EDUCATION **INDICATORS** – 2005 edition

Reach for your Dreams

Québec

EDUCATION **INDICATORS** – 2005 edition

Ministère de l'Éducation,
du Loisir et du Sport
Secteur de l'information
et des communications

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Table of Contents

Table of Indicators

Table of Indicators (cont.)

Table of Indicators (cont.)

Table of Indicators (cont.)

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. This year, the regular updates have been made as well as some changes to the sections on the labour market integration of university graduates and the performance of students on Canadian and international examinations. The results presented here are part of the School Achievement Indicators Program (SAIP), the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS 2003).

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 2005 edition contains 65 sections, compared with 58 in 2004. This year, 55 sections have been updated, while 10 are altogether new.

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 2002-2003, Québec's educational spending, including operating expenses, capital expenses of educational institutions and the administrative expenses of the Ministère de l'Éducation, du Sport et du Loisir, was estimated at $18.5 billion, or 7.5% of the gross domestic product (GDP). The share of the GDP allocated to education in the rest of Canada was estimated at 6.4%, and the United States, at 7.3%. In 2004-2005, 25% of the Québec government's program spending was allocated to education.

Total spending amounted to $2 510 per capita in 2002-2003, or about 3% more than the average for the rest of Canada. In 2002-2003, the breakdown of total spending by level of education was as follows: elementary and secondary education (school boards and subsidized private schools), 53%; college education (CEGEPs and subsidized private colleges), 9%; and university education, 25%. In addition, other spending, mainly for training funded by Human Resources and Skills Development Canada (HRSDC) or by Emploi Québec, accounted for 11% of the total.

In 2002-2003, operating expenses in Québec school boards were estimated at $8.1 billion, for a per-student average of $7 450. Per-student spending in Québec school boards was 2% higher than in the rest of Canada; however, the student-teacher ratio was 14.3 in Québec, compared with 16.7 in

the rest of Canada, whereas the average salary for teachers is relatively lower in Québec, that is, $51 738 compared with $63 235 in the rest of Canada.

Per-student operating expenses in CEGEPs were estimated at $8 768 in 2003-2004, 53% ($4 657) of which went to teachers. In 2002-2003, university per-student operating and capital expenses, not including funded research, were $12 877, about 3% more than the average for the rest of Canada ($12 552). Overall university spending represented a higher percentage of the GDP in Québec (1.91%) than in the rest of Canada (1.59%), mostly because of Québec's lower collective wealth (defined by the per capita GDP). Slightly more than a billion dollars was allocated to university research in 2002-2003. The cost of university professors per student was $5 112 in 2002-2003.

In 2003-2004, 133 113 persons benefited from Québec's Student Financial Assistance Program. A total of $355.4 million was granted in the form of loans and $315.2 million, in bursaries. Tuition fees averaged $1 890 in Québec ($1 668 for Québec residents) for full-time undergraduate studies, compared with $4 827 in the rest of Canada.

Student Retention From Elementary School to University

Student retention in Québec's education system for 2003-2004 is illustrated on the opposite 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, 99 could be expected to reach the secondary level and 85 to obtain a first secondary school diploma, 39 to obtain a Diploma of College Studies (DCS), 28 to earn a bachelor's degree, 8 to be awarded a master's degree, and 1 to obtain a doctorate. Of the 85 students to obtain a secondary school diploma, 28 would do so in vocational training. There are, however, important discrepancies between the sexes in educational achievement: in 2003-2004, more male students than female students (27% compared with 13%) left their studies before earning a diploma or degree. Similarly, in 2003, 34% of women obtained at least a bachelor's degree, compared with only 21% of men.

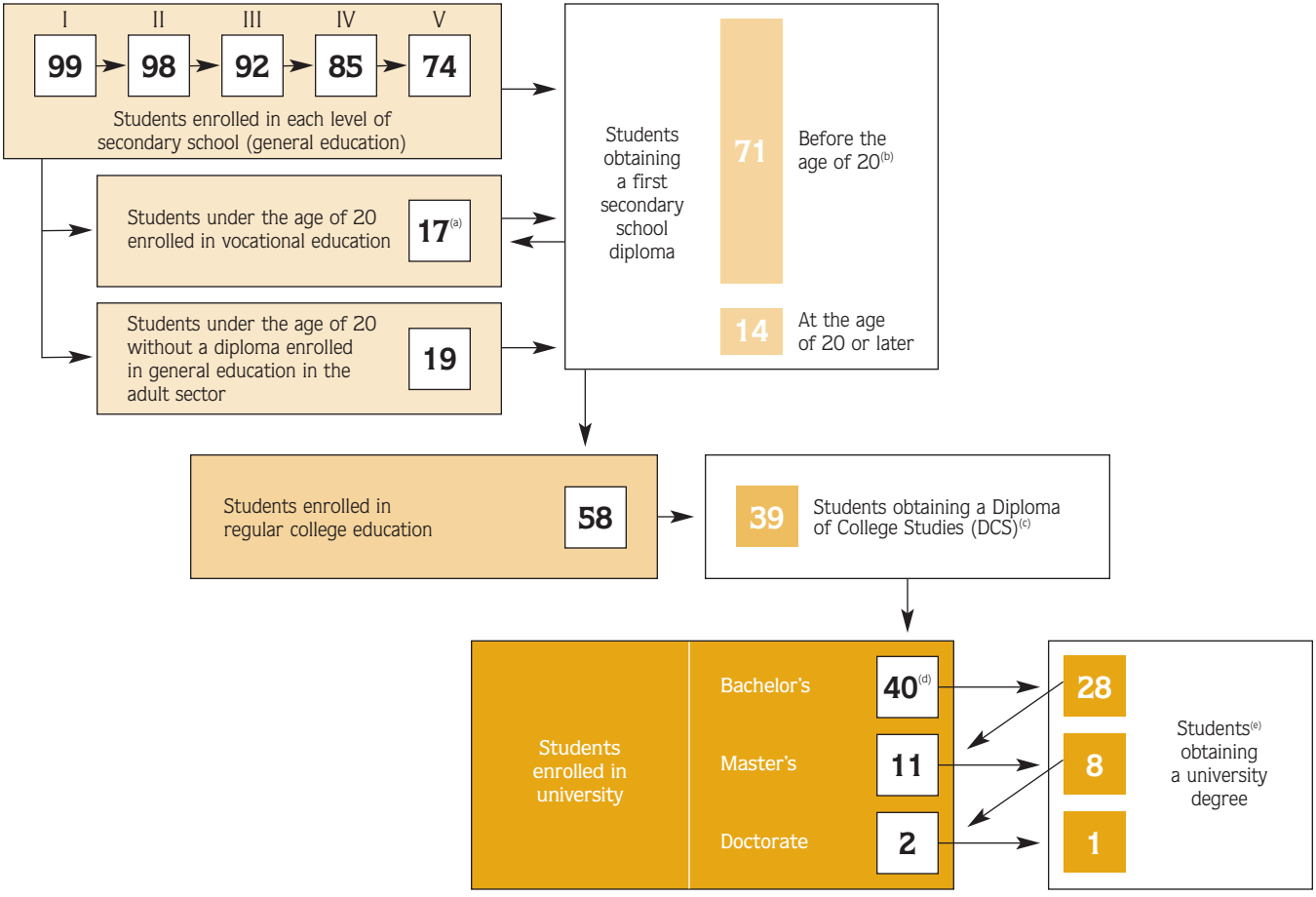
Objectives for the educational success of a greater number of Quebeckers have been set: to have 85% of the students in a generation earn a secondary school diploma before the age of 20; 60%, a DCS; and 30%, a bachelor's degree. Women have already attained the objective set for earning a bachelor's degree.

Children who began elementary school in 2003-2004 can expect to be in school for 15.6 years (assuming that the success rates and retention rates prevailing in the education system in 2003-2004 do not change). Secondary school graduates will have been in school for 11.2 years, at an estimated cost of $100 138 in 2002-2003; those obtaining a bachelor's degree will have studied for 17.2 years, at an estimated total cost of $196 261.

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 18.5% in 2003.

Student Retention of 100 Quebeckers in the Education System, Based on Findings for 2003-2004



(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 2002-2003.
(d) Students who enroll in university are not limited to those who hold a DCS.
(e) The most recent yaer for which data is available is 2003.

The proportion of students in other education sectors who obtained diplomas or degrees and the proportion who left school either temporarily or permanently were determined by observing the number of students who leave school each year. Thus, of the students in Secondary Cycle Two in the adult sector who quit their studies before the age of 20, 60% did so with a diploma, while 40% left school for at least two years. 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, 75 did so with a diploma. At the college level, 73% of students in pre-university programs leading to a DCS obtained a diploma; in technical education, 61% 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, 70% 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 2004, students in Secondary IV and V obtained an average mark of 75% and had a success rate of 87.1%. The male students' average was 74.4% and the female students', 75.5%. Students obtained an average final mark of 72.5% on the examination in Secondary V French, language of instruction, and 89.6% passed. In 2003-2004, 84.7% of college students passed the ministerial examination of college French, language of instruction.

Moreover, 13- and 16-year-old students in Québec distinguished themselves in the science assessments held in the spring of 2004 as part of the School Achievement Indicators Program (SAIP) of the Council of Ministers of Education, Canada. Québec 15-year-olds performed well in the Programme for International Student Assessment (PISA 2003), in which 40 countries participated. The results of Québec 10- and 14-year-olds varied considerably in the Trends in International Mathematics and Science Study (TIMSS 2003).

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 2002-3003, at the end of their college studies, 78.1% of pre-university program graduates under the age of 25 went on to university the following year, compared with 22.2% of graduates from technical programs.

The unemployment rate in March 2004 was 11.6% for students who had graduated in 2001-2002 with a DVS, and 6% for students who had graduated from a college technical program. Since 1990, the profile of the work force in Québec has changed significantly. In 2004, the increase in the number of jobs was more beneficial to those who had started but not completed postsecondary studies as well as 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 34.8%.

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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*
– *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*

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.

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 from economically disadvantaged areas can be admitted to kindergarten. 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 2003-2004, the Québec government funded 77% of school board operating expenses, while local taxes accounted for 14% 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 800 to 76 100, for a median size of approximately 9 380 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 5% of elementary students and 17% 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 0.3% 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 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

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.*

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 education; 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 socioeconomic 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 2003-2004, the Québec government funded 93% of CEGEP operating expenses. Private educational institutions served 11% of college students, and 55% 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 2003-2004, 56% of university expenses were subsidized by the Québec government.

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 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.

The Education Reform and the Strategic Plan of the Ministère de l'Éducation, du Loisir et du Sport

In the fall of 1996, following the Estates General on Education, the Ministère de l'Éducation, du Loisir et du Sport announced the main guidelines for the reform of the education system. Seven major lines of action were defined:

- Provide services for young children, in particular, by implementing full-time kindergarten.
- Teach the essential subjects throughout elementary and secondary school.
- Give more autonomy to schools.
- Support Montréal schools, given the particular challenges they are facing.
- Intensify the reform of vocational training and technical education.
- Consolidate and rationalize postsecondary education.
- Provide better access to continuing education.

Concrete changes have already taken place: in particular, kindergarten was made full-time for 5-year-olds in the fall of 1997. At the secondary level, the diversification of vocational training options has also been undertaken and will provide access to programs leading to a DVS after Secondary III and the implementation of programs leading to an Attestation of Vocational Education (AVE) that will prepare students who have completed Secondary II to practise a semiskilled occupation.

In addition, as part of the Ministère de l'Éducation, du Loisir et du Sport's 2000-2003 strategic plan, educational institutions at the elementary, secondary and college level were required to develop and implement success plans, and universities, performance contracts. In December 2002, section 83 of the *Education Act* (R.S.Q., c. I-13.1) strengthened the requirement that elementary and secondary educational institutions inform the parents and the community served by the school of the services provided by the school and report on the level of quality of such services. Section 16.2 of the *General and Vocational Colleges Act* (c. C-29) stipulates that colleges must make available a document explaining the success plan to the students and the staff of the college. Finally, section 4.6 of *An Act respecting educational institutions at the university level* (c. E-14.1) requires a report on universities' performance contracts that indicates graduation rates, the average duration of studies, student supervision measures and research activity programs. In addition to this report, and in accordance with section 4.1, each university submits to the National Assembly three other annual reports: financial statements, a statement of the salaries paid to the members of its administrative personnel, and a report on its development prospects.

1.1 Government Spending on Education in Québec

Spending on education in Québec was estimated at $11.8 billion in 2004-2005, accounting for 25.0% of government program spending.

Québec government program spending was cut from $36.1 billion to $35.4 billion between 1992-1993 and 1997-1998 in an attempt to reduce the deficit. By 1998-1999, however, it was once again on the rise, going from $37.9 billion to $47.2 billion in 2004-2005.

Table 1.1 presents Québec government program spending in the three major sectors: Education; Health and Social Services; and Employment, Social Solidarity and Family. Spending on other portfolios and programs are grouped together under "Other portfolios." The table makes it possible to compare changes in the portion of government spending allocated to education 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 has increased significantly since 1992-1993, from 35.1% to 42.6% in 2004-2005, while the portion allocated to Employment, Social Solidarity and Family rose from 12.3% to 12.6% during the same period.

The portion of spending allocated to Employment, Social Solidarity and Family fluctuated during the period considered because of significant variations in economic conditions. The decrease in spending in this sector observed as of 1999-2000 is partly attributable to an upswing in economic conditions (fewer households receiving social assistance).

Education and Other Portfolios also saw a decrease in the portion of program spending allocated to them. Between 1992 and 1998, the portion of government program spending allocated to education dropped 3.4 percentage points, from 28.7% to 25.3%. This decrease was a result of budget cuts and strict cost-cutting measures in educational institutions, as well as a drop in student enrollment.

The portion of program spending allocated to education varied slightly between 1998 and 2004, and was 25.0% in 2004-2005. While this proportion is slightly lower than that observed in 1998-1999 (25.3%), it is important to note that the actual amount of financial resources allocated to education in 2004-2005 was $11.8 billion, or $2.2 billion more than in 1998-1999 (a 23% increase). The slight decrease in the portion of program spending allocated to education during this period can be explained primarily by the fact that Health and Social Services saw a greater increase in spending between 1997-1998 and 2004-2005 than did education ($7.1 billion, or 55%).

The $2.2-billion increase in educational spending since 1998 can be partly explained by additional spending in 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.[1] Note that the considerable increase in university enrollments during this period contributed significantly to the increase in education spending.

Government spending on education in Québec was estimated at $11.8 billion in 2004-2005, $2.2 billion more than in 1998-1999.

1. *See, for example, Sections 1.7 and 1.11.*

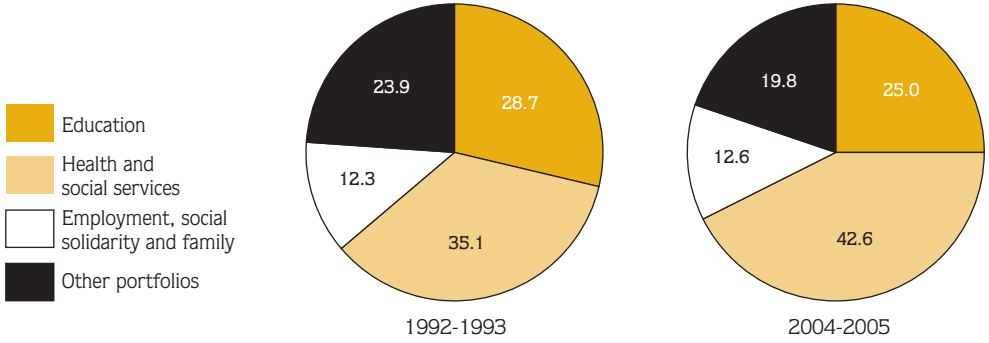
Table 1.1
Québec government program spending, by sector[1] (%)

	1992-1993	1994-1995	1998-1999	2000-2001	2002-2003	2004-2005[e]
Education	**28.7**	**28.3**	**25.3**	**24.8**	**25.1**	**25.0**
Health and social services	35.1	35.5	38.5	39.5	40.4	42.6
Employment, social solidarity and family	12.3	13.4	14.6	13.6	13.1	12.6
Other portfolios	23.9	22.8	21.6	22.1	21.4	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 2004-2005 budgetary structure.

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



1.2 Total Educational Spending in Relation to the GDP

In 2002-2003, Québec allocated 7.5% of its gross domestic product (GDP) to education,[1] compared with the Atlantic Provinces at 7.9%, Ontario at 5.8%, and Western Canada at 6.8%. The United States spent 7.3% of its GDP on education. When this indicator is considered, it is evident that Québec educational spending remains higher than the average for the other provinces and the United States.

During the 1980s, the share of the GDP earmarked for education in Québec dropped considerably, while it increased in the rest of Canada and the United States. The fact that Québec has moved closer to the North American average can largely be explained by 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 in all regions of Canada and in the United States.

However, between 1993 and 2001, 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 7.6%, and in the rest of Canada, from 7.6% to 6.3%. In the United States, however, it increased slightly and stood at 7.4% in 2001-2002.

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 2001, 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 2002-2003, 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 the above 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 and greater spending on childcare services and school transportation. There is also 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 8% lower in 2002-2003) and, if expenses are adjusted to take this into account, the difference is even more marked (about 14%).

In 2002-2003, the share of the GDP allocated to education was higher in Québec than in the rest of Canada as a whole and in the United States. However, compared with the situation that prevailed in the early 1980s, the gap has narrowed.

1. *In 2002-2003, Québec spent $18.5 billion of its $245.6-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. *The most recent year for which data is available on the share of the GDP allocated to education for the OECD countries is 2001.*

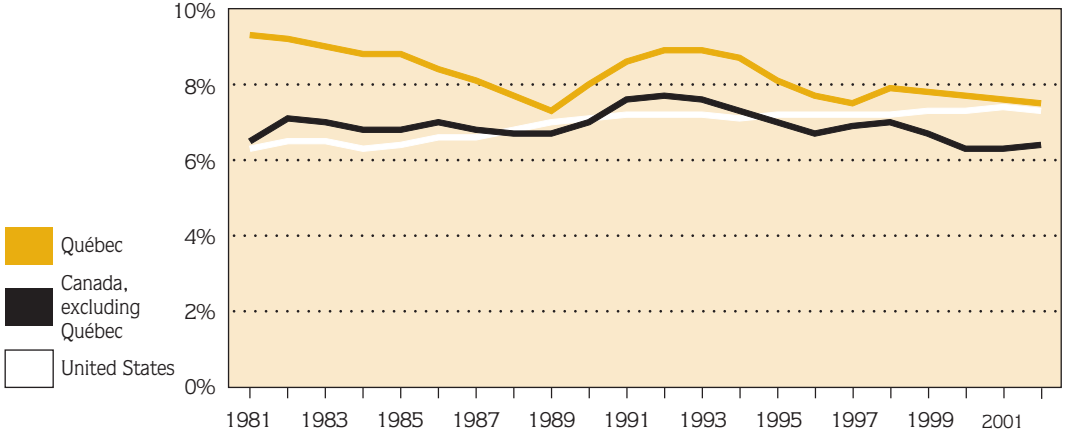
Table 1.2
Total educational spending[1] in relation to the GDP: Québec, other regions of Canada, and the United States (%)

	1981-1982	1989-1990	1993-1994	1999-2000	2001-2002[e]	2002-2003[e]
Québec	**9.3**	**7.3**	**8.9**	**7.8**	**7.6**	**7.5**
Canada, excluding Québec	**6.5**	**6.7**	**7.6**	**6.7**	**6.3**	**6.4**
Atlantic Provinces	10.5	9.3	9.8	8.6	8.1	7.9
Ontario	6.5	6.2	7.4	6.2	5.8	5.8
Western Canada	5.7	6.6	7.1	6.9	6.6	6.8
Canada	**7.1**	**6.8**	**7.9**	**6.9**	**6.6**	**6.6**
United States	**6.3**	**7.0**	**7.2**	**7.3**	**7.4**	**7.3**

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, Canada excluding Québec, and the United States (%)



1.3 Total Educational Spending Per Capita

In 2002-2003, total educational spending per capita[1] was estimated at $2 510, in Québec, higher than in the Atlantic Provinces ($2 325) and Ontario ($2 303), but lower than in Western Canada ($2 599). Graph 1.3 shows the relative change in total educational spending per capita for these regions between 1981 and 2002.

Table 1.3a shows the data on total spending per capita by level of education in 2002-2003.[2] These figures indicate the distribution of educational spending among the levels of education for the regions in question. 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 at the elementary and secondary levels is lower in Québec 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).[3]

Table 1.3b shows data on the direct sources of funds for total educational spending. 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.[4]

In 2004-2005, university students in Québec paid tuition fees that were 38% ($1 890) of the amount charged in Ontario ($4 960).[5] 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 $1 820 a year in tuition fees.[6] This amount does not include other compulsory fees, textbooks or supplies.

In 2002-2003, total educational spending per capita in Québec ($2 510) was slightly higher than in the rest of Canada ($2 434).

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).*
2. *The "Other" category in Table 1.3a includes training financed by Human Resources Development Canada, federal spending on language courses, vocational training offered in federal and provincial correctional institutions, various federal and provincial training programs (for example, those offered by Emploi Québec) and expenses of private trade schools, art schools, music schools, etc. (as defined by Statistics Canada).*
3. *Regarding the organizational differences at the college level, see Section 1.4.*
4. *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.*
5. *For Québec residents, tuition fees are $1 668 per year. Also, see footnote 1 at the bottom of Table 1.16.*
6. *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 educational spending per capita: Québec and the other regions of Canada, 2002-2003[e] (in current dollars)

	Elementary and secondary	College[1]	University	Other[2]	Total
Québec	**1 322**	**290**	**632**	**266**	**2 510**
Canada, excluding Québec	**1 391**	**151**	**602**	**290**	**2 434**
Atlantic Provinces	1 150	107	684	384	2 325
Ontario	1 382	142	577	202	2 303
Western Canada	1 439	167	622	371	2 599
Canada	**1 374**	**184**	**609**	**284**	**2 451**

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

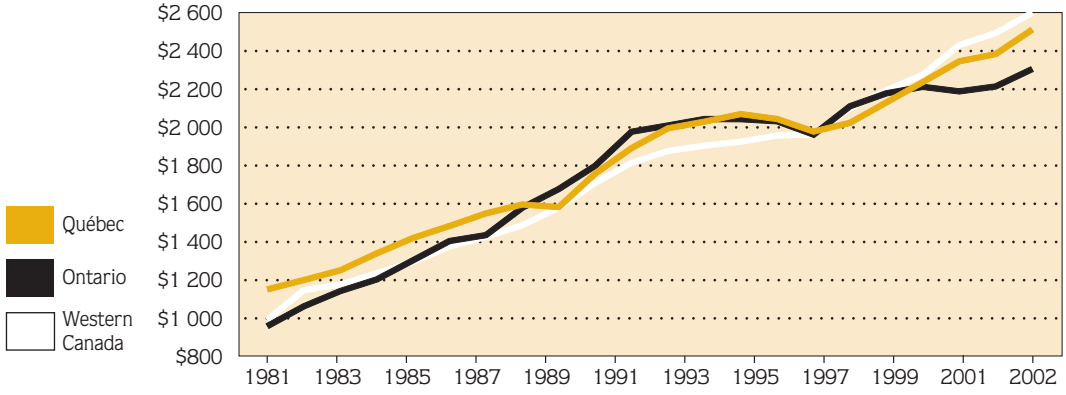
	Provincial government	Federal government	Local government	Other sources	Total
Québec	**68.8**	**8.3**	**6.1**	**16.8**	**100.0**
Canada, excluding Québec	**53.4**	**8.9**	**17.6**	**20.1**	**100.0**
Atlantic Provinces	66.7	12.1	3.0	18.2	100.0
Ontario	49.5	6.9	21.7	21.9	100.0
Western Canada	54.3	10.0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

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

Graph 1.3
Total educational spending per capita: Québec, Ontario and Western Canada (in current dollars)



1.4 Total Educational Spending per Student 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.[1] 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 2002-2003, the cost of living in Québec was approximately 8% lower than in the rest of Canada).

In 2002-2003, total per-student spending at the elementary and secondary levels ($8 208) was higher in Québec than in the Atlantic Provinces ($7 118), Ontario ($7 889) and Western Canada ($8 190).[2] The higher per-student spending in Québec is due mainly to lower student-teacher ratios and greater spending on childcare services and school transportation.

Total per-student spending at the college level was higher in Québec ($13 564) than in the Atlantic Provinces ($12 299) and in Ontario ($12 566), but lower than in Western Canada ($15 366) in 2002-2003. 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 2002-2003 was higher in Québec ($19 531) than in Ontario ($18 139) and in the Atlantic Provinces ($18 921), but lower than in Western Canada ($22 559).[3] The previously mentioned organizational differences partly explain the gaps observed between the regions.

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 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). Moreover, in the calculation of total per-student spending at the university level, funded research has been excluded. Also, in the calculation of 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. To calculate this indicator, the concept of per-student spending is more inclusive than that used in other sections of this chapter.*
2. *See Section 1.8 for a comparison of school board operating expenses per student.*
3. *See Section 1.14 for a comparison of university operating expenses per student.*

Table 1.4a
Total per-student educational spending: Québec and the other regions of Canada, 2002-2003[e] ($)

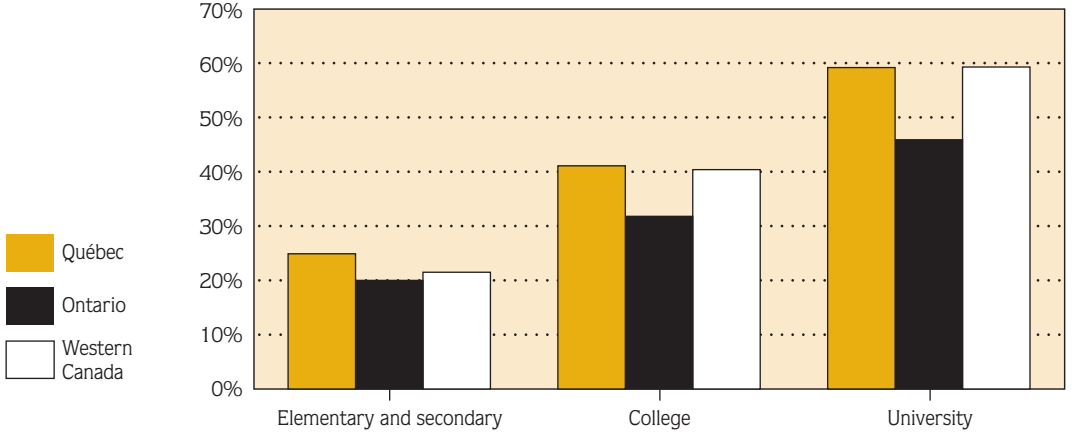
	Elementary and secondary	College	University
Québec	**8 208**	**13 564**	**19 531**
Canada, excluding Québec	**7 973**	**13 804**	**19 837**
Atlantic Provinces	7 118	12 299	18 921
Ontario	7 889	12 566	18 139
Western Canada	8 190	15 366	22 559
Canada	**8 026**	**13 827**	**19 764**

Table 1.4b
Total per-student educational spending in relation to the per capita GDP: Québec and other regions of Canada, 2002-2003[e] (%)

	Elementary and secondary	College	University
Québec	**24.9**	**41.1**	**59.2**
Canada, excluding Québec	**21.0**	**36.3**	**52.2**
Atlantic Provinces	24.3	42.0	64.6
Ontario	20.0	31.8	45.9
Western Canada	21.5	40.4	59.3
Canada	**21.8**	**37.6**	**53.7**

e: Estimates

Graph 1.4
Total per-student educational spending in relation to the per capita GDP: Québec, Ontario and Western Canada, 2002-2003 (%)



1.5 Cost of Educating Graduates

In 2002-2003, the total cost of a secondary school diploma was estimated at $100 138, of a college-level pre-university or technical diploma, at $125 949 and $161 439, respectively, and of a bachelor's degree, at $196 261.

The concept of expenses used here includes operating expenses (excluding funded research), capital expenses of educational institutions, the Ministère's administrative expenses, government contributions to employee pension plans, the cost of financial assistance to students, and other education expenses. 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 education, 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 2002-2003 was used,[1] as well as the average duration of studies completed by those who obtained the diploma or degree.[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. Furthermore, there are 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 2002-2003, the total cost of a bachelor's degree was approximately $196 000 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 terms is counted as one third of a full-time term at the university level and one quarter at the college level. Also see Note 1 at the bottom of Table 1.5.*
3. *See Marius Demers, "The Return on Investment in Education,"* Education Statistics Bulletin 8 *(Québec: Ministère de l'Éducation, Direction de la recherche, des statistiques et des indicateurs), February 1999. This document examines the profitability of investing in education and is available on the Internet at http://www.mels.gouv.qc.ca. For an analysis of the situation from the point of view of young people acquiring additional education, see Marius Demers, "Education Pays!"* Education Statistics Bulletin 16 *(June 2000).*

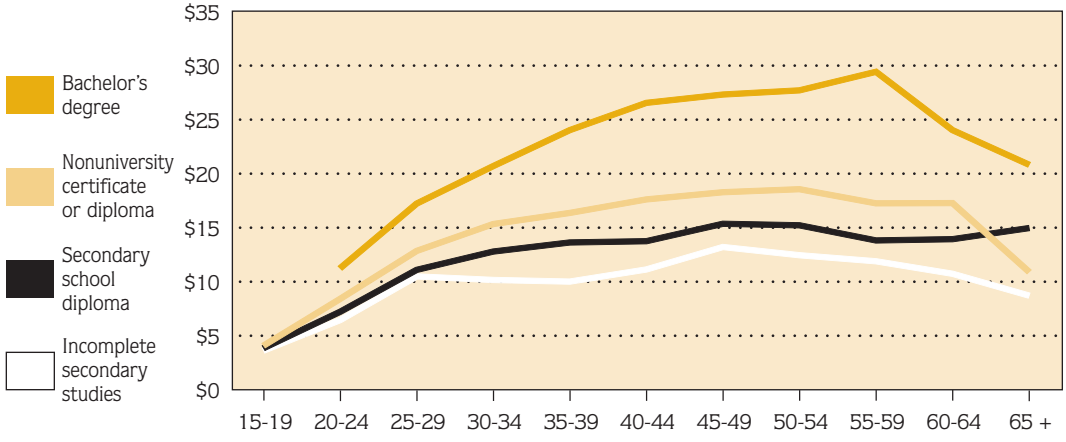
Table 1.5
Cost of educating graduates, 2002-2003

	Average duration of studies[1](years)	Cost of education ($)[e]
Secondary School Diploma	11.2	100 138
Diploma of College Studies		
Pre-university education	13.6	125 949
Technical education	15.0	161 439
Bachelor's degree	17.2	196 261

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, first 11 months of 2004 ($)



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

In 2002-2003, it was estimated that 4.0% of Québec's gross domestic product (GDP) was spent on elementary and secondary education,[1] compared with the Atlantic Provinces at 3.9%, Ontario at 3.5%, and Western Canada at 3.8%. In the United States, the share of the GDP allocated to elementary and secondary education was estimated at 4.4%. Québec therefore spent a larger share of its GDP on elementary and secondary education than the average for the rest of Canada. It should also be remembered that the duration of elementary and secondary education in Québec is shorter.[2]

In 1981-1982, the gap between the share of the GDP allocated to elementary and secondary education Québec and in the rest of Canada was very wide. Between 1981 and 1989, 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. The fact that Québec has reached the North American average can be explained largely by 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 5.1 % of its GDP on elementary and secondary education, that is, a slightly higher percentage than the rest of Canada, while the United States spent 4.3%.

Between 1993 and 1998, 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 1998-1999, in spite of a major reinvestment in education in Québec, the share of the GDP spent on education decreased slightly. 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 slightly. 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 elementary and secondary education accounted for 4.4% of the GDP in 2002-2003.

When the share of Québec's GDP spent on elementary and secondary education is compared with that of the OECD countries in 2001, Québec ranked below the average for the OECD countries considered, despite the fact that its per-student spending was slightly higher.[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 2002-2003, Québec spent a larger share of its GDP on elementary and secondary education than the rest of Canada.

1. *In 2002-2003, Québec spent $9.8 billion of its $245.6-billion GDP on public and private elementary and secondary education. 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.*
3. *The most recent year for which data is available on the share of the GDP allocated to education for the OECD countries in 2001.*
4. *The college network in Québec 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

Spending on elementary and secondary education[1] in relation to the GDP: Québec, the other regions of Canada, and the United States (%)

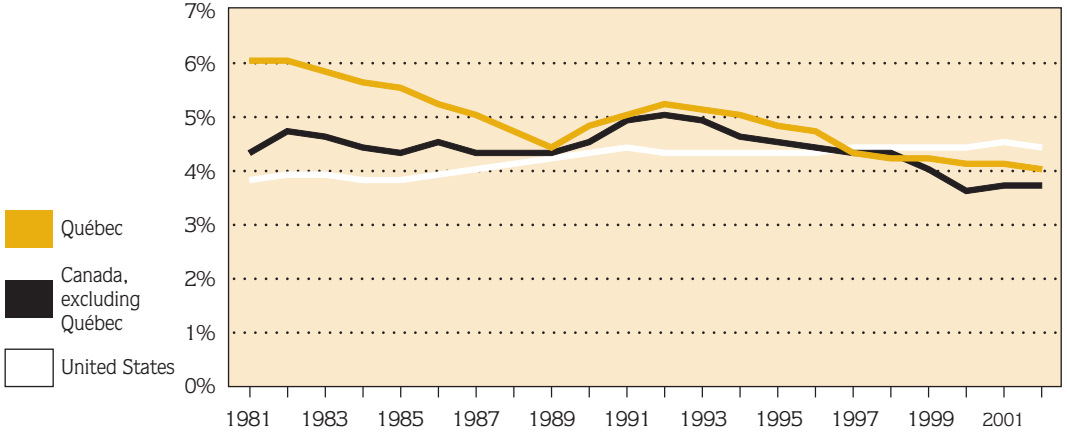
	1981-1982	1989-1990	1993-1994	1998-1999	2001-2002[e]	2002-2003[e]
Québec	**6.0**	**4.4**	**5.1**	**4.2**	**4.1**	**4.0**
Canada, excluding Québec	**4.3**	**4.3**	**4.9**	**4.3**	**3.7**	**3.7**
Atlantic Provinces	6.9	5.7	5.6	4.9	4.1	3.9
Ontario	4.4	4.3	5.1	4.3	3.5	3.5
Western Canada	3.7	4.1	4.4	4.2	3.7	3.8
Canada	**4.7**	**4.3**	**4.9**	**4.2**	**3.7**	**3.7**
United States	**3.8**	**4.2**	**4.3**	**4.4**	**4.5**	**4.4**

e: Estimates

1. These figures include the operating and capital expenses for public and private elementary and secondary education, the Ministère's administrative expenses (the portion attributable to elementary and secondary education), government contributions to employee pension plans and other education expenses (as defined by Statistics Canada).

Graph 1.6

Total spending on elementary and secondary education in relation to the GDP: Québec, Canada excluding Québec, and the United States (%)



1.7 School Board Operating Expenses in Current and Constant Dollars

In 2003-2004, school board spending in Québec was estimated at $8.3 billion, student enrollments at approximately 1.1 million, and per-student spending in current dollars at $7 728.[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).

In the early 1990s, per-student spending in constant dollars increased slightly, and then fell again so that in 1998-1999, it was slightly lower than in 1990-1991. The decrease observed between 1994 and 1998 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 2003, there was a 31% increase in per-student spending in current dollars and an 18% 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 child-care services,[5] programs to reduce the dropout rate, smaller classes in preschool and the first cycle of elementary school, special education policy, implementation of the education reform, support for economically disadvantaged areas, funding to reduce the fees charged to parents, 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 15.7 in 2003-2004. This factor contributed significantly to the increase in per-student spending. [6]

From 1998 to 2003, school board spending per student increased by 18% 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. Previous editions of the* Education Indicators *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; this explains the large increase observed in 1999-2000 (significant adjustment of salary scales compared with the previous year). It is important to note, however, that the amounts paid retroactively in 1999-2000 for past years are not considered for the purpose of calculating per-student spending in 1999-2000 and that per-student spending for past years has not been adjusted.*
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. *See Sections 1.8 and 1.9.*

Table 1.7
School board operating expenses[1]

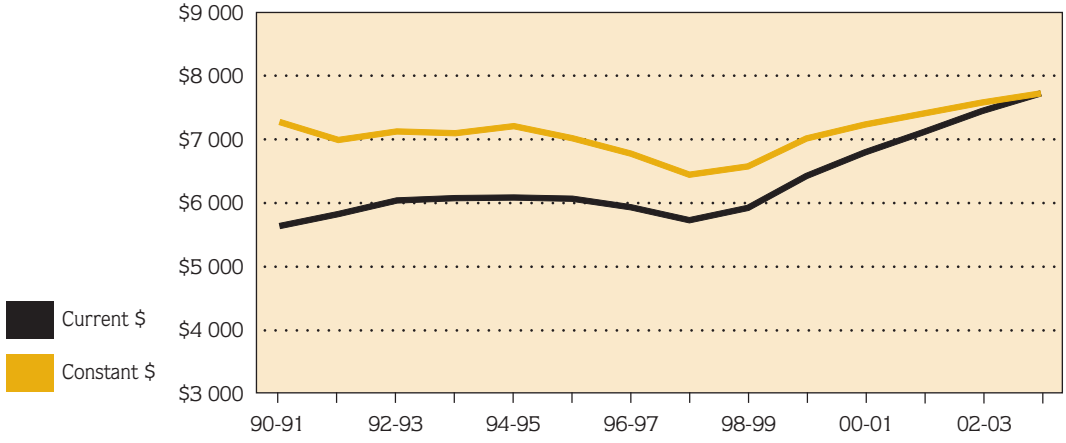
	1990-1991	1994-1995	1998-1999	2000-2001	2002-2003	2003-2004[e]
Total spending (in millions of dollars)						
In current dollars	6 001.8	6 583.7	6 607.6	7 437.8	8 079.3	8 303.7
In constant 2003-2004 dollars[2]	7 751.3	7 804.3	7 339.3	7 919.3	8 224.9	8 303.7
Spending per student ($)						
In current dollars	5 634	6 083	5 919	6 797	7 450	7 728
In constant 2003-2004 dollars[2]	7 276	7 211	6 575	7 237	7 584	7 728

e: Estimates

1. Operating expenses exclude debt service (long-term and current liabilities), capital expenses financed directly from current revenues, and transfer expenses. The direct contribution of the Québec government to school board employee pension plans is included in the operating expenses.

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

Graph 1.7
School board operating expenses per student in current dollars and in constant 2003-2004 dollars



1.8 School Board Operating Expenses per Student

In 2002-2003, spending per student[1] by Québec school boards was estimated at $7 450, compared with the Atlantic Provinces at $6 533, Ontario at $7 200, and Western Canada at $7 561. In the United States, per-student spending was estimated at $9 552.[2]

Previous education 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.

Between 1990 and 2002, per-student spending varied in Canada and, in 2002-2003, it was slightly higher in Québec than the Canadian average. It should be noted that per-student spending in Québec increased by 26% between 1998 and 2002. This increase is the result of different factors,[3] one of which is the main reason for the greater increase in per-student spending in Québec (26%) than in Ontario (5%) during this period. This is the fact that the student-teacher ratio decreased in Québec, while it increased significantly in Ontario.[4] These opposing trends are largely responsible for the greater growth of per-student spending in Québec than in Ontario.

It should also be noted 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 8% lower in 2002-2003). If the data is adjusted to take the cost of living into account, per-student spending is even higher in Québec (in real terms).

In the United States, per-student spending in 2002-2003 was 28% higher than in Québec. A comparison with the United States as a whole for 2002-2003 reveals that per-student spending was higher in 43 U.S. states[5] than in Québec, and lower in 8 states.

In 2002-2003, school board spending per student in Québec was slightly higher than the Canadian average, but lower than in the United States.

1. *The basic data used in this section comes from an annual survey conducted by Statistics Canada among all Canadian provinces. Some data not provided by the survey has been estimated based on data from other sources.*
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 1.7.*
4. *See Section 1.9.*
5. *Including the District of Columbia.*

Table 1.8

School board operating expenses per student:[1] Québec, the other regions of Canada, and the United States (in current dollars[2])

	1990-1991	1994-1995	1998-1999	1999-2000	2001-2002	2002-2003[e]
Québec	**5 634**	**6 083**	**5 919**	**6 424**	**7 116**	**7 450**
Canada, excluding Québec	**5 607**	**6 172**	**6 527**	**6 557**	**7 003**	**7 295**
Atlantic Provinces	4 538	4 959	5 443	5 854	6 241	6 533
Ontario	6 114	6 696	6 841	6 672	6 930	7 200
Western Canada	5 235	5 782	6 360	6 549	7 246	7 561
Canada	**5 613**	**6 152**	**6 392**	**6 525**	**7 012**	**7 313**
United States	**6 381**	**6 948**	**7 939**	**8 440**	**9 404**	**9 552**

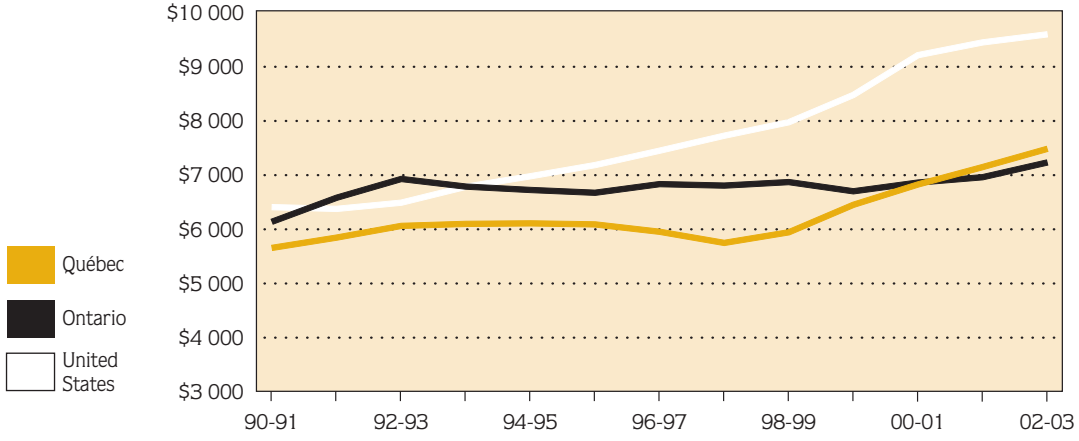
e: Estimates

1. Operating expenses exclude debt service (long-term and current liabilities) and capital expenses financed directly from current revenues. The direct contribution of the Québec government to school board employee pension plans is included in the operating expenses.

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

Graph 1.8

School board operating expenses per student: Québec, Ontario and the United States (in current dollars)



1.9 Student-Teacher Ratio in School Boards

In 2003-2004, the average number of students per teacher in school boards was estimated at 15.7 in Québec, that is, the same ratio as in the United States. 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 2003-2004, the student-teacher ratio in Québec school boards was therefore the same as in the United States. A comparison of Québec with the United States as a whole reveals that the student-teacher ratio was higher in 16 states and lower in 35 states.[1]

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).[2] Table 1.9b contains data on the student-educator ratio. In 2002-2003, this ratio was lower in Québec (14.3) than in the Atlantic Provinces (15.6), Ontario (17.0) and Western Canada (16.7). 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 21 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.

However, since the peak observed in 1997-1998 (15.2), Québec's student-educator ratio has gradually declined. This can be explained in part by the smaller class sizes in preschool and the first cycle of elementary school, and by the hiring of specialists. In 2002-2003, the average number of students per educator was 14.3 in Québec and 16.7 in the rest of Canada. This gap of 2.4 has a major impact on school board spending per student and is the main reason why per-student spending is higher in Québec than in the rest of Canada.[4]

The average number of students per teacher in Québec has declined in recent years.

1. *Including the District of Columbia.*
2. *The basic data used in this section comes from an annual survey conducted by Statistics Canada among all Canadian provinces. Some data not provided by the survey has been estimated based on data from other sources.*
3. *The instruction time for students is 900 hours in Québec and 950 hours in Ontario.*
4. *See Section 1.8.*

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

	1990-1991	1994-1995	1998-1999	2000-2001	2002-2003	2003-2004[e]
Québec	15.6	15.8	16.3	16.0	15.7	15.7
United States	16.7	16.8	16.0	15.6	15.6	15.7

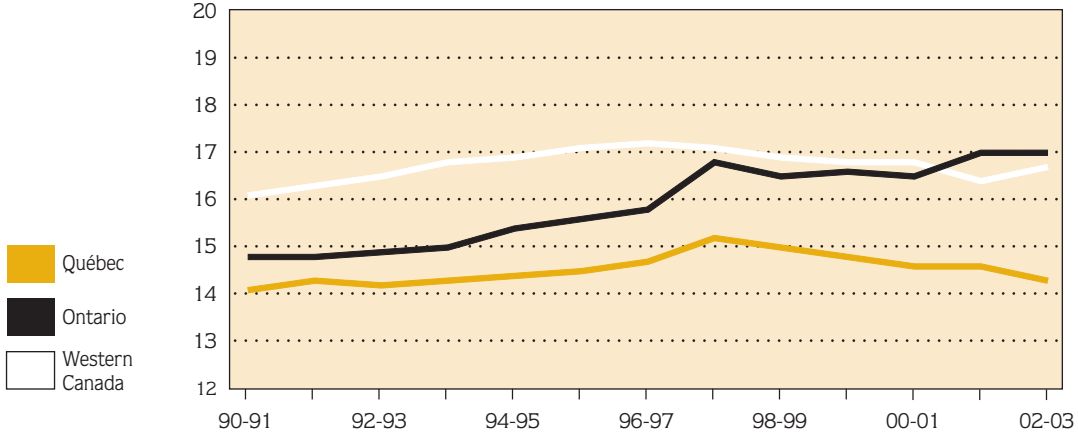
Table 1.9b
Student-educator ratio[1] in school boards: Québec and the other regions of Canada

	1990-1991	1994-1995	1998-1999	1999-2000	2001-2002	2002-2003[e]
Québec	**14.1**	**14.4**	**15.0**	**14.8**	**14.6**	**14.3**
Canada, excluding Québec	**15.4**	**16.0**	**16.6**	**16.6**	**16.6**	**16.7**
Atlantic Provinces	15.9	16.4	16.3	16.0	15.8	15.6
Ontario	14.8	15.4	16.5	16.6	17.0	17.0
Western Canada	16.1	16.9	16.9	16.8	16.4	16.7
Canada	**15.1**	**15.6**	**16.2**	**16.2**	**16.1**	**16.1**

e: Estimates

1. See definition in the text.

Graph 1.9
Student-educator ratio in school boards: Québec, Ontario and Western Canada



1.10 Average Salary of Teachers in School Boards

In 2003-2004, the average salary of teachers in Québec school boards was estimated at $49 586, compared with $56 273 in the United States.[1] A comparison of Québec with the United States as a whole for 2003-2004 reveals 30 U.S. states[2] where the average salary of teachers was higher than in Québec and 21 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).[3] Table 1.10b contains data on the average salary of educators. In 2002-2003, the average salary of educators in Québec was lower than in the rest of Canada. The difference between the average salary in Québec ($51 738) and in the rest of Canada ($63 235) was 18%.

Between 1990 and 1998, the average salary of educators increased by 5% in Québec, while it rose by 22% 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.[4]

However, there was a significant increase in the average salary of educators in Québec between 1998-1999 and 2002-2003 (16%), while the increase was less pronounced in the rest of Canada (11%). The greater increase in Québec is 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 as well as of a new collective agreement. In 2002-2003, the average salary of teachers in Québec was still lower than that of their counterparts in the rest of Canada (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 school boards in Québec 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.[5] In 2002-2003, the salary of teachers in Québec school boards was higher than the average for the OECD countries. Gaps in salaries are particularly wide in the case of teachers with 15 years of seniority because in Québec teachers reach the maximum salary scale their 15th year of recognized experience, whereas in the OECD countries, the maximum salary is reached on average after 24 years.

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

1. *The calculation of the average salary of U.S. teachers is based on data from the National Education Association. This data was expressed in Canadian dollars using the purchasing power parity rates (PPP) set by the OECD. See Note 2 in Section 1.8.*
2. *Including the District of Columbia.*
3. *The basic data used in this section comes from an annual survey conducted by Statistics Canada among all Canadian provinces. Some data not provided by the survey has been estimated on the basis of data from other sources.*
4. *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.*
5. *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, 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>.*

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

	1990-1991	1994-1995	1998-1999	1999-2000	2002-2003	2003-2004[e]
Québec	40 478	43 080	42 908	45 314	48 635	49 586
United States	41 892	44 774	48 189	49 808	54 755	56 273

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

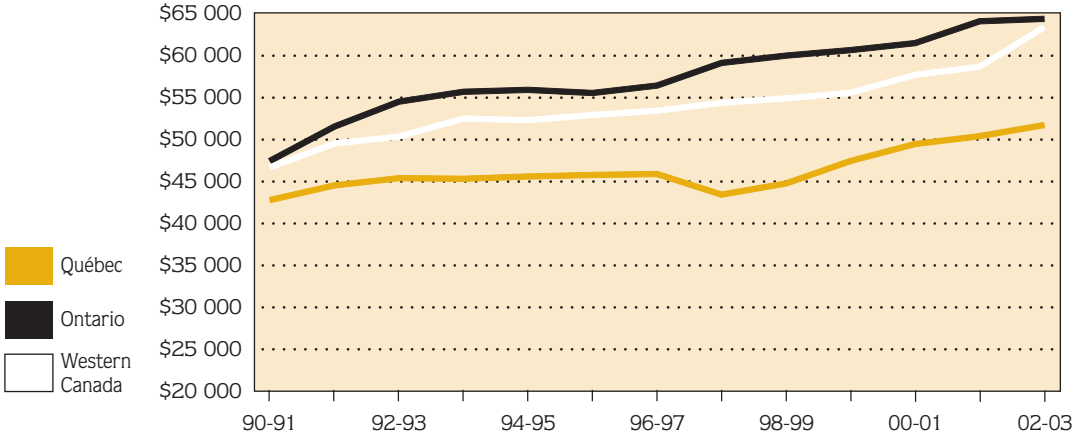
	1990-1991	1994-1995	1998-1999	1999-2000	2001-2002	2002-2003[e]
Québec	**42 800**	**45 610**	**44 780**	**47 459**	**50 415**	**51 738**
Canada, excluding Québec	**46 898**	**53 728**	**56 983**	**57 722**	**61 129**	**63 235**
Atlantic Provinces	44 588	47 104	49 154	50 539	54 834	56 584
Ontario	47 470	55 932	60 013	60 671	64 106	64 394
Western Canada	46 691	52 315	54 913	55 585	58 684	63 396
Canada	**45 895**	**51 773**	**54 042**	**55 238**	**58 427**	**60 409**

e: Estimates

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

2. See definition in the text.

Graph 1.10
Average salary of educators in school boards: Québec, Ontario and Western Canada (in current dollars)



1.11 CEGEP Operating Expenses

In 2003-2004, CEGEP spending on regular education was estimated at approximately $1.3 billion, with student enrollments at roughly 144 000.[1] Per-student spending was an estimated $8 768.

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 5.0% 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 31% increase in per-student spending in current dollars and an 18% 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.).

Per-student spending in CEGEPs was therefore $8 768 in current dollars in 2003-2004. This amount is an average for all types of programs: per-student spending on pre-university programs was $6 972, while spending on technical programs was $10 459. The higher 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 2003-2004, 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 $1 820.[4]

Between 1998-1999 and 2003-2004, CEGEP spending increased by 22%, in spite of a 7% 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. Previous editions of the* Education Indicators *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).*

Table 1.11
CEGEP operating expenses[1]

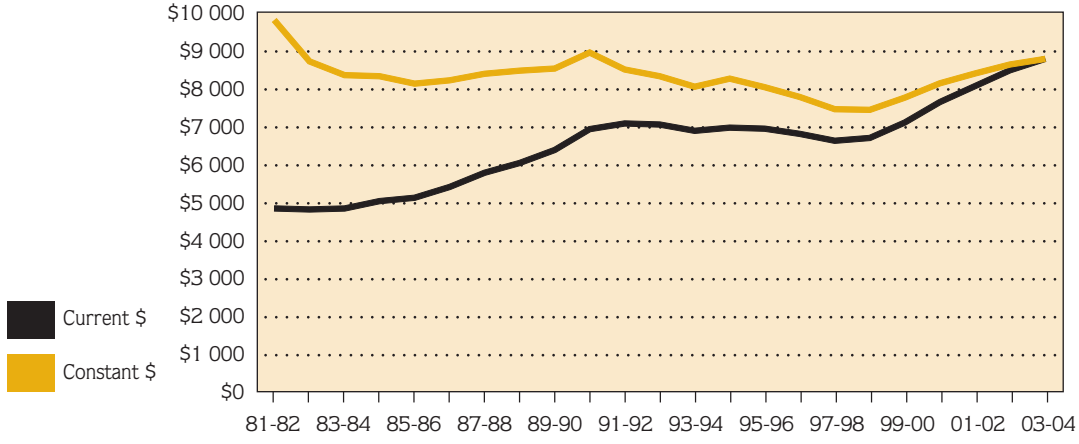
	1989-1990	1990-1991	1993-1994	1998-1999	2002-2003	2003-2004[e]
Total spending in current dollars (in millions of dollars)	830.7	909.0	1 074.9	1 035.7	1 230.4	1 258.9
Per-student spending in current dollars	6 370	6 920	6 876	6 688	8 469	8 768
Per-student spending in constant 2003-2004 dollars[2]	8 515	8 937	8 037	7 428	8 622	8 768

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 2003-2004 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 2003-2004, 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 2003-2004, the average number of students per teacher in CEGEPs was estimated at 12.3 and the average teacher's salary, at $57 489. 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% (7.4% 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 15% increase in the cost of teachers 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 12.3 in 2003-2004. Teachers' average salary was $57 489 in 2003-2004.

In 2003-2004, the average number of students per teacher in CEGEPs was estimated at 12.3 and the average teacher's salary, at $57 489. The actual cost of teachers has increased by 15% since 1998-1999.

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.*

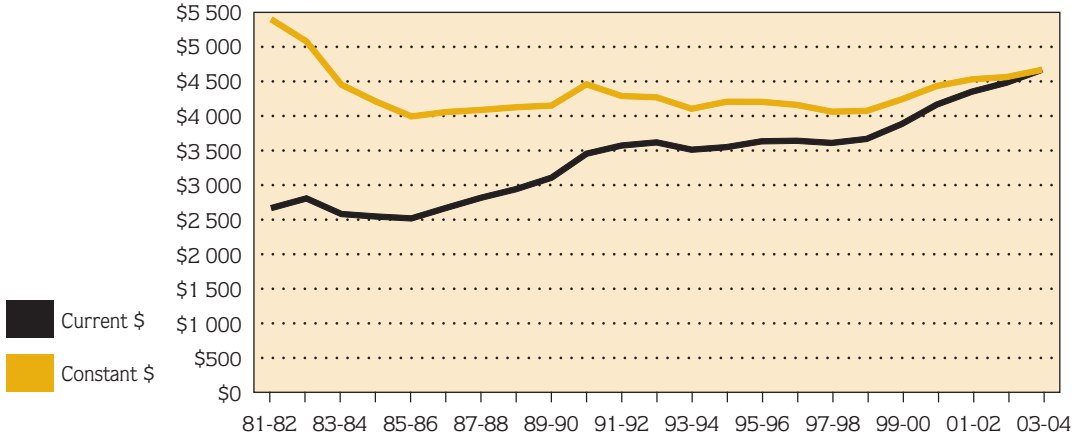
Table 1.12
Student-teacher ratio,[1] average salary of teachers and cost of teachers per student in CEGEPs

	1989-1990	1990-1991	1993-1994	1998-1999	2002-2003	2003-2004[e]
Student-teacher ratio	14.3	13.5	13.9	13.8	12.5	12.3
Average salary in current dollars	44 217	46 512	48 789	50 399	55 877	57 489
Cost of teachers per student						
In current dollars	3 098	3 444	3 503	3 659	4 473	4 657
In constant dollars (2003-2004)	4 141	4 448	4 094	4 064	4 553	4 657

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 2003-2004 dollars



1.13 Total University Spending in Relation to the GDP

In 2002-2003, 1.91% of the GDP was allocated to university education in Québec,[1] compared with 2.33% in the Atlantic Provinces, 1.46% in Ontario and 1.63% in Western Canada.[2]

Between 1981 and 1989, this share of the GDP was on a slight downward trend in Québec, Ontario and the Atlantic Provinces, while 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 2002, the share of the GDP allocated to university education increased slightly both in Québec and in the rest of Canada. In Québec, this increase was due primarily to the increase in per-student spending (in real terms) and by the growth in enrollments. In 2002-2003, 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 school attendance 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 factors were similar in Québec and the rest of Canada in 2002-2003: per-student spending, the school attendance rate and the demographic factor. The per capita GDP, however, was 13% lower in Québec than in the rest of Canada, explaining in large part why Québec invested more of its GDP in university education.

In order to determine the relative investment of the regions under consideration, it is necessary to combine two of these 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 2002-2003, the cost of living in Québec was about 8% 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.[4]

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 2001.[5] This can be explained primarily by the fact that the cost of per-student spending is an estimated 25% 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.[6]

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

1. *In 2002-2003, Québec spent $4.7 billion of its $245.6-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 1.4.*
5. *The most recent year for which data is available on the share of the GDP allocated to education for the OECD countries is 2001.*
6. *In 2001-2002, Québec students aged 20 to 29 represented 30.0% of the total population of 20-to-29-year-olds, whereas the corresponding average percentage for the OECD countries was 22.7%.*

Table 1.13

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

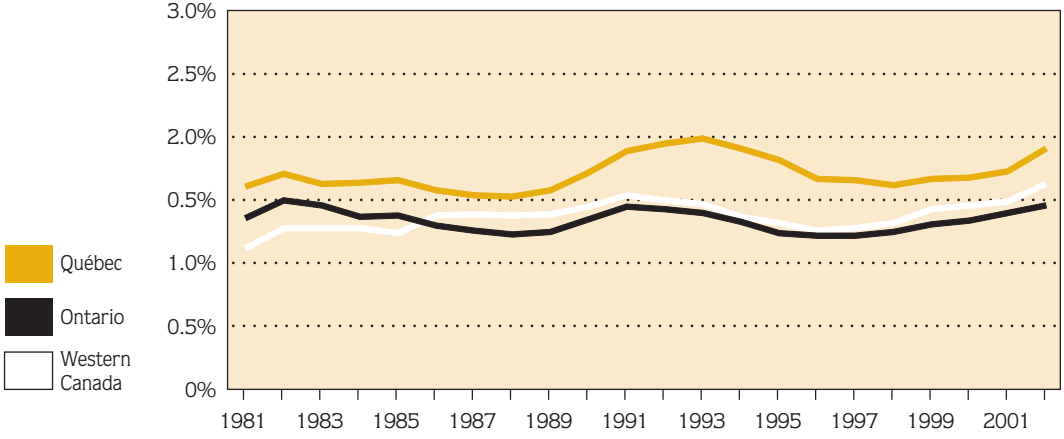
	1981-1982	1989-1990	1993-1994	1999-2000	2001-2002[e]	2002-2003[e]
Québec	**1.61**	**1.58**	**1.99**	**1.67**	**1.73**	**1.91**
Canada, excluding Québec	**1.34**	**1.40**	**1.52**	**1.43**	**1.50**	**1.59**
Atlantic Provinces	2.36	2.22	2.29	2.21	2.26	2.33
Ontario	1.36	1.25	1.40	1.31	1.40	1.46
Western Canada	1.12	1.39	1.47	1.43	1.49	1.63
Canada	**1.40**	**1.44**	**1.62**	**1.48**	**1.55**	**1.66**

e: Estimates

1. These figures include the operating and capital expenses for universities, the cost of student financial assistance, funded and sponsored research at the universities and the Ministère's administrative expenses (the portion attributable to university education). The calculation of the share of the GDP allocated to university education is based on data from Statistics Canada.

Graph 1.13

Total spending allocated to university education in relation to the GDP: Québec, Ontario and Western Canada (%)



1.14 University Operating Expenses per Student

In 2002-2003, spending per student by Québec universities (excluding sponsored research) was estimated at $12 877, compared with $12 817 in the Atlantic Provinces, $11 789 in Ontario and $13 603 in Western Canada.

Since there are differences in the way in which spending is accounted for between funds,[1] certain expenses are not included in the general operating fund: the purchase of furniture and equipment, equipment rental and maintenance, buildings, land and land improvements, other improvements and alterations, and financial expenses. Also, given the different approaches to student financial assistance in the different provinces, amounts awarded by universities in the form of bursaries have also been omitted.[2]

Previous editions of the *Education Indicators* showed that during the first half of the 1980s, spending per student rose at a much slower pace in Québec, such that, in 1986-1987, it was lower in Québec than in the other Canadian provinces. This slowdown in per-student spending in Québec can be explained by salary restrictions and budget cuts to Québec universities. However, in the second half of the 1980s until the mid-1990s, per-student spending rose more sharply in Québec than in the other regions of Canada, partly because of increased government subsidies per student, and partly because of increased revenues from tuition fees.

From the mid-1990s on, per-student spending in Québec decreased. This can be explained by budget cuts to universities and, more specifically, by a reduction in labour costs. In 1998-1999, spending per student was 6% lower in Québec than in the rest of Canada (see Table 1.14).

Between 1998-1999 and 2002-2003, per-student spending increased by 24% in Québec and by 13% in the rest of Canada. The more rapid growth in spending in Québec is primarily a result of a more substantial operating subsidy.

In 2002-2003, spending per student by Québec universities was slightly higher than the average for the rest of Canada,[3] and slightly more than $1 000 higher than in Ontario. This gap can be explained primarily by higher per-student spending on teaching personnel,[4] administration and activities related to computers and communications in Québec. Conversely, there is less spending in Québec than in Ontario on libraries and student services.

In 2002-2003, spending per student by Québec universities was slightly higher than in the rest of Canada.

1. *Part of the spending recorded in the capital fund in Québec appears in the general operating fund in Ontario. For example, Québec universities record most of their furniture and equipment expenses in the capital fund, while Ontario universities enter a large proportion of these expenses in the general operating fund.*
2. *In Québec, student financial assistance is for the most part managed by the government and not by universities. Universities spend little on student assistance. In Ontario, where tuition fees are considerably higher than in Québec (see Section 1.16), the universities are expected to give a portion back to the students in the form of bursaries. This explains why Ontario universities award so much more in the form of bursaries than Québec universities.*
3. *It should be noted that the data presented here has not been adjusted to take into account structural differences between university systems. If the necessary adjustments were made, spending per student in Québec universities would be less than the average for the rest of Canada. However, since the cost of living is lower in Québec than the average for the rest of Canada (approximately 8% lower in 2002-2003), the necessary adjustment to the data in order to take the cost of living into account would result in per-student spending (in real terms) that is higher than the average for the rest of Canada (even if structural differences are taken into account).*
4. *See Section 1.15.*

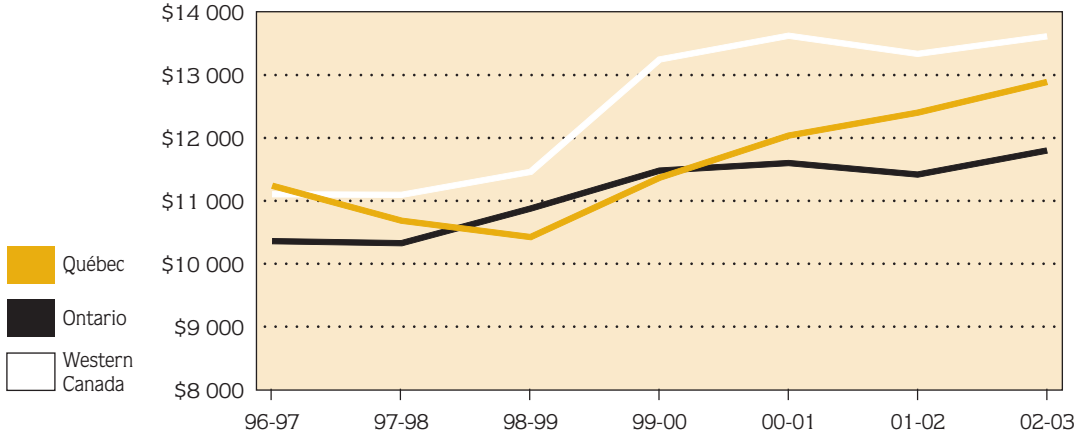
Table 1.14
University operating expenses per student:[1] Québec and the other regions of Canada (in current dollars)

	1996-1997	1997-1998	1998-1999	2000-2001	2001-2002	2002-2003[e]
Québec	**11 229**	**10 675**	**10 415**	**12 027**	**12 391**	**12 877**
Canada, excluding Québec	**10 583**	**10 587**	**11 063**	**12 392**	**12 138**	**12 552**
Atlantic Provinces	10 191	10 356	10 824	12 236	11 914	12 817
Ontario	10 350	10 318	10 868	11 591	11 408	11 789
Western Canada	11 095	11 086	11 451	13 613	13 325	13 603
Canada	**10 744**	**10 609**	**10 903**	**12 304**	**12 200**	**12 631**

e: Estimates

1. For the reasons explained in the text, certain expenses are not included in the general operating fund: the purchase of furniture and equipment, equipment rental and maintenance, buildings, land and land improvements, other improvements and alterations, financial expenses and bursaries. The basic data used to calculate per-student spending in universities 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.

Graph 1.14
University general operating expenses per student: Québec, Ontario and Western Canada (in current dollars)



1.15 Salary Costs of University Professors

Salary spending (including employee benefits) for all categories of personnel accounts for approximately 80% of university operating expenses 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 2002-2003, this cost was lower in Québec ($5 112) than in the Atlantic Provinces ($5 200) and Western Canada ($5 213), but 12% higher than in Ontario ($4 546) and slightly higher than the Canadian average ($4 863).[1]

The total payroll considered in the calculation of per-student spending for professors includes deans, department heads, 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 2003-2004, the average salary of professors in Québec ($86 473) was 8% higher than in the Atlantic Provinces ($79 772), but 6% and 8% lower, respectively, than in Ontario ($92 026) and Western Canada ($94 191). However, it should be noted that the cost of living is lower in Québec than the average for the rest of Canada (approximately 8% lower in 2002-2003 and 9% lower in 2003-2004).

It should also be noted that, although the average salary of professors in Québec is lower than in Ontario (by 5% in 2002-2003), the per-student cost of professors is still higher in Québec (by 12% in 2002-2003). 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 is slightly higher than in the rest of Canada.

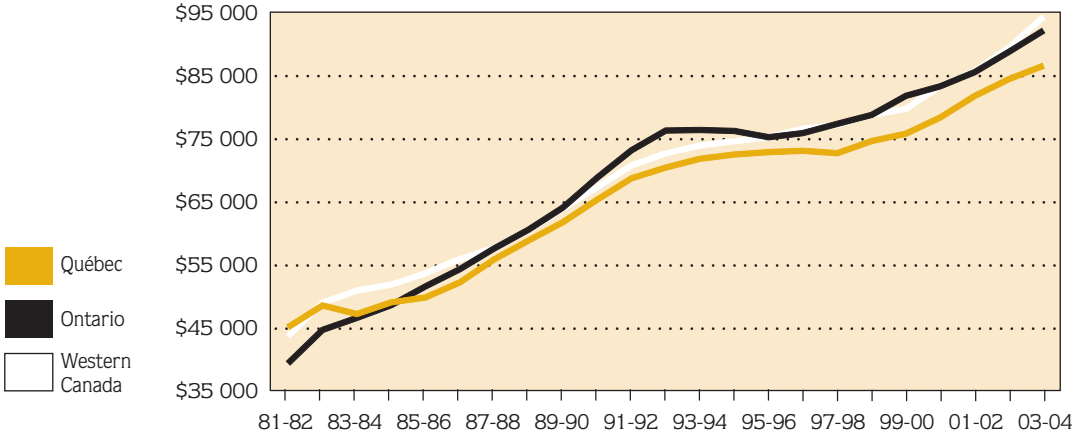
1. *The calculation of per-student spending for professors is based on a standard method for counting student enrollments in all the provinces, as follows: part-time enrollments are divided by 3.5 to convert them into full-time equivalents, and are then added to the full-time enrollments.*
2. *Employee 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	1996-1997	1999-2000	2002-2003[e]	2003-2004[e]
Québec	**65 284**	**71 766**	**73 022**	**75 736**	**84 364**	**86 473**
Canada, excluding Québec	**66 817**	**73 475**	**74 260**	**78 824**	**86 951**	**90 876**
Atlantic Provinces	59 826	63 764	64 586	68 707	76 621	79 772
Ontario	68 763	76 318	75 828	81 721	88 683	92 026
Western Canada	67 267	73 864	76 525	79 657	89 334	94 191
Canada	**66 464**	**73 050**	**73 943**	**78 076**	**86 312**	**90 086**

e: Estimates

Graph 1.15
Average salary of university research professors: Québec, Ontario and Western 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 2003-2004, of those persons studying full time, 21.6% of students in secondary vocational training, 23.2% of college students and 36.9% of university students received assistance. A total of 133 113 students benefited from the Student Financial Assistance Program. Of these, 54 920 received only a loan, 77 464 received a loan and a bursary, and 729 received only a bursary. A total of $355.4 million was granted in the form of loans and $315.2 million, in bursaries.

In 2003-2004, of the university students who received financial assistance, 37.6% obtained only a loan, which averaged $2 714, whereas 62.4% obtained a loan and a bursary totalling an average of $7 630. Those who received a loan and a bursary obtained on average slightly more than half of the assistance in the form of a bursary.

A look at the historical data on the breakdown of financial assistance awarded to Québec students attending university in 1990-1991 shows that loans made up 59.4% of the total assistance awarded, and bursaries, 40.6%. In the years that followed, the portion of assistance granted in the form of loans increased and the portion awarded in bursaries decreased, such that, in 1999-2000, the corresponding percentages were 68.0% and 32.0%, respectively. However, subsequently, there was a reversal in this trend. In 2003-2004, loans made up only 50.4% of the total assistance awarded and bursaries, 49.6%. The increase in the portion of bursaries is related to roughly the 25% reduction in the maximum amount of loans awarded due to the funding obtained as part of the Millennium Bursaries and a reduction in the student's contribution, as well as that of the parents or spouse, applied for the first time in 2001-2002.

In 2003-2004, upon completion of their undergraduate studies, Québec students who had received loans owed on average $9 854. The average debt for graduate studies was $12 881 and for postgraduate studies, $18 358.

Student loans contracted for college and undergraduate studies averaged $13 478 in 2003-2004; for college through to graduate studies, $21 172; and for college to postgraduate studies, $26 508.

It should be noted that student debt levels are much lower in Québec than in other parts of Canada. This is explained in part by the fact that Québec awards, on average, more assistance in the form of bursaries than any of the other provinces, and by the fact that Québec has the lowest tuition fees in Canada.

Thus, tuition fees in Québec universities in 2004-2005 were 39% of the amount charged in the rest of Canada, having remained frozen for a number of years. Although there were major increases at the beginning of the 1990s, tuition fees have remained approximately at the same level in Québec since 1993-1994,[1] whereas they have continued to climb in the other regions of Canada. The gap between Québec and the rest of Canada has once again begun to widen, and in 2004-2005, tuition fees in the rest of Canada ($4 827) were 2.6 times higher than in Québec ($1 890).

In 2004-2005, average tuition fees are $1 890 in Québec and $4 827 in the rest of Canada.

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

Table 1.16a

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

	1989-1990	1991-1992	1995-1996	1999-2000	2003-2004[p]	2004-2005[p]
Québec[1]	**519**	**1 311**	**1 703**	**1 813**	**1 865**	**1 890**
Canada, excluding Québec	**1 537**	**1 842**	**2 603**	**3 764**	**4 636**	**4 827**
Atlantic Provinces	1 728	2 075	2 821	3 778	4 560	4 841
Ontario	1 561	1 818	2 518	4 084	4 911	4 960
Western Canada	1 409	1 780	2 639	3 219	4 216	4 601
Canada	**1 271**	**1 706**	**2 384**	**3 328**	**4 019**	**4 172**

Table 1.16b

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

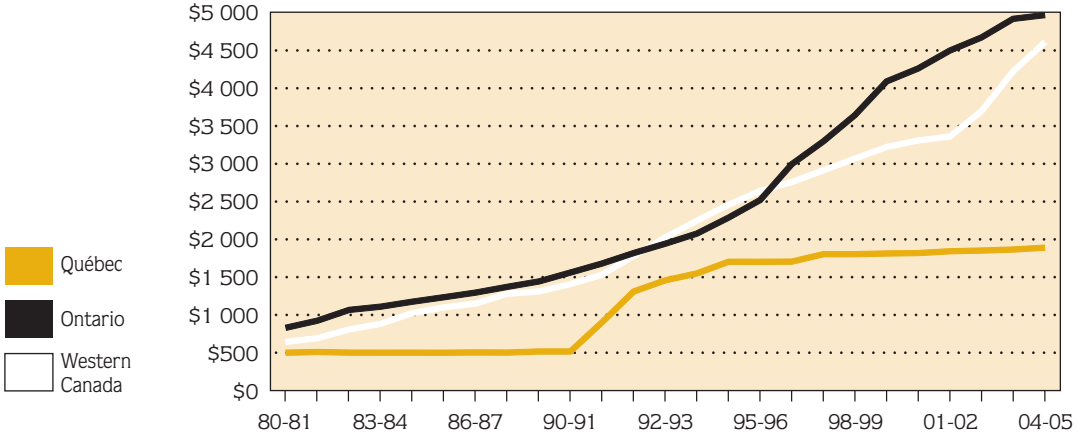
	1990-1991	1991-1992	1995-1996	1999-2000	2002-2003	2003-2004
Loans	59.4	60.5	66.4	68.0	51.5	50.4
Bursaries	40.6	39.5	33.6	32.0	48.5	49.6

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.

Graph 1.16

Average tuition fees for full-time undergraduate university students: Québec, Ontario and Western 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 2002-2003, going from $586.6 million to $1.087 billion. This represents an average annual increase of 8.0%. Funding per research professor rose from $65 866 to $125 811, for an average annual increase of 8.4%.

The increase in the amount of funding allocated to research was particularly significant during the last four years, with the amount of funding through grants and research contracts rising from $660.9 million in 1998-1999 to $1.087 billion in 2002-2003, which corresponds to an average annual increase of 13.3% during this period. This spectacular increase can be explained in large part by the investments of the Québec and Canadian governments in Canadian Foundation for Innovation (CFI) projects. In 2000-2001, for example, almost 65% of the increase in the amount of funding allocated to university research was attributable to CFI projects.

From 1994-1995 to 2001-2002, the contribution of the Québec government represented 24.0% of total contributions to university research. In 2002-2003, its contribution rose to 27.0%. Between 1994-1995 and 2002-2003, the average increase was 9.6% per year.

During the same period, the Canadian government's contribution increased on average 8.5% per year. In 1994-1995, it represented 39.9% of total contributions, compared with 41.3% in 2002-2003, a decrease from the previous year (44.1%). Contributions from the Canadian private sector grew an average of 6.6% per year from 1994-1995 to 2002-2003.

In 2002-2003, 79.9% of grants and research contracts were awarded in the fields of health sciences (36.4%), pure sciences (27.9%) and applied sciences (15.6%). Next came social sciences (7.4%), business administration (2.8%) and education (1.8%).

Health sciences received 35.7% of its grants and research contracts from the Canadian government, 28.7% from the Canadian private sector, and 22.4% from the Québec government. The federal government also funded 53.1% of the research in pure sciences, compared with 19.9% for the Québec government and 17.6% for the Canadian private sector. In applied sciences, the proportions were 46.3% for the federal government, 23.2% for the Québec government and 18.4% for the private sector.

Funding for research in education varied between $9.2 and $22.9 million from 1994-1995 to 2002-2003, when it reached an 8-year high. The average annual growth was 12.1%.

The amount of funding allocated to university research experienced spectacular growth between 1998-1999 and 2002-2003, increasing from $660.9 million to $1.087 billion. During this four-year period, the average increase in the amount allocated to research was 13.3%.

Table 1.17

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

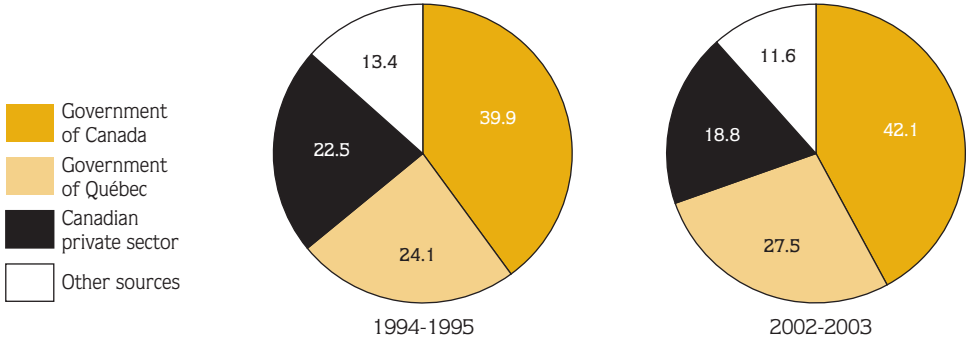
	1994-1995	1996-1997	1998-1999	2000-2001	2001-2002	2002-2003
Grants and research contracts (in millions of dollars),[1] by source						
Government of Canada	234.3	224.5	229.7	343.9	450.4	449.4
Government of Québec	141.5	142.5	155.2	208.6	238.9	293.9
Canadian private sector	132.1	157.5	179.0	190.8	201.3	215.7
Other sources	78.7	82.3	97.0	131.2	123.4	128.2
Total	586.6	606.8	660.9	874.5	1 013.9	1 087.3
Number of research professors[2]	**8 906**	**8 705**	**8 046**	**8 021**	**8 259**	**8 642**
Amount per research professor ($)	**65 866**	**69 710**	**82 135**	**109 032**	**122 769**	**125 811**

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). Data for 2002-2003 is preliminary. (Source: Ministère de l'Éducation, and Conference of Rectors and Principals of Québec Universities,* Enquête sur le personnel enseignant *[2002].)*

Graph 1.17

Distribution of grants and research contracts, by source of funding



2.1 School Life Expectancy

A child who began elementary school in 2003-2004 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 1.4 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 2002-2003, young people in Québec could expect to spend 15.5 years in school, or 0.2 years less than young people in France.[2]

A breakdown by level of education reveals that all increases in the past 16 years 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 0.41 years, resulting from an increase of 0.63 years in the adult sector and a drop of 0.23 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 (see Section 2.7). At the elementary and secondary levels, male students attend school slightly longer than female students (12.0 and 11.9 years, respectively) 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 (see Sections 2.9 and 2.11). Women attend postsecondary school for an average of 4.3 years, compared with 3.0 years for men.

From elementary to university education, in 2003-2004, school-aged Quebeckers could expect to stay in school for an average of 15.6 years.

1. *Technically, 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.*

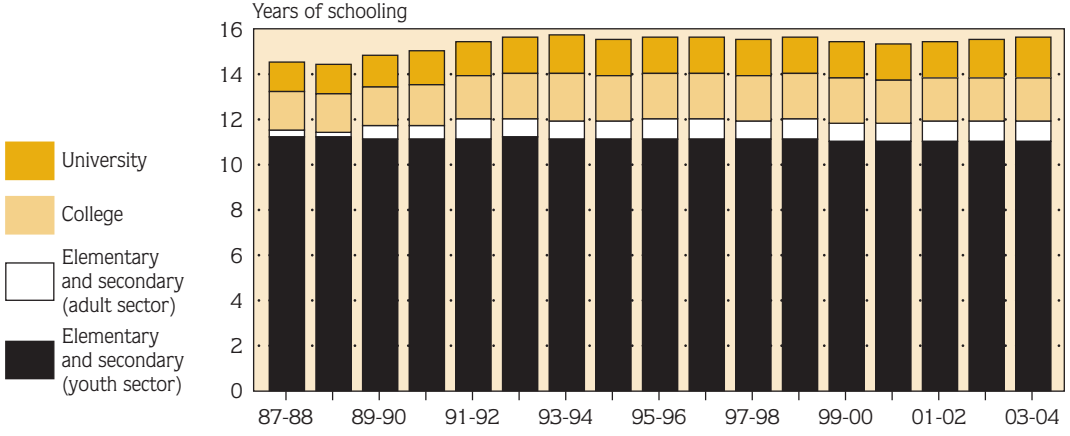
2. *Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, Direction de l'évaluation et de la prospective,* L'état de l'école, *Paris, Vol. 14, October 2004.*

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	2002-2003	2003-2004
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	16.0	16.2
Total	**14.5**	**14.5**	**15.7**	**15.5**	**15.5**	**15.6**
Both genders according to level of education						
Elementary (youth sector)	6.14	6.16	6.12	6.08	6.06	6.05
Secondary (youth sector)	5.09	5.03	5.01	5.00	4.94	4.96
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.88	0.90	0.93
College	1.74	1.74	2.07	1.99	1.90	1.86
University	1.28	1.34	1.64	1.53	1.69	1.78

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%. It has been significantly higher since 1994-1995 because children in Passe-Partout play groups are now included, and it stood at 19.2% in 2003-2004.

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 school—kindergarten or elementary school—as children in member countries of the Organisation for Economic Co-operation and Development (OECD).[3] In 2001-2002, virtually all countries had universal access to school for 5-year-olds (Sweden was one exception). 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 1.5% of students in kindergarten for 5-year-olds. For girls, the proportion was 1.0%, but it was double (2.0%) for boys.

In 2003-2004, 97.4% of all eligible children attended kindergarten for 5-year-olds, almost all of them on a full-time basis.

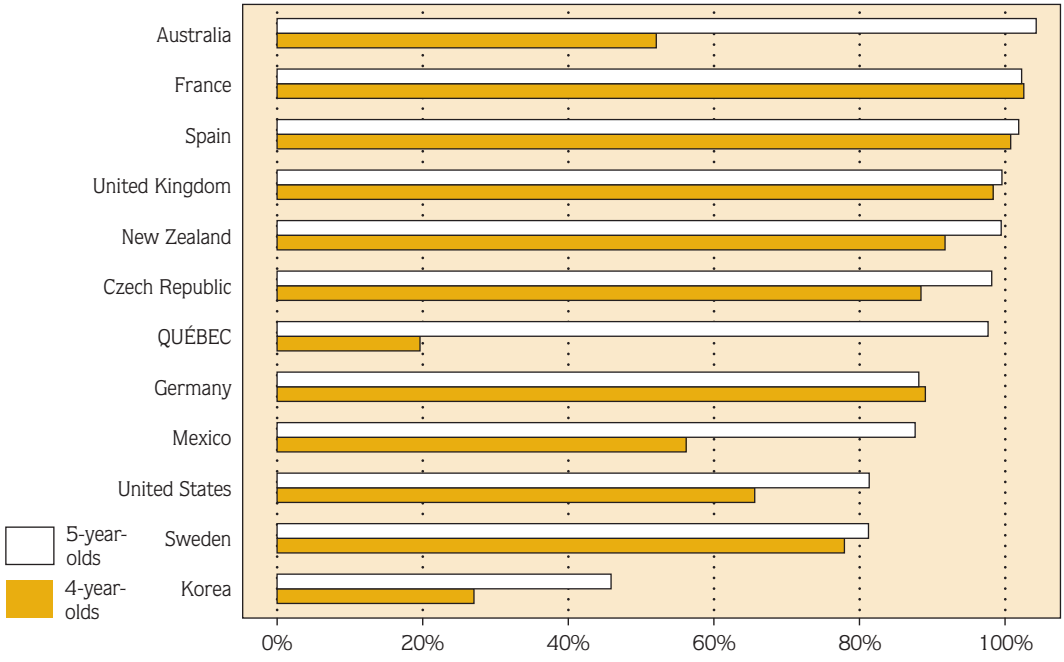
1. *This refers to the number of children in kindergarten for 5-year-olds (regardless of their age) in proportion to the population of 5-year-olds, or 4-year-olds in the case of kindergarten for 4-year-olds. Very few children who are not 5 years of age on September 30 are enrolled in kindergarten for 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	1997-1998	2001-2002	2002-2003	2003-2004
Kindergarten for 4-year-olds	**8.0**	**9.2**	**17.5**	**19.2**	**19.6**	**19.2**
Passe-Partout play groups	—	—	8.5	10.8	11.0	11.1
Other categories	—	—	9.0	8.4	8.5	8.1
Kindergarten for 5-year-olds	**97.4**	**96.7**	**98.6**	**98.1**	**98.2**	**97.4**
Full-time[1]	—	9.2	98.0	98.1	98.2	97.3
Part-time[2]	—	87.6	0.6	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 countries, 2002-2003 (%)



2.3 Enrollment in Secondary IV and V, General Education–Youth Sector

Enrollment in Secondary V stood at 73.9% in 2003-2004. Enrollment in Secondary IV was 84.9%, which means that enrollment in Secondary V could increase somewhat in 2004-2005.

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

Enrollment in Secondary I is virtually universal;[2] it was 99% in 2003-2004. In 2003-2004, 98% of young people were enrolled in Secondary II, and 92% in Secondary III.

In 2003-2004, differences in enrollment between female and male students appear in Secondary III, where female students are ahead of the male students by 5 percentage points. The gap widens in Secondary IV to 7 percentage points in favour of the female students, and to 11 percentage points in Secondary V.

In 2003-2004, in general education in the youth sector, enrollment in Secondary V was 73.9%.

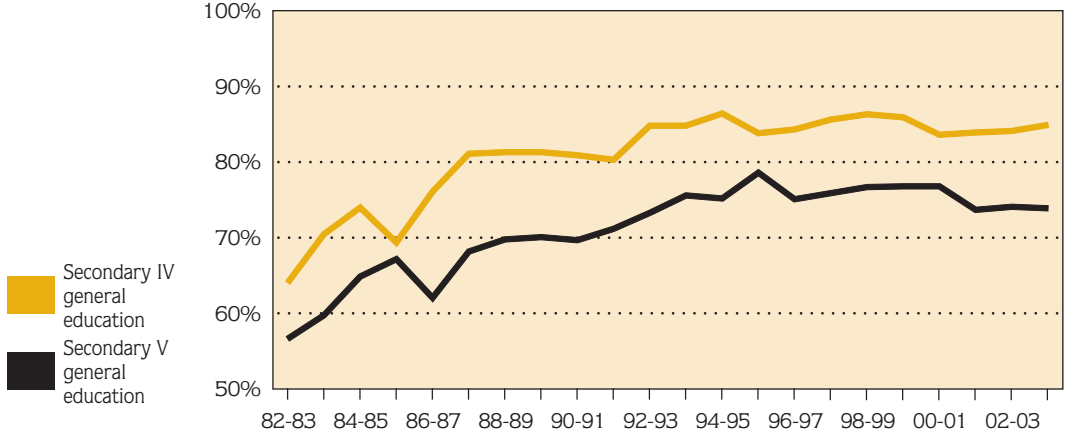
1. *The new, higher pass mark was applied to students entering secondary school in 1982-1983.*
2. *Some young people are not educated in the official education system. They may receive their schooling in reception centres, in schools that are not legally recognized or at home.*

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

	1982-1983	1992-1993	1997-1998	2001-2002	2002-2003	2003-2004
Secondary IV	**64.1**	**84.8**	**85.6**	**83.9**	**84.1**	**84.9**
Male	59.9	81.7	82.1	79.9	80.8	81.7
Female	68.6	88.0	89.3	88.1	87.5	88.3
Secondary V	**56.7**	**73.3**	**75.9**	**73.7**	**74.1**	**73.9**
Male	53.6	68.5	70.4	68.1	68.0	68.5
Female	60.0	78.3	81.8	79.7	80.5	79.6

Note: Students enrolled in vocational training are not included.

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



2.4 Enrollment in Secondary Vocational Training– Youth and Adult Sectors

The proportion of young people under the age of 20 enrolling in vocational training programs was 17.3% in 2003-2004, a significant increase over the previous year. Since 1998-1999, enrollment of students already holding a Secondary School Diploma (SSD) has been relatively stable, and was close to 10%; it dropped to 8.9% in 2003-2004.

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 still, in work skills and life skills education programs, which are a part of general education. Enrollment of students without diplomas was 8.4% in 2003-2004 and represented 49% of all people under the age of 20 enrolling in a vocational training program. This proportion has been on the rise in recent years.

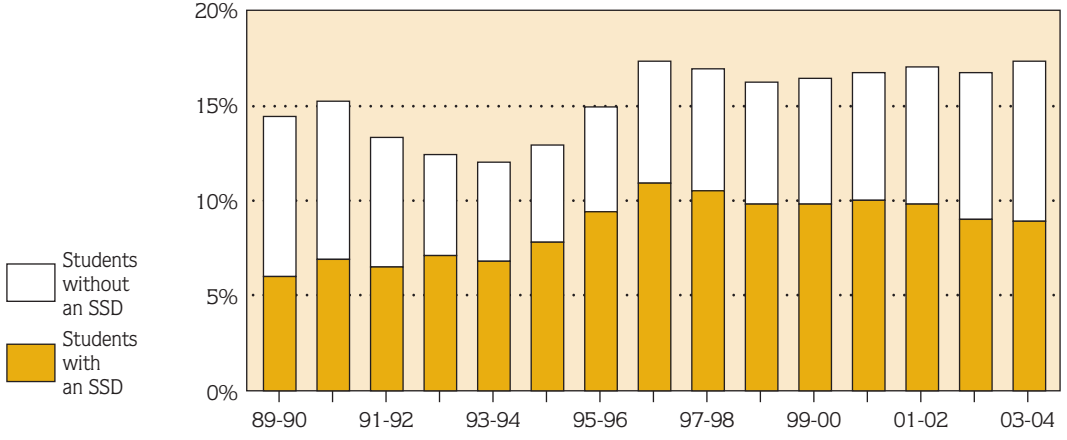
Vocational training programs attract more male than female students. Thus, in 2003-2004, 21.8% of male students opted for this path, compared with 12.7% of female students. This situation applies equally to students who had a diploma and to those who did not. This is the opposite of what has been occurring in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer.

In 2003-2004, 17.3% 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	2001-2002	2002-2003	2003-2004
TOTAL	**14.4**	**12.8**	**16.4**	**17.0**	**16.7**	**17.3**
Students without an SSD	8.4	5.1	6.6	7.2	7.7	8.4
Students with an SSD	6.0	7.8	9.8	9.8	9.0	8.9
MALE	**18.0**	**15.1**	**19.6**	**20.9**	**21.0**	**21.8**
Students without an SSD	11.5	6.6	8.9	9.7	10.6	11.7
Students with an SSD	6.5	8.5	10.8	11.1	10.4	10.1
FEMALE	**10.6**	**10.5**	**13.0**	**12.9**	**12.2**	**12.7**
Students without an SSD	5.0	3.4	4.2	4.5	4.6	5.0
Students with an SSD	5.5	7.1	8.9	8.5	7.6	7.7

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 in the youth sector are not all dropouts. Many of them choose to pursue their studies in the adult sector.

In 2003-2004, 15.2% 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 therefore 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 2003-2004, 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 2003-2004, 15.2% 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

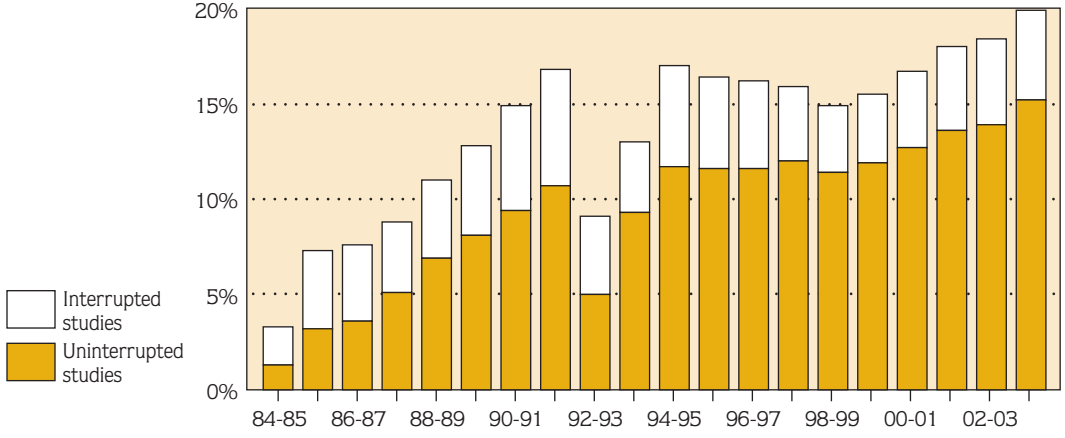
Enrollment in general education in the adult sector of students under the age of 20 without a secondary school diploma, by gender (%)

	1984-1985	1994-1995	1999-2000	2001-2002	2002-2003	2003-2004
Total	**3.2**	**17.0**	**15.5**	**18.0**	**18.4**	**19.8**
Uninterrupted studies[1] (directly from the youth sector)	1.3	11.7	11.9	13.6	13.9	15.2
Interrupted studies	2.0	5.3	3.6	4.4	4.5	4.7
Male	**3.3**	**19.4**	**17.8**	**20.4**	**20.7**	**22.1**
Uninterrupted studies[1] (directly from the youth sector)	1.4	13.7	13.7	15.6	15.7	16.9
Interrupted studies	1.9	5.8	4.1	4.9	5.1	5.2
Female	**3.1**	**14.6**	**13.0**	**15.6**	**16.0**	**17.4**
Uninterrupted studies[1] (directly from the youth sector)	1.1	9.7	9.9	11.6	12.0	13.3
Interrupted studies	2.0	4.9	3.1	3.9	4.0	4.1

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 2003 was 20.2% for 20-year-olds, 20.1% for 25-year-olds and 23.6% for 30-year-olds. An analysis of the data for a given age reveals that the dropout rate has declined considerably in the past 20 years: the rate for 17-year-olds went from 26.2% in 1979 to 11.6% in 2003, and the rate for 19-year-olds dropped from 40.6% to 18.5% 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 2003. For example, for 19-year-olds, the dropout rate for men in 2003 was almost half of what it was in 1979 (23.4% compared with 43.8%); for women, the rate in 2003 was almost one third of what it was in 1979 (13.3% 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.

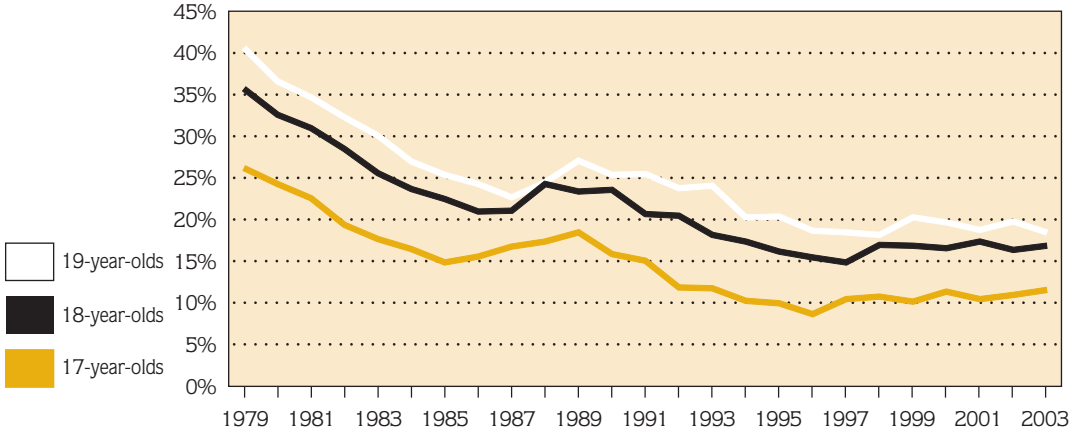
In 2003, 18.5% of 19-year-olds were without a secondary school diploma and were not attending school. This proportion was 40.6% in 1979.

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	2001	2002	2003
17-year-olds	**26.2**	**18.5**	**10.2**	**10.5**	**11.0**	**11.6**
Male	27.6	21.3	13.3	13.4	14.0	14.3
Female	24.7	15.5	7.0	7.4	8.0	8.7
18-year-olds	**35.7**	**23.4**	**16.9**	**17.4**	**16.4**	**16.9**
Male	38.0	27.1	20.7	21.7	20.7	21.4
Female	33.2	19.5	12.9	12.8	11.8	12.2
19-year-olds	**40.6**	**27.1**	**20.3**	**18.8**	**19.8**	**18.5**
Male	43.8	31.1	25.1	24.1	24.7	23.4
Female	37.2	22.9	15.2	13.2	14.5	13.3

Graph 2.6
Dropout rate by age (%)



2.7 Academic Delay – Youth Sector

Academic delay may be observed when a student in a grade level is older than the age expected for this level.[1] It is difficult for students to catch up when they are experiencing this kind of delay, because they would have to skip a year later on, which is rare, especially when they have already had enough difficulties that they have had to be held back a year or more. This is why, as shown in Table 2.7 (in elementary school in 1983-1984, for example), the proportion of students experiencing academic delay increases with each grade level; essentially, each year more students experiencing delay are added to this group but none are ever removed.

In more recent years, this cumulative effect in the proportion of students experiencing academic delay has been less visible because students in the third year of a cycle in elementary school (who, by definition, are all behind) are counted with the students in the second year, thereby increasing the proportion of students experiencing academic delay (among the students in the second year of a cycle).

On the contrary, in secondary general education, the proportion of students experiencing academic delay appears to be declining with each grade level (see Table 2.7; in 1983-1984, the rate went from 33.4% for Secondary I to 25.2% for Secondary IV). This is a result of these students dropping out (who, instead of being counted as students experiencing delay, are no longer considered at all present in the school system) or transferring to vocational training.

In more recent years, this explanation seems to be less applicable to secondary school. The apparently stable rate from one grade to another hides a different reality. If a cohort (for example, students enrolled in Secondary I in 2001-2002, in Secondary II the following year and in Secondary III in 2003-2004) is followed, the proportion of students experiencing an academic delay goes from 28.7% to 28.5%, then to 28.0%. The rates decrease for the cohort because the students drop out or transfer to vocational training.

Graph 2.7 shows the difference between girls and boys in terms of dropping out of school; more boys than girls are experiencing academic delay. For all elementary and secondary school students, the difference between boys and girls was almost 10 percentage points in 1983-1984. By 2003-2004, the gap had narrowed to 6 points. If secondary school students are considered in isolation (the proportion does not appear in Graph 2.7), 31.4% of boys were experiencing academic delay in 2003-2004, and girls, 22.2%, for a gap of 9 percentage points.

In 2003-2004, 17.8% of elementary and secondary school students were behind in their schooling.

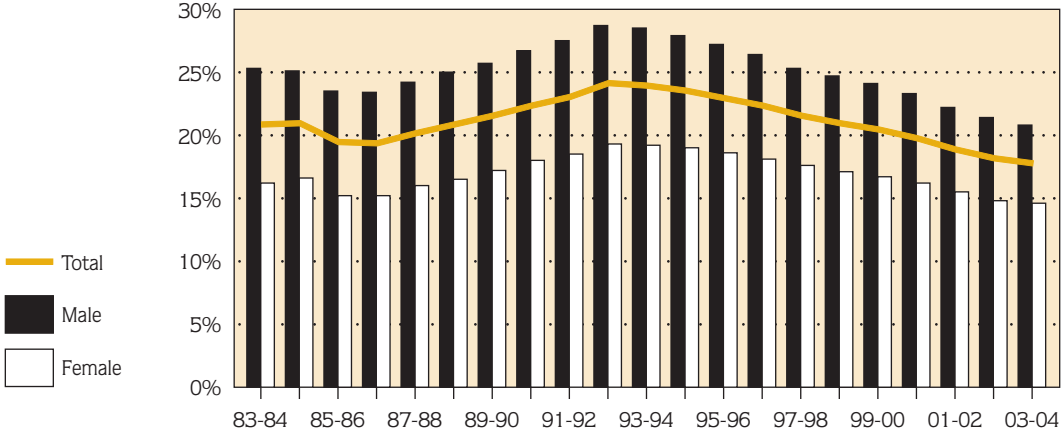
1. *This is the case if a student is older than 6 years of age (as of September 30) and enrolled in the first year of Elementary Cycle One, or older than 7 years of age and in the second year of Elementary Cycle One, as well as if a student is older than 12 years of age in Secondary I, and so forth. All students enrolled in the third year of a cycle at the elementary level are considered to be experiencing academic delay, regardless of their age.*

Table 2.7
Proportion of students experiencing academic delay, by level of education and grade level (%)

	1983-1984	1993-1994	1998-1999	2001-2002	2002-2003	2003-2004
Total	**20.9**	**24.0**	**21.0**	**18.9**	**18.2**	**17.8**
Elementary[1]	**13.2**	**16.2**	**12.8**	**11.6**	**10.7**	**10.0**
1 (or A) (or 1.1)	6.5	8.6	6.9	4.3	2.6	2.9
2 (or B-C) (or 1.2+)	9.2	12.5	9.8	10.2	9.8	9.7
3 (or D) (or 2.1)	11.3	15.9	12.1	10.5	9.0	8.2
4 (or E-F) (or 2.2+)	14.3	17.9	14.3	13.7	13.0	11.9
5 (or 3.1)	16.1	20.2	16.6	14.6	13.2	12.3
6 (or 3.2 +)	22.4	21.6	18.6	15.7	15.4	14.5
Secondary school (general education)	**30.6**	**32.9**	**31.0**	**28.5**	**27.6**	**26.9**
I	33.4	36.8	32.5	28.7	27.5	27.7
II	30.4	32.6	31.5	30.4	28.5	27.4
III	29.4	33.1	30.5	30.4	29.2	28.0
IV	25.2	30.1	29.3	27.1	26.6	25.9
V	33.5	30.4	30.8	25.3	25.4	24.6

1. *Elementary grade levels were referred to as **Elementary 1, 2, 3, 4, 5 and 6** until 2000-2001. In 2001-2002, elementary school was divided into three two-year cycles. Thus, **A, B and C** were used to refer to Cycle One, and **D, E and F**, to refer to Cycle Two. **C and F** were used for students who remained in a given cycle for more than the usual two years. The fifth and sixth years of elementary school had not yet been affected by the reform. Since September 2002, a two-digit notation has been used: for example, **1.1** represents Elementary Cycle One, first year; **1.2+** represents Cycle One, second (or third) year, and so on.*

Graph 2.7
Proportion of elementary and secondary school students behind in their studies, by gender (%)



2.8 Grade Repetition in General Education at the Secondary Level – Youth Sector

With the education reform, it is no longer possible to calculate grade repetition[1] in elementary school, as was done in previous versions of the *Education Indicators*, especially in terms of constructing a historical profile. This section therefore focuses on grade repetition in general education at the secondary level.

Since peaking in 1991-1992, the proportion of secondary school students who repeat a grade has been generally on a downward trend. The situation has remained relatively stable in recent years; the proportion was 8.0% in 2003-2004. Grade repetitions are particularly high in Secondary I, but this is not surprising, considering that all elementary school students, including those with difficulties, are sooner or later promoted to secondary school, if only because they have turned 13 years of age. Moreover, students in individualized paths for learning may be classified for administrative purposes in Secondary I for several years.

The proportion of students who repeat a year is relatively low in the final years of secondary school. Some of these students have reached the age when school attendance is no longer compulsory and either drop out of school or continue their studies in vocational training or in the adult sector. Graph 2.8 shows changes in the proportion of grade repetition for each grade level. For all of secondary school, this proportion was 8.0% in 2003-2004, compared with 10.0% in 1991-1992.

Boys are always more likely to repeat a grade, regardless of school year or grade. The proportion of boys who repeat a grade is often more than one and a half times the proportion of girls in the same situation.

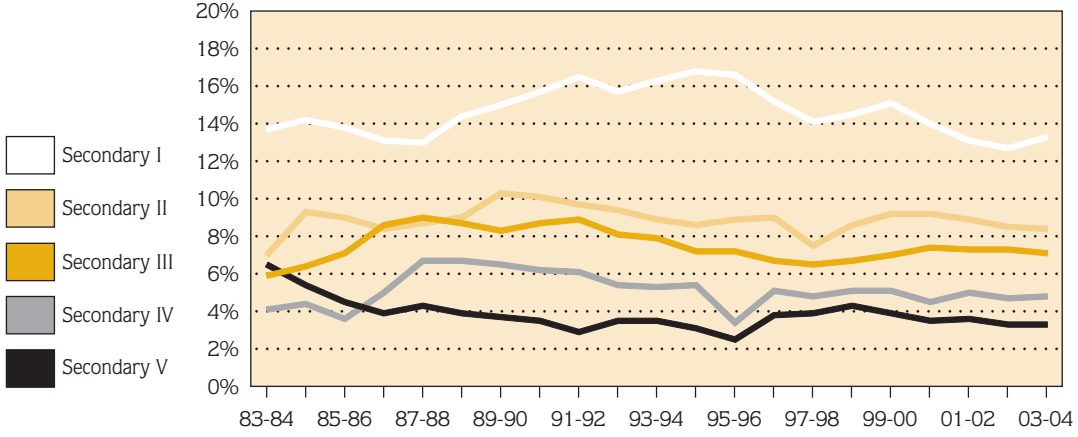
In 2003-2004, 8.0% of students in general education at the Secondary Level repeated a grade.

1. *Repeaters are those students who were in the same grade or a higher grade the preceding year. For our purposes, students in Secondary VI general education are considered repeaters.*

Table 2.8
Proportion of students who repeat a grade, by level of education and gender (%)

	1983-1984	1993-1994	1998-1999	2001-2002	2002-2003	2003-2004
Elementary	**4.7**	**4.9**	**3.9**	**3.1**	**–**	**–**
Male	5.9	5.9	4.7	3.8	–	–
Female	3.5	3.7	3.1	2.3	–	–
Secondary, general education	**8.7**	**9.3**	**8.2**	**8.0**	**7.9**	**8.0**
Male	11.0	11.5	10.1	9.9	9.7	9.8
Female	6.4	6.9	6.3	6.1	5.9	6.1
Secondary I	**13.7**	**16.3**	**14.5**	**13.1**	**12.7**	**13.3**
Male	16.9	19.8	17.6	15.7	15.4	16.1
Female	10.1	12.4	11.1	10.1	9.7	10.0
Total	**6.5**	**6.9**	**5.8**	**4.7**	**–**	**–**
Male	8.1	8.5	7.1	5.8	–	–
Female	4.8	5.2	4.5	3.6	–	–

Graph 2.8
Proportion of students repeating a year in secondary school, by grade level (%)



2.9 College Enrollment– Regular Education[1]

In 2003-2004, 57.8% of a generation of young Quebeckers went on to college. This is 6 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 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: first, a rise in the graduation rate in secondary general education until 1985-1986, followed by a drop in the graduation rate owing to the application of tighter standards at the end of the 1980s, then by a return to an upward trend at a slower pace from 1990-1991 to 1995-1996, ending with a sudden drop in 1996-1997, which was finally ended in 1998-1999.

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 15 years or so, the gender gap in college enrollment has widened steadily. Although rather negligible in the mid-1970s, the difference reached 19.7 percentage points in favour of women in 2003-2004, 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 34.3% in 2003-2004, after peaking at 43.9% in 1992-1993. The probability of enrolling in college technical education 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 2003-2004.

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 2003-2004, the figure was 7.3%, which, out of a total of 57.8%, represents more than one in ten new enrollments.

In 2003-2004, college enrollment stood at 57.8%, which is a return to the situation that prevailed six 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.*

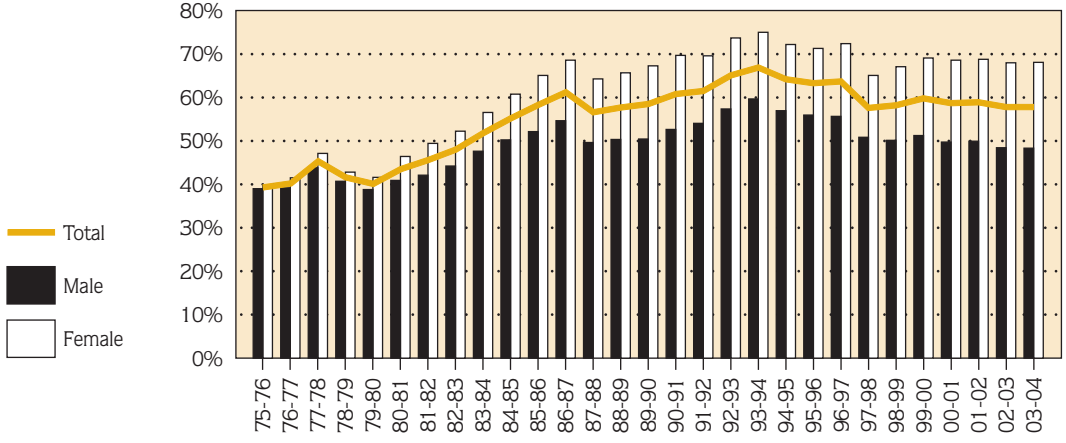
Table 2.9
Full- or part-time enrollment in regular education in public or private colleges, by gender and type of education (%)

	1975-1976	1985-1986	1995-1996	2001-2002	2002-2003	2003-2004[e]
Male	**38.9**	**52.0**	**55.8**	**49.8**	**48.3**	**48.2**
Pre-university education	25.4	34.2	31.5	26.2	26.2	27.1
Technical education	13.4	17.7	18.5	16.6	14.7	13.6
Explorations	–	–	5.9	7.0	7.5	7.5
Female	**39.7**	**64.9**	**71.1**	**68.6**	**67.8**	**67.9**
Pre-university education	22.5	41.0	44.7	41.7	41.1	41.9
Technical education	17.1	23.9	20.3	21.1	19.7	18.9
Explorations	–	–	6.1	5.7	7.0	7.1
Total	**39.3**	**58.3**	**63.3**	**58.9**	**57.8**	**57.8**
Pre-university education	24.0	37.5	37.9	33.7	33.4	34.3
Technical education	15.3	20.8	19.3	18.8	17.1	16.2
Explorations	–	–	6.0	6.4	7.3	7.3

e: Estimates

–: Not applicable

Graph 2.9
Full- or part-time enrollment in regular education in public or private colleges, by gender (%)



2.10 Immediate Transition From College to University

The main objective of college pre-university education is to prepare students for university. In the fall of 2003, 78.1% of the class of 2002-2003 aged 24 or under with a diploma in a pre-university program[1] were enrolled full-time in university.[2] Also in the fall of 2003, 77.9% 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 (78.4%).

Between 1994 and 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 1999 to 75.6% in 2001. Although the method used to estimate the proportion of graduates enrolled in university immediately after completing college has changed somewhat since 2000, data from the fall of 2003 indicates a slight increase in the past two years. Since 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 78.1% in the fall of 2003.

In the fall of 2003, 22.2% of students aged 24 or under who graduated from a technical program in 2002-2003 were enrolled full-time in university the following year, which represents an increase since the fall of 2000. This result confirms the fact that more technical training graduates now go on to university. Indeed, the proportion of graduates of technical programs going on to university has been close to 20% in the past two years, the highest proportion since 1984, despite the fact that the labour market is favorable to the hiring of young graduates from technical programs.

More male graduates aged 24 or under with a diploma in a technical program have been enrolling full-time in university than their female counterparts since 1984.

Of the class of 2002-2003, 78.1% of pre-university education graduates and 22.2% of technical education 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 Diploma of College Studies (DCS) between the months of September and August of a given school year.* Education Statistics Bulletin *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 1984 to 2000, estimates were based on the results of the* Relance *surveys conducted by the Ministère de l'Éducation, which present the situation of graduates of pre-university and technical programs as of March 31 following their year of graduation. In 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 2001 and 2004.*

Table 2.10

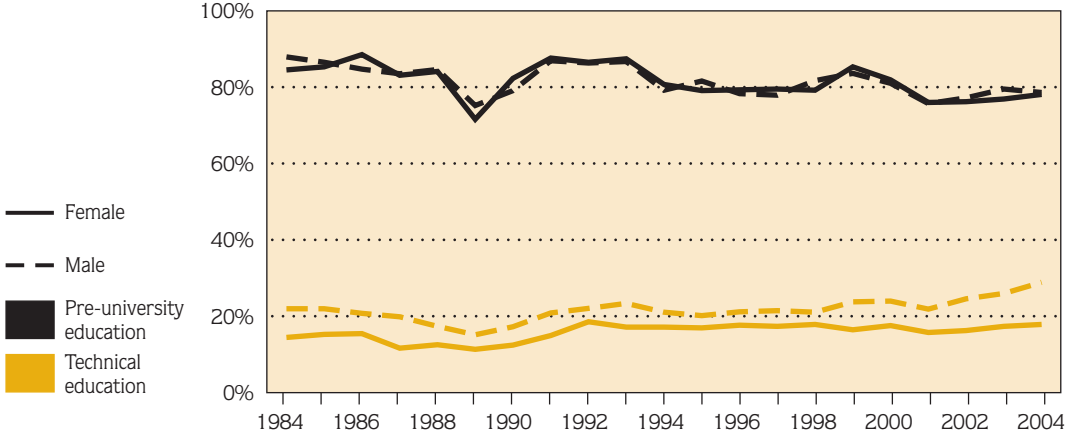
Proportion of college graduates (24 years old or under) enrolling full-time[1] in university without interrupting their studies, by type of education and gender (%)

	1984	1994	2001[2]	2002	2003	2004
Pre-university education	**86.0**	**79.9**	**75.6**	**76.4**	**77.7**	**78.1**
Male	87.7	79.0	75.5	77.0	79.3	78.4
Female	84.3	80.5	75.8	76.0	76.7	77.9
Technical education	**17.4**	**18.6**	**18.2**	**19.7**	**20.8**	**22.2**
Male	21.9	21.0	21.8	24.5	24.9	28.8
Female	14.4	17.1	15.7	16.2	17.3	17.8

1. *The statistics produced between 1984 and 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 2001 to 2004 represent the proportion of students who earned a college diploma between 1999-2000 and 2002-2003 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 2001.*
2. *Revised data*

Graph 2.10

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



2.11 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 2.9). Thereafter, the rate began to rise again, reaching 41.3% in 2004-2005, comparable to that of 1992-1993. Women posted an even higher rate of enrollment in programs leading to a bachelor's degree at 49.2%.

Over this 20-year period, only women showed veritable gains in enrollment in bachelor's programs: the rate increased by 17.9 percentage points, whereas men (33.9%) were 4.9 percentage points above the level observed in 1984-1985. The gender gap was 15.3 percentage points, whereas it had been 2.3 percentage points 20 years earlier.

With respect to master's programs, enrollment rose for a sixth time in a row to 11.7% after having dropped in 1997-1998. Here too, gains were more favourable for women, whose enrollment rate was 11.9% in 2004-2005, compared with 11.6% 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 2004-2005 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 3.1% in 2004-2005. Men continue to enroll in doctoral studies in slightly greater numbers (3.4%) than women (2.9%), but the number of women enrolling at this level has increased more rapidly in the past 20 years.

In 2004-2005, the proportion of students enrolling in university is estimated at 41.3% for bachelor's programs, 11.7% for master's programs, and 3.1% for doctorate programs.

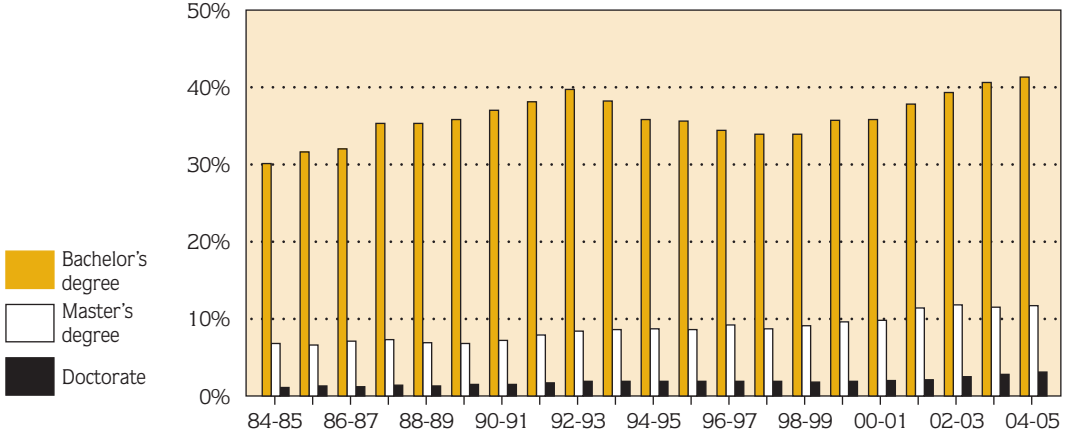
1. *Since the data on new enrollments generally used for this indicator was unavailable at the time of writing, preliminary data on enrollments provided by the Conference of Rectors and Principals of Quebec Universities (CREPUQ) was used for the 2004-2005 figures. More specifically, the annual variation in new full-time enrollments in programs leading to a bachelor's degree was used to estimate enrollment for 2004-2005 on the basis of the most recent data observed, that is, in 2003-2004. Data for programs leading to a master's degree or doctorate was estimated on the basis of variations in enrollment in these programs.*

Table 2.11
Enrollment in programs leading to a university degree, by gender (%)

	1984-1985	1992-1993	1997-1998	2002-2003	2003-2004	2004-2005[e]
Bachelor's programs						
Male	29.0	34.8	28.9	32.4	33.4	33.9
Female	31.3	44.9	39.1	46.6	48.3	49.2
Total	**30.1**	**39.7**	**33.9**	**39.3**	**40.6**	**41.3**
Master's programs						
Male	7.5	8.5	8.4	12.3	11.6	11.6
Female	6.0	8.3	8.9	11.3	11.5	11.9
Total	**6.8**	**8.4**	**8.7**	**11.8**	**11.5**	**11.7**
Doctoral programs						
Male	1.4	2.3	1.9	2.6	3.1	3.4
Female	0.8	1.4	1.8	2.3	2.6	2.9
Total	**1.1**	**1.9**	**1.9**	**2.5**	**2.8**	**3.1**

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

Graph 2.11
Enrollment in programs leading to a university degree (%)



2.12 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 2002, these students totalled 10 243, a peak since 1990.

Enrollment in doctoral programs is mainly concentrated in social sciences, applied sciences, pure sciences and health sciences. In 2003, 29.2% of doctoral candidates were in social sciences, 19.7% in applied sciences, 14.9% in pure sciences, and 13.2% in health sciences.

Men accounted for the majority of the students enrolled in a doctoral program (54% in the fall of 2003, compared with 46% for women). In 1990, the percentages were 64.7% and 35.3%, respectively. From 1990 to 2003, the increase in the number of women enrolled in doctoral programs (89.9%) was much greater than it was for men (21.4%).

In 2003, 80.8% of the men in doctoral programs were enrolled in applied sciences (28.4%), social sciences (24.0%), pure sciences (17.5%) and health sciences (10.9%). The number of men enrolled in business administration has increased the most since 1990, that is, by 142.9%, while the number of men enrolled in education and literature decreased by 27.1% and 25.5%, respectively.

The distribution of enrollments in doctoral programs differs for women and men. In the fall of 2003, 35.2% of the female students were in social sciences, 15.9% in health sciences, 11.8% in pure sciences, 9.6% in applied sciences, 7.9% in literature and 7.6% in education. The largest annual increases in female enrollment since 1990 have been in the arts (325.0%), law (252.6%), applied sciences (189.8%), health sciences (156.0%), and business administration (139.2%).[1]

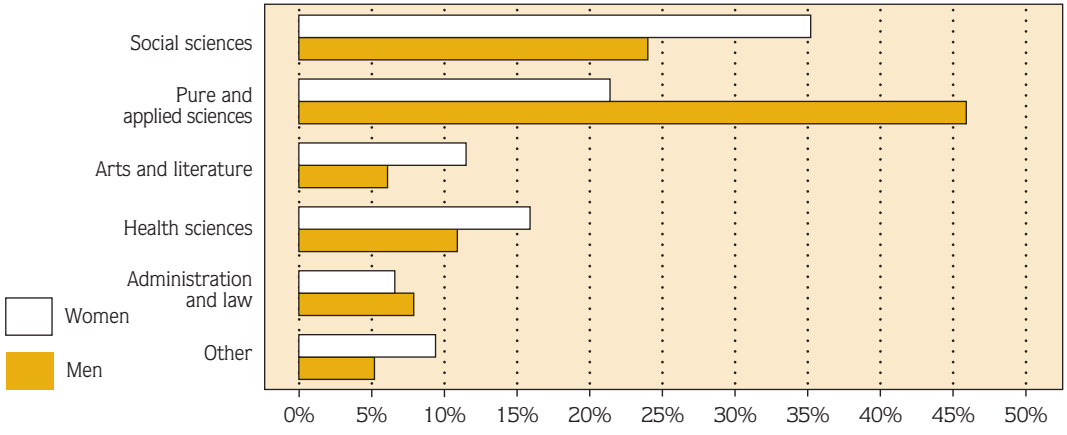
In the fall of 2003, 29.2% of doctoral students were enrolled in social sciences, 19.7% in applied sciences, 14.9% in pure sciences, and 13.2% in health sciences.

1. *Female enrollment in interdisciplinary studies, which went from 21 in 1990 to 64 in 2003, is not taken into consideration.*

Table 2.12
Enrollment in doctoral programs, by field of study (fall term)

	1990	1998	1999	2000	2001	2002	2003
Arts	96	175	186	200	209	237	278
Literature	654	690	665	607	583	579	601
Business administration	258	482	463	494	508	558	623
Law	58	107	108	109	110	120	127
Education	549	594	560	556	504	526	553
Social sciences	2 168	2 862	2 746	2 721	2 685	2 749	2 989
Pure sciences	1 229	1 365	1 347	1 351	1 355	1 408	1 522
Applied sciences	1 276	1 433	1 446	1 388	1 446	1 711	2 021
Health sciences	662	1 021	1 041	1 114	1 149	1 246	1 353
Interdisciplinary studies	60	105	96	92	87	121	143
Not applicable	27	22	21	16	23	25	33
Total	**7 037**	**8 856**	**8 679**	**8 648**	**8 659**	**9 280**	**10 243**

Graph 2.12
Distribution of enrollments in doctoral programs, by gender and field of study, fall 2003



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 2002-2003, 14.2% obtained a diploma. If only students in Cycle Two are considered, the proportion more than triples, to 48.0%. Of the various instructional services[2] 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 14.2%. 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, 59.6% 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 31.1% between 1980-1981 and 2002-2003.

In 1980-1981, the graduation rate was slightly higher for male students than for female students, but the situation has since reversed. In 2002-2003, the graduation rate for female students exceeded that of male students by 2.8 percentage points, with the difference being 10.2 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 2002-2003, 59.6% 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	1990-1991	1995-1996	2001-2002	2002-2003[e]
Male						
Secondary Cycle Two	N/A	22.7	37.3	50.2	44.8	44.7
Under the age of 20	N/A	36.2	45.5	61.0	53.3	56.2
All instructional services	13.1	13.2	13.1	14.9	12.9	12.8
Under the age of 20	23.1	22.4	23.9	22.4	24.8	26.9
Female						
Secondary Cycle Two	N/A	23.6	41.4	55.9	51.3	51.1
Under the age of 20	N/A	36.4	50.9	67.5	62.3	63.6
All instructional services	10.3	15.3	16.5	20.0	15.9	15.6
Under the age of 20	20.8	25.8	30.9	33.2	36.4	37.1
Total						
Secondary Cycle Two	N/A	23.2	39.6	53.2	48.0	48.0
Under the age of 20	N/A	36.3	48.2	64.3	57.5	59.6
All instructional services	11.5	14.4	14.9	17.4	14.4	14.2
Under the age of 20	22.0	24.1	27.1	26.8	29.6	31.1

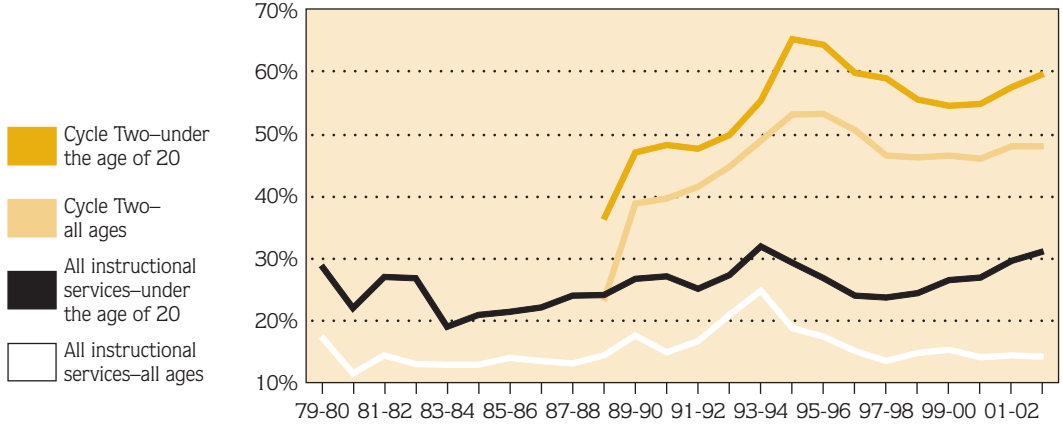
N/A: Data not available

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 School Vocational Training[1]

Of the students in vocational training[2] who left secondary school in 2002-2003, 60.3% obtained a diploma. If only those students truly considered to be working toward a diploma, that is, full-time students,[3] are considered, the proportion of graduates climbs to 84.8%, the highest rate in recent years.

Since the beginning of the vocational training reform in 1987-1988, the percentage of graduates has increased appreciably. For example, at the end of 2002-2003, 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 74.7%, 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 are considered, progress in more evident. As noted earlier, the proportion of graduates among students enrolled for the last time in 2002-2003 was 84.8%, 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 60.3% in 2002-2003.

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 2002-2003, the proportions were 69.1% and 54.6%, respectively.

In 2002-2003, the success rate for male students in programs leading to a DVS increased by 7.4 percentage points (74.8%), slightly surpassing the rate for female students, who had been in the lead since 1999-2000.

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 school vocational training with a diploma,[1] by gender, category and last year of enrollment (%)

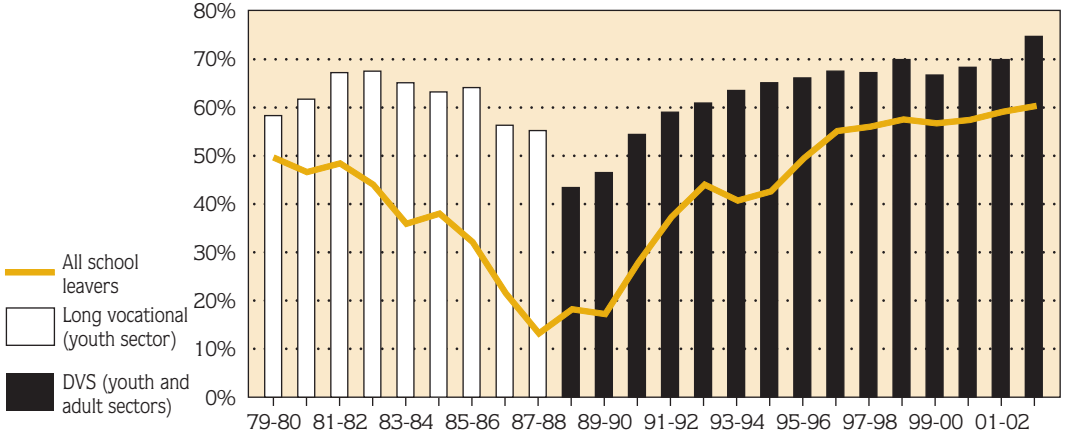
	1980-1981	1985-1986	1990-1991	1995-1996	2000-2001	2001-2002	2002-2003[e]
Male							
Long vocational or DVS[2]	57.1	58.3	60.0	67.7	66.1	67.4	74.8
Full-time[3]	51.8	51.4	81.1	79.5	80.6	83.5	83.8
All male school leavers	48.3	28.7	21.7	46.2	52.7	53.3	54.6
Female							
Long vocational or DVS[2]	65.5	69.5	50.3	64.5	71.3	73.2	74.4
Full-time[3]	61.3	62.0	80.0	78.3	82.7	85.1	85.9
All female school leavers	45.2	36.2	39.3	54.0	64.4	68.4	69.1
Total							
Long vocational or DVS[2]	61.7	64.1	54.4	66.1	68.3	69.9	74.7
Full-time[3]	56.3	56.6	80.6	78.9	81.6	84.2	84.8
All school leavers	46.6	32.1	27.9	49.5	57.4	59.1	60.3

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 2002-2003, 72.7% earned a Diploma of College Studies (DCS). In the past two decades, this graduation rate has fluctuated between 63.9% and 72.7%. 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 2.9) 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 2002-2003, the difference was 13.6 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 2.9), explains the gender gap with respect to graduation rates (see Section 5.6).

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 2002-2003, it was 74.9%. 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 in 1998-1999 and reached 56.0% in 2002-2003.

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 2002-2003 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 2002-2003, the corresponding success rate was 73.7%.

Of the students in pre-university education completing their studies in 2002-2003, 72.7% graduated with a DCS; this figure has increased by 3.4 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	2001-2002	2002-2003[e]
Male and female						
Same type of initial program						
2 years or less[1]	N/A	40.5	36.6	42.6	44.9	44.9
5 years or less[1]	N/A	70.8	65.2	70.0	73.4	73.7
All durations	N/A	72.0	66.5	71.3	74.6	74.9
Other type of initial program[2]						
All durations	N/A	61.3	47.5	53.7	56.6	56.0
All types of initial programs–all durations						
Male and female	66.8	71.4	64.7	69.3	72.6	72.7
Male	64.9	66.2	58.7	61.7	64.7	64.7
Female	68.8	75.8	69.5	74.7	78.1	78.3

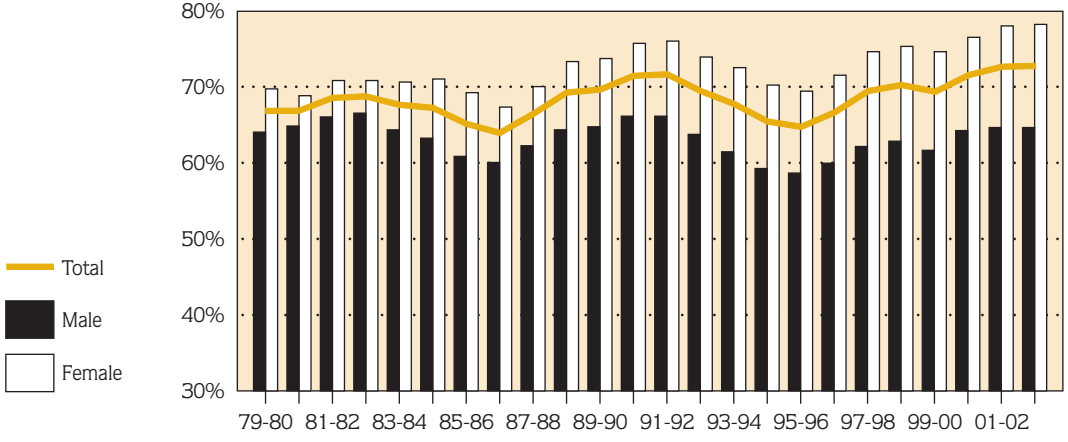
e: Estimates

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 2002-2003, 61.4% earned a Diploma of College Studies (DCS). In the past two decades, this graduation rate has fluctuated between 52.7% and 61.4%.

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 5 percentage points in 2002-2003, when the success rate for women was 66.9% compared with 54.5% for men, a difference of 12.4 percentage points in favour of women. This phenomenon, coupled with the fact that more women than men enroll in college (see Section 2.9), explains the difference between the sexes with respect to graduation rates (see Section 5.6).

When the type of initial college program is taken into account, in 2002-2003, 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 33.9% in 2002-2003 for all students who began in technical programs. If all technical education 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 2002-2003, the corresponding success rate was 55.4%.

Of the students in technical programs completing their studies in 2002-2003, 61.4% 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	2001-2002	2002-2003[e]
Male and female						
Same type of initial program						
3 years or less[1]	N/A	29.6	26.8	31.6	33.5	33.9
5 years or less[1]	N/A	51.1	47.8	52.4	55.1	55.4
All durations	N/A	56.6	53.1	57.6	61.2	61.6
Other type of initial program[2]						
All durations	N/A	64.4	55.7	57.8	60.9	60.9
All types of initial programs–all durations						
Male and female	59.0	58.6	53.9	57.7	61.1	61.4
Male	53.9	54.7	46.1	50.1	54.3	54.5
Female	63.0	61.3	60.9	64.6	66.8	66.9

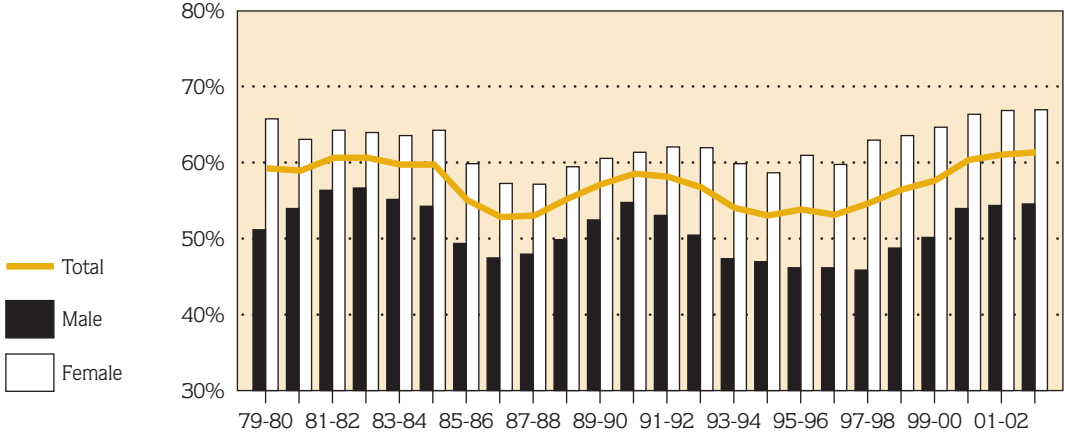
e: Estimates

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 2.1 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 education.

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 education, 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 education, after 3.9 years.

1. *This is why the results of 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 1998-1999 to 2002-2003). 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 education.*

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

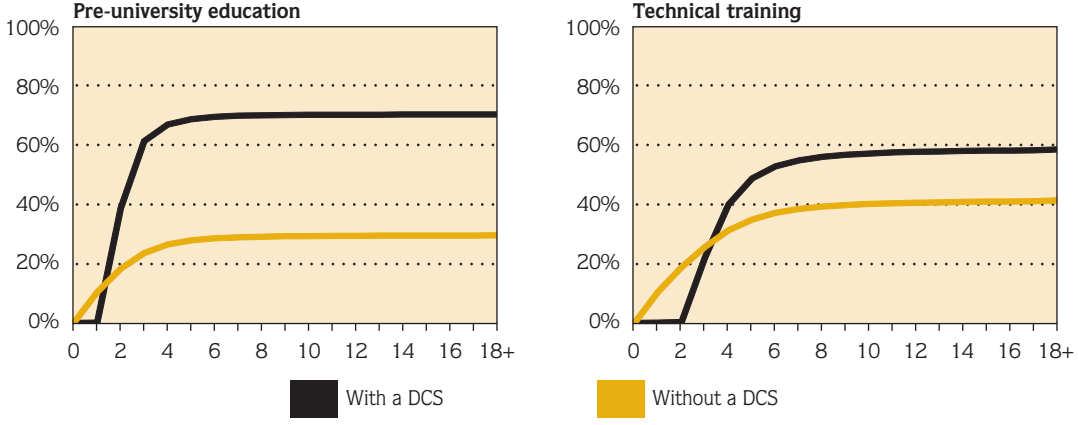
Average number of years[1] of study completed before leaving regular college education (average for all college leavers after 1998-1999), by gender and type of program enrolled in at the start and finish of the studies

	With Diploma		Without Diploma[2]		Total	
	Pre-university education	Technical education	Pre-university education	Technical education	Pre-university education	Technical education
Male	2.5	3.9	1.6	2.2	2.2	3.1
Female	2.4	3.8	1.4	2.1	2.1	3.2
Total[3]	**2.4**	**3.9**	**1.5**	**2.2**	**2.1**	**3.2**
Type of initial program						
Same	2.4	3.5	1.4	1.8	2.1	2.8
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 1998-1999 and 2002-2003, 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 2002-2003, 67.5% of students leaving a bachelor's program earned their degree. In the 15-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 6.0 percentage points between 1987-1988 and 2002-2003, after a maximum gap of 7.7 percentage points in 1996-1997. In the last year observed, 70% of female students who left a bachelor's program did so with a degree, compared with 64% of their male counterparts. This phenomenon, coupled with the fact that more women than men enroll in bachelor's programs (see Section 2.11), explains the gender gap with respect to graduation rates (see Section 5.7).

Graduates of bachelor's programs have studied for an average of 6.5 full-time terms, or for 8.8 terms if full-time or part-time status is not taken into account.[2] Those who leave without a degree study an average of 2.7 terms, or slightly more than one year, full-time. For all students leaving bachelor's programs, the average duration of studies is 7.2 terms, 5.1 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 2002-2003, more than two thirds (67.5%) 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	2000-2001	2001-2002	2002-2003[e]
Male	55.5	59.7	61.7	64.4	63.3	64.0
Female	56.2	63.1	69.0	68.7	70.3	70.0
Total	**55.9**	**61.5**	**65.9**	**66.9**	**67.4**	**67.5**

e: Estimates

Table 3.6b

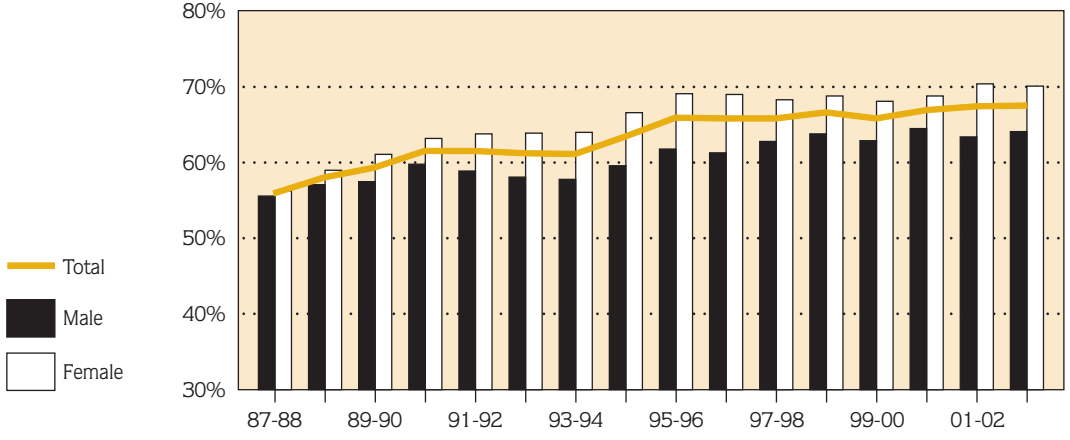
Average number of terms completed before leaving a bachelor's program (average for all leavers after 1998-1999), by gender

	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	6.7	9.0	2.9	4.5	5.2	7.2
Female	6.4	8.7	2.5	4.4	5.0	7.2
Total	**6.5**	**8.8**	**2.7**	**4.5**	**5.1**	**7.2**

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 2002-2003, 70.4% of students leaving a master's program earned their degree. This is a gain of 14.3 percentage points over a 15-year period, as well as the highest level recorded for that period.

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 2002-2003, 71.5% of women leaving a master's program did so with a degree, for an increase of 16.5 percentage points since 1987-1988. The corresponding increase for men was 12.4 percentage points; 69.4% of men leaving a master's program did so with a degree in 2002-2003. This phenomenon, coupled with the fact that more women than men enroll in master's programs (see Section 2.11), explains the gender gap with respect to graduation rates (see Section 5.7).

Graduates of master's programs are enrolled for an average of 7.1 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 5.0 terms, whether full-time or part-time. For all students leaving master's programs, the average duration of studies is 6.3 terms, 3.5 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 2002-2003, 70.4 earned a degree, after an average of 7.1 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	2000-2001	2001-2002	2002-2003[e]
Male	57.0	64.4	63.7	67.9	67.9	69.4
Female	55.0	64.5	67.5	71.2	71.9	71.5
Total	**56.1**	**64.5**	**65.6**	**69.6**	**69.9**	**70.4**

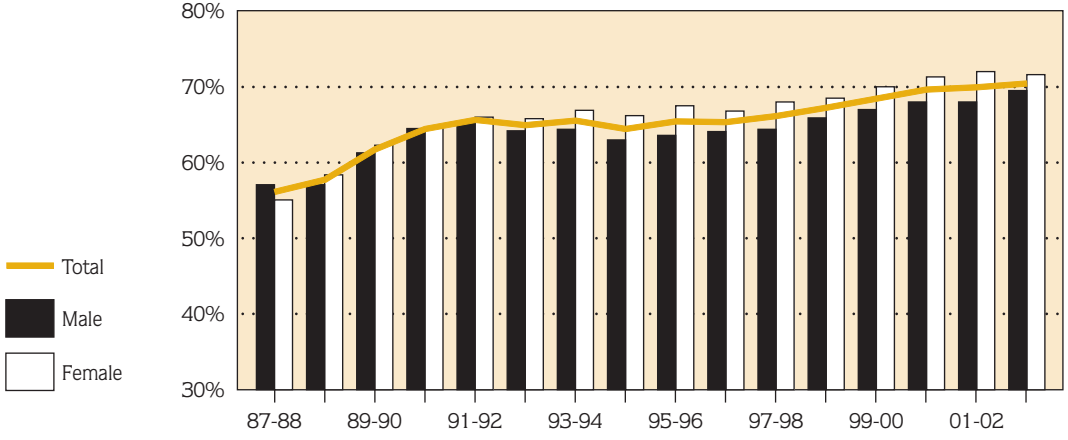
e: Estimates

Table 3.7b
Average number of terms completed before leaving a master's program (average for all leavers after 1996-1997), 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	4.1	6.9	2.4	4.8	3.4	6.1
Female	4.2	7.2	2.3	5.2	3.6	6.5
Total	**4.2**	**7.1**	**2.3**	**5.0**	**3.5**	**6.3**

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 3.7
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 2002-2003, 57.5% of students leaving a doctoral program earned their degree. Since 1987-1988, this proportion has increased by 8.8 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 2002-2003 who left doctoral programs, 54.7% earned their degree, for an increase of 14.4 percentage points compared with 15 years earlier. For men, the graduation rate increased by 6.7 percentage points during the same period and the proportion of male candidates who completed their studies in 2002-2003 with a degree was 59.8%, or 5.1 percentage points more 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 2.11), but there are still more men than women who obtain doctoral degrees (see Section 5.7).

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 13.1 terms in full-time studies. Those who leave without a degree study for 9.7 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 12.8 terms, of which 10.2 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 2002-2003, 57.5% 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	2000-2001	2001-2002	2002-2003[e]
Male	53.1	55.5	60.9	53.0	54.3	59.8
Female	40.3	46.7	48.4	54.7	54.0	54.7
Total	**48.7**	**52.3**	**56.3**	**53.8**	**54.2**	**57.5**

e: Estimates

Table 3.8b

Average number of terms completed before leaving a doctoral program (average for all leavers after 1998-1999), by gender

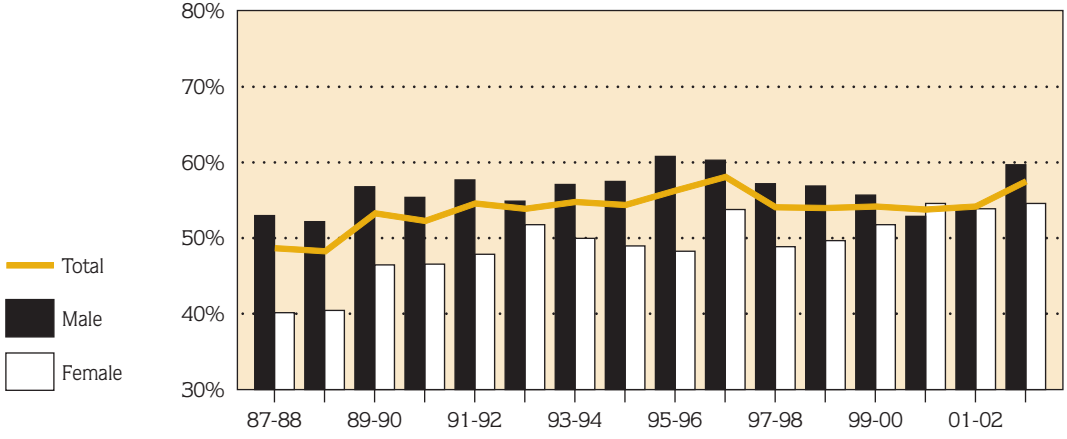
	With Degree		Without Degree[1]		Total	
	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]	Full-time	All attendance statuses[2]
Male	13.1	15.5	7.4	9.7	10.3	12.7
Female	13.2	16.6	7.0	9.6	10.0	13.0
Total	**13.1**	**16.0**	**7.2**	**9.7**	**10.2**	**12.8**

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 2004 examinations was 75%,[1] and the success rate was 87.1%.

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. This 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 8.5 percentage points higher than the average mark obtained in the public system. The success rate was 85% in the public system, compared with 95.9% 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 better results on the examinations than students who studied in English. The average mark of students studying in French was 4 percentage points higher than that of students studying in English; the success rate of students studying in French was 4.3 percentage points higher than that of students studying in English.

The best results were obtained in the second language, in particular English, and the poorest, in mathematics and physical science. The success rate was 89.6% for the Secondary V French, language of instruction, examination and 94.7% for the Secondary V English, language of instruction examination.

Female students outperformed male students in French, language of instruction, English, language of instruction, French, second language, and physical science. In the other subjects, there was little difference.

The success rate on the Ministère's June 2004 secondary school uniform examinations was 87.1%. Overall, female students obtained higher marks 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

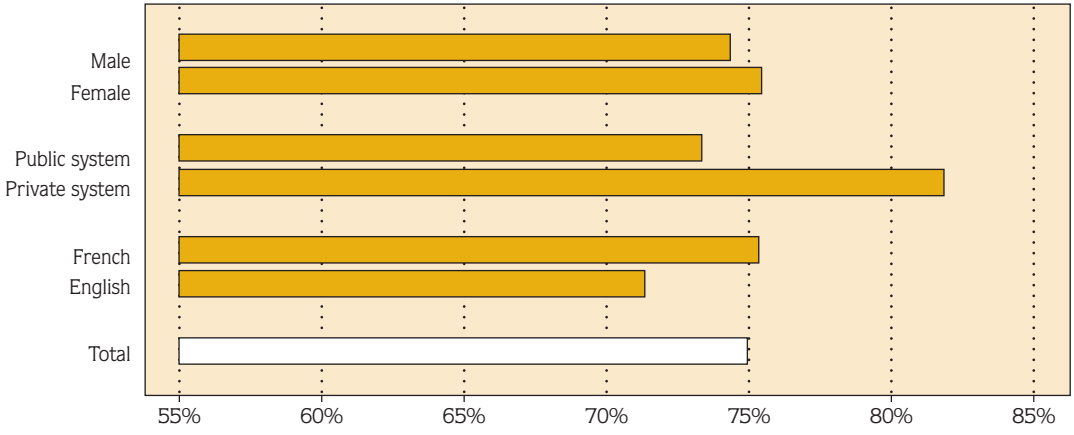
Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 2004 (%)

	Average	Success Rate
Male	74.4	86.2
Female	75.5	87.8
Public system[1]	73.4	85.0
Private system	81.9	95.9
Language of instruction: French	75.4	87.5
Language of instruction: English	71.4	83.2
English, language of instruction (Secondary V)	73.6	94.7
English, second language (Secondary IV)	80.9	93.3
English, second language (Secondary V)	81.8	94.7
French, language of instruction (Secondary V)	72.5	89.6
French, second language (Secondary V)	74.0	91.9
History (Secondary IV)	75.9	87.6
Physical Science 416 (Secondary IV)	70.4	79.2
Mathematics 436 (Secondary IV)	72.4	82.2
Mathematics 514 (Secondary V)	65.6	72.1
Total	**75.0**	**87.1**

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 results on secondary school uniform examinations in the youth sector, by gender, school system and language of instruction: June 2004 (%)



4.2 Regional Disparities in Secondary School Examination Results–Youth Sector

Four administrative regions recorded higher averages and success rates than the overall provincial results on the Ministère de l'Éducation's June 2004 uniform examinations.[1] These regions are Capitale-Nationale, Mauricie, Montérégie and Laval. Ranked among the lowest were Gaspésie–Îles-de-la-Madeleine, Côte-Nord and Nord-du-Québec.

Regional disparities changed little from 2003 to 2004. The difference between the highest and lowest average marks dropped from 8.6 to 8.3 percentage points, while the gap in the success rates dropped from 12.3 to 11.5 percentage points.

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 2004 uniform examinations showed a difference of 11.5 percentage points between the success rates of students in the region with the best performance (88.8%) and in the region with the poorest performance (77.3%).

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.*

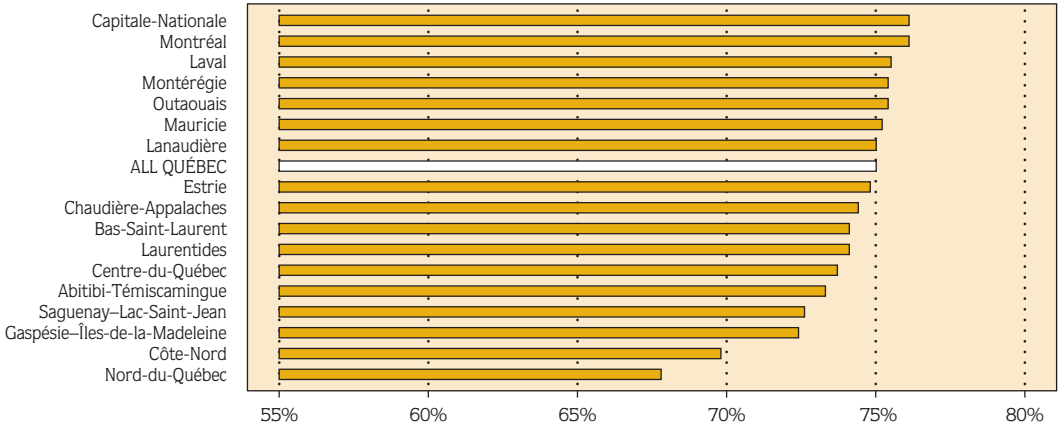
Table 4.2

Results on secondary school uniform examinations in the youth sector, by school administrative region: June 2004 (%)

School Administrative Region	Average	Success Rate
Gaspésie–Îles-de-la-Madeleine	72.4	84.5
Bas-Saint-Laurent	74.1	86.8
Saguenay–Lac-Saint-Jean	72.6	84.9
Capitale-Nationale	76.1	88.8
Chaudière-Appalaches	74.4	87.6
Mauricie	75.2	88.6
Centre-du-Québec	73.7	86.1
Estrie	74.8	87.5
Montérégie	75.4	88.1
Montréal	76.1	87.0
Laval	75.5	87.7
Lanaudière	75.0	87.2
Laurentides	74.1	85.8
Outaouais	75.4	86.6
Abitibi-Témiscamingue	73.3	86.0
Côte-Nord	69.8	77.3
Nord-du-Québec	67.8	79.2
Total	**75.0**	**87.1**

Graph 4.2

Average results on secondary school uniform examinations in the youth sector, by school administrative region: June 2004 (%)



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

Students who took the June 2004 Secondary V French, language of instruction, examination obtained an average mark of 72.5%; the success rate was 89.6%.[1]

The examination consisted of three components: 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. In written production, which was under the responsibility of the Ministère de l'Éducation, du Loisir et du Sport, students obtained an average of 72.5% and a success rate of 82.8%.

Whereas there was no significant difference overall between the results obtained by male and female students on most of the examinations used for purposes of certification, female students outperformed male students on the French examination. The average for female students was 5.3 percentage points above that for male students, and the success rate was 7.7 percentage points in favour of female students. In written production, the female students' average was 4.8 percentage points higher than the male students' and their success rate was 7.9 percentage points higher.

The average obtained by private school students surpassed that of public school students by 5.7 percentage points. In the public system, 12.1% of the students failed the ministry examination, compared with 3.4% in the private system. In written production, students in private schools scored 6.1 percentage points higher than students in the public system. Compared with the June 2003 examination, the success rate for the written production component went from 73.2% to 82.8%. For the examination as a whole, the success rate rose from 82.9% to 89.6%.

The success rate on the Ministère's June 2004 Secondary V French, language of instruction, examination was 89.6%. 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

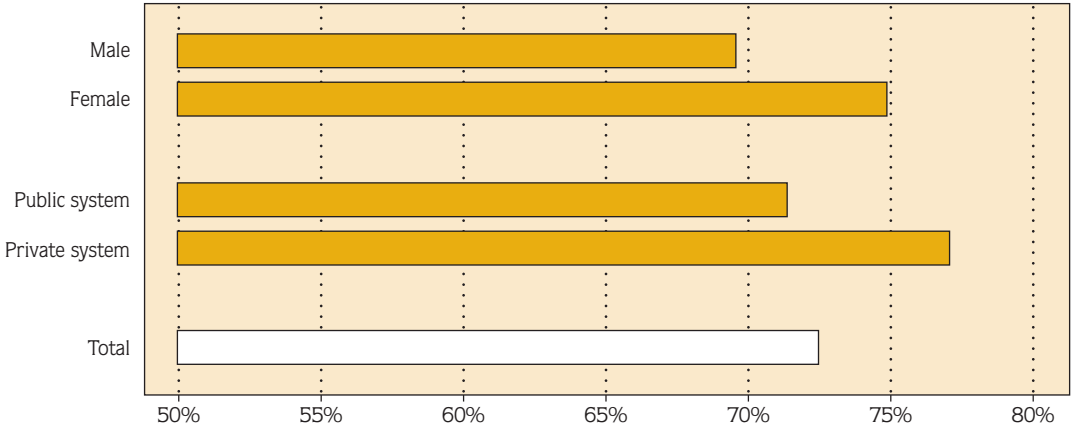
Results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2004 (%)

	Written Production		Overall Results	
	Average	Success Rate	Average	Success Rate
Male	69.9	78.5	69.6	85.4
Female	74.7	86.4	74.9	93.1
Public system[1]	71.3	80.6	71.4	87.9
Private system	77.4	91.7	77.1	96.6
Total	**72.5**	**82.8**	**72.5**	**89.6**

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 results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 2004 (%)



4.4 Science Achievement of 13-Year-Olds

Some 1 852 Québec 13-year-olds participated in the science assessment held in the spring of 2004 as part of the School Achievement Indicators Program (SAIP). For the most part, they were enrolled in Secondary I or II, while participants in most of the other provinces were enrolled in either Grade 7, Grade 8 or Secondary I.

The assessment, which is administered to 13-year-olds and to 16-year-olds, is intended to evaluate students' scientific knowledge and skills. It is corrected using a five-level scale, representing a continuum of knowledge and skills acquired by students throughout their education.[1] The assessment is designed in such a way that most 13-year-olds should have a performance equal to level 2. It should be noted that SAIP assessments are not intended to measure individual student performance but rather the effectiveness of the programs in place in the provinces and territories of Canada. That is why the results on the SAIP assessments do not focus on the average results obtained by the students, but on the proportion of students who achieved each of the five performance levels.

In Québec as a whole, more than 88.8% of francophone students and 82.8% of anglophone students achieved performance level 1, while 73.0% of francophone students and 67.9% of anglophone students achieved level 2. The results were comparable across the country. However, far fewer francophone students in Manitoba, Ontario, Nova Scotia, New Brunswick, the Yukon and the Northwest Territories than francophone Quebeckers achieved level 1.

Some 73.0% of francophone students in Québec achieved level 2 on the science assessment. Although this figure is slightly smaller than the proportion of Alberta students who achieved the same level (77.9%), the difference is not significant.[2] The results of francophone Quebeckers are also comparable to those of anglophone students in Ontario and British Columbia.

The proportion of female students who achieved level 2 on the science assessment is slightly lower than that of their male counterparts in Canada as a whole. More than 70.4% of female students achieved level 2 on the science assessment, compared with 71.7% of male students. In Québec, 73.6% and 69.2% of francophone and anglophone male students, respectively, achieved level 2, while the corresponding proportions were 72.6% and 66.5% for their female counterparts.

Francophone 13-year-olds in Québec did well on the SAIP science assessment held in the spring of 2004. No less than 73.0% of them achieved performance level 2, ranking among the best in Canada.

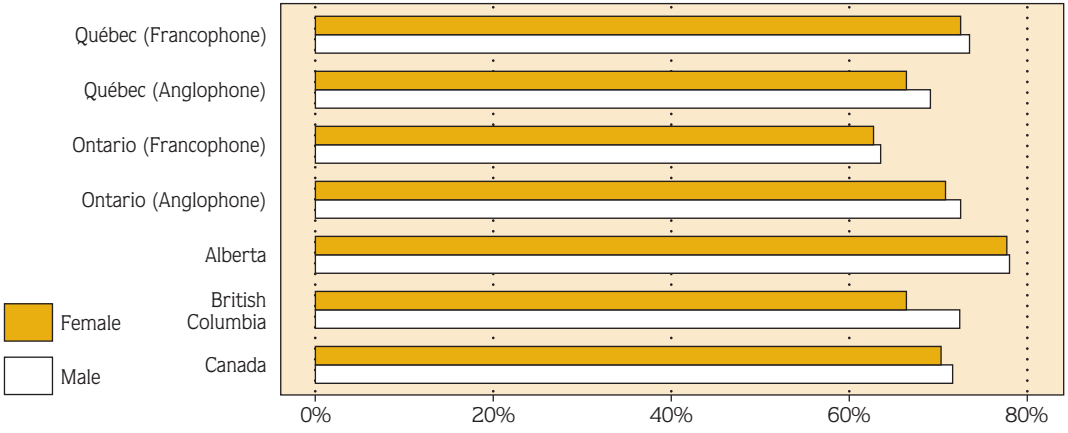
1. *For more information about the SAIP science assessments, consult the following document:* School Achievement Indicators Program of the Council of Ministers of Education (Canada) (SAIP) 2004: Québec Results in the 2004 Science Assessment, *available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: <http://www.mels.gouv.qc.ca/sanction/pirs.htm>.*

2. *The comparisons of results in this section take into account the margin of error inherent in any result obtained by surveying a sampling of persons. The confidence intervals calculated on the basis of the standard error for the average for francophone students in Québec and anglophone students in Ontario (a confidence interval of 95% corresponds to plus or minus about two standard errors around the average of a normally distributed population) indicate the possible variation in results.*

Table 4.4
Proportion of 13-year-old students who achieved the first two performance levels on the SAIP science assessment, 2004 (%)

	First two performance levels on the science assessment					
	Below Level 1 (%)	Standard error	Level 1 (%)	Standard error	Level 2 (%)	Standard error
British Columbia	16.0	2.4	84.0	2.4	69.6	3.0
Alberta	11.8	1.9	88.2	1.9	77.9	2.5
Saskatchewan	17.3	2.2	82.7	2.2	65.9	2.8
Manitoba (Anglophone)	17.7	2.4	82.3	2.4	67.6	2.9
Manitoba (Francophone)	29.5	2.4	70.5	2.4	58.4	2.6
Ontario (Anglophone)	11.5	2.0	88.5	2.0	71.8	2.8
Ontario (Francophone)	23.3	2.7	76.7	2.7	63.2	3.1
Québec (Anglophone)	**17.2**	**2.5**	**82.8**	**2.5**	**67.9**	**3.1**
Québec (Francophone)	**11.2**	**2.0**	**88.8**	**2.0**	**73.0**	**2.8**
New Brunswick (Anglophone)	18.7	2.4	81.3	2.4	61.7	3.0
New Brunswick (Francophone)	34.8	2.8	65.2	2.8	48.6	2.9
Nova Scotia (Anglophone)	18.9	2.5	81.1	2.5	63.1	3.0
Nova Scotia (Francophone)	31.0	5.4	69.0	0.0	58.8	0.0
Prince Edward Island	18.9	2.8	81.1	2.2	65.8	2.7
Newfoundland and Labrador	20.2	2.6	79.8	2.4	65.6	2.9
Yukon	24.2	4.4	75.8	1.8	61.5	2.1
Northwest Territories	35.2	4.1	64.8	2.2	48.7	2.3
Canada	**13.7**	**0.6**	**86.3**	**0.6**	**71.0**	**0.8**

Graph 4.4
Proportion of 13-year-old students who achieved performance level 2 in the SAIP science assessment, by gender: Québec, Ontario, Alberta, British Columbia and Canada, 2004 (%)



4.5 Science Achievement of 16-Year-Olds

Some 1 892 Québec 16-year-olds participated in the science assessment held in the spring of 2004 as part of the School Achievement Indicators Program (SAIP). For the most part, they were enrolled in Secondary IV or V, while participants in most of the other provinces were enrolled ineither Secondary II, III or IV.

The assessment, which is administered to 13-year-olds and to 16-year-olds, is intended to evaluate students' scientific knowledge and skills. It is corrected using a five-level scale (see Section 4.4).[1] The assessment is designed in such a way that most 16-year-olds should have a performance equal to level 3. The results on the SAIP assessments do not focus on the average results obtained by the students, but on the proportion of students who achieved each of the five performance levels.

In Québec as a whole, 90.9% of anglophone students achieved performance level 1, compared with 94.7% of their francophone counterparts, while 83.0% and 88.8% of Québec anglophone and francophone students, respectively, achieved level 2.

Some 65.8% of francophone students in Québec achieved level 3 on the science assessment, behind students in Alberta, but ahead of those in Ontario and British Columbia. These differences, however, are not considered significant.[2] Some 57.7% of anglophone students in Québec achieved level 3, behind the Canadian average (64.0%).

The proportion of female students who achieved level 3 on the science assessment is lower than that of their male counterparts in almost every region of the country. More than 62.1% of female students achieved level 3 on the science assessment, compared with 65.8% of male students. In Québec, 63.5% and 53.3% of francophone and anglophone female students, respectively, achieved level 3, while the corresponding proportions were 68.8% and 62.2%, respectively, for their male counterparts.

No less than 65.8% of francophone students and 57.7% of anglophone students achieved performance level 3 on the SAIP science assessment held in the spring of 2004.

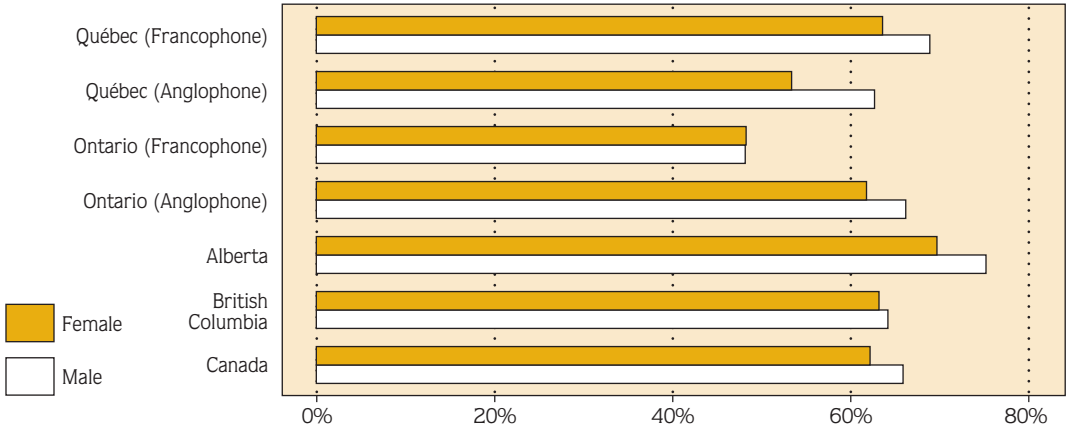
1. *For more information about the SAIP science assessments, consult the following document:* School Achievement Indicators Program of the Council of Ministers of Education (Canada) (SAIP) 2004: Québec Results in the 2004 Science Assessment, *available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: <http://www.mels.gouv.qc.ca/sanction/pirs.htm>.*

2. *The comparisons of results in this section take into account the margin of error inherent in any result obtained by surveying a sampling of persons. The confidence intervals calculated on the basis of the standard error for francophone students in Québec and anglophone students in Ontario (a confidence level of 95% corresponds to plus or minus about two standard errors around the average of a normally distributed population) indicate that the variation in results allows their overlap.*

Table 4.5
Proportion of 16-year-old students who achieved the first three performance levels on the SAIP science assessment, 2004 (%)

	First three performance levels on the science assessment					
	Level 1 (%)	Standard error	Level 2 (%)	Standard error	Level 3 (%)	Standard error
British Columbia	89.1	2.0	83.3	2.4	63.6	3.1
Alberta	95.1	1.4	90.4	1.8	72.4	2.8
Saskatchewan	92.0	1.7	82.7	2.4	59.3	3.1
Manitoba (Anglophone)	88.1	2.1	82.5	2.5	59.3	3.3
Manitoba (Francophone)	87.0	2.9	82.7	3.3	58.2	4.3
Ontario (Anglophone)	94.2	1.8	88.4	2.4	64.0	3.6
Ontario (Francophone)	82.9	2.7	73.6	3.1	48.2	3.5
Québec (Anglophone)	**90.9**	**2.0**	**83.0**	**2.6**	**57.7**	**3.4**
Québec (Francophone)	**94.7**	**1.5**	**88.8**	**2.1**	**65.8**	**3.1**
New Brunswick (Anglophone)	88.5	2.0	81.7	2.4	57.6	3.1
New Brunswick (Francophone)	83.4	2.3	76.6	2.6	57.2	3.1
Nova Scotia (Anglophone)	89.9	2.0	82.9	2.5	59.7	3.3
Nova Scotia (Francophone)	84.9	2.3	78.0	2.6	58.5	3.1
Prince Edward Island	88.3	2.0	82.0	2.4	58.0	3.1
Newfoundland and Labrador	90.9	1.9	84.4	2.3	62.3	3.1
Yukon	85.5	2.3	78.6	2.7	60.7	3.2
Northwest Territories	79.6	2.6	69.5	3.0	49.1	3.2
Canada	**92.7**	**0.5**	**86.7**	**0.6**	**64.0**	**0.9**

Graph 4.5
Proportion of 16-year-old students who achieved performance level 3 in the SAIP science assessment, by gender: Québec, Ontario, Alberta, British Columbia and Canada, 2004 (%)



4.6 Mathematical Literacy in 15-Year-Olds

In the spring of 2003, 3 357 Québec students from 131 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. Mathematics was the major domain of PISA 2003. A new test assessing problem-solving skills was also introduced that year.

Québec students scored an average of 537 on the mathematics test, ranking 5th among the 40 participating countries. They did better than their Japanese counterparts, who took first place in 2000, but not quite as well as students in Korea and Finland. Students in Alberta scored highest in Canada.

Male students did better on the mathematics test than female students in every participating country, except Thailand. In Québec, female students scored 7 points lower than their male counterparts (534, compared with 541). This difference, however, is not significant.[2]

Francophone students in Québec scored an average of 536 points, slightly below their anglophone counterparts (541 points).

A preliminary analysis of the background questionnaires filled out by students and administrative staff at the participating schools provides information about the differences between the scores of students in Québec and in the other provinces.

That male students performed better in mathematics can be associated with the fact that female students generally express less confidence in their ability to solve precise mathematical problems and to learn mathematics, and that they are more anxious about mathematics in general. The enjoyment associated with mathematics appears to be linked to higher scores on tests in this area.

The socioeconomic status indicator produced and used by PISA 2003 combines several factors that influence student performance, including parents' level of education and occupation. Generally speaking, students in Alberta, British Columbia and Ontario have a higher socioeconomic status indicator than those in the other provinces. If we compare the mathematics scores of Canadian students with comparable socioeconomic status indicators, in this case, parents' level of education (see Graph 4.6), we see that students in Québec do almost as well as those in Alberta and better than those in British Columbia and Ontario.

Québec 15-year-olds scored an average of 537 points on the PISA mathematics test held in the spring of 2003, ranking 5th among the 40 participating countries.

1. *The results of Québec students on the 2003 PISA tests are available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: < http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*

2 *The confidence intervals calculated on the basis of the standard error for male students (5.7 percentage points) and female students (4.7 percentage points) in Québec (a confidence level of 95% corresponds to plus or minus about two standard errors around the average of a normally distributed population) indicate that the variation in results allows their overlap.*

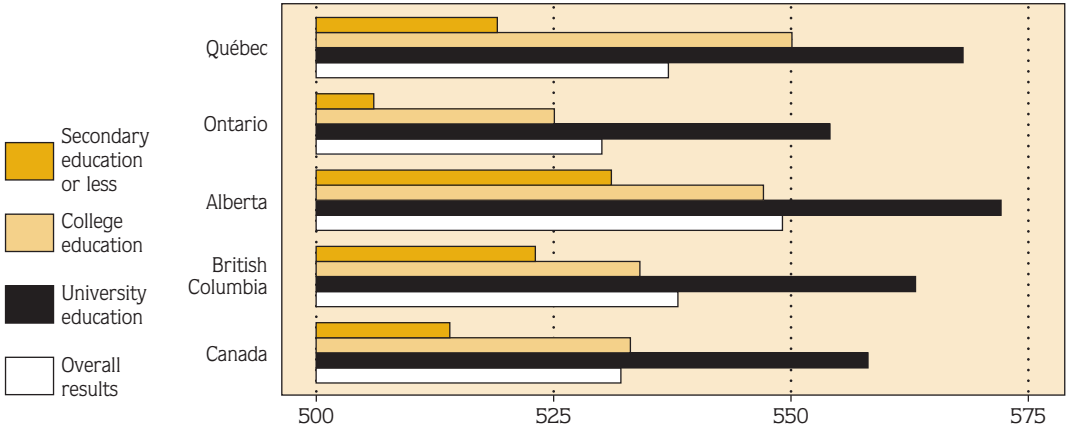
Table 4.6

Scores and standard errors on the PISA 2003 mathematics test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Hong Kong – China	550	4.5	Alberta	549	4.3
Finland	544	1.9	British Columbia	538	2.4
Korea	542	3.2	**Québec**	**537**	**4.7**
Netherlands	538	3.1	Ontario	530	3.6
Québec	*537*	*4.7*	Manitoba	528	3.1
Liechtenstein	536	4.1	Newfoundland and Labrador	517	2.5
Japan	534	4.0			
Canada	532	1.8	Saskatchewan	516	3.9
Belgium	529	2.3	Nova Scotia	515	2.2
Macao – China	527	2.9	New Brunswick	512	1.8
Switzerland	527	3.4	Prince Edward Island	500	2.0

Graph 4.6

Results[1] of 15-year-old students on the PISA 2003 mathematics test, by parents' level of education: Québec, Ontario, Alberta, British Columbia and Canada



1. The students' average score in mathematics is at the 50th percentile.

4.7 Problem-Solving Skills in 15-Year-Olds

In the spring of 2003, 3 357 Québec students from 131 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. Mathematics was the major domain of PISA 2003. A new test assessing problem-solving skills was also introduced that year.

Québec students scored an average of 531 on the problem-solving test, ranking 7th among the 40 participating countries. Students in Japan, Korea, Hong Kong (China) and Finland did significantly better than students in Québec. Students in Alberta scored highest in Canada.

Male students did as well as their female counterparts on the problem-solving test in most participating countries. However, female students in 6 countries, including Norway, Sweden, Finland and Iceland, scored significantly higher than their male counterparts. In Québec, female students scored 2 points higher than male students (532, compared with 530).

Francophone students in Québec scored an average of 529 points, slightly below their anglophone counterparts (538 points).

Those who did well on the problem-solving test generally did well on the other PISA 2003 tests. In some countries, including Canada, and particularly in Québec, most students scored better in mathematics than in problem-solving. According to OECD analysts, students in these countries have a better grasp of mathematics content as compared to other countries. This may be an indication that mathematics instruction is particularly effective there. In contrast, in some countries, such as France and Germany, most students perform relatively better in problem-solving. OECD analysts believe that this may suggest that students have the potential to achieve better results in mathematics than reflected in their current performance, since their level of generic problem-solving skills is relatively higher.[2]

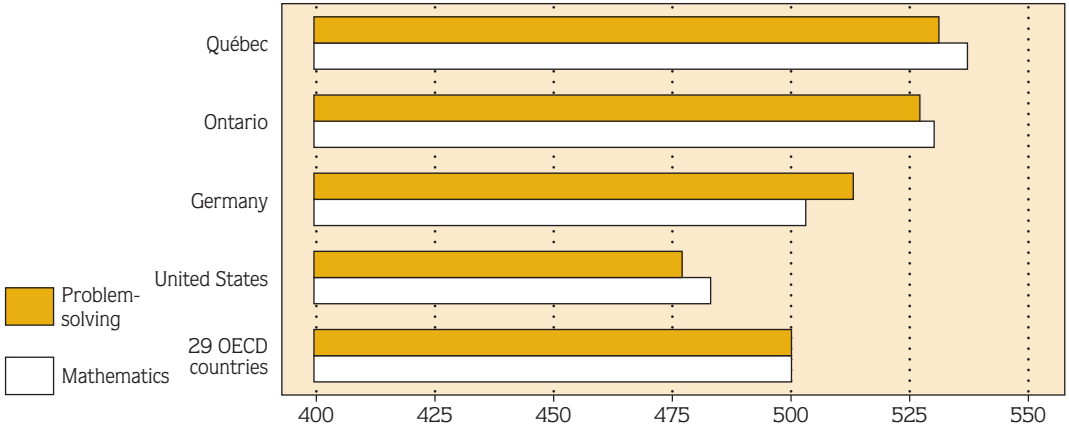
Québec 15-year-olds scored an average of 531 points on the PISA problem-solving test held in the spring of 2003, ranking 7th among the 40 participating countries.

1. *The results of Québec students on the 2003 PISA tests are available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: < http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*
2. *OECD*, Problem Solving for Tomorrow's World – First Measures of Cross-Curricular Competencies from PISA 2003, *http://www.pisa.oecd.org/.*

Table 4.7
Scores and standard errors on the PISA 2003 problem-solving test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Korea	550	3.1	Alberta	546	4.3
Hong Kong – China	548	4.2	British Columbia	536	2.4
Finland	548	1.9	**Québec**	**531**	**4.3**
Japan	547	4.1	Ontario	527	3.4
New Zealand	533	*2.2*	Manitoba	527	2.9
Macao – China	532	2.5	Newfoundland and Labrador	517	3.2
Québec	*531*	*4.3*			
Australia	530	2.0	Saskatchewan	516	4.0
Liechtenstein	529	3.9	Nova Scotia	514	2.3
Canada	529	1.7	New Brunswick	508	2.2
Switzerland	521	3.0	Prince Edward Island	498	2.2

Graph 4.7
Results of 15-year-old students on the PISA 2003 mathematics and problem-solving tests: Québec, Ontario, Germany, United States and 29 OECD countries



4.8 Scientific Literacy in 15-Year-Olds

In the spring of 2003, 3 357 Québec students from 131 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. Mathematics was the major domain of PISA 2003. A new test assessing problem-solving skills was also introduced that year.

Québec students scored an average of 520 points on the science test, ranking 11th among the 40 participating countries. Students in Japan, Korea, Hong Kong (China) and Finland did significantly better than students in Québec. Students in Alberta scored highest in Canada. The Canadian average, 519 points, was below that achieved in 2000.[2]

Male students generally did a little better than female students in most participating countries. In Canada, they did significantly better than their female counterparts (527, compared with 516). However, female students in 3 countries, including Finland and Iceland, achieved significantly better results than male students.

In Québec, female students scored 7 points lower than their male counterparts (516, compared with 523). This difference, however, is not considered significant.

Francophone students in Québec scored an average of 518 points, slightly below their anglophone counterparts (523 points).

Those who did well on the science test generally did well on the other PISA 2003 tests.

Québec 15-year-olds scored an average of 520 points on the PISA science test held in the spring of 2003, ranking 11th among the 40 participating countries.

1. *The results of Québec students on the 2003 PISA tests are available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: < http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*
2. *Students' results on the 2000 PISA tests are presented in the 2002 edition of the* Education Indicators, *which is available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: <http://www.mels.gouv.qc.ca/STAT/indic02/indic02A/ia2002.pdf>.*

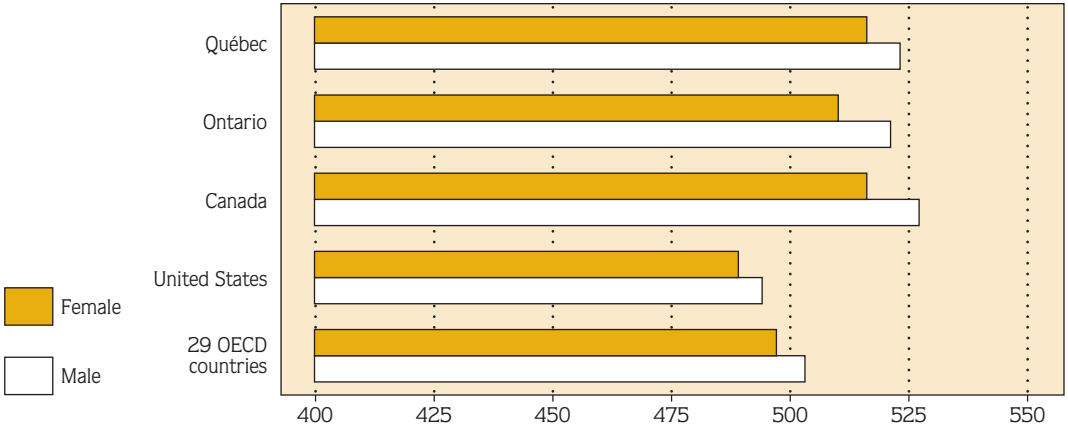
Table 4.8

Scores and standard errors on the PISA 2003 science test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Finland	548	1.9	Alberta	539	5.6
Japan	548	4.1	British Columbia	527	2.8
Hong Kong – China	539	4.3	**Québec**	**520**	**5.2**
Korea	538	3.5	Ontario	515	3.9
Liechtenstein	525	*4.3*	Newfoundland and	514	2.9
Australia	525	2.1	Labrador		
Macao – China	525	*3.0*	Manitoba	512	3.7
Netherlands	524	3.1	Saskatchewan	506	4.6
Czech Republic	523	3.4	Nova Scotia	505	2.4
New Zealand	521	2.4	New Brunswick	498	2.2
Québec	*520*	*5.2*	Prince Edward Island	489	2.6
Canada	***519***	*2.0*			

Graph 4.8

Results of 15-year-old students on the PISA 2003 science test, by gender: Québec, Ontario, Canada, United States and 29 OECD countries



4.9 Reading Literacy in 15-Year-Olds

In the spring of 2003, 3 357 Québec students from 131 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. Mathematics was the major domain of PISA 2003. A new test assessing problem-solving skills was also introduced that year.

Québec students scored an average of 525 points on the reading comprehension test, ranking 4th among the 40 participating countries. Only students in Finland did significantly better than students in Québec. Students in Alberta scored significantly higher than their Québec counterparts, ranking first in Canada.

Female students did better than male students in every participating country. Only in Liechtenstein did they not score significantly higher than their male counterparts.[2] In Québec, female students scored 34 points higher than male students (542, compared with 508).

Francophone students in Québec scored an average of 524 points, slightly below their anglophone counterparts (530 points).

Québec 15-year-olds scored an average of 525 points on the PISA reading comprehension test held in the spring of 2003, ranking 4th among the 40 participating countries.

1. *The results of Québec students on the 2003 PISA tests are available on the Web site of the Ministère de l'Éducation, du Sport et du Loisir at the following address: <http://www.mels.gouv.qc.ca/sanction/pisa.htm>.*

2 *The comparisons of results in this section take into account the margin of error inherent in any result obtained by surveying a sampling of persons. The confidence intervals calculated on the basis of the standard error for the average of all students (a confidence level of 95% corresponds to plus or minus about two standard errors around the average of a normally distributed population) indicate that the variation in results allows their overlap.*

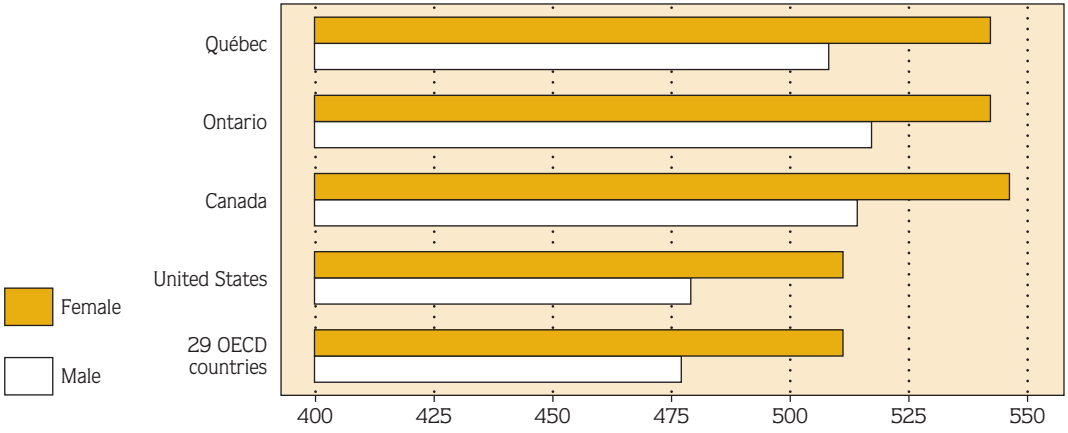
Table 4.9

Scores and standard errors on the PISA 2003 reading comprehension test for 15-year-olds, Canadian provinces and top 10 countries

Country	Average score	Standard error	Province	Average score	Standard error
Finland	543	1.6	Alberta	543	4.3
Korea	534	3.1	British Columbia	535	2.5
Canada	528	1.7	Ontario	530	3.5
Québec	*525*	*4.3*	**Québec**	**525**	**4.3**
Australia	525	2.1	Newfoundland and	521	3.2
Liechtenstein	525	3.6	Labrador		
New Zealand	522	2.5	Manitoba	520	3.3
Ireland	515	2.6	Nova Scotia	513	2.3
Sweden	514	2.4	Saskatchewan	512	4.2
Netherlands	513	2.9	New Brunswick	503	2.1
Hong Kong – China	510	3.7	Prince Edward Island	495	2.3

Graph 4.9

Results of 15-year-old students on the PISA 2003 reading comprehension test, by gender: Québec, Ontario, Canada, United States and 29 OECD countries



4.10 Mathematics Achievement of Fourth Year Elementary School Students

In the spring of 2003, 4 350 Québec students in the fourth year elementary school participated in the Trends in International Mathematics and Science Study (TIMSS 2003). These students were on average 10 years old in most of the education systems of the participating countries.[1]

The tests, prepared by a consortium led by the International Association for the Evaluation of Educational Achievement (IEA), are intended to assess mathematics achievement. Five major content domains are evaluated: number sense and fractions; geometry; algebra (regularity, equations, sequences); measurement; and data representation and analysis. Overall results are published for each of these domains.

Québec students scored a standardized average of 506 points, ranking 14th among the 25 participating countries, just behind the United States (518 points, 12th place) and Ontario (511 points, 13th place). Male students scored slightly higher than their female counterparts. However, there is no significant difference between the scores of male and female students in most of the participating countries.[2]

Francophone students in Québec scored an average of 508 points, significantly higher than their anglophone counterparts (490 points).

A preliminary analysis of the background questionnaires filled out by students, teachers and administrative staff at the participating schools provides information about the differences between the scores of students in Québec and those in Ontario and the United States.

Québec students expressed more confidence in their ability to learn mathematics than students in Ontario and the United States. A high level of self-confidence is generally associated with good results on the TIMSS tests.

Québec teachers of 10-year-olds report spending an average of 198 hours teaching mathematics, compared with 160 hours in Ontario and 147 hours in the United States. Textbooks are the primary source of mathematics instruction for 55% of Québec students, while the corresponding proportion is lower in Ontario (39%) and higher in the United States (60%). Similarly, the amount of school resources devoted to mathematics teaching is considered very high by teachers of 45% of Québec students, higher than the level observed in Ontario (35%) but comparable to that in the United States (43%).

Québec 10-year-olds scored a standardized average of 506 points on the TIMSS mathematics test held in the spring of 2003, ranking 14th among the 25 participating countries, just behind Ontario students, who ranked 13th.

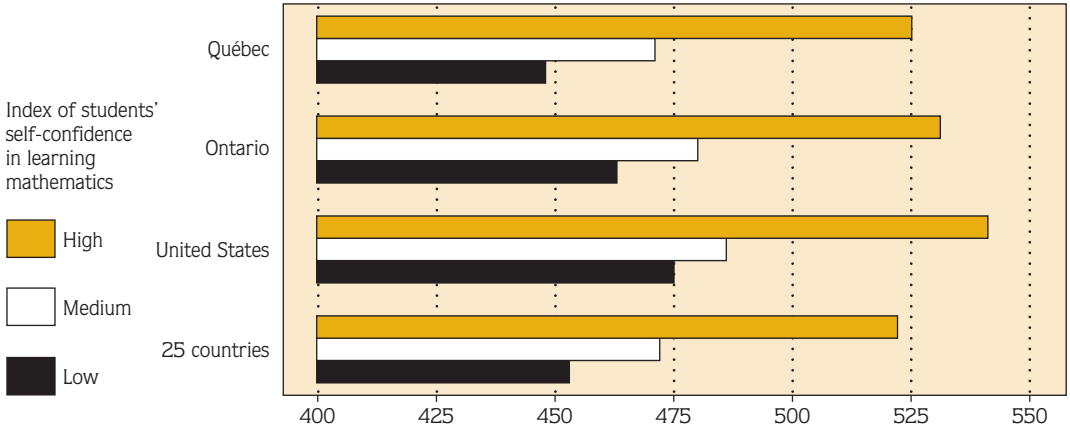
1. *The results of Québec students on the 2003 TIMSS tests are available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: <http://www.mels.gouv.qc.ca/sanction/teims.htm>.*

2. *The confidence intervals (about two standard errors around the average with a confidence level of 95%) indicate whether or not the variation in results allows their overlap. Thus, the results for male and female students in Québec (509 and 502 points, respectively), with a respective standard error of 5.6 and 5.4 points, do not represent a significant difference from a statistical standpoint.*

Tableau 4.10
Results of fourth year elementary school students on the TIMSS 2003 mathematics test: three participating school jurisdictions and top 10 countries

Participating countries	Fourth Year of Elementary School	
	Average	Standard error
Singapore	594	5.6
Hong Kong – China	575	3.2
Japan	565	1.6
Taiwan (Chinese Taipei)	564	1.8
Belgium (Flemish)	551	1.8
Netherlands	540	2.1
Latvia	536	2.8
Lithuania	534	2.8
Russian Federation	532	4.7
England	531	3.7
International average	**495**	**0.8**
Participating school jurisdictions		
Indiana (U.S.)	533	2.8
Ontario	**511**	**3.8**
Québec	**506**	**2.4**

Graph 4.10
Index of Grade 4 students' self-confidence in learning mathematics (TIMSS 2003): Québec, Ontario, United States and 25 countries



4.11 Mathematics Achievement Among Secondary II (Grade 8) Students

In the spring of 2003, 4 411 Québec Secondary II students from 175 schools participated in the Trends in International Mathematics and Science Study (TIMSS 2003). These students were on average 14 years old in most of the education systems of the participating countries.

The tests are intended to assess mathematics achievement. Five major content domains are evaluated: number sense and fractions; geometry; algebra; measurement; and data representation, analysis and probability. Results are published for each of these domains, as well as for the study as a whole.

Québec students scored a standardized average of 543 points, ranking 6th among the 46 participating countries. They scored 39 points higher than students in the United States (504 points) and 22 points higher than those in Ontario (521 points).

Male students generally did better than female students in most of the participating countries. In Québec, they scored an average of 555 points, 7 points higher than their female counterparts.

The TIMSS has four benchmarks for classifying students: top (625 points), upper-quarter (550 points), median (475 points) and lower-quarter (400 points). No less than 53% of Québec students achieved the "upper-quarter" benchmark, compared with 40% of Ontario students and 36% of students in the United States.

In order to contextualize the results of Québec Secondary II students, the parents' level of education is used as a reference to compare the results of students from different socioeconomic communities. The results of students whose parents graduated from university are better than those of students whose parents did not go to university (33% of the participating students' parents attended university). Although this proportion is higher than the international average (28%), it is lower than those observed among parents of the students from the United States (56%) and Ontario (46%).

Québec is also different in terms of students' valuing of mathematics. No less than 55% of Québec students showed a high level of valuing mathematics,[1] a proportion identical to that for all the countries combined (55%), similar to that for the United States (58%), but lower than that for Ontario (66%). Interest in learning mathematics is generally associated with better performance in this domain.

Québec 14-year-olds scored a standardized average of 543 points on the TIMSS mathematics test held in the spring of 2003, ranking 6th among the 46 participating countries, ahead of Ontario and the United States.

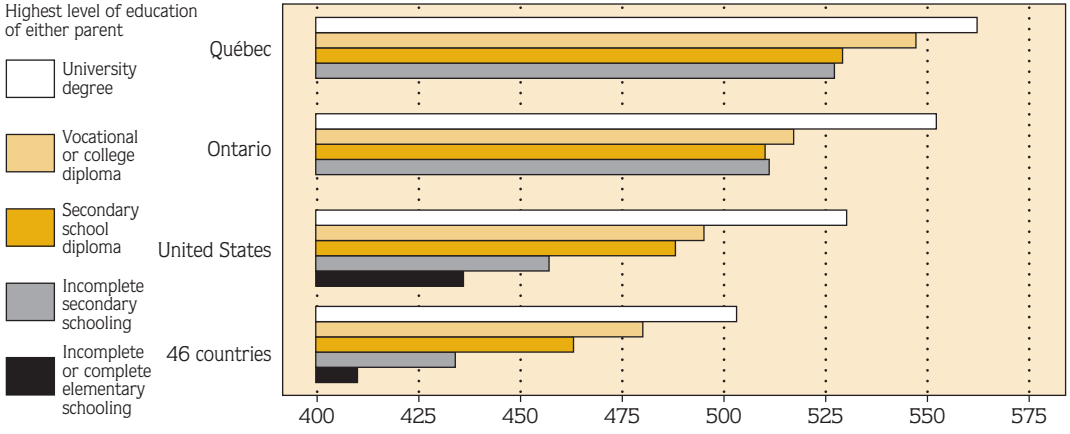
1. *In order to quantify the importance of mathematics, TIMSS uses an index of Students' Valuing Mathematics (SVM). This index is based on Grade 8 students' responses to seven statements about mathematics: 1) I would like to take more mathematics in school; 2) I enjoy learning mathematics; 3) I think learning mathematics will help me in my daily life; 4) I need mathematics to learn other school subjects; 5) I need to do well in mathematics to get into the university of my choice; 6) I would like a job that involved mathematics; 7) I need to do well in mathematics to get the job I want.*

Table 4.11
Results of Grade 8 students on the TIMSS 2003 mathematics test: four participating school jurisdictions and top 10 countries

Participating countries	Grade 8 students	
	Average	Standard error
Singapore	605	3.6
Republic of Korea	589	2.2
Hong Kong (China)	586	3.3
Taiwan (Chinese Taipei)	585	4.6
Japan	570	2.1
Belgium (Flemish)	537	2.8
Netherlands	536	3.8
Estonia	531	3.0
Hungary	529	3.2
Malaysia	508	4.1
International average	**467**	**0.5**
Participating school jurisdictions		
Basque region (Spain)	*487*	*2.7*
Indiana (U.S.)	*508*	*5.2*
Ontario[2]	*521*	*3.1*
Québec[2]	***543***	***3.0***

1. *The confidence intervals (about two standard errors around the average) indicate whether or not the variation in results allows their overlap. Thus, the results of Québec students (543 points, standard error of 6.0) are significantly higher than those of Ontario students (521 points, standard error of 6.2).*
2. *In Canada, only the provinces of Québec and Ontario participated in TIMSS 2003.*

Graph 4.11
Highest level of education of either parent of Grade 8 students taking the TIMSS 2003 mathematics test: Québec, Ontario, United States and 46 countries



4.12 Science Achievement of Fourth Year Elementary School Students

In the spring of 2003, 4 350 Québec students in the fourth year of elementary school participated in the science assessment as part of the Trends in International Mathematics and Science Study (TIMSS 2003). These students were on average 10 years old in most of the education systems of the participating countries.[1]

The tests, prepared by a consortium led by the International Association for the Evaluation of Educational Achievement (IEA), are intended to assess scientific literacy: life science, chemistry, physics, earth science and environmental science. The study makes it possible to analyze curricula and evaluate various program reforms. In addition, it reveals the science and mathematics skills of Québec students.

Students from Asian countries obtained the highest scores: students in Singapore scored an average of 565 points, while those in Québec scored an average of 500 points. Québec ranked 17th among the 25 participating countries, far behind Ontario and the United States, which placed 5th and 6th, respectively. Québec students scored slightly higher than the international average (489 points). Overall, male and female students obtained similar results[2] in most of the participating countries.

Québec students achieved the "median" TIMSS benchmark.[3] Québec students did best in life science and earth science, while they had more difficulty with physics.

A preliminary analysis of the background questionnaires filled out by students, teachers and administrative staff at the participating schools provides information about the differences between the scores of students in Québec and those in Ontario and the United States.

Québec students expressed more enjoyment in learning science than students in Ontario and the United States. A high level of enjoyment is generally associated with good results on the TIMSS science test. However, Québec students are generally less likely to use science textbooks. Indeed, teachers of 42% of participating students report that they do not use science textbooks. This proportion is higher than that observed in Ontario (23%) and the United States (24%). In addition, teachers in Québec devote 47 hours of teaching per year to science, compared with 93 hours in Ontario and 83 hours in the United States.

Québec 10-year-olds scored a standardized average of 500 points on the TIMSS science test held in the spring of 2003, ranking 17th among the 25 participating countries, behind Ontario students, who ranked 5th.

1. *The results of Québec students on the 2003 TIMSS tests are available on the Web site of the Ministère de l'Éducation, du Loisir et du Sport at the following address: <http://www.mels.gouv.qc.ca/sanction/teims.htm>.*

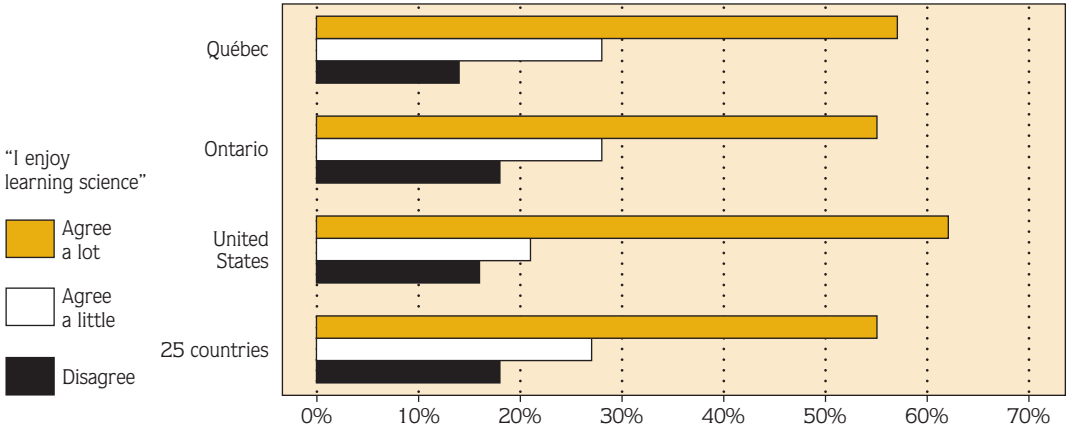
2 *The confidence intervals (about two standard errors around the average) indicate if the variation in results allows their overlap or not. Thus, the results of male students in Québec (500 points, standard error of 3.1) are comparable to those of their female counterparts (501 points, standard error of 2.7) with a confidence level of 95%.*

3. *The TIMSS has four benchmarks for classifying students: top (625 points or more), upper-quarter (550 to 624 points), median (475 to 549 points) and lower-quarter (400 to 474 points).*

Table 4.12
Results of fourth year elementary school students on the TIMSS 2003 science test: three participating school jurisdictions and top 10 countries

Participating countries	Fourth Year of Elementary School	
	Average	Standard error
Singapore	565	5.5
Taiwan (Chinese Taipei)	551	1.7
Japan	543	1.5
Hong Kong – China	542	3.1
England	540	3.6
United States	**536**	**2.5**
Lithuania	530	2.8
Hungary	530	3.0
Russian Federation	526	5.2
Netherlands	525	2.0
International average	**489**	**0.9**
Participating school jurisdictions		
Indiana (U.S.)	*553*	*3.7*
Ontario	*540*	*3.7*
Québec	***500***	***2.5***

Graph 4.12
Grade 4 students' responses to "I enjoy learning science" (TIMSS 2003): Québec, Ontario, United States and 25 countries (%)



4.13 Science Achievement Among Secondary II (Grade 8) Students

In the spring of 2003, 4 411 Québec Secondary II students from 175 schools participated in the science assessment as part of the Trends in International Mathematics and Science Study (TIMSS 2003). These students were on average 14 years old in most of the education systems of the participating countries.

The tests are intended to assess scientific literacy. Five major content domains are evaluated: life science, chemistry, physics, earth science and environmental science. Results are published for each of these domains, as well as for the study as a whole.

Québec students scored a standardized average of 531 points, or 12% higher than the international average, ranking just ahead of students in the United States, who ranked 9th among the 46 participating countries. Students in Ontario scored an average of 533 points.

Most male students in the participating countries scored significantly higher than female students. In Québec, they scored an average of 18 points higher than their female counterparts.[1] The gap, however, is only 6 points in favour of male students in all countries combined.

The TIMSS has four benchmarks for classifying students: top (625 points), upper-quarter (550 points), median (475 points) and lower-quarter (400 points). In Québec, 6% of students achieved the "top" benchmark, comparable to the international average (6%) and the rate in Ontario (7%), but lower than that in the United States (11%). However, 82% of Québec students achieved the "median" level, comparable to the rate observed in Ontario, but higher than that observed in the United States (75%) and the international average (54%).

In order to contextualize the results of Québec Secondary II students, the parents' level of education is used as a reference to compare the results of students from different socioeconomic communities. The results of students whose parents graduated from university are better than those of students whose parents did not go to university (33% of the participating students' parents attended university). Although this proportion is higher than the international average (28%), it is lower than those observed among parents of the students from the United States (56%) and Ontario (46%).

Québec is also different in terms of students' valuing of science. Barely 30% of Québec students showed a high level of valuing science,[2] a proportion lower than that observed in all countries combined (57%), the United States (47%) and Ontario (50%). Interest in learning science is generally associated with better performance in this domain.

> Québec 14-year-olds scored a standardized average of 531 points on the TIMSS science test held in the spring of 2003, ranking 9th among the 46 participating countries, just ahead of the United States.

1. *The confidence intervals (about two standard errors around the average) indicate whether or not the variation in results allows for their overlap. Thus, the results of male students in Québec (540 points, standard error of 6.4) are significantly higher than those of their female counterparts (522 points, standard error of 7.4) with a confidence level of 95%.*

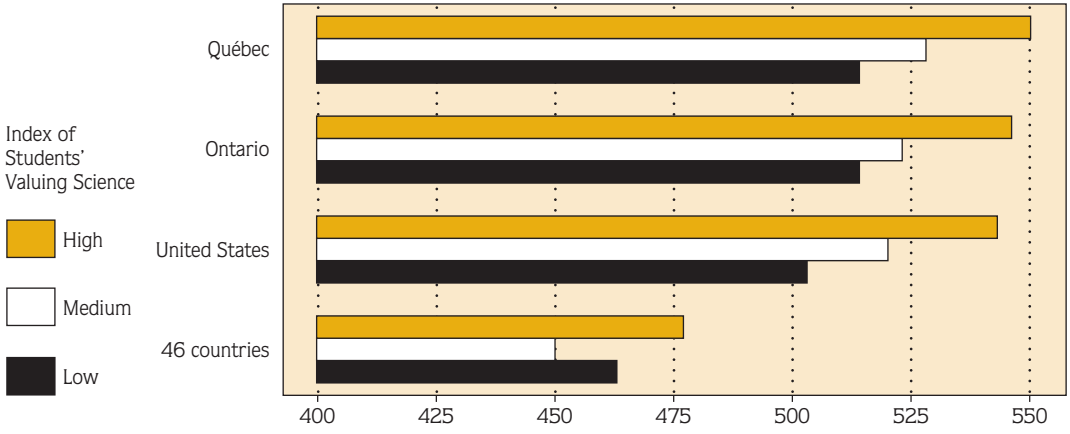
2. *In order to quantify the importance of science, TIMSS uses an index of Students' Valuing Science (SVS). This index is based on Grade 8 students' responses to seven statements about science: 1) I would like to take more science in school; 2) I enjoy learning science; 3) I think learning science will help me in my daily life; 4) I need science to learn other school subjects; 5) I need to do well in science to get into the university of my choice; 6) I would like a job that involved using science; 7) I need to do well in science to get the job I want.*

Table 4.13
Results of Grade 8 students on the TIMSS 2003 science test: four school jurisdictions and top 10 countries

Participating countries	Grade 8 students	
	Average	Standard error
Singapore	578	4.3
Taiwan (Chinese Taipei)	571	3.5
Republic of Korea	558	1.6
Hong Kong (China)	556	3.0
Estonia	552	2.5
Japan	552	1.7
Hungary	543	2.8
Netherlands	536	3.1
United States	**527**	**3.1**
Australia	527	3.8
International average	**474**	**0.6**
Participating school jurisdictions		
Basque region (Spain)	*489*	*2.7*
Indiana (U.S.)	*553*	*4.8*
Ontario[1]	*533*	*2.7*
Québec[1]	***531***	***3.0***

1. In Canada, only the provinces of Québec and Ontario participated in TIMSS 2003.

Graph 4.13
Index of Students' Valuing Science (Grade 8) (TIMSS 2003): Québec, Ontario, United States and 46 countries



4.14 Ministerial Examination of College French

In 2003-2004, 40 624 college students wrote the ministerial examination of college French, language of instruction and literature.

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

The examination consists in writing a 900-word critical essay based on the texts provided. There are three major evaluation criteria: 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 2003-2004, the overall success rate for the ministerial examination of college French was 84.7%, which was 1.1% lower than the rate observed in 2002-2003. This decrease can be explained by poorer performance on criterion III - Expression.

The best results were obtained in Organization of response, on which 47.7% of students received an A. Good results were also obtained in Comprehension and insight, on which 55.0% of students received a B. The results for the third criterion, Expression, were not as good: only 87.0% of students passed this criterion, 39.7% of them with a C.

In 2003-2004, the success rate for women was 87.5%, compared with 80.5% for men. These rates are slightly lower than those observed in 2002-2003: 1.0 percentage point for women and 1.3 for men.

Students enrolled in pre-university programs leading to a DCS recorded a success rate of 91.4%, while students enrolled in technical programs leading to a DCS achieved a success rate of 78.5%. In both cases, the results are lower than those observed during the previous period. The decrease is most marked among students enrolled in technical programs (1.4 percentage points).

Of the college students who took the ministerial examination of college French during the 2003-2004 school year, 84.7% 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.*

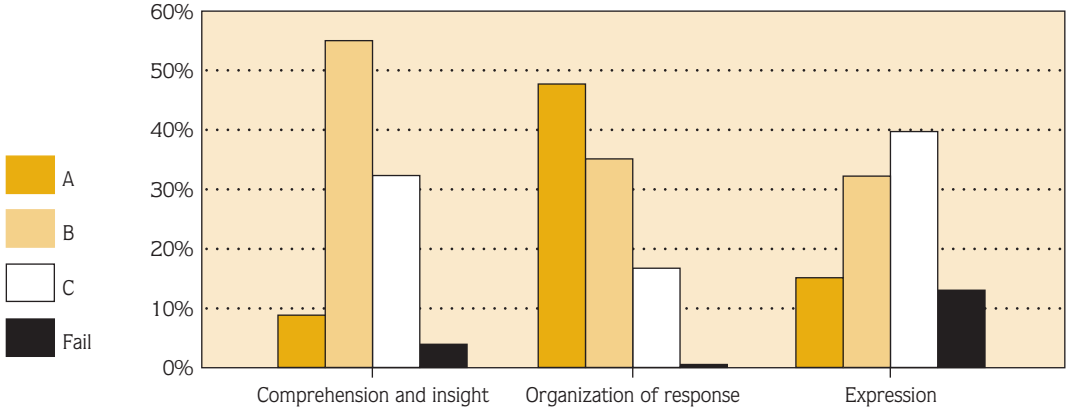
Table 4.14a
Success rate for the ministerial examination of college French, by gender and type of program (%)

	Success Rate			
	2000-2001	2001-2002	2002-2003	2003-2004
Female	86.4	86.8	88.5	87.5
Male	79.9	80.5	81.8	80.5
Pre-university education (DCS)	90.3	90.6	92.2	91.4
Technical training (DCS)	76.9	78.2	79.9	78.5
Overall examination	**83.7**	**84.3**	**85.8**	**84.7**

Table 4.14b
Distribution of students according to the grade obtained on each criterion of the ministerial examination of college French, 2003-2004 (%)

Criteria for the 2003-2004 examination	Distribution of students (%)				Success Rate
	A	B	C	Fail	
Comprehension and insight	8.8	55.0	32.3	3.9	96.1
Organization of response	47.7	35.1	16.7	0.5	99.5
Expression	15.1	32.2	39.7	13.0	87.0

Graph 4.14
Distribution of students, by grade obtained on each criterion of the ministerial examination of college French, 2003-2004 (%)



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 in the Introduction 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 2002-2003, 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 27.7%) was accompanied, at the other extreme, by a drop of more than one half in the proportion of those leaving school without a diploma (from 43.0% to 20.2%). 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 34.2% in 2002-2003. This decline of 29 percentage points is reflected by increases of 12.8 percentage points in the proportion of graduates with a bachelor's degree and 16.2 percentage points in the proportion of holders of vocational or technical training diplomas (11.8 and 4.4 percentage points, respectively).

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. In 2003, one and a half times more women than men graduated with a bachelor's degree or with a college diploma in technical training (53.2% compared with 33.1%), while roughly half as many women as men left school without a diploma (13% compared with 27%).

In 2002-2003, 65.8% 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.*

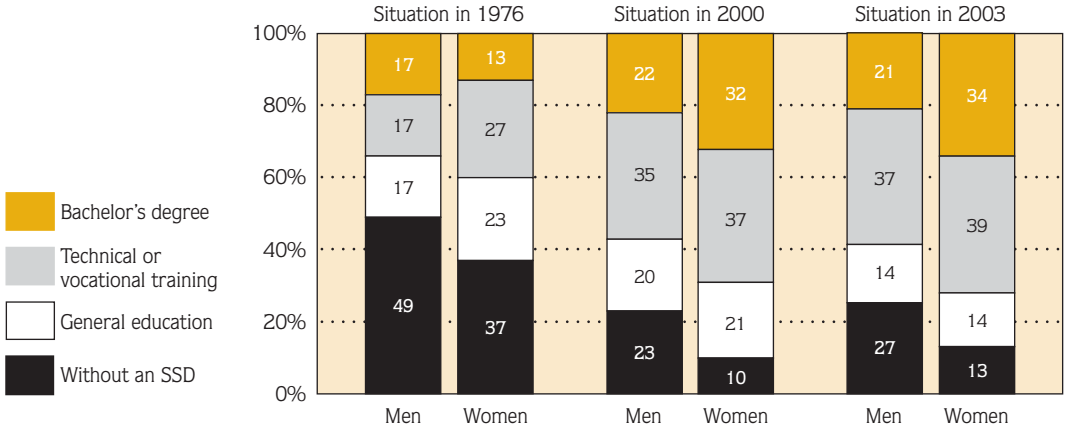
2. *This level of schooling is different from the level for the general population as indicated in the census, the latter being primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system. It also shows 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	2001-2002	2002-2003
Bachelor's degree[1]	14.9	19.0	23.6	29.0	27.0	27.7
College diploma in technical training[2]	7.4	11.2	10.4	11.2	12.1	11.8
Secondary vocational training diploma[3]	14.5	17.7	13.7	19.4	25.6	26.3
General education (DCS or SSD)	20.2	31.3	29.1	28.6	16.1	14.0
No diploma	43.0	20.8	23.2	11.8	19.3	20.2
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 2003-2004 was 85.2%, up from 2002-2003. This is the highest figure observed since 1995-1996.

In 2002-2003, 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 70.7%, which is 4 percentage points higher than the level observed the previous year. The Ministère's objective is to reach a rate of 85%.

The graduation rate discussed here applies primarily to general education. As indicated in Section 5.4, the graduation rate for vocational training rose in 2003-2004, as did the graduation rate in general education. This section is primarily concerned with the first diplomas earned.[2] It is interesting to note that in 2003-2004, 87.5% 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. As noted, however, the graduation rates for recent years were still lower than in 1995-1996 and had declined steadily since 1998-1999. The graduation rate in 2003-2004, i.e. 85.2%, is a 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 12 percentage points in 2003-2004.

The graduation rate for female students was above 90% between 1991-1992 and 1995-1996, and remained below this level after 1998-1999; it rose to above 90% in 2003-2004 (91.3%). For male students, it passed the 80% mark in 1995-1996, and stood at 79.3% in 2003-2004; this represents an increase of more than 6 percentage points over 2002-2003.

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 14.8% in 2003-2004.

In 2003-2004, the probability of obtaining a first secondary school diploma in the youth or adult sector was 85.2%, up by more than 5 percentage points over the previous year.

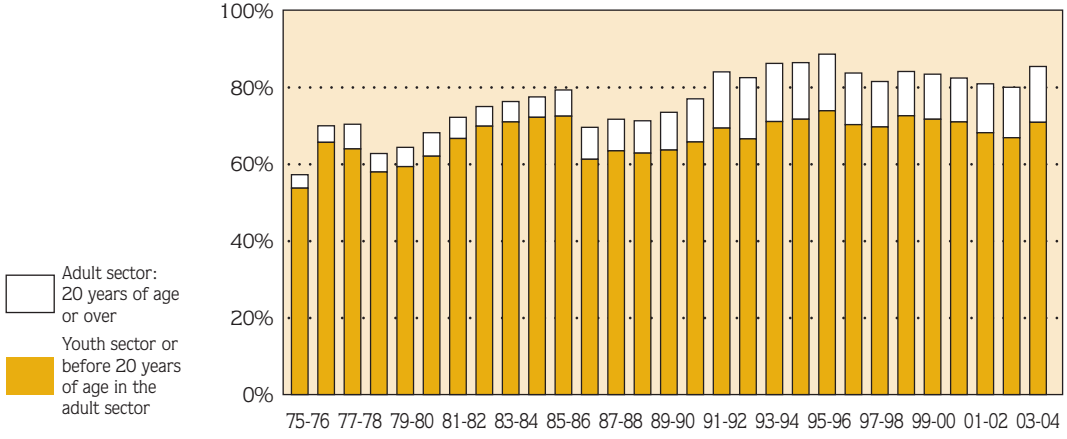
1. *The probability of obtaining a first secondary school diploma is determined by grouping the first diplomas obtained at the secondary level in general education and vocational training. This indicator is a measure of the proportion of a generation that stays in school until a secondary-level diploma 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	2001-2002	2002-2003	2003-2004[e]
Total	**57.1**	**79.2**	**88.4**	**80.7**	**79.8**	**85.2**
Adult sector: 20 years of age or over	3.5	6.8	14.7	12.7	13.1	14.5
Youth sector or before the age of 20 in the adult sector	53.6	72.3	73.7	68.0	66.7	70.7
Male	**51.2**	**73.1**	**81.9**	**74.2**	**73.0**	**79.3**
Adult sector: 20 years of age or over	3.0	6.0	14.6	13.4	13.7	14.8
Youth sector or before the age of 20 in the adult sector	48.2	67.1	67.3	60.7	59.3	64.6
Female	**63.1**	**85.6**	**95.3**	**87.6**	**87.0**	**91.3**
Adult sector: 20 years of age or over	4.0	7.6	14.9	11.9	12.4	14.2
Youth sector or before the age of 20 in the adult sector	59.1	78.0	80.4	75.6	74.5	77.1

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 School: Regional Disparities–Youth and Adult Sectors

The regional statistics in this section[1] must be interpreted with great caution. For example, the figures vary enough for the ranking of the administrative regions, shown in Graph 5.3, to change considerably from one year to the next. However, an analysis of the statistics for the past few years seems to indicate that the regions of Saguenay–Lac-Saint-Jean and Chaudière-Appalaches are among those that usually obtain the highest results, while Nord-du-Québec obtains the lowest results. The Outaouais, which usually places 16th, placed 14th in 2003-2004.

While the probability of obtaining a first secondary school diploma was on the rise in Québec as a whole between 2002-2003 and 2003-2004, the rate in Nord-du-Québec, where small numbers often result in striking variations, dropped by more than 4 percentage points. The rates in the other regions rose by up to 11 percentage points (Bas-Saint-Laurent) over 2002-2003.

Graph 5.3 shows the relative share of the secondary school diplomas earned by adults aged 20 or over with respect to the graduation rate for each administrative region. For example, the probability of obtaining a first secondary school diploma for the province as a whole (85.2%) is broken down as follows: 70.7% for the youth sector and adults under the age of 20, and 14.5% for adults 20 years of age or over. The graduation rate for adults 20 years of age or over varies from one region to another; it is particularly marked in the outlying regions (Gaspésie-Îles-de-la-Madeleine, Abitibi-Témiscamingue, Saguenay–Lac-Saint-Jean and Bas-Saint-Laurent).

The considerable increase in the provincial graduation rate is reflected in almost every administrative region of Québec. The rate in Saguenay–Lac-Saint-Jean was 98.5%.

1. *Refers to the probability of obtaining a first secondary school diploma. The probability of obtaining a first secondary school diploma is determined by grouping together 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.*

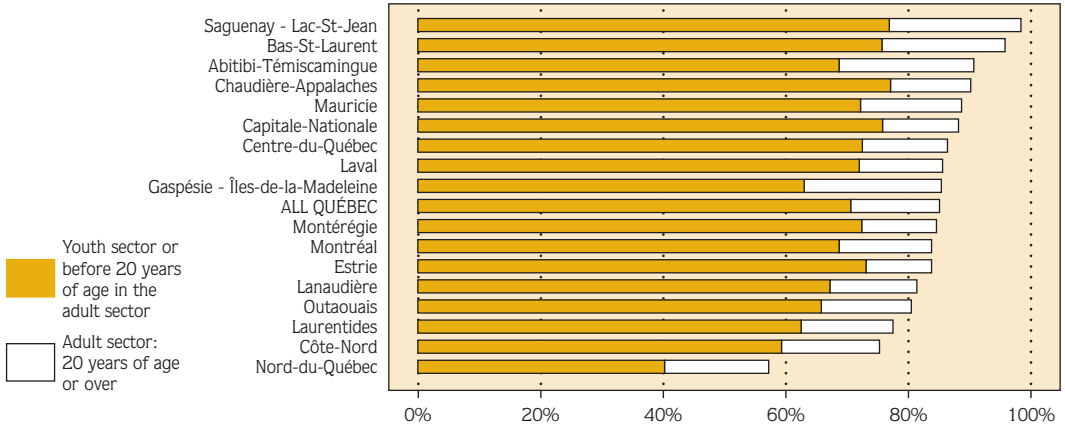
Table 5.3

Probability of obtaining a first secondary school diploma, by administrative region (%)

	2002-2003			2003-2004		
	Youth sector or before the age of 20 in the adult sector	Adult sector: 20 years of age or over	Total	Youth sector or before the age of 20 in the adult sector	Adult sector: 20 years of age or over	Total
Bas-Saint-Laurent	68.7	15.5	84.3	75.8	20.1	95.9
Saguenay–Lac-Saint-Jean	71.2	20.5	91.7	77.0	21.5	98.5
Capitale-Nationale	74.1	11.8	85.8	75.9	12.4	88.3
Mauricie	66.3	13.3	79.7	72.3	16.5	88.8
Estrie	70.2	10.7	80.9	73.2	10.7	83.9
Montréal	65.5	13.2	78.7	68.8	15.1	84.0
Outaouais	60.1	13.6	73.7	65.9	14.7	80.6
Abitibi-Témiscamingue	63.0	18.5	81.5	68.8	22.0	90.8
Côte-Nord	57.0	18.3	75.3	59.4	16.0	75.4
Nord-du-Québec	43.6	18.3	61.9	40.3	17.0	57.4
Gaspésie–Îles-de-la-Madeleine	61.3	24.3	85.6	63.1	22.4	85.5
Chaudière-Appalaches	71.5	12.2	83.7	77.2	13.1	90.3
Laval	69.2	12.4	81.6	72.1	13.6	85.6
Lanaudière	63.7	12.1	75.8	67.3	14.2	81.5
Laurentides	60.2	14.5	74.7	62.6	15.0	77.6
Montérégie	67.9	11.1	78.9	72.5	12.2	84.7
Centre-du-Québec	69.2	12.1	81.3	72.6	13.9	86.4
All Québec	**66.7**	**13.1**	**79.8**	**70.7**	**14.5**	**85.2**

Graph 5.3

Probability of obtaining a first secondary school diploma, by administrative region: 2003-2004 (%)



5.4 Graduation From Secondary Vocational Training– Youth and Adult Sectors

Based on behaviours observed in 2003-2004, 28 out of 100 Quebeckers can expect to obtain a vocational training diploma[1] in secondary school.[2] This group includes 17 persons who already have a first Secondary School Diploma (SSD) in general education. Since 1997-1998, the proportion of persons obtaining a vocational diploma after earning a diploma in general education has remained relatively stable.

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 2.3% in 2003-2004; this rate was higher than 16% in 1977-1978; it 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 (70.7% in 2003-2004) 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 (30.6%) than for female students (24.6%).

The proportion of a generation of students obtaining a secondary school vocational training diploma was 27.7% in 2003-2004. 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.*

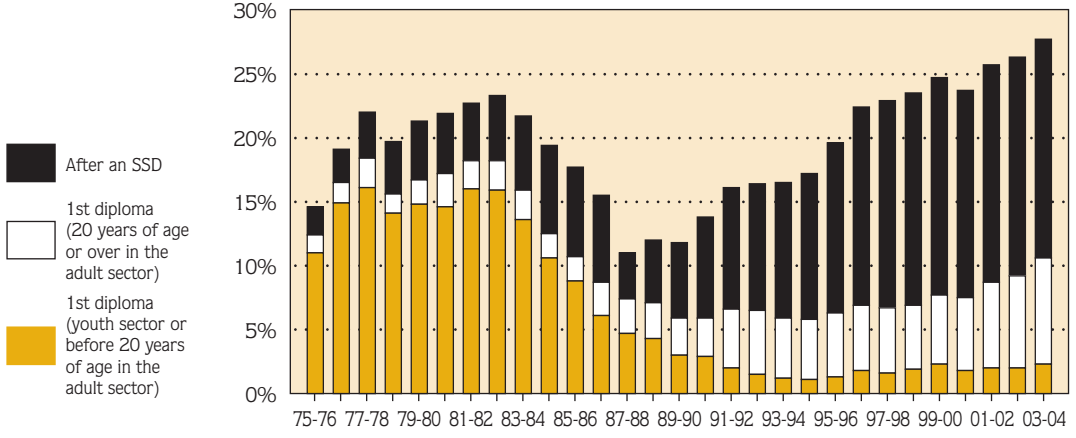
Table 5.4
Probability of obtaining a vocational training diploma, by sector, age and gender (%)

	1975-1976	1985-1986	1995-1996	2001-2002	2002-2003	2003-2004[e]
Total	**14.6**	**17.7**	**19.6**	**25.6**	**26.3**	**27.7**
Male	12.0	17.0	21.2	28.4	29.0	30.6
Female	17.2	18.4	17.9	22.7	23.4	24.6
First diploma	12.3	10.7	6.3	8.6	9.1	10.6
After an SSD[1]	2.2	7.0	13.3	17.0	17.1	17.1
Youth sector or before the age of 20 in the adult sector	**13.0**	**15.1**	**4.8**	**6.2**	**6.1**	**6.2**
First diploma	11.0	8.8	1.3	2.0	2.0	2.3
After an SSD[1]	2.1	6.4	3.5	4.2	4.1	4.0
Adult sector: 20 years of age or over	**1.5**	**2.5**	**14.8**	**19.4**	**20.1**	**21.5**
First diploma	1.4	1.9	5.0	6.7	7.2	8.3
After an SSD[1]	0.2	0.6	9.8	12.8	13.0	13.2

e: Estimates

1. SSD: Secondary School Diploma

Graph 5.4
Probability of obtaining a vocational training diploma, by sector and age (%)



5.5 Graduation From Secondary School in Québec and OECD Countries, 2002

In 2004, 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 2002.

Table 5.5 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 2002, the secondary school graduation rate in Québec (83%) remained higher than the average for the OECD countries.

Of the 19 OECD countries appearing in the table,[1] eight had higher secondary school graduation rates than Québec. Québec's rate was lower than that of Denmark, Norway, Germany, Japan, Poland, Switzerland, Finland, and Greece, but higher than that of France, Hungary, Italy, the Czech Republic, Belgium, Iceland, Ireland, the United States, Sweden, Luxembourg and the Slovak Republic.

Except for Switzerland, where the secondary school graduation rate is the same among male and female students, female students are more likely to graduate than male students. The greatest gender differences are observed in Greece (23 percentage points), Iceland (21 percentage points), Norway (18 percentage points), Finland (15 percentage points), Ireland (14 percentage points) and Spain (13 percentage points). Québec, with a difference of 14 percentage points, is among those places where female students are far more likely to graduate than male students. In other countries, graduation rates among male and female students differ less (as seen in Table 5.5), for example the Czech Republic, Japan, Germany, Italy, Sweden, the United States, France, Poland, Hungary, the Slovak Republic, Luxembourg and Belgium, where the gap is less than the OECD average (12 percentage points).

The graduation rate observed for male students in Québec (76%) was 1 percentage point higher than the OECD average of 75% for male students. The rate for female students in Québec was 90%, 3 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 74%, Québec ranks first among the OECD countries, with a rate 31 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 29%, while the average for the OECD countries is 44%. A number of countries obtained very good results in vocational training, including the Czech Republic (70%), Finland (69%), France (67%), Denmark (66%) and Poland (63%).

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

In 2002, the probability of obtaining a secondary school diploma[2] in Québec was 83%, 2 percentage points higher than the OECD average.

1. *The countries included in the table are those for which the OECD report provides totals and whose number of students per cohort is significant.*
2. *For Québec, this rate was obtained by dividing the number of "first diplomas" awarded in 2002 by the number of 17-year-olds in Québec (the age at which a secondary school diploma is generally awarded in Québec).*

Table 5.5

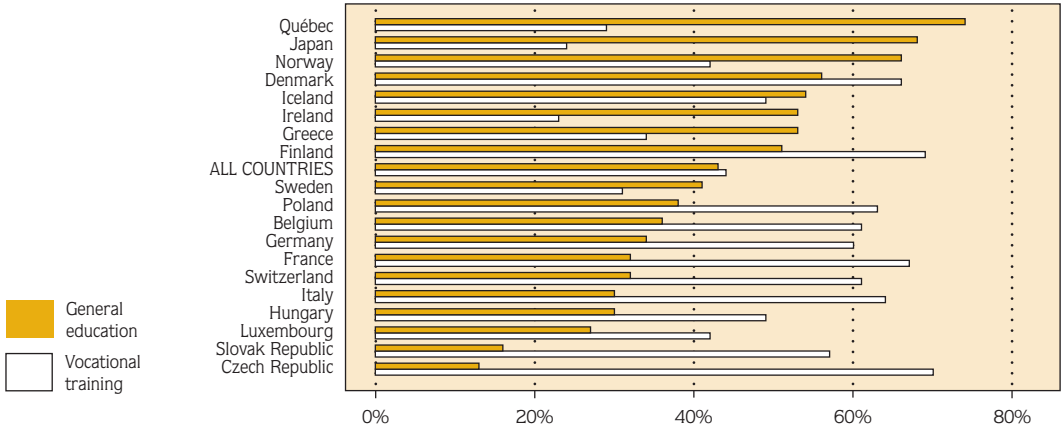
Probability of obtaining a secondary school diploma, by gender and type of program: Québec and OECD countries, 2002 (%)

	Total (without double counting)			General education		Vocational training	
	M + F	Male	Female	M + F	Female	M + F	Female
Denmark[1]	100	N/A	N/A	56	67	66	73
Norway	97	89	107	66	80	42	36
Germany	93	91	96	34	37	60	58
Japan	92	90	94	68	72	24	22
Poland	90	86	93	38	48	63	52
Switzerland	90	90	90	32	36	61	57
Finland[1]	85	78	93	51	62	69	78
Greece	85	74	97	53	61	34	38
Québec	**83**	**76**	**90**	**74**	**84**	**29**	**26**
France[1]	82	79	86	32	38	67	63
Hungary	82	79	86	30	36	49	47
Italy	82	79	85	30	40	64	58
Czech Republic	81	80	83	13	17	70	68
Belgium	79	74	83	36	42	61	66
Iceland	79	68	89	54	67	49	44
Ireland	77	70	84	53	57	23	27
United States	73	69	76	73	76	N/A	N/A
Sweden	72	69	76	41	45	31	31
Luxembourg	68	64	73	27	32	42	42
Slovak Republic	61	57	66	16	19	57	57
Average	**81**	**75**	**87**	**43**	**49**	**44**	**44**

Source: OECD, Education at a Glance: OECD Indicators *(Paris, 2004), Table A2.1. N/A: Data not available. 1. Reference year: 2001.*

Graph 5.5

Probability of obtaining a secondary school diploma, general education and vocational training: Québec and OECD countries, 2002 (%)



5.6 Graduation From College

In 2002-2003, the proportion of a generation who could expect to obtain a first college diploma (DCS), was 39%. This is an increase of 15.9 percentage points since 1975-1976, when it stood at 22.2%. The proportion of a generation who are admitted to college (see Section 2.9) and the proportion of students who obtain a diploma upon leaving college (see Sections 3.3 and 3.4) are combined to produce this result.

The probability of women obtaining a diploma was more than one and a half times higher than for men (49.9% compared with 28.7%). 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 almost 21 percentage points. In fact, in the past 16 years, it is virtually only among women that the probability of obtaining a college diploma 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 23.8% between 1975-1976 and 2002-2003, an increase of 10.3 percentage points, compared with a rise of 7.7 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. In the past seven years, however, only in technical education did the probability of obtaining a diploma increase (1.5 percentage points), while it dropped by 1.9 percentage points for a pre-university DCS.

For both types of programs, the number of women graduating between 1975-1976 and 2002-2003 exceeded the number of men, and the gap between the sexes continued to widen. The probability of women obtaining a pre-university DCS increased by 18.5 percentage points, compared with a rise of 2.6 for men. On the other hand, for both sexes the probability of obtaining a technical DCS grew more modestly (in absolute value), although the increase for men was more pronounced in technical training (6.3 percentage points) than in pre-university education (2.6 percentage points). Women were ahead of men by 4 percentage points in 1975-1976, and by 7 percentage points in 2002-2003.

The Ministère's objective is a college graduation rate of 60% for Quebeckers; in 2002-2003, the rate was 39%. The gap between the actual rate and the objective is greater than the increase recorded over the past 26 years, since the probability of obtaining a DCS in 1975-1976 was 21%.

While the proportion of female Quebeckers who could expect to obtain a DCS had risen by roughly 10.6 percentage points (from 39.3% to 49.9%) since 1985-1986, the proportion of male Quebeckers who could expect to obtain a DCS dropped slightly and stood at 28.7% in 2002-2003.

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.*

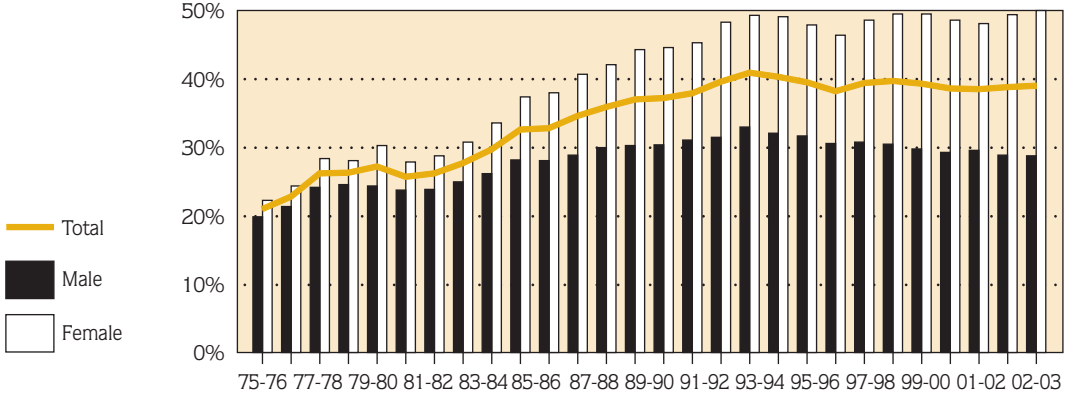
Table 5.6
Probability of obtaining a first college diploma, by gender and type of education (%)

	1975-1976	1985-1986	1995-1996	2000-2001	2001-2002	2002-2003[e]
Male						
All diplomas[1]	20.8	29.7	30.8	29.5	28.8	28.7
DCS[2]	**19.8**	**28.0**	**30.5**	**29.5**	**28.8**	**28.7**
Pre-university education	14.3	18.7	19.4	17.1	16.7	16.9
Technical training	5.5	9.0	10.9	12.4	12.0	11.8
Female						
All diplomas[1]	23.5	39.3	46.6	48.0	49.3	49.9
DCS[2]	**22.2**	**37.9**	**46.3**	**48.0**	**49.3**	**49.9**
Pre-university education	12.7	23.6	29.8	30.2	30.7	31.2
Technical training	9.5	14.0	16.2	17.9	18.6	18.8
Total						
All diplomas[1]	22.2	34.3	38.6	38.5	38.8	39.0
DCS[2]	**21.0**	**32.8**	**38.2**	**38.5**	**38.8**	**39.0**
Pre-university education	13.5	21.1	24.4	23.5	23.5	23.8
Technical training	7.5	11.4	13.5	15.1	15.2	15.2

e: Estimates

1. *The diplomas considered here are the Diploma of College Studies (DCS), 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). Since 1994, there have been no new enrollments in programs leading to a CEC or to a DPEC.*
2. *These figures include DCSs without mention of vocational specialty.*

Graph 5.6
Probability of obtaining a first college diploma (DCS), by gender (%)



5.7 Graduation From University[1]

Based on behaviours observed in 2003, more than one quarter of young Quebeckers (27.7%) 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 2.11). The situation for the two sexes 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 sexes was more similar and, since then, the increase in probability has been in women's favour. In 2003, the probability of obtaining a bachelor's degree was 34.4% for women and 21.3% for men, or an increase of 21.3 percentage points for women and 4.6 percentage points for men since 1976.

The Ministère's objective is a university graduation rate of 30% for Quebeckers. The current rate (27.7%) shows a slight increase despite a series of drops in university enrollment between 1992-1993 and 1997-1998 (see Section 2.11). The recovery of the enrollment rate in the past seven years appears to herald an end to the drop in the probability of obtaining a bachelor's degree. The probability is nevertheless lower in Québec than the average of 31.8% recorded for member countries of the Organisation for Economic Co-operation and Development (OECD) in 2002 (see Section 5.9).

With regard to obtaining a master's degree, the results have continued to increase and reached 8.5% for women and 8.5% for men. For both sexes, the rate of 8.5% represents close to triple the 1976 rate of 2.7%. An increase in enrollment at the master's level (see Section 2.11) points to a continued increase in the number of master's degrees awarded for at least a few years to come. The difference between the sexes 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 8.5%, moving ahead of the probability for men in 1993.

Doctorates are still only earned by a minute fraction (1.1%) 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: 1.2% of men obtain a doctorate, compared with 0.9% 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.

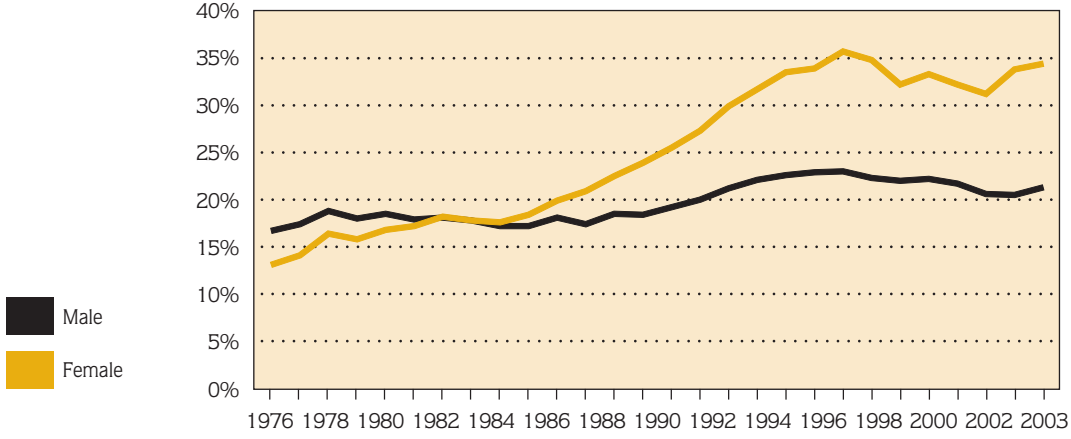
In 2003, the probability of obtaining a bachelor's degree increased 0.7 percentage points after having declined between 1999 and 2001, and stood at 27.7%.

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

Table 5.7
Probability of obtaining a university degree, by gender (%)

	1976	1986	1991	1996	2002	2003
Bachelor's degree	**14.9**	**19.0**	**23.6**	**29.3**	**27.0**	**27.7**
Male	16.7	18.1	20.0	23.0	20.5	21.3
Female	13.1	19.9	27.3	35.7	33.8	34.4
Master's degree	**2.7**	**3.9**	**4.4**	**6.1**	**7.6**	**8.5**
Male	3.5	4.4	4.4	5.8	7.4	8.5
Female	1.9	3.4	4.3	6.3	7.8	8.5
Doctorate	**0.4**	**0.5**	**0.6**	**0.9**	**1.0**	**1.1**
Male	0.6	0.7	0.9	1.2	1.0	1.2
Female	0.2	0.3	0.4	0.6	0.9	0.9

Graph 5.7
Probability of obtaining a bachelor's degree, by gender (%)



5.8 University Degrees by Field of Study[1]

In 2003, the largest proportion (26.4%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in the humanities, followed by business administration (24.1%), engineering and architecture (11.2%), education (10.7%), health sciences (8.4%) and natural sciences (7.3%). Social sciences, like mathematics and computer science, represented 4.7% of the degrees earned, while law represented 2.4%.

The majority of degree holders are women (57.4%). In 2003, women earned 83.0% of the degrees in education, 78.1% in social sciences, 73.5% in health sciences, 66.5% in the humanities, 61.8% in law and 55.4% in natural sciences. Men earned 76.1%[2] of the degrees in engineering and architecture, 73.5% in mathematics and computer science, and 51.9% in business administration.

The number of degrees issued by universities is experiencing an upward trend, going from 31 404 in 1990 to 39 955 in 2003, which represents an increase of slightly more than 27%. This percentage is the result of a 36.7% increase in the number of degrees awarded to women and a 16.3% increase for men.

Since 1990, the distribution of the degrees awarded according to field of study has changed. Between 1990 and 2003, for example, the number of degrees in business administration increased (by 1.5 percentage points), as did the number of degrees in mathematics and computer science (by 0.7 percentage points), the humanities (by 0.2 percentage points) and engineering and architecture (by 0.1 percentage points).

At the other extreme, the number of degrees awarded in law dropped (by 1.1 percentage points), as did the number of degrees in natural sciences (by 0.5 percentage points), education (by 0.4 percentage points), health sciences (by 0.3 percentage points) and social sciences (by 0.2 percentage points).

For member countries of the Organisation for Economic Co-operation and Development (OECD),[3] degrees earned in the sciences (engineering and architecture, natural sciences, mathematics and computer science) accounted for 26.1% of the total number of degrees earned in 2002; in Québec, this proportion was 23.6% in 2002 and 23.3% in 2003. The proportion of degrees in social sciences, law and business administration was 32.3% for the OECD countries in 2002, while it was 29.8% for Québec in 2002 and 31.3% in 2003. The proportion of degrees in health sciences was 13.0% for the OECD countries in 2002, while it was 8.7% for Québec in 2002 and 8.4% in 2003. Degrees in the humanities, literature and education represented 24.5% for the OECD countries, 37.9% for Québec in 2002 and 37.1% in 2003.

In 2003, the proportion of degrees earned in engineering and architecture, as well as mathematics and computer science, accounted for 15.9% of all the bachelor's, master's and doctoral degrees awarded. In these fields of study, more men (75.4%) obtained degrees. However, more women earned degrees in the other fields of study (except business administration), as well as in all fields combined.

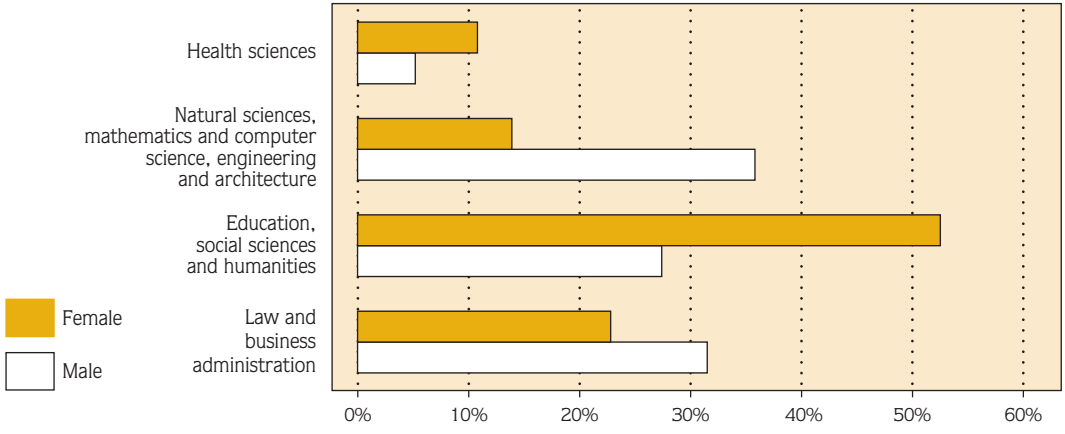
1. *This refers to students who earned a university degree (bachelor's, master's or doctoral degree) during the year in question.*
2. *The proportion of degrees in engineering and architecture earned by women rose from 16.8% in 1990 to 23.9% in 2003.*
3. *Source: OECD,* Education at a Glance–OECD Indicators *(Paris: 2004). Any comparison between the results presented in this section and those published by the OECD must take into account the different methodologies used to obtain the results.*

Table 5.8
Distribution of university degrees, by field of study and gender[1] (%)

	1990	1993	1999	2000	2001	2002	2003
Health sciences	8.7	8.7	9.6	8.3	8.2	8.7	8.4
Natural sciences	7.8	6.7	8.0	8.5	8.0	7.7	7.3
Mathematics and computer science	4.0	3.8	4.0	4.7	4.6	5.0	4.7
Engineering and architecture	11.1	10.7	10.2	10.2	10.7	10.4	11.2
Law	3.5	3.6	3.1	3.4	3.3	3.1	2.4
Business administration	22.6	22.7	20.1	20.7	22.2	22.6	24.1
Education	11.1	12.8	12.4	11.1	10.9	11.3	10.7
Humanities	26.2	26.5	27.5	28.0	27.4	26.6	26.4
Social sciences	4.9	4.6	5.1	5.1	4.8	4.6	4.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Female	53.4	55.3	57.0	56.7	57.2	58.4	57.4
Male	46.6	44.7	43.0	43.3	42.8	41.6	42.6

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

Graph 5.8
Distribution of university degrees, by field of study and gender: 2003 (%)



5.9 Graduation From University in Québec and OECD Countries, 2002

In 2004, the Organisation for Economic Co-operation and Development (OECD) published *Education at a Glance,* which contains indicators on graduation from university in OECD countries in 2002.

Table 5.9 compares the situation in Québec with that in a number of industrialized OECD nations with respect to graduation from university. In 2002, the probability of obtaining a bachelor's degree was 27% in Québec, that is, 4.8 percentage points lower than the OECD average. In 2001, the probability of obtaining a bachelor's degree in Québec was 4.6 percentage points below the OECD average, while in 1999 and 2000, the gap was 5 and 1 percentage points, respectively, in favour of Québec.

In 2002, 10 of the 17 OECD countries appearing in Table 5.9 had a higher probability of obtaining a first undergraduate (bachelor's) degree than Québec, that is, Australia (45.4%), Finland (45.4%), Poland (41.5%), Iceland (41.2%), Hungary (37.2%), the United Kingdom (35.9%), Japan (33.8%), Spain (33.5%) and Sweden (32.7%).

The probability of obtaining a doctorate in Québec was 1.0%, slightly lower than the OECD average (1.2%). Sweden (2.8%), Switzerland (2.6%), Germany (2.0%) and Finland (1.9%) posted the highest university graduation rates from postgraduate research programs.

In 2002, the probability of obtaining a bachelor's degree in Québec was 27%, and the average for the OECD countries was 31.8%.

Table 5.9

Probability of obtaining a university degree (bachelor's degree and doctorate) in Québec and certain OECD countries, 2002 (%)

	Bachelor's degree	Doctorate
Australia	45.4	1.3
Finland[1]	45.4	1.9
Poland	41.5	0.8
Iceland	41.2	0.1
Hungary	37.2	0.7
United Kingdom	35.9	1.6
Japan	33.8	0.7
Spain	33.5	1.0
Sweden	32.7	2.8
Ireland	31.1	0.8
Québec	**27.0**	**1.0**
France[1]	24.8	1.4
Slovak Republic	23.0	0.8
Italy[1]	22.7	0.5
Germany	19.2	2.0
Austria	18.0	1.7
Switzerland	17.9	2.6
Czech Republic	14.9	0.8
Average	**31.8**	**1.2**

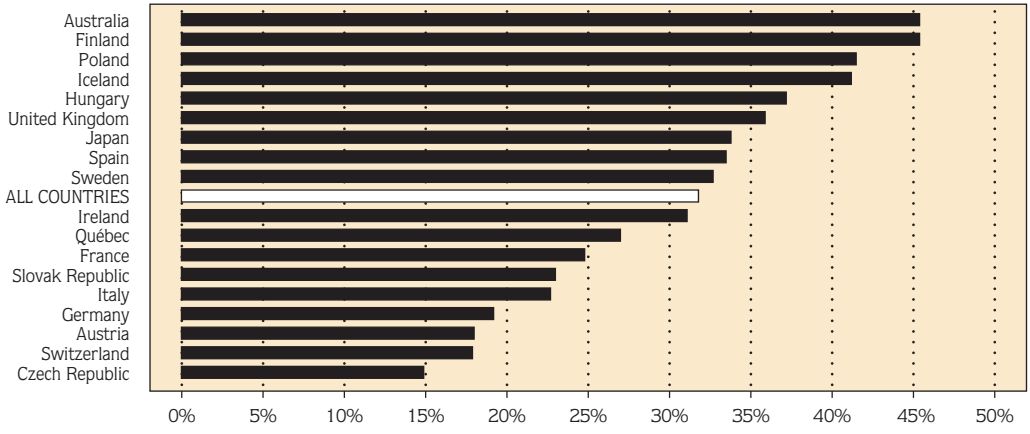
Source: OECD, Education at a Glance: OECD Indicators *(Paris, 2004), Table A2.1.*

1. Reference year: 2001.

Note: Care must be taken when comparing the probability of obtaining a first undergraduate (bachelor's) degree in different countries, since the structure and scope of university programs vary considerably from one country to the next. In addition, not all countries have equivalent information systems and the quality of the data transmitted to the OECD for each country can also vary considerably.

Graph 5.9

Probability of obtaining a bachelor's degree in Québec and certain OECD countries, 2002 (%)



6.1 Employment Trends by Level of Education

Since the early 1990s, the structure of the labour market in Québec and in Canada as a whole has been changing in a way that benefits workers with more education. Indeed, the employment situation has been more favourable for those with a postsecondary diploma or university degree,[1] both during the recession of the early 1990s and in the period since 1993, when employment has been on the rise. 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 Québec, it was not until 1995 that the job losses suffered in the last recession were absorbed. In 2004,[3] although there were 565 000 more jobs than in 1990, this growth in employment did not benefit all workers. Those with only a secondary school diploma or who did not finish secondary school suffered job losses, while those who successfully completed some postsecondary studies or graduated from college or university made gains. Thus, employed individuals with a university education were more numerous (by 339 000) in 2004 than in 1990, for an increase of 81.5%. Those with a postsecondary diploma held 529 000 more jobs (+58.1%) in 2004 than in 1990. Those with only some postsecondary studies were more likely to hold jobs in 2004 than in 1990 (60 000 more), for an increase of 23.3%. In short, individuals with some higher education held 928 000 more jobs in 2004 than in 1990, an increase of 58.6%.

The situation was very different for those without a secondary school diploma or with only a secondary education. In all, these individuals held far fewer jobs (-363 000) in 2004 than in 1990. Thus, those with only a secondary school diploma held 40 000 fewer jobs (-6.3%) than in 1990. The situation is even more dismal for individuals without a secondary school diploma: from 1990 to 2004, they held 323 000 fewer jobs, a decrease of 34.8%.

The increase of 57 000 jobs in 2004 over 2003 has benefited graduates with a postsecondary diploma or a university degree.

1. *According to Statistics Canada terminology, elementary school includes the first two years of secondary education. Postsecondary studies include all programs leading to diplomas and certificates in the trades (including the Diploma of Vocational Studies), 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 2004 is the average of the first eleven months of that year.*

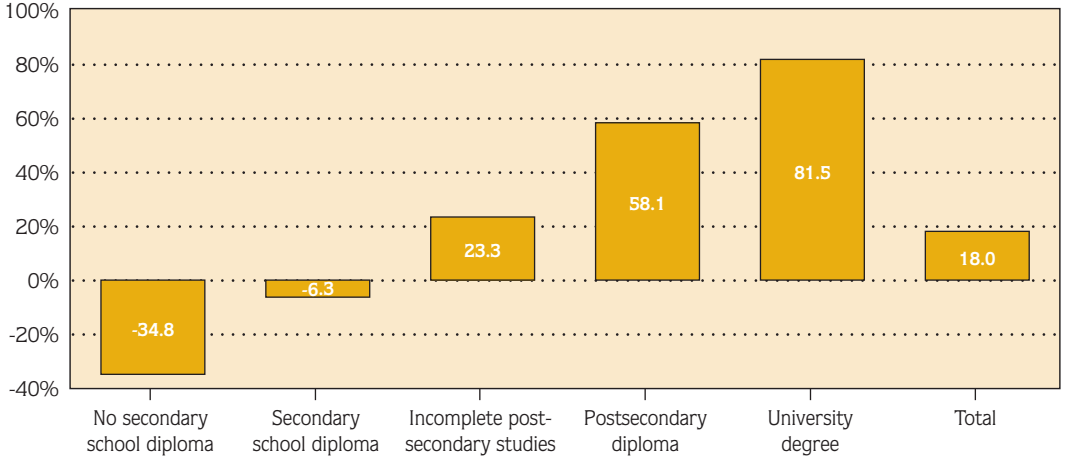
Table 6.1
Employment trends in Québec, by level of education[1] (in thousands)

Year	No secondary school diploma	Secondary school diploma	Some postsecondary studies	Postsecondary diploma	University degree	Total
1990	927	632	257	910	416	3 142
1992	784	604	233	948	473	3 042
1995	723	553	230	1 082	560	3 148
2000	638	604	281	1 254	661	3 438
2001	626	598	285	1 284	682	3 475
2002	633	607	290	1 370	693	3 593
2003	612	589	314	1 413	722	3 650
2004	604	592	317	1 439	755	3 707
Change from 1990 to 2004	- 34.8%	- 6.3%	23.3%	58.1%	81.5%	18.0%

Source: Statistics Canada

1. See notes at the bottom of the text.

Graph 6.1
Employment trends in Québec, by level of education: 1990 to 2004 (%)



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, 29.5% of employees did not have a secondary school diploma, whereas in 2004,[2] the rate was 16.3%. 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 13.4% in 2004. In the other provinces, the rates were 25.1% in 1990 and 14.5% in 2004.

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 has remained relatively stable, going from 8.2% to 8.5% in Québec and 10.3% to 10.8% in the other provinces. This percentage dropped slightly in Ontario (from 10.2% to 10.0%).

However, the number of employees with a postsecondary diploma or university degree has increased considerably. In 1990, they held approximately 40.0% of the jobs. In 2004, the proportions were 52.5% for the other provinces, 55.3% for Ontario and 59.2% for Québec.

The growth in the employment rate of university graduates was especially rapid: in 1990, they made up only 13.2% of employees in Québec, whereas in 2004, they held one in five jobs (20.4%). In Ontario, this proportion is even higher, with close to one in four jobs (23.8%) and in the other provinces, it is 18.8%.

If the rates for the number of jobs held by graduates with different diplomas or degrees are compared for Québec and Ontario and the other provinces, it can be noted that Québec's situation has changed gradually from 1990 to 2004.

For jobs held by individuals without a secondary school diploma, the gap has remained essentially the same with respect to Ontario, but decreased by 2.6 percentage points with respect to the other provinces.

The proportion of employed individuals with only a secondary school diploma declined more rapidly in Québec than in Ontario or the other provinces, but it should be noted 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 number of employees with a university degree in Québec (20.4%) currently exceeds that of the other provinces (18.8%); however, this increase was not sufficient enough to make up the gap with respect to Ontario (23.8%), which is now 3.4 percentage points.

In 2004, close to 60% of all jobs in Québec were held by individuals with a post-secondary diploma or a university degree.

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), 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 2004 is the average of the first eleven months of that year.*

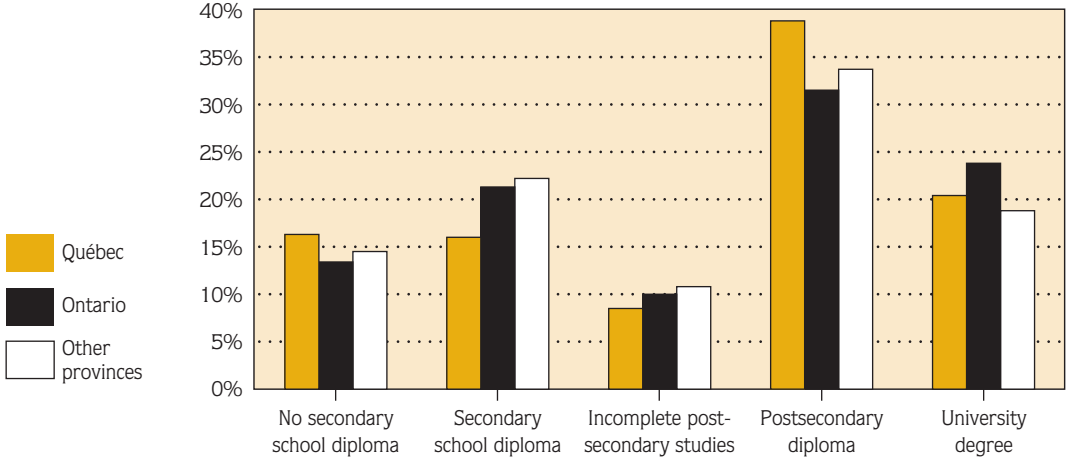
Table 6.2
Employment by highest level of education: Québec, Ontario and the other provinces, 1990 and 2004[1] (%)

	Québec		Ontario		Other provinces	
	1990	2004	1990	2004	1990	2004
Total	100.0	100.0	100.0	100.0	100.0	100.0
No secondary school diploma	29.5	16.3	26.7	13.4	25.1	14.5
Secondary school diploma	20.1	16.0	23.0	21.3	24.3	22.2
Some postsecondary studies	8.2	8.5	10.2	10.0	10.3	10.8
Postsecondary diploma	29.0	38.8	24.0	31.5	27.0	33.7
University degree	13.2	20.4	16.1	23.8	13.3	18.8
Bachelor's degree	9.1	14.4	10.7	16.3	9.3	13.3
Higher degree	4.1	6.0	5.4	7.5	4.0	5.5

Source: Statistics Canada

1. See notes at the bottom of the text.

Graph 6.2
Distribution of employment, by highest level of education: Québec, Ontario and the other provinces, 2004 (%)



6.3 Labour Market Integration of Graduates

Each year, almost 200 000 people obtain a secondary school or college diploma or a university degree. The data obtained through Québec government *Relance* surveys provides a picture of the situation of secondary school vocational training, college technical training and university graduates a few months after they obtain their diploma or degree.[1] In all, the *Relance* surveys some 80 000 people.[2]

Since 1997, at least 84.6% of graduates with a Diploma of Vocational Studies (DVS) are in the labour force (either working or looking for work). On March 31, 2004, 85.8% of graduates with a DVS were in the labour force; the rate was 86.9% in 2003. The unemployment rate for DVS graduates has been in decline since 1996, dropping from 27.0% in 1996 to 11.6% in 2004.

The proportion of graduates with an Attestation of Vocational Specialization (AVS) who are in the labour force went from 89.1% in 1998 to 83.7% in 2003; it stood at 85.6% in 2004. The proportion of AVS graduates who are still in school went from 9.2% in 2002 to 7.5% in 2004. The unemployment rate among AVS graduates dropped from 12.0% in 2003 to 10.3% in 2004, a level similar to that observed in 2002.

In 2004, 71.9% of graduates from a college technical program with a Diploma of College Studies (DCS) were in the labour force; this rate has been decreasing since 1999. Each year since 1999, the proportion of graduates still studying has been increasing. The unemployment rate for graduates with a DCS in technical training went from 5.6% in 2003 to 6.0% in 2004.

Between 1992 and 1999, the proportion of graduates with a bachelor's degree who were in the labour force varied between 80.5% and 81.4%. In 2001, 77.6% of them did so, while the participation rate for 2003 was 73.9%. It must, however, be noted that certain methodological[3] changes were introduced in 2003. The unemployment rate fell considerably between 1994 and 2001, dropping from 11.4% in 1994 to 4.0% in 2001, and then rose slightly in 2003 to 4.9%.

In 2003, 79.9% of graduates with master's degrees were in the labour force, comparable to the rate of 82.3% in 2001, if certain methodological changes are taken into account.[3] Their unemployment rate, which rose from 6.8% in 1994 to 8.1% in 1997, was 7.4% in 1999. By 2001, it had decreased very much, standing at 3.7%. In 2003, it stood at 4.6%.

Graph 6.3 shows that the unemployment rate of all the graduates considered in this section decreased considerably from 1997 to 2004, with slight fluctuations in recent years. The labour force as a whole in Québec, whose age, training and work experience differ considerably from those of these graduates, did not experience a comparable drop in the unemployment rate during the same period.

Since 2000, the unemployment rate has continued to drop among graduates with a DVS, but has fluctuated slightly among those with an AVS or a DCS in technical training.

1. *Results refer to graduates of 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 graduates are collected every two years, while data about secondary school and college graduates are collected annually. In 2003, 32 037 university graduates were surveyed.*
3. *Methodological changes concerning the definition of "working individual" resulted in a slight decrease in 2003 in the proportion of university graduates considered as workers. For more information, refer to the section dealing with the methodology of the* Relance survey of university graduates 2003 *at the Ministère's Web site: <http://www.mels.gouv.qc.ca/Relance/Relance.htm> (available only in French).*

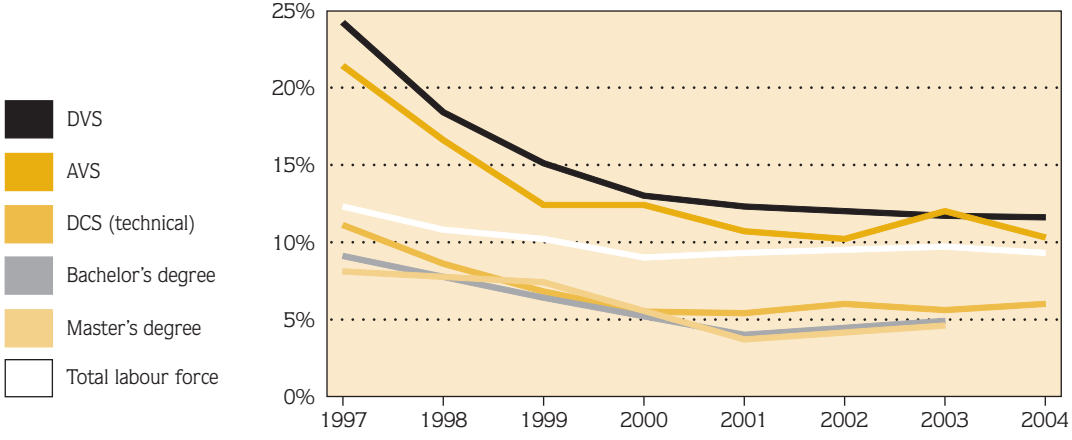
Table 6.3
Unemployment rates for graduates, by level of education and type of diploma or degree (%)

	2000	2001	2002	2003	2004
Secondary education[1]					
DVS	13.0	12.3	12.0	11.7	11.6
AVS	12.4	10.7	10.2	12.0	10.3
College[1]					
Technical training	5.5	5.4	6.0	5.6	6.0
University[1]					
Bachelor's degree	–	4.0	–	4.9	–
Master's degree	–	3.7	–	4.6	–
Unemployment rate in Québec[2]					
15-19-year-olds	18.1	20.0	22.0	19.8	23.3
20-24-year-olds	14.6	11.3	11.1	13.0	11.6
25-29-year-olds	10.5	8.2	8.2	9.5	8.6
Total labour force	9.0	9.3	9.5	9.7	9.3

1. *Source:* Relance *surveys, Direction de la recherche, des statistiques et des indicateurs, Ministère de l'Éducation, du Loisir et du Sport.*
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 takes place 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, 2004, about nine months after graduation, 75.9% of graduates of programs leading to a Diploma of Vocational Studies (DVS) were working, as were 76.8% of graduates of programs leading to an Attestation of Vocational Specialization (AVS).

On March 31, 2004, 9.9% of DVS graduates were looking for work, 10.2% were studying and 4.0% were inactive. The proportion of individuals with a DVS who were in the labour force (working or looking for work) was 85.8%, slightly lower than in 2003 (86.9%). The unemployment rate for DVS graduates has been in decline since 1996, decreasing by more than half from 27.0% in 1996 to 11.6% in 2004.

A total of 87.2% of working DVS graduates were working full-time in 2004, slightly better than the 2003 rate of 86.7%. There is an heavy trend throughout: the proportion of men working full-time remains higher than the corresponding proportion among working women. Despite a 1.3-point narrowing of the gap between men and women in the previous year, men were still 16.6 percentage points ahead in 2004 (94.4%, compared with 77.8% for women).

Between 1997 and 2002, the correspondence between the field of study and the field of work increased again and again from 68.0% to 77.9% among DVS graduates working full-time. Since 2002, the proportion of individuals working in a field related to the diploma earned declined slightly; it was 76.0% in 2004. Among women, the rate went from 76.7% in 2003 to 75.5% in 2004, while, among men, it went from 76.7% in 2003 to 76.3% in 2004.

On March 31, 2004, 8.8% of the class of 2002-2003 who graduated from programs leading to an AVS were looking for work, 7.5% were studying and 6.9% were inactive. The participation rate of AVS graduates in the labour force stood at 85.6% in 2004. Since 2000, the unemployment rate has fluctuated between 10.2% and 12.4%, standing at 10.3% in 2004.

A total of 86.4% of working AVS graduates were working full-time in 2004. There is still a large gap between the full-time working rate of women (76.8%) and that of men (94.5%). The correspondence between the field of study and the field of work among AVS graduates working full-time decreased from 75.8% in 2002 to 68.8% in 2004. This decline affected men (-9.3 percentage points) more than it did women (-4.0 percentage points).

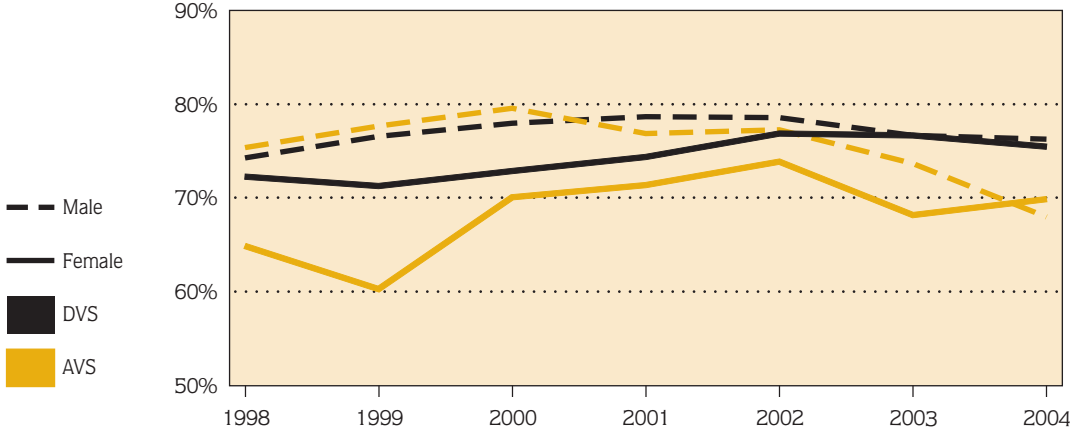
The unemployment rate for DVS graduates decreased from 15.1% in 1999 to 11.6% in 2004. The unemployment rate for AVS graduates was 10.3% in 2004.

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

	2000	2001	2002	2003	2004
Graduates with a DVS					
Working	73.6	74.3	76.2	76.7	75.9
Seeking employment	11.0	10.4	10.4	10.2	9.9
Studying	11.1	11.1	9.4	9.2	10.2
Inactive	4.3	4.2	3.9	3.9	4.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	13.0	12.3	12.0	11.7	11.6
Graduates with an AVS					
Working	76.1	77.2	76.4	73.7	76.8
Seeking employment	10.8	9.3	8.7	10.0	8.8
Studying	8.0	7.5	9.2	8.3	7.5
Inactive	5.1	6.1	5.7	8.0	6.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	12.4	10.7	10.2	12.0	10.3

Source: Relance surveys of vocational training graduates at the secondary level, Direction de la recherche, des statistiques et des indicateurs, Ministère de l'Éducation, du Loisir et du Sport.

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



6.5 Labour Market Integration of Graduates of College Technical Programs

The percentage of graduates of technical programs who were working approximately 10 months after they obtained a Diploma of College Studies (DCS) was on the decline as of March 31, 2004. It went from 69.5% in 2003 to 67.6% in 2004. That year, the proportion of male graduates who were working was 58.3%, while the proportion of female graduates in the same situation was 73.6%.

In 2004, 4.3% of graduates were looking for work, 26.1% were studying, and 2.1% were inactive. The percentage of DCS technical graduates in the labour force (either working or looking for work) declined in 2004, going from 73.6% in 2003 to 71.9% in 2004. In addition, the unemployment rate of DCS technical graduates went from 5.6% in 2003 to 6.1% in 2004. The unemployment rate of graduates aged 24 or younger went from 5.6% in 2003 to 6.1% in 2004. The proportion of DCS technical graduates in this age group was 79.9% in 2002-2003.

The percentage of individuals who, after obtaining a DCS in technical training the previous year, were studying on March 31 of the year in question rose from 19.6% in 2000 to 26.1% in 2004. Of those graduates surveyed in 2004, 34.3% of men and 20.6% of women were studying on March 31.

Most of these students, 81.3%, were in university, 9.8% were in technical training and 2.1% were in pre-university education. Of those in university on March 31, 2004, 87.3% were enrolled in a field related to the diploma earned in 2002-2003. Of those in technical training, 78.2% were also studying in a field related to the diploma earned in 2002-2003. Finally, 10.7% of those still studying on March 31, 2004, were in school because they were unable to find a job. The corresponding proportions were 6.2% in 2001, 7.7% in 2022 and 8.8% in 2003.

In 2004, 85.2% of DCS technical graduates were working full-time, a decrease from 2003, when it was 86.3%. This rate, which increased steadily between 1996, when it stood at 76.6%, and 2001, when it reached 88.8%, has been decreasing every year since 2001. In 2004, men were more likely to be working full-time (91.0%) than women (82.2%).

In 2004, 35.6% of part-time workers reported working part-time because they could not find a full-time job.

Finally, the correspondence between the field of study and the field of work is declining: in 2004, 80.9% of full-time jobs, that is to say 74.0% among men and 84.9% among women, were related to the field of study while, in 2003, the proportions were 83.5%, 78.2% and 86.7%, respectively.

The unemployment rate among graduates with a DCS in technical training went from 5.6% in 2003 to 6.0% in 2004. Slightly more than one in four technical training graduates (26.1% in 2004) are studying the year after they earned their diploma.

Table 6.5

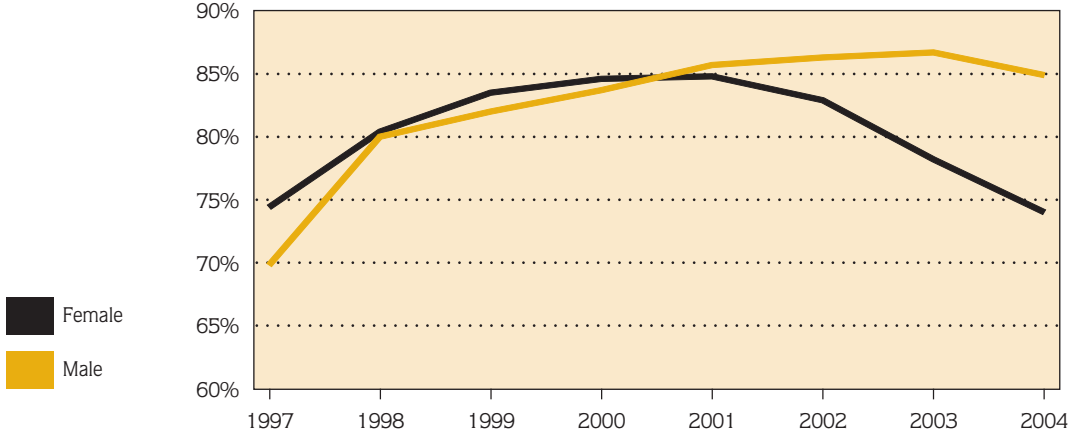
Situation of graduates of college technical programs, by graduating class, as at March 31 of the year following their graduation (%)

	2000	2001	2002	2003	2004
Graduates with a DCS					
Working	74.1	71.3	70.3	69.5	67.6
Seeking employment	4.3	4.1	4.5	4.1	4.3
Studying	19.6	22.8	23.1	24.4	26.1
Inactive	2.0	1.8	2.1	2.0	2.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Unemployment rate	5.5	5.4	6.0	5.6	6.0

Source: Relance *surveys of college graduates, technical training, Direction de la recherche, des statistiques et des indicateurs, Ministère de l'Éducation, du Loisir et du Sport.*

Graph 6.5

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



Statistical Appendix

Table 1

Full-time and part-time enrollment, by level of education and sector, 1994-1995 to 2003-2004

	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Preschool (4-year-olds)	**14 023**	**17 284**	**17 294**	**16 295**	**15 908**	**15 174**	**14 601**	**15 778**	**15 240**	**14 700**
Preschool (5-year-olds)	**89 912**	**95 651**	**96 087**	**95 303**	**91 513**	**89 223**	**87 297**	**84 624**	**80 967**	**76 832**
Elementary education (youth sector)	**547 395**	**547 642**	**552 482**	**559 279**	**566 372**	**573 102**	**575 862**	**574 274**	**564 559**	**549 073**
Secondary education (youth sector)	**498 105**	**492 629**	**486 696**	**479 740**	**469 250**	**456 148**	**447 937**	**446 491**	**455 467**	**467 594**
Elementary and secondary education (adult sector)[1]	**223 886**	**226 317**	**222 434**	**218 193**	**214 701**	**219 268**	**222 714**	**238 693**	**247 258**	**254 893**
College[2]	**247 400**	**241 873**	**237 525**	**230 724**	**228 714**	**219 303**	**213 430**	**206 371**	**200 728**	**193 853**
Regular education	181 678	179 152	180 315	176 585	174 462	171 653	166 967	164 733	163 055	160 903
Adult education	65 722	62 721	57 210	54 139	54 252	47 650	46 463	41 638	37 673	32 950
University[3]	**244 531**	**237 810**	**230 941**	**226 977**	**226 638**	**231 897**	**233 463**	**239 097**	**249 158**	**258 326**
Undergraduate studies	201 418	194 196	187 565	183 370	183 157	187 014	187 514	189 452	195 132	201 132
Graduate studies	34 021	34 271	34 086	34 281	34 558	36 120	37 192	40 808	44 573	46 732
Postgraduate studies	9 092	9 343	9 290	9 326	8 923	8 763	8 757	8 837	9 453	10 462
Total	**1 865 252**	**1 859 206**	**1 843 459**	**1 826 511**	**1 813 096**	**1 804 115**	**1 795 304**	**1 805 328**	**1 813 377**	**1 815 271**

Sources: *Déclaration des clientèles scolaires (DCS)*
Déclaration des clientèles en formation professionnelle (DCFP)
Système d'information du Ministère sur les clientèles adultes (SIMCA)
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 or 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, 2003-2004

	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	**14 480**	**72 223**	**517 996**	**385 139**	**249 864**				**1 129 702**
French	13 411	64 031	460 056	342 033	224 517				1 104 048
English	781	7 673	56 662	43 106	25 093				133 315
Native languages	288	519	1 278		254				2 339
Private institutions	**45**	**4 372**	**29 473**	**81 310**	**4 342**	**11 459**	**5 844**		**136 845**
French	20	3 549	23 724	73 430	3 950	6 408	1 952		113 033
English	25	823	5 749	7 880	392	2 814	481		18 164
French and English						2 237	3 411		5 648
Public institutions outside the jurisdiction of the MELS	**175**	**237**	**1 604**	**1 145**	**687**	**1 650**	**84**		**5 582**
French	60	134	1 138	1 048	687	1 575	84		4 726
English	18	16	126	91		75			326
Native languages	97	87	340	6					530
CEGEPs and campuses						**147 794**	**27 022**		**174 816**
French						124 229	22 375		146 604
English						23 565	4 647		28 212
French and English									
Universities and branches								**258 326**	**258 326**
French								193 916	193 916
English								64 410	64 410
Total	**14 700**	**76 832**	**549 073**	**467 594**	**254 893**	**160 903**	**32 950**	**258 326**	**1 815 271**
French	13 491	67 714	484 918	416 511	229 154	132 212	24 411	193 916	1 562 327
English	824	8 512	62 537	51 077	25 485	26 454	5 128	64 410	244 427
Native languages	385	606	1 618	6	254				2 869
French and English						2 237	3 411		5 648

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)
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 education, 1996-1997 to 2003-2004

	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004[p]
SECONDARY EDUCATION[1]	**88 690**	**93 274**	**94 263**	**99 884**	**95 991**	**99 063**	**101 040**	**104 288**
Under 20 years of age[2]	25 751	26 923	26 476	26 031	25 514	25 480	24 923	25 529
20 years of age or over[3]	62 939	66 351	67 787	73 853	70 477	73 583	76 117	78 759
Regular paths: DVS (SSVD), SSVC, AVS, AVE	**72 990**	**75 786**	**77 127**	**75 890**	**76 359**	**79 395**	**80 288**	**84 301**
Under 20 years of age[2]	24 530	25 818	25 208	24 623	24 343	24 044	23 232	23 810
20 years of age or over[3]	48 460	49 968	51 919	51 267	52 216	55 351	57 056	60 491
Other programs	**15 700**	**17 488**	**17 136**	**23 994**	**19 432**	**19 668**	**20 752**	**19 987**
Under 20 years of age[2]	1 221	1 105	1 268	1 408	1 171	1 436	1 691	1 719
20 years of age or over[3]	14 479	16 383	15 868	22 586	18 261	18 232	19 061	18 268
COLLEGE	**122 223**	**123 493**	**126 087**	**121 859**	**119 942**	**116 509**	**110 911**	**103 954**
Diploma of College Studies (DCS - technical)	90 459	90 959	90 440	88 964	87 499	86 840	84 670	81 372
Certificat d'études collégiales (CEC)	1 213	176	60	14	–	–	–	–
Attestation of College Studies (ACS)	30 549	32 350	35 587	32 880	32 443	29 669	26 241	22 582
Diplôme de perfectionnement de l'enseignement collégial (DPEC)	2	8	–	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);*
SSVC: *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, CEGEPs and universities by job category, based on full-time equivalents,[1] 1995-1996 to 2002-2003

	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
School boards	**105 919**	**104 380**	**104 462**	**106 630**	**108 772**	**111 464**	**113 184**	**115 710**
Youth and adult sectors								
Teaching staff	70 331	69 680	70 366	71 152	71 288	71 918	71 984	72 815
Administrative staff	1 388	1 274	1 159	1 118	1 080	1 076	1 079	1 097
School principals	3 753	3 647	3 528	3 567	3 661	3 713	3 723	3 771
Managerial staff	802	751	671	663	685	680	698	721
Nonteaching professionals	4 530	4 250	3 898	3 897	4 003	4 208	4 453	4 806
Support staff	25 115	24 778	24 840	26 233	28 055	29 869	31 247	32 500
CEGEPs	**21 245**	**20 472**	**19 570**	**19 692**	**19 869**	**20 491**	**20 636**	**20 744**
Regular education and adult education								
Teaching staff	13 652	13 224	12 699	12 892	12 950	13 381	13 355	13 338
Administrative staff	664	612	583	595	622	651	690	717
Managerial staff	307	287	245	230	232	233	234	237
Nonteaching professionals	1 085	1 047	964	964	1 017	1 086	1 137	1 196
Support staff	5 537	5 302	5 079	5 011	5 048	5 140	5 220	5 256
Universities[2]	**32 224**	**31 615**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Teaching and research staff	10 826	10 553	N/A	N/A	N/A	N/A	N/A	N/A
Teaching and research assistants	4 299	4 652	N/A	N/A	N/A	N/A	N/A	N/A
Executive personnel	1 291	1 218	N/A	N/A	N/A	N/A	N/A	N/A
Managerial staff	491	498	N/A	N/A	N/A	N/A	N/A	N/A
Nonteaching professionals	3 487	3 352	N/A	N/A	N/A	N/A	N/A	N/A
Support staff	11 830	11 342	N/A	N/A	N/A	N/A	N/A	N/A

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

N/A: *Data not available*

1. *All personnel activities carried out during the school year are include in the calculation of full-time equivalents for each job category.*
2. *Funds with or without restrictions. Excludes courses given by lecturers, those given in addition to regular course loads by regular professors and those given by individuals receiving honoraria or on contract.*

Table 5

Number of diplomas awarded, by level of education and type of diploma, 1994 to 2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Secondary[1]	**103 211**	**104 521**	**111 762**	**109 199**	**107 050**	**107 412**	**105 228**	**102 631**	**100 981**	**100 723**
General education	81 176	81 791	86 451	80 289	77 315	76 866	73 363	72 025	68 791	66 953
Vocational training	22 035	22 730	25 311	28 910	29 735	30 546	31 865	30 606	32 190	33 770
College	**45 285**	**43 761**	**42 267**	**44 787**	**45 206**	**46 074**	**50 683**	**52 195**	**52 658**	**n.d.**
DCS (pre-university education)	25 872	25 537	24 416	25 933	25 163	24 635	24 081	23 619	23 078	n.d.
DCS (technical training)	15 067	15 613	16 163	16 739	16 804	17 617	17 969	17 943	18 500	n.d.
DCS without mention	758	336	151	7	1	–	–	–	–	–
ACS, CEC and DEPC[2]	3 588	2 275	1 537	2 108	3 238	3 822	8 633	10 633	11 080	n.d.
University	**56 817**	**56 015**	**55 184**	**53 277**	**50 781**	**50 726**	**50 563**	**51 378**	**54 459**	**58 855**
Bachelor's degree	28 967	28 932	29 602	28 894	27 478	28 284	27 822	27 973	28 897	29 818
Master's degree	6 604	6 414	6 547	6 514	6 727	6 814	7 468	7 692	7 946	9 003
Doctorate	959	1 037	1 087	1 143	1 231	1 170	1 165	1 094	1 036	1 134
Certificates, diplomas and microprograms	20 287	19 632	17 948	16 726	15 345	14 458	14 108	14 619	16 580	18 900

Sources: *Système de sanction des études appliquée au ministère de l'Éducation (SESAME)*
Sanction des adultes en formation générale (SAGE)
Système de la sanction des études au collégial (SSEC)
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 1993-1994 to 2002-2003.*
2. *Since 1994, there have been no new enrollments in programs leading to CECs and DPECs. ACSs are counted starting in 2001.*

Table 6

Schooling rates,[1] by age, gender, level of education and attendance status, 2002-2003 (%)

	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	20.3	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	20.3
Female	20.5	0.0	0.0	0.0	0.0	0.0	0.0	20.5	0.0	20.5
Total	20.4	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	20.4
5-year-olds										
Male	96.7	0.0	0.0	0.0	0.0	0.0	0.0	96.7	0.0	96.7
Female	98.3	0.0	0.0	0.0	0.0	0.0	0.0	98.3	0.0	98.3
Total	97.5	0.0	0.0	0.0	0.0	0.0	0.0	97.5	0.0	97.5
15-year-olds										
Male	0.0	95.7	0.3	0.1	0.0	0.0	0.0	95.7	0.3	96.1
Female	0.0	96.8	0.1	0.1	0.0	0.0	0.0	96.9	0.1	97.0
Total	0.0	96.2	0.2	0.1	0.0	0.0	0.0	96.3	0.2	96.5
16-year-olds										
Male	0.5	88.7	3.0	1.8	0.0	0.0	0.0	91.0	3.1	94.1
Female	0.2	90.6	2.4	2.9	0.0	0.0	0.0	93.7	2.4	96.1
Total	0.3	89.6	2.7	2.4	0.0	0.0	0.0	92.3	2.7	95.1
17-year-olds										
Male	0.8	40.4	12.0	30.3	0.1	0.4	0.0	71.9	12.2	84.1
Female	0.4	30.3	10.1	47.3	0.1	0.7	0.0	78.7	10.2	88.9
Total	0.6	35.5	11.1	38.6	0.1	0.6	0.0	75.2	11.2	86.4
18-year-olds										
Male	0.7	23.9	11.2	34.5	0.4	2.6	0.1	61.7	11.8	73.4
Female	0.4	17.0	8.6	52.2	0.4	4.2	0.2	73.7	9.2	82.9
Total	0.5	20.5	9.9	43.1	0.4	3.4	0.1	67.5	10.5	78.0
19-year-olds										
Male	0.5	16.3	8.5	25.6	1.3	10.5	0.5	52.9	10.2	63.1
Female	0.3	11.6	6.1	33.7	1.6	19.4	0.5	65.0	8.3	73.3
Total	0.4	14.0	7.3	29.6	1.4	14.8	0.5	58.8	9.2	68.1

1. *Schooling rates are calculated by dividing the school population of a given age on September 30, 2002, 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 in Section 2.2).*

Table 6 (cont.)

Schooling rates, by age, gender, level of education and attendance status, 2002-2003 (%)

	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-to-24-year-olds										
Male	0.3	7.6	5.2	7.5	1.1	14.5	3.0	30.0	9.3	39.2
Female	0.3	6.0	3.5	9.4	1.3	21.3	4.6	36.9	9.5	46.4
Total	0.3	6.8	4.4	8.4	1.2	17.8	3.8	33.4	9.4	42.7
25-to-29-year-olds										
Male	0.4	3.3	3.2	1.5	0.4	4.6	3.7	9.7	7.3	17.0
Female	0.4	3.1	2.2	2.1	0.7	4.8	5.8	10.3	8.7	19.0
Total	0.4	3.2	2.7	1.8	0.5	4.7	4.7	10.0	8.0	18.0
30-to-39-year-olds										
Male	0.4	1.7	2.2	0.5	0.2	1.3	2.0	3.9	4.5	8.5
Female	0.4	2.0	1.6	0.9	0.4	1.1	3.0	4.4	5.1	9.5
Total	0.4	1.9	1.9	0.7	0.3	1.2	2.5	4.2	4.8	9.0
40-to49-year-olds										
Male	0.2	0.8	1.3	0.2	0.2	0.3	1.1	1.4	2.5	4.0
Female	0.2	1.0	1.1	0.3	0.3	0.3	1.9	1.9	3.3	5.2
Total	0.2	0.9	1.2	0.3	0.2	0.3	1.5	1.7	2.9	4.6
50-to-59-year-olds										
Male	0.1	0.3	0.6	0.1	0.1	0.1	0.4	0.5	1.1	1.6
Female	0.2	0.3	0.6	0.1	0.1	0.1	0.7	0.6	1.4	2.0
Total	0.1	0.3	0.6	0.1	0.1	0.1	0.5	0.6	1.2	1.8
60 years of age or over										
Male	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.1	0.3	0.4
Female	0.1	0.0	0.4	0.0	0.0	0.0	0.1	0.2	0.5	0.7
Total	0.1	0.0	0.4	0.0	0.0	0.0	0.1	0.2	0.4	0.6

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