by last year of enrollment (%)



3.2 Success in Secondary Vocational Training[1]

Of the students in vocational training[2] who left secondary school in 2005-2006, 64.3% obtained a diploma. If only those students truly considered to be working toward a diploma, that is, full-time students, are considered, the proportion of graduates climbs to 85.9%.

Since the beginning of the vocational training reform in 1987-1988, the percentage of graduates has increased appreciably. For example, at the end of 2005-2006, the proportion of students graduating from programs leading to a Diploma of Vocational Studies (DVS) (known as the Secondary School Vocational Diploma [SSVD] prior to 1998) was 72.2%, compared with 54.4% in 1990-1991. The success rate for long vocational programs has not increased much since the mid-1980s, but data on long vocational programs concerned only the youth sector. If only full-time students[3] are considered, progress is more evident. As noted earlier, the proportion of graduates among students enrolled for the last time in 2005-2006 was 85.9%, compared with 56.3% for students who completed their studies in 1980-1981.

However, if we consider all school leavers without taking into account the sector or whether enrollment is full-time or part-time, the proportion of diplomas 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%, and it rose to 64.3% in 2005-2006.

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 spend more time in general education before being admitted into vocational training. General education graduates still have higher success rates in vocational training than students who do not already have a diploma. This explains in large part the higher success rate observed for all school leavers in recent years.

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 and 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 for female students. However, when only the overall graduation rate by gender is considered, 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 2005-2006, the proportions were 72.8% and 58.2%, respectively.

In 2005-2006, the success rate for male and female students in programs leading to a DVS was 70.4% and 74.6%, 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. The diplomas 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 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.*

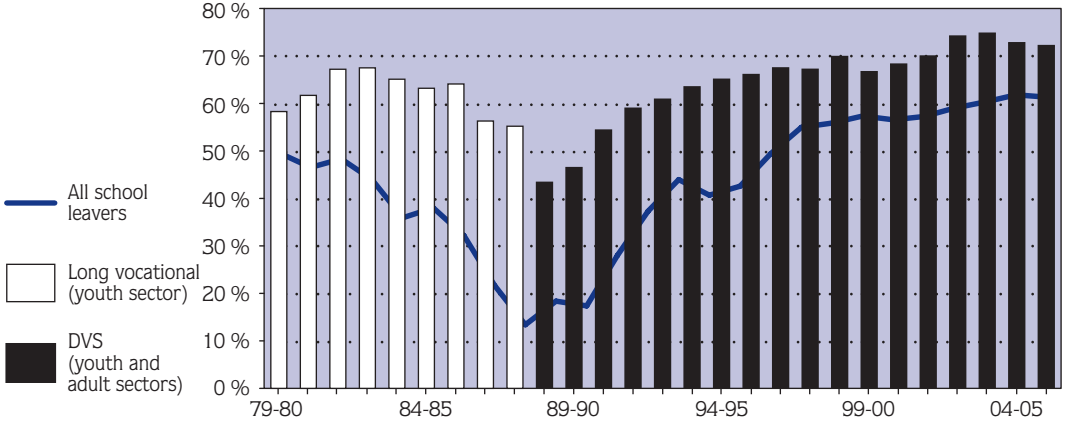
Table 3.2
Proportion of students leaving secondary vocational training with a diploma,[1] by gender, category and last year of enrollment (%)

	1980-1981	1985-1986	1990-1991	1995-1996	1999-2000	2004-2005	2005-2006[e]
Male							
Long vocational or DVS[2]	57.1	58.3	60.0	67.7	63.9	71.0	70.4
Full-time[3]	51.8	51.4	81.1	79.5	81.6	84.7	85.2
All male school leavers	48.3	28.7	21.7	46.2	50.7	54.6	58.2
Female							
Long vocational or DVS[2]	65.5	69.5	50.3	64.5	70.2	75.2	74.6
Full-time[3]	61.3	62.0	80.0	78.3	82.4	86.9	86.8
All female school leavers	45.2	36.2	39.3	54.0	65.7	72.1	72.8
Total							
Long vocational or DVS[2]	61.7	64.1	54.4	66.1	66.6	72.8	72.2
Full-time[3]	56.3	56.6	80.6	78.9	82.0	85.7	85.9
All school leavers	46.6	32.1	27.9	49.5	56.6	61.5	64.3

e: Estimates

1. *All secondary school diplomas are taken into account.*
2. *Figures for 1980-1981 and 1985-1986 cover enrollment in long vocational programs only in the youth sector. After 1988-1989, figures take into account DVSs in the youth and adult sectors.*
3. *Students enrolled for 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 Pre-University Programs in Regular College Education[1]

Of the students in pre-university programs who left regular college education at the end of 2005-2006, 72.2% earned a Diploma of College Studies (DCS). In the past two decades, this graduation rate has fluctuated between 63.9% and 73.3%. The success rate has increased 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 able to enroll in college.

Women tend to do better than men in pre-university programs, and the gap has grown over the years. In 1980-1981, the proportion of women finishing their pre-university education with a DCS surpassed that of men by 4.0 percentage points. In 2005-2006, the difference was 14.6 percentage points in favour of women (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 2005-2006, it was 74.7%. Students arriving from technical programs had markedly lower success rates. Given that since 1994-1995 some graduates have also begun in Explorations programs, the success rate 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 54.4% in 2005-2006.

In theory, it takes two years to obtain a DCS in a pre-university program, but very 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) reached 44.9% in 2005-2006 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 the pre-university DCSs are obtained within five years of the start of college studies; in 2005-2006, the corresponding success rate was 73.5%.

Of the students in pre-university education completing their studies in 2005-2006, 72.2% graduated with a DCS; this figure has increased by 2.9 percentage points since 1999-2000.

1. *Success in pre-university programs in regular college education is measured here by the proportion of new graduates among all students in pre-university programs in regular college education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are counted, 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 college education, gender, type of initial program, and time elapsed[1] since initial enrollment (%)

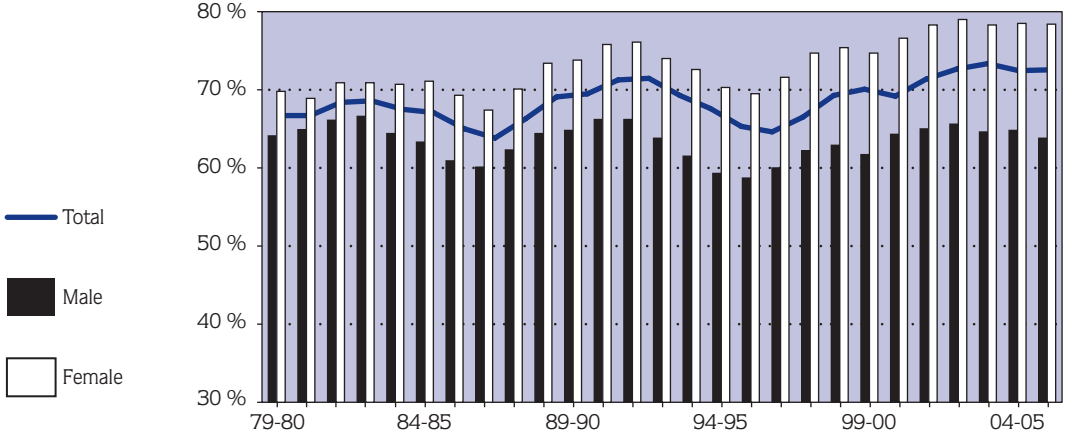
	1980-1981	1990-1991	1995-1996	1999-2000	2004-2005	2005-2006[e]
Male and female						
Same type of initial program						
2 years or less[1]	N/A	40.5	36.6	42.6	44.6	44.9
5 years or less[1]	N/A	70.8	65.2	70.0	73.4	73.5
All durations	N/A	72.0	66.5	71.3	74.8	74.7
Other type of initial program[2]						
All durations	N/A	61.3	47.5	53.7	57.3	54.4
All types of initial programs—all durations						
Male and female	66.8	71.4	64.7	69.3	72.7	72.2
Male	64.9	66.2	58.7	61.7	64.8	63.8
Female	68.8	75.8	69.5	74.7	78.5	78.4

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 college education (%)



3.4 Success in Technical Programs in Regular College Education[1]

Of the students in regular college education who left technical programs at the end of 2005-2006, 61.6% earned a Diploma of College Studies (DCS). Over the past two decades, this graduation rate has fluctuated between 52.7% and 63.6%.

In this area, women still do better than men. The gender gap was at its greatest (17.1 percentage points) in 1997-1998 and narrowed by 2.7 percentage points in 2005-2006, when the success rate for women was 67.8% compared with 53.4% for men, a difference of 14.4 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 difference between the sexes with respect to graduation rates (see Section 5.5).

When the type of initial college program is taken into account, in 2005-2006, the success rate was slightly higher than the average for students who began their studies in technical programs. 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 were 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 very 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 33.3% in 2005-2006 for all students who began in technical programs. If all technical training graduates are considered, regardless of the program in which they were initially enrolled, obviously their success rate for three-year completion will be slightly lower because students who transfer spend more time in school. Generally, a higher proportion of technical DCSs are obtained within five years of the start of college studies; in 2005-2006, the corresponding success rate was 54.0%.

Of the students in technical programs completing their studies in 2005-2006, 61.6% earned a DCS; this percentage has increased slightly in recent years.

1. *Success in technical programs in regular college education is measured here by the proportion of new graduates among all students in technical programs in regular college education who leave programs leading to a DCS, with or without a diploma. DCSs of all types are counted, 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 college education, gender, type of initial program, and time elapsed since initial enrollment[1] (%)

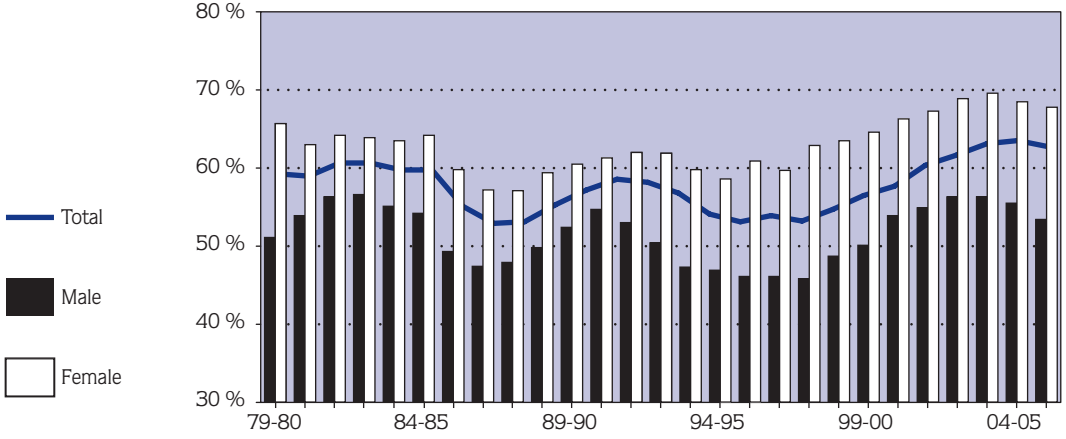
	1980-1981	1990-1991	1995-1996	1999-2000	2004-2005	2005-2006[e]
Male and female						
Same type of initial program						
3 years or less[1]	N/A	29.6	26.8	31.6	34.3	33.3
5 years or less[1]	N/A	51.1	47.8	52.4	55.9	54.0
All durations	N/A	56.6	53.1	57.6	62.7	61.3
Other type of initial program[2]						
All durations	N/A	64.4	55.7	57.8	62.9	62.1
All types of initial programs – all durations						
Male and female	59.0	58.6	53.9	57.7	62.8	61.6
Male	53.9	54.7	46.1	50.1	55.5	53.4
Female	63.0	61.3	60.9	64.6	68.5	67.8

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 left 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 college education (%)



3.5 Duration of Studies in Regular College 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 have studied for an average of 2.4 years. For those who leave without a diploma, the total duration of studies is still an average of 1.5 years. The average duration of studies, whether students leave with or without a diploma, is 2.2 years.[2] For most students, that is, those who began their college studies directly in pre-university programs, the corresponding durations are similar or are 0.1 years less. Students who transferred 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 2.2 years. Given the success rate (see Section 3.4), students leaving technical programs study for 3.2 years. Here too, those students who enrolled in technical programs right from the beginning of their college studies leave in a shorter time: those leaving with a DCS do so in 3.5 years and those leaving without a diploma do so after 1.8 years. However, students who had initially enrolled in pre-university programs (who have a higher success rate) 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 status upon leaving. In pre-university education, female graduates, like women who leave their studies before obtaining a diploma, do so sooner (0.1 years) than men. This difference disappears, 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. The same effect can be observed in technical training, where female graduates study 0.1 years less than their male counterparts, while women who leave their studies before obtaining a diploma spend the same amount of time in school as men (average of 2.2 years).

On average, a DCS in pre-university education is obtained after 2.4 years equivalent to full-time 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 2001-2002 to 2005-2006). 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 full-time terms 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 explains why 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

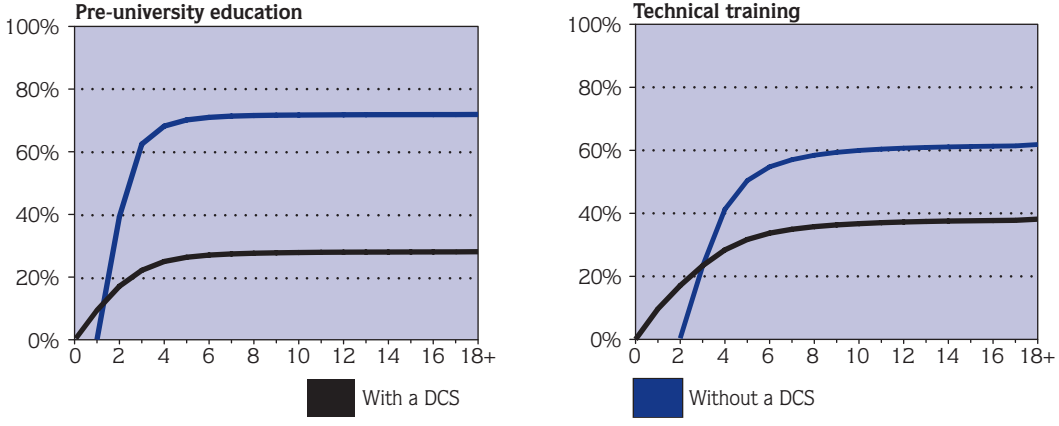
Average number of years[1] of study completed before leaving regular college education (average for all college leavers after 2001-2002), by gender and type of program enrolled in at the start and finish of the studies

	With Diploma		Without Diploma[2]		Total	
	Pre-university education	Technical training	Pre-university education	Technical training	Pre-university education	Technical training
Male	2.5	3.9	1.6	2.3	2.2	3.2
Female	2.4	3.8	1.5	2.1	2.2	3.3
Total[3]	**2.4**	**3.9**	**1.5**	**2.2**	**2.2**	**3.2**
Type of initial program						
Same	2.3	3.5	1.4	1.8	2.1	2.9
Different[3]	3.2	4.5	2.1	2.9	2.7	3.9

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 2001-2002 and 2005-2006, 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 Programs[1]

At the end of 2005-2006, 68.5% of students leaving a bachelor's program earned their degree. In the 20-year period observed, the graduation rate 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 to 6.7 percentage points between 1987-1988 and 2005-2006, with a maximum gap of 7.7 percentage points in 1996-1997. In the last year observed, 71.4% of female students who left a bachelor's program did so with a degree, compared with 64.7% of their male counterparts. This phenomenon, coupled with the fact that more women than men enroll in bachelor's programs (see Section 2.9), explains the gender gap with respect to graduation rates (see Section 5.6).

Graduates of bachelor's programs have studied for an average of 6.6 full-time terms, or for 8.9 terms if full-time or part-time status is not taken into account.[2] Those who leave without a degree study an average of 2.5 terms, or slightly more than one year, full-time. For all students leaving bachelor's programs, the average duration of studies is 7.3 terms, 5.2 of which are full-time.

Differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. Whether women obtain a bachelor's degree or give up their studies without a degree, they do so sooner than men do. Women who obtain a bachelor's degree spend 0.3 fewer terms in full-time studies than 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 difference is not as pronounced, because more women than men study part-time. For all students leaving bachelor's programs, the gender difference is less evident, mainly because more women than men obtain a degree, which raises the average duration of studies for women overall.

Of the students leaving a bachelor's program at the end of 2005-2006, more than two thirds (68.5%) earned a 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 years following the last year of enrollment.*

2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.2 to 2.5 terms. For those who leave without a degree, the duration of part-time studies is from 1.7 to 2.0 terms. For all school leavers, the duration of part-time studies varies from 2.0 to 2.4 terms.*

Table 3.6a
Proportion of students graduating from a bachelor's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2003-2004	2004-2005	2005-2006[e]
Male	55.5	59.7	61.7	63.7	64.3	64.7
Female	56.2	63.1	69.0	70.4	70.3	71.4
Total	**55.9**	**61.5**	**65.9**	**67.6**	**67.8**	**68.5**

e: Estimates

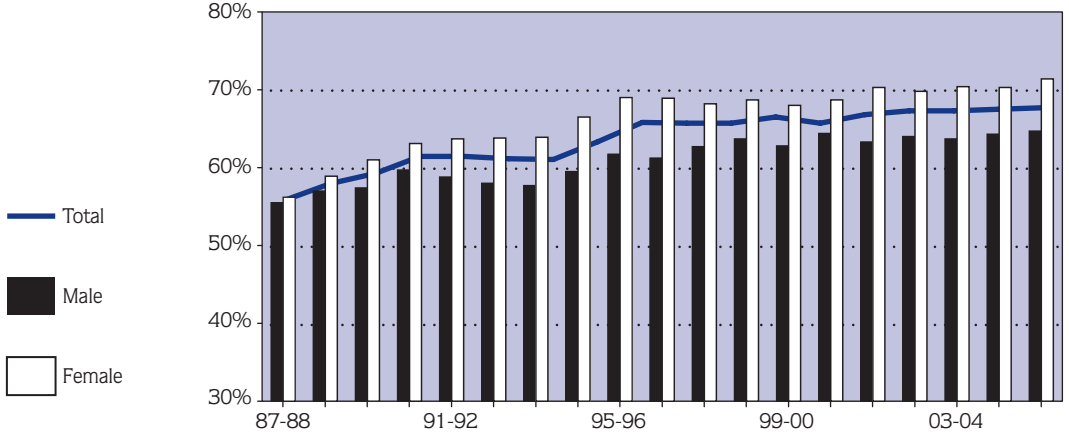
Table 3.6b
Average number of terms completed before leaving a bachelor's program (average for all leavers after 2000-2001), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	6.8	9.1	2.7	4.4	5.3	7.3
Female	6.5	8.7	2.3	4.3	5.1	7.3
Total	**6.6**	**8.9**	**2.5**	**4.3**	**5.2**	**7.3**

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 graduating from a bachelor's program, by gender and last year of enrollment (%)



3.7 Success and Duration of Studies in Master's Programs[1]

At the end of 2005-2006, 73.0% of students leaving a master's program earned their degree. This is a gain of 16.9 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 men. In 2005-2006, 73.7% of women leaving a master's program did so with a degree, for an increase of 18.7 percentage points since 1987-1988. The corresponding increase for men was 15.4 percentage points; 72.4% of men leaving a master's program did so with a degree in 2005-2006. This phenomenon, coupled with the fact that more women than men enroll in master's programs (see Section 2.9), explains the gender gap with respect to graduation rates (see Section 5.6).

Graduates of master's programs are enrolled for an average of 6.7 terms, regardless of whether they study on a full-time or part-time basis.[2] On average, students spend 4.2 terms in full-time studies. The total average duration of studies for students who leave without a degree is 4.6 terms, whether full-time or part-time. For all students leaving master's programs, the average duration of studies is 6.1 terms, 3.6 of which are full-time. The duration of studies referred to here is the actual duration and is not consistent 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 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.

Differences in the duration of studies are apparent in the figures for men and women, and according to the attendance status upon leaving. 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 100 students leaving a master's program at the end of 2005-2006, 73 earned a 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.*
2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.8 to 3.5 terms. For those who leave without a degree, the duration of part-time studies is from 2.4 to 3.0 terms. For all school leavers, the duration of part-time studies varies from 2.7 to 3.3 terms.*

Table 3.7a
Proportion of students graduating from a master's program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2003-2004	2004-2005[e]	2005-2006[e]
Male	57.0	64.4	63.7	69.3	71.4	72.4
Female	55.0	64.5	67.5	73.2	72.6	73.7
Total	**56.1**	**64.5**	**65.6**	**71.2**	**72.0**	**73.0**

e: Estimates

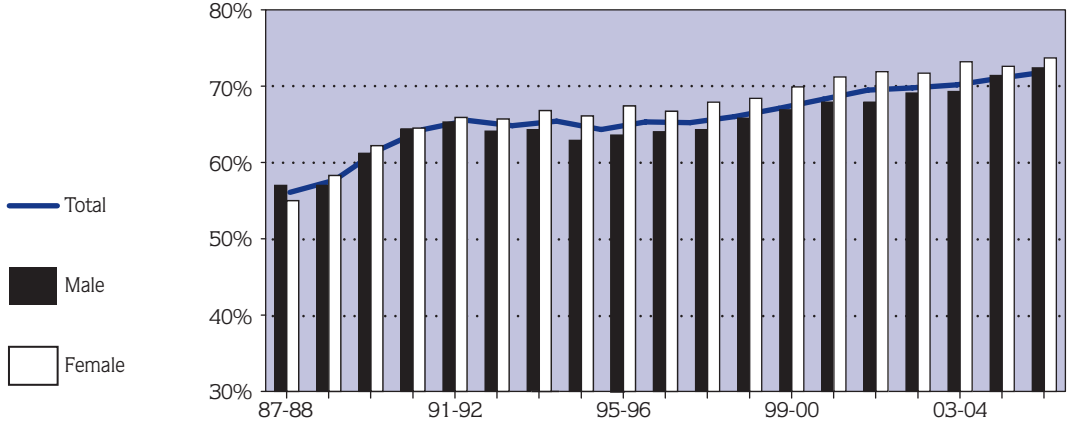
Table 3.7b
Average number of terms completed before leaving a master's program (average for all leavers after 2000-2001), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	4.0	6.6	2.2	4.5	3.4	5.9
Female	4.4	6.9	2.2	4.8	3.7	6.3
Total	**4.2**	**6.7**	**2.2**	**4.6**	**3.6**	**6.1**

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 graduating from a master's program, by gender and last year of enrollment (%)



3.8 Success and Duration of Studies in Doctoral Programs[1]

At the end of 2005-2006, 57.4% of students leaving a doctoral program earned their degree. Since 1987-1988, this proportion has increased by 8.7 percentage points, but has also dropped from its high of 58.1% in 1996-1997.

Although traditionally fewer women than men in doctoral programs have obtained their degree, in 2000-2001, for the first time, more women graduated from doctoral programs than their male counterparts. Of the women enrolled in 2005-2006 who left doctoral programs, 57.8% earned their degree, for an increase of 17.5 percentage points compared with 20 years earlier. For men, the graduation rate increased by 4.0 percentage points during the same period, and the proportion of male candidates who completed their studies in 2005-2006 with a degree was 57.1%, or 0.7 percentage points less than for female candidates. For women, success rates have been steadily rising, while for men, they have been in decline since 1995-1996. This phenomenon offsets the fact that more men than women enroll in doctoral programs (see Section 2.9), but there are still more men than women who obtain doctoral degrees (see Section 5.6).

Graduates of doctoral programs are enrolled for an average of 16 terms, regardless of whether they study on a full-time or part-time basis.[2] On average, students spend 14.1 terms in full-time studies. Those who leave without a degree study for 8.8 terms, whether full-time or part-time. For students overall, whether they leave a doctoral program with or without a degree, they do so after 12.7 terms, of which 10.9 are full-time. The duration of studies referred to here is the actual duration and is not consistent 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 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 men and women, and according to the attendance status upon leaving. Contrary to what was observed at the college level and 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 leaving a doctoral program at the end of 2005-2006, 57.4% earned their degree, on average after 16 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 post-graduate program leading to a doctorate. 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.*

2. *A portion of the studies is done part-time and is added to the average duration of full-time studies. For graduates, the duration of part-time studies varies from 2.4 to 5.0 terms. For those who leave without a degree, the duration of part-time studies is from 2.3 to 3.0 terms. For all school leavers, the duration of part-time studies varies from 2.4 to 4.0 terms.*

Table 3.8a
Proportion of students graduating from a doctoral program, by gender and last year of enrollment (%)

	1987-1988	1990-1991	1995-1996	2003-2004	2004-2005	2005-2006[e]
Male	53.1	55.5	60.9	55.4	55.3	57.1
Female	40.3	46.7	48.4	54.6	56.5	57.8
Total	**48.7**	**52.3**	**56.3**	**55.0**	**55.8**	**57.4**

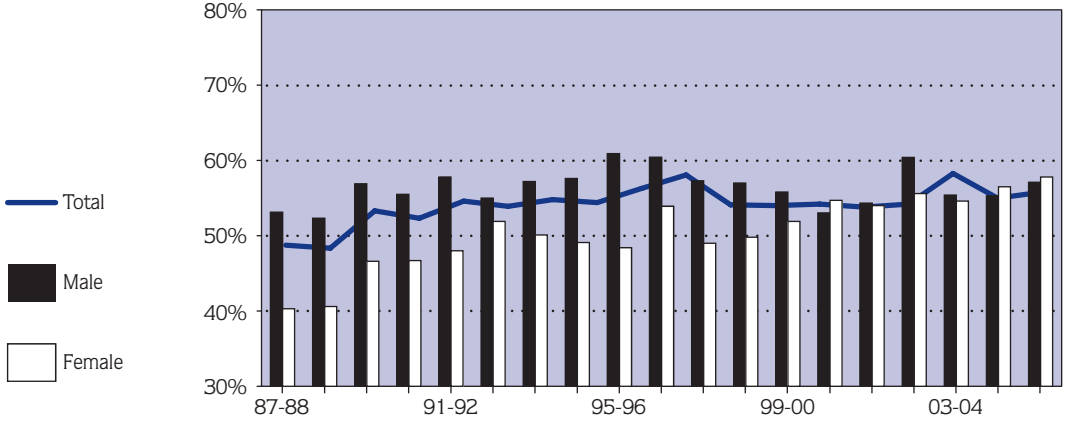
e: Estimates

Table 3.8b
Average number of terms completed before leaving a doctoral program (average for all leavers after 2000-2001), by gender

	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	13.9	15.4	7.1	8.7	10.7	12.3
Female	14.4	16.7	7.2	9.0	11.1	13.1
Total	**14.1**	**16.0**	**7.2**	**8.8**	**10.9**	**12.7**

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 graduating from a doctoral program, 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 V for purposes of certification. The average mark for the June 2007 examinations was 73.2%,[1] and the success rate was 84.4%.

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 the results obtained on uniform examinations. The slight difference may be because of the higher dropout rate among male students, for it is usually the weaker students who leave school before graduation.

The average mark obtained by students in private schools was 80.4%, 9 percentage points higher than the average mark obtained in the public system (71.4%). The success rate was 81.8% in the public system, compared with 95.0% in the private system. One of the factors likely to explain these differences[2] is that private schools can impose selection criteria for admitting students.

Students who received instruction in French obtained slightly better results on the examinations than students who studied in English. The average mark of students studying in French was 2 percentage points higher than that of students studying in English; the success rate of students studying in French was 2.4 percentage points higher than that of students studying in English.

The best results were obtained in Secondary V English, second language, and the poorest, in Secondary V mathematics. The success rate was 88.8% for the Secondary V French, language of instruction, examination and 93.6% 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 little difference.

The success rate on the Ministère's June 2007 secondary school uniform examinations was 84.4%. Overall, female students performed better than male students.

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.*

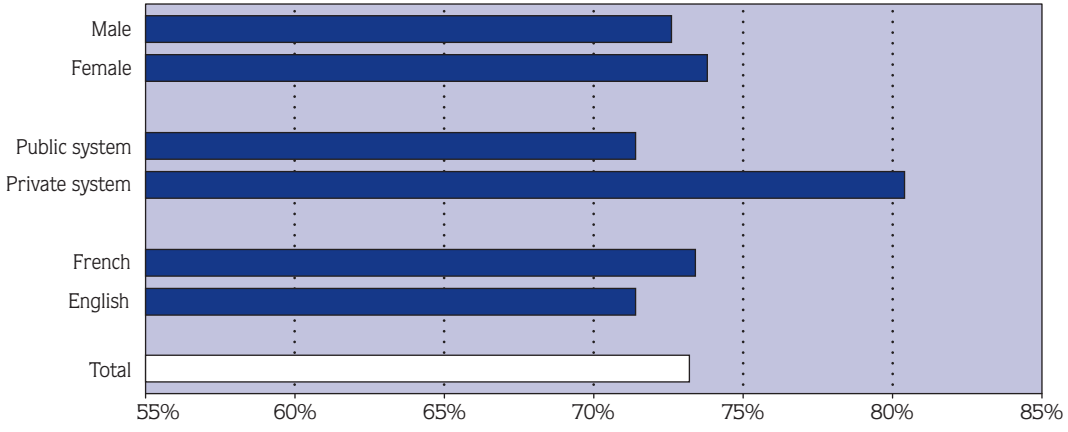
2. *"The performance disadvantage observed in public schools largely disappeared after other school factors were taken into consideration. . . . In other words, after taking the effect of other school characteristics into consideration, including school average parental SES, public school attendance was associated with higher individual performance." See* 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), p. 44.*

Table 4.1
Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 2007 (%)

	Average	Success Rate
Male	72.6	83.2
Female	73.8	85.4
Public system[1]	71.4	81.8
Private system	80.4	95.0
Language of instruction: French	73.4	84.8
Language of instruction: English	71.4	82.4
English, language of instruction (Secondary V)	73.4	93.6
English, second language (Secondary V)	78.4	90.2
French, language of instruction (Secondary V)	72.6	88.8
French, second language (Secondary V)	72.0	85.4
History (Secondary IV)	76.4	89.4
Physical Science 416 (Secondary IV)	71.0	78.4
Mathematics 436 (Secondary IV)	69.6	78.0
Mathematics 514 (Secondary V)	64.4	69.2
Total	**73.2**	**84.4**

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 2007 (%)



4.2 Regional Disparities in Secondary School Examination Results – Youth Sector

Five administrative regions recorded higher averages and success rates than the overall provincial results on the Ministère de l'Éducation, du Loisir et du Sport's June 2007 uniform examinations.[1] These regions are Capitale-Nationale, Estrie, Montréal, Montérégie and Bas-Saint-Laurent. Ranked among the lowest were Gaspésie–Îles-de-la Madeleine, Côte-Nord and Nord-du-Québec.

Regional disparities changed little from 2006 to 2007; however, the difference between the highest and lowest average marks rose from 16.6 to 7.8 percentage points, while the gap in the success rates dropped from 26.2 to 13.8 percentage points. These differences are attributable to a significant increase 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 2007 uniform examinations showed a difference of 13.8 percentage points between the success rates of students in the region with the best performance (86.4%) and in the region with the poorest performance (72.6%).

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.*

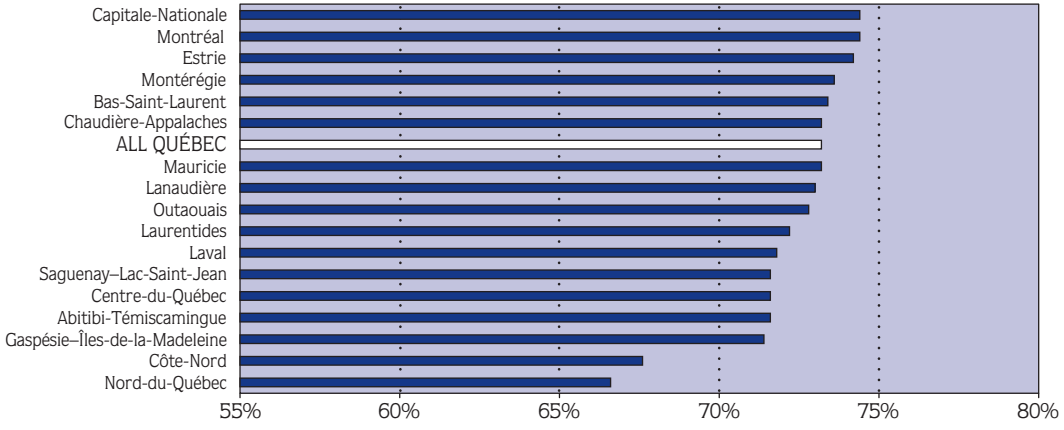
Table 4.2

Results on secondary school uniform examinations in the youth sector, by school administrative region: June 2007 (%)

School Administrative Region	Average	Success Rate
Gaspésie–Îles-de-la-Madeleine	71.4	82.6
Bas-Saint-Laurent	73.4	84.8
Saguenay–Lac-Saint-Jean	71.6	82.4
Capitale-Nationale	74.4	86.4
Chaudière-Appalaches	73.2	85.4
Mauricie	73.2	84.8
Centre-du-Québec	71.6	82.4
Estrie	74.2	86.4
Montérégie	73.6	85.2
Montréal	74.4	85.2
Laval	71.8	82.6
Lanaudière	73.0	85.2
Laurentides	72.2	82.4
Outaouais	72.8	82.6
Abitibi-Témiscamingue	71.6	83.0
Côte-Nord	67.6	72.6
Nord-du-Québec	66.6	75.0
Total	**73.2**	**84.4**

Graph 4.2

Average marks on secondary school uniform examinations in the youth sector, by school administrative region: June 2007 (%)



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

Students who took the June 2007 Secondary V French, language of instruction, examination obtained an average mark of 72.6%;[1] the success rate was 88.8%.

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; however, they were 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 of 73.0% and a success rate of 84.0%.

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 outperformed male students on the French examination. The average for female students was 5.6 percentage points above that for male students, and the success rate was 9 percentage points in favour of female students. In written production, the female students' average was 5.4 percentage points higher than the male students' and their success rate was 9.2 percentage points higher.

The average obtained by private school students surpassed that of public school students by 5.8 percentage points. In the public system, 13.6% of the students failed the ministry examination, compared with 3.2% in the private system. In written production, students in private schools scored 6.8 percentage points higher than students in the public system. Compared with the June 2006 examination, the success rate for the written production component went from 79.4% to 84.0%. For the examination as a whole, the success rate dropped from 86.6% to 88.8%.

The success rate on the Ministère's June 2007 Secondary V French, language of instruction, examination was 88.8%. Female students obtained significantly higher marks than male students.

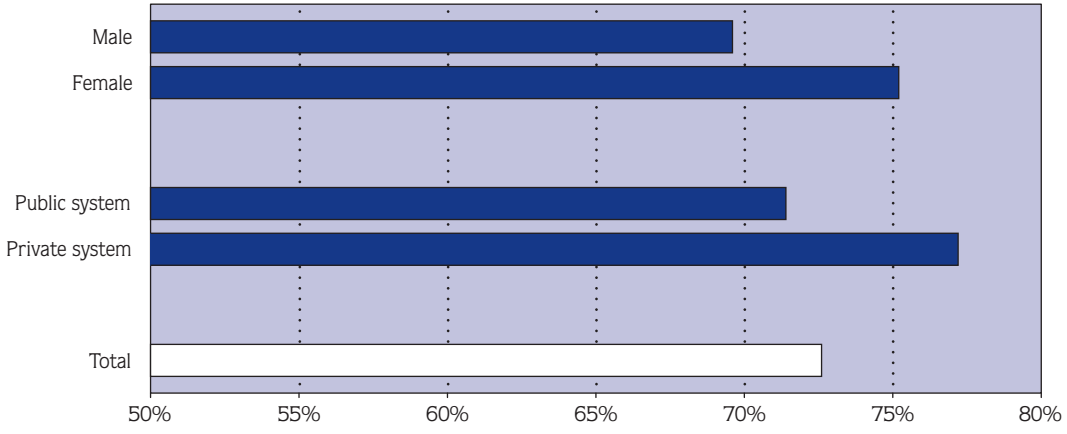
1. *Results are calculated on the basis of the students' final marks. The final mark is made up, in equal proportions, of the student's result on the uniform examination and the "moderated" school mark. "Moderation" is a procedure that renders the marks assigned by different schools comparable by using 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 2007 (%)

	Written Production		Overall Results	
	Average	Success Rate	Average	Success Rate
Male	70.0	79.0	69.6	83.8
Female	75.4	88.2	75.2	92.8
Public system[1]	71.4	81.4	71.4	86.4
Private system	78.2	93.2	77.2	96.8
Total	**73.0**	**84.0**	**72.6**	**88.8**

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 2007 (%)



4.4 Reading Achievement of 10-Year-Olds

The Progress in International Reading Literacy Study (PIRLS) is an initiative of the International Association for the Evaluation of Educational Achievement (IEA). The assessment focuses on 10 year-olds, i.e. in Québec, students who are in the second year of Elementary Cycle Two.

Forty countries participated in PIRLS 2006. Canada was represented by five provinces: British Columbia, Alberta, Ontario, Québec and Nova Scotia. Canadian results are published by province only. Ontario and Québec also participated in the first assessment in 2001. The results presented here are for the 2006 assessment, in which 185 Québec classes–3 748 students–participated.[1]

The PIRLS assessment focuses on three aspects of reading literacy: processes of comprehension (literary experience), purposes for reading (acquisition and use of information), and reading behaviours and attitudes. The first two aspects were assessed using a reading test, while a questionnaire administered to the students addressed the third aspect. The test included various questions dealing with texts in order to assess the two purposes for reading: reading for literary experience (narrative fiction) and reading to acquire and use information (texts, lists, tables, graphs, diagrams, etc.). The results of the test are published for each of these two aspects of the assessment, as well as for the test as a whole. These results were standardized around an international average set at 500 points and including a standard deviation of 100.

Québec students obtained a standardized average of 533 points. This overall score is comparable to the one obtained on the PIRLS 2001 assessment (537 points). However, Québec ranked lower in 2006 than in 2001, given much stronger performances by certain countries, such as the Russian Federation, Hong Kong and Singapore, and new participating countries, some of which scored higher than Québec, such as Luxembourg, Belgium (Flemish), Denmark, Austria and Chinese Taipei.

Girls outperformed boys in the PIRLS 2006 reading assessment in every one of the participating countries. The average difference between boys and girls was 17 percentage points. Depending on the country, the difference generally varied between 3 and 37 percentage points. One country, Kuwait, stands out, with a difference of 67 points. In Québec, the difference was 13 points.

The concept of reading enjoyment and strategies used by teachers to help students develop reading literacy are the two most important factors in students' performance on the PIRLS reading comprehension test.

In Québec, 10-year-old students obtained a standardized average of 533 points in the PIRLS 2006 reading assessment. This result is comparable to the one obtained in 2001.

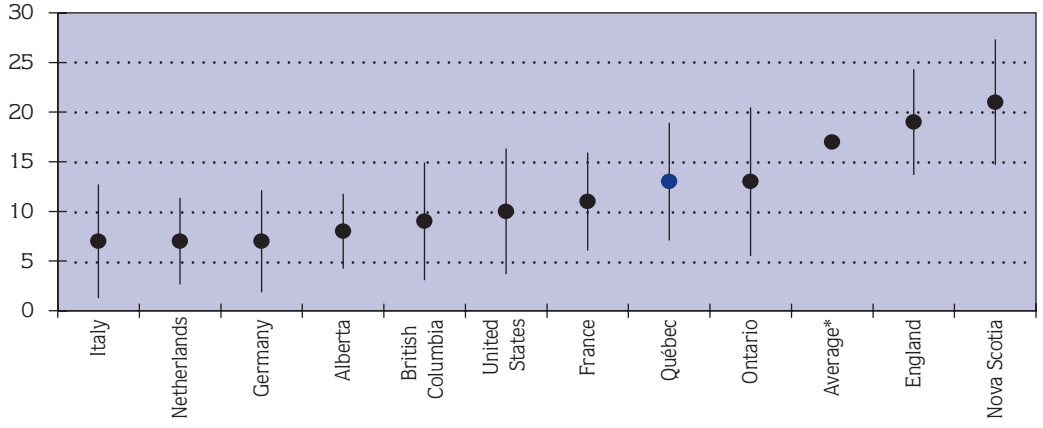
1. *For a more complete and detailed report on Québec results, see the following document: Ministère de l'Éducation, du Loisir et du Sport, Direction de la sanction des études, Progress in International Reading Literacy Study (PIRLS) 2006, Results for 10 year-old students in Québec, 2007, available on the following Web site: <www.mels.gouv.qc.ca/sanction/pirls.htm>.*

Table 4.4
Results of 10-year-old students in the PIRLS 2006 reading assessment, for the G7 countries and participating Canadian provinces

	Reading – Overall score			Literary experience			Acquisition and use of information		
	Average	Standard error		Average	Standard error		Average	Standard error	
Alberta	560	2.4	+	561	2.7	+	556	2.4	+
British Columbia	558	2.6	+	559	2.7	+	554	2.7	+
Ontario	555	2.7	+	555	3.0	+	552	3.0	+
Italy	551	2.9	+	551	3.3	+	549	2.9	+
Germany	548	2.2	+	549	2.2	+	544	2.3	+
Netherlands	547	1.5	+	545	1.8	+	548	1.6	+
Nova Scotia	542	2.2	=	543	2.4	+	539	2.4	=
United States	540	3.5	=	541	3.6	=	537	3.4	=
England	539	2.6	=	539	2.6	=	537	2.5	=
Québec	533	2.8		529	2.8		533	2.7	
France	522	2.1	-	516	2.4	-	526	2.1	=
Average*	500	0.0	-	500	0.0	-	500	0.0	-

+ : significantly higher than the Québec average
= : not significantly different from the Québec average
- : significantly lower than the Québec average
** Standardized average for all of the participating countries*

Graph 4.4
Differences (averages and confidence intervals of 95%) between male and female students on the overall mark for the G7 countries and participating provinces



4.5 Scientific Literacy in 15-Year-Olds

In the spring of 2006, 3 695 15-year-old Québec students from 159 secondary schools participated in the Programme for International Student Assessment (PISA), organized by the member countries of the Organisation for Economic Co-operation and Development (OECD).[1]

Launched in 2000, PISA assesses the reading literacy, mathematical literacy and scientific literacy of 15-year-olds. Science was the major domain of PISA 2006.

Québec students scored an average of 531 points on the science test, ranking 4th among the 57 participating countries and 4th among the Canadian provinces, behind Alberta, British Columbia and Ontario. Only Finland and Alberta did significantly better than Québec on the test. Québec students scored 12 points higher in 2006 than in 2003,[2] although this difference is not significant. Québec also ranked higher in 2006, going from 11th to 4th place.

The differences observed between girls and boys on the PISA 2006 test were not significant in most participating countries. This was the case in Canada and Québec, where boys did 4 and 8 percentage points better, respectively, than girls. In 9 participating countries, boys scored significantly higher than girls on the combined science scale (in particular, the United Kingdom, Luxembourg and Denmark). In 12 countries, girls scored significantly higher than boys (notably, among the OECD countries, Turkey and Greece).

In Québec, students in French schools scored an average 532 points, significantly higher (13 points higher) than their counterparts in English schools. However, Québec is the province in which the difference between the two language groups is smallest. In the other provinces that sampled students in both English and French schools (Nova Scotia, New Brunswick, Ontario and Manitoba), students in English schools did significantly better than their counterparts in French schools, scoring between 29 and 46 points higher.

Students whose parents have some postsecondary education generally score significantly higher in science than those whose parents do not (see Graph 4.5).

Québec 15-year-olds scored an average of 531 points on the PISA science test held in the spring of 2006, ranking 4th among the 57 participating countries and 4th among the 10 participating provinces.

1. A more complete report on the results of Québec students on the 2006 PISA tests are available on the Ministère's Web site at the following address: <http://www.mels.gouv.qc.ca/sanction/pisa.htm>. For information about the performance of students in other Canadian provinces, see the following document: The Performance of Canada's Youth in Science, Reading and Mathematics: 2006 First Results for Canadians Aged 15, *which is available on the following Web site: <http://stacan.ca/bsolc/english/bsolc?catno=81-590-X2007001>.*

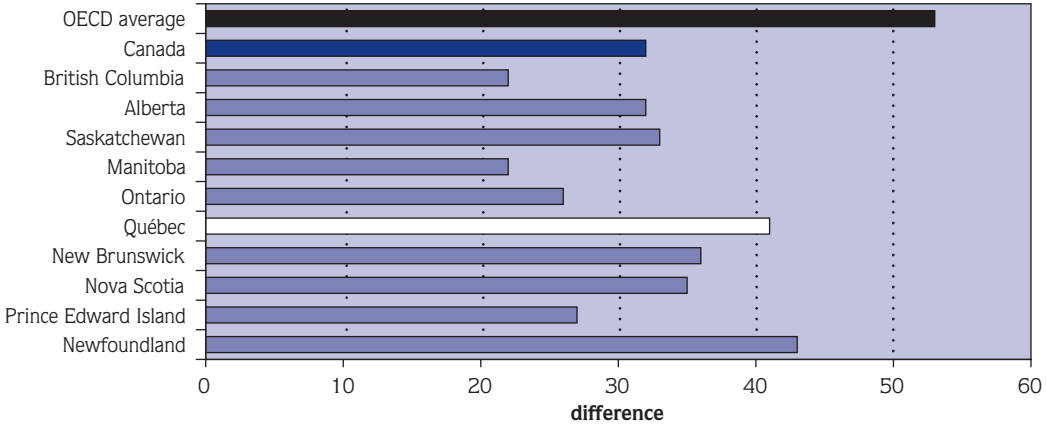
2. Students' results on the 2003 PISA tests are presented in the 2005 edition of the Education Indicators, which is available on the Ministère's Web site at the following address: <http://www.mels.gouv.qc.ca/STAT/indic05/indic05F/if2005.pdf>.

Table 4.5
Scores and standard errors[1] on the PISA 2006 science test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Finland	563	2.0	Alberta	550	3.8
Hong Kong–China	542	2.5	British Columbia	539	4.7
Canada	**534**	**2.0**	Ontario	537	4.2
Chinese Taipei	532	3.6	**Québec**	**531**	**4.2**
Estonia	531	2.5	Newfoundland and Labrador	526	2.5
Japan	531	3.4	Manitoba	523	3.2
New Zealand	530	2.7	Nova Scotia	520	2.5
Australia	527	2.3	Saskatchewan	517	3.6
Netherlands	525	2.7	Prince Edward Island	509	2.7
Korea	522	3.4	New Brunswick	506	2.3

1. Standard errors make it possible to calculate a confidence interval. An interval of 95% corresponds to approximately two standard errors on either side of the average for a normal population distribution.

Graph 4.5
Differences on the PISA 2006 science test between students whose parents have some postsecondary education and those whose parents have no postsecondary education, by province, and Canadian and OECD averages



4.6 Mathematical Literacy in 15-Year-Olds

In the spring of 2006, 3 695 15-year-old Québec students from 159 secondary schools participated in the Programme for International Student Assessment (PISA), organized by the member countries of the Organisation for Economic Co-operation and Development (OECD).[1]

Launched in 2000, PISA assesses the reading literacy, mathematical literacy and scientific literacy of 15-year-olds. Science was the major domain of PISA 2006.

Fifteen-year-old Québec students scored an average of 540 on the mathematics test, ranking 5th among the 57 participating countries and 1st among the 10 Canadian provinces. No country scored significantly higher than Québec.

Male students did better on the PISA 2006 mathematics test than female students in most of the participating countries and in all of the Canadian provinces. Specifically, in Québec, female students scored 13 points lower than their male counterparts (533 compared with 547). This difference is significant (see Graph 4.6).

Students in French schools in Québec scored an average of 541 points, significantly higher than their counterparts in English schools, who scored 530 points. In the other provinces that sampled students from both English and French schools (Nova Scotia, New Brunswick, Ontario and Manitoba), students in English schools scored higher than their counterparts in French schools. However, the differences were significant only in Ontario and New Brunswick.

Québec 15-year-olds scored an average of 540 points on the PISA mathematics test held in the spring of 2006, ranking 5th among the 57 participating countries and 1st among the 10 participating provinces.

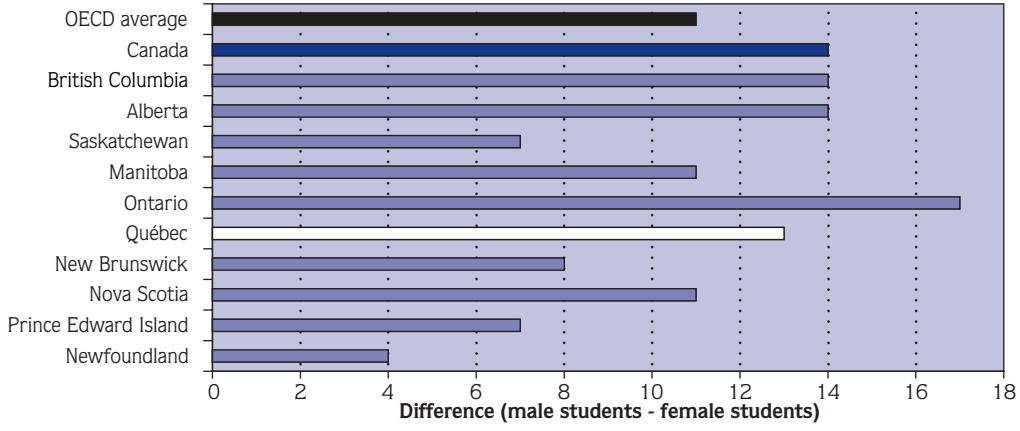
1. *The results of Québec students on the 2006 PISA tests are available on the Ministère's Web site at the following address: <http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*

Table 4.6
Scores and standard errors[1] on the PISA 2006 mathematics test for 15 year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Chinese Taipei	549	4.1	**Québec**	**540**	**4.2**
Finland	548	2.3	Alberta	530	3.8
China–Hong Kong	547	2.7	Ontario	526	3.7
Korea	547	3.8	British Columbia	523	4.4
Netherlands	531	2.6	Manitoba	521	3.3
Switzerland	530	3.2	Newfoundland and Labrador	507	2.5
Canada	**527**	**2.0**	Saskatchewan	507	3.3
China–Macao	525	1.3	New Brunswick	506	2.1
Liechtenstein	525	4.2	Nova Scotia	506	2.3
Japan	523	3.3	Prince Edward Island	501	2.3

1. Standard errors make it possible to calculate a confidence interval. An interval of 95% corresponds to approximately two standard errors on either side of the average for a normal population distribution.

Graph 4.6
Differences on the PISA 2006 mathematics test between male and female students, by province, and Canadian and OECD averages



4.7 Reading Literacy in 15-Year-Olds

In the spring of 2006, 3 695 15-year-old Québec students from 159 secondary schools participated in the Programme for International Student Assessment (PISA), organized by the member countries of the Organisation for Economic Co-operation and development (OECD).[1]

Launched in 2000, PISA assesses the reading literacy, mathematical literacy and scientific literacy of 15-year-olds. Science was the major domain of PISA 2006.

In reading literacy, Québec students ranked 4th among the 57 participating countries and 4th among the 10 Canadian provinces. Only the Republic of Korea and Finland scored significantly higher than Québec (see Table 4.7). The results of Québec students on the PISA 2006 reading test confirm those observed in 2000, when reading was the major domain, and those observed in 2003, when it was a minor domain.

Female students did significantly better on the reading literacy test than male students in every country and Canadian province that participated in PISA 2006. In Québec, female students scored an average of 28 points higher than their male counterparts (536 compared with 508). The difference between male and female students' performance in Québec is lower than that observed in Canada as a whole. In some provinces, the difference is considerable, in particular in Newfoundland (59 points) but also in Saskatchewan and Prince Edward Island (52 and 51 points, respectively) (see Graph 4.7).

Students in French schools in Québec scored an average of 522 points, barely–and therefore not significantly–higher than their counterparts in English schools, who scored 520 points. In the other provinces that sampled students from both English and French schools (Nova Scotia, New Brunswick, Ontario and Manitoba), students in English schools scored significantly higher (between 45 and 64 points higher) than their counterparts in French schools.

Québec 15-year-olds scored an average of 522 points on the PISA reading test in the spring of 2006, ranking 4th among the 57 participating countries and 4th among the 10 participating provinces.

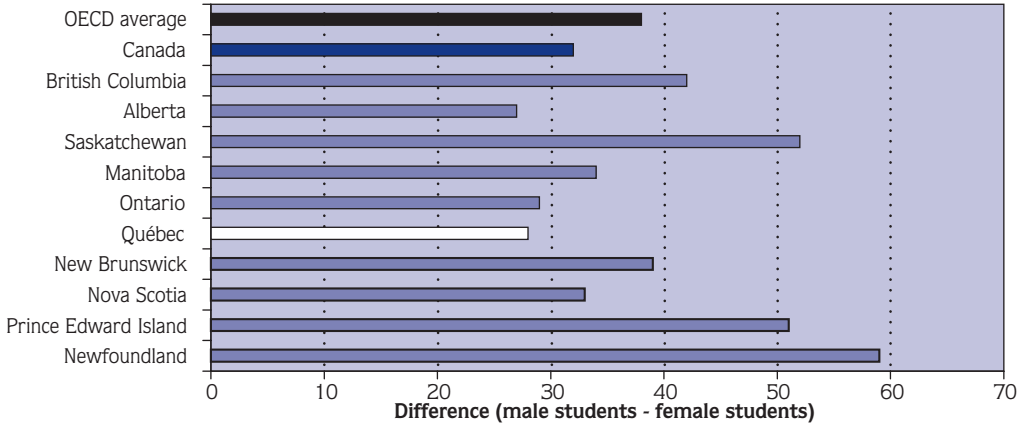
1. *The results of Québec students on the 2006 PISA tests are available on the Ministère's Web site at the following address: <http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*

Table 4.7
Scores and standard errors1 on the PISA 2006 reading test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Korea	556	3.8	Alberta	535	4.2
Finland	547	2.1	Ontario	534	4.6
China–Hong Kong	536	2.4	British Columbia	528	5.7
Canada	**527**	**2.4**	**Québec**	**522**	**5.0**
New Zealand	521	3.0	Manitoba	516	3.5
Ireland	517	3.5	Newfoundland and Labrador	514	3.2
Australia	513	2.1	Saskatchewan	507	4.2
Liechtenstein	510	3.9	Nova Scotia	505	3.5
Poland	508	2.8	New Brunswick	497	2.3
Netherlands	507	2.9	Prince Edward Island	497	2.8

1. Standard errors make it possible to calculate a confidence interval. An interval of 95% corresponds to approximately two standard errors on either side of the average for a normal population distribution.

Graph 4.7
Differences on the PISA 2006 reading test between male and female students, by province, and Canadian and OECD averages



4.8 The 39th WorldSkills Competition and the 13th Canadian Skills Competition

WorldSkills' mission is "to promote, through the cooperative actions of Members, a worldwide awareness of the essential contribution that skills and high standards or competence make to the achievement of economic success and individual fulfillment" (<http://www.worldskills.org/site/public/?pageid=3>). To this end, the WorldSkills Competition is held every two years. Québec competitors receive their training at vocational training centres and colleges in Québec. Montréal hosted the WorldSkills Competition in 1999. The honour falls to Calgary in 2009. In 2007, the 39th WorldSkills Competition was held in Shizuoka, Japan.

> "Over its 55-year history, WorldSkills International (formerly known as the "Skill Olympics") has come to symbolize the pinnacle of excellence in vocational training. Every two years hundreds of young skilled people, accompanied by their teachers and trainers, gather together from around the world to compete before the public in the skills of their various trades and test themselves against demanding international standards. They represent the best of their peers drawn from regional and national skill competitions held currently in 49 countries/regions.
>
> The experience and results of all the competitions provide valuable feedback both to the individuals and the systems and enterprises in which they are being trained. For some it is recognition for outstanding achievement, for others it provides the motivation and knowledge to aspire to higher standards. For the onlookers it is a revealing experience to see highly competent young tradespeople in action. The competitions are particularly effective in the context of providing positive career role models for school aged youngsters."
>
> (Source: <http://www.worldskills.org/site/public/?pageid=156>)

More than 850 finalists from 45 countries participated in WorldSkills 2007 in 45 different fields. Canada competed in 25 fields. The Canadian delegation was made up of 27 competitors, 18 of whom were from Québec (see Table 4.8).

Québec brought home more medals from WorldSkills 2007 than ever before: two gold, one silver and two bronze. The gold medals were won in cooking and welding, the others in electrical installations, bakery and ladies dressmaking. In addition, four Québec competitors won "medallions for excellence" for having earned an above-average number of points.

One Quebecker's outstanding performance earned him a gold medal for cooking, as well as the "Best of Nation" award for Canada and the Albert Vidal Award for having scored the highest number of points among all competitors.

The Canadian Skills Competition is held every year. Winners of this competition go on to the WorldSkills Competition. In 2007, the 13th Canadian Skills Competition was held in Saskatoon, Saskatchewan. Some 550 young people from every province and territory competed in 42 different fields. The Québec delegation was made up of 37 participants, who competed in 21 fields. It brought home 21 of the 172 medals, including 10 gold.

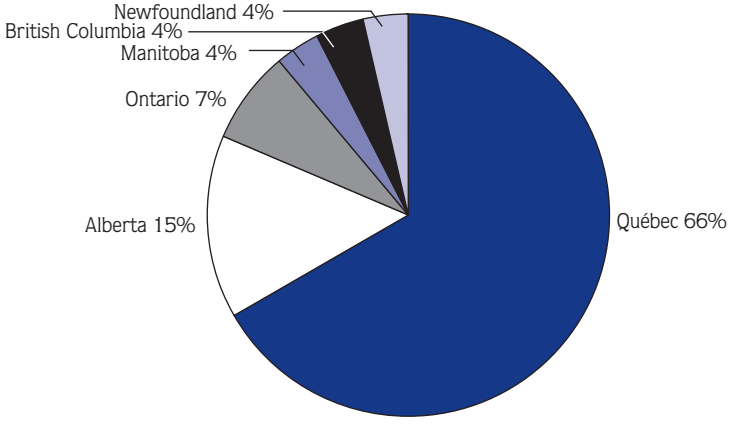
(For more information, visit <www.competencesquebec.com> and <www.skillscanada.com>.)

Québec brought home more medals from WorldSkills 2007 than ever before: two gold, one silver and two bronze.

Table 4.8
Participation of the Canadian team and medals won, WorldSkills Competition, 1999 to 2007

	Canadian competitors	Medals won by Canadians	Quebeckers on the Canadian team	Medals won by Quebeckers
Montréal, Canada–1999	39	3	25	2
Seoul, South Korea–2001	32	2	21	2
St. Gallen, Switzerland–2003	29	2	15	2
Helsinki, Finland–2005	28	5	15	3
Shizuoka, Japan–2007	27	6	18	5

Graph 4.8
Provincial distribution of the composition of the Canadian team competing at WorldSkills 2007



4.9 Ministerial Examination of College French

In 2006-2007, 41 178 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 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 2006-2007, the overall success rate for the ministerial examination of college French was 83.3%, compared with 81.1% in 2005-2006.

The best results were obtained in Organization of response, on which 35.3% of students received an A. Good results were also obtained in Comprehension and insight, on which 52.3% of students received a B. The results for the third criterion, Expression, were the lowest: only 39.9% of students passed this criterion, 85.6% of them with a C.

In 2006-2007, the success rate for women was 86.2%, compared with 79.0% for men. These rates were higher than those observed in 2005-2006, which were 83.8% and 76.7%, respectively.

Students enrolled in pre-university programs leading to a DCS recorded a success rate of 90.7%, while students enrolled in technical programs leading to a DCS achieved a success rate of 75.7%.[2] In the latter case, the results were 3.1 percentage points higher than those observed in 2005-2006. Although this is a considerable increase, the results have still not risen to levels prior to 2005-2006. Similarly, the performance of students enrolled in pre-university programs is slightly higher than that observed the previous year. Moreover, the success rate of students enrolled in programs other than those leading to a DCS (in programs leading to an ACS, for example) has improved, reaching 67.6% in 2006-2007. This is the highest success rate in the past seven years.

Of the college students who took the ministerial examination of college French in 2006-2007, 83.3% passed.

1. *This requirement was postponed until January 1, 2003, for students who have passed at least one language and literature course in the old system. Students may retake the examination until they pass it.*
2. *The average mark in secondary school of students enrolled in pre-university education who wrote the ministerial examination of college French in 2006-2007 was 77.7%; it was 67.9% for those enrolled in technical training. This difference in performance may help explain the gap between the results of students enrolled in the different types of college programs.*

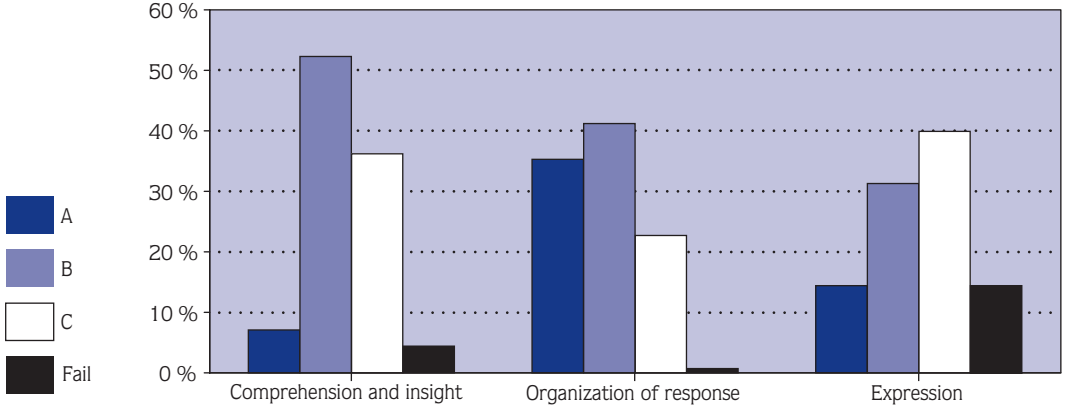
Table 4.9a
Success rate for the ministerial examination of college French, by gender and type of program (%)

	Success Rate			
	2003-2004	2004-2005	2005-2006	2006-2007
Female	87.5	87.6	83.8	86.2
Male	80.5	80.2	76.7	79.0
Pre-university education (DCS)	91.4	91.6	89.1	90.7
Technical training (DCS)	78.5	77.6	72.6	75.7
Other programs	61.5	63.0	58.4	67.6
Overall examination	**84.7**	**84.7**	**81.1**	**83.3**

Table 4.9b
Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2006-2007 (%)

Criteria for the 2006-2007 examination	Distribution of students				Success Rate
	A	B	C	Fail	
Comprehension and insight	9.0	51.9	33.7	5.4	94.6
Organization of response	37.1	38.1	23.6	1.3	98.7
Expression	14.5	31.0	38.2	16.3	83.7

Graph 4.9
Distribution of students, by grade obtained on each criterion of the ministerial examination of college French, 2006-2007 (%)



5.1 Highest Diploma or Degree Earned

The main data pertaining to diplomas and degrees earned at the various levels of education appears in the diagram on student retention and is presented in more detail in the following sections. Organized in a different way,[1] this 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 2005-2006, graduation rates at the secondary and university levels rose rapidly for both men and women. During this period, the increase in the proportion of new graduates with bachelor's degrees (from 14.9% to 31.4%) was accompanied, at the other extreme, by a drop of almost two thirds in the proportion of those leaving school without a diploma (from 43.0% to 14.5%). This decline has resulted in a significant 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 27.2% in 2005-2006. This decline of 36 percentage points is reflected by increases of 16.5 percentage points in the proportion of graduates with a bachelor's degree and 19.6 percentage points in the proportion of holders of vocational or technical training diplomas (16.0 and 3.6 percentage points, respectively).

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. In 2006, one and a half times more women than men graduated with a bachelor's degree or with a college diploma in technical training (58.3% compared with 34.3%), while only one third as many women as men left school without a diploma (7% compared with 21%).

In 2005-2006, 72.9% 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 without mention of vocational specialty 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 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.*

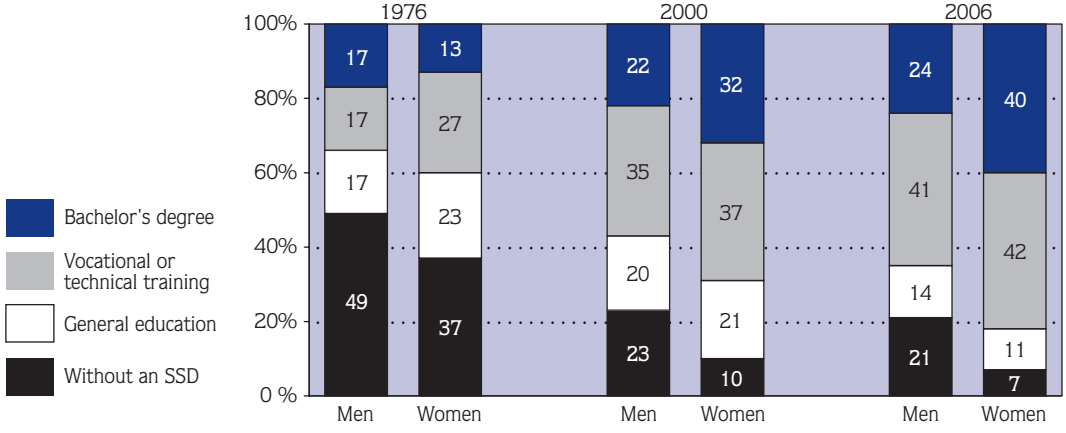
2. *This level of schooling is different from the level for the general population as indicated in the census, the latter being primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system. It also shows 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	1990-1991	1995-1996	2004-2005	2005-2006
Bachelor's degree[1]	14.9	19.0	23.6	29.0	30.2	31.4
College diploma in technical training[2]	7.4	11.2	10.4	11.2	11.3	11.0
Secondary vocational diploma[3]	14.5	17.7	13.7	19.4	29.1	30.5
General education (DCS or SSD)	20.2	31.3	29.1	28.6	14.8	12.7
No diploma	43.0	20.8	23.2	11.8	14.6	14.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1. *Figures for university are based on the calendar year in which the school year ends.*
2. *The diplomas considered here are the Diploma of College Studies (DCS) in technical training, the Attestation of College Studies (ACS) until 1984, 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. *The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS–known as the Secondary School Vocational Diploma [SSVD] prior to 1998), 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[1] in 2006-2007 was 85.1%. This rate is slightly lower than the one observed in the previous year (85.5% in 2005-2006).

In 2006-2007, for students in the youth sector and under 20 years of age in the adult sector in Québec, the probability of obtaining a secondary school diploma was 69%, one percentage point lower than the previous year. The Ministère's objective is to reach a rate of 85%.

The graduation rate discussed here applies mainly to general education. This section is primarily concerned with the first diplomas earned.[2] It is interesting to note that in 2006-2007, 86.8% of all the diplomas earned were first diplomas obtained in general education. This proportion was 97.1% if only diplomas obtained in the youth sector or by students under 20 years of age in the adult sector are considered.

The temporary slump in the graduation rate between 1986 and 1990 was largely due to the raising of the pass mark from 50% to 60%, which has made the diploma more valuable, yet more difficult to obtain. Students seem to have overcome this obstacle since 1989, and the graduation rate continued to rise for a number of years, although it has been dropping steadily since 1998-1999. Finally, since 2003-2004, the rate has been rising steadily to return to the levels observed in the mid-1990s.

The probability of graduating from secondary school is greater for female students than for male students. The gender gap was nearly 18 percentage points in 1989-1990 and close to 11 percentage points in 2006-2007.

The graduation rate for female students was above 90% between 1991-1992 and 1995-1996, and remained below this level after 1998-1999; it is once again above 90% since 2003-2004 (90.5%), reaching 90.8% in 2006-2007. For male students, it passed the 80% mark in 1995-1996, and stood at 79.6% in 2006-2007.

The dropout rate is the proportion of the population who would never earn a diploma 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, presented in this section. The dropout rate was 20.2% in 2002-2003; it was 14.9% in 2006-2007.

In 2006-2007, the probability of obtaining a first secondary school diploma in the youth or adult sector was 85.1%.

1. *The probability of obtaining a first secondary school diploma 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 is earned.*

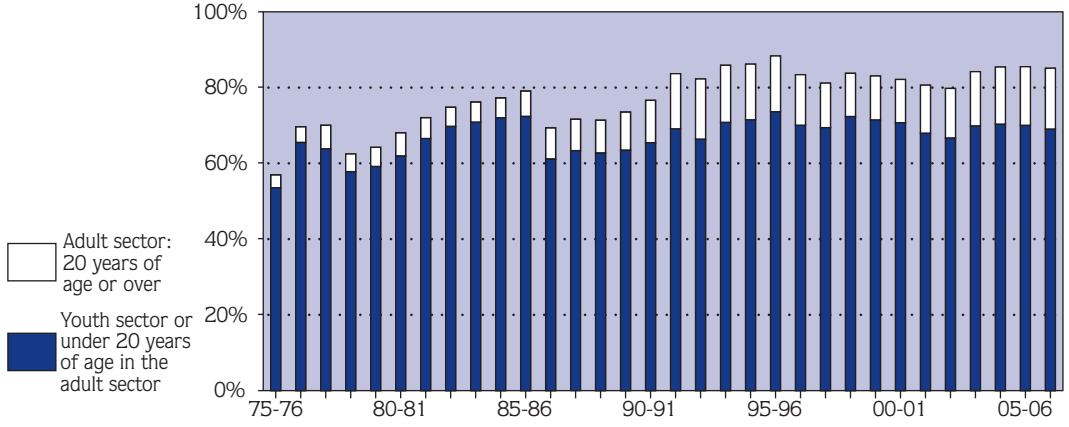
2. *Figures do not include the second or third vocational training diploma that a student may have earned, vocational training diplomas received after a general SSD, or SSDs obtained after a diploma in vocational training.*

Table 5.2
Probability of obtaining a secondary school diploma in either the youth or the adult sector, by gender (%)

	1975-1976	1985-1986	1995-1996	2004-2005	2005-2006	2006-2007[e]
Total	**57.0**	**79.1**	**88.3**	**85.4**	**85.5**	**85.1**
Adult sector: 20 years of age or over	3.4	6.7	14.7	15.1	15.5	16.1
Youth sector or under the age of 20 in the adult sector	53.5	72.4	73.6	70.3	70.0	69.0
Male	**51.1**	**73.1**	**81.8**	**79.1**	**78.5**	**79.6**
Adult sector: 20 years of age or over	2.9	6.0	14.6	15.3	15.6	16.1
Youth sector or under the age of 20 in the adult sector	48.2	67.1	67.3	63.8	63.0	63.5
Female	**63.0**	**85.4**	**95.2**	**92.0**	**92.7**	**90.8**
Adult sector: 20 years of age or over	3.9	7.5	14.9	15.0	15.4	16.1
Youth sector or under the age of 20 in the adult sector	59.1	78.0	80.3	77.1	77.3	74.7

e: Estimates

Graph 5.2
Probability of obtaining a secondary school diploma in either the youth or the adult sector (%)



5.3 Graduation From Secondary Vocational Training – Youth and Adult Sectors

Based on behaviours observed in 2006-2007, 29 out of 100 Quebeckers can expect to obtain a vocational training diploma[1] in secondary school.[2] This group includes 18 persons who already have a first Secondary School Diploma (SSD) in general education. Since 1997-1998, this proportion has been relatively stable (roughly 16 or 17). A high of 19 was reached in 2005-2006.

Moreover, the probability of obtaining a first secondary school diploma from the youth sector or before the age of 20 in the adult sector in vocational training was 2.2% in 2006-2007; this rate was higher than 16% in 1977-1978 and has been relatively stable since 1996-1997. Students in the youth sector or before the age of 20 in the adult sector who obtain a first secondary school diploma (69.0% in 2006-2007) are most likely to do so in general education (Section 5.2).

The very nature of vocational training diplomas 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 (31.7%) than for female students (23.2%).

The proportion of a generation of students obtaining a secondary school vocational training diploma was 29.2% in 2006-2007. This is the highest rate ever recorded.

1. *The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Diploma of Vocational Studies (DVS–known as the Secondary School Vocational Diploma [SSVD] prior to 1998), the Attestation of Vocational Specialization (AVS), the Attestation of Vocational Education (AVE) and other secondary school diplomas (SSDs) with mention of vocational specialty.*
2. *Refers to the probability of obtaining a first secondary school diploma. This rate is determined by grouping only the first secondary school diplomas 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.*

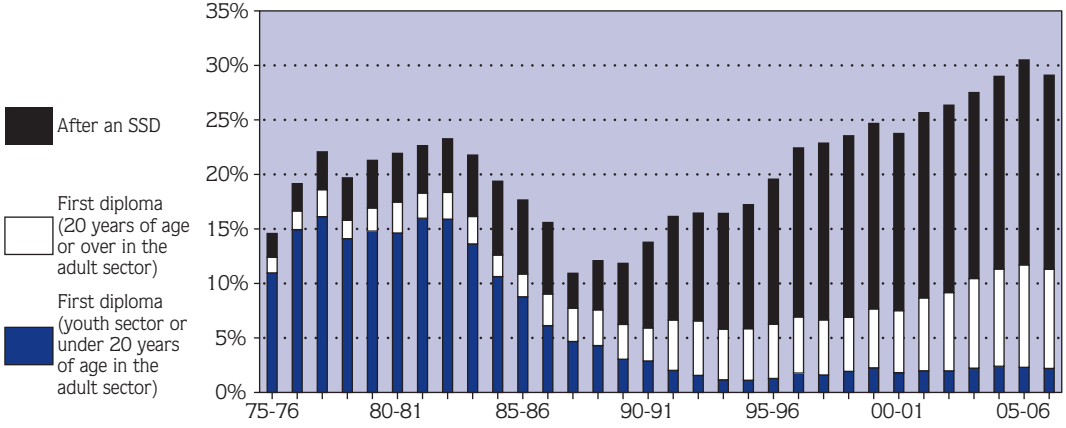
Table 5.3
Probability of obtaining a vocational training diploma, by sector, age and gender (%)

	1975-1976	1985-1986	1995-1996	2004-2005	2005-2006	2006-2007[e]
Total	**14.6**	**17.7**	**19.6**	**29.1**	**30.5**	**29.2**
Male	12.0	17.0	21.2	31.7	33.4	32.5
Female	17.2	18.4	17.9	26.3	27.5	25.7
First diploma	12.4	10.9	6.3	11.4	11.7	11.3
After an SSD[1]	2.2	6.8	13.3	17.7	18.8	17.8
Youth sector or before the age of 20 in the adult sector	**13.0**	**15.1**	**4.8**	**6.5**	**6.6**	**6.3**
First diploma	11.0	8.8	1.3	2.4	2.3	2.2
After an SSD[1]	2.1	6.4	3.5	4.0	4.3	4.0
Adult sector: 20 years of age or over	**1.5**	**2.5**	**14.8**	**22.6**	**23.9**	**22.9**
First diploma	1.4	2.1	5.0	8.9	9.4	9.1
After an SSD[1]	0.1	0.4	9.8	13.7	14.5	13.8

e: Estimates

1. SSD: Secondary School Diploma

Graph 5.3
Probability of obtaining a vocational training diploma, by sector and age (%)



5.4 Graduation From Secondary School in Québec and OECD Countries, 2005

In 2007, 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 2005.

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 out of a total population old enough, in theory, to have obtained a secondary school diploma. In 2005, the secondary school graduation rate (SSD) in Québec (89%) remained higher than the average for OECD countries.

Of the 23 OECD countries listed in the table,[2] 7 had higher secondary school graduation rates than Québec. Québec's rate was lower than that of Greece, Germany, Finland, Japan, Korea, Norway and Ireland, but higher than that of Poland, Denmark, the United Kingdom, Hungary, the Slovak Republic, Italy, Iceland, Sweden, Luxembourg, the United States, Spain, New Zealand, Turkey and Mexico.

Except for Korea, Switzerland and Turkey, where the secondary school graduation rate for male students is higher than that for female students, female students are more likely to graduate than male students. The greatest gender differences are observed in Iceland (24 percentage points), Norway and New Zealand (22 percentage points), Denmark (19 percentage points), Spain (15 percentage points) and Ireland (14 percentage points). Québec, with a difference of 13 percentage points, is among those places where female students are more likely to graduate than male students. In other countries, graduation rates among male and female students differ less (as seen in Table 5.4), for example, Japan.

The graduation rate observed for male students in Québec (83%) was higher than the OECD average for male students. The rate for female students in Québec was 96%, 9 percentage points higher than the OECD average for female students.

There are far more students in general education in Québec than there are in vocational training, and this holds true for both male and female students. With a probability of obtaining a diploma in general education of 78%, Québec ranks first among the OECD countries, with a rate 33 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 34%, while the average for the OECD countries is 48%. A number of countries obtained very good results in vocational training, including Ireland (100%), Finland (81%), the Czech Republic (70%), the Slovak Republic (70%) and Switzerland (69%).

The probability of obtaining a diploma in vocational training in Québec is only slightly higher for male students than for female students. It is the sector of activity that differs for female and male students.

In 2005, the probability of obtaining a secondary school diploma[1] in Québec was 89%, 7 percentage points higher than the OECD average.

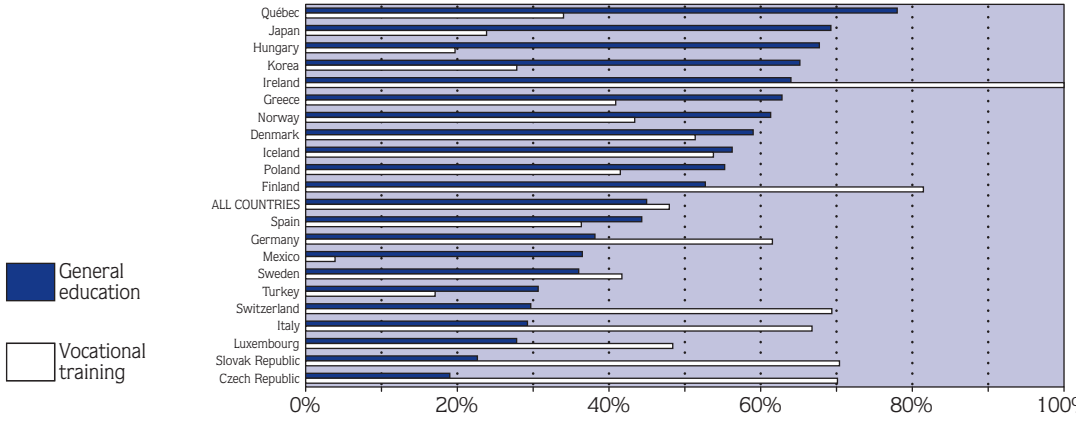
1. *For Québec, this rate was obtained by dividing the number of "first diplomas" awarded in 2005 by the number of 17-year-olds in Québec (the age at which a secondary school diploma is generally awarded in Québec).*
2. *The countries included in the table are those for which the OECD report provides 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, 2005 (%)

	Total (without double counting)			General education		Vocational training	
	M + F	Male	Female	M + F	Female	M + F	Female
Greece	102	99	106	63	71	41	36
Germany	100	98	102	38	43	62	59
Finland[1]	95	89	101	53	63	81	90
Japan	93	92	94	69	73	24	21
Korea	93	94	92	65	65	28	28
Norway	93	82	104	61	75	43	42
Ireland	91	84	98	64	68	100	100
Québec	**89**	**83**	**96**	**78**	**87**	**34**	**31**
Czech Republic	89	88	91	19	24	70	67
Switzerland	89	90	88	30	34	69	63
Poland	86	81	92	55	66	41	33
Denmark	86	77	96	59	70	51	58
United Kingdom	86	83	90	N/A	N/A	N/A	N/A
Hungary	84	81	87	68	75	20	15
Slovak Republic	84	81	86	23	28	70	66
Italy	82	80	83	29	38	67	60
Iceland	80	68	92	56	68	54	50
Sweden	78	74	81	36	42	42	39
Luxembourg	76	70	82	28	33	48	49
United States	76	70	82	N/A	N/A	N/A	N/A
Spain	72	65	80	44	53	36	39
New Zealand	72	61	83	N/A	N/A	N/A	N/A
Turkey	48	51	44	31	30	17	14
Mexico	40	37	44	36	40	4	4
OECD average	**82**	**78**	**87**	**45**	**51**	**48**	**47**

Source: OECD, Education at a Glance: OECD Indicators *(Paris, 2007, Table A2.1.*
N/A: Data not available. 1. Reference year: 2004

Graph 5.4
Probability of obtaining a secondary school diploma, general education and vocational training: Québec and OECD countries, 2005 (%)



5.5 Graduation From College

In 2005-2006, the proportion of a generation who could expect to obtain a first college diploma (all diplomas combined) was 48.4%. This is an increase of 26.2 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 39.6%, an increase of 18.6 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) when it became mandatory to declare ACSs in 2000. The proportion of a generation who are admitted to college (see Section 2.7) and the proportion of students who obtain a diploma upon leaving college (see Sections 3.3 and 3.4) also contribute to this result.

The probability of women obtaining a diploma was more than one and a half times higher than for men (60.1% compared with 37.2%). The gender gap grew steadily during the 1980s and 1990s. In 1975-1976, the probability of obtaining a college diploma[1] was only 2.7 percentage points higher for women than for men. Since then, the probability has continued to rise more sharply for women, and the gap is now 22.9 percentage points. In fact, in the past several years, it is virtually only among women that the probability of obtaining a DCS has grown.

The greatest growth has occurred with the pre-university DCS, as the probability of obtaining this type of diploma rose from 13.5% to 25.0% between 1975-1976 and 2005-2006, an increase of 11.5 percentage points, compared with 7.1 percentage points for the technical DCS over the same period. In the latter case, however, the increase has been greater, given that the rate doubled. Since 1995-1996, only in technical training did the probability of obtaining a diploma increase (1.1 percentage points), while it remained stable for a pre-university DCS.

For both types of programs, the number of women graduating between 1975-1976 and 2005-2006 exceeded the number of men, and the gender gap continued to widen. The probability of women obtaining a pre-university DCS increased by 19.2 percentage points, compared with 4.1 percentage points for men. On the other hand, for both men and women, the probability of obtaining a technical DCS grew more modestly (in absolute numbers), although the increase for men was more pronounced in technical training (5.2 percentage points) than in pre-university education (4.1 percentage points). Women were ahead of men by 4 percentage points in 1975-1976, and by 8.0 percentage points in 2005-2006.

The Ministère's objective is that 60% of Quebeckers obtain a DCS; in 2005-2006, the rate for a DCS was 39.6%, while it was 48.4% for all college diplomas combined, including the ACS.

By 2005-2006 the proportion of female Quebeckers who could expect to obtain a college diploma had risen by 20.8 percentage points since 1985-1986, compared with 7.5 percentage points for male Quebeckers.

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 (%)

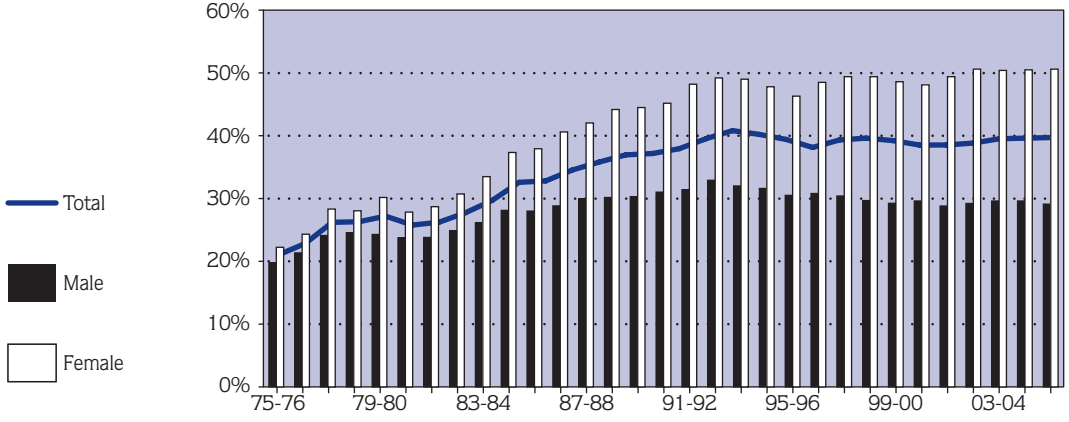
	1975-1976	1985-1986	1995-1996	2003-2004	2004-2005	2005-2006[e]
Male						
All diplomas[1]	20.8	29.7	31.7	38.3	37.9	37.2
DCS[2]	**19.8**	**28.0**	**30.5**	**29.6**	**29.6**	**29.1**
Pre-university education	14.3	18.7	19.4	17.6	18.1	18.4
Technical training	5.5	9.0	10.9	12.0	11.5	10.7
Female						
All diplomas[1]	23.5	39.3	47.4	60.4	60.1	60.1
DCS[2]	**22.2**	**37.9**	**46.3**	**50.4**	**50.5**	**50.6**
Pre-university education	12.7	23.6	29.8	31.1	31.5	31.9
Technical training	9.5	14.0	16.2	19.3	19.0	18.7
Total						
All diplomas[1]	22.2	34.4	39.4	49.1	48.7	48.4
DCS[2]	**21.0**	**32.8**	**38.2**	**39.7**	**39.8**	**39.6**
Pre-university education	13.5	21.1	24.5	24.2	24.7	25.0
Technical training	7.5	11.4	13.5	15.5	15.1	14.6

e: Estimates

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 vocational specialty.

Graph 5.5
Probability of obtaining a first college diploma (DCS), by gender (%)



5.6 Graduation From University[1]

Based on behaviours observed in 2006, 31.4% of Quebeckers can 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 similar and, since then, the increase in probability has been in women's favour. In 2006, the probability of obtaining a bachelor's degree was 39.6% for women and 23.6% for men, or an increase of 26.5 percentage points for women and 6.9 percentage points for men since 1976.

The Ministère's objective is a university graduation rate of 30% for Quebeckers. The current rate (31.4%) shows an increase despite a series of drops in university enrollment between 1992-1993 and 1997-1998 (see Section 2.9). The recovery of the university enrollment rate in the past several years has allowed the Ministère's objective to be attained.

With regard to obtaining a master's degree, the results have continued to increase and reached 8.9% for women and 9.3% for men. For both sexes, the rate of 9.1% represents more than triple the 1976 rate of 2.7%. An increase 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 disappeared in 2003, but could widen in favour of women, given the growing margin in earning a bachelor's degree. Since 1976, the situation of men and women has reversed; whereas the initial gap was 1.6 percentage points in favour of men, the probability of women obtaining a master's degree has climbed from 1.9% to 8.9%, an increase of 7 percentage points.

Doctorates are still only earned by a very small fraction (1.2%) of the population. This last phase in the education system is perhaps the only one in which men continue to outnumber women. Figures are, however, minimal for both sexes: 1.3% of men obtain a doctorate, compared with 1.0% 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.

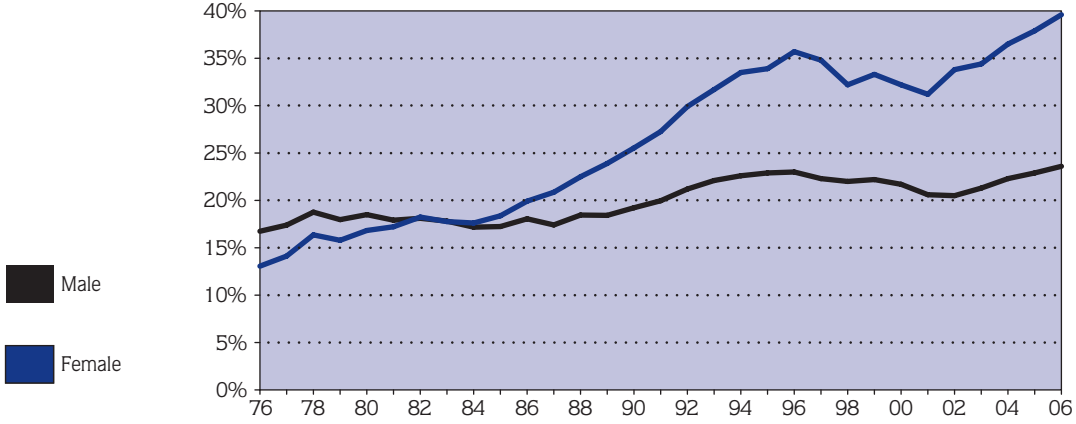
In 2006, the proportion of Quebeckers who could expect to obtain a bachelor's, master's or doctoral degree was 31.4%, 9.1% and 1.2%, respectively. These are the highest rates observed for these university degrees.

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 Quebeckers outside the province are not taken into account.*

Table 5.6
Probability of obtaining a university degree, by gender (%)

	1976	1986	1991	1996	2004	2005	2006
Bachelor's degree	**14.9**	**19.0**	**23.6**	**29.3**	**29.3**	**30.2**	**31.4**
Male	16.7	18.1	20.0	23.0	22.3	22.9	23.6
Female	13.1	19.9	27.3	35.7	36.5	37.9	39.6
Master's degree	**2.7**	**3.9**	**4.4**	**6.1**	**8.9**	**9.2**	**9.1**
Male	3.5	4.4	4.4	5.8	9.0	9.4	9.3
Female	1.9	3.4	4.3	6.3	8.8	9.1	8.9
Doctorate	**0.4**	**0.5**	**0.6**	**0.9**	**1.1**	**1.2**	**1.2**
Male	0.6	0.7	0.9	1.2	1.3	1.3	1.3
Female	0.2	0.3	0.4	0.6	1.0	1.1	1.0

Graph 5.6
Probability of obtaining a bachelor's degree, by gender (%)



5.7 University Degrees by Field of Study[1]

In 2006 the largest proportion (27.3%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in the humanities, followed by business administration (23.7%), engineering and architecture (11.6%), health sciences (10.4%), education (9.3%), and natural sciences (6.9%). Social sciences represented 4.5%, mathematics and computer science, 3.6% and law, 2.7%.

The majority of degree holders are women (57.9%). In 2006, women earned 82.3% of the degrees in education, 79.9% in social sciences, 77.9% in health sciences, 66.9% in the humanities, 61.5% in law and 57.2% in natural sciences. Men earned 77.8% of the degrees in engineering and architecture,[2] 77.0% in mathematics and computer science, and 52.5% in business administration.

The number of degrees issued by universities is experiencing an upward trend, going from 31 404 in 1990, to 43 397 in 2005 and 44 169 in 2006, which represents an increase of 1.8% between these two years. This increase, however, hides differences from one field of study to another. For example, the number of degrees in health sciences and law increased by 11.5%, while the number of degrees in the humanities increased by 1.9%. Between 2005 and 2006, the number of degrees awarded in mathematics and computer science, engineering and architecture, education and social sciences decreased by 3.0%, 1.8%, 1.3% and 1.2%, respectively.

Between 2000 and 2006, the distribution of the degrees awarded according to field of study has also changed. For example, the number of degrees in business administration increased (by 2.7 percentage points), as did the number of degrees in engineering and architecture (by 1.3 percentage points) and health sciences (by 2.0 percentage points). At the other extreme, the number of degrees awarded in education dropped (by 2.1 percentage points), as did the number of degrees in natural sciences (by 1.6 percentage points). The proportion of degrees in the humanities, law, mathematics and computer science, and social sciences all dropped by approximately 0.6 percentage points.

The distribution of university degrees awarded by field of study changed little between 2005 and 2006. Between 2000 and 2006, the proportion of degrees awarded in business administration went from 21.0% to 23.7% of all diplomas. In health sciences, the proportion went from 8.3% to 10.4%. During the same period, the proportion in education dropped from 11.4% to 9.3% and in natural sciences, from 8.5% to 6.9%.

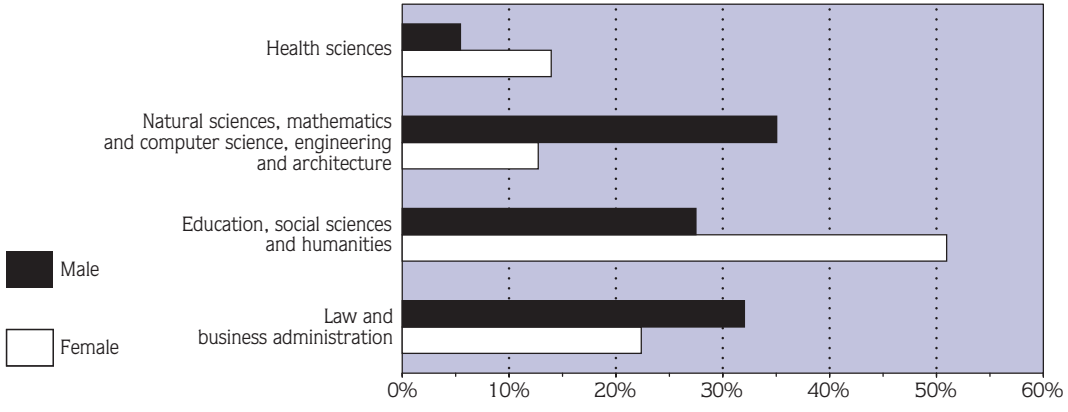
1. *This refers to students who earned a first university degree (bachelor's, master's or doctoral degree) during the year in question.*
2. *The proportion of degrees in engineering and architecture earned by women rose from 16.8% in 1990 to 22.2% in 2006.*

Table 5.7
Distribution of university degrees, by field of study and gender[1] (%)

	1990	2000	2002	2003	2004	2005	2006
Health sciences	8.7	8.3	8.6	8.3	9.1	9.5	10.4
Natural sciences	7.7	8.5	7.7	7.3	7.1	7.0	6.9
Mathematics and computer science	3.9	4.3	5.0	4.7	4.3	3.8	3.6
Engineering and architecture	11.0	10.2	10.4	11.2	11.7	12.0	11.6
Law	3.5	3.4	3.1	2.4	2.6	2.5	2.7
Business administration	22.8	21.0	22.6	23.7	23.5	23.8	23.7
Education	11.1	11.4	11.3	10.7	10.2	9.6	9.3
Humanities	26.3	27.8	26.7	26.9	26.8	27.3	27.3
Social sciences	4.9	5.0	4.6	4.7	4.7	4.6	4.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Female	53.4	56.7	58.4	57.4	57.6	57.6	57.9
Male	46.6	43.3	41.6	42.6	42.4	42.4	42.1

1. Only holders of bachelor's, master's or doctoral degrees who obtained their degree in the calendar year in question are considered.

Graph 5.7
Distribution of university degrees, by field of study and gender: 2006 (%)



6.1 Changes in Educational Attainment in the Labour Force

Since the early 1990s, there has been a significant increase in the level of education of the labour force in Québec and in Canada as a whole.[1] The data presented in this section is from Statistics Canada. The levels of education considered here correspond to the highest level of education attained by employed workers in a given year.[2] It should be noted, however, that these levels do not necessarily correspond to employment requirements.

In 2007,[3] although there were 712 000 more jobs than in 1990, this 22.7% growth in employment did not benefit all workers. Those with only a secondary school diploma or who did not finish secondary school had fewer jobs, while those who successfully completed postsecondary or university studies made gains. Thus, employed individuals with a university education were more numerous (by 457 000) in 2007 than in 1990, for an increase of 109.6%. Those with a postsecondary diploma held 649 000 more jobs (+ 71.2%) in 2007 than in 1990. Those with only some postsecondary studies were more likely to hold jobs in 2007 than in 1990 (8 000 more), for an increase of 3.1%. In short, individuals with some higher education held 1 106 000 more jobs in 2007 than in 1990, which by far exceeds the total increase in the number of jobs during this period (712 000).

The situation was very different for those without a secondary school diploma or with only a secondary education. In all, these individuals held 403 000 fewer jobs in 2007 than in 1990. Thus, in 2007, those with only a secondary school diploma held 18 000 fewer jobs (- 2.8%). The situation is even more dismal for individuals without a secondary school diploma: from 1990 to 2007, they held 385 000 fewer jobs, a decrease of 41.8%.

The increase of 87 000 jobs in 2007 over 2006 benefited graduates with a postsecondary diploma or a university degree.

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 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 than in an earlier year.*
3. *The figure for 2007 is the average of the first 11 months of that year.*

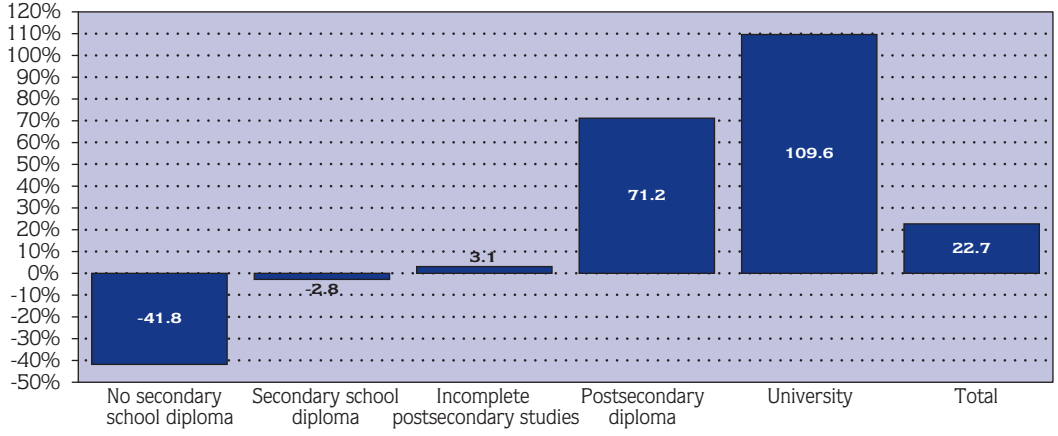
Table 6.1
Employment trends in Québec, by level of education[1] (in thousands)

Year	No secondary school diploma	Secondary school diploma	Some postsecondary studies	Postsecondary diploma	University degree	Total
1990	922	632	258	912	417	3 140
1995	722	549	229	1 077	559	3 135
2000	633	598	277	1 242	655	3 403
2001	613	585	282	1 270	691	3 440
2002	625	596	290	1 367	693	3 570
2003	599	581	316	1 413	719	3 629
2004	592	585	312	1 437	755	3 681
2005	548	608	280	1 482	799	3 717
2006	551	602	261	1 527	824	3 765
2007	537	614	266	1 561	874	3 852
Change from 1990 to 2007	- 41.8%	- 2.8%	3.1%	71.2%	109.6%	22.7%

Source: Statistics Canada

1. See notes at the bottom of the text.

Graph 6.1
Employment trends in Québec from 1990 to 2007, by level of education (%)



6.2 Labour Force Participation by Level of Education[1]

As indicated in Section 6.1, in recent years, there has been a rapid increase in the level of education of employees. In 1990, 29.4% of employees did not have a secondary school diploma, whereas in 2007,[2] the rate was only 14.0%. This phenomenon is not limited to Québec; it extends to Ontario and the other provinces as well. In Ontario, individuals without a diploma accounted for 26.7% of employees in 1990 and only 11.7% in 2007. In the other provinces, the rates were 24.9% in 1990 and 13.7% in 2007.

The number 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, going from 8.2% to 6.9% in Québec, from 10.1% to 7.4% in Ontario and from 10.3% to 9.8% in the other provinces.

However, the number of employees with a postsecondary diploma or university degree has increased considerably. In 1990, they held approximately 40% of the jobs in each province. In 2007, the proportions were 63.2% for Québec, 60.1% for Ontario and 54.0% for the other provinces.

The growth in the employment rate of university graduates was especially rapid: in 1990, they held 13.2% of the jobs in Québec, whereas in 2007, they held more than one in five jobs (22.7%). In Ontario, this proportion is even higher, with more than one in four jobs (26.4%) and in the other provinces, it is 21.0%.

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's situation has changed gradually from 1990 to 2007.

The percentage of jobs held by individuals without a secondary school diploma fell more rapidly in Québec than in Ontario and the other provinces. However, there is still a significant gap with respect to Ontario (2.3 percentage points) and a smaller gap with respect to the other provinces (0.3 percentage points).

Although the proportion of employed individuals with only a secondary school diploma declined everywhere, it is lower in Québec. It should be noted, however, that it takes less time 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.

The proportion of employees with a university degree in Québec (22.7%) currently exceeds that of the other provinces (21.0%); however, this increase was not sufficient to make up the gap with respect to Ontario (26.4%), which is now 3.9 percentage points.

> In 2007, individuals with a postsecondary diploma or university degree held more than 63% 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), nonuniversity 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 figure for 2007 is the average of the first 11 months of that year.*

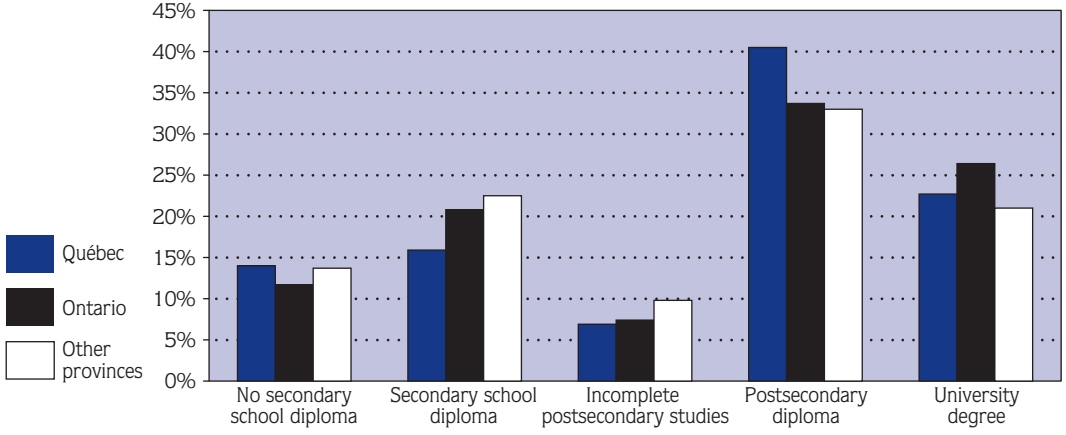
Table 6.2
Employment by highest level of education: Québec, Ontario and the other provinces, 1990 and 2007[1] (%)

	Québec		Ontario		Other provinces	
	1990	2007	1990	2007	1990	2007
Total	100.0	100.0	100.0	100.0	100.0	100.0
No secondary school diploma	29.4	14.0	26.7	11.7	24.9	13.7
Secondary school diploma	20.2	15.9	23.0	20.8	24.3	22.5
Some postsecondary studies	8.2	6.9	10.1	7.4	10.3	9.8
Postsecondary diploma	29.0	40.5	24.0	33.7	27.1	33.0
University degree	13.2	22.7	16.2	26.4	13.4	21.0
Bachelor's degree	9.2	16.0	10.7	17.9	9.4	15.0
Higher degree	4.0	6.7	5.5	8.5	4.0	6.0

Source: Statistics Canada

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, 2007 (%)



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 Québec government *Relance* surveys provides a picture of the placement of secondary school vocational training, college technical training and university graduates a number of months after they obtain their diploma or degree.[1] In all, the surveys provide data about a little more than 105 000 people.[2]

Since 2003, more than 85.0% of students with a Diploma of Vocational Studies (DVS) found work. In 2007, the proportion of students with a DVS in the labour force, i.e. who have either found work or are seeking work, stood at 86.7%. Since 2003 this proportion has varied little.

In 2007, the proportion of students with an Attestation of Vocational Specialization (AVS) who are in the labour force was 82.2%, compared with 80.7% in 2006, representing an increase of 1.5 percentage points. In 2007, the proportion of students with an AVS who were still in school was 10.9%, and the unemployment rate was 8.6%, compared with 12.0% in 2003. This represents a decrease of 3.4 percentage points.

In 2007, 71.4% of students who graduated from a college technical program with a Diploma of College Studies (DCS) were in the labour force. The proportion of graduates still studying was 26.5%. Finally, the unemployment rate for graduates with a DCS in technical training has reached an all-time low in the past five years, dropping from 6.0% in 2004 to 3.7% in 2007.

After declining in 2001 and in 2003 as a result of an increase in the number of graduates still in school, the proportion of university graduates with a bachelor's degree in the labour force, i.e. who have either found work or are seeking work, has been relatively stable since 2003, fluctuating between 71.9% and 74.0%. In 2007, it stood at 72.6%.

The unemployment rate for university graduates with a bachelor's degree rose from 4.9% in 2003 to 5.3% in 2005, then fell to 4.0% in 2007, dropping by 1.3 percentage points to its 2001 level.

In 2007, 78.7% of graduates with a master's degree entered the labour force. This proportion has varied little since 2003, between 78.0% and 79.9%. After increasing in 2003 and 2005, the unemployment rate for these graduates dropped from 5.7% in 2005 to 4.4% in 2007.

Graph 6.3 shows that the unemployment rate of graduates with a DVS and AVS has dropped since 2003. The unemployment rate for graduates with a DCS in technical training was 3.7% in 2007. This rate has remained very low in recent years: since 2003, it has fluctuated between 3.7% and 6.0%. During the same period, the unemployment rate for the labour force as a whole in Québec, whose age, training and work experience differ from those of these graduates, declined from 9.7% in 2003 to 8.2% in 2007.

The unemployment rate among graduates with a DCS in technical training has reached an all-time low in the past five years, dropping from 6.0% in 2004 to 3.7% in 2007.

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 or master's degree is as of January, approximately 20 months after they earned their degree.*

2. *This number is valid for those years in which the three* Relance *surveys are conducted. Data about university students is published every two years, while data about secondary school and college graduates is published annually.*

Table 6.3
Unemployment rates for graduates, by level of education and type of diploma or degree (%)

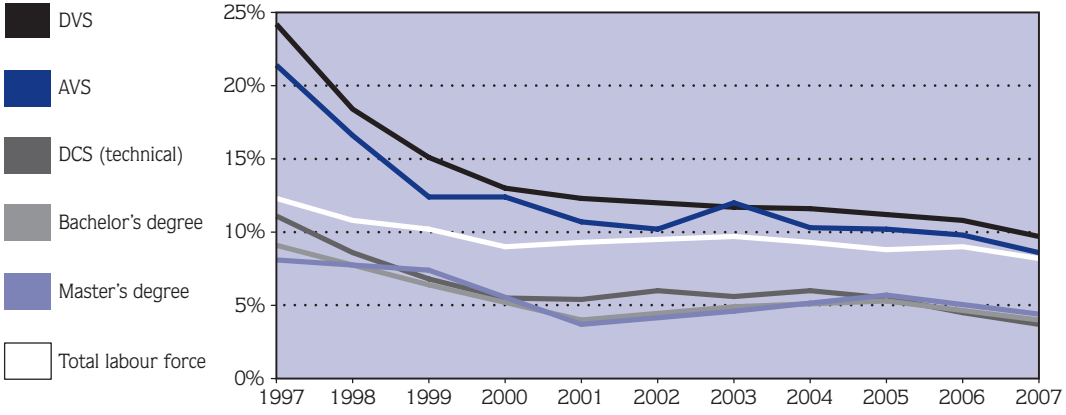
	2003	2004	2005	2006	2007
Secondary education[1]					
DVS	11.7	11.6	11.2	10.8	9.7
AVS	12.0	10.3	10.2	9.8	8.6
College[1]					
Technical training	5.6	6.0	5.5	4.5	3.7
University[1]					
Bachelor's degree	4.9	–	5.3	–	4.0
Master's degree	4.6	–	5.7	–	4.4
Unemployment rate in Québec[2]					
15-19-year-olds	19.8	23.3	21.2	23.7	17.8
20-24-year-olds	13.0	11.6	12.7	10.3	10.2
25-29-year-olds	9.5	8.6	7.0	8.4	8.3
Total labour force	9.7	9.3	8.8	9.0	8.2

1. *Source:* Relance *surveys, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport, <http://www.mels.gouv.qc.ca/Relance/Relance.htm>.*

2. *Data obtained from Statistics Canada. Includes 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, monthly labour force survey estimates (Labour Force Survey, Table 282-0001).*

–: *There is no data for these years: the* Relance *survey of university graduates is conducted every two years.*

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, 2007, about nine months after graduation, 78.3% of graduates of programs leading to a Diploma of Vocational Studies (DVS) were employed, as were 75.1% of graduates of programs leading to an Attestation of Vocational Specialization (AVS).

On March 31, 2007, 9.2% of DVS graduates in the class of 2005-2006 were studying and 4.1% were inactive. The proportion of individuals with a DVS who were in the labour force (employed or looking for work) was 86.7%; this rate has remained relatively stable since 2003. The unemployment rate for DVS graduates was 9.7% in 2007.

A total of 87.8% of DVS graduates were employed full-time in 2007. This rate has fluctuated little since 2003, between 86.7% and 87.8%. There is an obvious trend throughout: more men than women are employed full-time. Men were 15.0 percentage points ahead in 2007 (94.3% compared with 79.3% for women).

Between 2003 and 2007, the correspondence between the field of study and the field of employment remained relatively stable, varying from 76.0% to 79.3% among DVS graduates working full-time. In 2007, the rate was 79.0% for both women and men.

On March 31, 2007, 7.1% of the class of 2005-2006 who graduated from programs leading to an AVS were looking for work, 10.9% were studying and 6.9% were inactive. The number of AVS graduates in the labour force stood at 82.2% in 2007. The unemployment rate was 8.6% in 2007, compared with 12.0% in 2003, representing a decrease of 3.4 percentage points.

A total of 84.7% of AVS graduates were employed full-time in 2007. There is still a large gap between the full-time employment rate of women (78.2%) and that of men (92.4%). The correspondence between the field of study and the field of employment among AVS graduates was 71.1% in 2007.

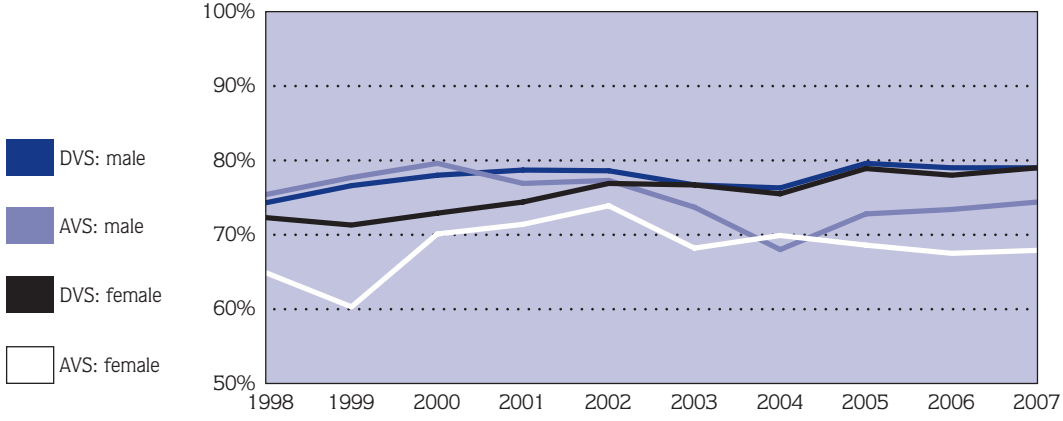
The unemployment rate for DVS graduates decreased from 11.7% in 2003 to 9.7% in 2007. The unemployment rate for AVS graduates was 8.6% in 2007.

Table 6.4
Employment situation of secondary school vocational training graduates, by graduation class, as at March 31 of the year following their graduation (%)

	2003	2004	2005	2006	2007
Graduates with a DVS[1]					
Employed	76.7	75.9	77.1	76.3	78.3
Seeking employment	10.2	9.9	9.7	9.3	8.4
Studying	9.2	10.2	8.9	10.1	9.2
Inactive	3.9	4.0	4.3	4.2	4.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	11.7	11.6	11.2	10.8	9.7
Graduates with an AVS[1]					
Employed	73.7	76.8	74.1	72.8	75.1
Seeking employment	10.0	8.8	8.4	7.9	7.1
Studying	8.3	7.5	12.1	11.3	10.9
Inactive	8.0	6.9	5.4	7.9	6.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	12.0	10.3	10.2	9.8	8.6

1. *Source:* Relance *surveys of vocational training graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport, <http://www.mels.gouv.qc.ca/Relance/Relance.htm>.*

Graph 6.4
Proportion of DVS and AVS graduates working full-time in a related field, as of March 31 of the year following their graduation, by gender (%)



6.5 Employers' Opinions of Graduates of Vocational Training Programs

In 2006-2007, the Ministère de l'Éducation, du Loisir et du Sport surveyed employers who had hired at least one secondary school vocational training graduate between 2002 and 2004. In all, 1 242 employers, employing more than 169 000 graduates, answered the survey.

Employers' overall evaluation of the competence of graduates was average, good or very good in 89.3% of cases, while the corresponding percentage was 89.6% in 2000 (see Table 6.5a).

After three months of work, 70.5% of employers claimed to be satisfied or very satisfied with the performance of graduates, compared with 72.7% in 2000, 73.6% in 1997 and 73.2% in 1994-1995 (see Table 6.5b). After one year, this percentage reached 92.7%, compared with 91.2% in the previous study.

The study demonstrated that 66.4% of employers prefer hiring vocational training graduates for trade work. In addition, 15.6% of employers often or regularly hire individuals with less schooling, while 15.8% hire people with more schooling.

More than 85.0% of the employers surveyed believed that vocational training provides graduates with distinct tools that give them an advantage over nongraduates and that prepare them to more effectively perform their tasks and more readily adapt to change: more theoretical knowledge (94.4%), greater ease in specializing in their field (91.9%) and greater skills (dexterity) (87.7%). Also, 75.2% of the employers pointed out that graduates had better attitudes with respect to work.

More than two thirds of employers reported difficulty recruiting qualified personnel for the types of jobs associated with vocational training. Indeed, 68.7% of employers said that there were not enough qualified applicants (58.8% in 2000). Moreover, 55.4% of employers indicated an insufficient number of applicants, regardless of qualifications (46.5% in 2000).

Seven of the 15 suggested hiring criteria were considered important or very important by more than 87.0% of employers. The fact that these five criteria include "relevant field of study" (90.0%) and "applicant has obtained the required diploma" (87.7%) clearly illustrates how much employers recognize the value of trade-related studies and their certification. The importance of the criteria "applicant's personality" (91.8%), "ability to communicate verbally" (90.4%), "interpersonal skills" (90.3%) and "performance in the interview" (88.3%) indicates how much employers value communication skills. Finally, "applicant's versatility" (91.2%) was also an important criterion.

In order of importance, the 18 criteria (out of a possible 39) considered important by at least 71.8% of employers are: punctuality, a thorough knowledge of basic techniques, a sense of responsibility, the ability to work well in a team, respect for authority, loyalty, honesty, understanding of and compliance with instructions, resourcefulness, productivity (accuracy, quality, speed), the ability to keep up to date in their daily work, commitment, good listening skills, enthusiasm (words and actions), the ability to meet deadlines, good manners, the ability to adapt, and the ability to plan and organize their work.

An analysis of the evaluation of the work of recruits with respect to employers' expectations indicates potentially problematic situations for seven items in the competency profile. In more than 20.0% of cases, these items fell short of employers' expectations, which were average or high: the ability to plan and organize their work (30.1%), commitment (27.0%), productivity (26.1%), a sense of responsibility (23.7%), resourcefulness (23.5%), the ability to meet deadlines (23.4%) and loyalty (20.2%).

Other items that need improvement, but that are not part of the competency profile, include language skills (English and French); specialized techniques, advanced techniques and the use of specialized equipment; a number of proactive abilities and attitudes, such as the ability to solve problems, innovate and correctly identify clients' expectations; interest in a challenge; good judgment and perseverance; and the ability to deal with stressful situations.

In 2006-2007, 89.3% of employers considered their vocational training recruits competent. In addition, 87.7% of them felt that a vocational training diploma was important or very important as a hiring criterion.

Table 6.5a
Evaluation of level of competency of recruits (% of employers)

	1994-1995	1997	2000	2006-2007
Level of competency[1]				
High	37.1	40.9	39.0	38.1
Average	52.5	50.3	50.6	51.2
Low	9.5	7.8	9.7	9.7
Not indicated	0.9	0.9	0.7	1.0

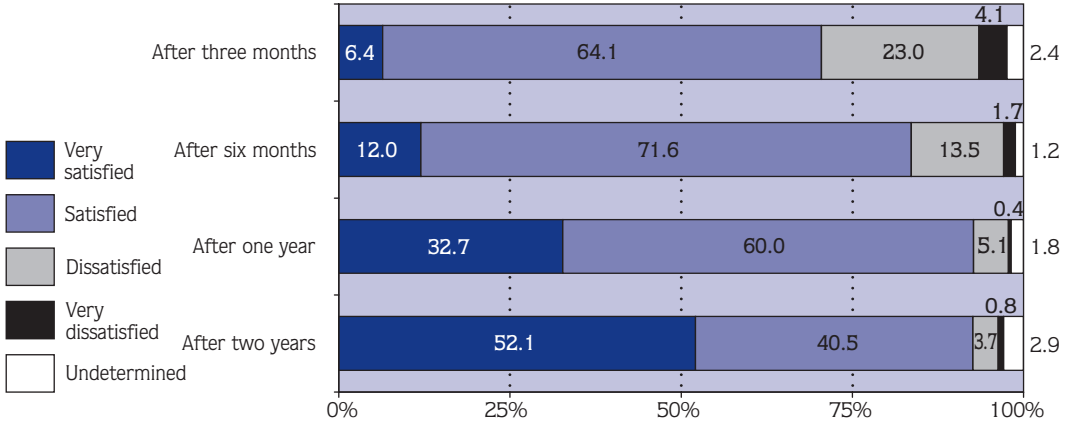
Table 6.5b
Employers' satisfaction with performance (% of employers)

	1994-1995	1997	2000	2006-2007
Satisfied or very satisfied[1]				
After three months	73.2	73.6	72.7	70.5
After six months	89.1	87.8	87.0	83.7
After one year	92.4	91.6	91.2	92.7
After two years	N/A	N/A	N/A	92.6

Source: Relance *surveys of vocational training graduates, Ministère de l'Éducation, du Loisir et du Sport, <http://www.mels.gouv.qc.ca/Relance/Relance.htm>.*

1. This data takes into account only those employers who answered the question.

Graph 6.5
Rate of satisfaction with the performance of vocational training graduates, by period of time elapsed (survey conducted in 2006-2007)



6.6 Labour Market Integration of Graduates of College Technical Programs

The percentage of graduates of technical programs who were employed approximately 10 months after they obtained a Diploma of College Studies (DCS) was 68.8% as of March 31, 2007. That year, the proportion of male graduates who were employed was 62.5%, while the proportion of female graduates in the same position was 72.6%, making the difference between the two 10.1 percentage points.

In 2007, the labour force participation rate was 71.4%, compared with 69.8% in 2006. The unemployment rate for graduates with a DCS in technical training dropped from 5.5% in 2005 to 3.7% in 2007. Among women, the unemployment rate was 2.4%, while it was 6.0% among men. Although both these rates are clearly lower than the unemployment rate for the Québec labour force as a whole (8.2%), any comparison is risky, since the labour force as a whole is extremely heterogeneous and its structure differs from that of the graduates studied in the Relance surveys.

On March 31, 2007, the proportion of graduates still in school was 26.5%. Of the graduates surveyed, 31.7% of men and 23.4% of women were still in school on that date. As a comparison, the respective proportions for men and women in 2006 were 32.9% and 25.2%.

Most of these students, 85.5%, were in university. Of these, 89.9% were studying in a field related to the diploma earned in 2005-2006. Finally, only 4.9% of those in school on March 31, 2007, were there because they were unable to find a job. The corresponding proportions were 10.7% in 2004, 7.1% in 2005 and 5.9% in 2006.

In 2007, 86.0% of DCS technical graduates were employed full-time; this rate has remained above 85.0% since 2000. However, men are more likely to be employed full-time (90.9%) than women (82.4%). This gender gap has persisted over the years.

On March 31, 2007, 34.3% of part-time workers reported working part-time because they could not find full-time employment, compared with 33.9% in 2006.

The correspondence between the field of study and the field of employment for full-time workers rose from 80.9% in 2004 to 84.6% in 2007. This rate increased significantly among men, going from 74.0% in 2004 to 81.4% in 2007, while it hovered around 85.0% among women.

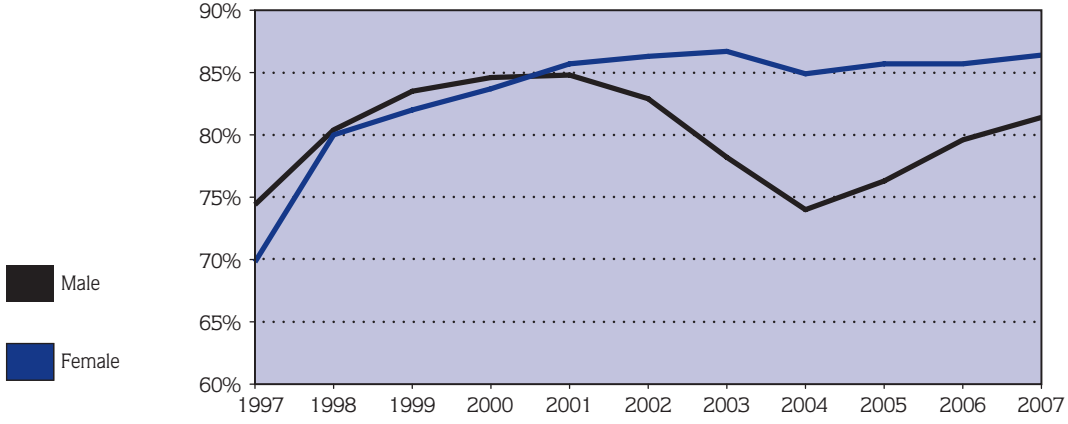
The unemployment rate among graduates with a DCS in technical training was 6.0% in 2004 and reached a low of 3.7% in 2007. Slightly more than 26.5% of technical training graduates continued studying the year after they earned their diploma.

Table 6.6
Employment situation of graduates of college technical programs, by graduating class, as of March 31 of the year following their graduation (%)

	2003	2004	2005	2006	2007
Graduates with a DCS[1]					
Employed	69.5	67.6	65.8	66.7	68.8
Seeking employment	4.1	4.3	3.8	3.1	2.6
Studying	24.4	26.1	27.9	28.1	26.5
Inactive	2.0	2.1	2.4	2.1	2.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	5.6	6.0	5.5	4.5	3.7

1. *Source:* Relance *surveys of technical training graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport, <http://www.mels.gouv.qc.ca/Relance/Relance.htm>.*

Graph 6.6
Proportion of DCS graduates of technical programs working full-time in a related field, as of March 31 of the year following their graduation, by gender (%)



6.7 Labour Market Integration of University Graduates

Approximately 20 months after obtaining their degree, 69.7% of graduates from a bachelor's program and 75.2% of graduates from a master's program were employed as at the reference week of January 21 to 27, 2007. In 2005 and 2003, the employment rates were 68.1% and 70.4%, respectively, for graduates with a bachelor's degree, while they were 73.5% and 76.2%, respectively, for graduates with a master's degree.

After declining in 2001 and in 2003 as a result of an increase in the number of graduates still in school, the proportion of university graduates with a bachelor's degree in the labour force, i.e. who have either found work or are seeking work, has been relatively stable since 2003, fluctuating between 71.9% and 74.0%. In 2007, it stood at 72.6%. The unemployment rate for university graduates with a bachelor's degree, defined as the ratio between the number of graduates seeking employment and the number of graduates in the labour force, rose from 4.9% in 2003 to 5.3% in 2005, then to 4.0% in 2007, dropping by 1.3 percentage points to its 2001 level.

In 2007, 78.7% of graduates with a master's degree were in the labour force (75.2% were employed and 3.5% were looking for work). This rate has varied little since 2003, fluctuating between 78.0% and 79.9%. The unemployment rate for these graduates dropped 1.3 percentage points from 5.7% in 2005 to 4.4% in 2007.

The percentage of graduates who obtained a bachelor's degree in 2005 and who were studying in 2007 was 24.5% during the reference week of January 21 to 27, 2007, while the percentage of graduates with a master's degree in the same situation stood at 18.4%. After successive increases in 2001, 2003 and 2005, this percentage seems to have stabilized among both types of graduates.

Of those who earned a bachelor's degree in 2005 and who were studying in university in 2007 during the reference week, 66.6% were enrolled in a master's program and 9.7% in a doctoral program, while 17.1% were in a bachelor's program. Of the graduates who, during the reference week in 2007, were studying in a master's or doctoral program, 88.8% and 90.1%, respectively, were in a field of study related to the degree earned in 2005.

Of the graduates with a bachelor's or master's degree who were studying in 2007, 9.0% and 9.8%, respectively, were there because they were unable to find employment.

In 2005, 88.6% of graduates with a bachelor's degree and 91.6% of graduates with a master's degree were employed full-time. More men than women were employed full-time. The correspondence between the studies completed in 2005 and the profession being practised was 81.0% for graduates with a bachelor's degree and 83.8% for graduates with a master's degree who were working full-time during the reference week.

The proportion of university graduates with a bachelor's degree working part-time who reported doing so because they had not found full-time employment was 38.8% after earning a bachelor's degree and 24.5% after a master's degree. In 2005, the corresponding proportions were 38.5% and 36.2%, respectively.

Almost half of all graduates with a bachelor's degree (47.4%) obtained a first serious paid job without having to look for one. The corresponding proportion for graduates with a master's degree was more than half (54.2%).

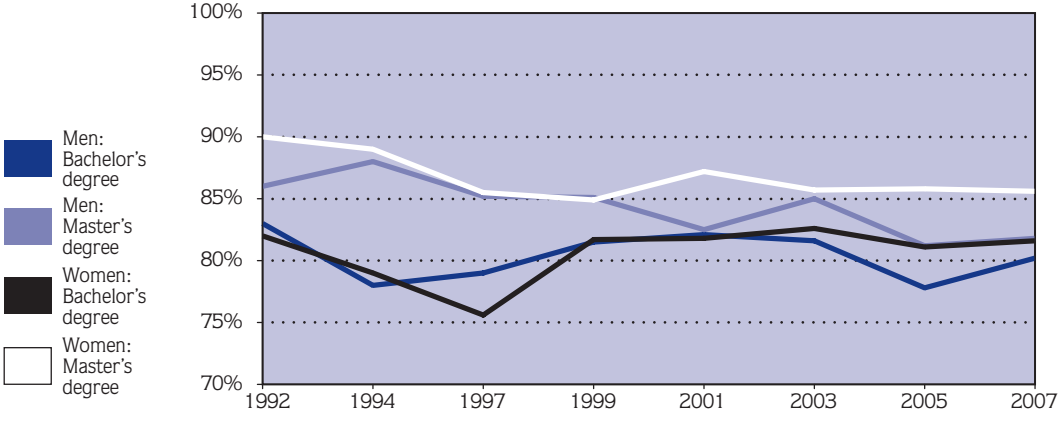
The unemployment rate for university graduates with a bachelor's degree went from 4.9% in 2003 to 5.3% in 2005, then to 4.0% in 2007.

Table 6.7
Employment situation of university graduates, by graduating class, as at January, roughly 20 months following their graduation (%)

	1999	2001	2003	2005	2007
Graduates with a bachelor's degree[1]					
Employed	75.6	74.5	70.4	68.1	69.7
Seeking employment	5.2	3.1	3.6	3.8	2.9
Studying	16.5	19.8	22.9	25.0	24.5
Inactive	2.7	2.5	3.1	3.1	2.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	6.4	4.0	4.9	5.3	4.0
Graduates with a master's degree[1]					
Employed	79.7	79.2	76.2	73.5	75.2
Seeking employment	6.4	3.1	3.7	4.5	3.5
Studying	11.7	15.2	17.3	18.9	18.4
Inactive	2.2	2.5	2.9	3.1	2.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	7.4	3.7	4.6	5.7	4.4

1. *Source:* Relance *surveys of university graduates, Direction de la recherche, des statistiques et de l'information, Ministère de l'Éducation, du Loisir et du Sport <http://www.mels.gouv.qc.ca/Relance/Relance.htm>.*

Graph 6.7
Proportion of graduates from bachelor's and master's programs working full-time in a related field, 20 months after their graduation, by gender (%)



Statistical Appendix

Table 1

Full-time and part-time enrollment, by level of education and sector, 1997-1998 to 2006-2007

	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
Preschool (4-year-olds)	**16,295**	**15,908**	**15,174**	**14,601**	**15,778**	**15,240**	**14,700**	**14,996**	**14,808**	**14,640**
Preschool (5-year-olds)	**95,303**	**91,513**	**89,223**	**87,297**	**84,624**	**80,967**	**76,832**	**74,801**	**74,123**	**73,970**
Elementary education (youth sector)	**559,279**	**566,372**	**573,102**	**575,862**	**574,274**	**564,559**	**549,073**	**529,860**	**510,340**	**492,631**
Secondary education (youth sector)	**479,740**	**469,250**	**456,148**	**447,937**	**446,491**	**455,467**	**467,594**	**480,319**	**489,054**	**492,217**
Elementary and secondary education (adult sector)[1]	**218,193**	**214,701**	**219,268**	**222,714**	**238,693**	**247,258**	**254,482**	**258,979**	**257,568**	**260,662**
College[2]	**230,724**	**228,712**	**219,209**	**213,418**	**206,361**	**200,770**	**195,797**	**193,363**	**189,101**	**190,978**
Regular education	176,584	174,463	171,652	166,965	164,728	163,069	160,964	159,952	159,306	162,187
Adult education	54,140	54,249	47,557	46,453	41,633	37,701	34,833	33,411	29,795	28,791
University[3]	**227,009**	**226,669**	**231,973**	**233,554**	**239,094**	**249,177**	**258,324**	**261,677**	**264,242**	**264,959**
Undergraduate studies	183,355	183,141	187,021	187,518	189,450	195,132	201,129	202,071	203,311	203,210
Graduate studies	34,326	34,604	36,183	37,275	40,808	44,592	46,735	48,197	48,741	49,092
Postgraduate studies	9,328	8,924	8,769	8,761	8,836	9,453	10,460	11,409	12,190	12,657
Total	**1,826,543**	**1,813,125**	**1,804,097**	**1,795,383**	**1,805,315**	**1,813,438**	**1,816,802**	**1,813,995**	**1,799,236**	**1,790,057**

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

1. *Only persons having taken courses for which credits are earned for certification purposes are included.*
2. *Fall term. Figures for adult education exclude students enrolled in noncredit programs.*
3. *Fall term. These figures include resident physicians and some students in college Explorations programs. However, they exclude auditors, postdoctoral trainees and students in Explorations programs.*

Table 2

Full-time and part-time enrollment, by category of institution, language of instruction, level of education and sector, 2006-2007

	Preschool		Elementary	Secondary	Elementary and secondary	College[2]		University[3]	Total
	4-year-olds	5-year-olds	(Youth sector)	(Youth sector)	(Adult sector)[1]	Regular education	Adult education		
School boards	**14,511**	**69,043**	**460,502**	**402,946**	**254,923**				**1,201,925**
French	13,540	61,587	409,085	356,586	228,738				1,069,536
English	706	6,896	50,240	46,359	25,904				130,105
Native languages	265	560	1,177	1	281				2,284
Private institutions	**28**	**4,776**	**31,101**	**88,203**	**5,016**	**11,599**	**6,294**		**147,017**
French	6	3,891	25,043	80,101	4,598	6,732	1,634		122,005
English	22	885	6,058	8,102	418	2,881	652		19,018
French and English						1,986	4,008		5,994
Public institutions outside the jurisdiction of the MELS	**101**	**151**	**1,028**	**1,068**	**723**	**1,623**	**68**		**4,762**
French	80	109	775	935	723	1,541	68		4,231
English	10	14	105	111		82			322
Native languages	11	28	148	22					209
CEGEPs and campuses						**148,965**	**22,429**		**171,394**
French						124,899	18,253		143,152
English						24,066	4,176		28,242
French and English									
Universities and branches								**264,959**	**264,959**
French								198,827	198,827
English								66,132	66,132
Total	**14,640**	**73,970**	**492,631**	**492,217**	**260,662**	**162,187**	**28,791**	**264,959**	**1,790,057**
French	13,626	65,587	434,903	437,622	234,059	133,172	19,955	198,827	1,537,751
English	738	7,795	56,403	54,572	26,322	27,029	4,828	66,132	243,819
Native languages	276	588	1,325	23	281	0	0	0	2,493
French and English						1,986	4,008	0	5,994

Sources: Délaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Gestion des données sur les effectifs universitaires (GDEU)

1. *Only persons having taken courses for which credits are earned for certification purposes are included.*
2. *Fall term. Figures for adult education exclude students enrolled in noncredit programs.*
3. *Fall term. These figures include resident physicians, but exclude auditors, postdoctoral trainees and students in Explorations programs.*

Table 3

Enrollment in secondary vocational training and college technical training, 1999-2000 to 2006-2007

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007[p]
SECONDARY EDUCATION	**99,884**	**95,991**	**99,063**	**101,040**	**104,645**	**108,838**	**106,881**	**105,423**
Under 20 years of age[2]	26,031	25,514	25,480	24,923	25,580	26,257	26,281	27,455
20 years of age or over[3]	73,853	70,477	73,583	76,117	79,065	82,581	80,600	77,968
Regular paths:								
DVS (SSVD), SSVC, AVS, AVE	**75,890**	**76,559**	**79,395**	**80,288**	**84,552**	**88,156**	**91,118**	**91,743**
Under 20 years of age[2]	24,623	24,343	24,044	23,232	23,847	24,530	24,731	25,961
20 years of age or over[3]	51,267	52,216	55,351	57,056	60,705	63,626	66,387	65,782
Other programs	**23,994**	**19,432**	**19,668**	**20,752**	**20,093**	**20,682**	**15,763**	**13,680**
Under 20 years of age[2]	1,408	1,171	1,436	1,691	1,733	1,727	1,550	1,494
20 years of age or over[3]	22,586	18,261	18,232	19,061	18,360	18,955	14,213	12,186
COLLEGE EDUCATION	**121,767**	**119,938**	**116,503**	**110,954**	**105,894**	**102,813**	**99,154**	**97,681**
Diploma of College Studies (DCS-technical)	88,961	87,499	86,831	84,687	81,563	80,072	78,215	76,995
Certificat d'études collégiales (CEC)	16							
Attestation of College Studies (ACS)	32,789	32,439	29,672	26,267	24,331	22,741	20,939	20,686
Diplôme de perfectionnement de l'enseignement collégial (DPEC)	1							

Sources: Déclaration des clientèles scolaires (DCS)
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information financière sur la clientèle adulte (SIFCA)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)

p: Preliminary figures

DVS: Diploma of Vocational Studies (or SSVD: Secondary School Vocational Diploma, prior to 1998); SSVD: Secondary School Vocational Certificate; AVS: Attestation of Vocational Specialization; AVE: Attestation of Vocational Education

1. *Only persons having taken courses for which credits are earned for certification purposes are included. Persons enrolled in more than one program in the same year are counted only once.*
2. *Includes students 20 years of age or over in the youth sector.*
3. *For the adult sector only.*

Table 4

Personnel in school boards and CEGEPs by job category based on full-time equivalents,[1] 1998-1999 to 2005-2006

	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
School boards	**106,630**	**108,772**	**111,464**	**113,184**	**115,751**	**116,203**	**115,202**	**114,516**
Youth and adult sectors								
Teaching staff	71,152	71,288	71,918	71,984	72,820	72,606	71,594	71,122
Administrative staff	1,118	1,080	1,076	1,079	1,097	1,143	1,166	1,097
School principals	3,567	3,661	3,713	3,723	3,772	3,807	3,796	3,739
Managerial staff	663	685	680	698	721	730	735	746
Nonteaching professionals	3,897	4,003	4,208	4,453	4,810	4,926	4,992	5,110
Support staff	26,233	28,055	29,869	31,247	32,531	32,991	32,919	32,702
CEGEPs	**19,692**	**19,869**	**20,491**	**20,636**	**20,744**	**20,609**	**20,319**	**20,093**
Regular education and adult education								
Teaching staff	12,892	12,950	13,381	13,355	13,338	13,214	13,005	12,817
Administrative staff	595	622	651	690	717	724	640	718
Managerial staff	230	232	233	234	237	225	306	216
Nonteaching professionals	964	1,017	1,086	1,137	1,196	1,185	1,178	1,220
Support staff	5,011	5,048	5,140	5,220	5,256	5,261	5,190	5,122

Sources: Personnel des commissions scolaires (PERCOS II)
Système d'information sur le personnel des organismes collégiaux (SPOC-RFA)

1. All personnel activities carried out 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, 1997 to 2006

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006[P]
Secondary[1]	**109,199**	**107,050**	**108,355**	**105,927**	**103,260**	**102,417**	**101,513**	**105,155**	**106,456**	**110,599**
General education	80,289	77,315	77,370	73,867	72,509	69,410	67,641	69,785	69,490	71,857
Vocational training	28,910	29,735	30,985	32,060	30,751	33,007	33,872	35,370	36,966	38,742
College	**44,930**	**45,453**	**46,454**	**51,064**	**52,793**	**53,765**	**53,440**	**53,328**	**52,549**	**n.d.**
DCS (pre-university education)	25,946	25,182	24,657	24,123	23,696	23,291	23,449	23,429	23,495	n.d.
DVS (technical training)	16,749	16,819	17,633	17,995	18,006	18,760	18,193	18,084	17,395	n.d.
DCS without mention	7	1				1	4			
ACS, CEC and DPEC[2]	2,228	3,451	4,164	8,946	11,091	11,713	11,794	11,815	11,659	n.d.
University[3]	**53,277**	**50,778**	**50,726**	**50,563**	**51,378**	**54,459**	**58,855**	**62,358**	**64,366**	**64,206**
Bachelor's degree	28,894	27,475	28,284	27,822	27,973	28,897	29,818	31,553	32,117	32,988
Master's degree	6,514	6,727	6,814	7,468	7,692	7,946	9,003	9,515	10,002	9,925
Doctorate	1,143	1,231	1,170	1,165	1,094	1,036	1,134	1,217	1,278	1,256
Certificates and diplomas	16,726	15,345	14,458	14,108	14,429	16,139	17,840	18,931	19,580	18,674
Attestations and microprograms	n.d.	n.d.	n.d.	n.d.	190	441	1,060	1,142	1,389	1,363

Sources: *Entrepôt de données ministériel (EDM au 2007-10-15)*
Sanction des adultes en formation générale (SAGE)
Système d'information et de gestion des données sur l'effectif collégial (SIGDEC)
Système de recensement des clientèles universitaires (RECU)
Gestion des données sur les effectifs universitaires (GDEU)

DCS: Diploma of College Studies; ACS: Attestation of College Studies; CEC: Certificat d'études collégiales (certificate of college studies); DPEC: Diplôme de perfectionnement de l'enseignement collégial (diploma of advanced college studies)

1. From 1997-1998 to 2006-2007

2. Since 1994, there have been no new enrollments in programs leading to CECs and DPECs. ACSs are counted starting in 2001.

3. Excludes diplomas awarded by the Collège militaire Royal de Saint-Jean.

p. Data for 2006 is preliminary.

Table 6

Schooling rates,[1] by age, gender, level of education and attendance status, 2005-2006 (%)

	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 statuses
4-year-olds										
Male	20.4	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	20.4
Female	20.8	0.0	0.0	0.0	0.0	0.0	0.0	20.8	0.0	20.8
Total	20.6	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	20.6
5-year-olds										
Male	96.5	0.0	0.0	0.0	0.0	0.0	0.0	96.5	0.0	96.5
Female	97.5	0.0	0.0	0.0	0.0	0.0	0.0	97.5	0.0	97.5
Total	97.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	97.0
15-year-olds										
Male	0.0	97.4	0.5	0.1	0.0	0.0	0.0	97.4	0.5	97.9
Female	0.0	98.3	0.2	0.1	0.0	0.0	0.0	98.3	0.2	98.5
Total	0.0	97.8	0.3	0.1	0.0	0.0	0.0	97.9	0.3	98.2
16-year-olds										
Male	0.4	90.0	3.5	1.6	0.0	0.0	0.0	92.0	3.5	95.5
Female	0.3	92.9	2.7	2.6	0.0	0.0	0.0	95.8	2.7	98.4
Total	0.3	91.4	3.1	2.1	0.0	0.0	0.0	93.8	3.1	96.9
17-year-olds										
Male	0.6	39.9	12.4	31.8	0.1	0.7	0.0	73.0	12.5	85.5
Female	0.4	30.2	10.8	47.7	0.1	0.9	0.0	79.2	10.9	90.0
Total	0.5	35.1	11.6	39.6	0.1	0.8	0.0	76.0	11.7	87.7
18-year-olds										
Male	0.7	24.0	11.6	34.4	0.4	3.5	0.2	62.6	12.2	74.8
Female	0.5	17.5	9.2	51.5	0.3	5.4	0.2	75.0	9.7	84.7
Total	0.6	20.9	10.4	42.8	0.4	4.4	0.2	68.7	11.0	79.6
19-year-olds										
Male	0.5	17.0	9.1	23.8	1.2	11.2	0.4	52.5	10.8	63.3
Female	0.4	12.1	6.7	33.4	1.5	20.2	0.6	66.1	8.8	75.0
Totall	0.4	14.6	8.0	28.5	1.3	15.6	0.5	59.2	9.8	69.0

1. *Schooling rates are calculated by dividing the school population of a given age on September 30, 2005, 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, by age, gender, level of education and attendance status, 2005-2006 (%)

	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 statuses
20-24-year-olds										
Male	0.3	7.9	5.3	7.0	1.0	15.7	3.2	30.9	9.5	40.4
Female	0.3	6.5	3.8	9.3	1.2	23.1	4.9	39.1	9.8	49.0
Total	0.3	7.2	4.5	8.1	1.1	19.3	4.0	34.9	9.6	44.6
25-29-year-olds										
Male	0.3	3.3	3.0	1.4	0.3	5.2	3.5	10.1	6.8	17.0
Female	0.4	3.4	2.1	2.2	0.6	5.6	5.8	11.7	8.5	20.1
Total	0.3	3.3	2.6	1.8	0.4	5.4	4.6	10.9	7.6	18.5
30-39-year-olds										
Male	0.4	2.0	2.1	0.5	0.2	1.6	2.0	4.6	4.3	8.8
Female	0.5	2.4	1.6	0.9	0.3	1.4	3.3	5.2	5.2	10.4
Total	0.4	2.2	1.8	0.7	0.3	1.5	2.6	4.9	4.7	9.6
40-49-year-olds										
Male	0.2	0.9	1.2	0.2	0.1	0.3	0.9	1.6	2.2	3.8
Female	0.3	1.2	1.0	0.3	0.2	0.4	1.7	2.1	3.0	5.1
Total	0.2	1.0	1.1	0.3	0.2	0.3	1.3	1.8	2.6	4.4
50-59-year-olds										
Male	0.1	0.4	0.6	0.1	0.1	0.1	0.3	0.6	1.0	1.6
Female	0.1	0.4	0.7	0.1	0.1	0.1	0.6	0.7	1.3	2.1
Total	0.1	0.4	0.6	0.1	0.1	0.1	0.5	0.7	1.2	1.8
60-year-olds and over										
Male	0.0	0.1	0.3	0.0	0.0	0.0	0.1	0.1	0.3	0.4
Female	0.1	0.0	0.6	0.0	0.0	0.0	0.1	0.2	0.6	0.8
Total	0.1	0.0	0.4	0.0	0.0	0.0	0.1	0.1	0.5	0.6

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 that age.

Schooling rates are calculated by dividing school enrollments for a given age by the total population that age on the same date.

This rate is presented in Table 6.

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.

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.

This rate is the ratio between the number of new enrollments in the different programs and the total population that age (on September 30). The result is the enrollment rates by age, which are then added together to obtain the proportion of a generation 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.

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 year. In general, the probability of obtaining a first diploma is calculated by adding the rates for each age.

Probability of obtaining a secondary school diploma

The numbers of first diplomas are divided by enrollments, by age group and gender. The concept of first diploma means that students who obtain more than one diploma are counted only once.

Diplomas obtained at a given age are compared with the total population that age, then the rates for each age are added. The result is the proportion (%) of a generation that will obtain a secondary school diploma in the youth or adult sector.

See Section 5.2.

Comparison with OECD countries

The OECD uses a simple method of calculating the probability of obtaining a secondary school diploma. The method consists in comparing the number of diplomas obtained with the total population of the age at which the diploma is normally awarded. In Québec, the rate is obtained by dividing the number of first diplomas awarded in a given year by the total population of 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 is available or can be estimated. The number of countries varies from one year to the next.

See Section 5.4.

5. Dropout rate

The dropout rate is defined as the proportion of the population that has not obtained a secondary school diploma and that is not enrolled in school. This indicator is calculated for each age and has no overall counterpart (see Section 2.6).

An individual who has obtained a secondary school diploma or who is still enrolled in school (secondary school or CEGEP) has not dropped out. Unlike those who have left school permanently, those who have dropped out may return to school after a while.

The permanent school leaving rate is defined as the proportion of a generation that leaves secondary school without a diploma. It is the complement to the probability of obtaining a secondary school diploma.

The proportion of school leavers who have not obtained a diploma in a given year is the opposite of the success rate. The success rate is the proportion of students enrolled who obtain a diploma.

The Ministère uses three ways of measuring the dropout rate, as explained in *Education Statistics Bulletin 25, March 2003*. In addition to these three concepts, there is also the concept of interrupted studies, whose definition varies from one researcher to the next. For example, in the document on student flow from secondary school to university, interrupted studies means that a student is absent from the Québec school system for at least one school year.

6. Academic success rate

The academic success rate measures the proportion of students enrolled who obtain a diploma.

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. This is what makes it possible to analyze fluctuations. The longitudinal approach, although easier to explain and understand, does not provide such information. The data is old or incomplete and requires a longer follow-up period. Moreover, it would be difficult to compare on an international level. However, the longitudinal approach has advantages, as illustrated in the document on student flow.[1]

1. *Ministère de l'Éducation du Québec,* Student Flow From Secondary School to University *(Québec: Gouvernement du Québec, 2004).*

The method used by the DRSI in the *Education Indicators* 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 are of the same order of magnitude as those provided by the observation of cohorts (the method used in higher education) despite differences in the concepts.

The proposed concept therefore consists in measuring success in a 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 measure academic success in various levels of education.

7. Examination results

Sections 4.1, 4.2 and 4.3 present the results and averages obtained on secondary school uniform examinations administered in June. Two types of data are presented in these sections: the average result and the success rate. This is a complement to the information contained in the document *Results on the June 2007 Uniform Ministry Examinations and Graduation Rates*.

The average result is calculated by dividing the sum of the final marks by the number of students writing the examination. The success rate is calculated by comparing the number of students who passed the examination with the number of students writing the examination.

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