Education Indicators
1999 edition

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Introduction

This edition of the *Education Indicators* deals with all levels of education, from kindergarten to university. Some indicators cover the education system as a whole, whereas others focus on each level of education. This year, new information has been added and new topics have been introduced: the student-teacher ratio at the college level and entry into the labour market of students without a diploma.

The purpose of publishing indicators is to keep Québec society abreast of major trends and developments in the education system by providing specific information on the resources allocated to education, on the various activities generated by the education system and on the results obtained. The indicators are presented under a series of headings classifying recent and historical data that help trace these developments over time. The 1999 edition contains 58 sections, 7 more than last year. Forty-five of these have been updated from last year, while the remaining 13 have been substantially revised or 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 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.

Resources Allocated to Education

In 1998-99, Québec's educational spending, including operating expenses, capital expenses and the administrative expenses of the Ministère de l'Éducation, is estimated at $14.7 billion, representing 7.6% of the gross domestic product (GDP). The share of the GDP allocated to education in the rest of Canada is estimated at 6.6% and in the United States, 7.6%.

In 1997-98, the breakdown of operating expenses by level of education was as follows: elementary and secondary education (comprising school boards and subsidized private schools), 63.6%; college education (comprising CEGEPs and subsidized private colleges, 12.7%; and university education, 23.7%.

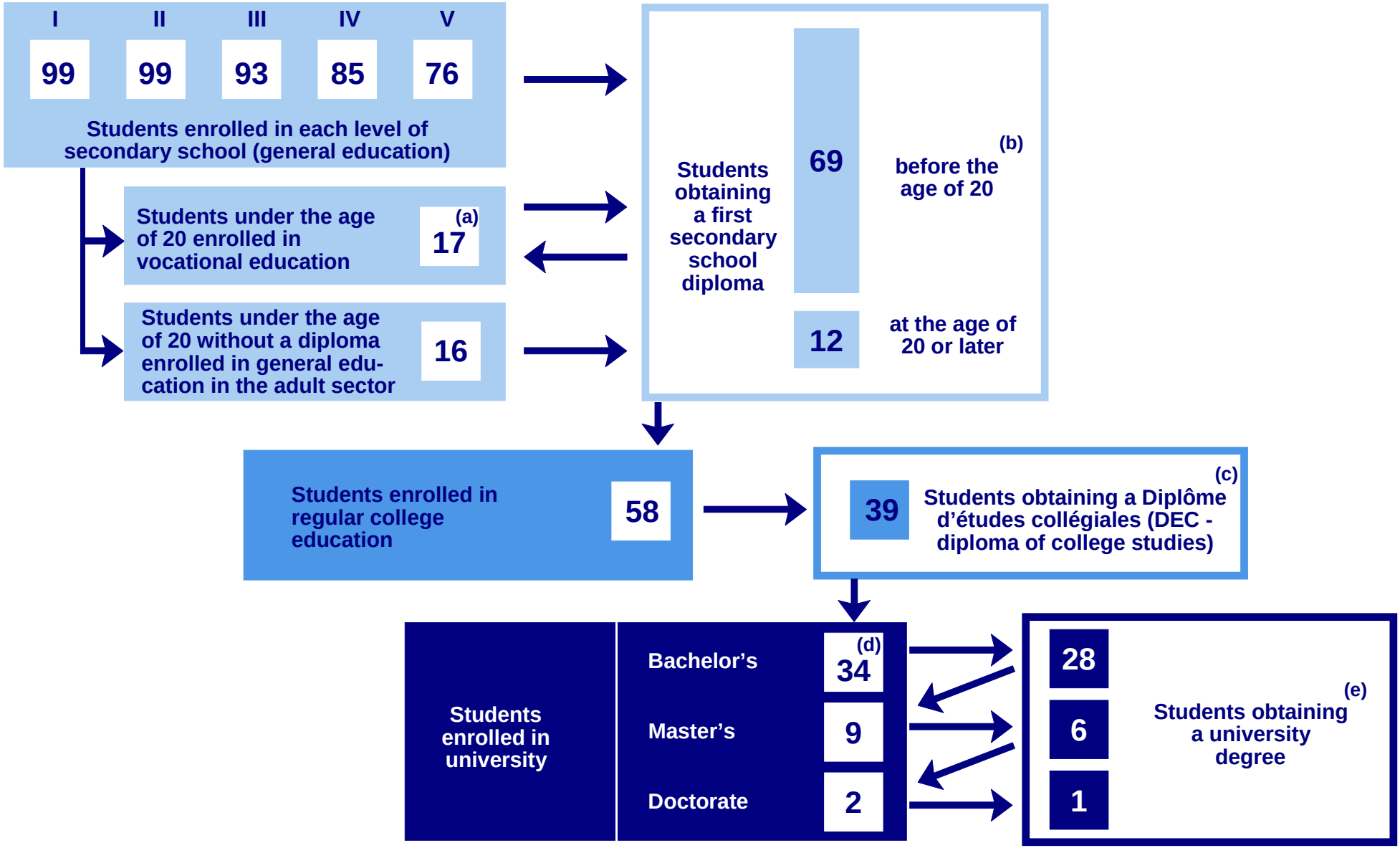
In 1998-99, in Québec, school board spending per student is estimated at $5 472, CEGEP spending per student, at $6 554, and university spending per student, at $11 084, not including subsidized research. Funds allocated to university research in 1996-97 totalled $606.2 million.

In 1997-98, 160 513 persons benefited from Québec's Student Financial Assistance Program. A total of $530.5 million was granted in the form of loans and $239.6 million, in bursaries.

Student Retention from Elementary School to University

Student retention in Québec's education system for 1997-98 is illustrated on the next page. The diagram represents the proportions of a cohort of young people who could expect to enrol 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 81 to obtain a first secondary school diploma, 39 to obtain a Diplôme d'études collégiales (DEC–diploma of college studies), 28 to earn a bachelor's degree, 6 to be awarded a master's degree and 1 to obtain a doctorate. Of the 81 students to obtain a secondary school diploma, 23 would do so in vocational education. The situation was not the same for the two sexes: in 1997-98, many more men than women (26% compared with 11%) could be expected to leave their studies before earning a diploma. At the other extreme, 34% of women would obtain at least a bachelor's degree, compared with 22% of men.

Student Retention of 100 Quebecers in the Education System, Based on Findings for 1997-98



(a) This figure includes 11 general education graduates likely to obtain another diploma in vocational education.
(b) All diplomas earned in the youth sector are included, regardless of the age of the graduates.
(c) The most recent data available dates from 1996-97.
(d) Students who enrol in university are not limited to those who hold a DEC.
(e) The most recent data available dates from 1997.

Objectives for the educational success of a greater number of Quebecers have been set for the year 2010: to have 85% of the students in a generation earn a secondary school diploma before the age of 20, 60%, a DEC 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 1997-98 can expect to be in school for 15.4 years (if it is assumed that the success rates and retention rates prevailing in the education system in 1997-98 do not change). Secondary school graduates can expect to be in school for 11.2 years, at an estimated cost of $80 227 in 1998-99; those obtaining a bachelor's degree can expect to study for 17.1 years, at an estimated total cost of $155 364.

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, reflected here by the probability of obtaining a diploma, is measured differently, depending on the level and sector of education. The proportion of a generation leaving secondary school in the youth sector without a diploma or not obtaining a diploma before the age of 20 in the adult sector was 30.6% in 1997-98. However, when the diplomas obtained in the adult sector are taken into account, regardless of age, the probability of leaving school permanently without obtaining a diploma drops to 18.8%.

The proportion of students in other education sectors who obtained a diploma 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-level vocational education, of 100 students of all ages enrolled in programs leading to a Secondary School Vocational Diploma (SSVD), which became known as the Diploma of Vocational Studies (DVS) in 1998, who left secondary school, 67 did so with a diploma, while 33 dropped out of school. At the college level (regular education), 51% of students in technical programs leading to a DEC obtained a diploma, while 49% interrupted their studies for a period of at least two full years. Of the college students enrolled in pre-university programs, 66% left with a DEC, while 34% left without one. At the university level, 66% of students leaving bachelor's programs did so with a degree, while 34% dropped their studies. Of the students enrolled in master's programs, 65% earned their degree, while 35% dropped their studies, and at the doctoral level, 58% of candidates earned a doctorate, while the remaining 42% did not complete their program.

Evaluation of Learning

In the subjects for which examinations were administered for the certification of studies by the Ministère de l'Éducation in June 1998, students in Secondary IV and V obtained an average mark of 76.3% and had a success rate of 90.0%. The male students' average was 75.5% and the female students', 77.1%. Students obtained an average final mark of 70.9% on the Secondary V French, language of instruction, examination; 87.5% obtained a passing mark.

On reading and writing examinations held in 1998 under the supervision of the Council of Ministers of Education, Canada, 13- and 16-year-old students in Québec ranked high, outperformed only by students from Alberta on the writing examination for 13-year-olds. The proportion of Francophone students from Québec who placed in each level of performance defined in the School Achievement Indicators Program (SAIP) was equal to or greater than that of all Francophone students from other provinces.

With respect to holders of a diploma in technical education at the college level, employers surveyed in 1997 considered that the graduates' knowledge of French and English needed to be improved, but 90% of the employers nonetheless thought the graduates' competence was average or good.

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 have their sights set on the labour market. In 1996-97, at the end of their college studies, 80% of pre-university program graduates under the age of 25 went on to university the following year, compared with 19% of graduates from technical programs.

In March 1998, students who had graduated in 1996-97 with a Secondary School Vocational Diploma (SSVD) had an unemployment rate of 18.4%. Students who graduated from a college technical program in 1996-97 had an unemployment rate of 8.6% in March 1998 and graduates of pre-university programs, 12.5%. In January 1997, the unemployment rate for graduates with a bachelor's degree awarded in 1995 was 9.1% and for those with a master's degree, it was 8.1%. In comparison, a 1997 survey of students who left secondary school without a diploma revealed

an unemployment rate of 21.2%. In 1998, college students who interrupted their studies in technical or pre-university education had unemployment rates of 11.3% and 17.1%, respectively.

Since 1990, there has been a significant change in the structure of the labour market in Québec. The number of jobs held by vocational education, college and university graduates in 1998 increased by 527 000 compared with 1990. During this time, the number of jobs held by those with only a Secondary School Diploma (SSD) in general education dropped by 373 000.

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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 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*
– *Rapport annuel* of the Ministère de l'Éducation
– *Annual Report on the State and Needs of Education*, published by the Conseil supérieur de l'éducation
– *A New Direction for Success: Ministerial Plan of Action for the Reform of the Education System*

The Ministère de l'Éducation also has a page at the Web site of the Gouvernement du Québec (www.meq.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 almost all 5-year-olds attend half time and, as of the fall of 1997, full time. 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 1997-98, the Québec government funded 77% of school board operating expenses, while local taxes accounted for 16% of school board revenues, and other sources provided the remaining 7%.

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 enrolments ranging from 900 to 76 500; the median number of students is approximately 11 000. The three special-status school boards serve primarily Native students in the Côte-Nord and Nord-du-Québec regions; they are the Cree School Board, the Kativik School Board and the Commission scolaire du Littoral.

Elementary and secondary education are also provided by private institutions, some of which are subsidized by the Ministère de l'Éducation. The private school system accounts for 4% of elementary students and 15% of secondary students in the youth sector. More than half of the operating expenses of subsidized private institutions is funded by the

Québec government. Elementary and secondary education are 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 to students who fulfil the certification requirements. A Secondary School Diploma (SSD) is required for admission to college. A Secondary School Vocational Diploma (SSVD), or Diploma of Vocational Studies (DVS), as it is now known, generally leads to the labour market, but also allows admission to college. The harmonization of educational services offered in the youth sector and the adult sector is a feature of Québec's education system. Adult education leads to secondary school diplomas that are the same as or equivalent to those offered in the youth sector.

College Education

Students may enrol in college programs leading to a Diplôme d'études collégiales (DEC–diploma of college studies) or in short technical programs leading to an Attestation d'études collégiales (AEC–attestation of college studies). 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 graduates 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. CEGEPs are administered by boards composed of representatives from different interest groups, including members of the public, parents, students, staff members and college administrators. In 1997-98, the Québec government funded 85% of CEGEP operating expenses. The private school system accounted for 11% of college students. A total of 58% of the operating expenses of subsidized private colleges was funded by the Québec government. College education is also offered by several other schools under the responsibility of a ministry other than the Ministère de l'Éducation and by MacDonald College, which falls under the jurisdiction of McGill University.

A DEC is awarded to a student by the Minister of Education following the recommendation of the institution attended. For shorter programs, other types of certification are awarded: the Certificat d'études collégiales (CEC–certificate of college studies), the Diplôme de perfectionnement de l'enseignement collégial (DPEC–diploma of advanced college

studies) and the AEC. These are issued directly by the college. CECs and DPECs are being phased out, as students stopped being admitted to programs leading to these types of certification in 1994.

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, compared with the four years required elsewhere in North America), the second, to a master's degree and the third, to a doctoral degree. Universities also award certificates, diplomas and other forms of attestations to certify the successful completion of short programs. In 1997-98, 58% of university expenses was subsidized by the Québec government.

The Ministère de l'Éducation

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

Reform of the Education System

In the fall of 1996, following the Estates General on Education, then Minister of Education, Pauline Marois, published the main guidelines for the reform of the education system. Seven major lines of action were defined:

- providing services for young children, in particular, by implementing full-time kindergarten
- teaching the essential subjects throughout elementary and secondary school

- giving more autonomy to schools
- supporting Montréal schools, given the particular challenges they are facing
- intensifying the reform of vocational and technical education
- consolidating and rationalizing postsecondary education
- providing better access to continuing education

Concrete changes have already been made, in particular, the implementation of full-time kindergarten for 5-year-olds in the fall of 1997. At the college level, a new financial measure promoting educational success was introduced in 1997-98: special fees of $2.00 per hour will be levied for each course that is not successfully completed (with the exception of the first course) and this should raise the success rate for courses from 83% to 90% by the end of the 1999-2000 school year. At the secondary level, the diversification of vocational education options has also been undertaken and will provide access to programs leading to a Diploma of Vocational Studies (DVS) after Secondary III and the implementation of programs leading to a Vocational Education Certificate (VEC) that will prepare students who have completed Secondary II to practise a semi-skilled occupation.

1.1 Educational Spending in Relation to the GDP

It is estimated that, in 1998-99, Québec will allocate 7.6% of its gross domestic product (GDP) to education,[1] compared with the Atlantic Provinces at 8.1%, Ontario at 6.2%, and Western Canada at 6.6%. Although Québec continues to earmark more for education than the rest of Canada, the gap between Québec and the Canadian average has narrowed. The United States will allocate an estimated 7.6% of its GDP to education, or the same percentage as Québec.

It is estimated that, in 1998-99, the share of the GDP allocated to education will be higher in Québec than in the rest of Canada as a whole, but the same as in the United States. Compared with the situation that prevailed in the early 1980s, the gap between Québec and the rest of Canada has narrowed.

From 1976 to 1981, the share of the GDP allocated to education in Québec decreased slightly, falling from 9.6% to 9.3%, while in the rest of Canada it dropped from 7.0% to 6.5%. In the United States, it went from 6.9% to 6.3%. With respect to educational funding, the gap between Québec and the rest of Canada was 2.8 percentage points in 1981-82; the gap between Québec and the United States was 3.0 percentage points.

Between 1981 and 1989, the share of the GDP earmarked for education in Québec dropped considerably (from 9.3% to 7.3%), while increasing slightly in the rest of Canada (from 6.5% to 6.7%), and showing a slightly higher rise in the United States (from 6.3% to 7.0%). The gap of 2.8 percentage points between Québec's funding and that of the rest of Canada in 1981-82 narrowed to 0.6 percentage points in 1989-90; the gap between Québec and the United States decreased to 0.3 percentage points.

The fact that Québec has now reached the North American average can largely be explained by the more restrictive measures adopted by the Québec government to control spending during that period.

1. In 1998-99, it is estimated that $14.7 billion of Québec's $192.8-billion GDP will be spent on education. The concept of expenses used in this section is defined in Table 1.1.

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, with the result that, in 1993-94, Québec spent 8.7% of its GDP on education, the rest of Canada spent 7.7% and the United States spent 7.3%.

If the share of the GDP allocated to education in Québec is compared with that allocated by the member countries of the Organisation for Economic Co-operation and Development (OECD) in 1995, Québec ranks among the countries with the highest educational spending. This is primarily because teaching costs are relatively higher in Québec than the average for the OECD countries.[2] 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.

Between 1993 and 1998, the share of the GDP spent on education decreased in all regions of Canada, because of budget cuts. The share of the GDP allocated to education in Québec went from 8.7% to 7.6%, while in the rest of Canada, it went from 7.7% to 6.6%. The United States' educational spending has continued to grow and is estimated at 7.6% for 1998-99.

The fact that educational spending in 1998-99 represents a larger share of the GDP in Québec than in the rest of Canada as a whole can be explained primarily by the fact that Québec's collective wealth is relatively lower than the Canadian average. If Québec had the same level of collective wealth as the average for the other provinces, its current educational spending would represent the same proportion of the GDP as elsewhere in Canada.

2. Refer to the *Bulletin statistique de l'éducation*, published by the Direction des statistiques et des études quantitatives of the Ministère de l'Éducation du Québec: Demers, Marius, "La dépense d'éducation par rapport au PIB; une comparaison Québec-pays de l'OCDE," no. 3, June 1998. This document is available on the Internet at http://www.meq.gouv.qc.ca. The most recent year for which data is available on the share of the GDP allocated to education for the OECD countries is 1995.

Table 1.1

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

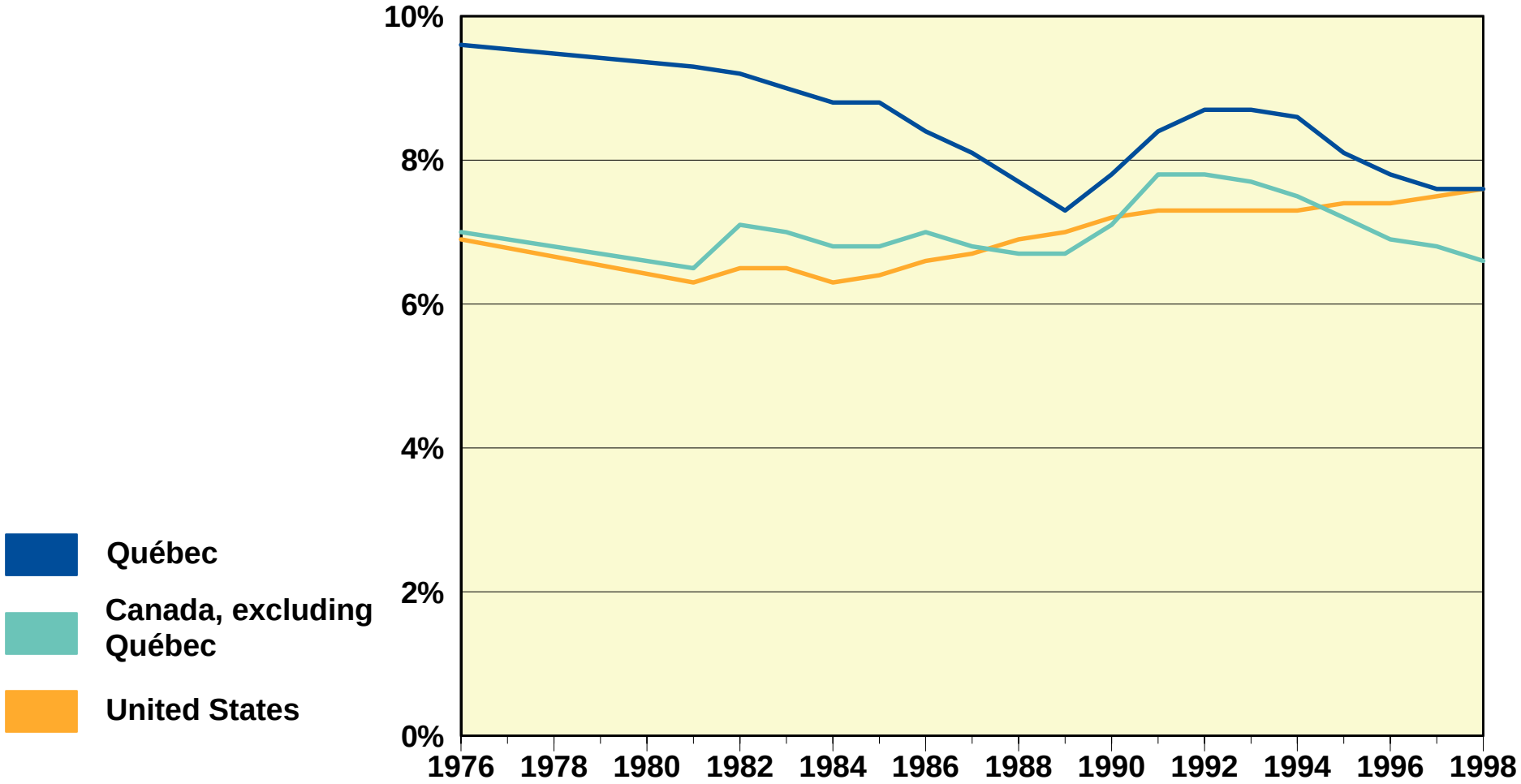
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**9.6**	**9.3**	**7.3**	**8.7**	**7.6**	**7.6**
Canada, excluding Québec	**7.0**	**6.5**	**6.7**	**7.7**	**6.8**	**6.6**
Atlantic Provinces	10.9	10.5	9.3	9.7	8.3	8.1
Ontario	6.8	6.5	6.2	7.5	6.5	6.2
Western Canada	6.3	5.7	6.6	7.2	6.6	6.6
Canada	**7.6**	**7.1**	**6.8**	**7.9**	**6.9**	**6.8**
United States	**6.9**	**6.3**	**7.0**	**7.3**	**7.5**	**7.6**

e: Estimates

1. These figures include the operating and capital expenses of all levels of public and private education, the Ministère's administrative expenses, government contributions to employee pension plans and other education expenses (according to Statistics Canada).

Graph 1.1

Educational spending in relation to the GDP: Québec, Canada excluding Québec, and the United States (%)



1.2 The Cost of Educating Graduates and the Sources of Funding

In 1998-99, the cost of educating a secondary school graduate is estimated at $80 227; for graduates from pre-university education and technical education, the cost is estimated at $102 146 and $127 393, respectively. The cost of educating a graduate from a bachelor's program is estimated at $155 364.

The total cost of a bachelor's degree is $155 364, almost 90% of which is funded from the public purse.

The concept of expenses used here includes operating and 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 Diplôme d'études collégiales (DEC–diploma of college studies) 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 DEC 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) and college (pre-university) levels, as well as in undergraduate university studies.

To calculate the cost of educating a graduate, an estimate of the annual spending per student at each level of education in 1998-99[1] was used, 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.

1. The cost of university studies has been determined for all levels. Figures for studies leading to a bachelor's degree have therefore been slightly overestimated.
2. At the university level, one year of study is equivalent to two full-time terms. One part-time term counts as one third of a full-time term at university and one quarter of a full-time term at college.

It is also possible to break down the various sources of funding for a bachelor's degree. The total cost for all the years of schooling in preschool education, elementary school (regular), secondary school (general), college (pre-university) and undergraduate university studies is considered.[3]

Table 1.2b presents the main sources of funding for a bachelor's degree in 1997-98, in comparison with Ontario.[4] In Québec, the provincial government finances 79.5% of the total cost of a bachelor's degree, whereas the Ontario government contributes only 45.1%. Ontario relies much more heavily on local taxes than Québec (38.3% compared with 7.8%). Tuition fees, which are included in the category of "Individuals" in the table, are higher in Ontario than in Québec.[5]

If government subsidies and school taxes are taken together, public funding stands at 87.3% in Québec and 83.4% in Ontario.

3. The sources of funding for a bachelor's degree have been determined on the basis of a typical individual attending a public institution.
4. Since the data required to calculate the actual duration of studies in Ontario is not available, the real cost of obtaining a bachelor's degree in Ontario cannot be determined. Therefore, costs have been estimated on the basis of a hypothetical duration of studies. Quebecers who obtain a bachelor's degree without interrupting their studies spend 16 years in school: 6 at the elementary level, 5 at the secondary level, 2 at CEGEP and 3 at university. In Ontario, students progress through school in different ways: they spend 12 or 13 years in elementary and secondary school, and 3 or 4 years at university. For the simulation presented in Table 1.2b, it was assumed that students in Ontario spent 12 years in elementary and secondary school and 4 years at university.
5. See Section 1.15.

Table 1.2a
Total cost of various diplomas and a bachelor's degree,[1] 1998-99[e]

	Average duration of studies (years)	Cost of education ($)
Secondary School Diploma	11.2	80 227
DEC (diploma of college studies)		
Pre-university education	13.6	102 146
Technical education	15.0	127 393
Bachelor's degree	17.1	155 364

Table 1.2b
Sources of funding for a bachelor's degree, 1997-98[e] (%)

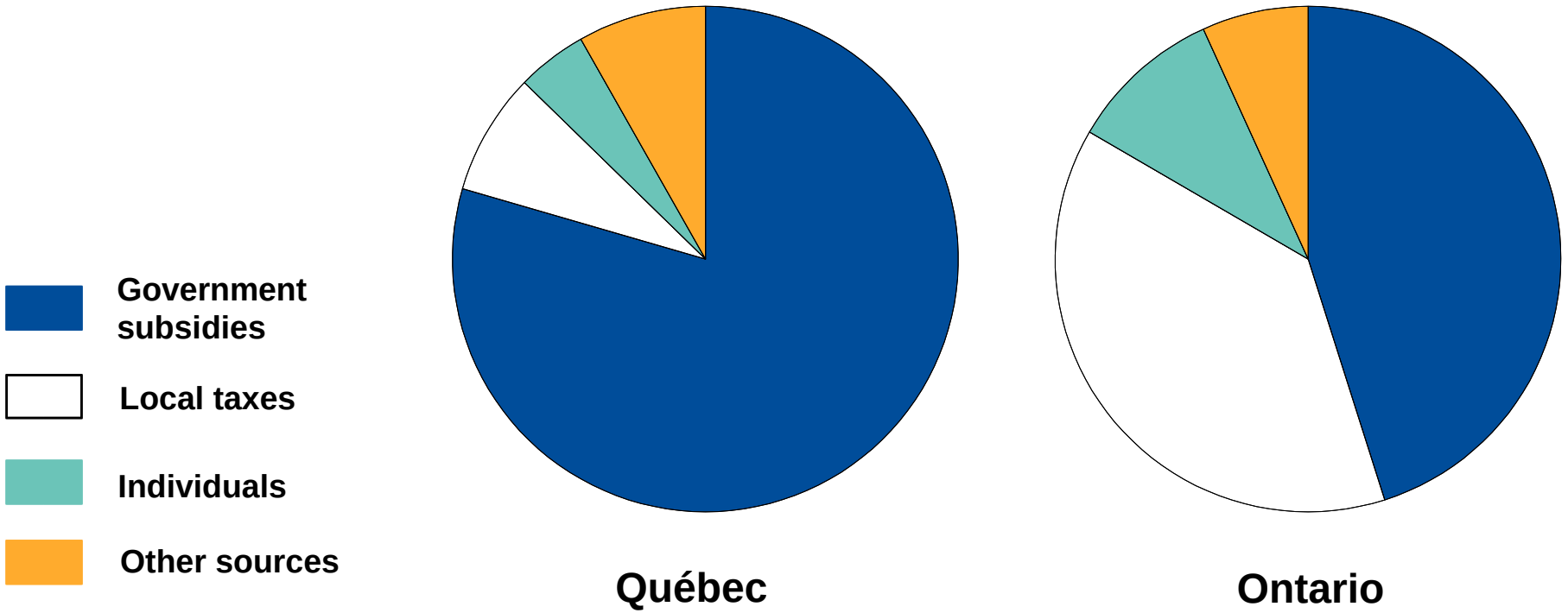
	Québec	Ontario
Government subsidies[2]	79.5	45.1
Local taxes	7.8	38.3
Individuals	4.5	9.8
Other sources	8.2	6.8
Total	100.0	100.0

e: Estimates

1. The cost includes preschool education; however, with respect to the average duration of studies indicated in the table, the duration of preschool education has not been taken into account because this year is not generally recognized.
2. Includes provincial and federal government subsidies.

Graph 1.2

Sources of funding for a bachelor's degree, Québec and Ontario, 1997-98



1.3 Spending on Elementary and Secondary Education in Relation to the GDP

In 1998-99, it is estimated that 4.3% of Québec's gross domestic product (GDP) will be spent on education,[1] compared with 4.7% for the Atlantic Provinces, and 4.2% for Ontario and Western Canada. In the United States, the share of the GDP allocated to elementary and secondary education is estimated at 4.6%. Québec therefore spends roughly the same as the average for the rest of Canada. It should be kept in mind, however, that the duration of elementary and secondary education in Québec is shorter.[2]

Between 1981 and 1990, the share of the GDP allocated to elementary and secondary education in Québec dropped considerably. Since 1990-91, it has increased slightly and then fallen again. In 1998-99, it is estimated that Québec will spend roughly the same portion of its GDP on elementary and secondary education as the average for the rest of Canada.

Between 1976 and 1981, the share of the GDP allocated to elementary and secondary education dropped from 6.6% to 6.0% in Québec, while in the rest of Canada it went from 4.6% to 4.3%. In the United States, it fell from 4.4% to 3.9%. The gap between Québec and the rest of Canada with respect to educational funding was 1.7 percentage points in 1981-82, representing a total of $1.4 billion.

From 1981 to 1989, the share of the GDP earmarked for elementary and secondary education dropped from 6.0% to 4.4% in Québec, while it remained stable in the rest of Canada as a whole and increased in the United States. The gap of 1.7 percentage points recorded in 1981-82 between Québec and the rest of Canada narrowed steadily in subsequent years and disappeared almost entirely in 1989-90. 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 now reached the North American average can largely be explained by the more restrictive measures adopted by the Québec government to control spending during that period.

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1. In 1998-99, it is estimated that $8.3 billion of Québec's $192.8-billion GDP will be spent on public and private elementary and secondary education. The concept of expenses used in this section is defined in Table 1.3.
2. The duration of elementary and secondary education is 11 years in Québec and at least 12 years in the other regions considered.

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 1993-94, Québec spent 4.9% of its GDP on elementary and secondary education, that is, the same percentage as in the rest of Canada. In 1993-94, the United States spent 4.4% of its GDP on elementary and secondary education.

When the share of Québec's GDP spent on elementary and secondary education is compared with that of the member countries of the Organisation for Economic Co-operation and Development (OECD) in 1995, Québec ranks among the countries with the highest educational funding. Québec's higher spending is primarily explained by the costs of teaching, which are relatively higher in Québec than the average for the OECD countries.[3]

Between 1993 and 1998, the share of the GDP spent on elementary and secondary education decreased in Québec and in the other provinces, following budget cuts to school boards. In the United States, spending on elementary and secondary education continued to rise.

3. See the *Bulletin statistique de l'éducation*, published by the Direction des statistiques et des études quantitatives of the Ministère de l'Éducation du Québec: Demers, Marius, "La dépense d'éducation par rapport au PIB; une comparaison Québec-pays de l'OCDE," no. 3, June 1998. This document is available on the Internet at http://www.meq.gouv.qc.ca. The most recent year for which data is available on the share of the GDP allocated to education for the OECD countries is 1995.

Table 1.3

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

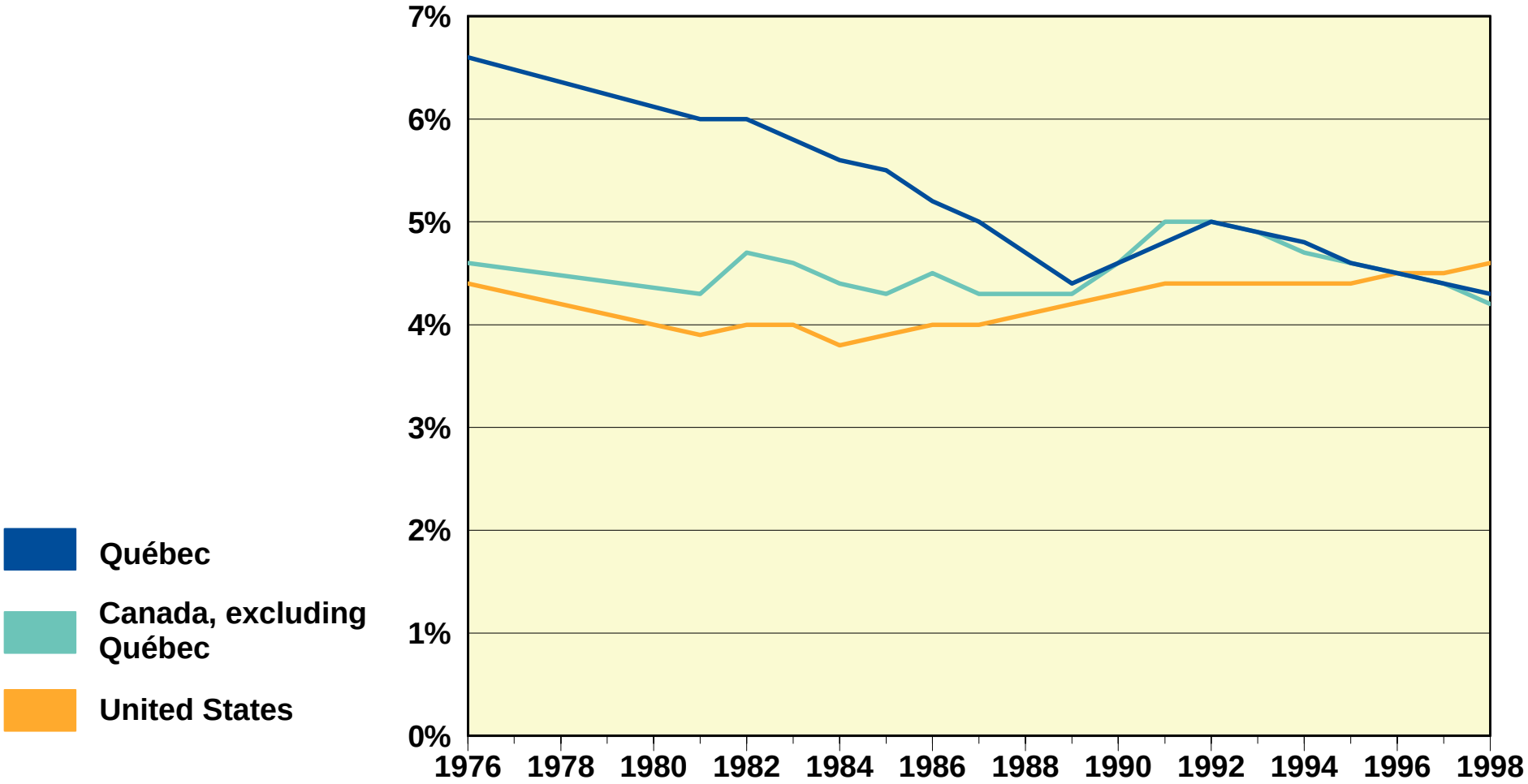
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**6.6**	**6.0**	**4.4**	**4.9**	**4.4**	**4.3**
Canada, excluding Québec	**4.6**	**4.3**	**4.3**	**4.9**	**4.4**	**4.2**
Atlantic Provinces	7.0	6.9	5.7	5.6	4.8	4.7
Ontario	4.5	4.4	4.3	5.1	4.4	4.2
Western Canada	4.2	3.7	4.1	4.5	4.2	4.2
Canada	**5.1**	**4.7**	**4.3**	**4.9**	**4.4**	**4.2**
United States	**4.4**	**3.9**	**4.2**	**4.4**	**4.5**	**4.6**

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 (according to Statistics Canada).

Graph 1.3

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



1.4 School Board Spending per Student in Relation to Per Capita GDP

Québec's relative financial investment in school boards is higher than in the rest of Canada, chiefly because its level of collective wealth is lower.

Per-student spending[1] is an indicator of financial investment in education, and the per capita gross domestic product (GDP) is an indicator of collective wealth. Relating the two provides an indicator of the relative financial investment in education, that is, per-student spending expressed as a percentage of the per capita GDP. In 1998-99, Québec's school board expenditures per student are estimated at $5 472 and the per capita GDP at $26 286, the former representing 20.8% of the latter. A comparison of this relative financial investment indicator with that of the rest of Canada shows that Québec spends more on education than the other regions.

Between 1976 and 1981, the ratio of per-student spending to per capita GDP grew significantly in Québec, from 23.7% to 28.9%, whereas in the rest of Canada and the United States, it rose more moderately, from 17.3% to 18.5% and from 17.0% to 18.0%, respectively. The gap between Québec and these areas has nevertheless narrowed considerably since 1981-82.

In fact, from 1981 to 1989, the ratio of per-student spending to per capita GDP shrank from 28.9% to 22.8% in Québec, while increasing more moderately in the rest of Canada (from 18.5% to 20.2%) and in the United States (from 18.0% to 20.4%). The steep decline in Québec's ratio stems from the more restrictive measures implemented to control spending, which slowed the growth of the school boards' expenditures per student.

Between 1989 and 1993, the ratio of per-student spending to per capita GDP increased throughout Canada and in the United States. In Québec, this ratio rose from 22.8% in 1989-90 to 25.6% in 1993-94; in the rest of Canada,

1. This refers to operating expenses, which exclude debt service, adult education (except for Québec as of 1990-91), capital expenditures financed directly from current revenues, and transfer expenses. As of 1990-91, the operating expenses of Québec school boards include adult education. This modification is a result of changes in the financial statements of Québec school boards. It is no longer possible to clearly separate operating expenses for the youth sector and the adult sector. The impact of this modification on the ratio of per-student spending to per capita GDP is negligible.

it climbed from 20.2% to 22.3% during this same period. This increase in the relative financial investment in education can be largely explained by the economic recession, which resulted in a much smaller increase in the per capita GDP. In Québec, per-student spending rose by 18% from 1989 to 1993, while the per capita GDP increased by only 5%.

Between 1993 and 1998, the ratio of per-student spending to per capita GDP decreased throughout Canada, primarily because of large budget cuts. In the United States, the ratio dropped slightly, and then rose again.

In 1998-99, it is estimated that Québec's relative financial investment in education is higher than that of the rest of Canada, in spite of a significant decrease in per-student spending by school boards in Québec. In 1998-99, per-student spending is estimated to be 5% lower in Québec than in the rest of Canada ($5 472 compared with $5 731).[2] Québec's level of collective wealth, as measured by the per capita GDP, is roughly 13% lower ($26 286 compared with $30 292), such that per-student spending represents 20.8% of the per capita GDP in Québec and 18.9% in the rest of Canada. Québec's relative financial investment in 1998-99 is expected to be less than that of the United States.

2. See Section 1.6.

Table 1.4

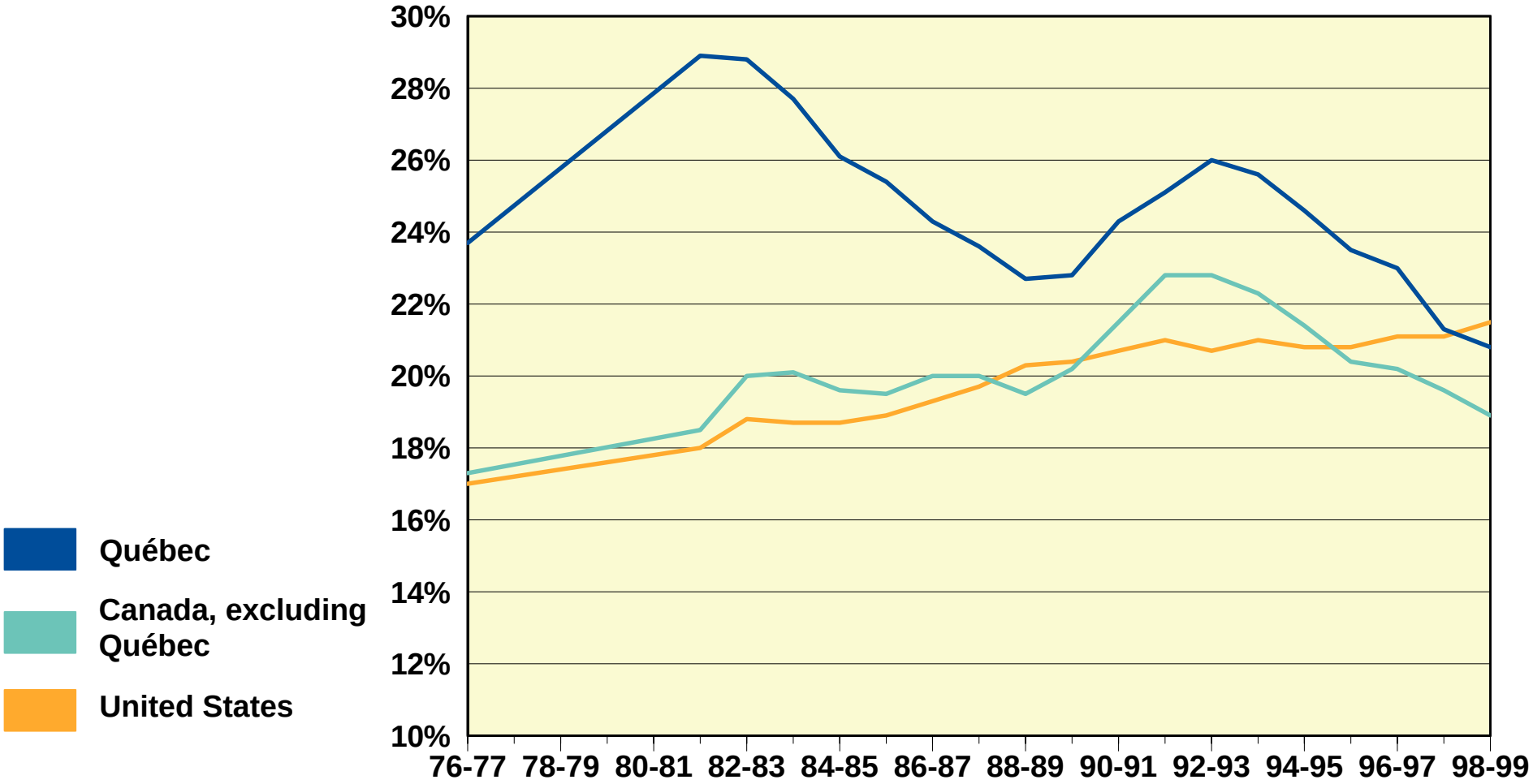
School board spending per student in relation to per capita GDP: Québec, other regions of Canada and the United States (%)

	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**23.7**	**28.9**	**22.8**	**25.6**	**21.3**	**20.8**
Canada, excluding Québec	**17.3**	**18.5**	**20.2**	**22.3**	**19.6**	**18.9**
Atlantic Provinces	23.0	25.0	23.5	23.1	21.4	21.3
Ontario	17.4	19.2	20.3	23.5	20.0	18.5
Western Canada	16.2	16.9	19.3	20.4	18.6	18.8
Canada	**18.8**	**20.7**	**20.8**	**23.0**	**20.0**	**19.4**
United States	**17.0**	**18.0**	**20.4**	**21.0**	**21.1**	**21.5**

e: Estimates

Graph 1.4

School board spending per student in relation to per capita GDP: Québec, Canada excluding Québec, and the United States (%)



1.5 School Board Spending in Current and Constant Dollars

In 1998-99, school board spending in Québec is estimated to be $6.1 billion, student enrolment, approximately 1.1 million, and per-student spending in current dollars, $5 472.[1] Compared with 1993-94, per-student spending in current dollars has dropped by 6%. This drop can be explained by budget cuts and by significant cost-saving measures adopted by the school boards. These measures ensue largely from agreements between the government and unions that have made it possible to reduce labour costs.

Per-student spending by school boards in constant dollars dropped by 9% between 1993 and 1998.

Between 1976 and 1981, school board spending increased an average of 10.6% per year, but this rate dropped to 3.9% per year between 1981 and 1989, and to 4.8% between 1989 and 1993. Lower inflation, salary restrictions and generally more conservative budget policies have curbed the rapid increase in spending.

When increases in the price of goods and services used in providing educational services are taken into account, spending can be expressed in constant dollars.[2] Figures show that spending in constant dollars remained relatively stable between 1976 and 1981, while enrolments declined by 17%. This resulted in an increase in real funds available per student: per-student spending in constant dollars grew by 21% between 1976 and 1981. 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.

Between 1981 and 1989, spending in constant dollars changed very little. The level of teacher qualifications recognized for salary purposes increased slightly (an increase in real expenses), but the student-teacher ratio also increased slightly (a decrease in real expenses). Because enrolments decreased slightly during this period (2%), a small increase (3%) in per-student spending in constant dollars occurred.

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1. The data in this section covers both the youth and adult sectors.
2. The school boards' education price index is used to express spending in constant dollars. This index indicates changes in the price of goods and services used to provide educational services. Changes in spending in constant dollars reflect changes in the real funds available to school boards.

At the beginning of the 1990s, school board operating expenses in constant dollars rose at a faster rate. This increase is attributable to a rise in enrolments (especially in the adult sector), as well as to the significant variations in certain expense items, including expenses for students with handicaps or learning or adjustment difficulties, consultation and workshop activities, and school bus transportation. If per-student spending in constant dollars is considered, the increase is less significant.

Since 1993-94, however, spending per student (in current and constant dollars) has decreased. From 1996-97 to 1997-98, the drop was particularly significant; as mentioned previously, budget cuts and the adoption of cost-saving measures by school boards, as well as the introduction of full-time kindergarten in Québec school boards in 1997-98, resulted in a drop in per-student spending.[3]

3. The introduction of full-time kindergarten has increased the “relative weight” of a segment of the school population that is relatively less costly.

Table 1.5
School board spending[1]

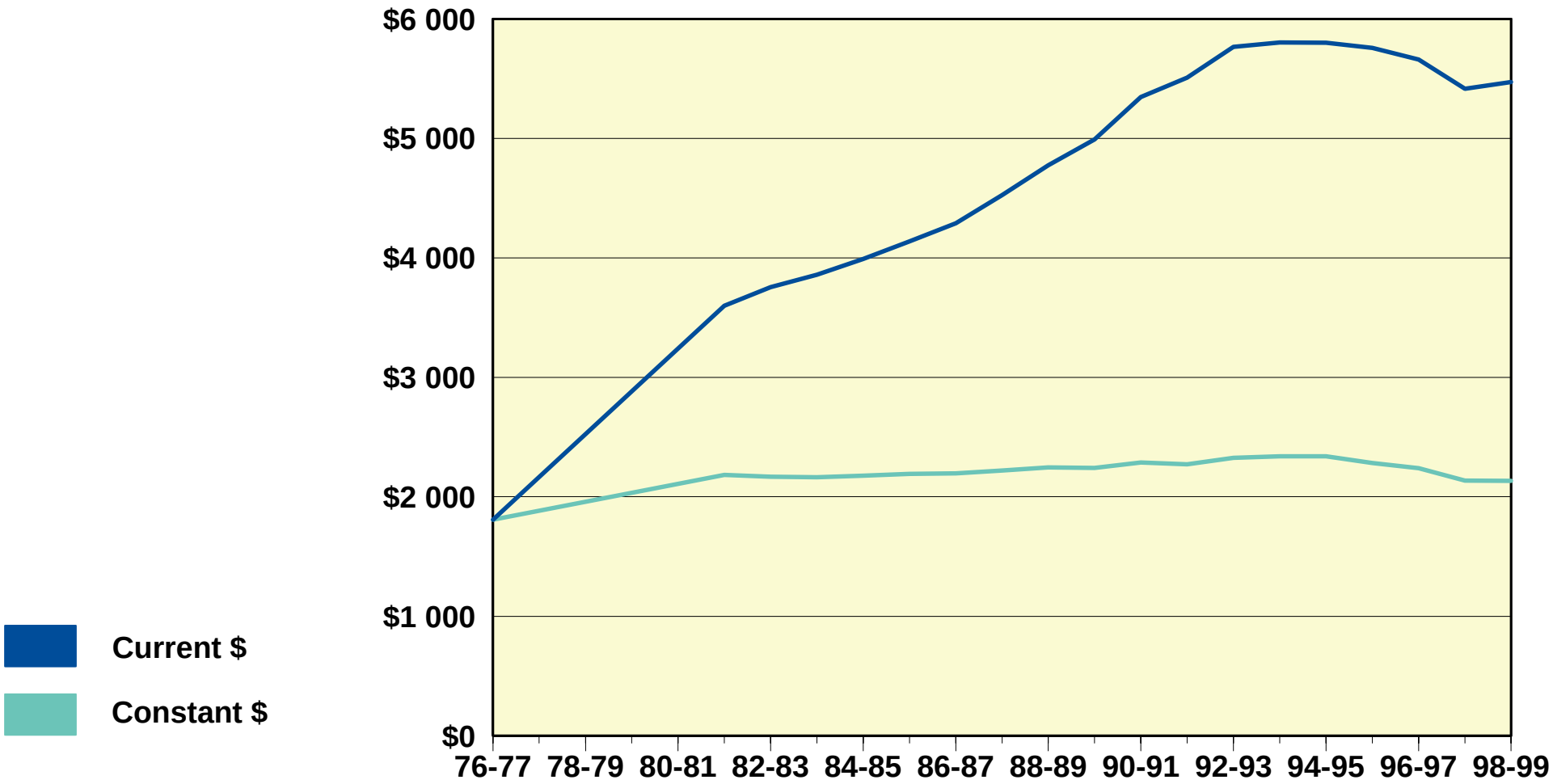
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Total spending (in millions of dollars)						
In current dollars	2 335.3	3 857.0	5 228.2	6 303.9	6 055.4	6 088.0
In constant 1976-77[2] dollars	2 335.3	2 337.7	2 348.0	2 539.3	2 388.6	2 372.9
Spending per student ($)						
In current dollars	1 808	3 600	4 991	5 804	5 415	5 472
In constant 1976-77[2] dollars	1 808	2 182	2 242	2 338	2 136	2 133

e: Estimates

1. Operating expenses exclude debt service (long-term and short-term debt), capital expenses financed directly from current revenues, transfer expenses and revenues of ancillary enterprises.
2. See Note 2 in text.

Graph 1.5

School board spending per student in current dollars and in constant 1976-77 dollars



1.6 School Board Spending per Student

In 1998-99, spending per student by Québec school boards is estimated at $5 472, compared with $4 774 for the Atlantic Provinces, $5 934 for Ontario and $5 664 for Western Canada.[1] In the United States, per-student spending is estimated at $7 979.[2]

In 1998-99, spending per student by Québec school boards is higher than in the Atlantic Provinces, but lower than in the other regions of Canada and the United States.

Between 1976 and 1981, spending per student rose by 101% in Québec, compared with 82% in the rest of Canada and 73% in the United States. The sharper decline in Québec enrolments accounted for a large increase in per-student spending, owing to constraints which prevented expenses from being slashed in proportion to the drop in enrolments. 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 in Québec's spending per student during this period. In 1981-82, spending per student in Québec was 28% higher than in the rest of Canada and 14% higher than in the United States.

Between 1981 and 1993, Québec's spending per student rose by 63%, compared with 109% in the rest of Canada and 115% in the United States. The increase was most pronounced in Ontario: 128%. In Québec, the slower

1. This refers to operating expenses, which exclude debt service, adult education (except for Québec as of 1990-91), capital expenditures financed directly from current revenues, and transfer expenses. As of 1990-91, operating expenses of Québec school boards include adult education. This modification is a result of changes in the financial statements of Québec school boards. It is no longer possible to clearly separate operating expenses for the youth sector and the adult sector. The enrolments used to calculate per-student spending correspond to this new concept. The impact of this modification on the level of spending per student is negligible.
2. For comparative purposes, per-student spending in the United States is expressed in Canadian dollars. U.S. dollars are converted into Canadian dollars using the purchasing power parity index produced by the Organisation for Economic Co-operation and Development (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*)

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 have been higher in these areas than in Québec since the mid-1980s.

Between 1993 and 1998, per-student spending decreased in Québec, while it fluctuated in the other regions of Canada. In Québec, the 6% decrease between 1993 and 1998 is chiefly due to budget cuts, and more specifically, a reduction in labour costs. It should also be noted that the introduction of full-time kindergarten in Québec school boards in 1997-98 has brought down the per-student spending.[3]

In the United States, per-student spending continued to increase and, in 1998-99, it is estimated to be 46% higher than in Québec. In 1997-98, per-student spending in the United States was higher than in Québec in 50 U.S. states[4] and lower in one state (according to the most recent figures available for each state).

3. The introduction of full-time kindergarten has increased the “relative weight” of a segment of the school population that is relatively less costly.
4. Including the District of Columbia.

Table 1.6

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

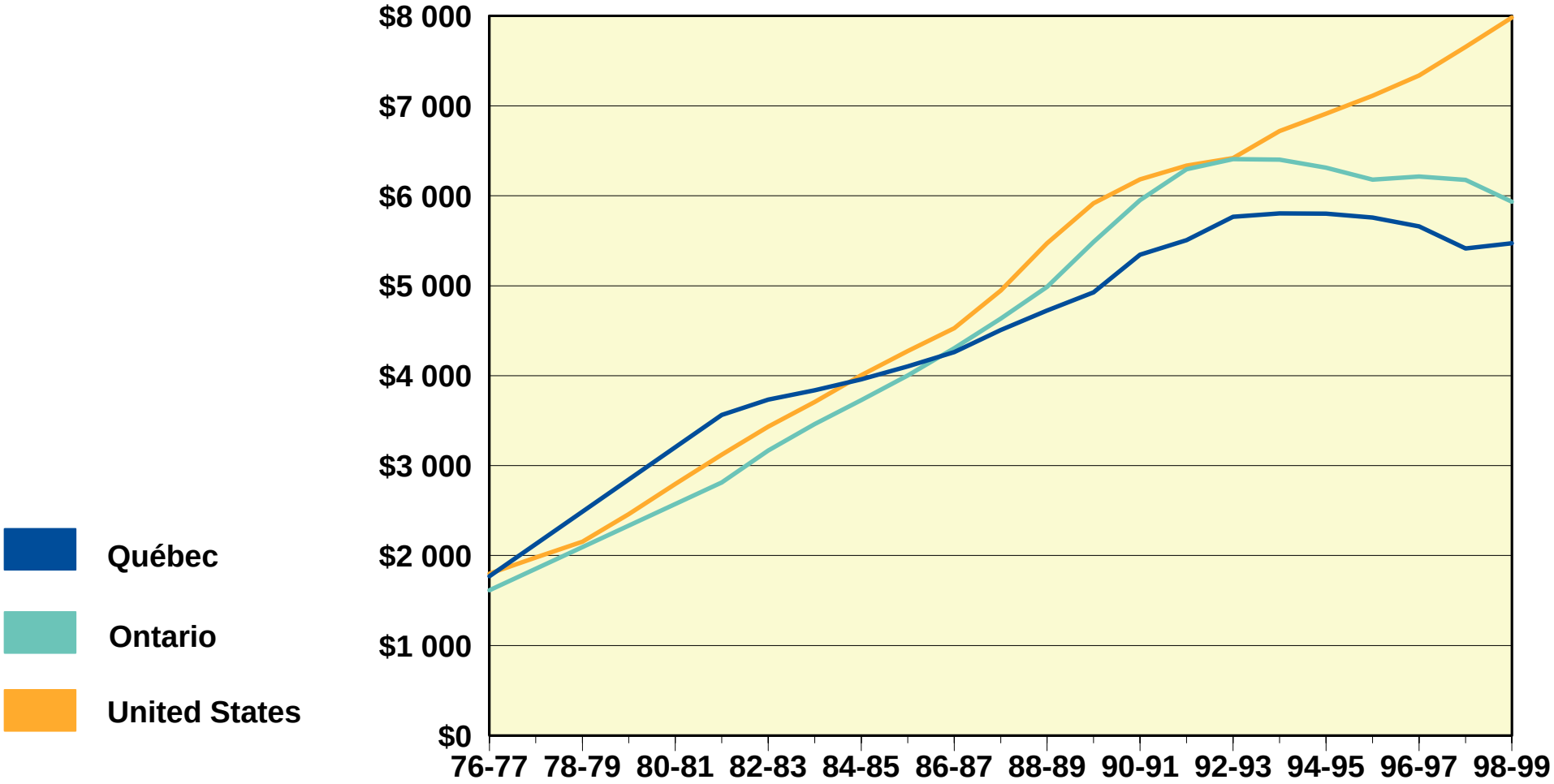
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**1 769**	**3 563**	**4 925**	**5 804**	**5 415**	**5 472**
Canada, excluding Québec	**1 522**	**2 776**	**4 968**	**5 813**	**5 796**	**5 731**
Atlantic Provinces	1 190	2 169	3 918	4 407	4 602	4 774
Ontario	1 613	2 813	5 486	6 401	6 178	5 934
Western Canada	1 525	2 941	4 578	5 402	5 559	5 664
Canada	**1 584**	**2 956**	**4 959**	**5 811**	**5 711**	**5 675**
United States	**1 800**	**3 121**	**5 917**	**6 720**	**7 654**	**7 979**

e: Estimates

1. Operating expenses exclude debt service (long-term and short-term debt), adult education (except for Québec as of 1990-91), capital expenses financed directly from current revenues, transfer expenses, as well as revenues from ancillary enterprises. See also Note 1 in text.
2. See Note 2 in text.

Graph 1.6

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



1.7 Student-Teacher Ratio in School Boards

In 1998-99, the average number of students per teacher in school boards is estimated to be 16.0 in Québec, 18.4 in Ontario and 16.7 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 enrolments 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 number of students per class, the average teaching time of teachers and the average learning time of students.

In 1998-99, the average number of students per teacher is estimated to be lower in Québec than in Ontario and in the United States. The gap between these regions is not as wide, however, as in the early 1980s.

The 1970s were marked by a significant decline in enrolments without any corresponding reduction in the number of teachers, with the result that the student-teacher ratio dropped in all three areas observed. In Québec, the drop was particularly steep during the first half of the decade, owing to lighter teaching loads and changes in the composition of the student population. The workload reduction was obtained as a result of centralized collective bargaining. In Ontario and the United States, negotiations between teachers' unions and employers are conducted locally in each school board and most collective agreements contained no provisions governing teaching loads during that time.

In the early 1980s, however, a major reversal occurred in Québec. As part of the cutbacks in spending that took place during that time, teaching loads increased, and the average number of students per teacher also rose slightly, from 16.2 in 1981 to 16.5 in 1989. Elsewhere, this number continued to drop, falling to 17.8 in Ontario and 16.7 in the United States in 1989-90.

Between 1989 and 1993, the average number of students per teacher dropped from 16.5 to 15.8 in Québec. This decline was largely due to changes in the composition of the student population under consideration. Since 1990-91, figures for enrolments and the number of teaching positions that had been used to calculate the student-

teacher ratio have covered both the youth and adult sectors (in previous years, only the youth sector was considered).[1] In Ontario, the average number of students per teacher went from 17.8 in 1989-90 to 17.6 in 1993-94, and in the United States, it rose from 16.7 to 16.9 during the same period.

Since 1993-94, the student-teacher ratio has increased slightly in Québec, while decreasing slightly in the United States, but increasing significantly in Ontario (from 17.6 to 18.4). This increase in Ontario is a result of staffing cuts under the social contract legislation passed in 1993. One of the objectives of this legislation was to reduce the number of teachers in the school boards by 4.75% by August 31, 1996. The reduction in personnel was expected to be carried out primarily by attrition, however, and attrition credits were to be allocated to take into account the fact that teachers were not being hired despite an increase in enrolments.

In 1998-99, the student-teacher ratio in Québec school boards is estimated to be 2.4 students lower than in Ontario and 0.7 students lower than in the United States.[2]

A comparison of Québec with the United States as a whole for 1997-98 reveals that the student-teacher ratio was higher in 22 U.S. states and lower in 29 states[3] (according to the most recent figures available for each state).

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1. See Note 2 in Table 1.7.
2. The lower student-teacher ratio in Québec indicates a relatively higher number of teachers here than in the other areas observed. However, Ontario has a relatively larger number of non-teaching educators than Québec and this partially compensates for the higher number of teachers in Québec. The concept of non-teaching educators includes administrative personnel in schools as well as non-teaching professionals who work in schools (e.g. educational consultants, guidance counsellors and pastoral animators).
3. Including the District of Columbia.

Table 1.7

Student-teacher ratio[1] in school boards: Québec, Ontario and the United States

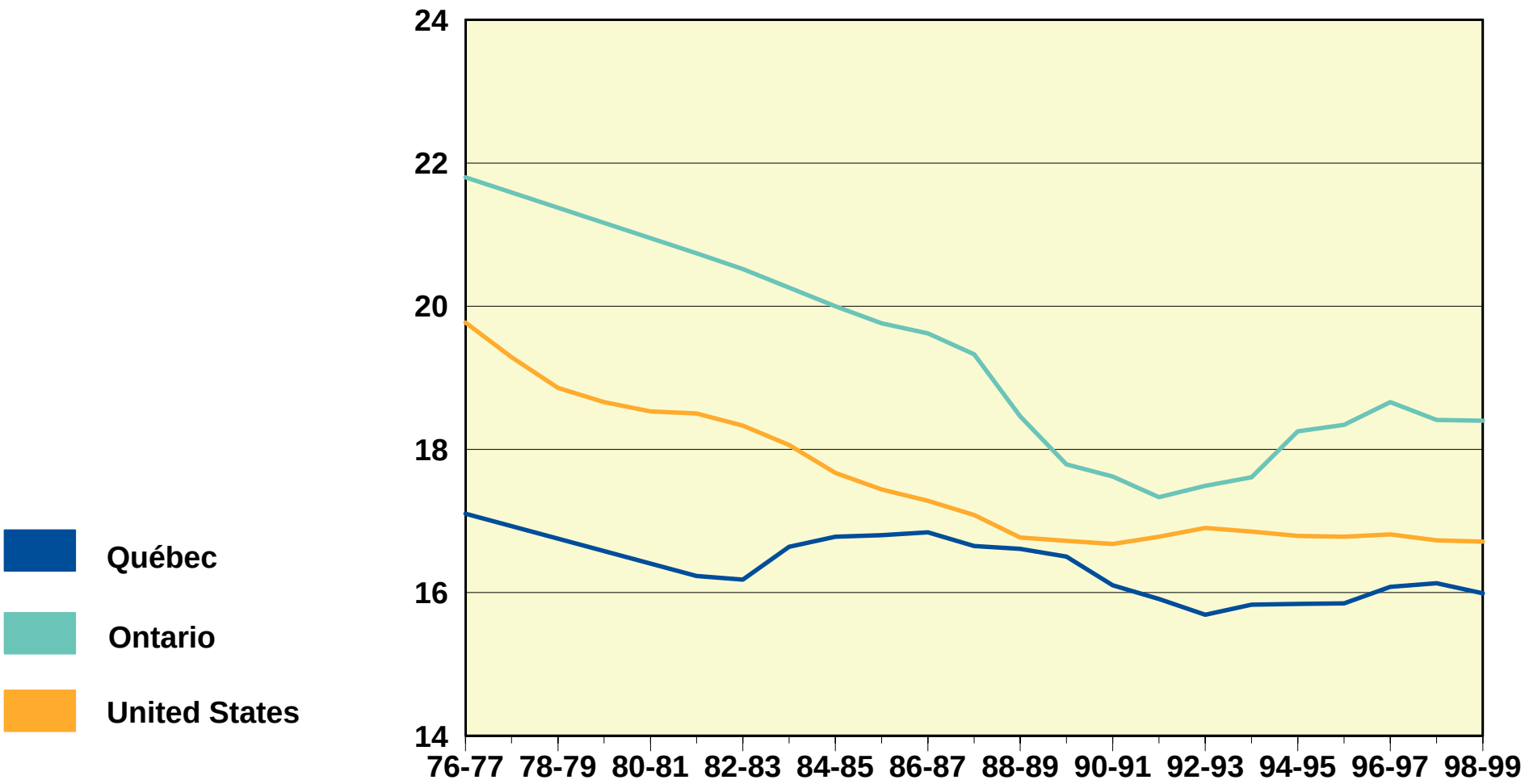
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec[2]	17.1	16.2	16.5	15.8	16.1	16.0
Ontario[3]	21.8	20.7	17.8	17.6	18.4	18.4
United States	19.8	18.5	16.7	16.9	16.7	16.7

e: Estimates

1. The enrolments and the teaching positions used to calculate the student-teacher ratio are based on full-time equivalents.
2. As of 1990-91, the enrolments and the number of teachers in Québec's school boards used to calculate the student-teacher ratio cover both the youth sector and the adult sector (in previous years, only the youth sector was considered). This modification is a result of changes in the school boards' financial statements, which no longer make it possible to clearly separate financial statistics for the youth sector and the adult sector. For the sake of consistency in the concepts used in all the sections dealing with financial investment in education, a decision was made to produce a student-teacher ratio covering both sectors as of 1990-91.
3. In order to take into account differences between Ontario and Québec in their definition of **teaching personnel**, some adjustments have been made to the Ontario data (e.g. the exclusion of principals and vice-principals). The figures used are therefore estimates.

Graph 1.7

Student-teacher ratio in school boards: Québec, Ontario and the United States



1.8 Average Salary of Teachers in School Boards

In 1998-99, the average salary of teachers in Québec school boards is estimated at $42 640, compared with $56 574 in Ontario and $49 482 in the United States.[1]

It is estimated that Québec teachers will earn an average of $42 640 in 1998-99, that is, 25% less than teachers in Ontario and 14% less than teachers in the United States.

Between 1976 and 1981, teachers in Québec received higher raises (81%) than teachers in Ontario (66%) and in the United States (45%). Variations in salary policies explain these major differences.[2] In 1981-82, the average salary of Québec teachers was slightly higher than that of their Ontario counterparts ($28 983 compared with $28 672) and 17% higher than that of U.S. teachers ($24 671).

This trend was reversed in Québec between 1981 and 1993. As part of the general budget constraints during this period, salaries were rolled back and less generous salary indexation policies were set. Meanwhile, the salary conditions for teachers in Ontario and in the United States were improving, such that by 1993-94, Québec teachers were earning on average 21% less than Ontario teachers and 5% less than U.S. teachers.

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1. The average salary of teachers in the United States has been determined on the basis of data from the National Education Association; the data has been expressed in Canadian dollars using the purchasing power parity indexes of the Organisation for Economic Co-operation and Development (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*).
2. While inflation may explain the large increase in salaries in each area, it does not account for the much higher increase in the average salary of Québec teachers, since price hikes were very similar in Québec and in Ontario between 1976 and 1981. U.S. figures have been adjusted for the difference in price increases by means of the PPP index, which takes into account price differences among the various areas.

A comparison of the salary of teachers in school boards in Québec with that in the OECD countries is possible using indicators such as the starting salary, salary after 15 years of seniority and maximum salary.[3] According to these indicators, in 1993-94, the salary of teachers in school boards in Québec was relatively much higher than in most of the OECD countries.

Since 1993-94, the average salary of teachers in Québec and Ontario has remained relatively stable, while in the United States, it continues to grow. 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.

In 1993-94, Ontario began experiencing a period of budget cuts. The salary policy set out in the social contract legislation of 1993 was implemented and, with certain exceptions, no salary increases would be granted during the period from June 14, 1993, to March 31, 1996. Under the conditions stipulated, a school board granting a salary increase to its teaching personnel would have to introduce compensatory cost-saving measures to ensure that the overall objective of cutting costs was met.

In 1997-98, 32 U.S. states[4] paid their teachers a higher average salary than Québec, whereas 19 states paid their teachers less than Québec (according to the most recent figures available per state).

3. See the *Bulletin statistique de l'éducation* of the Direction des statistiques et des études quantitatives of the Ministère de l'Éducation du Québec: Demers, Marius, "Rémunération et temps d'enseignement des enseignants dans l'enseignement public primaire et secondaire (1er cycle); Une comparaison Québec-pays de l'OCDE," no. 2, November 1997. This document is available on the Internet at http://www.meq.gouv.qc.ca.
4. Including the District of Columbia.

Table 1.8

Average salary of teachers in school boards: Québec, Ontario and the United States (in current dollars)

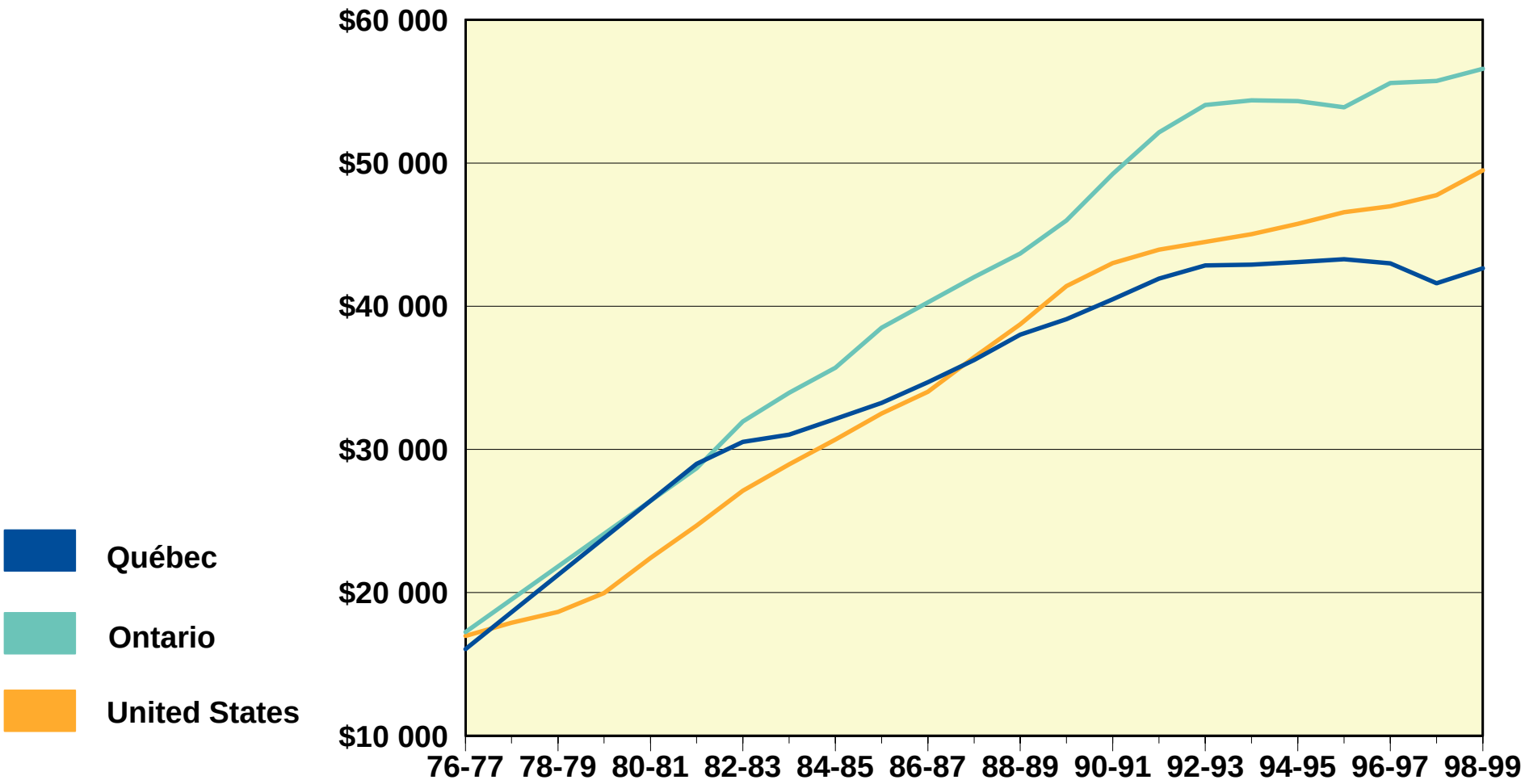
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec[1]	16 046	28 983	39 091	42 897	41 595	42 640
Ontario[2]	17 229	28 672	45 995	54 377	55 738	56 574
United States[3]	16 960	24 671	41 404	45 024	47 756	49 482

e: Estimates

1. As of 1990-91, these figures refer to the average salary of teachers in both the youth sector and the adult sector (in previous years, only the youth sector was considered). This modification is a result of changes in the school boards' financial statements, which no longer make it possible to clearly separate financial statistics for the youth sector and the adult sector. For the sake of consistency in the concepts used in all the sections dealing with financial investment in education, a decision was made to produce an average salary of teachers covering both sectors as of 1990-91.
2. In order to take into account differences between Ontario and Québec in their definition of **teaching personnel**, some adjustments have been made to the Ontario data (e.g. the exclusion of principals and vice-principals). The figures used are therefore estimates.
3. See Note 1 in text.

Graph 1.8

Average salary of teachers in school boards: Québec, Ontario and the United States (in current dollars)



1.9 CEGEP Spending

In 1998-99, it is estimated that CEGEPs will spend slightly more than $1 billion on regular education (the regular day division) and funding will be provided for roughly 153 200 students.[1] Per-student spending is estimated at $6 554.

In 1998-99, CEGEP spending is estimated to be similar to that of the early 1990s, in spite of a considerable increase in enrolments. This can be primarily explained by budget cuts and a reduction in labour costs.

Between 1976 and 1981, CEGEP spending on regular education increased at an average compound rate of 14.8%. This rapid growth can be explained primarily by a high inflation rate, by salary increases exceeding the inflation rate, and by a considerable rise in enrolments (an average rate of 3.0% per year). This resulted in a 4.2% increase in per-student spending in constant dollars between 1976 and 1981.[2]

Between 1981 and 1989, the rise in operating expenses of CEGEPs was sharply curbed, with the annual average rate of growth dropping to 4.2%. This decrease was a result of a curtailment in the inflation rate, as well as budget cutbacks adopted by the Québec government. Enrolments also continued to rise until the mid-1980s, but then declined. Per-student spending in constant dollars was slightly lower in 1989-90 than in 1981-82.

In 1990-91, per-student spending in current dollars was $6 920, or 8.6% higher than in 1989-90 (which corresponds to an actual rate of growth of 3.4%). 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 rise in the number of teachers applies to activities such as departmental committees, practicums, professional development for teachers, and student support services.

---

1. The figures used in this section are determined on the basis of fall enrolments.
2. The CEGEPs' education price index is used to express spending in constant dollars. This index indicates the changes in the price of goods and services used to provide educational services in CEGEPs. Changes in spending in constant dollars reflect changes in the real funds spent by CEGEPs on education.

Between 1990 and 1995, primarily as a result of the Québec government's salary restriction policy, spending per student in current dollars remained relatively stable, and per-student spending in constant dollars once again declined.

Between 1995 and 1998, there was a decrease in CEGEP spending in current dollars that is primarily attributable to budget cuts and the adoption of cost-saving measures by the CEGEPs. These measures ensue largely from agreements between the government and unions that have made it possible to reduce labour costs. However, as the agreements with the various unions are not the same, the cost-saving measures do not affect all the employees of a given category of personnel in the same way.

Thus, depending on the union that a teacher belongs to, the salary cut may be higher or lower. As a trade-off for the salary cut, teachers receive a compensatory leave. There has also been a net decrease in the number of CEGEP employees, a decrease in departmental committees, a restructuring of teaching, and savings due to the influx of younger personnel.

Thus, between 1995 and 1998, per-student spending dropped by 5.4% in current dollars and by 8.0% in constant dollars.

Table 1.9
CEGEP spending[1]

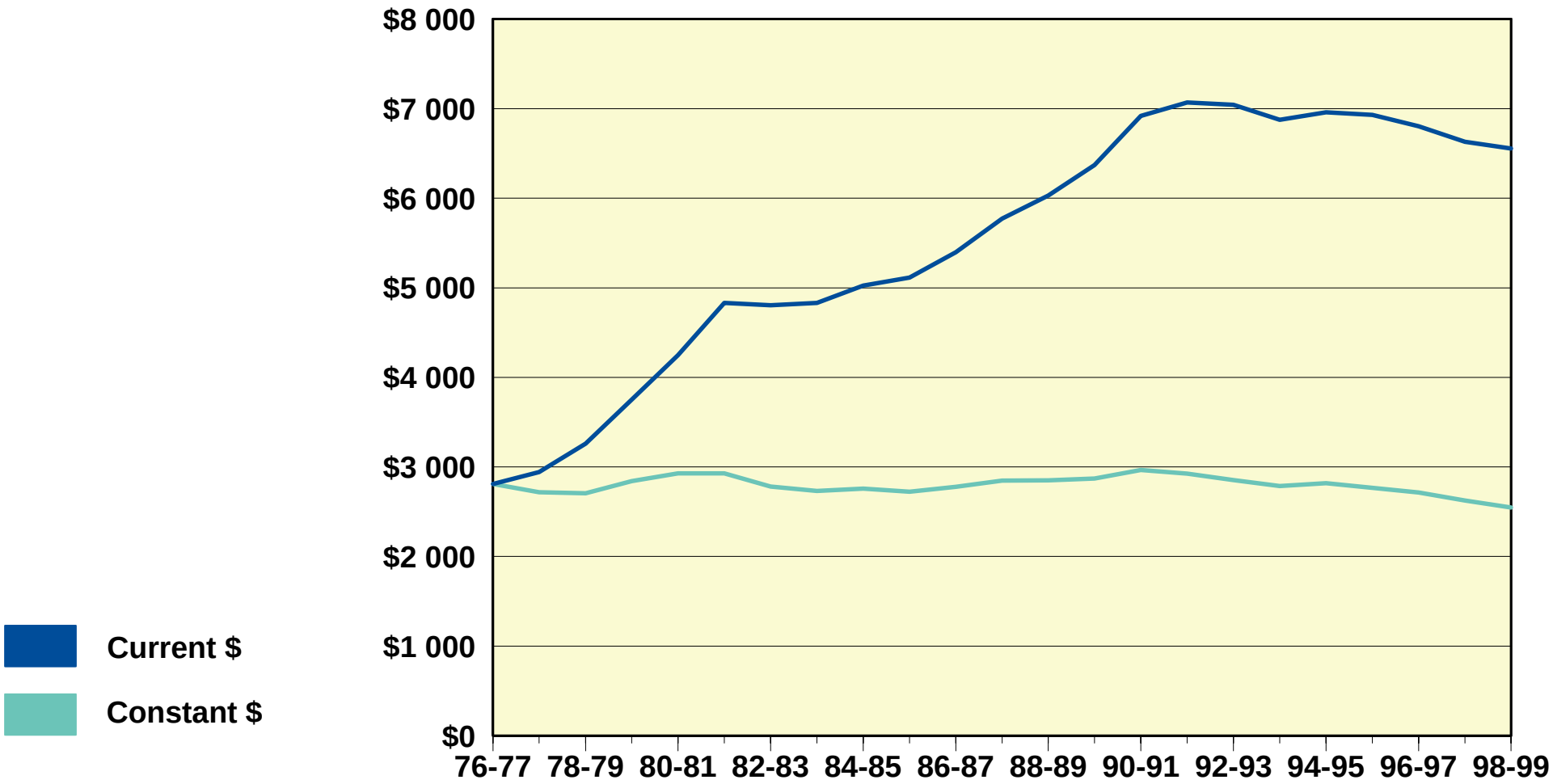
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Total spending in current dollars (in millions of dollars)	298.7	596.0	830.7	1 074.9	1 033.0	1 004.2
Spending per student in current dollars	2 810	4 831	6 370	6 876	6 629	6 554
Spending per student in constant 1976-77[2] dollars	2 810	2 928	2 869	2 786	2 624	2 547

e: Estimates

1. Operating expenses exclude debt service (long-term and short-term debt) and capital expenses financed directly from current revenues.
2. See Note 2 in text.

Graph 1.9

CEGEP spending per student in current dollars and in constant 1976-77 dollars



1.10 CEGEP Spending per Student in Relation to Per Capita GDP

In 1998-99, spending per student by CEGEPs is estimated at $6 554 and the per capita gross domestic product (GDP), at $26 286, the former representing 24.9% of the latter. This proportion is an indicator of the relative financial investment in CEGEPs.

The recent decrease in CEGEP spending per student in relation to per capita GDP can be explained primarily by budget cuts and a reduction in labour costs.

Between 1976 and 1981, the ratio of per-student spending to per capita GDP rose from 37.7% to 39.1%. During that time, expenditures per student grew somewhat more rapidly than the per capita GDP.

Between 1981 and 1989, a period of budget cutbacks, per-student spending increased much more slowly than the per capita GDP, and the relative financial investment indicator declined sharply, dropping from 39.1% in 1981-82 to 29.5% in 1989-90.

Between 1989 and 1992, the ratio of per-student spending to per capita GDP increased once again to stand at 31.7% in 1992-93. This increase can be largely explained by the economic recession, which led to a very small increase in the per capita GDP. During this period, per-student spending rose by 11%, while the per capita GDP increased by only 3%.

However, following budget cuts and the adoption of cost-saving measures in CEGEPs,[1] the ratio between CEGEP spending per student and the per capita GDP has decreased once again, and is estimated at 24.9% in 1998-99.

1. See Section 1.9.

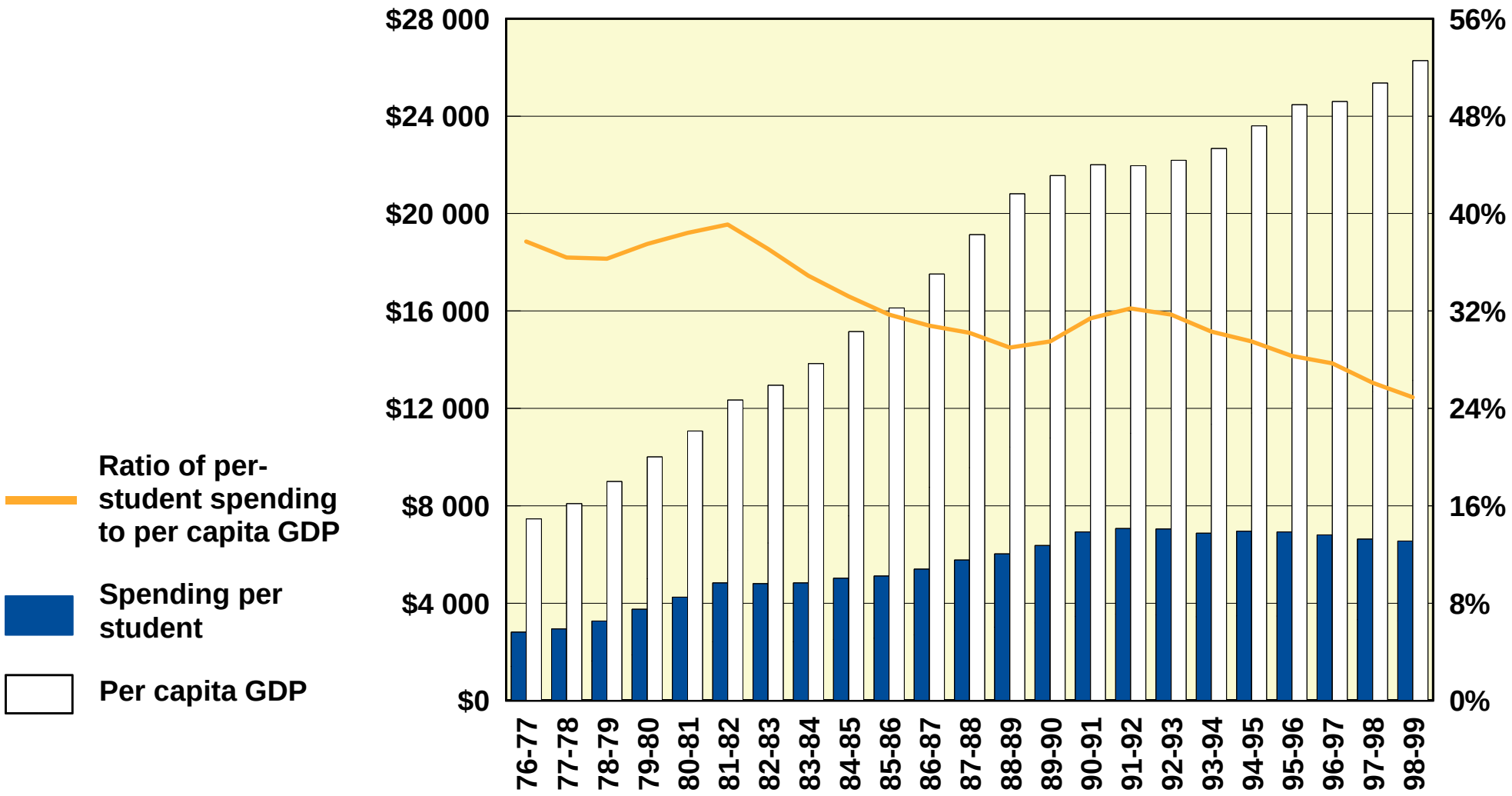
Table 1.10
CEGEP spending per student in relation to per capita GDP

	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Spending per student (in current dollars)	2 810	4 831	6 370	6 876	6 629	6 554
Per capita GDP (in current dollars)	7 456	12 342	21 566	22 674	25 364	26 286
Ratio of per-student spending to per capita GDP (%)	37.7	39.1	29.5	30.3	26.1	24.9

e: Estimates

Graph 1.10

CEGEP spending per student (in current dollars), per capita GDP (in current dollars), and ratio of per-student spending to per capita GDP (%)



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

Section 1.9 included an analysis of the change in CEGEP spending. This section complements that information. Salary costs for teachers represent more than half of all CEGEP operating expenses in 1998-99 and the increase in these costs has been a determining factor in the change 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 1998-99, the average number of students per teacher in CEGEPs is estimated to be 13.9, and the average salary of teachers is $51 295. The actual cost of teachers is slightly lower than in 1990-91.

In 1998-99, the average number of students per teacher in CEGEPs is estimated to be 13.9, while the average salary of teachers is $51 295. The student-teacher ratio is calculated by dividing the number of students by the number of teachers in the CEGEPs.[3] The ratio 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 learning time of students.

Between 1981 and 1989, the average number of students per teacher rose from 12.3 to 14.3, while the average salary of teachers increased by 35.7%, from $32 595 to $44 217. In comparison, the consumer price index (CPI) increased by 52.8% during this same period. The cost of teachers per student, in current dollars, went from $2 659 in 1981-82 to $3 098 in 1989-90, an increase of 16.5%, but the cost per student in constant dollars fell by 13.7%.[4]

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1. Salary costs considered in this section do not include fringe benefits. If benefits were included, the salary costs of teachers would represent approximately 60% of all CEGEP operating spending.
2. The cost of teachers per student is calculated by dividing payroll expenditures for teachers by the number of students.
3. Enrolment figures are determined by weighting fall enrolments for purposes of funding and the number of teachers is expressed in full-time equivalents.
4. The CEGEP education price index is used to express the cost of teachers per student in constant dollars. This index indicates the changes in the price of goods and services used to provide educational services in CEGEPs. Changes in spending in constant dollars reflect changes in the real funds spent by CEGEPs on education.

Between 1989-90 and 1990-91, the student-teacher ratio decreased by 5.6% and the average salary of teachers increased by 5.2%. The cost of teachers per student, in current dollars, increased by 11.2%, and the cost in constant dollars increased by 5.9%. The decrease in the average number of students per teacher can be explained by the creation of new positions resulting from the adoption of a new collective agreement. The increase in the number of teachers applies to activities such as departmental coordination, practical training periods in the workplace, in-service training and student support and supervision.

Since 1990-91, the average number of students per teacher has increased, and it is estimated to be 13.9 in 1998-99. The average salary increased by 10.3% between 1990 and 1998 and is $51 295 in 1998-99. In comparison, the CPI increased by 16.4% during the same period. The cost of teachers per student, in current dollars, increased by 6.9%, while the cost in constant dollars decreased by 2.6% between 1990 and 1998.

Measures for reducing labour costs, which were addressed in Section 1.9, helped bring down the actual cost of teachers per student. Among other measures, the preretirement program resulted in a younger population of teachers. These measures, introduced by the Québec government in an attempt to reduce the deficit, have resulted in fewer teaching positions and lower actual earnings.

Table 1.11

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

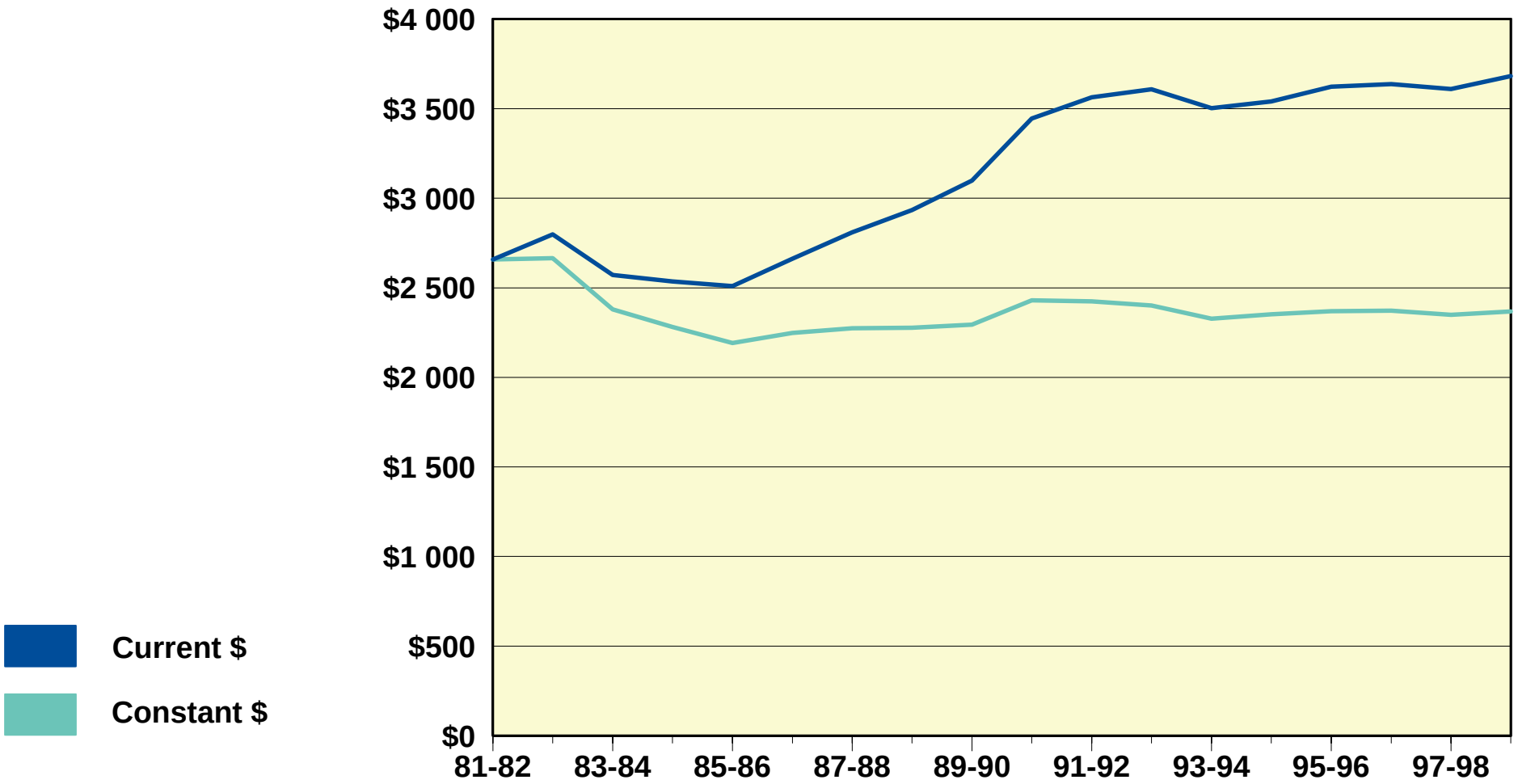
	1981-82	1989-90	1990-91	1993-94	1997-98[e]	1998-99[e]
Student-teacher ratio	12.3	14.3	13.5	13.9	13.9	13.9
Average salary in current dollars	32 595	44 217	46 512	48 789	50 038	51 295
Cost of teachers per student						
In current dollars	2 659	3 098	3 444	3 503	3 609	3 682
In constant 1981-82 dollars	2 659	2 295	2 430	2 328	2 349	2 368

e: Estimates

1. See Note 3 in text.

Graph 1.11

Cost of teachers per student in CEGEPs in current dollars and in constant 1981-82 dollars



1.12 University Spending in Relation to the GDP

In 1998-99, it is estimated that Québec will allocate 1.49% of its gross domestic product (GDP) to university education,[1] compared with 1.92% for the Atlantic Provinces, 1.19% for Ontario and 1.25% for Western Canada.[2]

In 1998-99, the share of the GDP allocated to university spending in Québec is estimated at 1.49%, compared with 1.28% for the rest of Canada. Québec's higher level of university spending is explained primarily by a lower per capita GDP.

In 1976-77, the share of the GDP spent on university education in Québec was the same as in Ontario, but in the years that followed, Québec's financial investment rose, while that of Ontario and Western Canada dropped.

From 1981 to 1989, this share of the GDP decreased slightly in Québec, Ontario and the Atlantic Provinces, while it rose in Western Canada. At the beginning of the 1990s, however, Québec's financial investment in university education climbed significantly, while in the rest of Canada, less marked increases were observed.

A significant gap therefore developed between Québec's spending on university education and that of the rest of Canada. From 1986 to 1993, university spending in Québec increased by 73%, compared with 56% in the rest of Canada. This greater growth in Québec can be explained partly by the considerable increase in university research,[3] as well as by a larger increase in the resources allocated to teaching.

Between 1993 and 1998, the share of the GDP allocated to university education decreased in all regions of Canada. In Québec, this share of the GDP went from 1.98% in 1993-94 to 1.49% in 1998-99, following budget cuts and a reduction in labour costs. In the rest of Canada, the share of the GDP allocated to university education dropped from 1.53% in 1993-94 to 1.28% in 1998-99, also following budget cuts.

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1. In 1998-99, it is estimated that Québec will spend $2.9 billion of its $192.8-billion GDP on university education.
2. Data on the universities has not been adjusted to take into account organizational differences in education systems.
3. See Section 1.16.

In 1998-99, university spending is estimated to be higher in Québec than in the rest of Canada (except for the Atlantic Provinces), primarily because Québec's collective wealth, as measured by the per capita GDP, is relatively lower than that of the rest of Canada.

Table 1.12

University spending[1] in relation to the GDP: Québec and other regions of Canada (%)

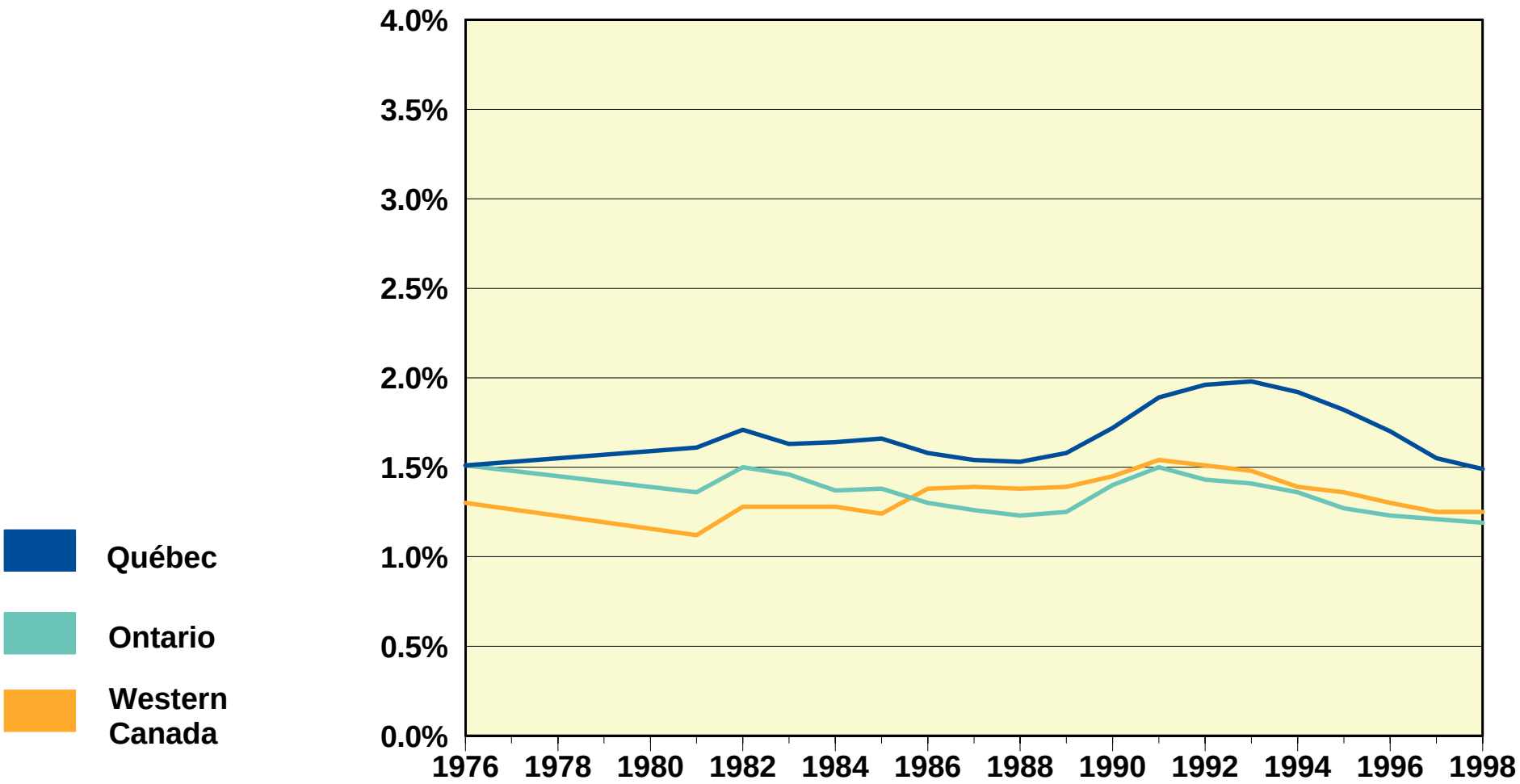
	1976-77	1981-82	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**1.51**	**1.61**	**1.58**	**1.98**	**1.55**	**1.49**
Canada, excluding Québec	**1.50**	**1.34**	**1.40**	**1.53**	**1.30**	**1.28**
Atlantic Provinces	2.32	2.36	2.22	2.28	1.99	1.92
Ontario	1.51	1.36	1.25	1.41	1.21	1.19
Western Canada	1.30	1.12	1.39	1.48	1.25	1.25
Canada	**1.50**	**1.40**	**1.44**	**1.63**	**1.35**	**1.33**

e: Estimates

1. University expenses include operating expenses and capital expenses, financial assistance to students, funded and sponsored research and the administrative expenses of the Ministère de l'Éducation (the portion attributable to university education). Statistics Canada's basic data is used to calculate the share of the GDP allocated to university education.

Graph 1.12

University spending in relation to the GDP: Québec, Ontario and Western Canada (%)



1.13 University Spending per Student

In 1998-99, university spending per student in Québec (excluding sponsored research) is estimated at $11 084, compared with $11 169 for the Atlantic Provinces, $11 525 for Ontario and $12 814 for Western Canada. Data on the universities presented here has not been adjusted to take into account organizational differences in education systems.

Budget cutbacks in recent years have resulted in a decrease in per-student spending in Québec universities, such that, in 1998-99, it is less than the per-student spending of universities in the rest of Canada.

In 1981-82, per-student spending was 25% higher in Québec than in Ontario, but following salary restrictions and budget cutbacks in Québec universities in subsequent years, the gap was considerably reduced; in 1986-87, spending per student was 1% lower in Québec than in Ontario. In 1986-87, per-student spending by Québec universities was 5% lower than in the Atlantic Provinces and 11% lower than in Western Canada.

Between 1986 and 1993, per-student spending in Québec rose by 37%, compared with 22% in Ontario, 18% in the Atlantic Provinces and 31% in Western Canada. During this period, the consumer price index (CPI) rose by 30% in Québec.[1]

The more rapid rise in per-student spending by Québec universities was made possible by the growth in government funding per student, as well as by the increase in revenues from tuition fees.[2] Between 1986 and 1993, the share of tuition fees in the funding of universities (excluding funded research) rose from 6% to 14%.

When per-student spending is broken down into four categories–salaries of teaching personnel, salaries of non-teaching personnel, fringe benefits and non-salary expenses–it can be observed that, during the period from 1986

1. An education price index such as those developed for school boards and CEGEPs is not currently available for universities. For information purposes, it should be noted that the education price index for CEGEPs rose by 27% between 1986 and 1993.
2. Once the freeze on tuition fees was lifted in 1990-91, the share of these fees in the funding of Québec universities rose from $94 million in 1989-90 to $294 million in 1993-94.

to 1993, the expenses in these categories all increased faster in Québec than in Ontario.[3] In 1993-94, the average salary of teaching personnel at Québec universities was lower than that of their Ontario colleagues, but the average number of students per professor was also lower. These two factors have an inverse effect on the cost of teaching personnel per student, but the difference between the average number of students per professor is such that the cost of teaching personnel per student was higher in Québec than in Ontario.[4]

Between 1993 and 1998, spending per student in Québec was on the decline, while in the rest of Canada, it increased slightly. In Québec, the decrease is explained by budget cuts and, more specifically, the reduction in labour costs. In 1998-99, university spending per student in Québec is estimated to be 7% lower than in universities in the rest of Canada.

3. It would appear that, during this period, salary policies were relatively more costly at university than at the other levels of education in Québec. This would explain, at least in part, the faster growth in the salaries of university teaching staff. Thus, the average salary of full-time university research professors increased by 38% between 1986 and 1993, while the average salary of CEGEP teachers rose by 29% and that of teachers in school boards, by 26%.
4. It is not possible to determine the average number of students per professor (including lecturers) in full-time equivalents with the current information systems on university personnel. The data available does, however, allow us to estimate that the student-professor ratio was lower in Québec than in Ontario in 1993-94.

Table 1.13

University spending per student:[1] Québec and other regions of Canada (in current dollars)

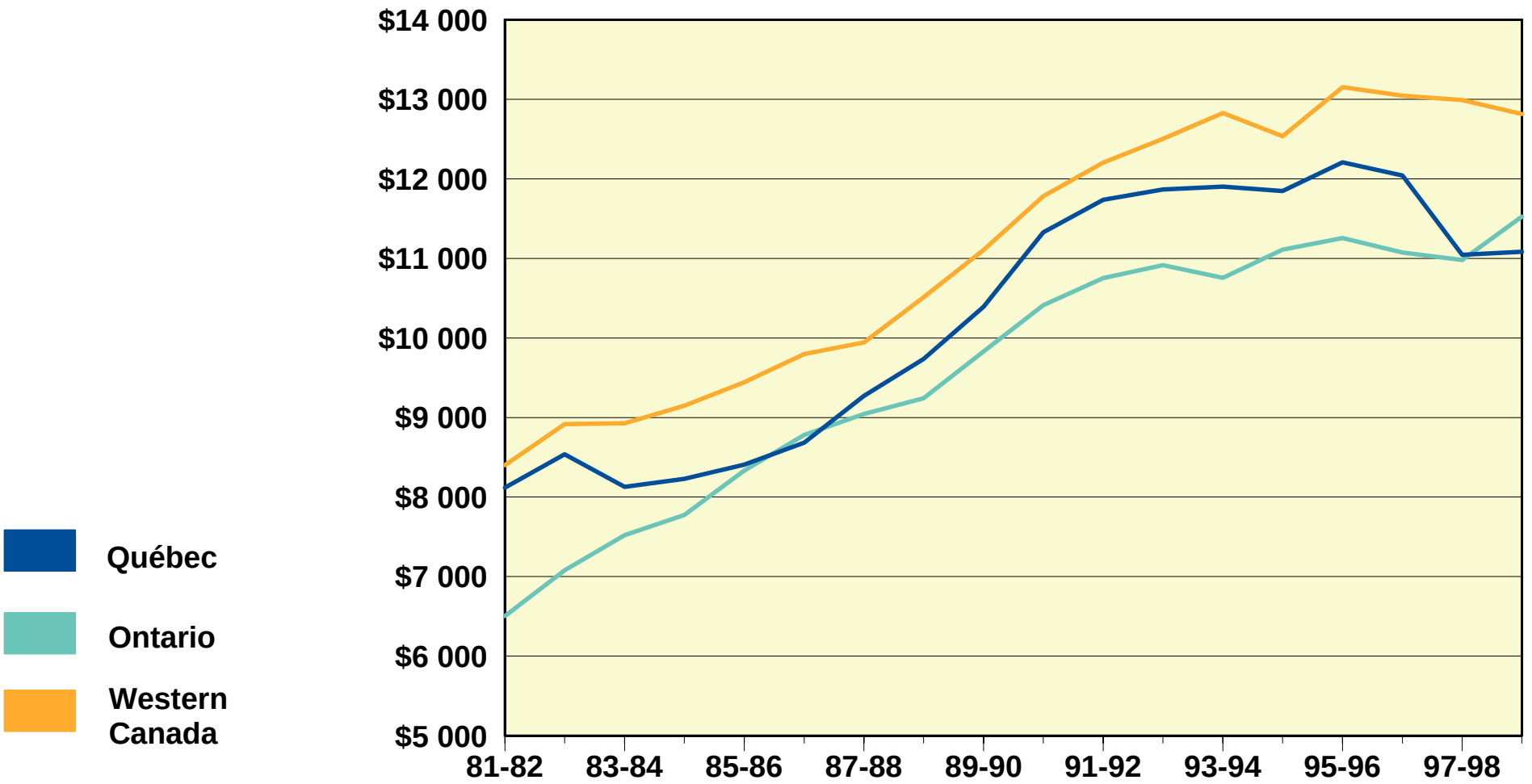
	1981-82	1986-87	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**8 118**	**8 682**	**10 393**	**11 904**	**11 044**	**11 084**
Canada, excluding Québec	**7 305**	**9 167**	**10 359**	**11 429**	**11 698**	**11 937**
Atlantic Provinces	7 979	9 099	10 621	10 756	11 132	11 169
Ontario	6 505	8 782	9 832	10 756	10 980	11 525
Western Canada	8 400	9 798	11 108	12 830	12 991	12 814
Canada	**7 512**	**9 036**	**10 368**	**11 552**	**11 539**	**11 729**

e: Estimates

1. These figures refer to the universities' general operating expenses, which exclude funded research, the donations and endowments fund, as well as expenses for ancillary enterprises. Statistics Canada's basic data is used to calculate university spending per student.

Graph 1.13

University spending per student: Québec, Ontario and Western Canada (in current dollars)



1.14 University Spending per Student in Relation to Per Capita GDP

Per-student spending[1] is an indicator of financial investment in education, and the per capita gross domestic product (GDP) is an indicator of collective wealth. Relating the two provides an indicator of the relative financial investment in education.[2] In 1998-99, university spending per student (excluding sponsored research) is estimated to be $11 084 and the per capita GDP, $26 286; the former represents 42.2% of the latter. A comparison of this proportion with that for the other regions of Canada reveals that the relative financial investment in university education is higher in Québec than in Ontario, but less than in the other regions.

In 1998-99, university spending per student in Québec is estimated to represent 42.2% of the per capita GDP, while the corresponding figure for the rest of Canada is 39.4%. In recent years, this ratio has dropped both in Québec and in the rest of Canada.

Changes in the ratio of per-student spending to per capita GDP can be classified into three periods. Between 1981 and 1989, spending per student rose less rapidly than the per capita GDP in Québec, resulting in a significant decrease in the ratio of per-student spending to per capita GDP, which went from 65.8% in 1981-82 to 48.2% in 1989-90. A sharp decline was also observed in the Atlantic Provinces, whereas in Ontario and Western Canada, a less marked decline occurred.

Between 1989 and 1993, per-student spending by Québec universities rose by 15%, while the per capita GDP increased by only 5% during the economic recession. The ratio of per-student spending to per capita GDP climbed from 48.2% to 52.5%. An increase in the financial investment in education was also observed in Ontario and Western Canada, while it continued to decrease in the Atlantic Provinces.

1. Per-student spending refers to the universities' general operating expenses, which exclude funded research, the donations and endowments fund and expenses for ancillary enterprises.
2. Data on the universities has not been adjusted to take into account organizational differences in education systems.

Between 1993 and 1998, budget cuts and a reduction in labour costs meant that per-student spending dropped, while the per capita GDP rose and the ratio between them went from 52.5% to 42.2%. This ratio also fell in other regions of Canada.

In 1998-99, the ratio of per-student spending by universities to per capita GDP is estimated to be 42.2% in Québec, 36.0% in Ontario, 49.8% in the Atlantic Provinces and 42.5% in Western Canada. The gap between the relative financial investment in Québec and in Ontario can be explained by the fact that Québec's collective wealth is relatively lower than Ontario's.

Table 1.14

University spending per student in relation to per capita GDP:[1] Québec and other regions of Canada (%)

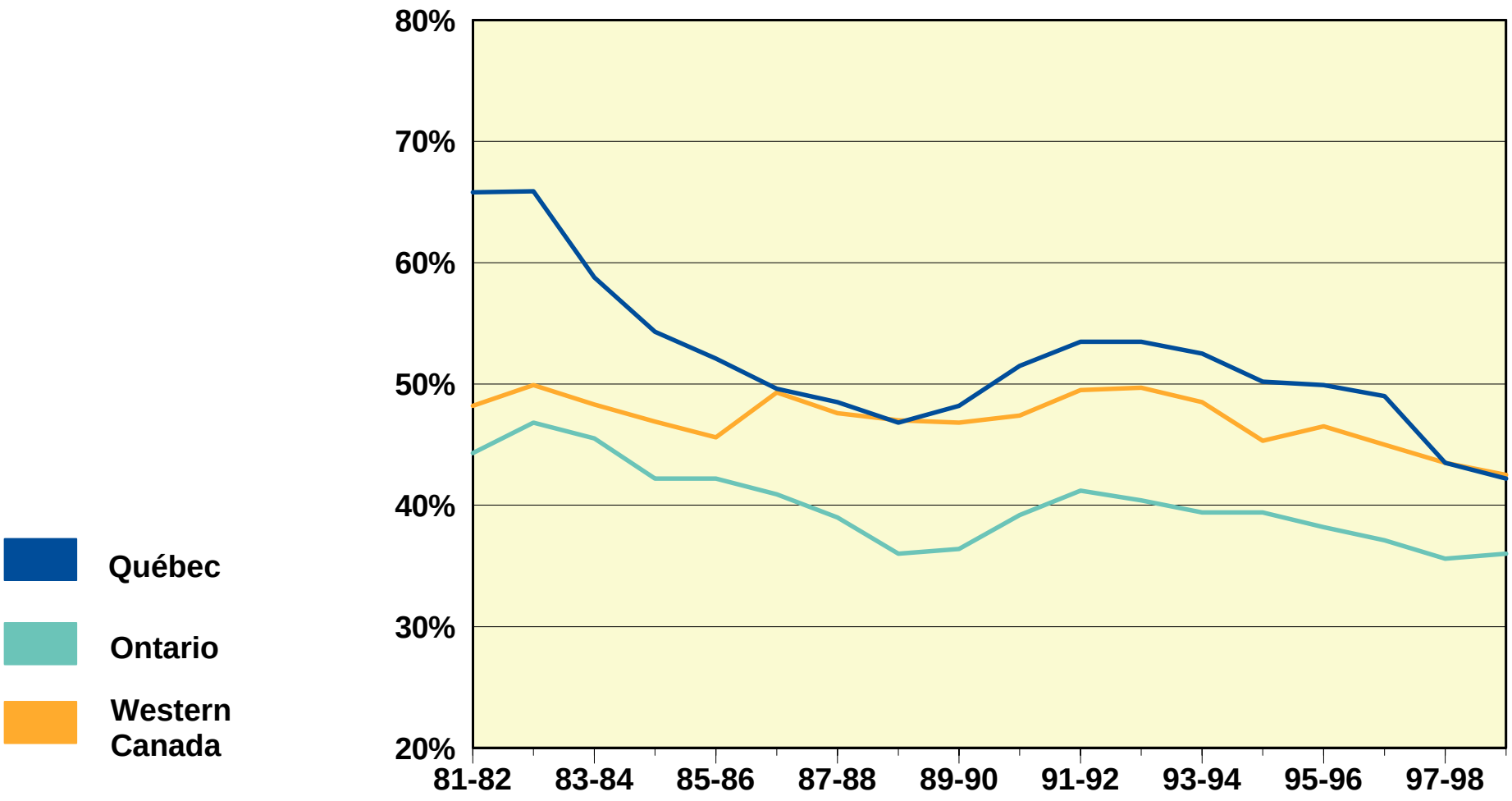
	1981-82	1986-87	1989-90	1993-94	1997-98[e]	1998-99[e]
Québec	**65.8**	**49.8**	**48.2**	**52.5**	**43.5**	**42.2**
Canada, excluding Québec	**48.7**	**46.2**	**42.1**	**43.8**	**39.6**	**39.4**
Atlantic Provinces	92.1	67.5	63.8	56.4	51.7	49.8
Ontario	44.3	41.1	36.4	39.4	35.6	36.0
Western Canada	48.2	49.5	46.8	48.5	43.5	42.5
Canada	**52.5**	**46.8**	**43.5**	**45.8**	**40.5**	**40.0**

e: Estimates

1. Statistics Canada's basic data has been used to calculate the ratio of university spending per student to per capita GDP.

Graph 1.14

University spending per student in relation to per capita GDP: Québec, Ontario and Western Canada (%)



1.15 Student Financial Assistance and Tuition Fees

In 1998-99, tuition fees in Québec universities are approximately half of what they are elsewhere in Canada.

In Québec, financial assistance is available to students in full-time postsecondary studies as well as students in secondary vocational education. The loans and bursaries awarded under Québec's Student Financial Assistance Program are intended to supplement the contribution of the student and, where applicable, 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 this contribution and the student's allowable expenses.

In 1997-98, of those persons eligible for financial assistance, 25.9% of students in secondary vocational education, 31.3% of college students and 44.8% of university students received assistance. It should be noted that the financial assistance awarded to students in vocational education falls under a new program implemented in 1994-95. A total of 160 513 students benefited from the Student Financial Assistance Program. Of these, 90 729 received only a loan, 69 227 received a loan and a bursary and 557 received only a bursary. Loans totalled $530.5 million and bursaries, $239.6 million.

In 1997-98, of the university students who received financial assistance, 56.1% obtained only a loan, which averaged $3 178, whereas 43.9% obtained a loan and a bursary totalling an average of $7 628. Those who received a loan and a bursary obtained on average slightly more than half of the assistance in the form of a bursary.

Table 1.15b presents historical data on the breakdown of financial assistance awarded to Québec students attending university. In 1997-98, loans represented 66.9% of the total assistance awarded and bursaries, 33.1%. In 1984-85, the corresponding percentages were 53.6% and 46.4%, respectively. This trend towards increasing the portion of assistance that is granted in the form of loans and decreasing the portion given in bursaries has also been observed in the other provinces, in the United States and elsewhere in the world.

In 1997-98, upon completion of their undergraduate studies, Québec students who had received loans owed an average of $11 988. The average debt for graduate studies was $15 662 and for postgraduate studies, $17 898.

Student loans contracted for college and undergraduate studies averaged $15 218 in 1997-98; for college through to graduate studies, $22 128; and for college to postgraduate studies, $26 283.

Although these debt levels are relatively high, they are lower in Québec than elsewhere in Canada. This is partly explained by the fact that, on average, Québec awards more bursaries than the other provinces and that tuition fees in Québec universities are the lowest in Canada.

In effect, tuition fees in Québec universities are approximately half of what they are elsewhere in Canada because of periods during which they have been frozen. At the beginning of the 1990s, there were major increases in tuition fees in Québec, but nevertheless, since 1993-94, tuition fees have remained at approximately the same level in Québec, whereas they continue to climb in the other regions of Canada. The gap between Québec and the rest of Canada has once again begun widening, and in 1998-99, tuition fees in the rest of Canada ($3 449) are slightly more than double what they are in Québec ($1 690).

Table 1.15a

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

	1989-90	1990-91	1991-92	1993-94	1997-98	1998-99[p]
Québec	**581**	**948**	**1 350**	**1 630**	**1 690[1]**	**1 690**
Canada, excluding Québec	**1 541**	**1 662**	**1 852**	**2 202**	**3 181**	**3 449**
Atlantic Provinces	1 689	1 802	2 023	2 446	3 434	3 597
Ontario	1 561	1 684	1 819	2 076	3 286	3 667
Western Canada	1 440	1 562	1 828	2 298	2 893	3 071

Table 1.15b

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

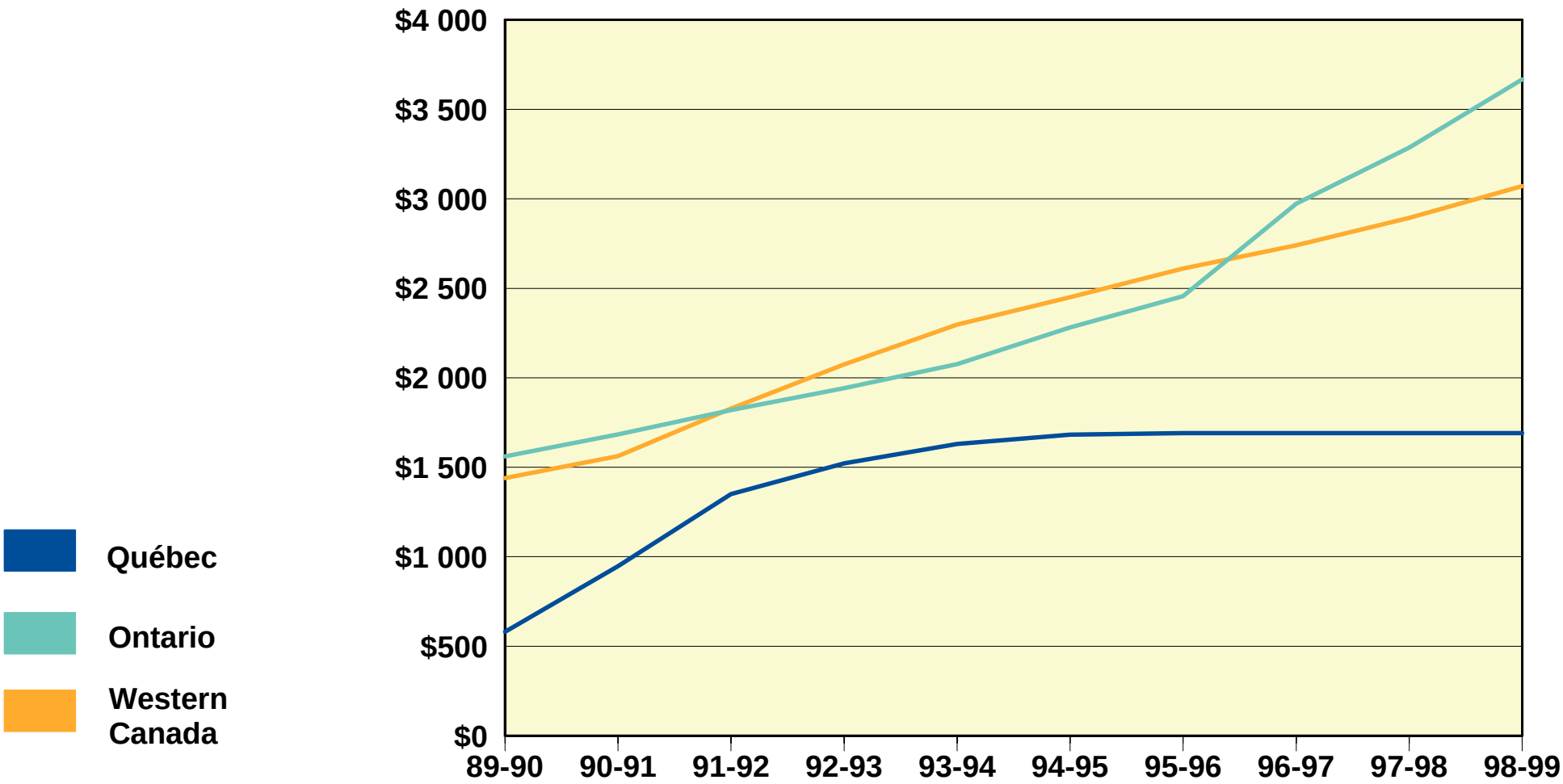
	1984-85	1989-90	1991-92	1993-94	1996-97	1997-98
Loans	53.6	64.5	60.5	63.0	67.8	66.9
Bursaries	46.4	35.5	39.5	37.0	32.2	33.1

p: Preliminary figures

1. In Québec, as of the fall of 1997, Canadian students not residing in Québec must pay an additional amount that has not been taken into account in the calculation of the average tuition fee.

Graph 1.15

Average tuition fees for full-time undergraduate university students: Québec, Ontario and Western Canada (in current dollars)



1.16 Funded and Sponsored Research in Universities

Although government contributions have continued to grow, the total amount of grants and contracts awarded for university research has dropped since 1992-93, primarily because of the decline in the private sector's contribution.

The amount of funding through grants and research contracts allocated to universities has increased significantly in recent years, rising from $259.7 million in 1986-87 to $655 million in 1992-93. From 1992-93 to 1996-97, however, the amount of funding through grants and research contracts awarded to universities dropped from $655 million to $606.2 million.

The amount of funding through grants and research contracts per research professor rose from $38 331 in 1986-87 to $79 918 in 1996-97, representing an average annual increase of 7.6%. In comparison, the consumer price index (CPI) rose at an average rate of 3% per year. However, this amount went from $84 283 in 1992-93 to $79 918 in 1996-97, for an average annual drop of 1.3%. In comparison, the CPI increased on average 1% per year during this period. The last ten years have been marked by growth between 1986-87 and 1992-93, by a decline between 1993-94 and 1994-95, and then by a slight increase from 1995-96 to 1996-97.

This increase in the amounts allocated to university research is closely tied to a rise in private-sector funding. Private-sector funding peaked in 1992-93 ($30 162 per research professor) as a result of tax incentives introduced in 1991 to encourage businesses to have their research conducted in universities. Once these incentives were abolished, funding from the private sector decreased substantially. Funding per research professor dropped to $16 625 in 1994-95 and then started to rise, totalling $20 705 in 1996-97. Despite an average annual increase of 0.2% in the funding allocated to research (per professor) by the federal government and an increase of 3.7% in the funding granted by the provincial government, the decrease in the private sector's contribution (9%) resulted in an average annual decline of 1.3% in the total funding allocated to university research since 1992-93.

Over the last ten years, the direct contribution to research by the Canadian and Québec governments also increased steadily (4% and 7%, respectively), but given the exceptional growth in the private sector's participation between 1986-87 and 1992-93, the governments' relative contribution decreased during this period. However, the

direct contribution of governments does not take into account the cost of tax incentives for encouraging industry to have its research done by university research departments.

In 1980, Québec universities received 22% of the funding allocated by the three main federal research councils,[1] whereas in 1995, they were granted 29% of the available funding. The latter percentage is higher than the ratio of the number of research professors in Québec to the total number in Canada (approximately 25%).

In 1996-97, 79% of the grants and research contracts were awarded in the fields of health sciences, pure sciences and applied sciences; grants and research contracts in health sciences accounted for 36% of the total funding. Research in education grew on average 11% per year from 1989-90 to 1994-95, going from $9 million to $15.1 million. In 1995-96, it dropped to $8.8 million and in 1996-97, it rose to $11.2 million.

1. The Medical Research Council of Canada (MRC), the National Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRCC).

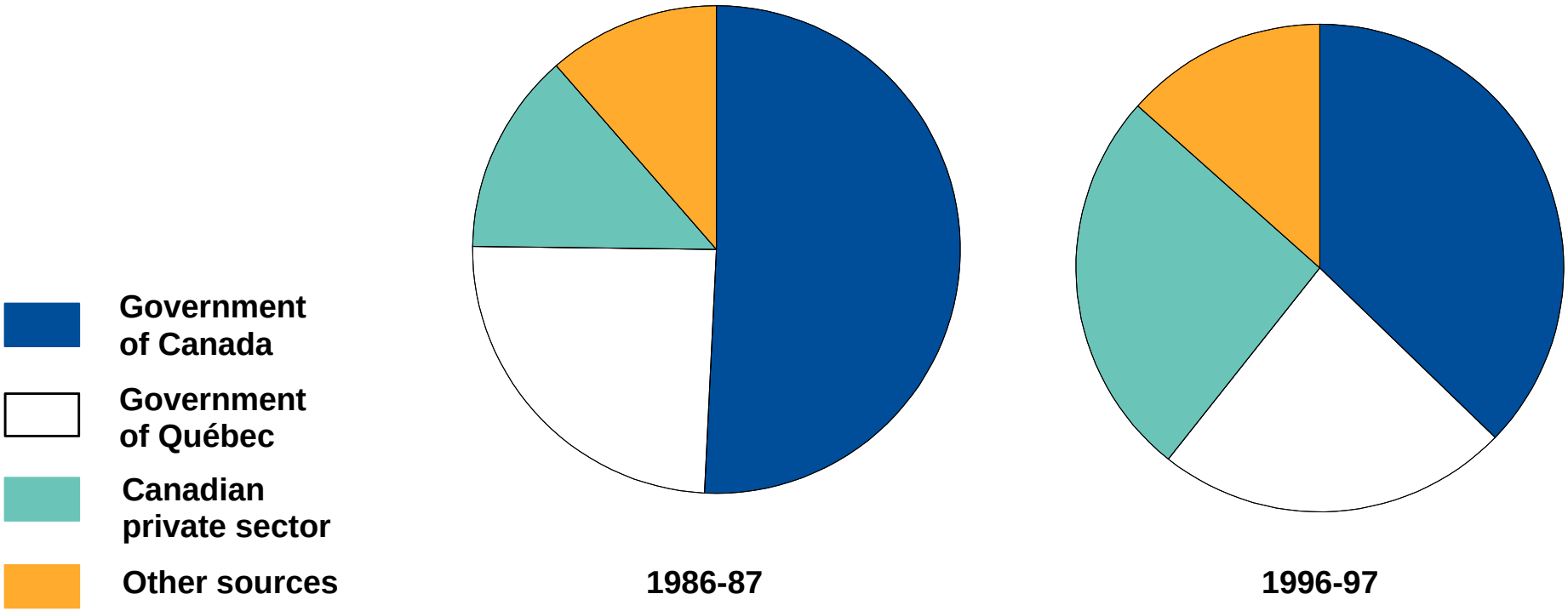
Table 1.16
Funded and sponsored research per research professor, by source of funding

	1986-87	1990-91	1992-93	1993-94	1994-95	1995-96	1996-97
Funded and sponsored research[1]							
Grants and research contracts (in millions of dollars)	259.7	456.4	655.0	632.9	586.6	587.6	606.2
Number of research professors[2]	6 775	7 266	7 771	7 852	7 945	7 799	7 586
Amount per research professor (in dollars)	38 331	74 962	84 283	80 597	73 832	75 338	79 918
Amount per research professor, by source of funding (in dollars)							
Government of Canada	19 484	28 143	29 474	28 814	29 492	29 173	29 754
Government of Québec	9 357	14 941	16 174	16 926	17 808	18 312	18 716
Canadian private sector	5 130	24 253	30 162	25 416	16 625	17 975	20 705
Other sources	4 360	7 626	8 474	9 441	9 907	9 878	10 744

1. This refers to all research receiving direct assistance (e.g. grants, contracts, commissions) from either the university itself or from external organizations. Included are research projects conducted under the supervision of a university's research professors for which funds have been put into specific accounts managed by the financial services or accounting department of a university, hospital or university-affiliated centre (according to the definition of the *Système d'information sur la recherche universitaire*–SIRU).
2. This refers to the number of full-time research professors in Québec universities. Professors in management positions are excluded (source: Ministère de l'Éducation and Conference of Rectors and Principals of Quebec Universities, *Enquête sur le personnel enseignant*).

Graph 1.16

Distribution of grants and research contracts, by source of funding



2 Activities

2.1 School Life Expectancy

A child who began elementary school in 1997-98 can expect to spend 15.4 years in the education system.[1] Since 1988-89, 0.9 years of schooling has been added for both male and female students. School life expectancy has not improved in terms of the duration of 15.7 years observed in 1993-94. In 1996-97, students from Québec and from France[2] spent 15.6 years in school.

From elementary to university education, in 1997-98, school-aged Quebecers could expect to stay in school for an average of 15.4 years.

A breakdown by level of education reveals that all recent increases 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 0.36 years, resulting from an increase of 0.52 years in the adult sector and a drop of 0.16 years in the youth sector.

For elementary and secondary school, the actual duration of schooling corresponds to the projected length of studies. This is not surprising given that enrolment in these levels of education is virtually universal and almost compulsory until the end of secondary school. The reason that at the college and university levels the average duration of schooling is less than the length of programs is primarily because not everyone goes 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 very slight decline since 1992-93 in the duration of schooling at the elementary and secondary levels can be explained simply by the decrease in the

---

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 et de la Technologie, Direction de la programmation et du développement, *L'état de l'École*, Paris, no. 8 (October 1998).

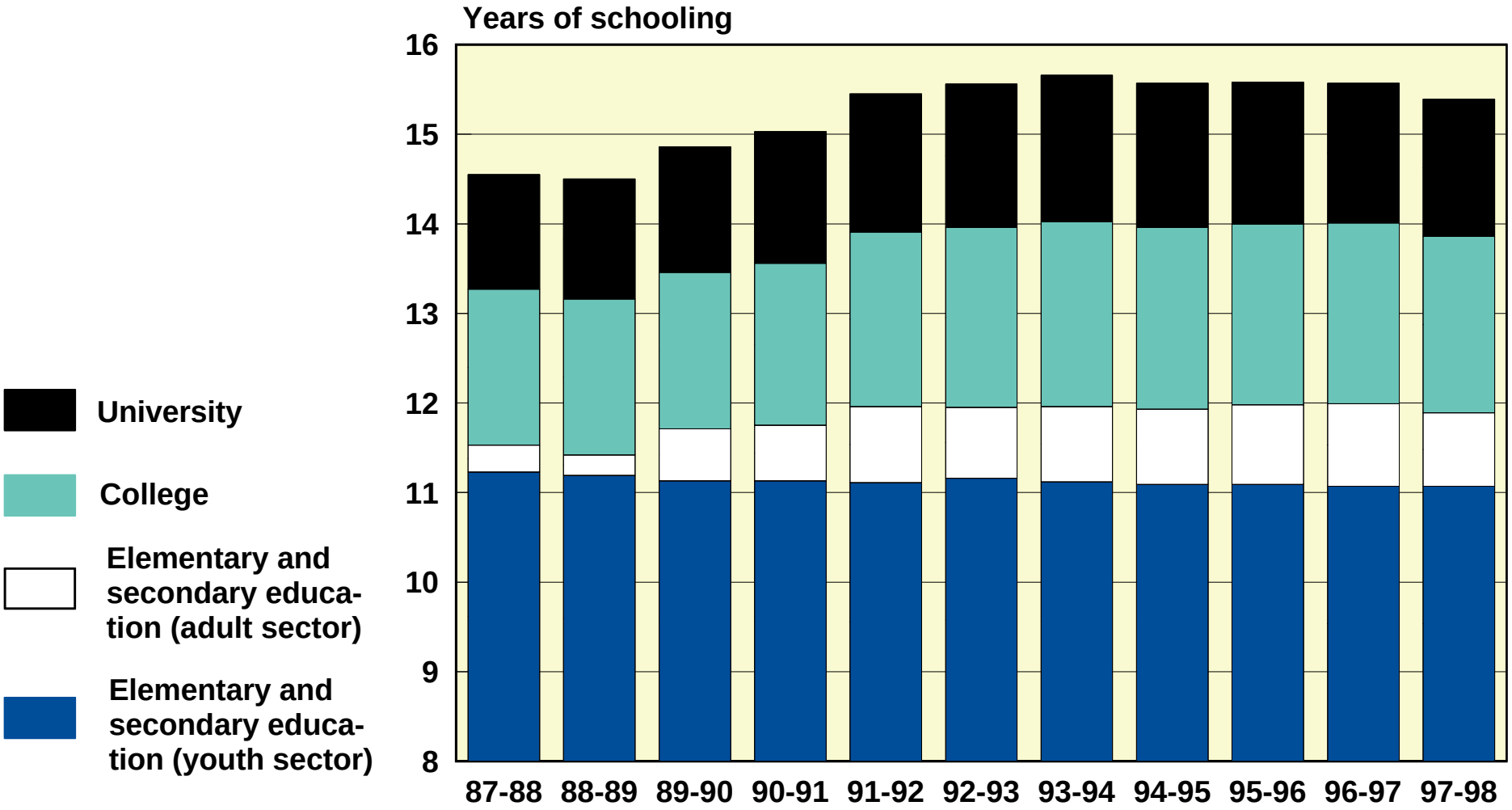
number of years that are repeated (see Section 2.7). At the elementary and secondary levels, male students attend school slightly longer than female students precisely because they have more difficulties. At the college and university levels, women tend to stay in school longer because more of them enrol in postsecondary education than men (see sections 2.9 and 2.11).

Table 2.1
School life expectancy for a child entering elementary school, by gender and level of instruction (in years)

	1987-88	1988-89	1993-94	1995-96	1996-97	1997-98
All levels of instruction by gender						
Male	N/A	14.2	15.4	15.3	15.3	15.1
Female	N/A	14.8	16.0	15.9	15.9	15.7
Both	**14.5**	**14.5**	**15.7**	**15.6**	**15.6**	**15.4**
Both according to level of instruction						
Elementary (youth sector)	6.14	6.16	6.12	6.10	6.08	6.06
Secondary (youth sector)	5.09	5.03	5.01	4.98	4.99	5.01
Elementary and secondary (adult sector)	0.30	0.23	0.84	0.89	0.92	0.82
College	1.74	1.74	2.06	2.02	2.02	1.97
University	1.28	1.34	1.64	1.58	1.56	1.53

Graph 2.1

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



2.2 Enrolments in Preschool Education

Enrolments in kindergarten for 5-year-olds[1] has varied between 97% and 99% for a number of years. There is no difference between the enrolment of boys and girls in either kindergarten for 5-year-olds or kindergarten for 4-year-olds. Until recent years, enrolment in kindergarten for 4-year-olds varied between 6% and 9%; enrolment has been significantly higher since 1994-95 because children in *Passe-partout* play groups are now included; it stands at 17.4% in 1998-99.

In 1998-99, 96.7% of all eligible children attend kindergarten for 5-year-olds, almost all of them on a full-time basis.

Children enrolled in part-time kindergarten[2] have always accounted for approximately 87% of all students in kindergarten for 5-year-olds, and there have been no differences between boys and girls. In 1997-98, with the kindergarten reform, the situation has become completely reversed because almost all boys and girls enrolled in kindergarten for 5-year-olds attend on a full-time basis.

Students with handicaps or learning or adjustment difficulties account for approximately 2% of enrolments in kindergarten for 5-year-olds.[3] There are marked differences between boys and girls. Approximately 1.5% of girls have handicaps or learning or adjustment difficulties, compared with almost twice as many boys (2.7%).

Countries use daycare centres, kindergartens and regular schools to varying degrees for the education of young children. In Québec, daycare centres are entrusted with a relatively large share of educational activities, while the

1. This refers to the number of children enrolled 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-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 refers to five half-days per week and full-time attendance refers to five full days per week. In kindergarten for 4-year-olds, part-time attendance refers to one to four half-days per week and full-time attendance refers to five half-days per week.
3. This analysis uses data from 1997-98, the most recent data available.

official school system plays a greater role in children's lives later on. In comparison with the various OECD countries,[4] 5-year-olds in Québec have about the same probability of attending school, be it at the kindergarten or elementary level. In 1995-96, Germany and Sweden were two of the small number of countries where enrolment was not universal, or almost universal, at 5 years of age. In the case of 4-year-olds, Québec compares with the OECD countries that most often used institutions other than schools to provide such services. Moreover, in many countries, the rate of 4-year-olds attending school is almost as high as that of 5-year-olds. Of the 26 OECD countries for which data is available for 1995-96, 11 had a schooling rate for 3-year-olds that was higher than 50%. In Canada and Québec, 3-year-olds do not attend school; this is rare among the OECD countries.

4. The Organisation for Economic Co-operation and Development (OECD) calculates the net schooling rate, which is the proportion of children of a given age who attend preschool or elementary school. Preschool and elementary school are considered as one category because of significant differences among the various countries. In the United Kingdom, for example, attendance in kindergarten for 4-year-olds is marginal because most children are already enrolled in elementary school. In theory, a net schooling rate should never exceed 100%; however, this does occur in some of the OECD tables, given the various technical constraints and the quality of the statistical data provided by certain countries. In Graph 2.2, it is important not to over-emphasize minor differences. It should be understood that the top eight countries listed are approximately all at the same level; virtually all 5-year-olds attend school. Furthermore, this net schooling rate does not differentiate between the types of attendance. Full-time and part-time attendance, as well as hours and days of attendance per week are not taken into consideration. Here too, differences among the various countries may also be quite significant.

Table 2.2
Proportion of children enrolled in kindergarten for 4-year-olds and 5-year-olds (%)

	1981-82	1991-92	1994-95	1996-97	1997-98	1998-99[e]
Kindergarten for 4-year-olds	**7.4**	**8.8**	**14.4**	**17.8**	**17.4**	**17.4**
Passe-partout play groups	N/A	N/A	5.0	8.4	8.4	8.4
Other	7.4	8.8	9.4	9.4	8.9	9.0
Kindergarten for 5-year-olds	**97.3**	**97.3**	**97.5**	**97.1**	**98.0**	**96.7**
Full time[1]	–	–	10.1	10.2	97.4	96.0
Part time[2]	–	–	87.4	86.9	0.6	0.7

N/A: Not available

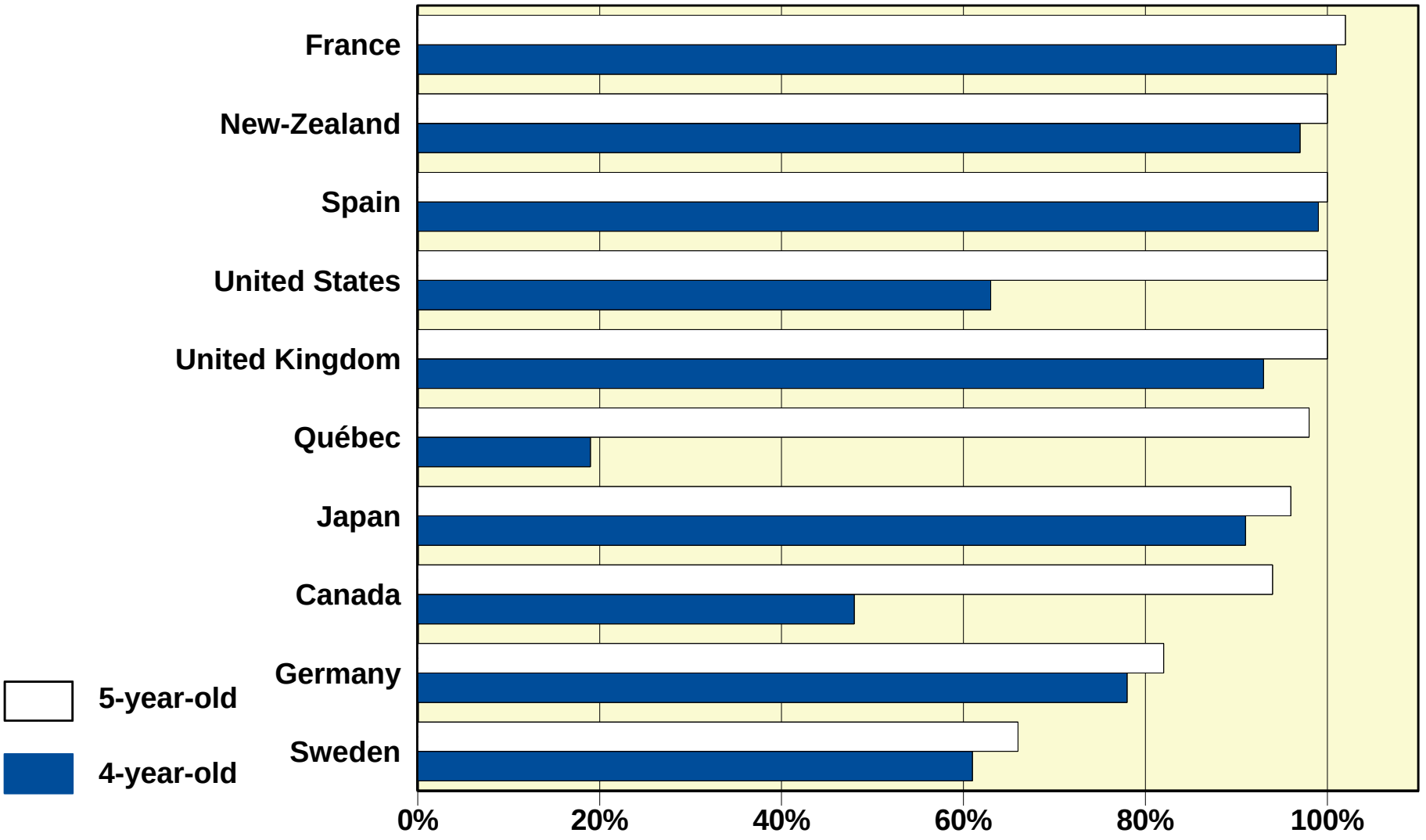
–: Not applicable

e: Estimates

1. Full time: five full days.
2. Part time: five half-days.

Graph 2.2

Net schooling rate of 4- and 5-year-olds: Québec, Canada and various other countries, 1995-96 (%)



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

Enrolments in Secondary V in 1997-98 rose by 1 percentage point to 76.0%, after having dropped 3.5 percentage points between 1995-96 and 1996-97. Similarly, with a rate of 85.4%, enrolments in Secondary IV have been on the rise in recent years, even though they did not reach the all-time high of 86.3% recorded in 1994-95. But in both cases, the 1997-98 enrolment rate is the second highest ever observed.

In 1997-98, in general education in the youth sector, enrolments in Secondary V reached 76.0%. With the exception of 1995-96, this is the highest rate ever observed.

From a more historical perspective, Graph 2.3 shows that enrolments in Secondary IV and V increased appreciably in the 1980s. This trend can be explained by the fact that admission to vocational education was delayed to ensure that students spent an extra year in general education. On the other hand, the drop observed in 1985-86 (in Secondary IV) and in 1986-87 (in Secondary V) was due to the raising of the pass mark.[1] There was a temporary decline in student retention, but it was not long before an upward trend took hold once again.

For the past several years, virtually all young Quebecers have enrolled in Secondary I,[2] that is, 99% in 1996-97 and 98% in 1997-98. In 1997-98, 99% entered Secondary II and 93% enrolled in Secondary III. Figures in recent years have been relatively stable, even though enrolments in Secondary II and III are the highest ever observed. Obviously, the higher the enrolments at the beginning of secondary school for a given generation, the more likely this generation is to have higher enrolment rates in Secondary IV and V and better graduation rates as well.

Differences in enrolments between female and male students appear in Secondary III, where female students are ahead of the male students by 3 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.

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1. The higher pass mark was applicable to students who entered secondary school in 1982-83.
2. Some young people are not educated in the official education system. They may receive their schooling in reception centres, in schools not legally recognized or at home.

Table 2.3

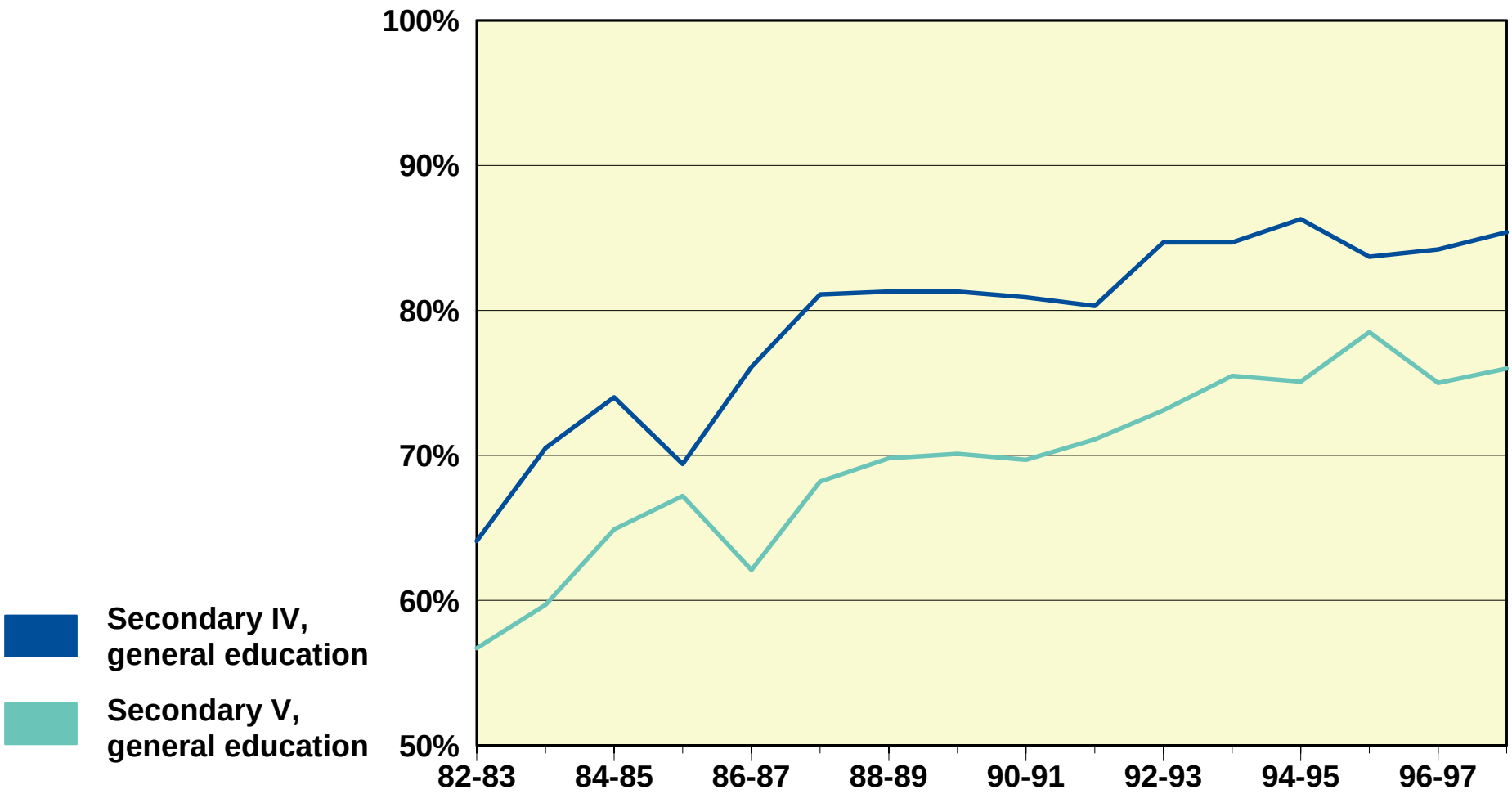
Proportion of young people enrolling in Secondary IV and V in general education in the public and private systems, by gender (%)

	1982-83	1987-88	1992-93	1995-96	1996-97	1997-98
Secondary IV						
Male	59.9	76.8	81.6	80.4	80.7	82.0
Female	68.6	85.5	87.9	87.1	88.0	89.1
Both	64.1	81.1	84.7	83.7	84.2	85.4
Secondary V						
Male	53.6	63.5	68.4	73.8	69.9	70.4
Female	60.0	73.2	78.2	83.5	80.5	81.8
Both	56.7	68.2	73.1	78.5	75.0	76.0

Note: Students enrolled in vocational education are not included.

Graph 2.3

Proportion of young people enrolling in Secondary IV and V in general education in the public and private systems (%)



2.4 Enrolments in Secondary Vocational Education–Youth and Adult Sectors

The proportion of students under the age of 20 enrolling in vocational education programs was 16.9% in 1997-98. This is a slight drop from the rate observed in 1996-97 (17.3%). Since 1984-85, enrolments of students already holding a Secondary School Diploma (SSD) have been steadily rising, and stood at 10.5% in 1997-98.

In 1997-98, 16.9% of young people enrolled in vocational education, 62% of whom already held an SSD.

As short vocational programs were phased out, 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 part of general education. Enrolment of students without diplomas was 6.4% in 1997-98 and represented only 38% of all vocational education enrolments under the age of 20.

Vocational education programs have traditionally attracted more male students than female students. In 1997-98, 19.6% of male students opted for this path, compared with 14.0% of female students. This situation applies equally to students who had a diploma and to those who did not. This is the opposite of what has been occurring in general education in the youth sector (see Section 2.3), where female students tend to stay in school longer. Male students, who are more likely to enrol in vocational education programs than female students, more often leave general education and the youth sector.

Table 2.4

Enrolment in vocational education of students under the age of 20, youth and adult sectors combined (%)

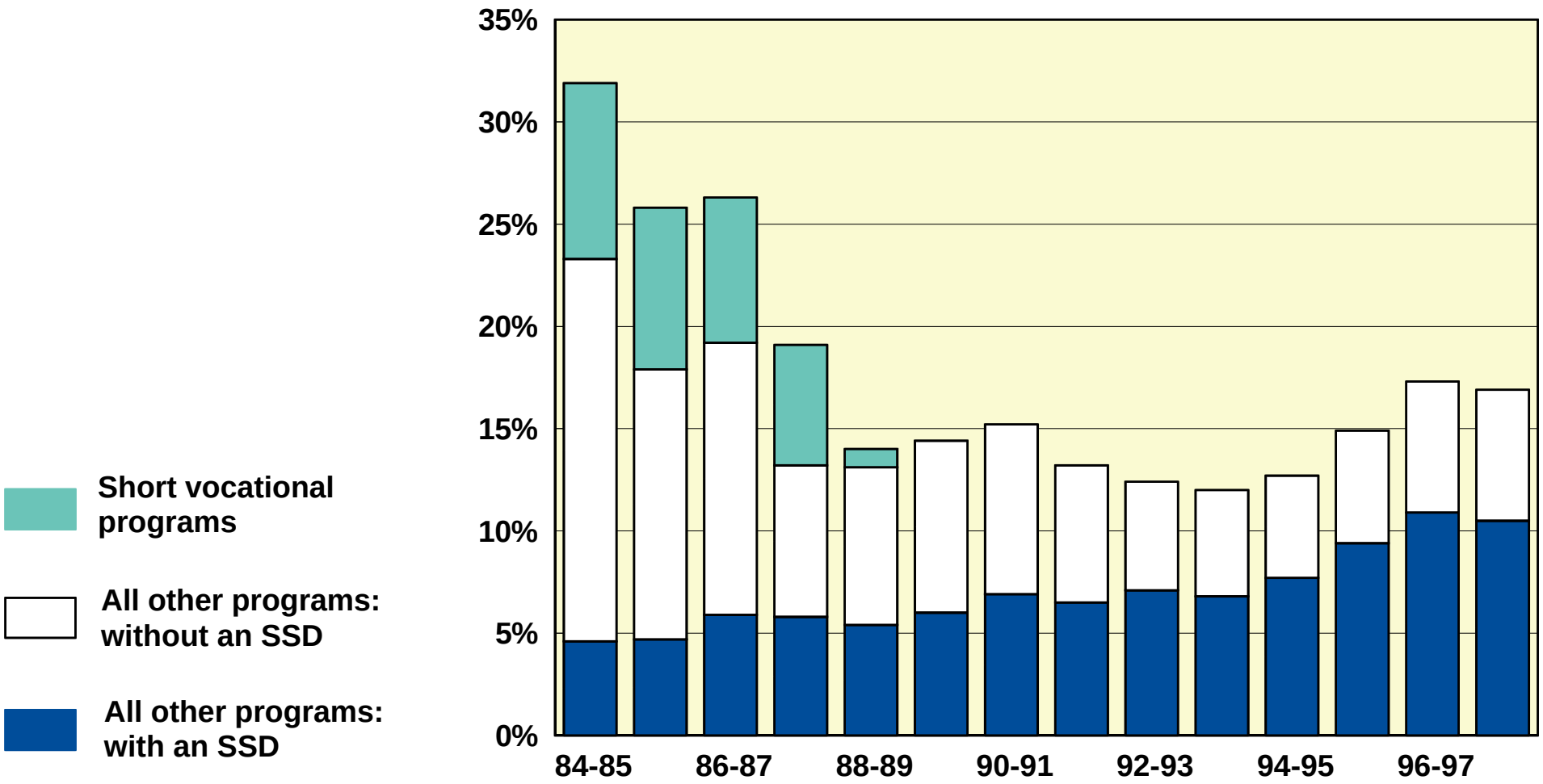
	1984-85	1989-90	1994-95	1995-96	1996-97	1997-98
MALE						
Short vocational programs[1]	11.9	–	–	–	–	–
All other programs	**21.8**	**18.0**	**15.0**	**17.4**	**20.5**	**19.6**
Without an SSD	18.2	11.5	6.6	7.2	8.7	8.3
With an SSD	3.6	6.5	8.4	10.2	11.8	11.3
FEMALE						
Short vocational programs[1]	5.2	–	–	–	–	–
All other programs	**24.8**	**10.6**	**10.4**	**12.2**	**13.8**	**14.0**
Without an SSD	19.1	5.0	3.4	3.7	4.0	4.3
With an SSD	5.7	5.5	7.0	8.5	9.8	9.7
BOTH						
Short vocational programs[1]	8.6	–	–	–	–	–
All other programs	**23.3**	**14.4**	**12.8**	**14.8**	**17.3**	**16.9**
Without an SSD	18.7	8.4	5.0	5.5	6.4	6.4
With an SSD	4.6	6.0	7.7	9.4	10.9	10.5

–: Not applicable

1. Most enrolments in short vocational programs are young people without a diploma.

Graph 2.4

Enrolment in vocational education of students under the age of 20, youth and adult sectors combined (%)



2.5 Enrolments in Secondary General Education in the 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 1997-98, 12.0% of students under the age of 20 transferred directly from the youth sector to the adult sector.

In 1997-98, 12.0% of a school-aged generation under the age of 20 went directly from the youth sector to the adult sector in general education without interrupting their studies. In 1984-85, such students accounted for only 1.3%; there has therefore been a ninefold increase. In view of this, the relatively low rate of 5.0% observed in 1992-93 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 1993-94 (9%) was due in large part to the fact that the envelope was once again opened for students 16 to 18 years of age.

An additional number of students re-enrol in general education in the adult sector after having interrupted their studies. Until 1986-87, among students aged 15 to 19, returning students registering in the adult sector were always more numerous than those going directly from the youth sector to the adult sector. Since then, however, the latter path has grown in popularity, and in 1997-98, accounted for three quarters of all new enrolments of students under the age of 20.

The adult sector does not limit its services to providing students leaving the youth sector with the opportunity to earn their diploma. Adult education is also open to those who already have a secondary school diploma, but who wish to add to their initial education. Of those students without a diploma who enrol 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.

1. As a result, the school boards had to encourage students to stay in the youth sector (whose envelope was still open), since there were no financial resources to accommodate them in the adult sector in 1992-93.

Table 2.5

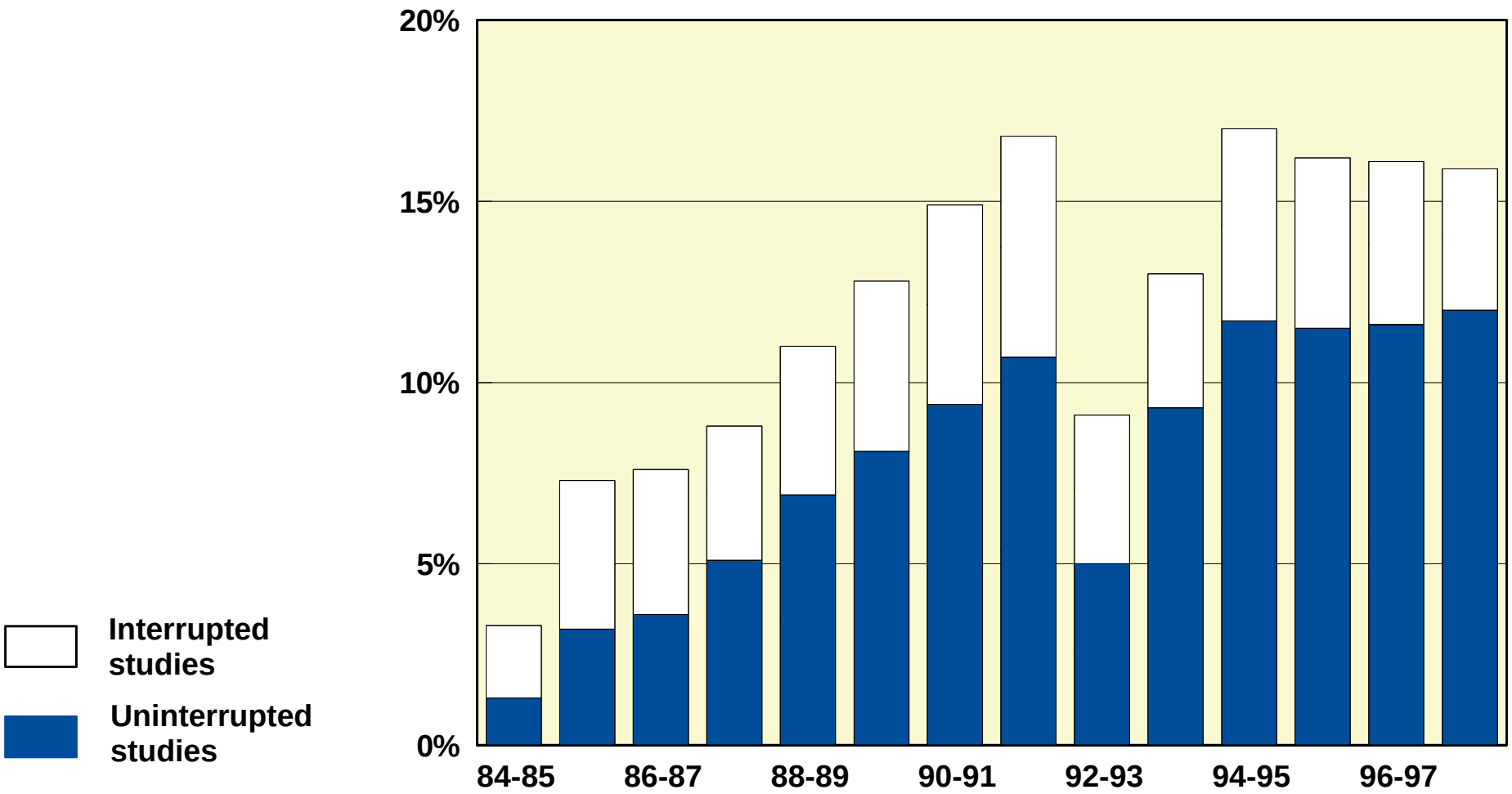
Enrolment in general education in the adult sector of students under the age of 20 without a secondary school diploma, by gender (%)

	1984-85	1989-90	1994-95	1995-96	1996-97	1997-98
Male						
Uninterrupted studies[1] (directly from the youth sector)	1.4	9.1	13.6	13.6	13.5	13.7
Interrupted studies	1.9	4.5	5.7	5.2	5.1	4.3
Total (both categories)	3.3	13.6	19.3	18.8	18.6	18.0
Female						
Uninterrupted studies[1] (directly from the youth sector)	1.1	7.1	9.7	9.3	9.5	10.1
Interrupted studies	2.0	4.9	4.8	4.3	4.0	3.5
Total (both categories)	3.1	12.0	14.5	13.6	13.5	13.6
Both						
Uninterrupted studies[1] (directly from the youth sector)	1.3	8.1	11.7	11.5	11.6	12.0
Interrupted studies	2.0	4.7	5.3	4.7	4.5	3.9
Total (both categories)	3.2	12.9	17.0	16.3	16.1	15.9

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

Graph 2.5

Enrolment in general education in the adult sector of students under the age of 20 without a secondary school diploma (%)



2.6 Early School Leavers–Youth and Adult Sectors

In 1997-98, 30.5% of students left school without obtaining a diploma[1] in the youth sector or before the age of 20 in the adult sector. In the mid-1970s, this rate fluctuated between 45% and 50%, but then began to slide and dropped to under 28% by the mid-1980s. The subsequent increase was caused by several factors, including the stricter graduation requirements stipulated in the basic school regulation[2] and certain measures that stimulated the growth of the adult sector.

At 12.0% in 1995-96, the probability of not obtaining a diploma rose to 18.8% in 1997-98.

The number of students who leave school without a diploma is lower if the graduation rate of adults is considered. If both the youth sector and the adult sector (all ages) are taken into account, the probability of not obtaining a diploma was 18.8% in 1997-98.

Some students with mental handicaps leave secondary school without a diploma after having attended school until the age of 21. Other students enrolled in continuous individualized paths for learning enter life skills and work skills education programs at the age of 16. The latter students may then obtain an attestation of skills issued by the school board. Although this certificate recognizes that the student has attained a certain level of achievement, it is not considered a diploma in the strict sense of the word. Strictly speaking, these students cannot be considered dropouts. The same holds true for students who transfer from the youth sector to the adult sector without interrupting their studies. Moreover, in 1997, the Ministère issued close to 5 000 Attestations for Equivalence of Secondary Studies.

In 1997, the probability of female students not obtaining a diploma was 11.5%; for male students it was twice as high, at 25.8%.

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1. The diplomas considered here are the Secondary School Diploma (SSD), the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Secondary School Vocational Diploma (SSVD), the Attestation of Vocational Specialization (AVS), the Vocational Education Certificate (VEC) and certification for on-the-job training in a recycling facility.
2. This refers primarily to the raising of the secondary school pass mark from 50% to 60% and the introduction of an extra year of study in general education as a requirement for admission to vocational education.

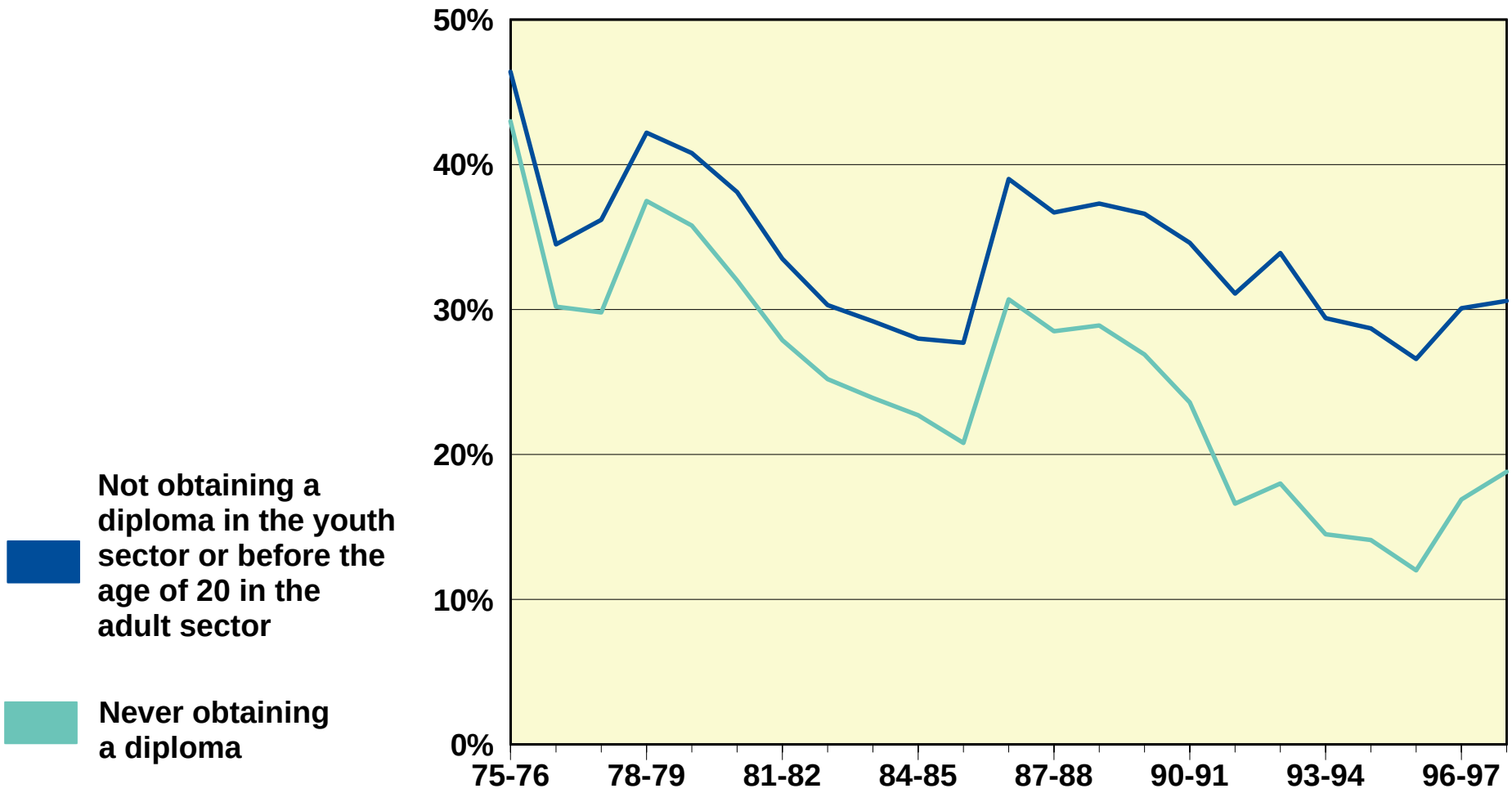
Table 2.6
Proportion of a generation of students leaving secondary school without a diploma, by gender (%)

	1975-76	1985-86	1995-96	1996-97	1997-98[e]
Male					
Proportion of a generation:					
– not obtaining a diploma in the youth sector	52.6	33.5	35.9	38.7	41.3
– not obtaining a diploma in the youth sector or before the age of 20 in the adult sector	51.8	32.9	33.0	35.7	38.1
– never obtaining a diploma	48.8	26.9	18.6	22.5	25.8
Female					
Proportion of a generation:					
– not obtaining a diploma in the youth sector	41.5	22.7	23.0	27.1	26.0
– not obtaining a diploma in the youth sector or before the age of 20 in the adult sector	40.9	22.1	19.8	24.2	22.7
– never obtaining a diploma	36.9	14.5	5.0	11.1	11.5
Both					
Proportion of a generation:					
– not obtaining a diploma in the youth sector	47.1	28.3	29.6	33.1	33.8
– not obtaining a diploma in the youth sector or before the age of 20 in the adult sector	46.4	27.7	26.6	30.1	30.6
– never obtaining a diploma	43.0	20.8	12.0	16.9	18.8

e: Estimates

Graph 2.6

Proportion of a generation of students leaving secondary school without a diploma (%)



2.7 Students Repeating a Year in Elementary School and in Secondary General Education–Youth Sector

Since 1990-91, the proportion of students repeating a year[1] has been steadily dropping to 5.4% in 1997-98. A record-high number of students repeated a year in 1990-91.

Despite a decline in grade repeating at the elementary and secondary levels, one out of six boys repeated Secondary I in 1997-98.

The number of male students who repeat a given year is always higher than the number of female students, regardless of the school year or the grade level. The proportion of male students who repeat a year is often more than one and one half times higher than the proportion of female students in the same situation. There are twice as many repeaters in secondary school as there are in elementary school, and the probability of repeating a year is always significantly higher in Secondary I. This situation 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 continuous individualized paths for learning may be classified for administrative purposes in Secondary I for several years.

The rate of repeating Secondary I has stayed high since 1983-84, when it was already at 13.7%. That was the year in which the effects of raising the secondary school pass mark from 50% to 60% were first felt.[2]

In both elementary and secondary school, the first year is always the most difficult to pass. The rate of repeaters dwindles as the grade level increases. Even if the proportion of students who repeat a year is relatively low in the

1. Repeaters are those students who were in the same grade or a higher grade the preceding year. For our purposes, students in Elementary 7 and Secondary VI general education are considered repeaters.
2. The new higher pass mark was applied to students entering secondary school in 1982-83. Despite incomplete data, it can be established that, in 1982-83, the proportion of repeaters was 9.2% in Secondary I. Thereafter, between 1983-84 and 1984-85, this proportion jumped from 7.0% to 9.3% in Secondary II. In 1985-86, this figure increased again in Secondary III, and it continued to rise in the subsequent grades until 1987-88.

final years of secondary school, that does not necessarily mean that students' performance has improved. Indeed, at this point many students have reached the age where school attendance is no longer compulsory and they either drop out of school or continue their studies in vocational education or in the adult sector.

Obviously, the cumulative effect of repeating a year is to delay students in their schooling. Thus, in 1997-98, at the end of the normal six-year period of elementary school, 23.3% of 12-year-olds had not reached secondary school.

Grade repeating lengthens the duration of studies, but early school leaving shortens it. While the average duration of secondary studies is 5 years, it is 5.2 years or so for students leaving with a diploma, but only 4.2 years[3] for those leaving without one.

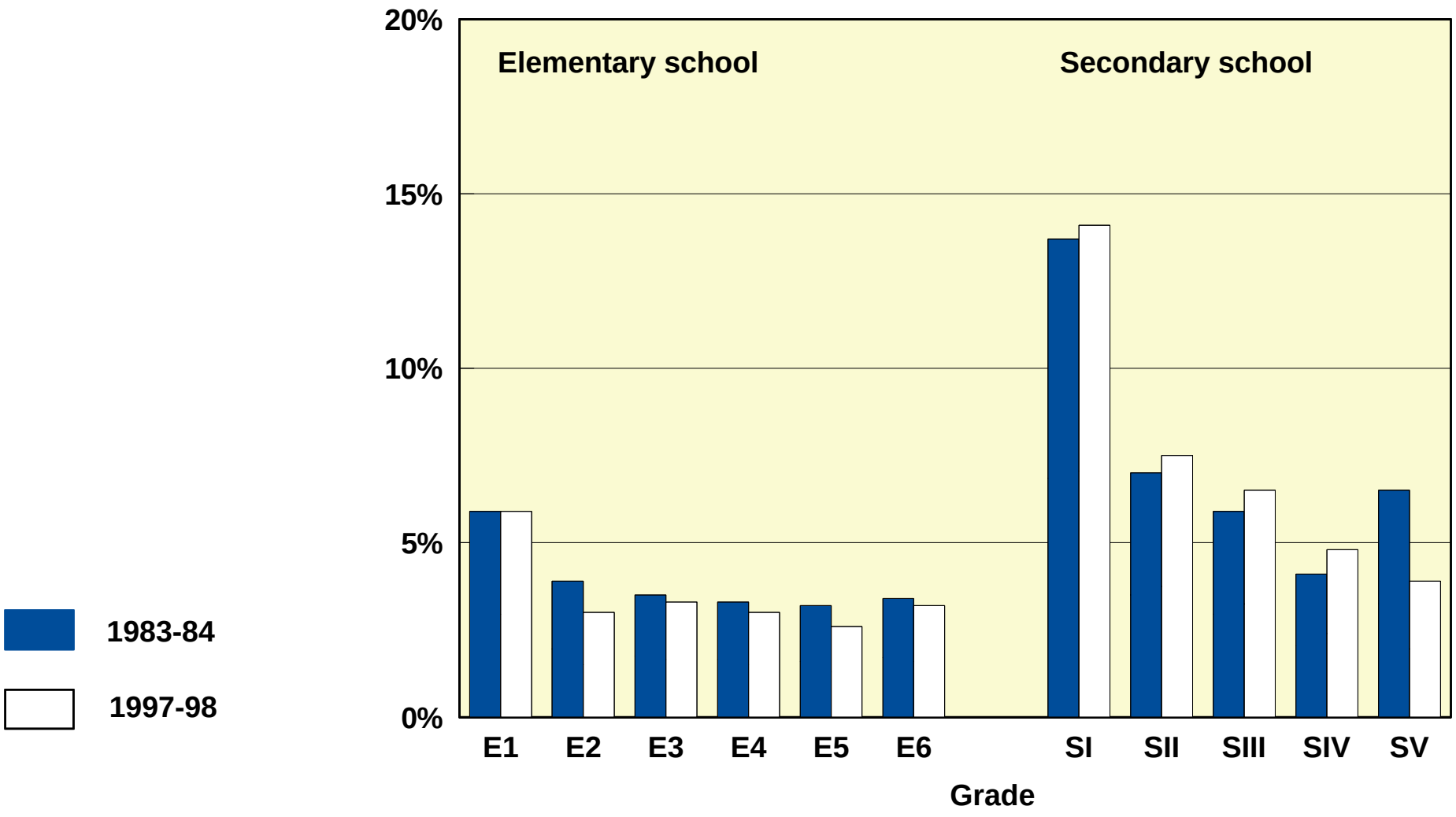
3. These durations do not take into account the time spent in elementary education, which is generally longer for students who do not finish their secondary studies.

Table 2.7
Proportion of students repeating a year, by level of instruction and gender (%)

	1983-84	1990-91	1993-94	1995-96	1996-97	1997-98
Elementary school						
Male	5.9	7.0	5.9	5.4	4.8	4.3
Female	3.5	4.4	3.7	3.5	3.1	2.8
Both	4.7	5.7	4.9	4.5	4.0	3.6
Secondary school (general education)						
Male	11.0	12.1	11.5	10.5	10.4	9.4
Female	6.4	7.8	6.9	6.5	6.3	5.9
Both	8.7	10.0	9.3	8.5	8.4	7.7
Secondary I						
Male	16.9	18.6	19.8	20.1	18.4	16.9
Female	10.1	12.4	12.4	12.7	11.6	10.8
Both	13.7	15.7	16.3	16.6	15.2	14.1
Total						
Male	8.1	9.2	8.5	7.8	7.4	6.6
Female	4.8	5.9	5.2	4.9	4.6	4.2
Both	6.5	7.6	6.9	6.4	6.0	5.4

Graph 2.7

Proportion of students repeating a year, by level of instruction and grade (%)



2.8 Going On to College[1] in Regular Education

In 1997-98, 57.6% of a generation of young Qubecers went on to college. The decline from the previous year followed a drop in the 1996-97 rate for graduating with a secondary school diploma. College admission criteria have also become more stringent.

In 1997-98, college enrolment dropped by 6 percentage points, to 57.6%, and was therefore at its lowest level in ten years.

Enrolment in college (regular education) rose by almost 22 percentage points between 1975-76 and 1986-87 (from 39.3% to 61.2%), followed by a drop of 4.6 percentage points in 1987-88. In the six years thereafter, it rose by 10 percentage points, reaching a new high of 66.7% in 1993-94. Since then, enrolment has dropped by 9.1 percentage points for all young Quebecers.[2]

Since the late 1970s, changes in college enrolment can be largely explained by trends observed at the secondary level in the youth sector: first, the growth in the secondary school graduation rate in general education until 1985-86; then, from 1986-87 on, the decline in the secondary school graduation rate because of the introduction of more stringent graduation requirements; a slower rise in the graduation rate between 1990-91 and 1995-96; and finally, a drastic drop in 1996-97.

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 eventually go on to college, along with a certain number of graduates in vocational education.

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1. The figures mentioned here include only students enrolled for the first time in programs leading to a Diplôme d'études collégiales (DEC–diploma of college studies) in regular education. In this edition, the method used to calculate the rates has been changed and the rates may differ from those already published.
2. Since the fall of 1997, students entering college must, in addition to having an SSD, have completed the following courses: Secondary V language of instruction and second language; Secondary IV history and physical science; and Secondary V mathematics or a Secondary IV mathematics course of comparable difficulty.

Over a period of 15 years or so, the gap between men and women going on to college widened steadily. Although rather negligible in the mid-1970s, the difference was 17.0 percentage points in favour of women in 1990-91. It was 14.2 percentage points in 1997-98, with women having lost the most ground in the last year.

College enrolment also varies with the type of education involved. Since 1984-85, the probability of enrolling in pre-university education has dropped slightly, going from 34.7% to 33.6% in 1997-98, after having reached a high of 43.8% in 1992-93. The probability of enrolling in technical education at college declined from 21.3% to 18.0% from 1986-87 to 1989-90, to return to 21.3% in 1992-93 and then settle at 18.9% in 1997-98.

In recent years, only enrolment in Explorations programs in regular education has increased. In 1993-94, 4.9% of students began their college studies in this type of program; in 1997-98, the figure was 5.1%, which, of a total of 57.6%, represents close to one out of ten new enrolments. A slight majority of first-time college students who enrol in this type of program pursue studies leading to a DEC in pre-university education in the fall of the following year.

Table 2.8

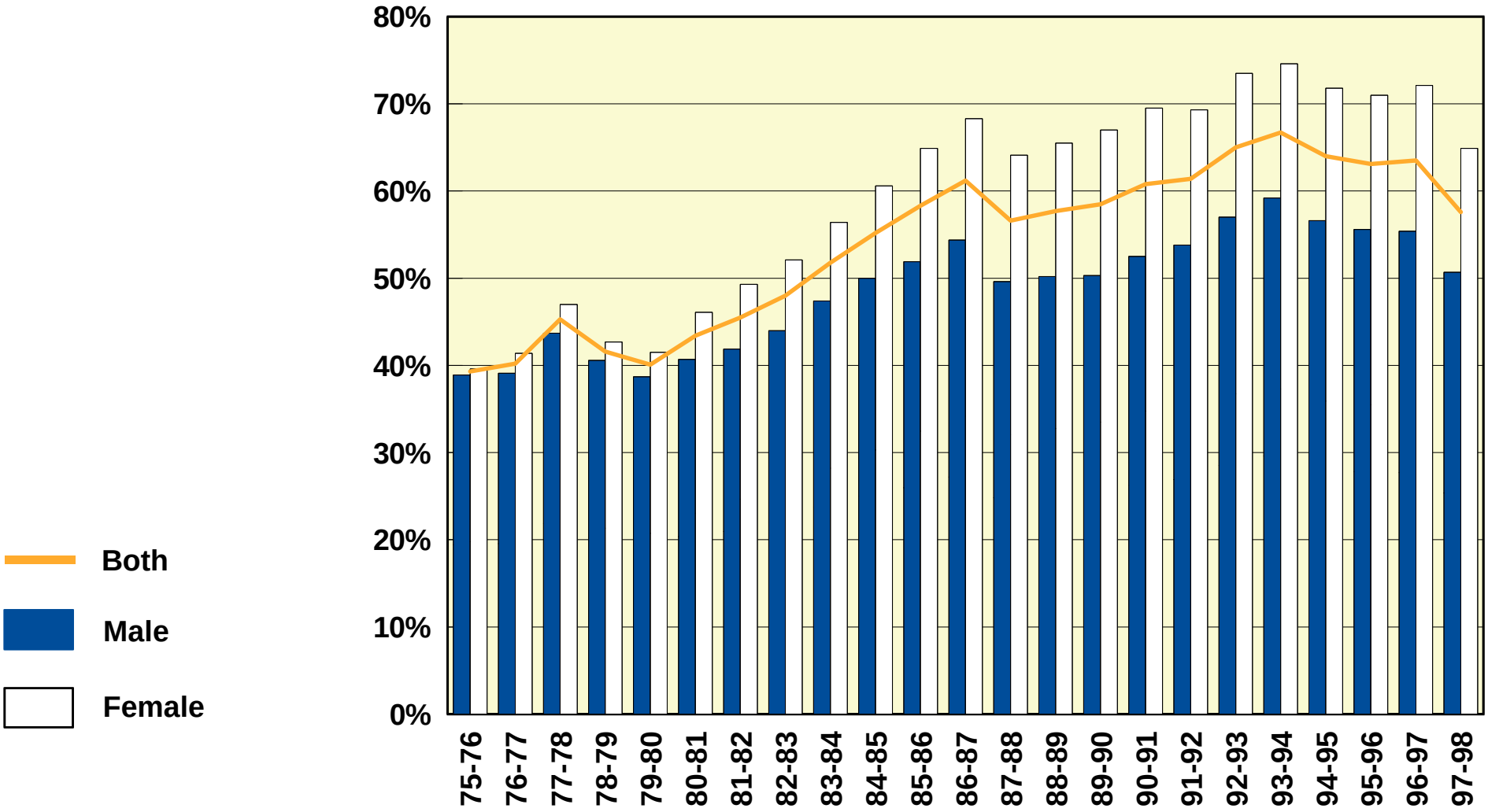
Full- or part-time enrolment in regular education in private or public colleges, by gender and type of education (%)

	1975-76	1985-86	1990-91	1995-96	1996-97	1997-98
Male	**38.9**	**51.9**	**52.5**	**55.6**	**55.4**	**50.7**
Pre-university education	25.4	34.2	36.5	31.3	29.8	27.0
Technical education	13.4	17.7	16.0	18.4	18.8	18.3
Explorations	–	–	–	5.9	6.8	5.4
Female	**39.6**	**64.9**	**69.5**	**71.0**	**72.1**	**64.9**
Pre-university education	22.5	40.9	46.6	44.6	44.6	40.7
Technical education	17.1	23.9	22.9	20.2	21.1	19.5
Explorations	–	–	–	6.1	6.4	4.7
Both	**39.3**	**58.3**	**60.8**	**63.1**	**63.5**	**57.6**
Pre-university education	24.0	37.5	41.4	37.8	37.0	33.6
Technical education	15.3	20.8	19.4	19.3	19.9	18.9
Explorations	–	–	–	6.0	6.6	5.1

–: Not applicable

Graph 2.8

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



2.9 Going Directly From College to University

In 1996-97, 80.0% of pre-university program graduates and 19.0% of technical program graduates went on to university.

The main objective of pre-university college studies is to prepare students for university. In 1996-97, 80.0% of pre-university program graduates aged 24 and under enrolled in university; this proportion was 78.6% in 1995-96. However, in 1997-98, fewer students went on to studies other then university then the previous year. On March 31, 1998, the proportion of persons with a full-time job was also lower than the previous year.

Since the early 1980s, the proportion of pre-university program graduates[1] going on to university has fluctuated between 78% and 87%, except in 1987-88, when it fell to 73.1%.

In technical education, more graduates aged 24 and under opt for the labour market, which is in fact the aim of this type of education. The proportion of these graduates going on to university was 19.0% in 1996-97 (18.9% the previous year). This proportion has remained stable for roughly the last ten years.

For more than ten years, more men than women aged 24 and under and graduates of technical programs pursued university studies. The gap is narrowing with time, such that in 1982-83, the difference was 7.5 percentage points, whereas it is only 3.1 percentage points now.

1. This refers to students who, between the months of September and August of a given school year were enrolled in the last year of a college program and who have successfully completed their studies. Furthermore, these students did not attend a CEGEP, private college certified for purposes of funding or government institution during the fall term following the completion of their studies.

Table 2.9

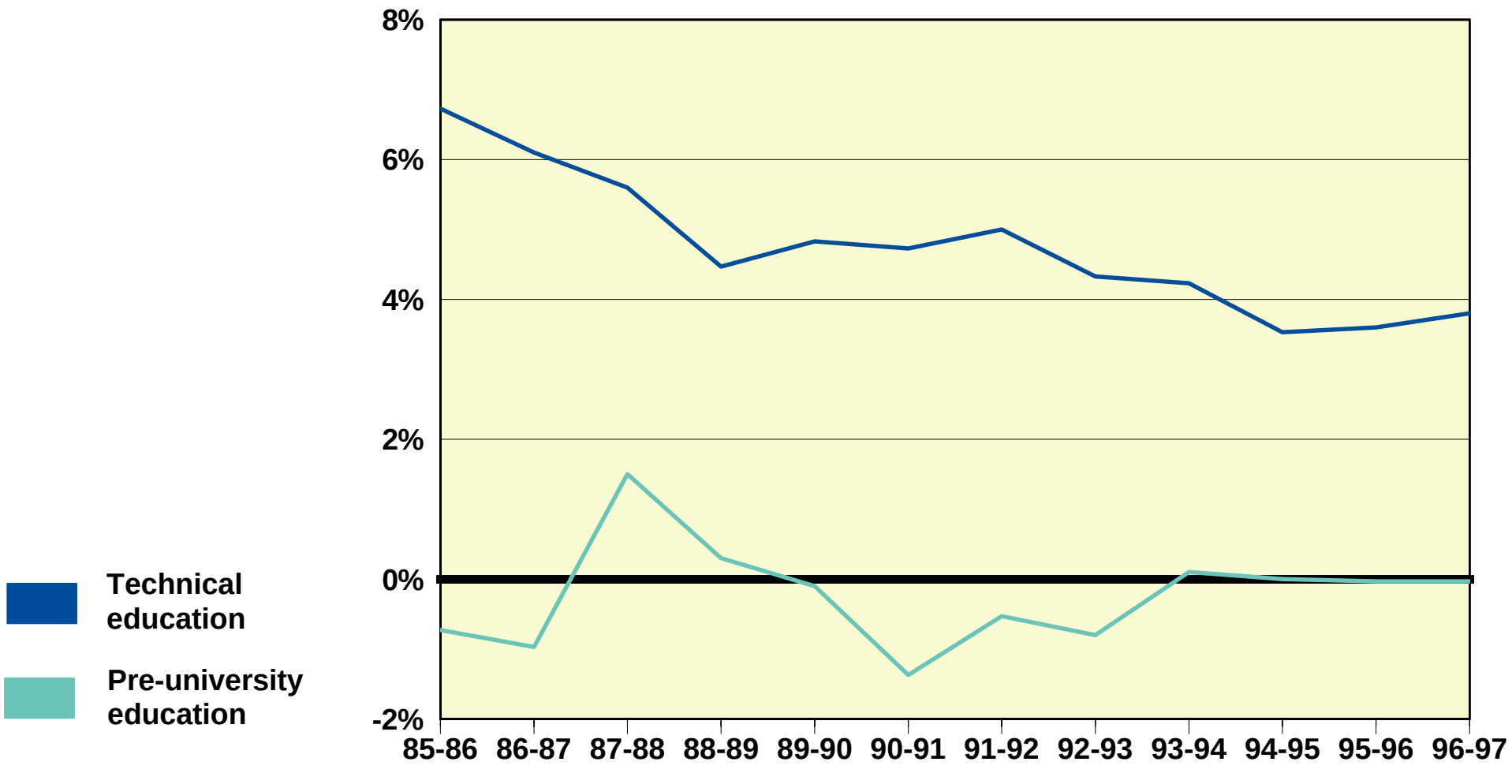
Proportion of college graduates (24 years old and under) going on to university without interrupting their studies, by type of education and gender (%)

	1982-83[1]	1990-91	1993-94	1994-95	1995-96	1996-97
Pre-university education						
Male	87.7	86.1	81.4	78.4	77.7	81.5
Female	84.3	86.3	78.9	79.8	79.3	79.0
Both	**86.0**	**86.2**	**80.0**	**79.2**	**78.6**	**80.0**
Technical education						
Male	21.9	22.0	20.1	21.2	21.4	21.0
Female	14.4	18.5	16.9	17.7	17.3	17.9
Both	**17.4**	**19.8**	**18.1**	**19.2**	**18.9**	**19.0**

1. Year in which the diploma was obtained.

Graph 2.9

Going directly from college to university: gap between men and women (three-year moving average)



2.10 University Enrolments

This section concerns only enrolments in programs leading to university degrees at the bachelor's, master's or doctoral levels. Enrolments in studies leading to certificates and enrolments in non-program studies are not measured here.

In 1997-98, the proportion of men enrolling in university studies leading to a bachelor's degree stood at 28.9%, the lowest point in 13 years.

The proportion of a generation enrolling for the first time in a program leading to a bachelor's degree increased by one third over an eight-year period, climbing to 39.7% in 1992-93, from 30.1% in 1984-85. In the last five years, there has been a decline of more than 5.8 percentage points in enrolment in programs leading to a bachelor's degree, lowering the probability of enrolling in university to 33.9% in 1997-98, below the 1987-88 level. A similar decline was observed in enrolment in college pre-university programs after 1992-93 (see Section 2.8).

Over the 13-year period, only women experienced gains in enrolment in bachelor's programs, for an increase of 7.8 percentage points, or a total of 39.1% in 1997-98, whereas men (28.9%) were below the level observed in 1984-85. The gap between the sexes was 10.2 percentage points, whereas it had been 2.4 percentage points 13 years earlier.

With respect to master's programs, enrolment dropped for the first time and returned to its 1994-95 level of 8.7%. This decline is no doubt related to the drop five years earlier in enrolment in bachelor's programs, as well as to the decrease in the rate of obtaining a bachelor's degree, as observed in 1997. Here too, gains were more favourable for women, whose enrolment rate was 8.9% in 1997-98, compared with 8.5% for men. In 1984-85, the difference was 1.5 percentage points in favour of the men. The overall increase in enrolment in master's programs (1.9 percentage points) between 1984-85 and 1997-98, was relatively higher than that observed at the bachelor's level, where there has in fact been a decrease in enrolments over the last five years.

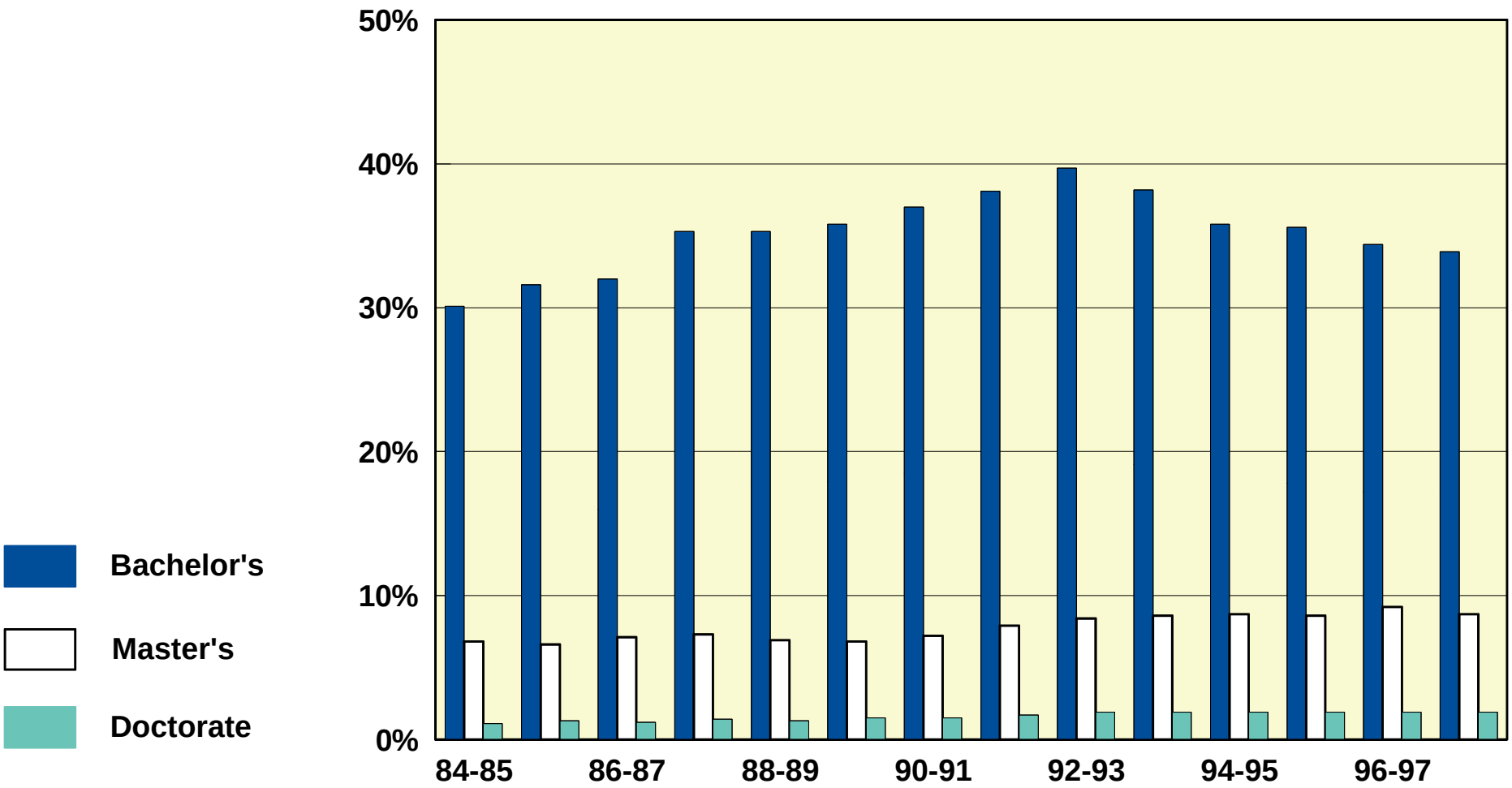
The growing interest in doctoral studies is significant even though it applies to only a small portion of the population. Enrolments rose from 1.1% in 1984-85 to 1.9% in 1997-98. Men (2.0%) continue to enrol in doctoral studies in slightly greater numbers than women (1.8%), but the number of women has increased considerably since 1984-85.

Table 2.10
Enrolment in a program leading to a university degree, by gender (%)

	1984-85	1989-90	1992-93	1994-95	1996-97	1997-98
Bachelor's programs						
Male	29.0	31.9	34.8	30.6	29.7	28.9
Female	31.3	39.9	44.9	41.2	39.2	39.1
Both	**30.1**	**35.8**	**39.7**	**35.8**	**34.4**	**33.9**
Master's programs						
Male	7.5	7.0	8.5	8.4	8.9	8.5
Female	6.0	6.7	8.3	9.0	9.4	8.9
Both	**6.8**	**6.8**	**8.4**	**8.7**	**9.2**	**8.7**
Doctoral programs						
Male	1.4	1.9	2.3	2.2	2.1	2.0
Female	0.8	1.1	1.4	1.6	1.6	1.8
Both	**1.1**	**1.5**	**1.9**	**1.9**	**1.9**	**1.9**

Graph 2.10

Enrolment in a program leading to a university degree (%)



2.11 Training of Researchers

Students enrolled in a program leading to a doctorate are probably the most representative of those who will go into university research. In the fall of 1997, these students numbered 9 268. From 1990 to 1997, this number increased by 4% a year on average.

In the fall of 1997, 32% of doctoral students were enrolled in pure and applied sciences, 31% in social sciences and 11% in health sciences.

Enrolments in doctoral programs are mainly concentrated in pure and applied sciences, social sciences and health sciences. In 1997, 32% of doctoral candidates were enrolled in pure and applied sciences, 31% in social sciences and 11% in health sciences.

Men accounted for most of the students enrolled in a program leading to a doctorate (57% in the fall of 1997, compared with 43% for the women). From 1990 to 1997, the increase in the number of women enrolled in doctoral programs (7%) was greater than it was for men (2%).[1]

In 1997, approximately 78% of the men in doctoral programs were enrolled in social sciences (26%), applied sciences (23%), pure sciences (19%) and health sciences (10%). The number of men enrolled in business administration has increased the most since 1990, that is, an average of 10% per year.[2]

The distribution of enrolments in doctoral programs differs for women and men. In the fall of 1997, 36% of the female students were in social sciences, 13% were in health sciences, 12% were in literature, 11% were in pure sciences and 8% were in applied sciences. The largest annual increase in female enrolments since 1990 has been in the fields of law (15%), the arts and applied science (11%), business administration (10%), and health sciences (8%).[3]

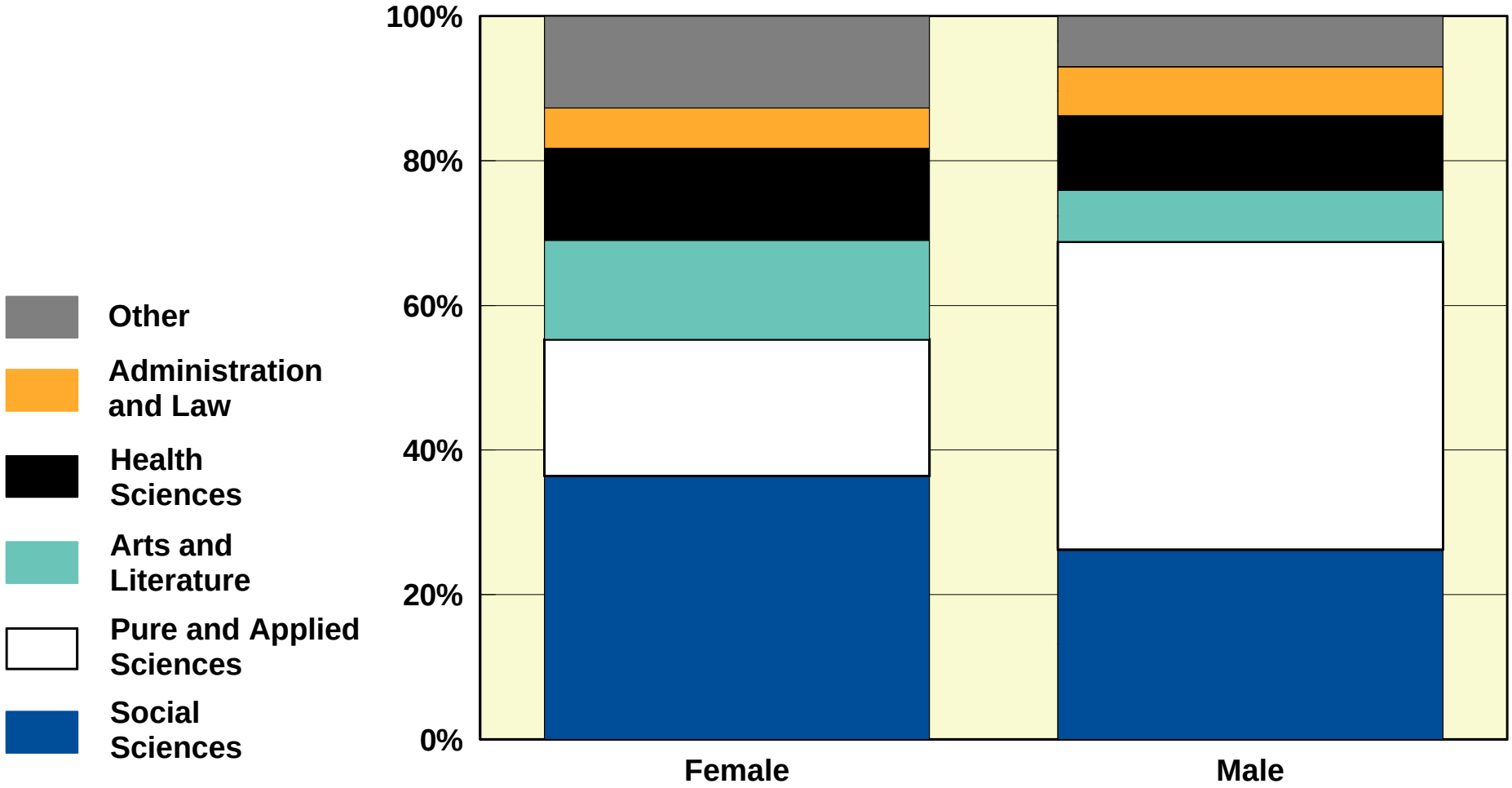
1. See Section 2.10.
2. Male enrolments in interdisciplinary studies, which went from 39 in 1990 to 81 in 1997, are not taken into consideration.
3. Female enrolments in interdisciplinary studies, which went from 21 in 1990 to 44 in 1997, are not taken into consideration.

Table 2.11
Enrolments in doctoral programs, by field of study, 1990 to 1997 (fall term)

	1990	1993	1994	1995	1996	1997
Arts	96	101	108	120	132	157
Literature	654	708	723	770	760	770
Business administration	258	334	367	391	435	475
Law	58	79	86	103	103	105
Education	549	547	539	587	629	609
Social sciences	2 168	2 559	2 674	2 735	2 805	2 839
Pure sciences	1 229	1 516	1 530	1 506	1 448	1 434
Applied sciences	1 277	1 709	1 758	1 716	1 634	1 558
Health sciences	662	798	866	958	1 009	1 053
Interdisciplinary studies	60	101	112	127	134	125
Not applicable	26	40	195	164	158	143
Total	**7 037**	**8 492**	**8 958**	**9 177**	**9 247**	**9 268**

Graph 2.11

Distribution of enrolments in doctoral programs, by gender and field of study, fall 1997



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

Of the students in general education in the adult sector who left secondary school in 1996-97, 15.6% obtained a diploma. If only students in Cycle Two are considered, the proportion more than triples, to 50.4%. Of the various instructional services offered,[2] only Secondary Cycle Two usually leads to a diploma. Figures for new enrolments broken down according to instructional service are available as of 1988-89 only. These figures show that the proportion of graduates was 23.2% for students leaving Secondary Cycle Two; the rate has therefore more than doubled since that time.

Among students who were enrolled in Secondary Cycle Two in the adult sector in 1996-97, 60.2% of those leaving before the age of 20 did so with a diploma.

Although the attainment of 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 from all the instructional services in the adult sector. Since 1980-81, this proportion has risen from 11.5% to 15.6%. This increase is primarily due 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 the age of 20 than that for all ages combined. Thus, in Secondary Cycle Two, 60.2% of the students leaving before the age of 20 did so

1. Success in general education is measured here by the proportion of new holders of a diploma among all 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 enrolment or the following year, when 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 enrolment.
2. The following instructional services are offered, or were offered in the past, in general education for adults: Integration into Community Life Program (ICLP), sociovocational integration, pre-employment training activities (PTA), literacy, francization, adults educated in the youth sector, study skills and career planning, presecondary education, secondary cycle one, secondary cycle two, vocational education preparation, postsecondary education preparation and preparation for higher education.

with a diploma; progress has been considerable in this respect, because the corresponding proportion for 1988-89 was 36.3%. With respect to instructional services as a whole, the proportion of those leaving under the age of 20 with a diploma went from 22.0% to 24.9% between 1980-81 and 1996-97.

In 1980-81, the graduation rate was slightly higher for male students than for female students, but the situation has since reversed. In 1996-97, the graduation rate for female students exceeded that of male students by 4.6 percentage points, and this difference was 9.0 percentage points for those under 20 years of age.

Table 3.1

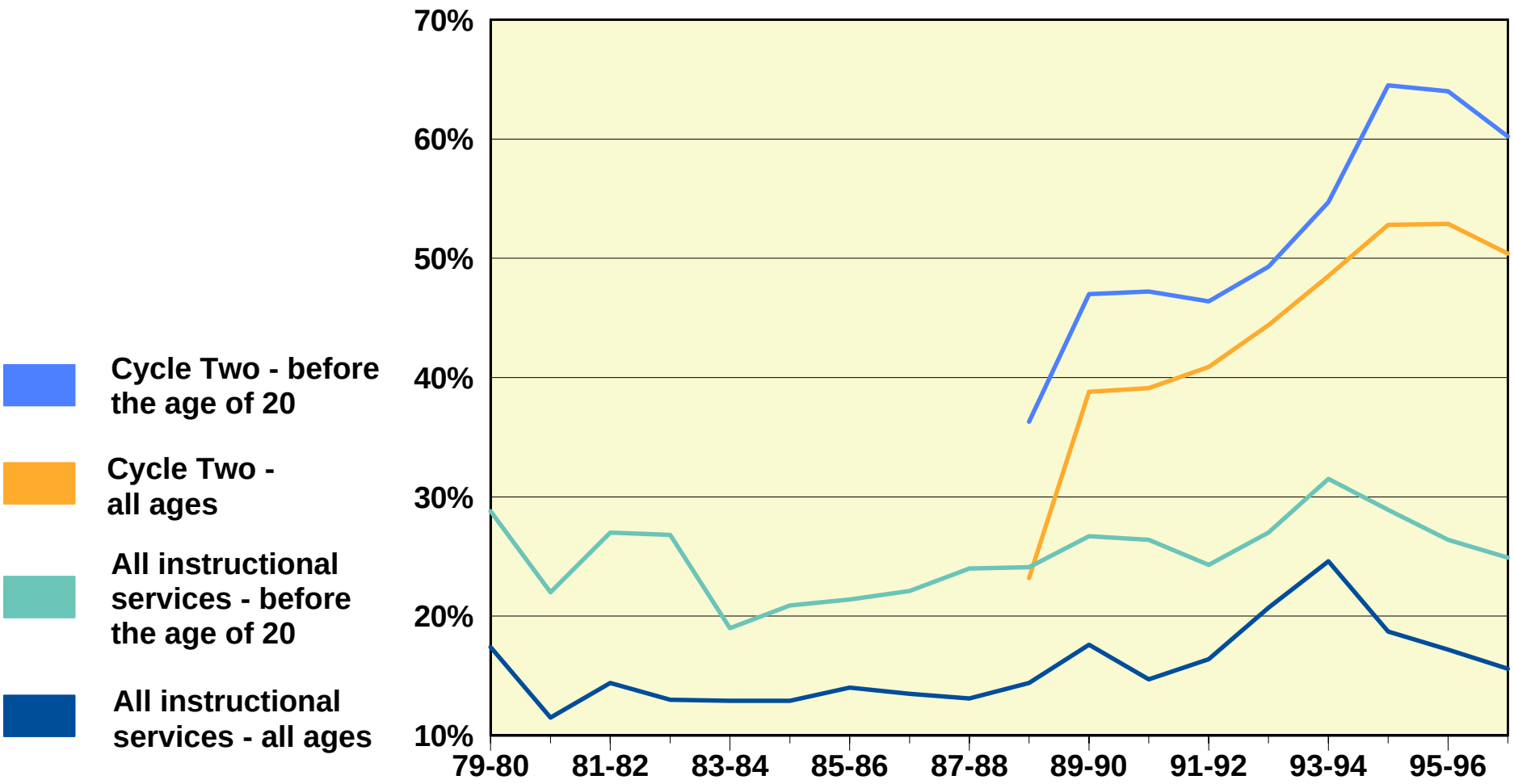
Proportion of students leaving general education in the adult sector with a diploma,[1] by gender, instructional service, age and last year of enrolment (%)

	1980-81	1988-89	1990-91	1993-94	1995-96	1996-97[e]
Male						
Secondary Cycle Two	N/A	22.7	36.7	44.8	49.8	47.5
Before the age of 20	N/A	36.2	44.5	50.4	60.6	61.8
All instructional services	13.1	13.2	12.8	21.0	14.7	13.4
Before the age of 20	23.1	22.4	23.2	26.1	21.9	22.3
Female						
Secondary Cycle Two	N/A	23.6	40.9	51.8	55.6	53.0
Before the age of 20	N/A	36.4	49.8	59.2	67.3	64.0
All instructional services	10.3	15.3	16.3	28.3	19.8	18.0
Before the age of 20	20.8	25.8	30.1	38.7	32.7	31.3
Both						
Secondary Cycle Two	N/A	23.2	39.1	48.5	52.9	50.4
Before the age of 20	N/A	36.3	47.2	54.7	64.0	60.2
All instructional services	11.5	14.4	14.7	24.6	17.2	15.6
Before the age of 20	22.0	24.1	26.4	31.5	26.4	24.9

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 enrolment (%)



3.2 Success in Secondary Vocational Education[1]

Of the students in vocational education who left secondary school in 1996-97, 54.2% obtained a diploma. If only full-time students[2] are considered, the proportion of graduates climbs to 78.5%.

At the end of 1996-97, the success rate for students enrolled full time in a vocational education program was 78.5%; this rate has remained stable since the beginning of the 1990s.

Since the beginning of the vocational education reform in 1987-88, the percentage of students who obtain a diploma has increased appreciably. For example, at the end of 1996-97, the proportion of students graduating from programs leading to a Secondary School Vocational Diploma (SSVD) was 67.0%, compared with 43.4% in 1988-89. The graduation rate for long vocational programs has not increased much since the beginning of the 1980s, but data on long vocational programs concerned only the youth sector. If only full-time students are considered,[2] progress is more evident. As noted earlier, the proportion of graduates among students enrolled for the last time in 1996-97 was 78.5%, compared with 56.3% for students enrolled for the last time in 1980-81.

However, considering all school leavers, without taking into account the sector or whether students are enrolled full time or part time, the proportion of diplomas has also increased since the early 1980s. Thus, the graduation rate of persons enrolled in vocational education for the last time in 1980-81 was 46.6%. This overall proportion rose to 54.2% in 1996-97. This can be explained by the stronger presence in recent years of categories of students whose success rate, as measured here, is higher. Fewer persons are enrolling part time in vocational education or using it as a form of academic upgrading without necessarily working towards a diploma.

---

1. Success in vocational education is measured here by the proportion of new holders of a diploma among all vocational 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 enrolment or the following year, when 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 enrolment.
2. Students enrolled for 270 course hours or more per year are considered to be full time.

There was a significant decline in the number of new enrolments in vocational education during the 1980s (see Section 2.5). Students are now required to spend more time in general education before being admitted into vocational education. General education graduates still have higher success rates in vocational education 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.

There are varying differences in the results of male and female students over the years. For programs leading to an SSVD, the success rate for male students is 2 to 10 percentage points higher than for female students. Moreover, the differences are reversed, and even higher, when only the overall graduation rate by gender is considered. In this case, the success rate for female students is higher: for example in 1996-97, it was 59.4%, compared with 50.5% for male students. This is due to the fact that female enrolments in vocational education are primarily concentrated in categories (programs leading to a diploma, full-time studies) where success is higher.

Table 3.2

Proportion of students leaving secondary vocational education with a diploma,[1] by gender, category and last year of enrolment (%)

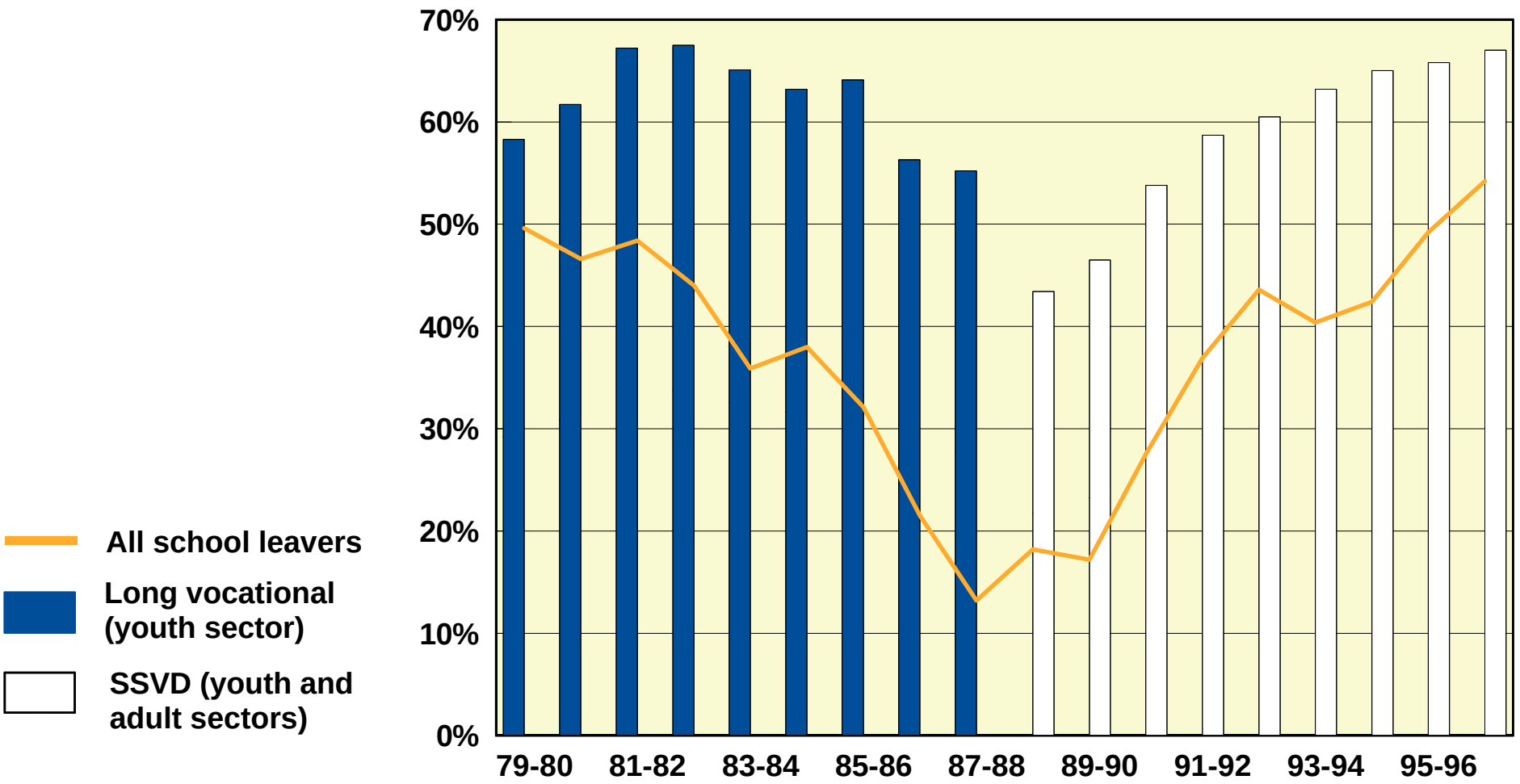
	1980-81	1985-86	1990-91	1993-94	1995-96	1996-97[e]
Male						
Long vocational or SSVD[2]	57,1	58,3	59,3	65,1	67,4	68,1
Full-time[3]	51.8	51.4	80.5	78.7	79.6	79.0
All school leavers	48.3	28.7	21.3	35.3	45.8	50.5
Female						
Long vocational or SSVD[2]	65.5	69.5	49.8	61.5	64.2	65.8
Full-time[3]	61.3	62.0	79.6	77.7	78.2	78.0
All school leavers	45.2	36.2	38.9	47.2	53.7	59.4
Both						
Long vocational or SSVD[2]	61.7	64.1	53.8	63.2	65.8	67.0
Full-time[3]	56.3	56.6	80.1	78.2	78.9	78.5
All school leavers	46.6	32.1	27.5	40.4	49.2	54.2

e: Estimates

1. All secondary school diplomas are taken into account.
2. Figures for 1980-81 and 1985-86 cover enrolments in long vocational programs in the youth sector. After 1988-89, figures take into account SSVDs in the youth and adult sectors.
3. Refers to students enrolled for 270 course hours or more per year.

Graph 3.2

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



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 the 1996-97 school year, 66.2% obtained a Diplôme d'études collégiales (DEC–diploma of college studies). In the past 16 years, this graduation rate has fluctuated between 63.9% and 71.6%.

Of the students enrolled in pre-university education who left college at the end of 1996-97, 66.2% obtained a DEC, for an increase of almost 2 percentage points over the preceding year.

In this area, women tend to do better than men and the gap in their favour has grown over the years. In 1980-81, the proportion of women finishing their pre-university education with a DEC surpassed that of men by 3.9 percentage points. In 1996-97, the gap was 10.2 percentage points in favour of women (the gap was 11.0 percentage points in 1995-96). This phenomenon, coupled with the fact that more women than men enrol in college (see Section 2.8), explains the difference between the sexes with respect to their obtaining a diploma (see Section 5.4).

When the type of program in which students begin their college education is taken into account, the success rate (68.3% in 1996-97) is slightly higher than the average for those who began in pre-university programs. Students who began in technical programs had markedly lower success rates (52.6% in 1993-94). Given that, since 1994-95, some graduates also began in Explorations programs (introduced the previous year), the success rate dropped once again for pre-university program students who came from another type of program. This rate has been only approximately 47% since 1994-95.

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1. Success in pre-university programs in regular college education is measured here by the proportion of new holders of a DEC among all students in pre-university programs in regular college education who leave programs leading to a DEC, with or without a diploma. DECs 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, when the student has not re-enrolled in a program leading to a DEC. Students are considered to have left school without a diploma when they have been absent for a period of at least two school years following the last year of enrolment.

In theory, it takes two years to obtain a DEC in a pre-university program, but very few students do so within this time period. In fact, the success rate for two years or less (that is, the time elapsed from when a student first enrols in a program leading to a DEC) was 37.6% in 1996-97 and varied between 35% in 1985-86 and 40.8% in 1993-94. With regard to all pre-university program graduates, regardless of the type of programs in which these students were first enrolled, obviously the success rate for two years would be lower because those transferring from other programs spend more time in school. Generally, almost all (98%) of the pre-university DECs are obtained within 5 years after the student begins college; in 1996-97, the success rate was 67.1%.

Table 3.3

Proportion of students leaving a pre-university program with a DEC, by last year of enrolment in regular college education, gender, type of initial program, and time elapsed since the first enrolment[1] (%)

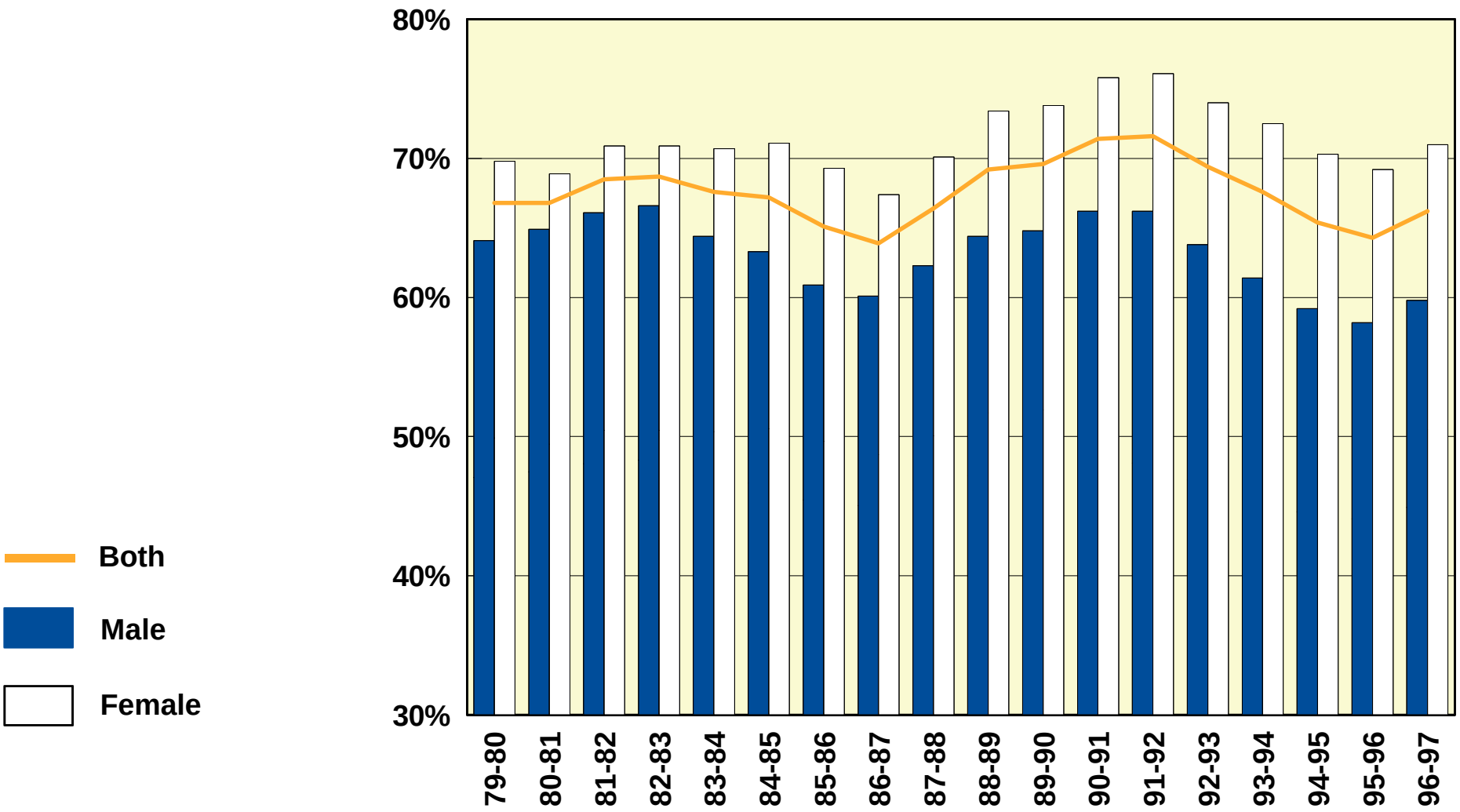
	1980-81	1985-86	1990-91	1994-95	1995-96	1996-97[e]
Male and female						
Same type of initial program						
2 years or less[1]	N/A	36.3	40.5	38.0	36.6	37.6
5 years or less[1]	N/A	64.3	70.8	65.7	64.9	67.1
All durations	N/A	65.3	72.0	67.0	66.2	68.3
Other type of initial program[2]						
All durations	N/A	63.8	61.3	46.6[2]	46.7[2]	46.7[2]
All types of initial programs–all durations						
Male and female	66.8	65.1	71.4	65.4	64.3	66.2
Male	64.9	60.9	66.2	59.2	58.2	59.8
Female	68.8	69.3	75.8	70.3	69.2	71.0

e: Estimates
N/A: Data not available

1. The time elapsed since the first enrolment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-94, this category referred to students who began their studies in technical programs. As of 1994-95, this category also includes students who leave pre-university education (with or without a diploma) after having been in an Explorations program the previous year.

Graph 3.3

Proportion of students leaving a college pre-university program with a DEC, by gender and last year of enrolment 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 1996-97, 51.4% obtained a Diplôme d'études collégiales (DEC–diploma of college studies). In the past 16 years, this graduation rate has fluctuated between 51.4% and 60.7%.

Of the students enrolled in technical education who left college in 1996-97, 51.4% obtained a DEC; this figure has dropped by more than 7 percentage points since 1990-91.

In this area, women still do better than men, with the difference being at its highest in 1995-96. The success rate for women was 60.1% compared with 45.4% for men, for a gap of 14.7 percentage points in favour of the women; in 1996-97, the gap narrowed to 13.9 percentage points. This phenomenon, coupled with the fact that more women than men enrol in college (see Section 2.8), explains the difference between the sexes with respect to their obtaining a diploma (see Section 5.4).

When the type of program in which students begin their college education is taken into account, the success rate is slightly lower than the average for those who began their studies in technical programs (50.2% in 1996-97). Moreover, students who began in pre-university programs and who transferred to technical programs had markedly higher success rates (more than 60% until 1993-94). Since 1994-95, the success rates of students who began their college studies in programs other than technical programs remained higher than the average (54% in 1996-97), but were brought down by the rates of students in Explorations programs (introduced the previous year). Students who began elsewhere than in technical programs accounted for close to one quarter of these graduates; they accounted for more than 30% of technical DECs in 1996-97.

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1. Success in technical programs in regular college education is measured here by the proportion of new holders of a DEC among all students in technical programs in regular college education who leave programs leading to a DEC, with or without a diploma. DECs 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, when the student has not re-enrolled in a program leading to a DEC. Students are considered to have left school without a diploma when they have been absent for a period of at least two school years following the last year of enrolment.

In theory, it takes three years to earn a DEC in a technical program, but very few students do so within this time period. In fact, the success rates for three years or less (that is, the time elapsed from when a student first enrolled in a program leading to a DEC) was 24.3% in 1996-97 for all students who began in technical programs. If all technical education graduates are considered, regardless of which program they were initially enrolled in, obviously their success rate after three years will be lower because students who transfer spend more time in school. Generally, a higher proportion (85% to 90%) of technical education DECs are obtained within the 5-year period following the start of their college studies; in 1996-97, the success rate for these students was 45.0%.

Thus, students who began their college studies directly in technical programs obtain a DEC in a shorter time period, but students who transfer from pre-university programs are more likely to earn a DEC in a technical program, if the time elapsed since their first enrolment is not taken into account.

Table 3.4

Proportion of students leaving a college technical program with a DEC, by last year of enrolment in regular college education, gender, type of initial program, and time elapsed since the first enrolment[1] (%)

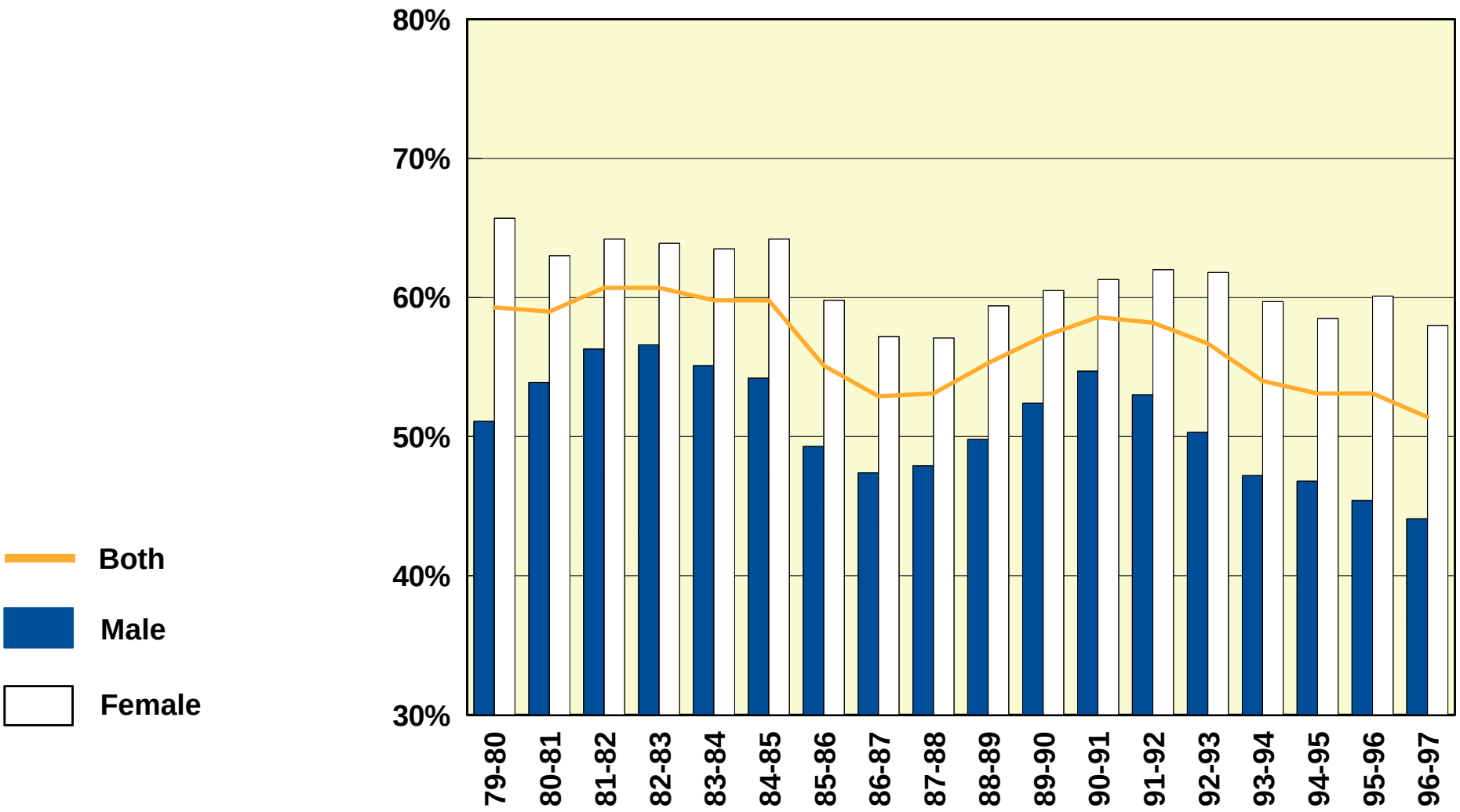
	1980-81	1985-86	1990-91	1994-95	1995-96[e]	1996-97[e]
Male and female						
Same type of initial program						
3 years or less[1]	N/A	28.7	29.6	26.2	26.5	24.3
5 years or less[1]	N/A	50.5	51.1	46.4	47.2	45.0
All durations	N/A	53.7	56.6	52.1	52.4	50.2
Other type of initial program[2]						
All durations	N/A	61.1	64.4	55.6[2]	54.9[2]	54.0[2]
All types of initial programs–all durations						
Male and female	59.0	55.1	58.6	53.1	53.1	51.4
Male	53.9	49.2	54.7	46.8	45.4	44.1
Female	63.0	59.8	61.3	58.5	60.1	58.0

e: Estimates
N/A: Data not available

1. The time elapsed since the first enrolment is not necessarily the same as the duration of studies, because the studies may have been interrupted at some point.
2. Until 1993-94, this category referred to students who began their studies in pre-university programs. As of 1994-95, this category also includes students who left technical education (with or without a diploma) after having begun in an Explorations program the previous year.

Graph 3.4

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



3.5 Duration of Studies in Regular College Education

The duration of studies for holders of a Diplôme d'études collégiales (DEC–diploma of college studies) and for all students (regardless of whether or not they obtain a DEC) has changed very little over the years.[1]

On average, a DEC in pre-university education is obtained after 2.4 years equivalent to full-time study, and a DEC in technical education, after 3.8 years.

Holders of a DEC who graduate 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 1.4 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 less than 0.1 year. Students who transferred from another type of program take 3 years to obtain their DEC in pre-university education.

Students in technical programs take an average of 3.8 years to earn a DEC, while those who leave without a diploma do so after 2.0 years. Given the success rate (see Section 3.4), students leaving technical programs study for 3.0 years. Here too, those students who had been enrolled in technical programs right from the beginning of their college studies leave in a shorter time: those obtaining a DEC did so in 3.5 years and those leaving without a diploma did so after 1.8 years. However, students who had initially enrolled in pre-university programs (and who have a higher success rate) or in Explorations programs take 4.4 years to obtain a DEC in technical education.

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1. This is why the results of this section are the averages for college leavers for the last 5 years observed (that is, the averages for students enrolled for the last time from 1992-93 to 1996-97). 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 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 DEC 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.

A very slight difference in the duration of studies is apparent in the figures for men and women. Female graduates study 0.2 years less than their male counterparts. Similarly, 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, which raises the average duration of studies for women overall.

Table 3.5

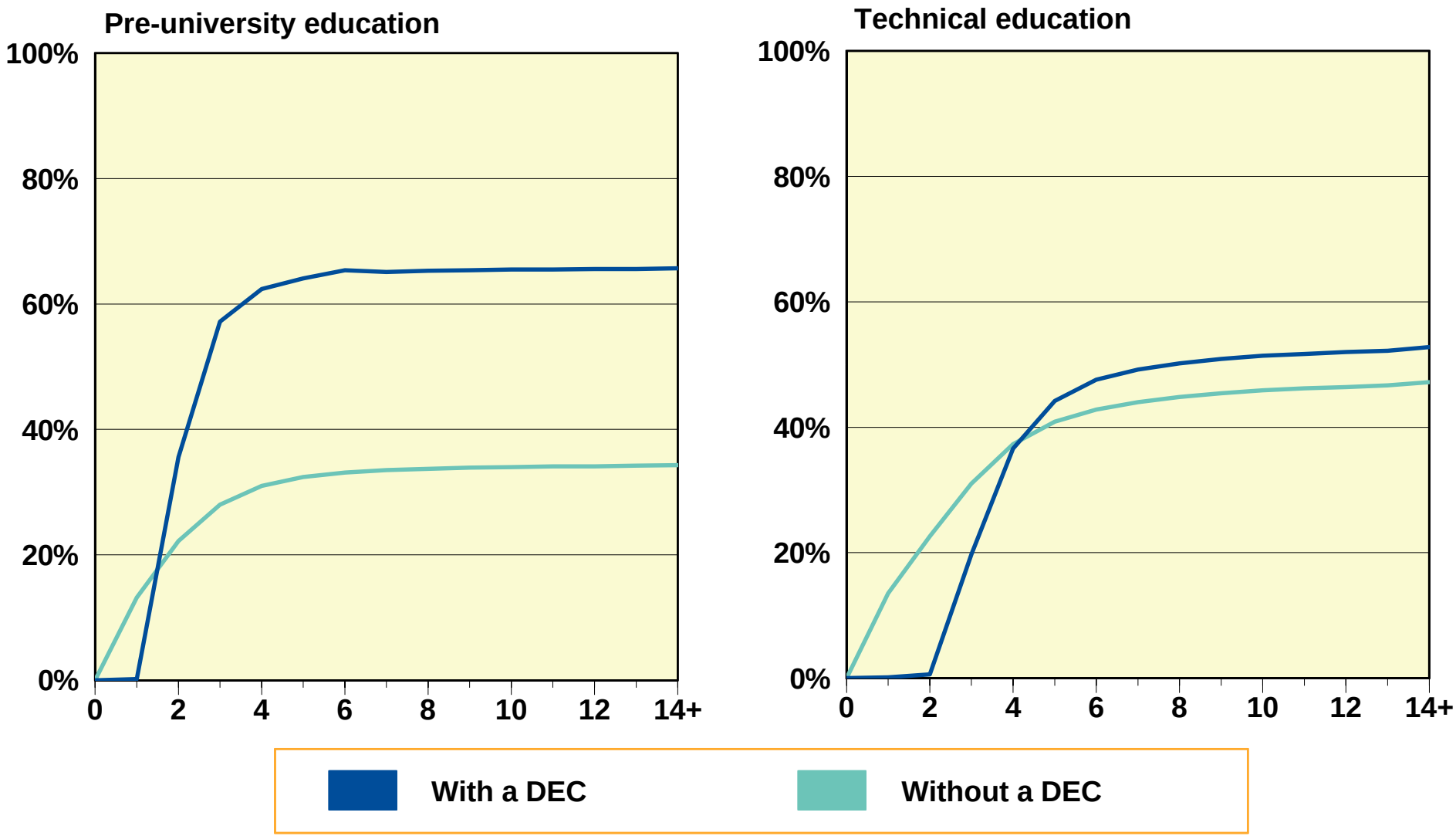
Average number of years[1] of study completed before leaving regular college education (average for all college leavers after 1992-93), by gender and type of program enrolled in at the start and finish of the studies

	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	1.5	2.1	2.1	2.9
Female	2.3	3.7	1.4	2.0	2.1	3.0
Both[3]	**2.4**	**3.8**	**1.4**	**2.0**	**2.1**	**3.0**
Type of initial program						
Same	2.3	3.5	1.3	1.8	2.0	2.7
Different[3]	3.0	4.4	2.1	2.8	2.5	3.7

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 1992-93 and 1996-97, by number of years elapsed since the first enrolment in a program leading to a DEC (%)



3.6 Success in University Programs Leading to a Bachelor's Degree[1] and Duration of Studies

At the end of 1996-97, 65.7% of students leaving university programs leading to a bachelor's degree obtained their degree, or 0.2% fewer than the preceding year. In the 10-year period observed, the graduation rate increased, for it had been 55.9% for students enrolled for the last time in 1987-88.

Of 100 students enrolled in a program leading to a bachelor's degree and leaving their program at the end of 1996-97, 66 obtained a degree after an average of 6.3 full-time terms and 2.3 part-time terms.

From the beginning of the period under observation, female students have had a higher success rate than male students, with the difference rising from 0.7 to 8.0 percentage points between 1987-88 and 1996-97. In the last year observed, 69.1% of female students who left a bachelor's program did so with a degree, compared with 61.1% of their male counterparts. This phenomenon, coupled with the fact that more women than men enrol in bachelor's programs (see Section 2.10), explains the difference between the sexes with respect to their obtaining a degree (see Section 5.5).

Graduates of bachelor's programs have studied for an average of 6.3 full-time terms, or for 8.6 terms if no consideration is given to whether they studied full time or part time.[2] Those who leave without a degree spend an average of 2.5 terms full time, or slightly more than one year of study. For all students leaving bachelor's programs, the average duration of studies is 7.0 terms, of which 4.8 terms are full time.

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1. Success in university programs leading to a bachelor's degree is measured here by the proportion of new holders of a bachelor's degree among all students who leave programs leading to a bachelor's, 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, when 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 school years following the last year of enrolment.
2. A portion of the studies is done part time and is added to the average duration of full-time studies. The duration of part-time studies is from 2.0 to 2.6 terms for graduates. For those who leave without a degree, the duration of part-time studies is from 1.6 to 2.1 terms. For all school leavers, the duration of part-time studies varies from 1.9 to 2.4 terms.

When the duration of studies is examined by gender and by whether students leave with or without a degree, differences are readily apparent. Whether women obtain a bachelor's degree or give up their studies without a degree, they do so sooner than men. Women who obtain a bachelor's degree spend 0.7 fewer terms in full-time studies than men, while women who leave their program without a degree do so 0.5 terms sooner than men. Nevertheless, when the duration of studies is considered, regardless of full- or part-time status, the differences between the sexes are not as pronounced, for more women than men study part time. For all students leaving bachelor's programs, the difference between the sexes is less evident, mainly because more women than men obtain a degree, which raises the average duration of studies for women overall.

Table 3.6a

Proportion of students leaving a university program leading to a bachelor's degree with such a degree, by gender and last year of enrolment (%)

	1987-88	1990-91	1993-94	1994-95	1995-96	1996-97[e]
Male	55.5	59.7	57.7	59.5	61.7	61.1
Female	56.2	63.1	63.9	66.5	69.0	69.1
Both	**55.9**	**61.5**	**61.1**	**63.4**	**65.9**	**65.7**

e: Estimates

Table 3.6b

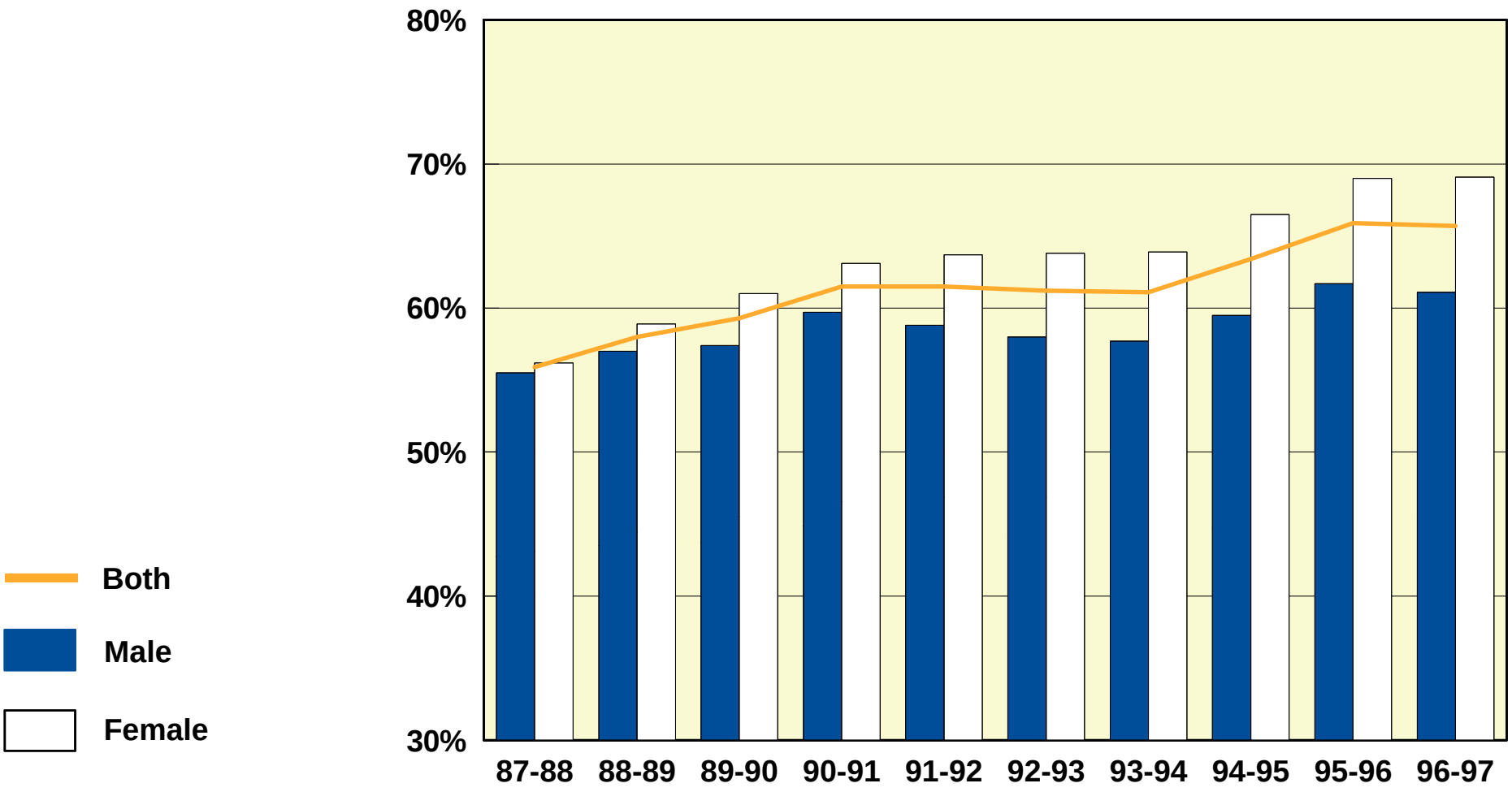
Average number of terms completed before leaving a program leading to a bachelor's degree (average for all leavers after 1992-93), by gender

	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	8.9	2.7	4.4	5.1	7.0
Female	6.0	8.5	2.2	4.3	4.7	7.0
Both	**6.3**	**8.6**	**2.5**	**4.3**	**4.8**	**7.0**

1. Refers to students who have interrupted their studies for at least six consecutive terms.
2. Refers to the total duration of full- and part-time studies.

Graph 3.6

Proportion of students leaving a university program leading to a bachelor's degree with such a degree, by gender and last year of enrolment (%)



3.7 Success in University Programs Leading to a Master's Degree[1] and Duration of Studies

At the end of 1996-97, 65.4% of students leaving programs leading to a master's degree obtained their degree. Until 1993-94, this proportion had grown by 9.6 percentage points, to reach a high of 65.7%, compared with 56.1% in 1987-88. The 1996-97 result therefore represents a drop of 0.3 percentage points from 1993-94.

Of 100 students enrolled in a program leading to a master's degree and leaving their program at the end of 1996-97, 65 obtained a degree, after an average of 7.8 terms of study.

In 1987-88, 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 1996-97, 66.2% of women leaving a master's program did so with a degree, for an increase of 11.2 percentage points since 1987-88. The corresponding change for men was 7.6 percentage points; in 1996-97, 63.4% of men leaving a master's program did so with a degree. This phenomenon, coupled with the fact that more women than men enrol in master's programs (see Section 2.10), explains the difference between the sexes with respect to their obtaining a degree (see Section 5.5).

Graduates of master's programs are enrolled for an average of 7.8 terms, regardless of whether they study full or part time.[2] On average, students spend 4.1 terms in full-time studies. The total average duration of studies for

1. Success in university programs leading to a master's degree is measured here by the proportion of new holders of a master's degree among all students who leave programs leading to a master's, 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, when 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 school years following the last year of enrolment.
2. A portion of the studies is done part time and is added to the average duration of full-time studies. The duration of part-time studies is from 3.4 to 4.3 terms for graduates. For those who leave without a degree, the duration of part-time studies is from 2.9 to 3.4 terms. For all school leavers, the duration of part-time studies varies from 3.3 to 3.9 terms.

students who leave without a degree is 5.2 terms, whether full time or part time. For all students leaving master's programs, the average duration of studies is 6.9 terms, 3.4 of which are full time. The duration of studies referred to here is the actual duration and not the standardized duration used to calculate full-time equivalents (FTEs) for funding purposes, where a standardized duration is generally recognized for a master's program with thesis. In these cases, the "funded" duration is a maximum of 4 terms (1.5 years in FTEs) for master's programs, whereas the actual duration of studies exceeds this standardized period for all types of leavers. This means that students who leave without a master's degree are in practice fully funded, with the exception of a supplementary amount of $600 that is allocated to universities when the degree is awarded.

When the duration of studies is examined by gender and by whether students leave with or without a degree, differences are readily apparent. Contrary to what was observed at the college level and in programs leading to a bachelor's degree, women enrolled in master's programs do not take less time than men to obtain their degree. If full-time enrolment only is considered, women leave sooner (with or without a diploma) than men, but women with a master's degree have studied part time for 0.4 terms longer than men; women who leave without a degree have been enrolled part time for 3.3 terms, compared with 3.0 terms for men in the same situation. For all students leaving master's programs, there is no discernible difference by gender between those leaving with a degree and those leaving without a degree.

Table 3.7a

Proportion of students leaving a university program leading to a master's degree with such a degree, by gender and last year of enrolment (%)

	1987-88	1990-91	1993-94	1994-95	1995-96	1996-97[e]
Male	57.0	64.4	64.4	63.0	63.7	64.6
Female	55.0	64.5	67.0	66.2	67.5	66.2
Both	**56.1**	**64.5**	**65.7**	**64.6**	**65.6**	**65.4**

e: Estimates

Table 3.7b

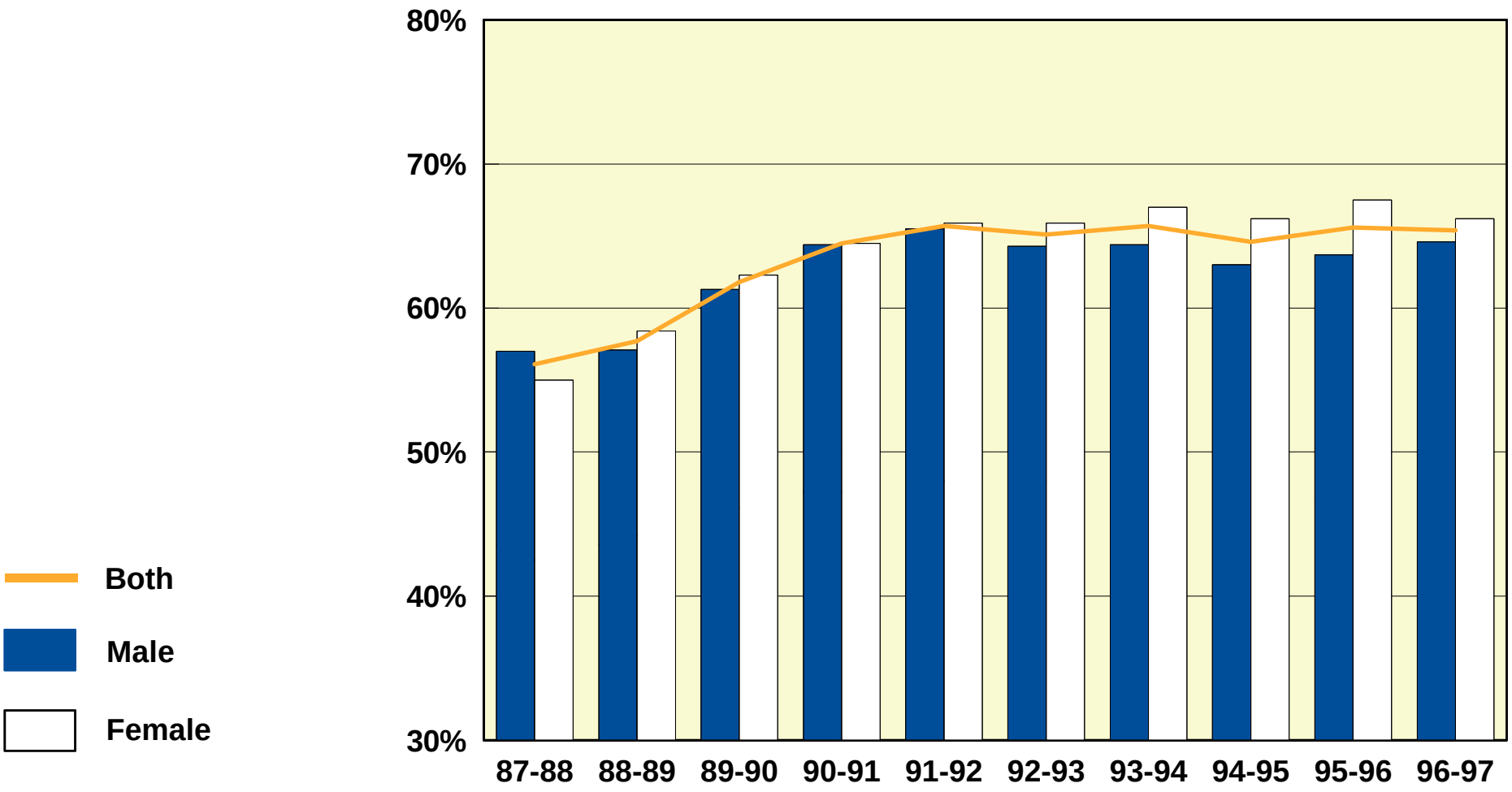
Average number of terms completed before leaving a program leading to a master's degree (average for all leavers after 1992-93), by gender

	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	4.2	7.8	2.2	5.2	3.5	6.8
Female	4.0	7.9	1.9	5.2	3.2	7.0
Both	**4.1**	**7.8**	**2.0**	**5.2**	**3.4**	**6.9**

1. Refers to students who have interrupted their studies for at least six consecutive terms.
2. Refers to the total duration of full- and part-time studies.

Graph 3.7

Proportion of students leaving a university program leading to a master's degree with such a degree, by gender and last year of enrolment (%)



3.8 Success in University Programs Leading to a Doctorate[1] and Duration of Studies

At the end of 1996-97, 58.3% of students leaving programs leading to a doctorate obtained their degree. From 1987-88 to 1993-94, the graduation rate increased by 6.2 percentage points, from 48.7%; the figure for 1994-95 represents a decline of 0.4 percentage points. Since then, there has been an increase of 3.8 percentage points, bringing the total growth since 1987-88 up to 9.6 percentage points.

Of students enrolled in a program leading to a doctorate and leaving their program at the end of 1996-97, 58.3% obtained a degree after an average of 15.3 terms.

There are still relatively fewer women than men with doctorates. Of the women enrolled in 1996-97 who left doctoral programs, 54.8% obtained their degree, for an increase of 14.5 percentage points compared with the situation nine years earlier. For men, the graduation rate increased by 7.1 percentage points in the same period and the proportion of male candidates who completed their studies in 1996-97 with a degree was 60.2%, or 5.4 percentage points more than for female candidates. This phenomenon, coupled with the fact that more men than women enrol in doctoral programs (see Section 2.10), explains the difference between the sexes with respect to their obtaining a degree (see Section 5.5).

Graduates of doctoral programs are enrolled for an average of 15.3 terms, regardless of whether they study full or part time.[2] On average, students spend 11.1 terms in full-time studies. Those who leave without a degree study

1. Success in university programs leading to a doctorate is measured here by the proportion of new holders of a doctorate among all students who leave programs leading to a doctorate, 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, when the student has not re-enrolled in a postgraduate 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 school years following the last year of enrolment.
2. A portion of the studies is done part time and is added to the average duration of full-time studies. The duration of part-time studies is from 3.3 to 5.7 terms for holders of a doctorate. For those who leave without a degree, the duration of part-time studies is from 2.5 to 3.7 terms. For all school leavers, the duration of part-time studies varies from 3.0 to 4.8 terms.

for 8.5 terms, whether full time or part time. For candidates overall, whether they leave with or without a degree, they do so after 12.3 terms, of which 8.6 are full time. The duration of studies referred to here is the actual duration and not the standardized duration used to calculate full-time equivalents (FTEs) for funding purposes. In most cases, the “funded” duration is a maximum of 8 terms (3 years in FTEs) for doctoral programs, whereas the actual duration of studies exceeds this standardized period for all types of leavers. This means that students who leave without a doctorate 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.

When the duration of studies is examined by gender and by whether students leave with or without a degree, differences are readily apparent. Contrary to what was observed at the college level and in programs leading to a bachelor’s degree, women enrolled in doctoral programs do not take less time than men to obtain their degree or to give up their studies. If full-time enrolment only is considered, women leave sooner than men (with or without a degree), but women with a doctorate have studied part time for 1.5 terms longer than men; women who leave without a degree have been enrolled part time for 3.2 terms, compared with 2.7 terms for men in the same situation. For all students leaving doctoral programs, the difference between the sexes is less evident, mainly because more men than women obtain a degree, which raises the average duration of studies for men overall.

Table 3.8a

Proportion of students leaving a university program leading to a doctorate with such a degree, by gender and last year of enrolment (%)

	1987-88	1990-91	1993-94	1994-95	1995-96	1996-97[e]
Male	53.1	55.5	57.3	57.8	60.9	60.2
Female	40.3	46.9	50.1	49.1	48.9	54.8
Both	**48.7**	**52.4**	**54.9**	**54.5**	**56.5**	**58.3**

e: Estimates

Table 3.8b

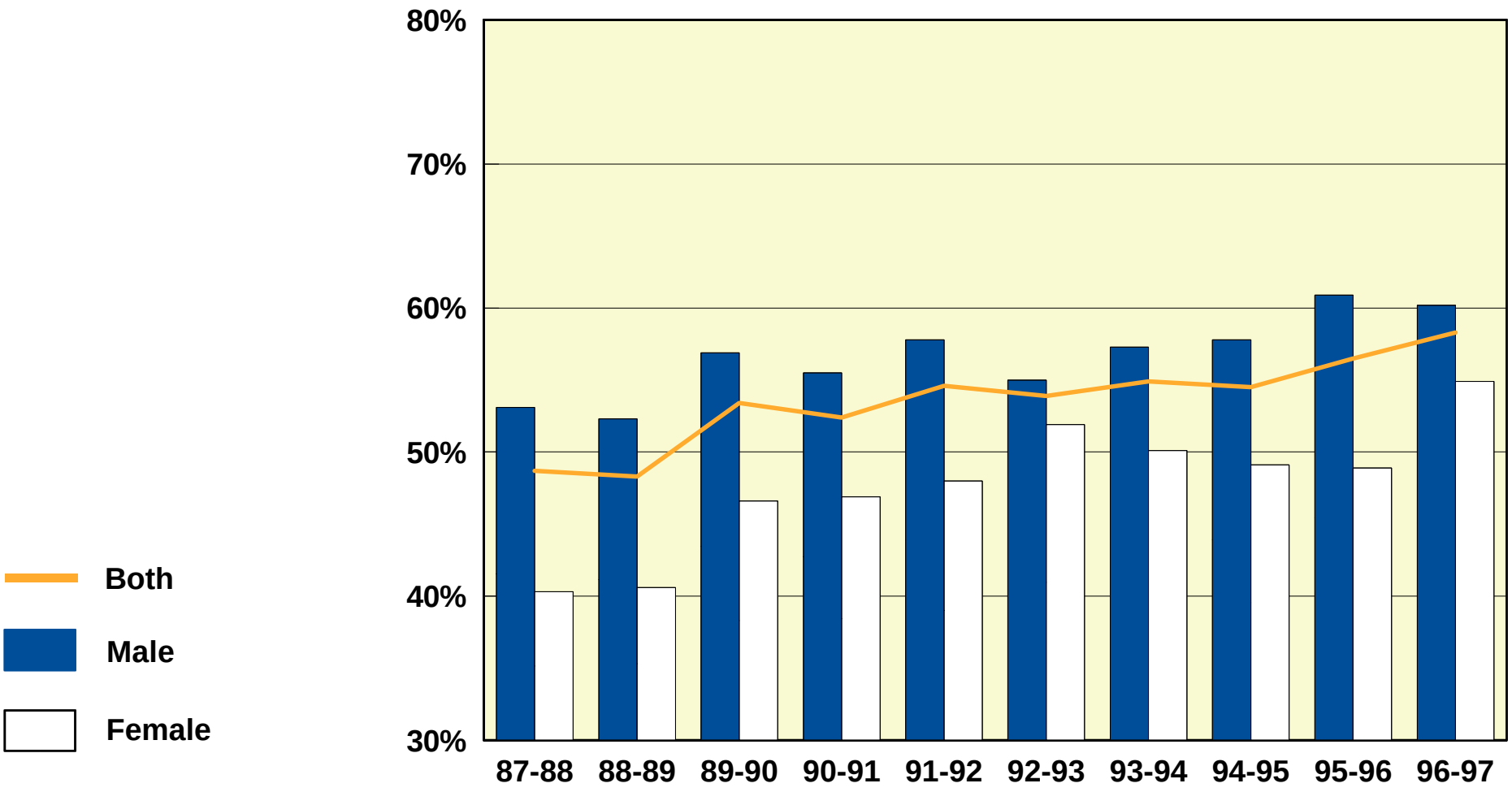
Average number of terms completed before leaving a program leading to a doctorate (average for all leavers after 1992-93), by gender

	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	11.3	14.9	5.8	8.5	8.9	12.2
Female	10.8	16.1	5.4	8.6	8.1	12.3
Both	**11.1**	**15.3**	**5.6**	**8.5**	**8.6**	**12.3**

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 3.8

Proportion of students leaving a university program leading to a doctorate with such a degree, by gender and last year of enrolment (%)



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

The Ministère de l'Éducation administers uniform examinations to students in Secondary IV and V for purposes of certification. The average result for the June 1998 examinations was 76.3%,[1] and the success rate was 90.0%.

The success rate for the June 1998 secondary school uniform ministry examinations was 90.0%. Overall, female students obtained slightly higher marks than male students.

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 is probably 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 8.0 percentage points higher than the average mark obtained in the public system. In 1998, the success rate was 88.7% in the public system, compared with 97.0% in the private system. One of the factors likely to explain these differences is that private schools impose selection criteria for admitting students, whereas school boards must accept all students eligible for secondary school.

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 4.5% higher than that of students studying in English; the success rate of students studying in French was 5.8 percentage points higher than that of students studying in English.

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 which 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.

The best results were obtained in the second language; the lowest results were obtained in French, language of instruction, physical science 416 and history.

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

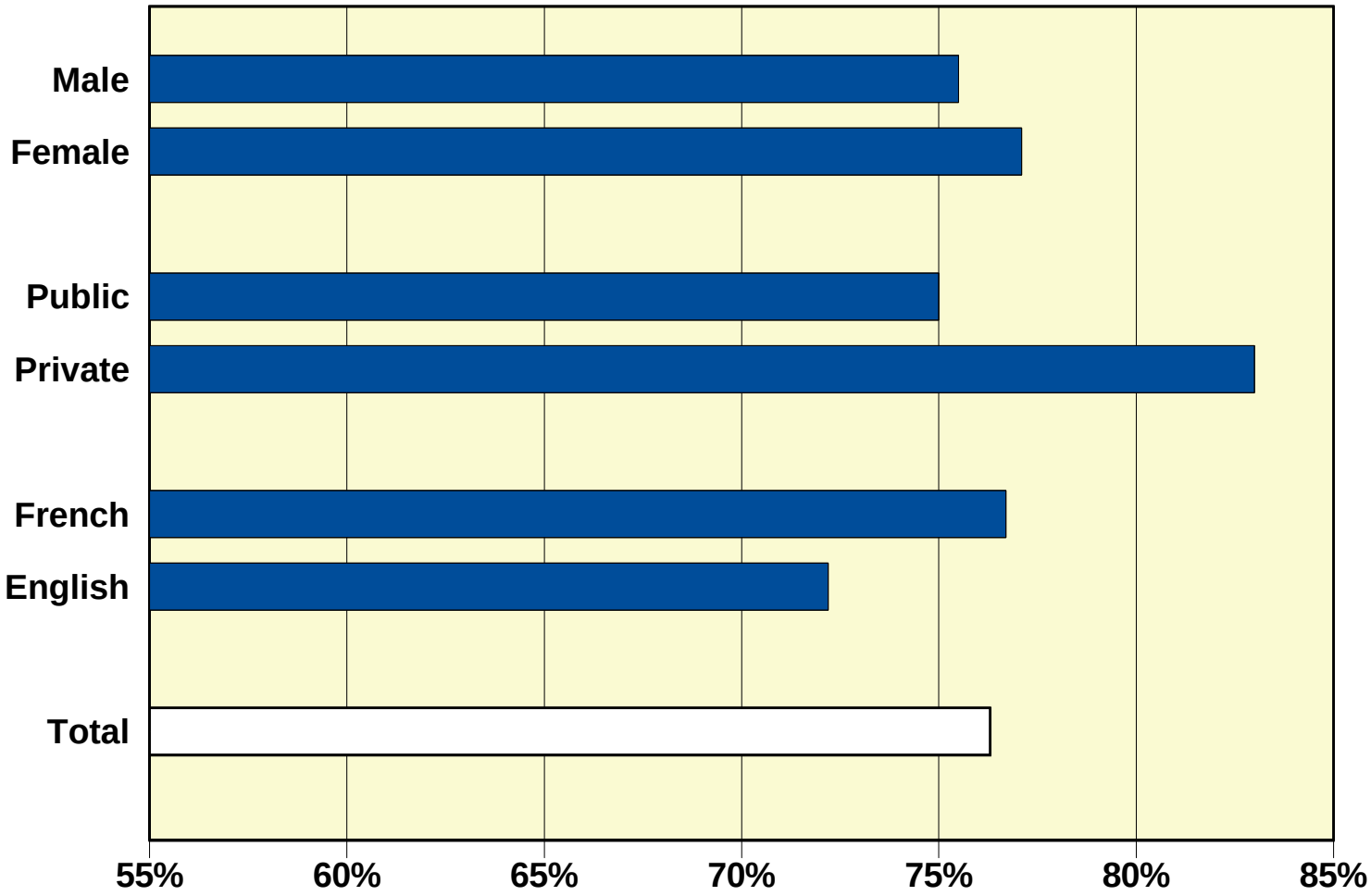
Table 4.1

Results on secondary school uniform examinations in the youth sector, by gender, school system, language of instruction and subject: June 1998 (%)

	Average	Success Rate
Male	75.5	89.0
Female	77.1	91.0
Public schools	75.0	88.7
Private schools	83.0	97.0
Language of instruction: French	76.7	90.5
Language of instruction: English	72.2	84.7
English, language of instruction (Secondary V)	72.3	94.4
English, second language (Secondary IV)	80.5	95.2
English, second language (Secondary V)	83.0	96.8
French, language of instruction (Secondary V)	70.9	87.5
French, second language (Secondary V)	77.1	93.4
History (Secondary IV)	75.2	87.6
Physical science 416 (Secondary IV)	73.4	84.2
Total	**76.3**	**90.0**

Graph 4.1

Averages on uniform secondary school examinations in the youth sector, by gender, school system and language of instruction: June 1998 (%)



4.2 Regional Disparities in Secondary School Examination Results–Youth Sector

Six regions recorded higher averages and success rates than the overall provincial results on the June 1998 uniform ministry examinations:[1] Québec, Estrie, Mauricie, Montérégie, Chaudière-Appalaches and Lanaudière. Ranked among the lowest were Gaspésie–Îles-de-la-Madeleine, Côte-Nord and Nord-du-Québec.

The results of the June 1998 uniform examinations showed a difference of 10.8 percentage points between the success rates of students in the region with the best performance (91.9%) and that of students in the region with the poorest performance (81.1%). The gap increased from 1997 to 1998.

Regional disparities[2] increased from 1997 to 1998. The difference between the highest and lowest averages rose from 5.9 to 8.1 percentage points, whereas the gap in the success rates increased from 8.4 to 10.8 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.

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 which 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. For statistical purposes, the territories of Catholic school boards have been grouped as much as possible according to the administrative regions defined by the Bureau de la statistique du Québec.

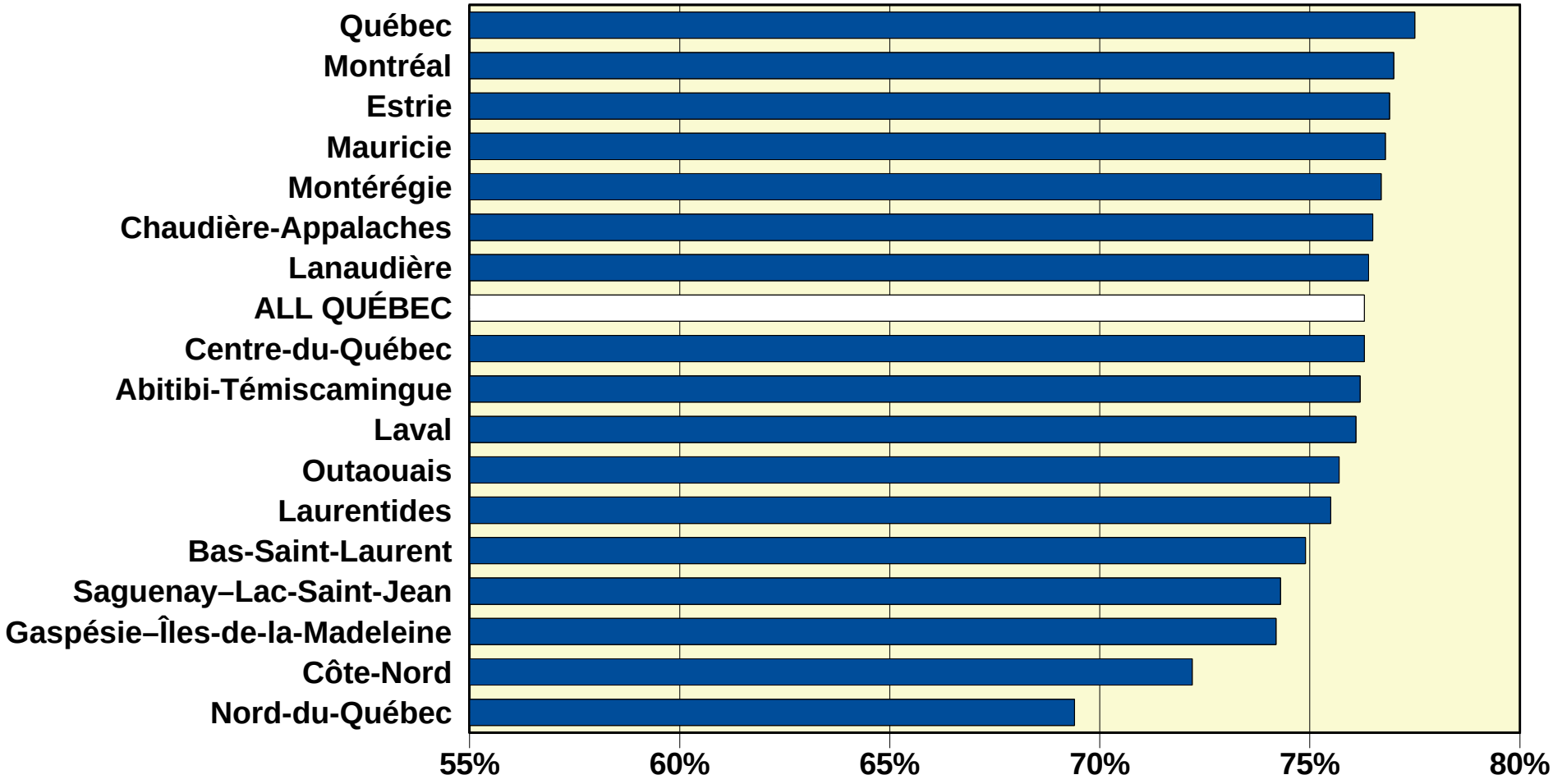
Table 4.2

Results on secondary school uniform examinations in the youth sector, by school administrative region: June 1998 (%)

School Administrative Region	Average	Success Rate
Gaspésie–Îles-de-la-Madeleine	74.2	88.1
Bas-Saint-Laurent	74.9	89.2
Saguenay–Lac-Saint-Jean	74.3	89.5
Québec	77.5	91.9
Chaudière-Appalaches	76.5	91.6
Mauricie	76.8	91.3
Centre-du-Québec	76.3	91.6
Estrie	76.9	91.4
Montérégie	76.7	90.6
Montréal	77.0	89.4
Laval	76.1	88.9
Lanaudière	76.4	90.2
Laurentides	75.5	88.8
Outaouais	75.7	87.6
Abitibi-Témiscamingue	76.2	91.2
Côte-Nord	72.2	83.2
Nord-du-Québec	69.4	81.1
Total	**76.3**	**90.0**

Graph 4.2

Averages on secondary school uniform examinations in the youth sector, by school administrative region: June 1998 (%)



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

Students who wrote the June 1998 Secondary V French, language of instruction, examination obtained an average mark of 70.9%. The success rate was 87.5%.[1]

The success rate on the June 1998 Secondary V French, language of instruction, examination was 87.5%. Female students obtained significantly higher marks than male students.

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 school boards and private schools. 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, students obtained an average of 69.1% and a success rate of 73.9%.

Whereas there was no significant difference overall between the results obtained by male and female students on the examinations used for purposes of certification (see Section 4.1), female students outperformed male students on the French examination. The average for female students was 6.0 percentage points above that for male students, and their success rate was 10.2 percentage points higher than that for male students. In written production, the female students' average was 6.9 percentage points higher than the male students' and their success rate was 13.4 percentage points higher.

The average obtained by private school students surpassed that of public school students by 5.9 percentage points. In the public system, 14.0% of the students failed the ministry examination, compared with 5.0% in the private system. In written production, students in private schools scored higher than students in the public system.

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 which 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

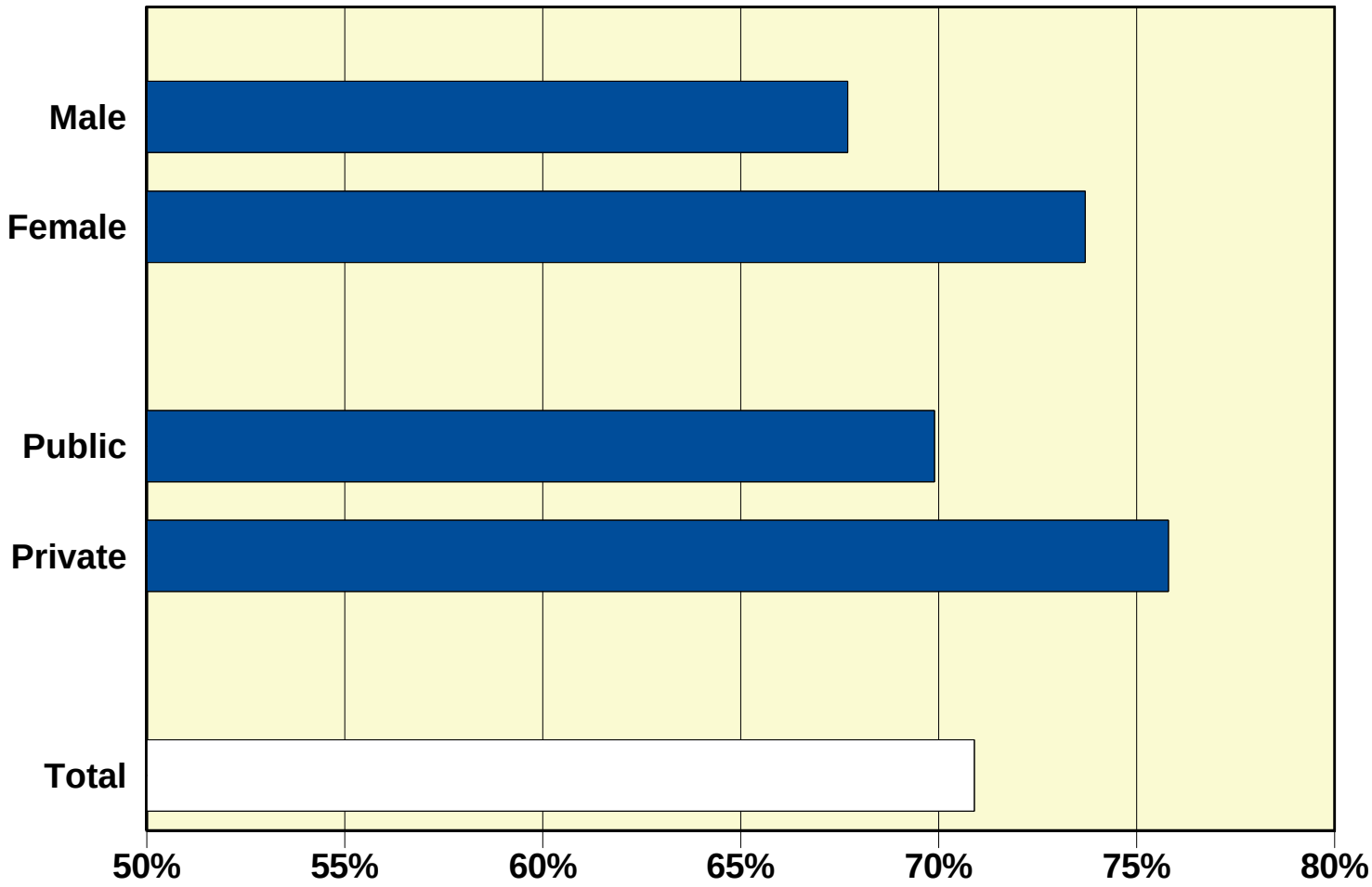
Results on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 1998 (%)

	Written Production		Overall Results	
	Average	Success Rate	Average	Success Rate
Male	65.4	66.7	67.7	82.0
Female	72.3	80.1	73.7	92.2
Public system[1]	68.0	71.6	69.9	86.0
Private system	74.4	85.1	75.8	95.0
Total	**69.1**	**73.9**	**70.9**	**87.5**

1. Excludes the Cree School Board and the Kativik School Board.

Graph 4.3

Averages on the Secondary V French, language of instruction, examination in the youth sector, by gender and school system: June 1998 (%)



4.4 Reading Achievement Among 13-Year-Olds

Francophone 13-year-olds from Québec obtained better results than those of Francophone students in the other provinces on a reading examination held in the spring of 1998. Anglophone students from Québec obtained better results than Anglophone students in many of the other provinces.[1] These examinations were held as part of the School Achievement Indicators Program (SAIP) of the Council of Ministers of Education, Canada.

Québec Francophone 13-year-olds obtained better results than Francophone students in the other provinces on a reading examination. Anglophone students from Québec obtained better results than their counterparts in many of the other provinces.

The students' results were expressed in terms of five levels of performance. The first level corresponds to the learning achievement expected of elementary school students, and the fifth level, to the results expected of students with a mastery of the language. It must be emphasized that the examinations for Francophone and Anglophone students are not comparable.

Almost all Francophone students from Québec (97.3%) attained the first level of performance. Eight out of ten students attained the second level, and five out of ten, the third level. The results of Francophone students from Québec were better than those of Francophone students in the other provinces. The results of female Francophone students from Québec were much better than those of their male counterparts. The percentages of female students who attained the second, third and fourth levels were 90%, 67% and 22%, as opposed to 78%, 43% and 8% for male students. The results of Francophone students from Québec in 1998 are similar to those obtained in a comparable study in 1994. The difference between the results of male and female students decreased between 1994 and 1998.

As for Anglophone students from Québec, 96.8% attained the first level of performance, 77.6%, the second level and 42.3%, the third level. The results of Anglophone students from Québec were better than those of their

1. The comparisons of results in this section take into account a margin of error inherent in any result obtained by surveying a sampling of persons.

counterparts in many of the other provinces, particularly at the third and fourth levels. The percentage of Anglophone students from Québec who attained the fourth level of performance is higher than the Canadian average for Anglophones. Only British Columbia and Newfoundland obtained comparable results for all the levels of performance. As for differences between the sexes, the results obtained by female Anglophone students in Québec were better than those obtained by their male counterparts: 86% of female students attained the second level of performance, 51%, the third level and 15%, the fourth level, while the corresponding percentages for male students were 68%, 33% and 8%. The results of Anglophone students from Québec were similar to those obtained in 1994. The difference between the results of male and female students remained constant between 1994 and 1998.

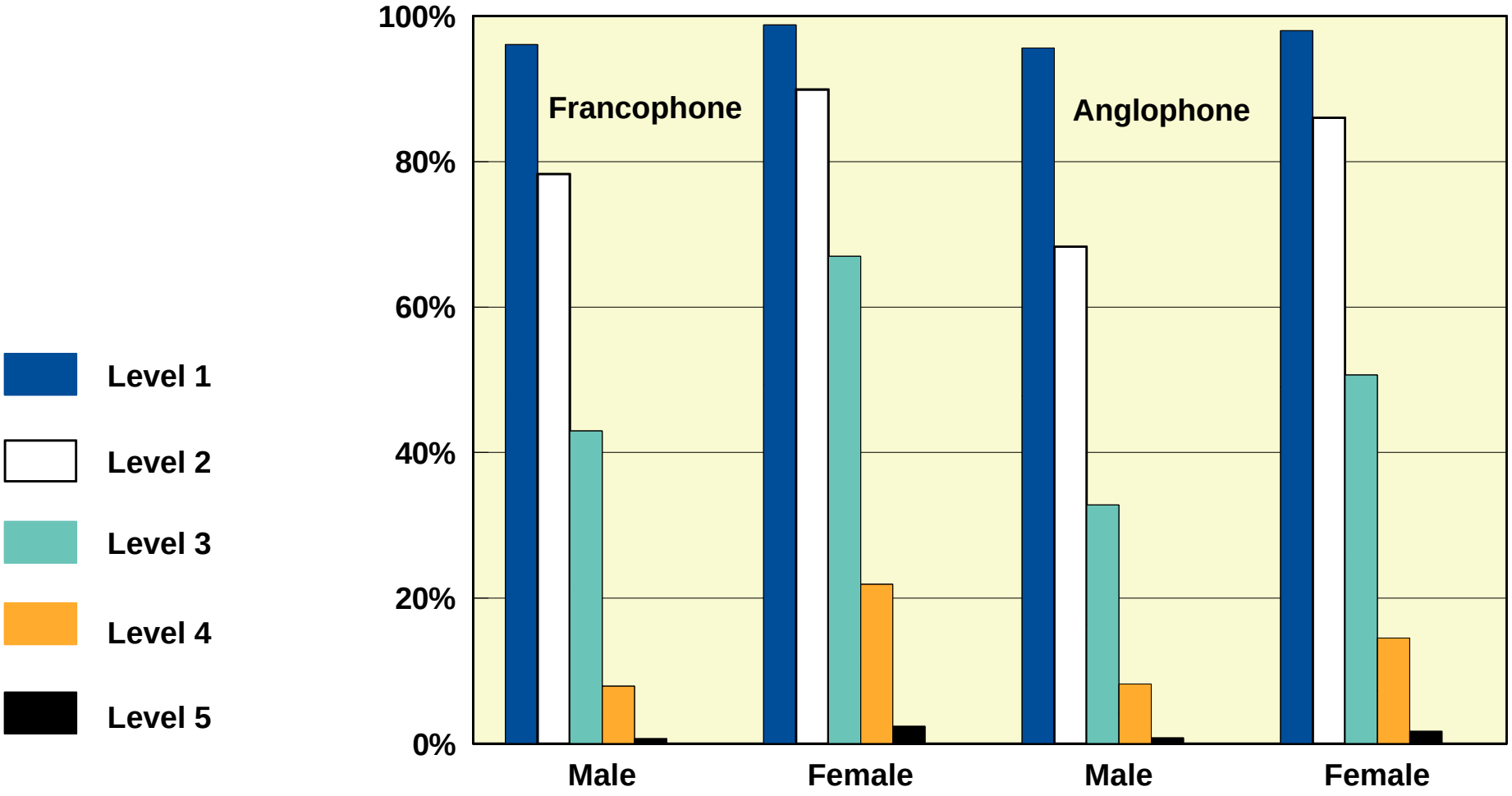
Table 4.4

Performance of 13-year-olds on the SAIP reading examination, by province or territory, Canada: 1998 (%)

	Level of Performance				
	1	2	3	4	5
British Columbia	96.5	74.9	38.7	9.2	1.1
Alberta	96.4	78.2	39.4	7.4	1.0
Saskatchewan	97.2	76.1	34.8	6.0	0.2
Manitoba (Anglophone)	95.8	73.4	34.9	5.0	0.4
Manitoba (Francophone)	95.5	70.5	42.4	12.9	1.3
Ontario (Anglophone)	97.1	77.8	38.4	6.4	1.0
Ontario (Francophone)	94.8	72.4	35.5	7.9	0.4
Québec (Anglophone)	**96.8**	**77.6**	**42.3**	**11.6**	**1.3**
Québec (Francophone)	**97.3**	**83.7**	**54.6**	**14.7**	**1.5**
New Brunswick (Anglophone)	97.2	76.1	38.8	6.9	0.5
New Brunswick (Francophone)	95.6	72.8	36.2	8.9	1.4
Nova Scotia (Anglophone)	96.7	71.4	34.1	8.1	0.9
Nova Scotia (Francophone)	91.0	58.4	24.7	7.5	0.4
Prince Edward Island	96.1	77.3	39.3	5.9	0.7
Newfoundland	96.2	78.2	41.5	8.7	0.4
Northwest Territories	64.4	37.7	15.6	3.7	0.2
Yukon	94.3	77.5	31.1	2.6	0.7
Canada (Anglophone)	**96.7**	**76.7**	**38.2**	**7.2**	**0.9**
Canada (Francophone)	**97.0**	**82.3**	**52.3**	**14.0**	**1.4**

Graph 4.4

Performance of 13-year-olds on the SAIP reading examination, by language and gender, for Québec: 1998 (%)



4.5 Writing Achievement Among 13-Year-Olds

Francophone 13-year-olds from Québec obtained better results than their counterparts in the other provinces on a writing examination that was held in the spring of 1998. Anglophone students from Québec obtained results comparable to those obtained by their counterparts in most of the other provinces.[1] These examinations were held as part of the School Achievement Indicators Program (SAIP) of the Council of Ministers of Education, Canada.

Québec Francophone 13-year-olds obtained better results than Francophone students in the other provinces on a writing examination. Anglophone students from Québec obtained results comparable to those of their counterparts in most of the other provinces.

The students' results were expressed in terms of five levels of performance. The first level corresponds to the learning achievement expected of elementary school students, and the fifth level, to the results expected of students with a mastery of the language. It must be emphasized that the examinations for Francophone and Anglophone students are not comparable.

Almost all Francophone students from Québec (99.5%) attained the first level of performance. The percentage of students who attained the second level was 95.3%, and 66.2% attained the third level. The results of Francophone students from Québec were better than those of Francophone students in the other provinces. The results of female Francophone students from Québec were much better than those of their male counterparts. The percentages of female students who attained the second, third and fourth levels were 98%, 79% and 21%, as opposed to 92%, 53% and 9% for male students. The results of Francophone students from Québec in 1998 are slightly better than those obtained in a comparable study in 1994. The percentage of those who attained the third level of performance was higher in 1998 (66.2%) than in 1994 (54.7%). The difference between the results of male and female students remained more or less constant between 1994 and 1998.

1. The comparisons of results in this section take into account a margin of error inherent in any result obtained by surveying a sampling of persons.

Almost all Anglophone students from Québec (99.5%) attained the first level of performance, 94.7%, the second level and 73.8%, the third level. These results are comparable to those in almost all the other provinces. Only in Alberta did a larger proportion of Anglophone students attain the fourth level of performance (23.9% compared with 17.1%). Anglophone students in the Northwest Territories obtained results below those of their Québec counterparts. As for differences between the sexes, the results obtained by female Anglophone students in Québec, like those of their Francophone counterparts, were better than those obtained by male students: 81% of female students attained the third level of performance and 23%, the fourth level, while the corresponding percentages for male students were 65% and 11%. The results of Anglophone students from Québec were similar to those obtained in 1994. The difference between the results of male and female students remained fairly constant between 1994 and 1998.

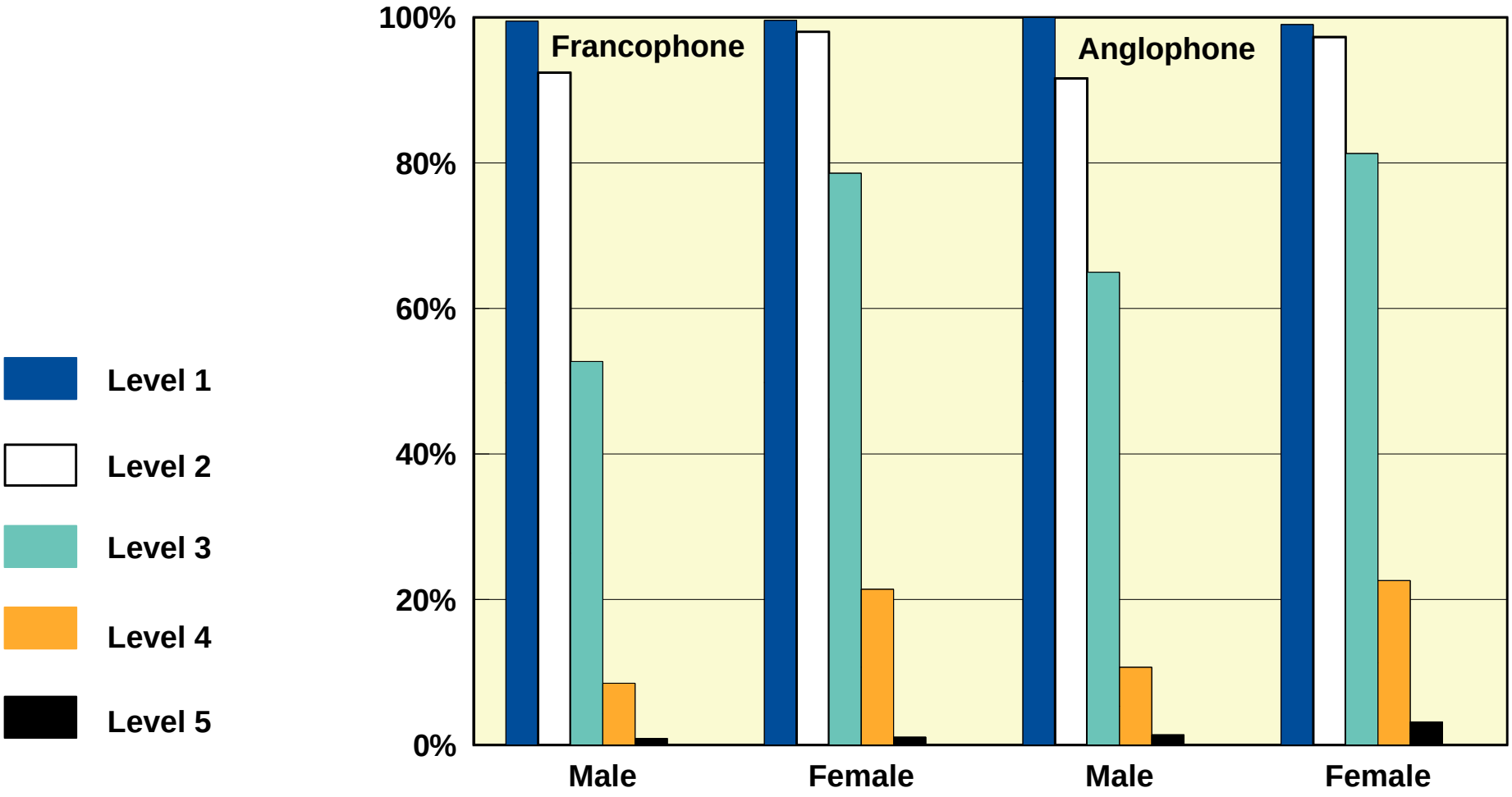
Table 4.5

Performance of 13-year-olds on the SAIP writing examination, by province or territory, Canada: 1998 (%)

	Level of Performance				
	1	2	3	4	5
British Columbia	98.7	94.5	72.0	18.1	2.2
Alberta	99.5	95.3	74.7	23.9	4.5
Saskatchewan	99.4	95.9	73.6	17.9	3.2
Manitoba (Anglophone)	99.0	94.3	70.6	16.0	2.5
Manitoba (Francophone)	100.0	80.1	28.0	3.4	0.6
Ontario (Anglophone)	99.8	96.6	73.9	19.8	1.9
Ontario (Francophone)	99.3	80.8	30.8	2.3	0.0
Québec (Anglophone)	**99.5**	**94.7**	**73.8**	**17.1**	**2.4**
Québec (Francophone)	**99.5**	**95.3**	**66.2**	**15.2**	**1.0**
New Brunswick (Anglophone)	99.9	95.0	70.1	14.2	2.2
New Brunswick (Francophone)	99.2	87.7	40.9	6.0	0.4
Nova Scotia (Anglophone)	99.6	94.4	69.5	14.7	2.4
Nova Scotia (Francophone)	99.3	71.2	20.9	0.4	0.4
Prince Edward Island	99.4	94.9	68.2	13.4	1.1
Newfoundland	99.3	96.1	70.7	14.7	2.5
Northwest Territories	87.9	51.0	19.2	2.1	0.6
Yukon	99.3	93.9	66.7	17.3	1.8
Canada (Anglophone)	**99.4**	**95.6**	**73.0**	**19.2**	**2.5**
Canada (Francophone)	**99.5**	**93.8**	**62.1**	**13.8**	**0.9**

Graph 4.5

Performance of 13-year-olds on the SAIP writing examination, by language and gender, for Québec: 1998 (%)



4.6 Reading Achievement Among 16-Year-Olds

Francophone 16-year-olds from Québec obtained better results than their counterparts in the other provinces on a reading examination held in the spring of 1998. Anglophone students from Québec obtained better results than their counterparts in many of the other provinces.[1] These examinations were held as part of the School Achievement Indicators Program (SAIP) of the Council of Ministers of Education, Canada.

Québec Francophone 16-year-olds obtained better results than Francophone students in the other provinces on a reading examination. Anglophone students from Québec obtained better results than their counterparts in many of the other provinces.

The students' results were expressed in terms of five levels of performance. The first level corresponds to the learning achievement expected of elementary school students, and the fifth level, to the results expected of students with a mastery of the language. It must be emphasized that the examinations for Francophone and Anglophone students are not comparable.

Almost all Francophone students from Québec attained the first two levels of performance (98.9% and 95.3%, respectively). Eight out of ten students attained the third level, and four out of ten, the fourth level. The results of Francophone students from Québec were better than those of Francophone students in the other provinces. The results of female Francophone students from Québec were much better than those of their male counterparts, especially at the third, fourth and fifth levels, where the percentages for female students were 88%, 53% and 22%, as opposed to 68%, 27% and 7% for male students. The results of Francophone students from Québec in 1998 are similar to those obtained in a comparable study in 1994. The difference between the results of male and female students, however, increased between 1994 and 1998.

Almost all Anglophone students from Québec (99.3%) attained the first level of performance. Nine out of ten students attained the second level, seven out of ten, the third level, and three out of ten, the fourth level. There is

1. The comparisons of results in this section take into account a margin of error inherent in any result obtained by surveying a sampling of persons.

no significant difference between the results of Anglophone students from Québec and those from British Columbia, Alberta, Ontario and Newfoundland. Anglophone students from Québec obtained better results than their counterparts in the Northwest Territories at every level. They obtained better results than their counterparts in the other provinces, and especially the Yukon, at the second and third levels. As for differences between the sexes, the difference between the results of male and female students is comparable to the difference among Francophone students. The percentages of female students who attained the third, fourth and fifth levels were 83%, 42% and 14%, as opposed to 58%, 17% and 4% for male students. The results of Anglophone students from Québec were similar to those obtained in 1994. The difference between the results of male and female students increased between 1994 and 1998.

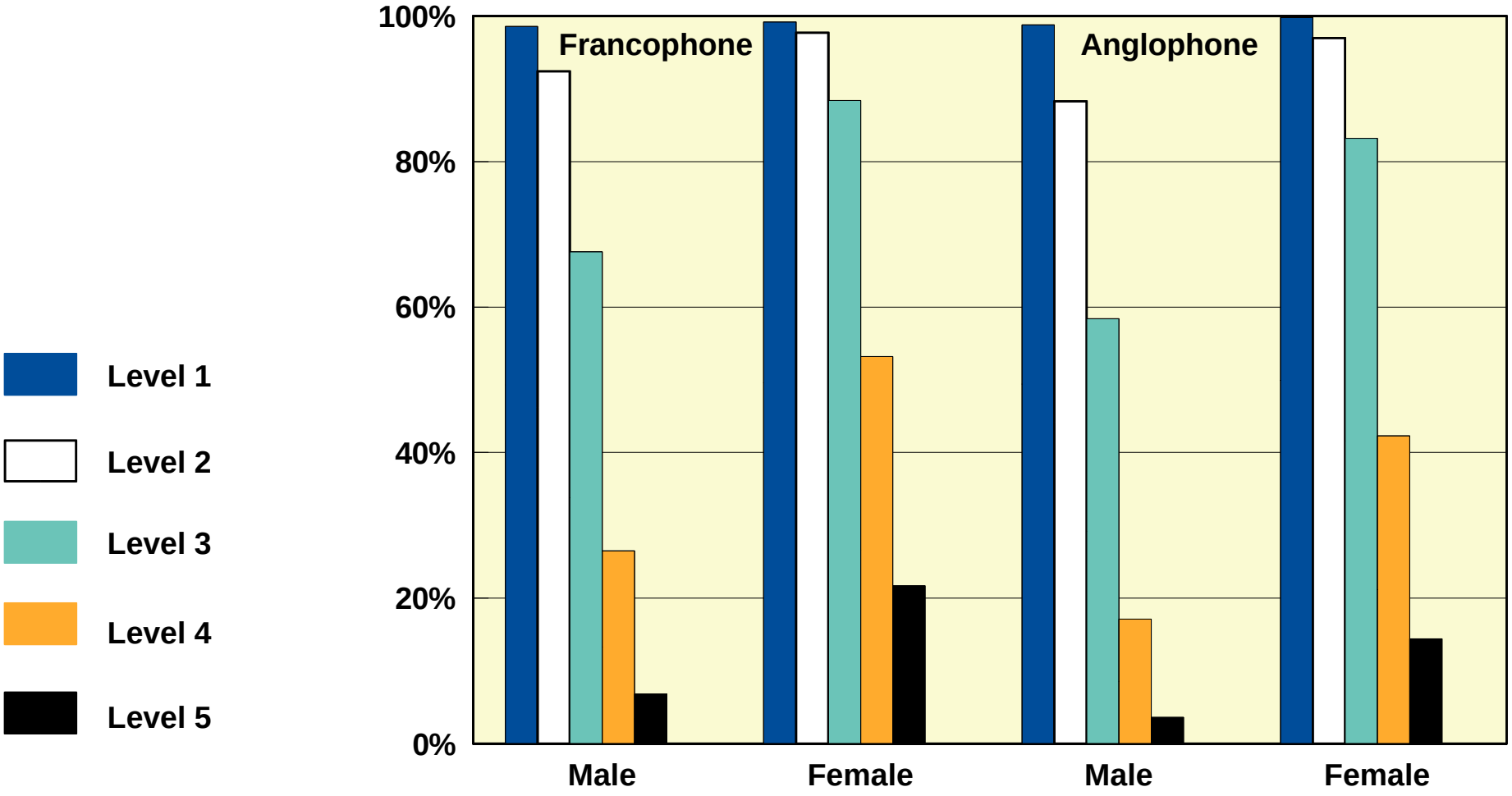
Table 4.6

Performance of 16-year-olds on the SAIP reading examination, by province or territory, Canada: 1998 (%)

	Level of Performance				
	1	2	3	4	5
British Columbia	98.6	90.1	67.9	29.0	6.7
Alberta	99.4	91.4	67.4	28.6	6.9
Saskatchewan	99.0	91.4	64.9	24.9	4.8
Manitoba (Anglophone)	98.3	88.1	65.5	27.1	6.1
Manitoba (Francophone)	100.0	83.8	59.9	27.5	8.4
Ontario (Anglophone)	98.7	91.1	71.6	35.5	10.2
Ontario (Francophone)	98.7	87.8	65.0	28.0	6.8
Québec (Anglophone)	**99.3**	**93.1**	**71.9**	**31.0**	**9.5**
Québec (Francophone)	**98.9**	**95.3**	**79.4**	**41.8**	**15.3**
New Brunswick (Anglophone)	97.6	89.7	65.9	27.0	5.2
New Brunswick (Francophone)	98.9	90.2	68.1	31.3	9.0
Nova Scotia (Anglophone)	99.3	90.7	66.4	27.3	5.6
Nova Scotia (Francophone)	98.8	88.4	62.0	26.0	6.8
Prince Edward Island	97.7	85.6	63.9	25.5	5.5
Newfoundland	98.6	93.6	71.4	30.8	6.8
Northwest Territories	81.7	61.4	36.3	9.4	2.5
Yukon	96.5	79.8	55.3	22.8	5.2
Canada (Anglophone)	**98.7**	**90.8**	**69.3**	**31.6**	**8.3**
Canada (Francophone)	**98.9**	**94.6**	**78.0**	**40.5**	**14.5**

Graph 4.6

Proportion of 16-year-olds on the SAIP reading examination, by language and gender, for Québec: 1998 (%)



4.7 Writing Achievement Among 16-Year-Olds

Francophone 16-year-olds from Québec obtained better results than their counterparts in the other provinces on a writing examination that was held in the spring of 1998. Anglophone students from Québec obtained slightly better results than those obtained by their counterparts in many of the other provinces.[1] These examinations were held as part of the School Achievement Indicators Program (SAIP) of the Council of Ministers of Education, Canada.

Québec Francophone 16-year-olds obtained better results than Francophone students in the other provinces on a writing examination. Anglophone students from Québec obtained results comparable to those of their counterparts in many of the other provinces.

The students' results were expressed in terms of five levels of performance. The first level corresponds to the learning achievement expected of elementary school students, and the fifth level, to the results expected of students with a mastery of the language. It must be emphasized that the examinations for Francophone and Anglophone students are not comparable.

Almost all Francophone students from Québec attained the first two levels of performance (99.5% and 98.6%, respectively). The percentage of students who attained the third level was 87.0%. Four out of ten students attained the fourth level. The results of Francophone students from Québec were better than those of Francophone students in the other provinces. The results of female Francophone students from Québec were better than those of male students at the third and fourth levels, where the percentages for female students were 93% and 49%, as opposed to 80% and 29% for male students. The only significant difference between the results of this study and those of a comparable study conducted in 1994 involves the percentage of students who attained the third level of performance, which was higher in 1998 than in 1994 (87.0% compared with 78.5%). The difference between the results of male and female students remained constant between 1994 and 1998.

1. The comparisons of results in this section take into account a margin of error inherent in any result obtained by surveying a sampling of persons.

Like their Francophone counterparts, almost all Anglophone students from Québec attained the first two levels of performance (99.7% and 98.6%, respectively). The percentage of students who attained the third level is 87.6%, while 43.6% attained the fourth level. Anglophone students in British Columbia, Alberta, Manitoba and Ontario achieved results comparable to those of their Québec counterparts. The latter obtained results much higher than those of students in the Northwest Territories, and slightly higher than those of students in the other provinces, especially at the fourth and fifth levels. As for differences between the sexes, the results obtained by female Anglophone students in Québec, like those of their Francophone counterparts, were better than those obtained by male students: 91% of female students attained the third level of performance, and 49%, the fourth level, while the corresponding percentages for male students were 84% and 38%. The results of Anglophone students from Québec were slightly better than those obtained in 1994. The percentage of Anglophone students from Québec who attained the fifth level of performance increased from 8.2% in 1994 to 13.6% in 1998. The difference between the results of male and female students remained fairly constant between 1994 and 1998.

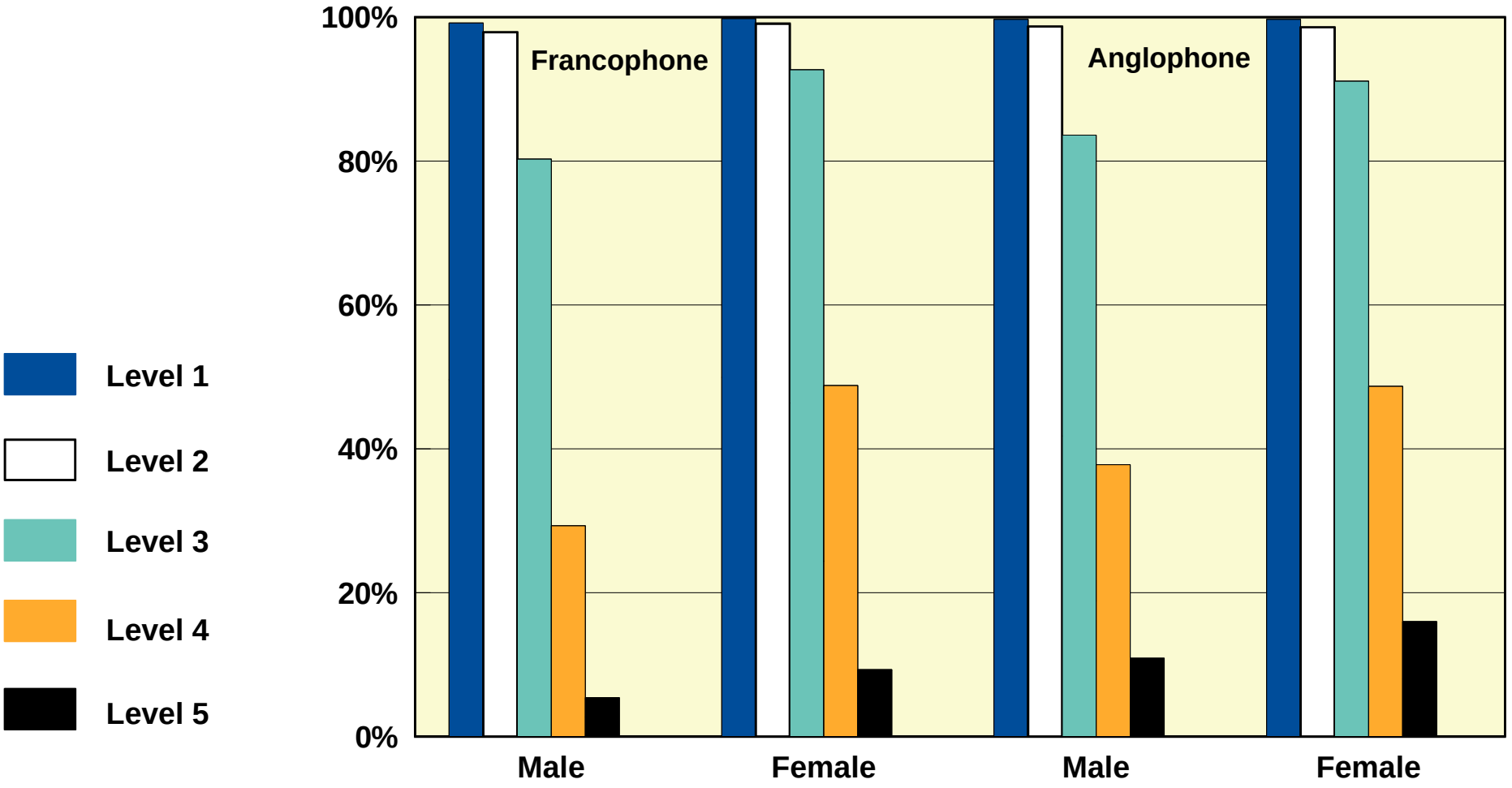
Table 4.7

Performance of 16-year-olds on the SAIP writing examination, by province or territory, Canada: 1998 (%)

	Level of Performance				
	1	2	3	4	5
British Columbia	99.0	97.1	83.6	37.5	11.0
Alberta	99.5	97.8	83.8	42.7	10.0
Saskatchewan	99.9	97.4	84.2	34.7	7.1
Manitoba (Anglophone)	99.9	98.7	86.4	38.9	9.0
Manitoba (Francophone)	99.2	92.9	56.8	7.1	0.0
Ontario (Anglophone)	99.9	98.6	87.5	42.2	10.9
Ontario (Francophone)	99.5	91.6	50.8	13.4	1.9
Québec (Anglophone)	**99.7**	**98.6**	**87.6**	**43.6**	**13.6**
Québec (Francophone)	**99.5**	**98.6**	**87.0**	**39.8**	**7.5**
New Brunswick (Anglophone)	99.6	98.4	87.5	36.7	7.1
New Brunswick (Francophone)	99.5	92.0	61.2	16.8	2.0
Nova Scotia (Anglophone)	99.9	99.1	88.5	37.5	8.7
Nova Scotia (Francophone)	98.8	88.4	44.8	4.8	0.8
Prince Edward Island	99.4	98.0	85.1	33.6	7.0
Newfoundland	99.7	98.5	88.8	35.4	6.4
Northwest Territories	94.3	78.8	38.4	5.7	0.0
Yukon	99.1	98.1	83.3	30.7	6.8
Canada (Anglophone)	**99.6**	**98.1**	**86.0**	**40.3**	**10.3**
Canada (Francophone)	**99.5**	**97.9**	**83.7**	**37.2**	**6.9**

Graph 4.7

Proportion of 16-year-olds on the SAIP writing examination, by language and gender, for Québec: 1998 (%)



5 Results–Graduation

5.1 Level of Graduation Upon Leaving the Education System

In 1996-97, 61.2% of those leaving the education system graduated with a bachelor's degree or a diploma in technical or vocational education.

The main data pertaining to diplomas obtained at the various levels of instruction appears in the diagram in the introduction and is presented in more detail in the following pages. Organized in a different way,[1] this data may also show the distribution of a cohort of school leavers according to the highest diploma earned.[2]

Between 1975-76 and 1996-97, graduation rates at the secondary and university levels rose at a rapid pace for both men and women. The increase in the proportion of new graduates with bachelor's degrees (from 14.9% to 28.2%) 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 16.9%). 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 DEC (including DECs without mention) was 64.7% in 1975-76 and dropped to 38.8% in 1996-97. This decline of 25.9 percentage

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1. It is assumed that the diplomas 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 DECs; it follows that the surplus of DECs in relation to the bachelor's degrees would represent the number of DECs that are not followed by a university degree. For this reason, there are no persons with a DEC in pre-university education or without mention as a last diploma in 1975-76 and 1995-96. An additional hypothesis makes it possible to estimate the number of DECs in technical education that are followed by a bachelor's degree. It is also assumed that secondary vocational education 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 Secondary School Diplomas in general education.
2. This level of schooling is not that for the population as a whole as indicated in the census, which is primarily a historical reflection of all the generations in question. The level measured here is the schooling for persons currently leaving the education system; this level also reflects what would become of the general state of schooling if current conditions were to remain the same.

points is reflected by increases of 13.3 percentage points in the proportion of graduates with a bachelor's degree and 12.6 percentage points in the proportion of holders of vocational or technical education diplomas (8.9 and 3.7 percentage points, respectively).

A glance at the situation according to gender highlights the disparities already observed in the schooling of men and women. One and one half times more women than men graduate with a bachelor's degree or with a college diploma in technical education (48.9% compared with 30.6%), while roughly half as many women as men leave school without a diploma (11.1% compared with 22.5%).

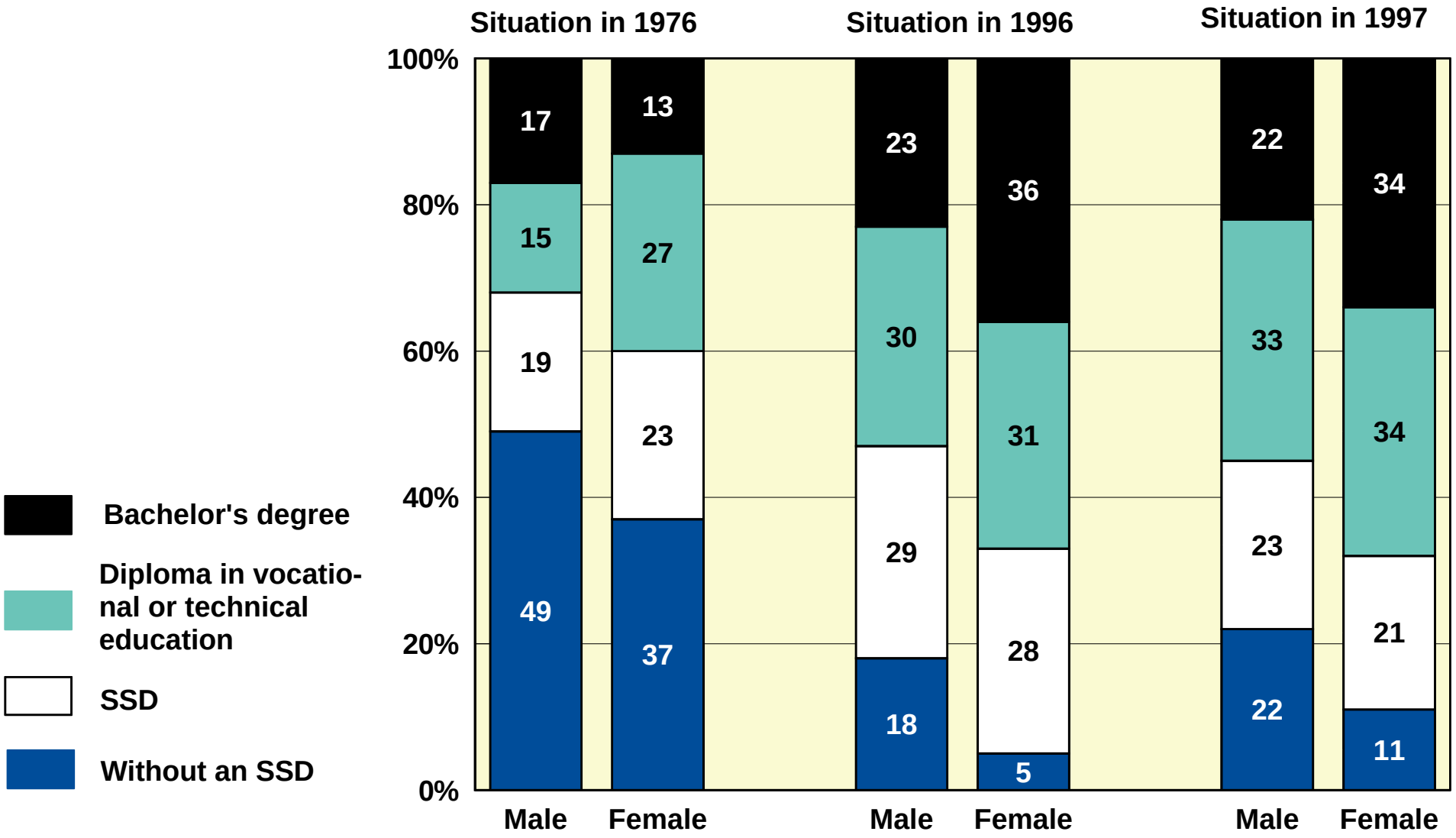
Table 5.1
Distribution of school leavers, by highest diploma earned (%)

	1975-76	1980-81	1985-86	1990-91	1995-96	1996-97
Bachelor's degree[1]	14.9	17.6	19.0	23.6	29.0	28.2
College diploma in technical education[2]	7.3	10.0	11.2	10.3	11.1	11.0
Secondary vocational education diploma[3]	13.1	21.9	17.7	13.7	19.4	22.0
DEC in pre-university education or without mention of specialty	–	–	4.1	5.4	–	–
SSD (general education)	21.7	18.5	27.2	23.4	28.5	21.9
No diploma	43.0	32.0	20.8	23.6	12.0	16.9
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 DEC in technical education, the Attestation d'études collégiales (AEC–attestation of college studies) 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 Secondary School Vocational Diploma (SSVD), the Attestation of Vocational Specialization (AVS), the Vocational Education Certificate (VEC) and other secondary school diplomas (SSDs) with mention of vocational specialty.

Graph 5.1

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



5.2 Graduation From Secondary School–Youth and Adult Sectors

In 1997-98, the probability of obtaining a secondary school diploma[1] was 81.2%, a drop of 2 percentage points from 1996-97. Following the decline of the preceding year, the probability is increasingly moving away from the high of 88.0%, which was observed in 1995-96.

In 1997-98, the probability of obtaining a first secondary school diploma from the youth or adult sector was 81.2%, that is, the level observed at the beginning of the 1990s.

The decline in 1996-97 can be explained in part by a decrease in enrolments in Secondary IV and V (see Section 2.3). However, in 1997-98, enrolments in these two grades increased slightly. Nevertheless, various factors counteracted what should have been a positive impact on the graduation rate. Thus, enrolments in vocational education and in the adult sector declined slightly. Moreover, the decrease in the probability of obtaining a secondary school diploma in 1997-98 concerned primarily male students.

In 1997-98, for students in the youth sector and those under 20 years of age in the adult sector, the probability of obtaining a secondary school diploma was 69.4%. The Ministère's objective is 85% by the year 2010.

The situation presented here in terms of the graduation rate applies primarily to general education. Section 5.3 reveals that the graduation rate for vocational education increased in 1997-98. This section is primarily concerned with the first diplomas obtained.[2] It might be interesting to note that, in 1997-98, 93.0% of all the diplomas earned were first diplomas obtained in general education. This proportion was 98.6% if only diplomas obtained in the youth sector or by those under 20 years of age in the adult sector are considered.

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1. The probability of obtaining a first secondary school diploma is determined by grouping the first diplomas obtained at the secondary level in general and vocational education. 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 education diploma that a student may have earned, vocational education diplomas received after a general SSD, or SSDs obtained after a vocational education diploma.

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, it has been on the decline in the last two years.

During the 1980s, the probability of graduating from secondary school was greater for female students than for male students. The gap between the sexes was 18 percentage points in 1989-90, and 14 percentage points in 1997-98.

The graduation rate for female students reached more than 90% between 1991-92 and 1995-96, but dropped to 88.5% in 1997-98. For male students, it was 80% in 1995-96, but dropped to 74.2% in 1997-98.

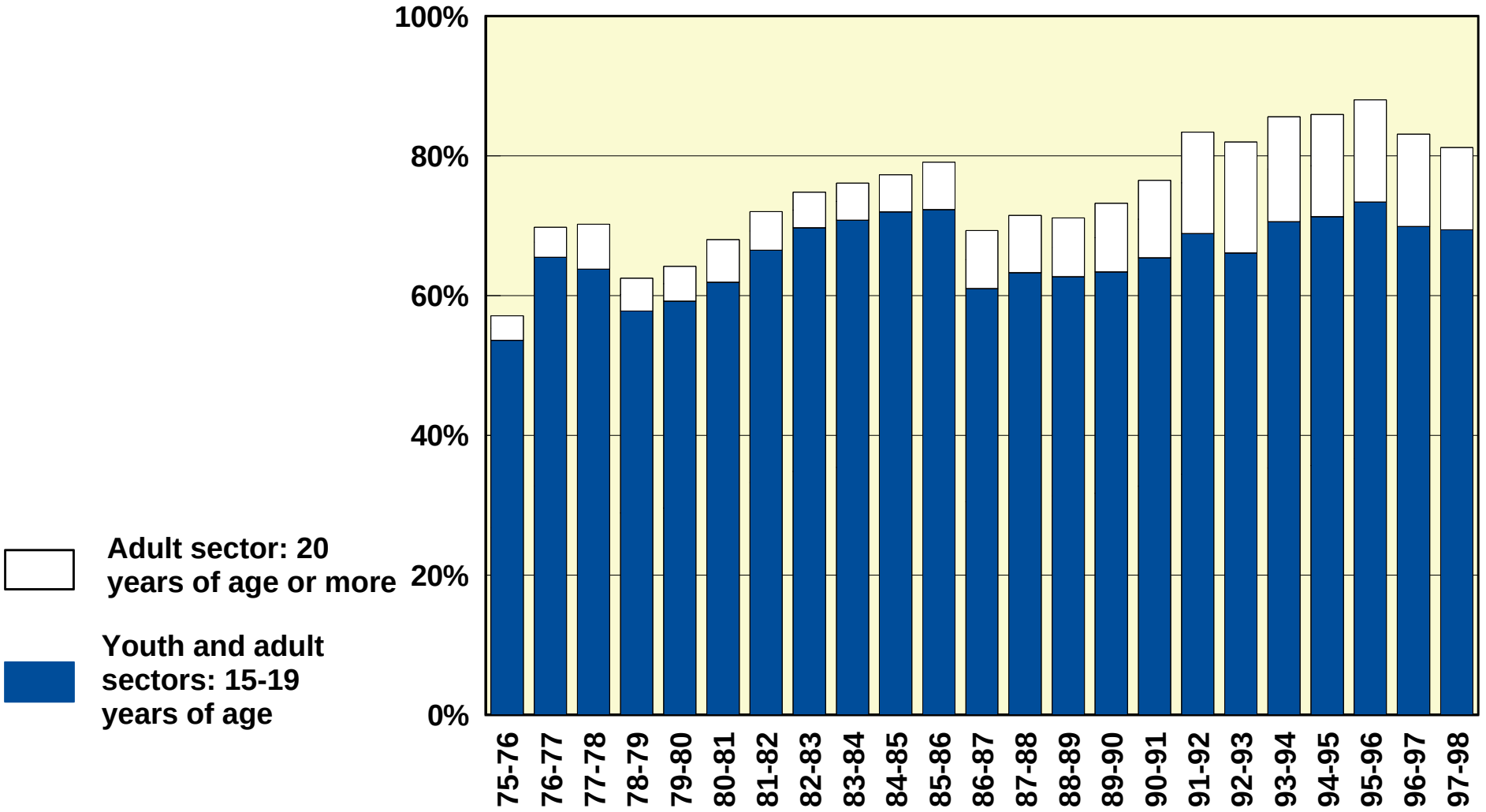
Table 5.2
Probability of obtaining a secondary school diploma from either the youth or the adult sector, by gender (%)

	1975-76	1985-86	1995-96	1996-97	1997-98[e]
Male					
Youth sector	47.4	66.5	64.1	61.3	58.7
Youth and adult sectors: 15 to 19 years of age	48.2	67.1	67.0	64.3	61.9
Youth and adult sectors: all ages	**51.2**	**73.1**	**81.4**	**77.5**	**74.2**
Female					
Youth sector	58.5	77.3	77.0	72.9	74.0
Youth and adult sectors: 15 to 19 years of age	59.1	77.9	80.2	75.8	77.3
Youth and adult sectors: all ages	**63.1**	**85.5**	**95.0**	**88.9**	**88.5**
Both					
Youth sector	52.9	71.7	70.4	66.9	66.2
Youth and adult sectors: 15 to 19 years of age	53.6	72.3	73.4	69.9	69.4
Youth and adult sectors: all ages	**57.0**	**79.2**	**88.0**	**83.1**	**81.2**

e: Estimates

Graph 5.2

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



5.3 Graduation From Secondary Vocational Education–Youth and Adult Sectors

Based on behaviours observed in 1997-98, 23 out of 100 young Quebecers can expect to obtain a vocational education diploma[1] in secondary school.[2] This group includes 16 persons who already have a first Secondary School Diploma (SSD) in general education. Since the beginning of the vocational education reform in 1987-88, a growing number of persons obtaining a vocational education diploma are doing so after having obtained a diploma in general education.

The proportion of a generation of students obtaining a secondary school vocational education diploma was 22.9% in 1997-98. With the exception of 1982-83, this is the highest rate ever observed.

In 1997-98, the probability of students in the youth sector or those under the age of 20 in the adult sector obtaining a first secondary school diploma in vocational education was 1.8%, whereas it was over 16% in 1977-78. This confirms that obtaining a first diploma in vocational education is becoming less common and that students in the youth sector or those under the age of 20 in the adult sector who obtain a first secondary school diploma (69.7% in 1997-98) are most likely to do so in general education (see Section 5.2).

The very nature of vocational education diplomas has also changed. Short vocational programs have been phased out in favour of general education. The basic difference between the Secondary School Vocational Diploma (SSVD), which became known as the Diploma of Vocational Studies (DVS) in 1998, and its predecessor, the Long Vocational Diploma, is that the SSVD deals exclusively with vocational education, since all the components of the vocational programs dealing with general education have been transferred to the SSD.

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1. The diplomas considered here are the Short Vocational Diploma, the Long Vocational Diploma, the Secondary School Vocational Certificate (SSVC), the Secondary School Vocational Diploma (SSVD) or the Diploma of Vocational Studies (DVS), the Attestation of Vocational Specialization (AVS), the Vocational Education Certificate (VEC) and other Secondary School Diplomas (SSDs) with mention of vocational specialty.
2. Figures refer to the probability of obtaining a first secondary school diploma. This rate includes only the first secondary school diplomas obtained in vocational education. This indicator is a measure of the proportion of a generation that stays in school until a vocational education diploma is obtained.

The difference between male and female students is much less pronounced than in general education. Nevertheless, more male students than female students enrol in vocational education.

In 1994-95, 4 655 vocational education diplomas[3] were awarded to students under 20 years of age. The Ministère's objective is to quadruple this number before the year 2000, that is, to award 18 500 diplomas. In 1997-98, 6 581 diplomas (preliminary figure) were awarded.

3. All vocational education diplomas are considered here, be they the first, second, third, and so on, earned by a student. The other statistics in this section deal only with the first vocational education diploma, which may be the first diploma earned at the secondary level or the diploma earned after having obtained an SSD in general education.

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

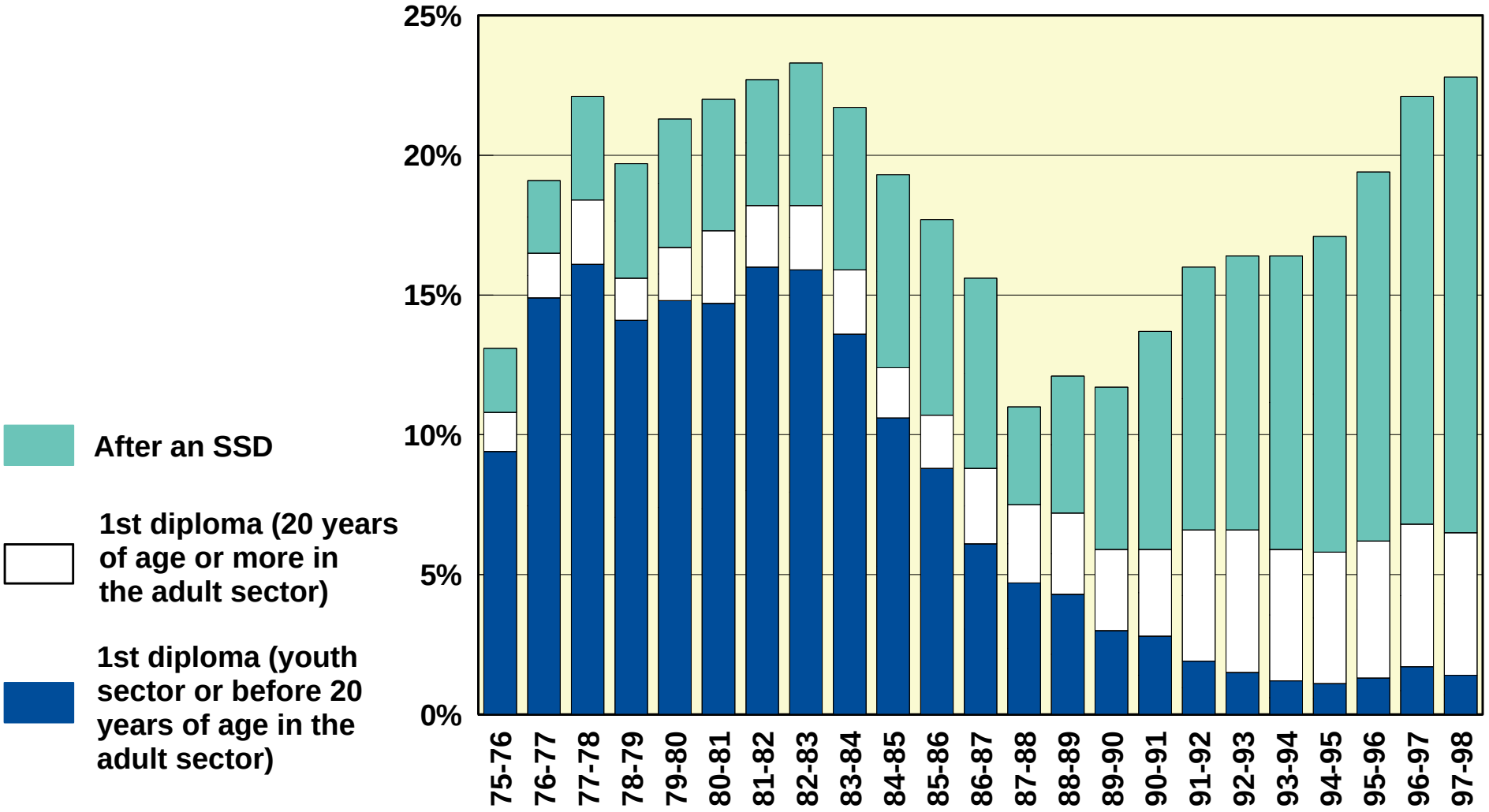
	1975-76	1985-86	1990-91	1995-96	1996-97	1997-98[e]
Youth sector or before 20 years of age in the adult sector						
First diploma	9.4	8.8	2.8	1.3	1.7	1.4
After an SSD	2.1	6.4	3.9	3.5	4.1	4.6
Total	11.5	15.1	6.8	4.7	5.8	6.1
Adult sector: 20 years of age or over						
First diploma	1.4	1.9	3.1	4.9	5.1	5.1
After an SSD	0.2	0.6	3.9	9.7	11.2	11.8
Total	1.6	2.5	7.0	14.7	16.3	16.8
Both						
First diploma	10.8	10.7	5.9	6.2	6.8	6.5
After an SSD	2.3	7.0	7.8	13.2	15.3	16.3
Total	**13.1**	**17.7**	**13.7**	**19.4**	**22.0**	**22.9**
Male	9.7	17.0	14.0	20.9	23.9	24.7
Female	16.5	18.4	13.4	17.7	20.1	21.0

e: Estimates

SSD: Secondary School Diploma

Graph 5.3

Probability of obtaining a vocational education diploma, by sector and age (%)



5.4 Graduation From College

In 1996-97, the proportion of a generation who could expect to obtain a first college diploma, be it a Diplôme d'études collégiales (DEC–diploma of college studies) or any other diploma, was 39.2%. This represents an increase of 17.0 percentage points over 1975-76, when it stood at 22.2%. The proportion of a generation who are admitted to college education (see Section 2.8) and the proportion of students who obtain a diploma upon leaving college (see sections 3.3 and 3.4) combine to produce this result.

In 1996-97, the proportion of young Quebecers who could expect to obtain a DEC was 39.0%, an increase of 1.3 percentage points over the previous year.

The probability of women obtaining a diploma (DEC or other) was approximately one and one half times higher than for men (48.3% compared with 30.4%). The gap between the sexes grew steadily during the 1980s. In 1975-76, the probability of women obtaining a college diploma[1] was already 2.7 percentage points higher than for men. Since then, the probability of obtaining a college diploma has continued to rise more sharply for women than for men, and the gap is now 17.9 percentage points.

The greatest growth occurred with the pre-university DEC, as the probability of obtaining this type of diploma rose from 13.5% to 25.6% between 1975-76 and 1996-97, an increase of 12.1 percentage points, compared with a rise of 5.9 percentage points for the technical DEC over the same period. The increase in the last year is almost entirely due to pre-university education, where the graduation rate improved in 1996-97 (see Section 3.3).

For both types of programs, the number of women graduating between 1975-76 and 1996-97 exceeded the number of men and the gap between the sexes continued to widen. The probability of women obtaining a pre-university DEC increased by 19.3 percentage points, compared with a rise of 5.3 percentage points for men. On the other hand,

1. The probability of obtaining a first college diploma is the measure of the proportion of a generation that stays in school until a college diploma is earned. In this edition, the rates are calculated according to the school year and not the calendar year, as was done in previous editions.

for both sexes the probability of obtaining a technical DEC grew more modestly, although the increase for men was as pronounced in technical education (5.2 percentage points) as in pre-university education (5.3 percentage points). Women outnumbered men by 4.4 percentage points in 1975-76, and by 5.5 percentage points in 1996-97.

The Ministère's objective for the year 2010 is that 60% of young Quebecers obtain a DEC; in 1996-97, the rate was 39.0%. The gap between the actual rate and the objective is greater than the increase recorded over the last 21 years, since the probability of obtaining a DEC in 1975-76 was 21%.

Table 5.4
Probability of obtaining a first college diploma, by gender and type of education (%)

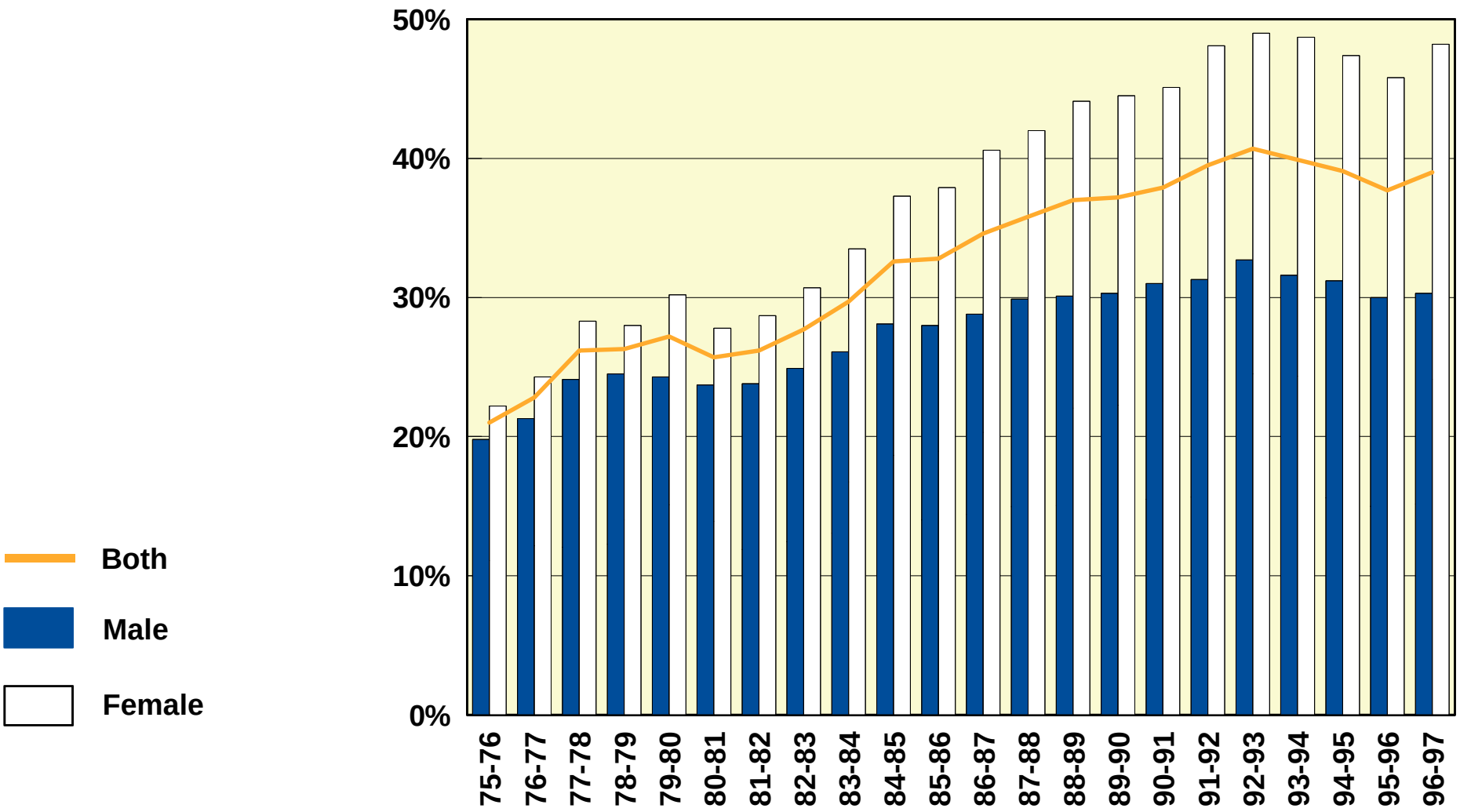
	1975-76	1985-86	1990-91	1992-93	1995-96	1996-97[e]
Male						
All diplomas[1]	20.8	29.6	32.5	35.4	30.3	30.4
DEC[2]	**19.8**	**28.0**	**31.0**	**32.7**	**30.0**	**30.3**
Pre-university education	14.3	18.7	21.8	21.8	19.1	19.6
Technical education	5.5	9.0	8.4	9.7	10.7	10.7
Female						
All diplomas[1]	23.5	39.2	46.5	51.3	46.2	48.3
DEC[2]	**22.2**	**37.9**	**45.1**	**49.0**	**45.8**	**48.2**
Pre-university education	12.7	23.6	30.0	32.0	29.5	32.0
Technical education	9.5	13.9	13.8	15.2	16.0	16.2
Both						
All diplomas[1]	22.2	34.3	39.4	43.2	38.1	39.2
DEC[2]	**21.0**	**32.8**	**37.9**	**40.7**	**37.7**	**39.0**
Pre-university education	13.5	21.1	25.9	26.8	24.2	25.6
Technical education	7.5	11.4	11.1	12.4	13.3	13.4

e: Estimates

1. The diplomas considered here are the Diplôme d'études collégiales (DEC–diploma of college studies), the Attestation d'études collégiales (AEC–attestation of college studies) 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 enrolments in programs leading to a CEC or to a DPEC.
2. These figures include DECs without mention of vocational specialty.

Graph 5.4

Probability of obtaining a first DEC, by gender (%)



5.5 Graduation From University[1]

Based on behaviours observed in 1997, more than one quarter of young Quebecers (28.2%) can expect to obtain a bachelor's degree. For several years, more women than men have enrolled in university (see Section 2.10). 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 the women's favour. In 1997, the probability of obtaining a bachelor's degree was 34.5% for women and 22.0% for men, or an increase of 21.4 percentage points for women and 5.3 percentage points for men.

In 1997, the probability of obtaining a bachelor's degree dropped by 0.8 percentage points to 28.2%; this was the first decline observed since 1984.

The Ministère's objective for the year 2010 is that 30% of young Quebecers obtain a bachelor's degree. The current rate of 28.2% is not likely to increase any time soon, given that, since 1992-93, enrolments in programs leading to a bachelor's degree have decreased (see Section 2.10). In effect, it was in 1997 that the effect of this decline could be felt for the first time because the probability of obtaining a bachelor's degree dropped by 0.8 percentage points from 1996. The probability of obtaining a bachelor's degree is nevertheless higher in Québec than the average of 23.6% recorded for member countries of the Organisation for Economic Co-operation and Development (OECD) in 1996.[2]

With regard to obtaining a master's degree, the results had not changed in the previous year; the probability of graduating with a master's degree was 6.0%, or more than double the 2.7% probability for 1976. An increase in enrolments at the master's level, maintained until 1996-97 (see Section 2.10), points to a continued increase in the

1. Only university degrees (bachelor's, master's and doctoral degrees) awarded by Québec universities are considered here. Degrees earned by Quebecers outside the province are not taken into account.
2. This is the average with respect to the probability of obtaining a first university degree when the short programs (similar to a bachelor's) and long programs (more than four years) are combined. These rates appear in Table C4.2a in the OECD publication, *Education at a Glance–OECD Indicators* (Paris, 1998).

number of master's degrees awarded for at least a few years to come. The difference between the sexes is much less significant (0.5 percentage points) but could widen in favour of women, given the growing margin with respect to obtaining 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 the men, the probability of women obtaining a master's degree has climbed from 1.9% to 6.3%, moving ahead of the probability for men in 1993.

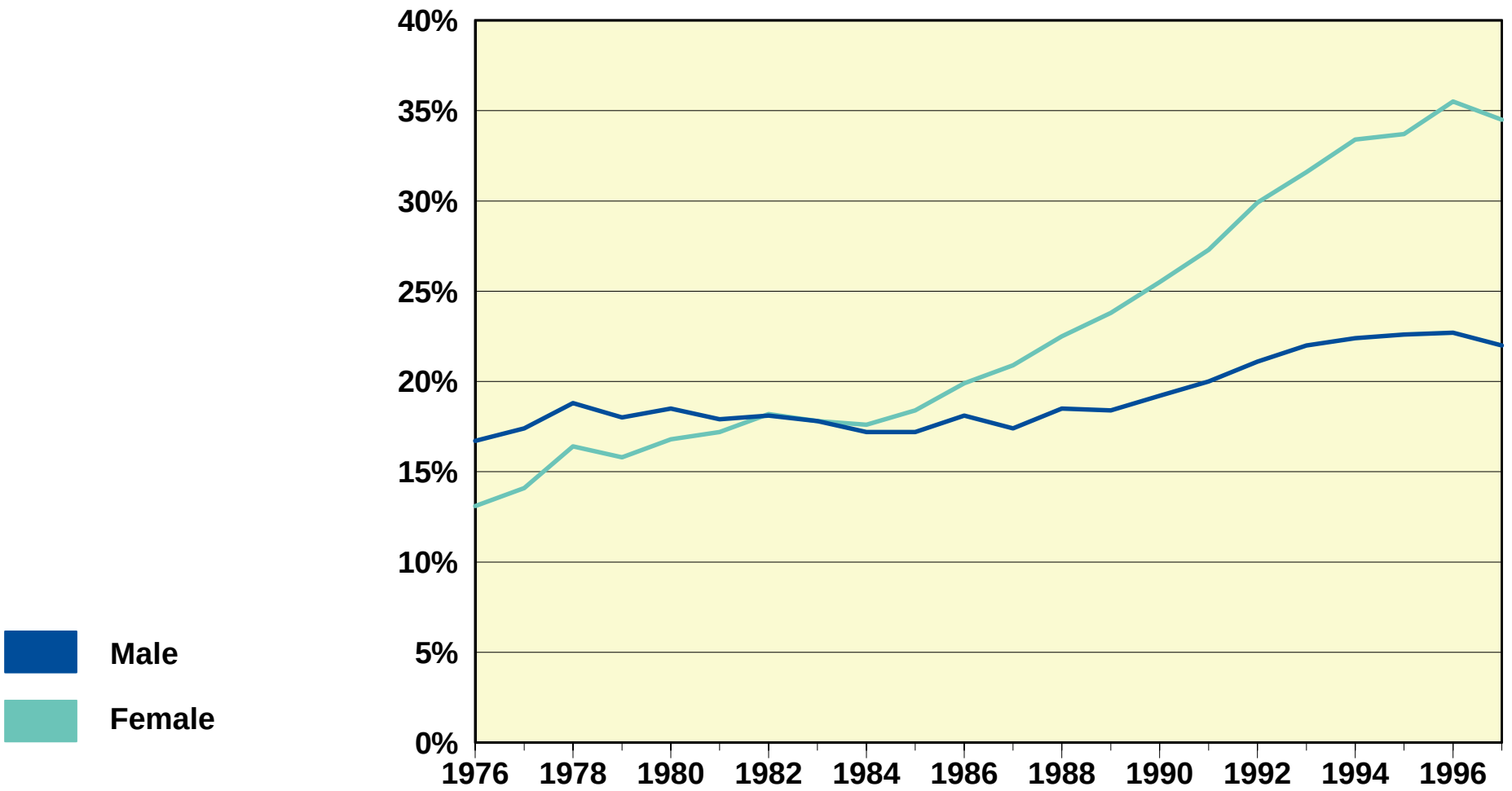
A doctorate is still earned by a minute fraction of the population–only 1.0%. This last phase in the education system is perhaps the only one in which men continue to outnumber women. Figures are, however, minimal for both sexes: 1.2% of men obtain a doctorate, compared with 0.7% of women. In view of developments at the master's level, the pool of aspiring doctoral candidates is also likely to increase for some time to come.

Table 5.5
Probability of obtaining a university degree, by gender (%)

	1976	1986	1991	1995	1996	1997
Bachelor's degree						
Male	16.7	18.1	20.0	22.6	22.7	22.0
Female	13.1	19.9	27.3	33.7	35.5	34.5
Both	**14.9**	**19.0**	**23.6**	**28.1**	**29.0**	**28.2**
Master's degree						
Male	3.5	4.4	4.4	5.6	5.8	5.8
Female	1.9	3.4	4.3	6.0	6.3	6.3
Both	**2.7**	**3.9**	**4.4**	**5.8**	**6.0**	**6.0**
Doctorate						
Male	0.6	0.7	0.9	1.2	1.2	1.2
Female	0.2	0.3	0.4	0.6	0.6	0.7
Both	**0.4**	**0.5**	**0.6**	**0.9**	**0.9**	**1.0**

Graph 5.5

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



5.6 University Degrees by Field of Study

In 1997, the largest proportion (34.9%) of bachelor's, master's and doctoral degrees issued by Québec universities were earned in social sciences and humanities, followed by business administration (17.4%), education (13.7%), engineering and architecture (10.1%), health sciences (9.3%), natural sciences (7.5%), mathematics and computer science (3.8%), and law (3.3%).

In 1997, the proportion of degrees earned in engineering and architecture, natural sciences, and mathematics and computer science accounted for 21.4% of all the bachelor's, master's and doctoral degrees awarded. In these fields of study, more men (67.8%) obtained degrees than women; however, more women earned degrees in the other fields of study or when all the fields of study are taken into account.

The majority of degree holders were women (57.6%). Women earned 70.8% of the degrees in education, 73.7% in health sciences, 64.7% in social sciences and humanities, 56.6% in law, and 50.2% in business administration. Men earned the majority of the degrees in engineering and architecture (77.9%),[1] mathematics and computer science (70.8%) and natural sciences (52.7%).[2]

Compared with 1990, the number of degrees issued by universities in 1997 rose by 16.4%. This percentage is the result of a 25.6% increase in the number of degrees awarded to women and a 5.7% increase in the number awarded to men.

In the last seven years, the breakdown of the degrees awarded according to field of study has changed. For example, the number of degrees in business administration has dropped (by 3.7 percentage points), as has, to a lesser extent, the number of degrees in natural sciences, mathematics and computer science, and engineering and architecture (from 0.1 to 1.0 percentage points). At the other extreme, the number of degrees awarded in health sciences has risen by 0.6 percentage points, and in education and social sciences and humanities, by 2.6 and 2.2 percentage points, respectively.

1. The proportion of degrees in engineering and architecture earned by women rose from 16.8% in 1990 to 22.1% in 1997.
2. This refers to students who have earned a university degree (bachelor's, master's or doctoral degree) during the year in question.

For member countries of the Organisation for Economic Co-operation and Development (OECD),[3] degrees earned in the sciences (natural sciences, mathematics and computer science, engineering and architecture) accounted for 26% of the total number of degrees earned in 1996; in Québec, this proportion was 21.4%. The proportion of degrees in law and business administration was 25% for the OECD countries and 20.7% for Québec, whereas the proportion of degrees in health sciences was 11% for the OECD countries and 9.3% for Québec. Degrees in social sciences and humanities (including education) represented 38% for the OECD countries and 48.6% for Québec.

3. Source: *OECD, Education at a Glance–OECD Indicators* (Paris: 1998). All comparisons between the results presented in this section and those published by the OECD must take into account the fact that differences exist in the methodologies used to obtain the results.

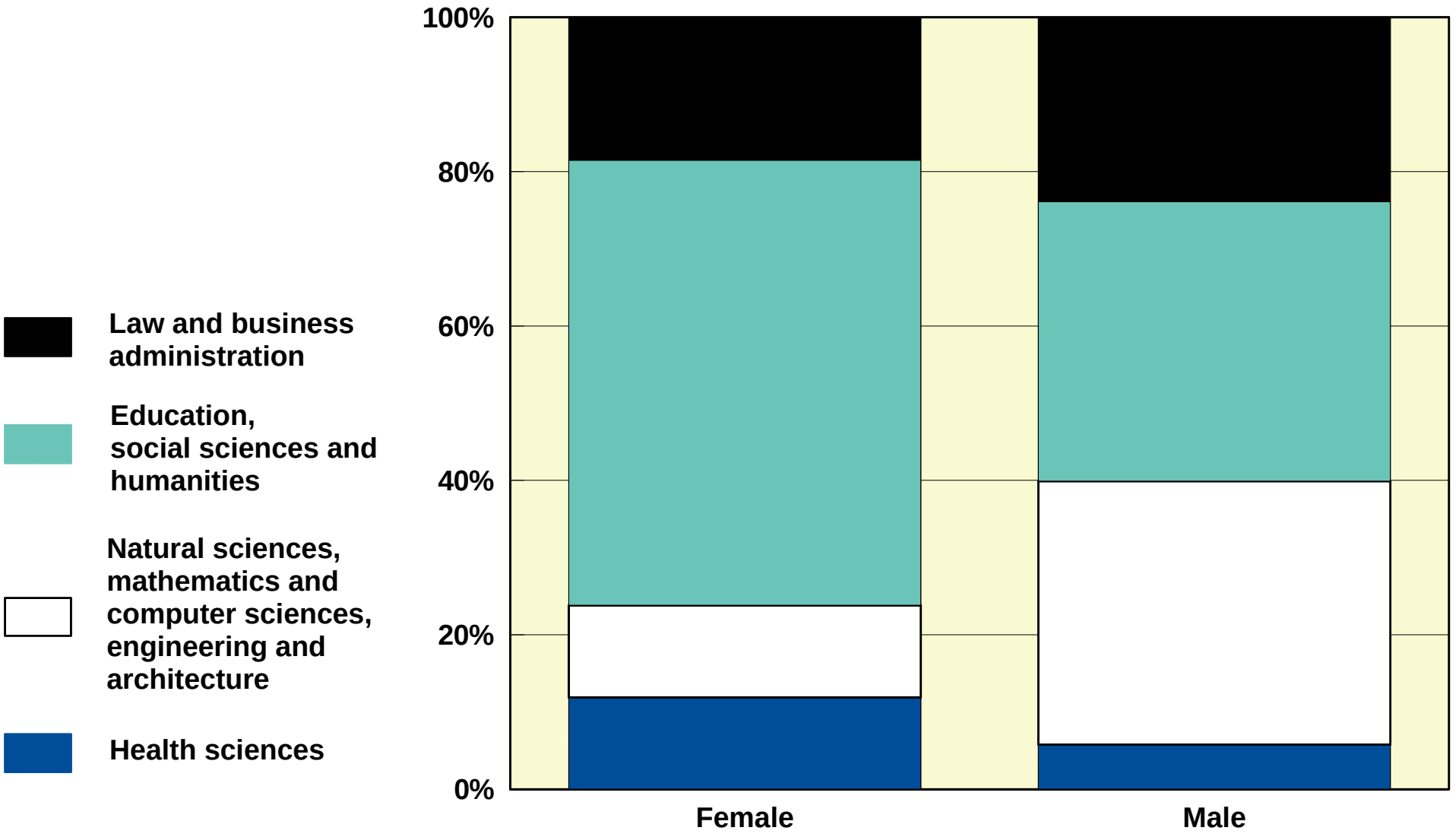
Table 5.6
Distribution of university degrees, by field of study and gender[1] (%)

	1990	1992	1993	1994	1995	1996	1997
Health sciences	8.7	8.4	8.7	9.0	8.9	8.8	9.3
Natural sciences	7.6	7.0	6.5	6.8	6.3	7.2	7.5
Mathematics and computer science	4.0	3.6	3.8	3.5	3.6	3.5	3.8
Engineering and architecture	11.1	11.0	10.7	11.0	11.0	10.6	10.1
Law	3.5	3.6	3.6	3.2	3.2	3.3	3.3
Business administration	21.1	21.5	21.1	19.6	18.5	17.5	17.4
Education	11.2	12.1	13.2	13.9	15.5	15.6	13.7
Social sciences and humanities	32.8	32.8	32.4	33.0	33.0	33.5	34.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Female	53.4	54.6	55.3	56.3	56.4	57.6	57.6
Male	46.6	45.4	44.7	43.7	43.6	42.4	42.4

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

Graph 5.6

Distribution of university degrees, by field of study and gender: 1997 (%)



6.1 Employment Trends by Level of Instruction

The increase of 66 000 jobs in 1998 over 1997 has benefited individuals from almost all levels of instruction, including those without a secondary school diploma (17 000 jobs).

Since the early 1990s, changes in the structure of the labour market have been occurring in Québec and in Canada as a whole that benefit workers with higher 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 instruction considered here correspond to the highest level of instruction attained by employed workers in a given year.[2] It should be noted, however, that these levels of instruction do not necessarily correspond to employment requirements.

In Québec, it was only in 1995 that the job losses suffered in the last recession were absorbed. In 1998, there were 154 000 more jobs than in 1990.[3] However, although there may have been an overall increase of 154 000 jobs, this growth in employment did not benefit all workers. Those who did not complete postsecondary or university studies suffered job losses, while those who did made gains. Thus, employed individuals with a university education were more numerous (by 226 000) in 1998 than in 1990, for an increase of 53.7%. Those with a postsecondary diploma held 301 000 more jobs (32.7%) in 1998 than in 1990. In short, those with a postsecondary or university education held 527 000 more jobs in 1998 than in 1990.

The situation was different for those without a postsecondary or university education. In all, these individuals held 373 000 fewer jobs in 1998 than in 1990. Thus, fewer people who had begun postsecondary studies without

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 Secondary School Vocational Diploma, or the Diploma of Vocational Studies as it is known today) and exclude university studies. University education begins with programs that lead to at least a bachelor's degree.
2. The level of instruction 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 instruction in a given year than in an earlier year.
3. The figures presented here are yearly averages, except for 1998, which is the average for the first 11 months.

completing them held jobs in 1998 than in 1990 (3 000 fewer), representing a decrease of 1.2%. Secondary school graduates who did not pursue a postsecondary education held 100 000 fewer jobs (15.7%) in 1998 than in 1990. The number of persons who were employed and whose highest level of instruction fell short of a secondary school diploma declined in 1998 by 270 000 compared with 1990, for a decrease of 29.1%.

Finally, contrary to the trend observed, employment of individuals without a secondary school diploma increased by 17 000 in 1998.

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

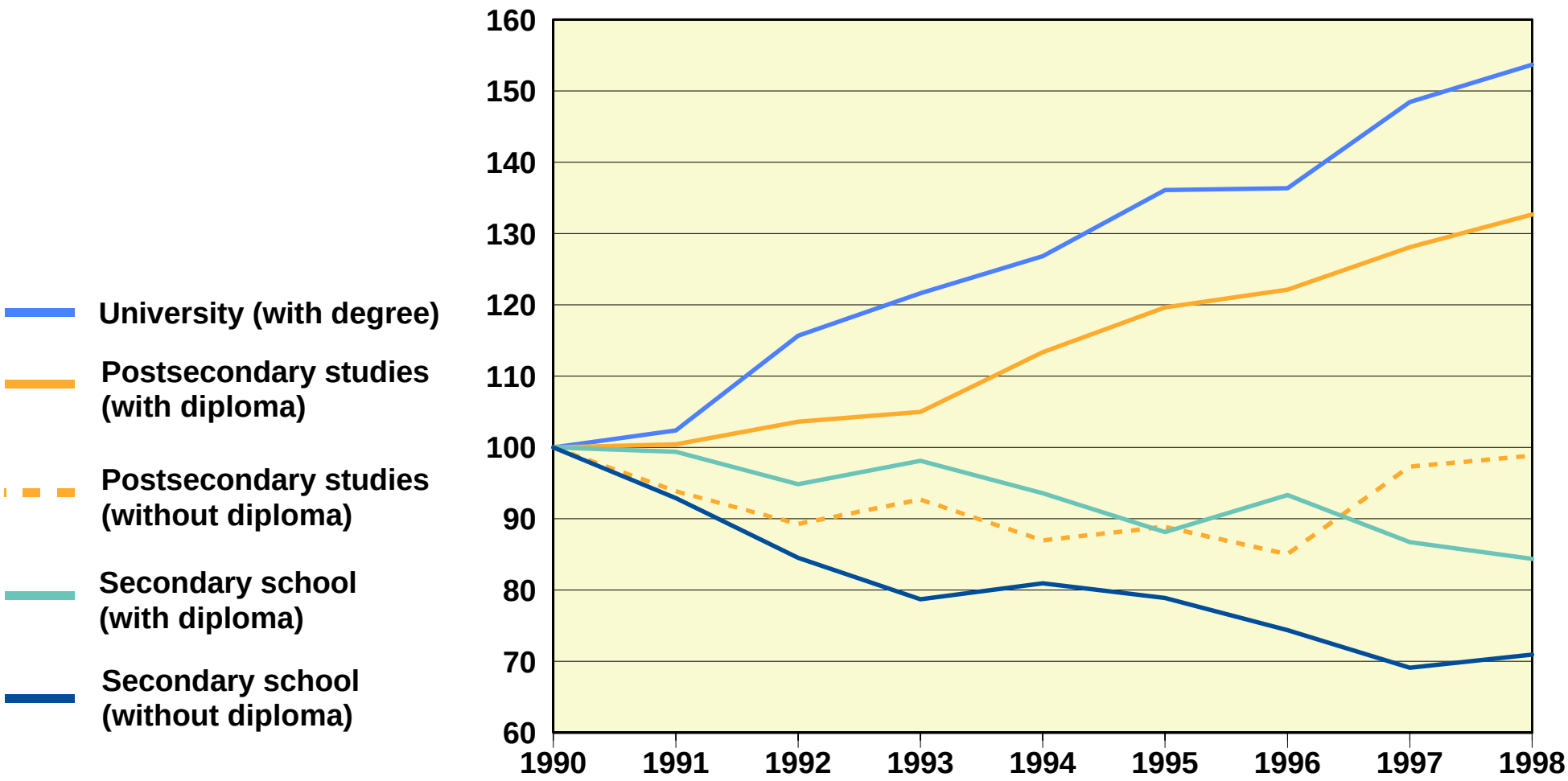
Year	Secondary School (without diploma)	Secondary School (with diploma)	Postsecondary Studies (without diploma)	Postsecondary Studies (with diploma)	University (with degree)	Total
1990	929	639	261	922	421	3 172
1992	785	606	233	955	487	3 066
1995	733	563	232	1 103	573	3 204
1997	642	553	250	1 183	632	3 260
1998	659	539	258	1 223	647	3 326
Change from 1990 to 1998	- 29.1%	- 15.7%	- 1.2%	32.7%	53.7%	4.9%

Source: Statistics Canada

1. See Note 1 in text.

Graph 6.1

Employment trends in Québec, by level of instruction (1990 = 100)



6.2 Labour Force Activity by Level of Instruction[1]

In 1998, approximately one out of every five jobs in Québec (19.8%) was held by people who had not finished secondary school. Almost one out of every four jobs (24.0%) was held by people having finished secondary school or begun postsecondary studies. More than half of all jobs (56.2%) were held by people with a postsecondary or university diploma or degree.

In 1998, more than half of all jobs in Québec were held by postsecondary or university graduates.

Of the 19.4% who had a university degree, 14.0% had a bachelor's degree and 5.4% had a higher degree.

In comparison with Ontario and the other provinces, the proportion of jobs in Québec held by individuals who did not finish secondary school was 2.3 and 2.6 percentage points higher, respectively; the proportion of jobs held by people who finished secondary school or began postsecondary studies was 7.1 and 8.1 percentage points lower, respectively, and the proportion of jobs held by people holding a postsecondary or university diploma or degree was 4.8 and 5.6 percentage points higher, respectively.

The proportion of jobs in Québec held by people with a postsecondary diploma was 5.9 percentage points higher than in Ontario and 3.3 percentage points higher than in the other provinces, while the proportion of jobs held by people with university degrees was 1.1 percentage points lower than in Ontario, but 2.3 percentage points higher than in the other provinces.

Of the university graduates, the proportion of those with bachelor's degrees was 0.6 percentage points higher than in Ontario and 2.0 percentage points higher than in the other provinces, while the proportion of people with higher degrees was 1.7 percentage points lower than in Ontario, but 0.3 percentage points higher than in the other provinces.

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1. According to Statistics Canada terminology, the postsecondary sector includes all programs of study leading to trade diplomas and certificates (including the Secondary School Vocational Diploma–SSVD, or the Diploma of Vocational Studies–DVS, as it is known today) and excludes the university sector. The university sector begins with programs leading to at least a bachelor's degree. The results presented are averages for the first 11 months of 1998.

Table 6.2
Employment by highest level of instruction, Québec, Ontario and the other provinces, Canada: 1998[1] (%)

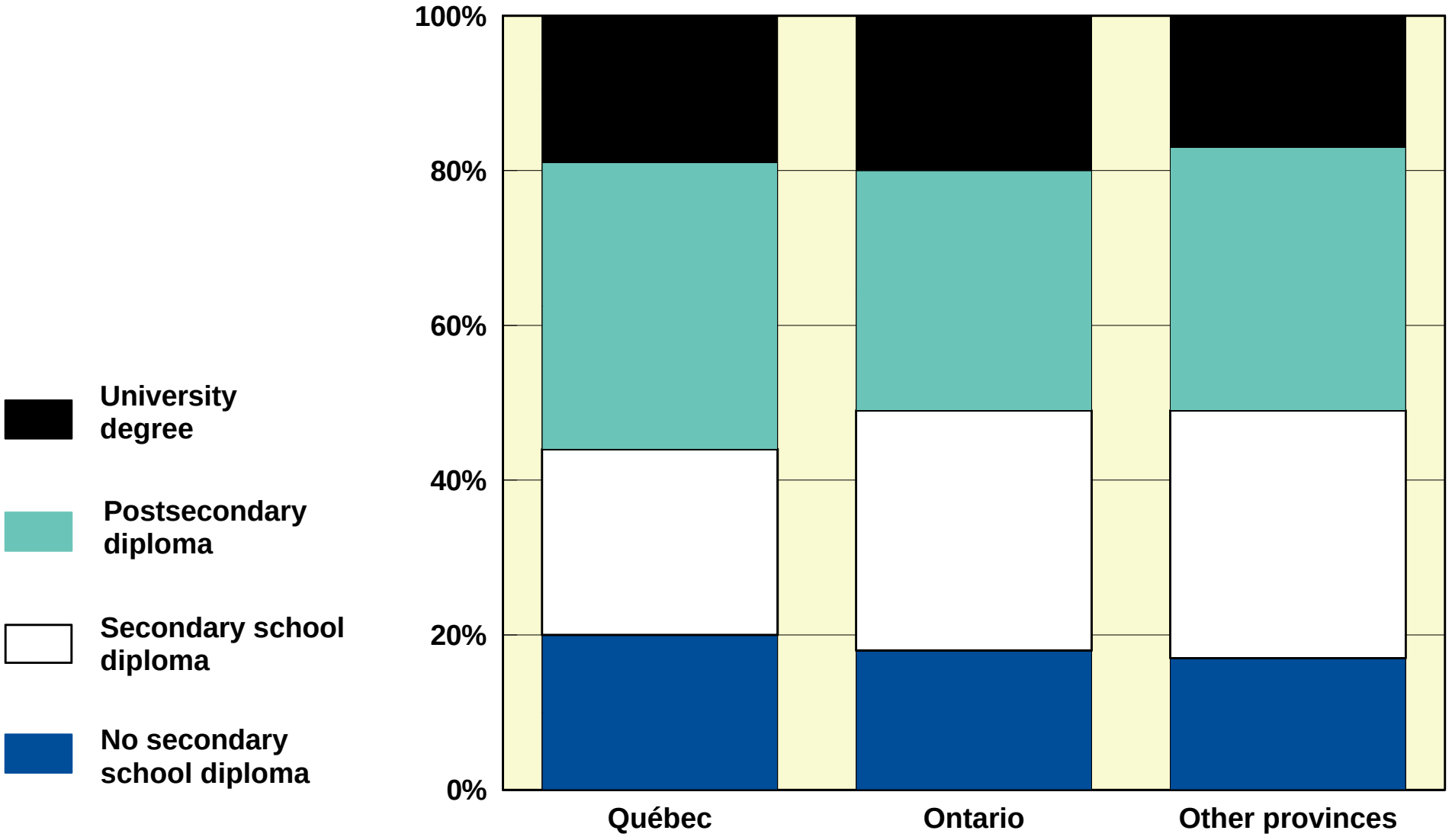
	Québec	Ontario	Other Provinces
Total	100.0	100.0	100.0
No secondary school diploma	19.8	17.5	17.2
Secondary school diploma	16.2	21.4	21.8
Some postsecondary education	7.8	9.7	10.3
Postsecondary diploma	36.8	30.9	33.5
University degree	19.4	20.5	17.1
Bachelor's degree	14.0	13.4	12.0
Higher degree	5.4	7.1	5.1

Source: Statistics Canada

1. See Note 1 in text.

Graph 6.2

Distribution of employment by highest diploma or degree earned, 1998 (%)



6.3 Entry of Graduates Into the Labour Market

College graduates have lower unemployment rates than secondary school graduates. Similarly, university graduates have lower unemployment rates than college graduates.

Upon completing their studies, secondary school, college and university graduates who do not pursue their education arrive on the labour market.[1] Data obtained through Québec government studies provides a picture of the placement and unemployment of graduates a few months after they obtain their diploma or degree.[2]

In 1998, 18.4% of the students who graduated in 1996-97 with a Secondary School Vocational Diploma (SSVD) were unemployed, a decrease of 5.8 percentage points from 1997. A total of 73.2% of the SSVD graduates had a job. Of the employed SSVD graduates, 83.5% worked full time and 73.6% were employed full time in their field of study. Placement rates for SSVD graduates have been on the rise since 1994.

A total of 8.6% of students who obtained a diploma in a college technical program in 1996-97 were unemployed on March 31, 1998. This represents a drop of 2.5 percentage points from 1997. In 1998, 71.6% of technical program graduates had a job. Of those who were employed, 82.3% worked full time and 80.2% were employed full time in their field. Placement rates for technical program graduates have been on the rise since 1994.

On March 31, 1998, 12.5% of students who obtained a diploma in a college pre-university program in 1996-97 were unemployed–a drop of 5.8 percentage points from the previous year. Some 13.9% of pre-university program graduates had a job. Of the employed graduates, 63.9% worked full time. Since 1994, the proportion of pre-university graduates finding employment has been on the rise, but it dropped slightly in 1998.

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1. The analysis deals specifically with holders of a Secondary School Vocational Diploma (SSVD) or, as it is now known, the Diploma of Vocational Studies (DVS), a Diplôme d'études collégiales (DEC–diploma of college studies), a bachelor's degree or a master's degree.
2. In this edition, results refer to students graduating in the year indicated, that is, 9 months after the completion of studies for graduates with an SSVD or an Attestation of Vocational Specialization (AVS) and roughly 10 months for DEC graduates (15 months for those finishing in the fall). The situation for those graduating with a bachelor's or a master's degree is as of January, two years after they obtained the degree.

According to the most recent statistics available on entry into the labour market, the unemployment rate for students who obtained a bachelor's degree in 1995 was 9.1% in January 1997; the rate had dropped by 2.3 percentage points compared with 1994. A total of 74% of the graduates had a job. Of the employed graduates, 80.0% were working on a full-time basis and 75.5% had found a full-time job in their field of study. Placement rates have been on the rise since 1994.

The unemployment rate for those who graduated with a master's degree in 1995 was 8.1% in January 1997–an increase of 1.3 percentage points since 1994. A total of 77.7% of the graduates had a job. Of those who were working, 85.2% were employed full time and 83.5% had found a full-time job related to their field of study. Placement rates have been rising since 1994.

Unemployment rates for 15-to-34-year-olds are given in Table 6.3 as a reference.

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

	1989	1994	1996	1997	1998
Secondary education					
SSVD (or DVS)	–	27.2	27.0	24.2	18.4
AVS	–	24.6	21.8	21.4	16.6
College					
Pre-university education	N/A	21.4	14.1	18.3	12.5
Technical education	8.2	18.4	13.3	11.1	8.6
University					
Bachelor's degree	8.1	11.4	N/A	9.1	N/A
Master's degree	4.9	6.8	N/A	8.1	N/A
Unemployment rates in Québec[1]					
15-19-year-olds	15.2	20.6	24.6	27.4	23.4
20-24-year-olds	11.9	15.9	15.6	15.7	13.8
25-34-year-olds	9.6	12.7	11.9	11.2	9.8

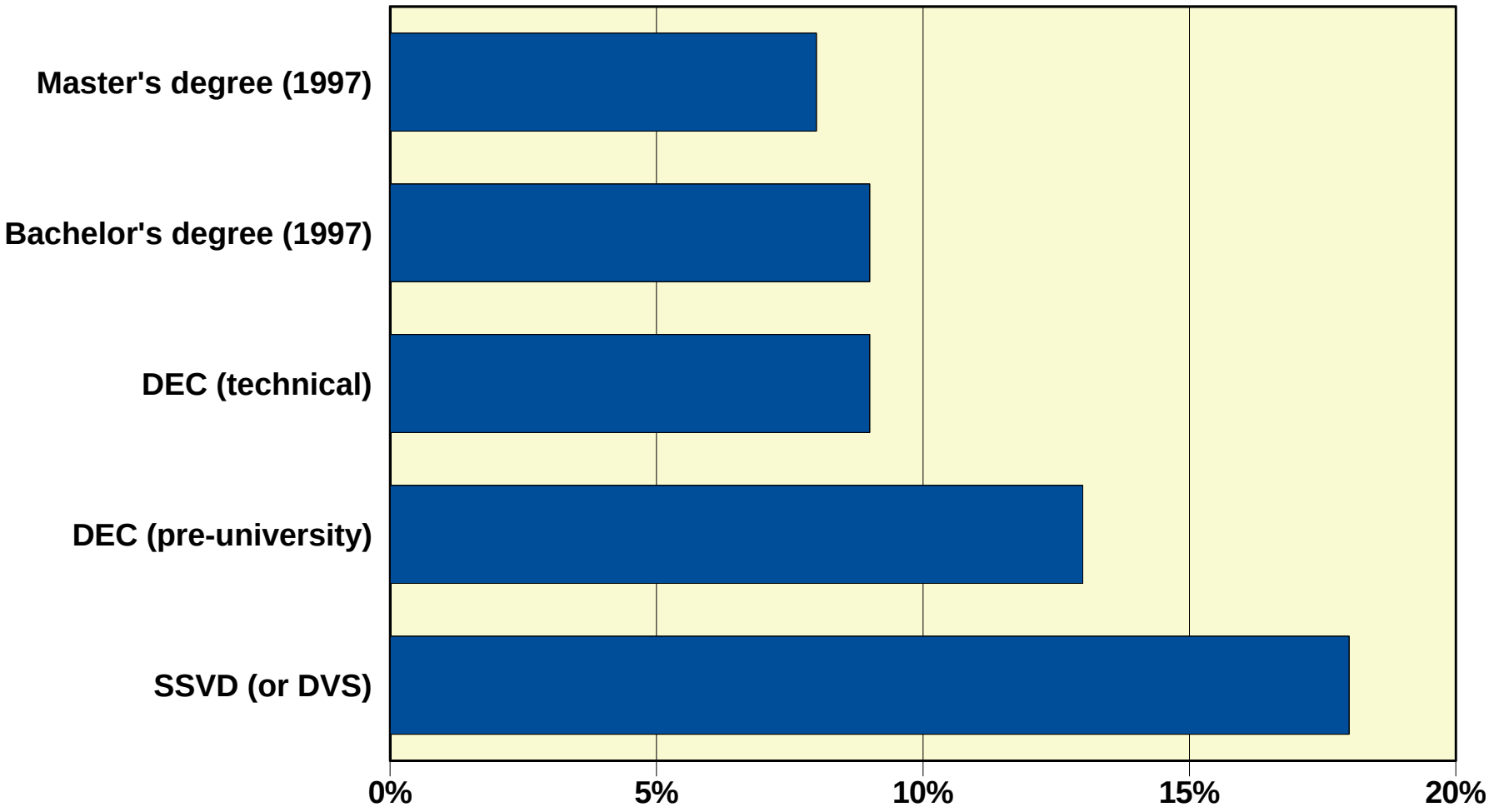
N/A: Data not available

–: Not applicable

1. Source: Statistics Canada. Data includes, for each age group, persons from all levels and types of education, whose work experience may differ from that of recent graduates.

Graph 6.3

Unemployment rates for graduates in 1998 (%)



6.4 Integration of Secondary Vocational Education Graduates Into the Labour Market

The unemployment rate among secondary vocational education graduates fell in 1997 and 1998.

On March 31, 1998, 73.2% of graduates of programs leading to a Secondary School Vocational Diploma (SSVD), or a Diploma of Vocational Studies (DVS), as it has been called since 1998, were employed, 16.5% were looking for a job, 6.0% were still in school and 4.3% were not in the labour force. At the same time, 74.3% of 1996-97 graduates of programs leading to an Attestation of Vocational Specialization (AVS) were employed, 14.8% were looking for a job, 5.8% were still in school and 5.1% were not in the labour force. The number of SSVD graduates in the labour force was 0.6 percentage points higher than the number of AVS graduates, the number of SSVD graduates still in school was 0.2 percentage points higher than the number of AVS graduates, and the number of SSVD graduates not in the labour force was 0.8 percentage points lower than the number of AVS graduates. The unemployment rate among SSVD graduates was 18.4%, higher than the number of AVS graduates (16.6%).

Proportionally speaking, the number of jobs held by SSVD graduates is growing more rapidly than the number of graduates themselves. Thus, between 1995 and 1998, the number of jobs obtained by SSVD graduates increased by 52.6%, from 10 607 to 16 189. During the same period, the number of SSVD graduates (calculated according to *Relance* criteria) increased by 34.9%, from 16 394 in 1995 to 22 116 in 1998.

The results are particularly encouraging among graduates under the age of 20: the proportion of graduates with an SSVD who were employed increased from 61.6% in 1996 to 75.4% two years later. The proportion of graduates with an AVS increased from 73.8% to 80.1% during the same period.

Although the unemployment rate among SSVD graduates is still high, it is decreasing. Between 1995 and 1998, the rates were 25.6%, 27.0%, 24.2% and 18.4%, respectively. Also, the unemployment rate among graduates 24 years old or younger is still below average: 14.3% in 1998, compared with 18.4%.

There is an obvious trend throughout: more men than women are employed full time. Since 1995, the percentage of men employed full time has varied between 90.0% and 91.8%, compared with 66.0% and 72.9% of women.

Between 1995 and 1998, the relationship between schooling and trade increased from 66.1% to 73.6%. Since 1995, there has been no significant difference between men and women in terms of this relationship.

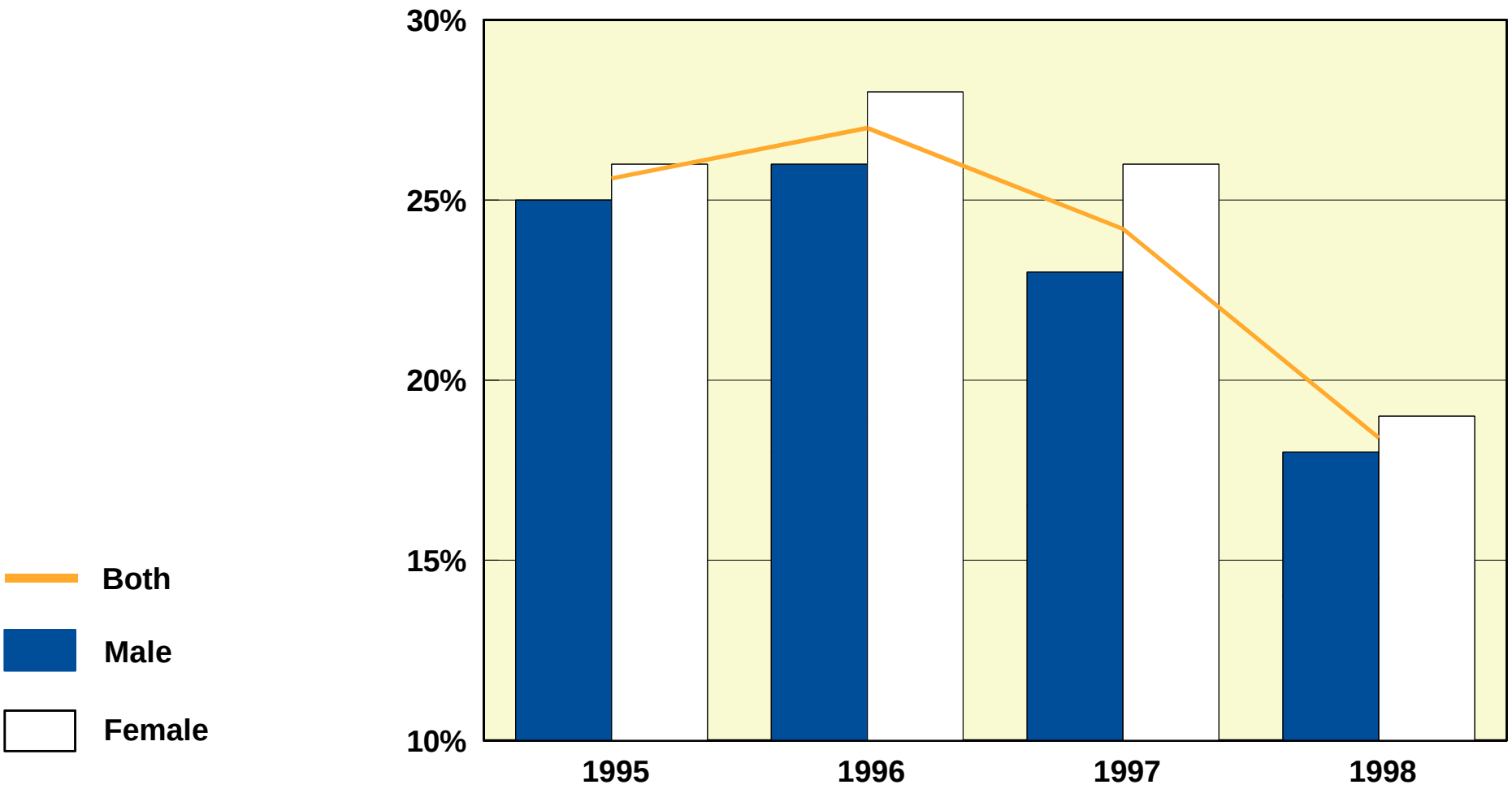
Since 1995, the vast majority of graduates employed full time have permanent jobs. In 1996, 1997 and 1998, the proportion exceeded 90.0%.

Table 6.4
Employment situation of secondary vocational education graduates, by graduation class, on March 31 following completion of their studies (%)

	1995	1996	1997	1998
Graduates with a Secondary School Vocational Diploma (SSVD)				
Employed	64.8	59.0	65.6	73.2
Looking for a job	22.2	21.8	21.0	16.5
In school	6.7	12.0	8.1	6.0
Not in the labour force	6.3	7.2	5.3	4.3
	100.0	100.0	100.0	100.0
Unemployment rate	25.6	27.0	24.2	18.4
Graduates with an Attestation of Vocational Specialization (AVS)				
Employed	71.1	65.7	69.5	74.3
Looking for a job	18.8	18.3	18.9	14.8
In school	5.0	8.6	6.3	5.8
Not in the labour force	5.1	7.4	5.3	5.1
	100.0	100.0	100.0	100.0
Unemployment rate	20.9	21.8	21.4	16.6

Graph 6.4

Unemployment rate for SSVD graduates, by gender, on March 31 following completion of their studies (%)



6.5 Integration of Young People Leaving the Youth Sector Without a Secondary School Diploma Into the Labour Market

In 1997, the integration into the labour market of young people leaving general education without a diploma was very similar to that of those leaving with a diploma. Both held or were competing for the same type of non-specialized job.

In 1997, the Direction de la recherche of the Ministère de l'Éducation conducted a survey among young people enrolled in secondary school in the youth sector (both general and vocational education) in 1994-95, but who were not enrolled in 1995-96, although they had not yet obtained a diploma.[1] Findings indicate that 22.8% of these young people were in training activities (for the most part adult education), 45.5% were employed, 21.2% were looking for a job and 10.5% were not in the labour force.

Of the young people who left vocational education without a diploma, 61% had jobs, compared with 42.4% of young people without a diploma who had been enrolled in general education. The group with the least success (41.8%) were young people with learning and adjustment difficulties,[2] while 42.7% of other students leaving general education without a diploma were employed.

These young people had mostly non-specialized jobs. Most women were in the commerce or service sector. Men were manual labourers in the industrial and craft sector.

More men than women were in the labour force: almost half of them (47.7%) had jobs, compared with one third of women (33.9%). More women returned to school than men, however (29.7% as opposed to 21.5%), and more women were unemployed (36.4% compared with 30.8%).

1. For purposes of comparison, this survey also included another group: graduates from general education in the youth sector who did not pursue a vocational education program or college studies.
2. These were students classified as such during their last year of school. Young students with handicaps were excluded from the study and were the subject of another report.

Of the young people leaving general education without a diploma, one out of four was still in school. The proportion of young people still in school was lower among those leaving vocational education without a diploma (13.7%).

In all groups, the number of young people leaving secondary school without a diploma and who were looking for a job was high. The percentages were 17.3% for young people leaving vocational education without a diploma and 22% for those leaving general education without a diploma (26.2% of students with learning or adjustment difficulties, compared with 19% for the others).

Of the young people leaving secondary school without a diploma, one out of ten was not in the labour force. The proportion of young people not in the labour force was much lower among those who had been enrolled in vocational education (8%) than among the others (11%).

The proportion of graduates from general education in the youth sector (the reference group) in the labour market was similar to that of young people leaving vocational education without a diploma (60.6%). The proportion of young people looking for a job was highest (26.5%). The proportion of young people still in school was 4.7%, lower than in the other groups. The percentage of young people not in the labour force was rather low (8.2%), similar to that of those leaving vocational education without a diploma.

Table 6.5

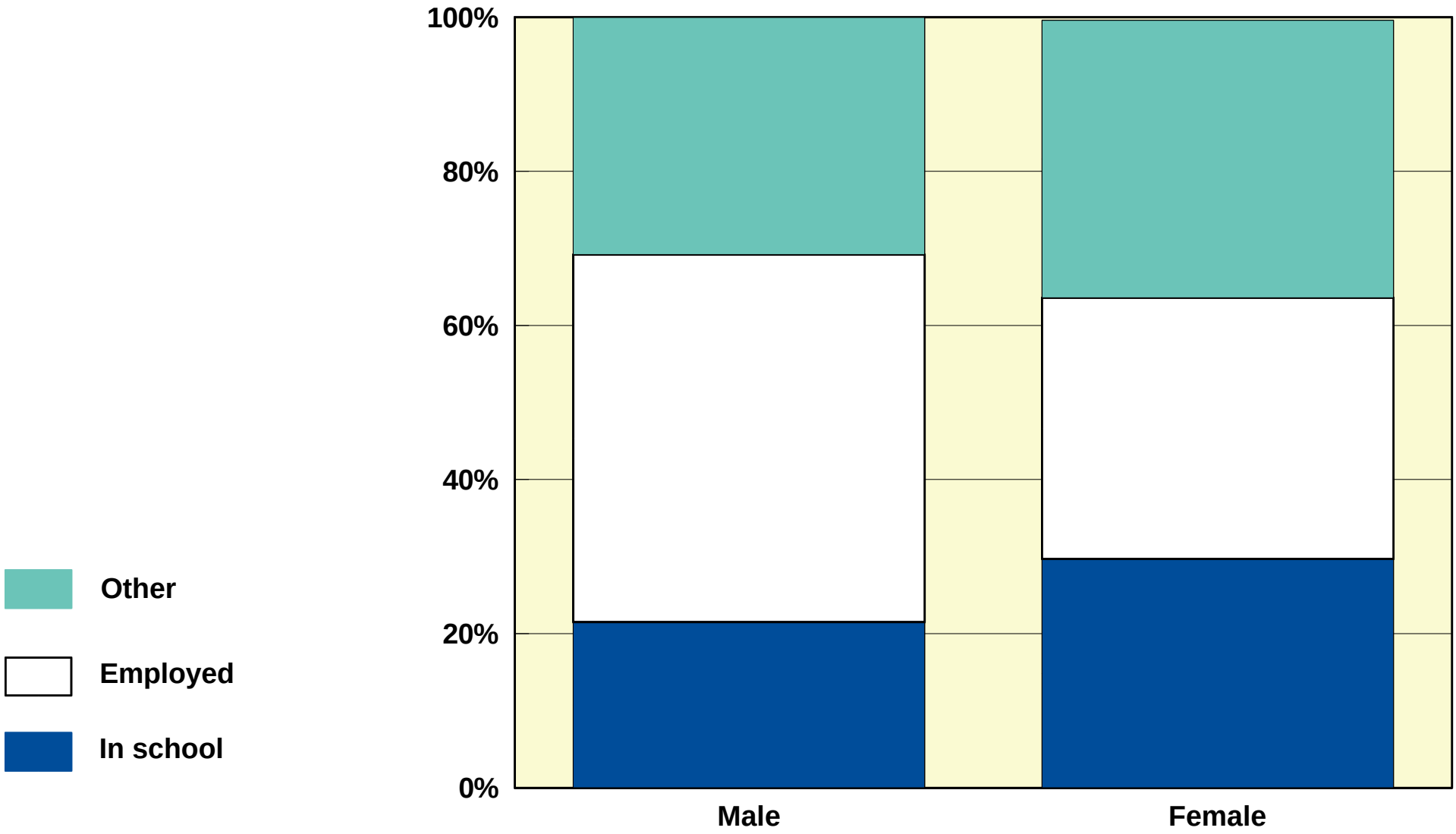
Main employment situation during the week preceding the interview of young people having left secondary school without a diploma,[1] 1997 (%)

	In school	Employed	Looking for a job	Not in the labour force	Total
Young people without a diploma	22.8	45.5	21.2	10.5	100.0
General education	24.6	42.4	22.0	11.0	100.0
Young people with learning or adjustment difficulties	21.2	41.8	26.2	10.8	100.0
Others	27.2	42.7	19.0	11.1	100.0
Vocational education	13.7	61.0	17.3	8.0	100.0
Young graduates from general education (reference group)	4.7	60.6	26.5	8.2	100.0

1. See notes 1 and 2 in text.

Graph 6.5

Main employment situation of young people having left secondary vocational education without a diploma, by gender (%)



6.6 The Social and Vocational Integration of Young People With Handicaps Leaving Secondary General Education Without a Diploma

The second part of a survey conducted in 1997 by the Direction de la recherche of the Ministère de l'Éducation on the social and vocational integration of young people leaving secondary school without a diploma provides information on the situation of young people with handicaps one year after they left school. These were young people with physical, mental or sensory handicaps enrolled in secondary school in 1994-95 but not in 1995-96, despite the fact that they had not yet obtained a diploma.

In 1997, the difficulties involved in the social and vocational integration of young people with handicaps were largely determined by the category of disability in question. Overall, the situation of young people with handicaps was more difficult than that of other young people.

At the time of the survey, a little more than one third of the young people with handicaps were employed: 27.7% were in the labour market and 7.9% were working in an adapted work centre. The others were either still in school (16.4%) or looking for a job (14.9%). Those not in the labour force, that is, not in school, not employed and not looking for a job, represented one third of the population surveyed (33.1%).

Thus, a little more than half of the young people were either at work or in training. There are important differences, however, when we consider employment according to category of disability. Young people with sensory disabilities or mild mental impairments were the most likely to have a job: four out of ten in these two groups were employed. The proportion of young people looking for jobs was high (about 20%), while a similar proportion was not in the labour force.

Three out of four young people with severe mental impairments were not in the labour force. Those who were, worked in adapted work centres (20.7%). This group constituted the largest percentage of young people in these centres.

The proportion of young people with moderate mental impairments in the labour market was similar to that of young people with mild mental impairments. The types of activity, however, differed. In the first case, 24.3% were employed and 16.5% were working in an adapted work centre. The proportions of young people with severe developmental disorders or multiple disabilities working in adapted work centres were 13.0% and 15.8%, respectively.

Aside from those with severe mental impairments, three other groups were represented in small numbers in the labour force. Almost half of all young people with physical handicaps, severe developmental disorders or multiple disabilities were not in the labour force.

Overall, if young people with handicaps are compared with other young people leaving general education without a diploma, we see that, in 1997, young people with handicaps were less likely to be employed or in school and, consequently, were more often not in the labour force: one third of young people with handicaps were not in the labour force, compared with 11% of other young people leaving general education without a diploma.

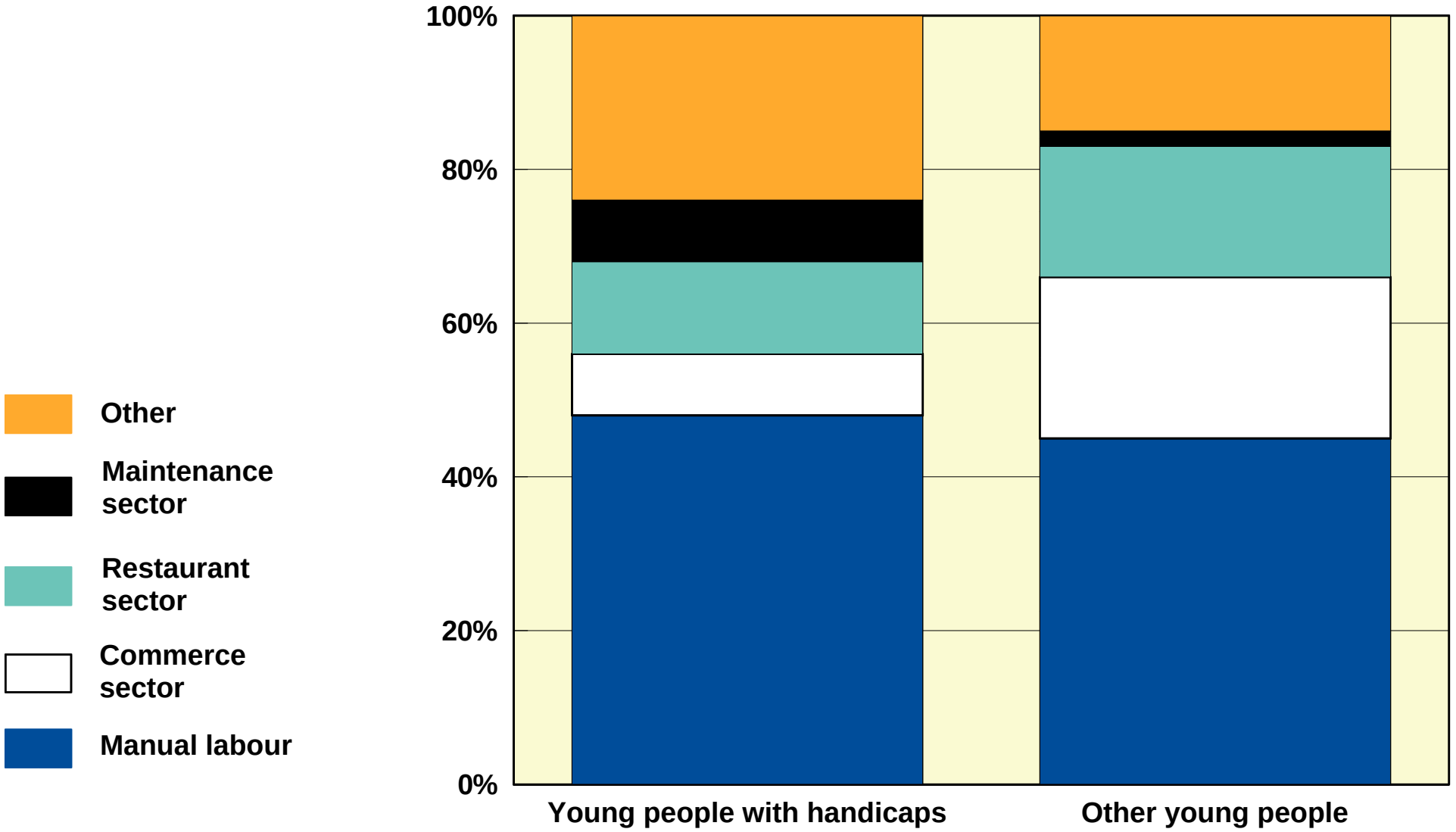
Table 6.6

Main employment situation during the week preceding the interview of young people with handicaps having left secondary general education without a diploma, by category of disability, 1997 (%)

	In school	Employed	In an adapted work centre	Looking for a job	Not in the labour force
Mild mental impairment	18.0	39.0	1.6	22.2	19.2
Moderate mental impairment	17.4	24.3	16.5	7.0	34.8
Severe mental impairment	1.9	1.9	20.7	0.0	75.5
Physical handicap	25.9	15.5	1.7	8.6	48.3
Sensory disability	20.8	39.6	2.1	18.7	18.8
Serious developmental disorder	10.9	10.9	13.0	19.6	45.6
Multiple disabilities	12.6	17.9	15.8	7.4	46.3
Total	16.4	27.7	7.9	14.9	33.1
Young people having left general education without a diploma	24.6	42.4	0.0	22.0	11.0

Graph 6.6

Jobs held by young people with handicaps and other young people having left secondary general education without a diploma, by category, 1997 (%)



6.7 Integration of College Graduates Into the Labour Market

On March 31, 1998, 71.6% of graduates of college technical programs from the class of 1996-97 had entered the labour market, while, on March 31, 1997, 69.8% of graduates from the class of 1995-96 had done so.

Fewer graduates of college technical programs are unemployed than graduates of pre-university programs.

The working conditions associated with the jobs obtained were better than those of the preceding year. In 1998, 82.3% were full-time jobs and 80.2% of these were related to their studies, while in 1997, only 78.6% were full-time jobs, 70.7% of them in their field. In 1998, technicians were earning an average weekly salary of $452, compared with $429 in 1997.

The proportion of those looking for a job decreased by 2 percentage points. In 1998, it was 6.7%, down from 8.7% in 1997. The unemployment rate decreased significantly, falling from 11.1% in 1997 to 8.6% in 1998. The percentage of technical education graduates still in school was identical to that of the previous year (19.0%); most of them were in university (see Section 2.9). The percentage of graduates no longer in the labour force increased slightly, from 2.5% in 1997 to 2.8% in 1998.

On March 31, 1998, the proportion of pre-university education graduates with jobs was 13.9%, down from 1997. Note that the aim of pre-university education is to prepare students to pursue their studies and not to enter the labour market.

The working conditions of graduates of pre-university programs, already not as good as those of graduates of technical programs, have worsened slightly over the past year. The percentage of graduates with full-time jobs decreased slightly from 64.4% on March 31, 1997, to 63.9% in 1998. The average weekly salary in 1998 was $319, compared with $322 in 1997.

On March 31, 1998, the proportion of graduates of pre-university programs looking for a job was 2.0%, compared with 3.3% in 1997. The unemployment rate fell by 5.8 percentage points, from 18.3% in 1997 to 12.5% in 1998.

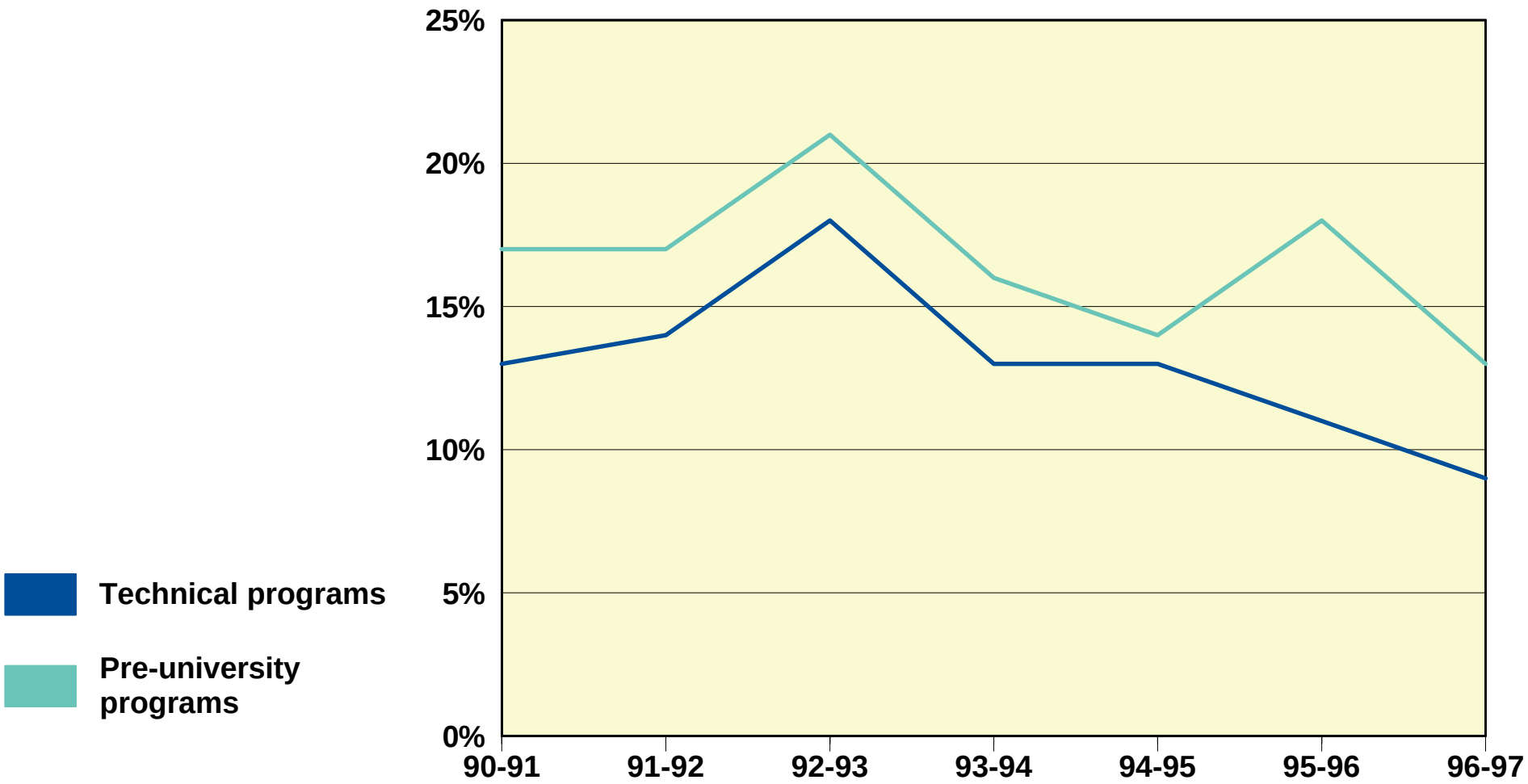
During the year following their last year in college, 81.6% of graduates of pre-university programs were still in school, compared with 79.9% the previous year. Most of them were in university programs (see Section 2.9). The proportion of those not in the labour force increased slightly, from 2.0% to 2.5%.

Table 6.7
Employment situation of college graduates, by graduation class, on March 31 of the year following completion of their studies (%)

	1990-91	1993-94	1994-95	1995-96	1996-97
Graduates of technical programs					
Employed	67.9	70.0	68.1	69.8	71.6
Looking for a job	10.4	10.2	10.4	8.7	6.7
In school	20.2	17.2	18.2	19.0	19.0
Not in the labour force	1.5	2.6	3.3	2.5	2.7
	100.0	100.0	100.0	100.0	100.0
Unemployment rate	13.2	12.8	13.3	11.1	8.6
Graduates of pre-university programs					
Employed	9.3	14.2	14.5	14.8	13.9
Looking for a job	1.9	2.7	2.4	3.3	2.0
In school	87.6	80.7	81.1	79.9	81.6
Not in the labour force	1.2	2.3	2.0	2.0	2.5
	100.0	100.0	100.0	100.0	100.0
Unemployment rate	16.6	16.1	14.1	18.3	12.5

Graph 6.7

Unemployment rate for college graduates, classes of 1990-91 to 1996-97 (%)



6.8 Integration of Individuals Leaving College Without a Diploma Into the Labour Market

In 1998, the Ministère de l'Éducation conducted a telephone survey among individuals who had left college in 1996 or 1997, who were not enrolled for the fall 1997 term, and who had not obtained a diploma.[1]

On March 31, 1998, two thirds of those who had left technical programs without a diploma were employed. The proportion of those who had left pre-university programs without a diploma was 41%.

On March 31, 1998, 66.6% of individuals leaving technical programs without a diploma were employed, and 84.2% of them had full-time jobs. Of those working full time, 55.5% had jobs related to their studies. Their average weekly salary was $416, $87 more than the average salary of those who had left pre-university programs without a diploma. In comparison, 71.6% of graduates of technical programs were employed, 82.3% of these full time. Of those working full time, 80.2% considered their jobs to be related to their studies. They were earning $452 per week on average, $36 more than the average weekly salary of those who had left technical programs without a diploma.

The proportion of those having left technical programs without a diploma who were unemployed was 11.3%, while only 8.6% of graduates were unemployed (the overall unemployment rate in Québec was 10.1%). Of those who had left technical programs without a diploma, 8.5% were looking for a job. This proportion was slightly higher than that among graduates (6.7%). Of the respondents, 18.2% had returned to school, three fifths of them to technical programs. Finally, 6.7% of respondents who had left technical programs without a diploma were not in the labour force, compared with 2.7% of technical education graduates.

1. Individuals leaving technical programs without a diploma are those who, in the fall of 1996, were enrolled full time in the fifth or sixth term of a technical program, were not enrolled in college in the fall of 1997, and did not receive a diploma of college studies (DEC–Diplôme d'études collégiales). Those leaving pre-university programs without a diploma are those who, in the fall of 1996, were enrolled full time in the first or second term of a pre-university program, were enrolled full time in the winter 1997 term in any type of program, were not enrolled in college in the fall of 1997 and did not obtain a DEC.

On March 31, 1998, 41.4% of those who left pre-university programs without a diploma were in school, one third of these were still in a pre-university program and more than a quarter were in secondary school programs.

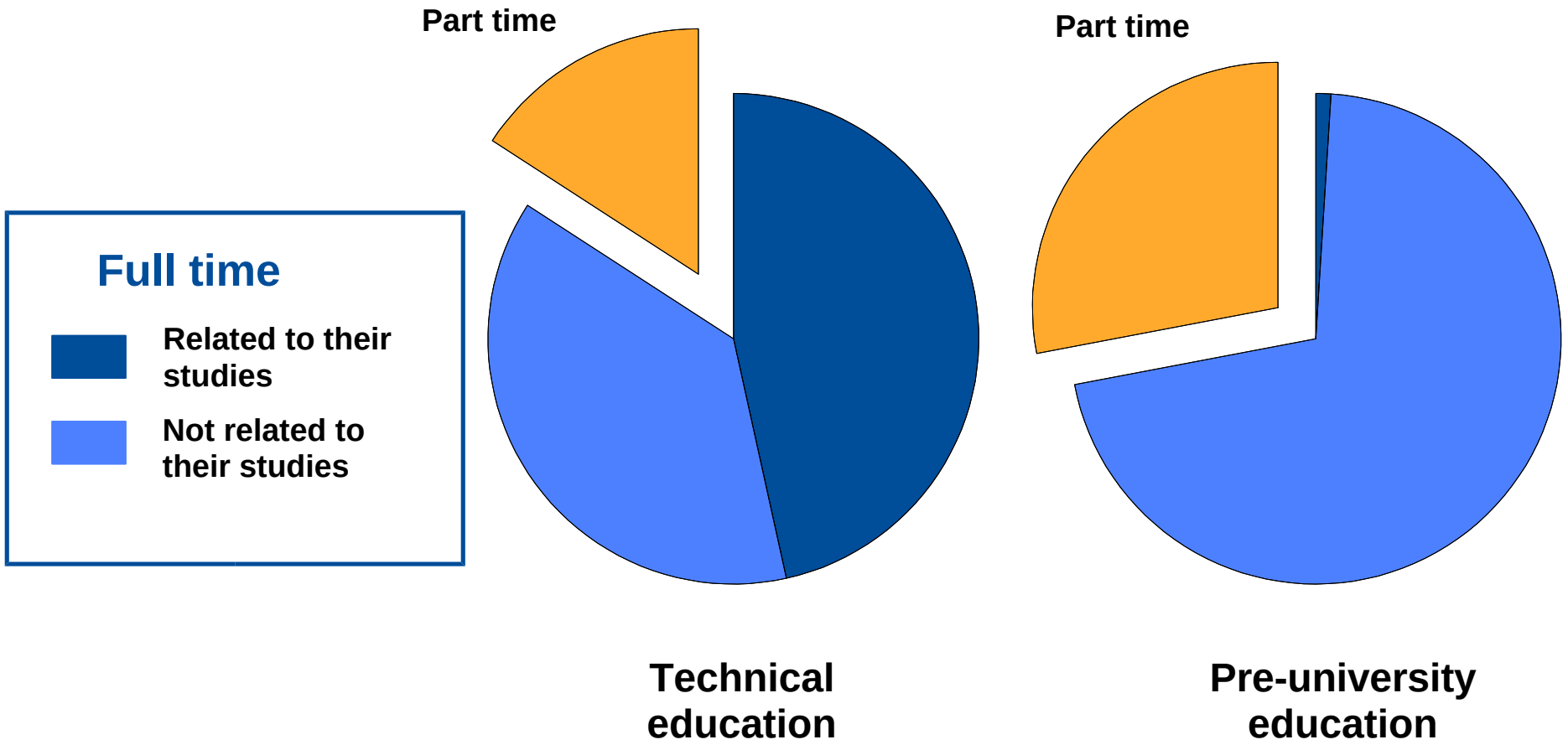
Of those who left pre-university programs without a diploma, 41.0% were employed, and 72.0% of these had full-time jobs. As a comparison, only 13.9% of graduates of pre-university programs were employed, 63.9% full time. The average weekly salary was $329, 20.9% less than that earned by individuals who left technical programs without a diploma. On March 31, 1998, the unemployment rate among those leaving pre-university programs without a diploma was 17.1%, compared with 10.1% for the overall population of Québec. Finally, on the reference date, 9.1% of respondents were not in the labour force.

Table 6.8
Employment situation of individuals leaving college without a diploma compared with that of graduates, on March 31, 1998 (%)

	Without a diploma	With a diploma
Technical programs		
Employed	66.6	71.6
Looking for a job	8.5	6.7
In school	18.2	19.0
Not in the labour force	6.7	2.7
	100.0	100.0
Unemployment rate	11.3	8.6
Pre-university programs		
Employed	41.0	13.9
Looking for a job	8.5	2.0
In school	41.4	81.6
Not in the labour force	9.1	2.5
	100.0	100.0
Unemployment rate	17.1	12.5

Graph 6.8

Employment situation of individuals leaving college without a diploma in 1996 and 1997, on March 31, 1998



6.9 Employers' Opinions of Graduates of Technical Programs

In 1997, employers' evaluation of the competence of graduates of technical programs was average, good or very good in 93% of cases.

In 1997, the Ministère de l'Éducation surveyed employers who had hired at least one college graduate from a technical program. Their evaluation of graduates was generally in line with their expectations. Although their evaluation of oral and written communication in French in 1997 was better than that in 1994, there is still room for improvement in this respect.

Employers' overall evaluation of the competence of graduates was average, good or very good in 93% of cases, while the corresponding percentages were 91.0% in 1994 and 87% in 1990. After three months of work, 73% of employers claimed to be satisfied or very satisfied with the performance of graduates, compared with 77% in 1994. After one year, this percentage reached 89%, compared with 90% in the previous study.

The study conducted in 1997 demonstrated that 52% of employers considered a technical diploma of college studies (DEC–Diplôme d'études collégiales) essential for the position offered. Since 1990, this proportion has fallen 8 percentage points. Moreover, 34% of employers believed that other types of diplomas, particularly at the college level, might suffice. The corresponding percentages were 32% in 1994 and 23% in 1990. Almost half the respondents mentioned that they had at least once hired someone with more schooling than required. This percentage was 9 percentage points higher than in 1994. The 1997 survey also revealed that 35% of employers have hired someone with less schooling than required to fill a position. The corresponding percentage in 1994 was 30%.

About half the employers (51%) stated that on-the-job training would be less useful than schooling or at least that it could never replace it, while 44% considered that it would be as useful as or more useful than schooling. These percentages are identical to those observed in 1994.

Table 6.9a
Distribution of employers, by hiring policy with respect to the diploma required to fill a position (%)

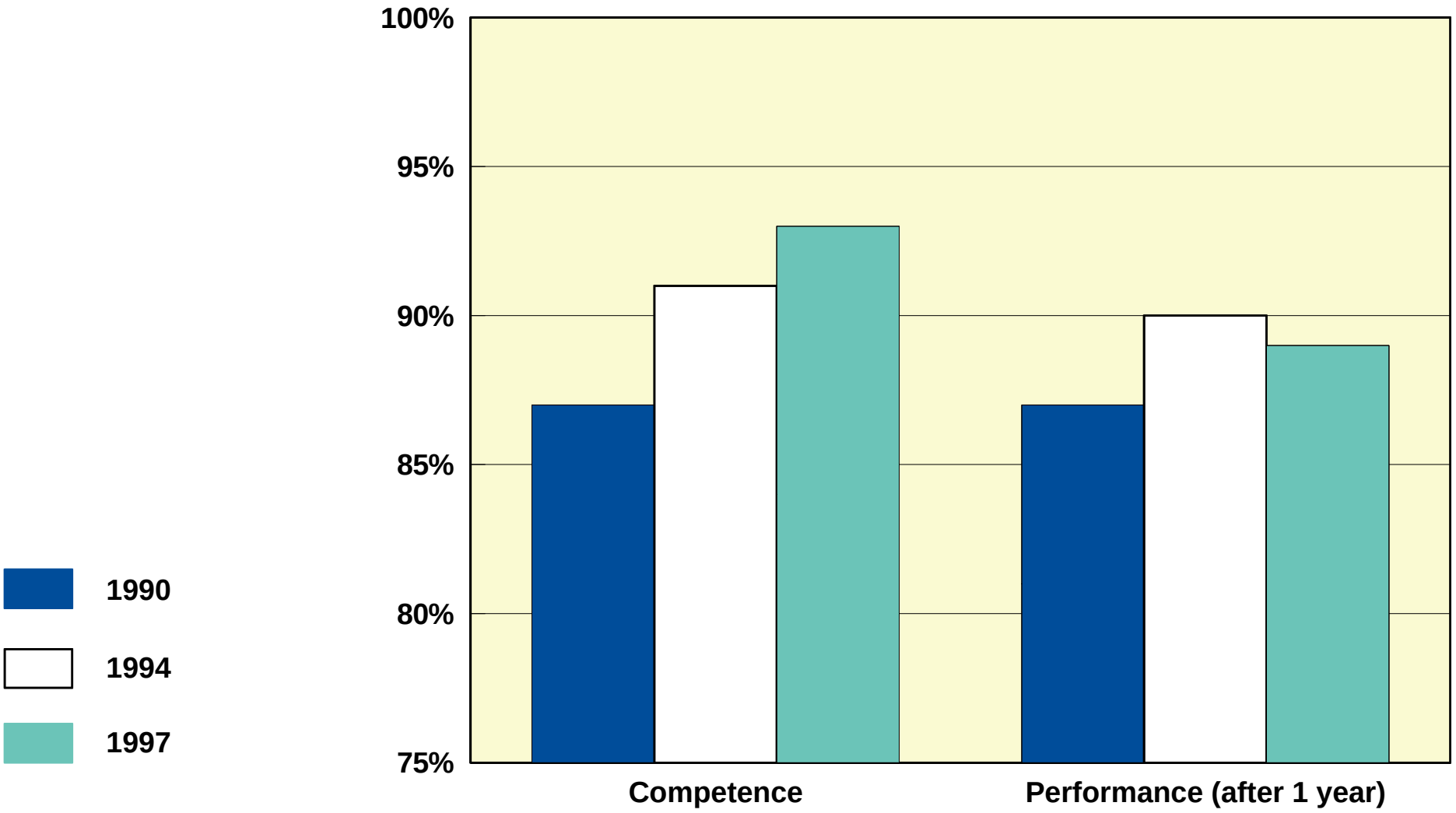
	1990	1994	1997
DEC in technical education essential	60	56	52
Other diplomas might be considered	23	32	34
No policy	16	10	13
No response	1	2	1

Table 6.9b
Proportion of employers who have at least once hired someone with more or less schooling than required for a position (%)

	1990	1994	1997
Less schooling	26	30	35
More schooling	44	40	49

Graph 6.9

Satisfaction of employers with respect to competence and performance (%)



6.10 Integration of University Graduates Into the Labour Market

In January 1997, 74% of those who had obtained a bachelor's degree in 1995 were employed. The corresponding percentage among those with a master's degree was 77.7%. The unemployment rate was 9.1% for those with a bachelor's degree and 8.1% for those with a master's degree.

Since 1994, the chances of finding a job have increased slightly for graduates with a bachelor's degree and, despite a slight decline, the chances are still good for graduates with a master's degree. The percentage of full-time, permanent jobs related to the main field of study, however, is declining steadily.

Between 1994 and 1997, the proportion of graduates with jobs rose by 2.7 percentage points among those with a bachelor's degree and 0.7 percentage points among those with a master's degree. The unemployment rate fell by 2.3 percentage points for those with a bachelor's degree and increased by 1.3 percentage points for those with a master's degree, bringing the difference between the unemployment rates for the two groups down to 1 percentage point in favour of those with a master's degree.

The proportion of graduates with a bachelor's degree looking for a job fell by 1.8 percentage points (7.4%) with respect to 1994, while that of graduates with a master's degree increased by 1.2 percentage points (6.8%). The proportion of graduates with a bachelor's degree still in school fell by 0.3 percentage points, while that of graduates with a master's degree fell by 2.3 percentage points (16.2% and 12.7%, respectively). The proportion of graduates with a bachelor's degree not in the labour force decreased by 0.6 percentage points (2.4%), while that of graduates with a master's degree increased by 0.4 percentage points (2.8%).

Of those who were employed in 1997, 80% of graduates with a bachelor's degree and 85.2% of graduates with a master's degree had full-time jobs. Their jobs were related to the main field of study in 75.5% and 83.5% of cases, respectively. They were in permanent positions in 62.5% and 66.1% of cases, respectively. Finally, 41.3% and 55.2% of them, respectively, had full-time permanent jobs related to their main field of study.

Analysis of changes in the labour market situation since 1987 reveals that, following successive decreases in the proportion of university graduates with jobs and successive increases in the proportion of those looking for work, still in school or not in the labour force, as well as increases in the unemployment rate until 1994, the chances of finding a job have begun improving, especially for graduates with a bachelor's degree. Despite an increase in the unemployment rate of graduates with a master's degree, the proportion of this group who were employed increased slightly between 1994 and 1997.

With respect to the parameters that characterize working conditions, such as full-time employment, permanent status and relationship with the main field of study, all have decreased since 1987. This decrease was more marked for graduates with a bachelor's degree than for those with a master's degree. For example, while the annual average decrease in the proportion of full-time, permanent positions related to the main field of study was 1.6 percentage points for graduates with a bachelor's degree, it was 0.9 percentage points for those with a master's degree.

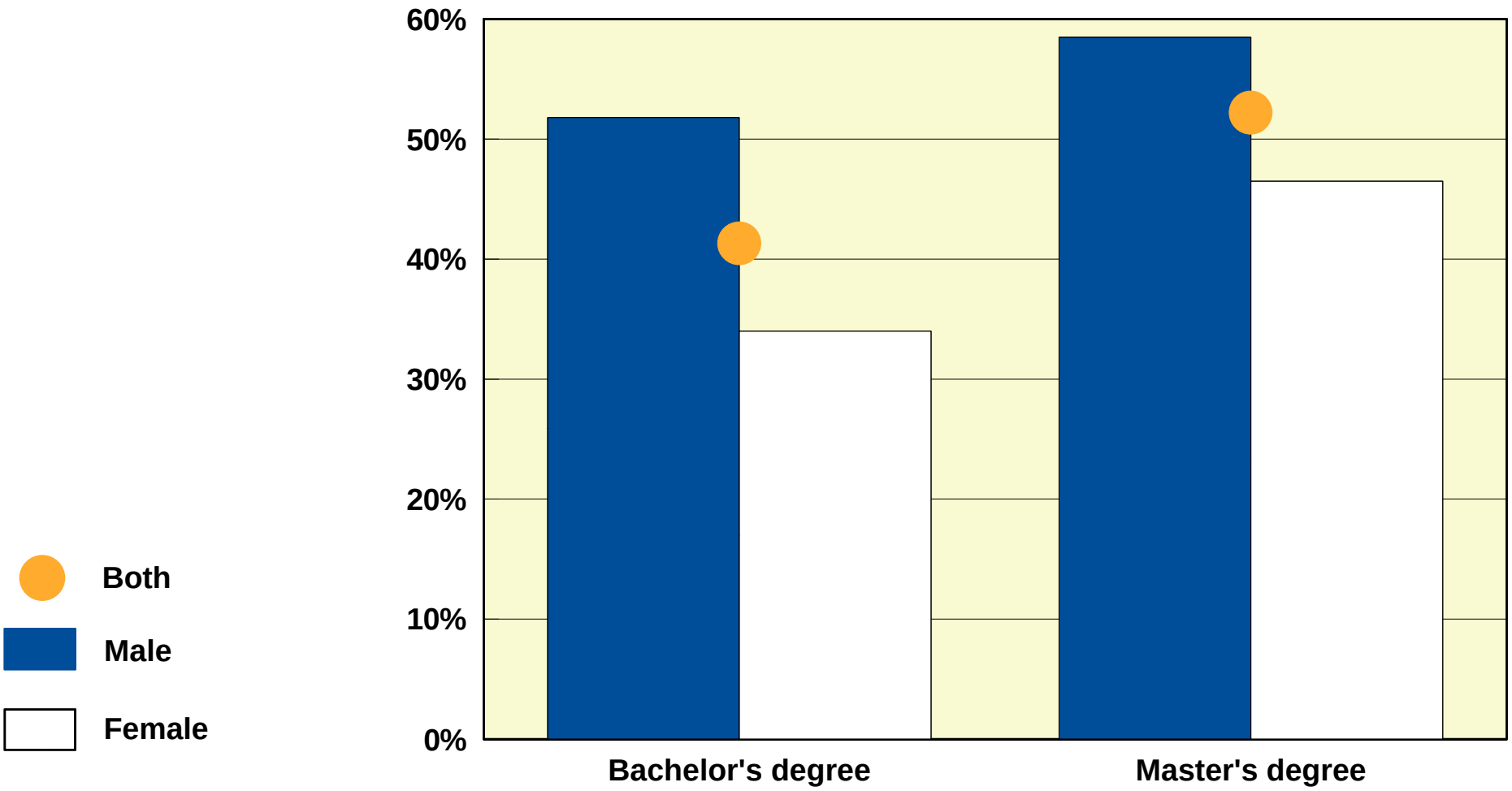
Table 6.10
Employment situation of graduates with a bachelor's or master's degree (%)

	1987	1989	1992	1994	1997
Bachelor's degree					
Employed	76.8	78.1	73.4	71.3	74.0
Looking for a job	6.9	6.9	7.2	9.2	7.4
In school	13.8	13.2	16.9	16.5	16.2
Not in the labour force	2.5	1.8	2.5	3.0	2.4
	100.0	100.0	100.0	100.0	100.0
Unemployment rate	8.3	8.1	8.9	11.4	9.1
Master's degree					
Employed	80.0	80.2	79.2	77.0	77.7
Looking for a job	4.3	4.1	5.2	5.6	6.8
In school	13.8	13.9	14.1	15.0	12.7
Not in the labour force	1.9	1.8	1.5	2.4	2.8
	100.0	100.0	100.0	100.0	100.0
Unemployment rate	5.1	4.9	6.2	6.8	8.1

1. The situation of graduates approximately two years after they received their degree; for example, the situation in 1997 refers to individuals who graduated in 1995.

Graph 6.10

Proportion of graduates with a bachelor's or master's degree who have full-time, permanent jobs related to their main field of study, 1997



Statistical Appendix

Table 1

Full-time and part-time enrolments, by level of instruction and sector, 1988-89 to 1997-98

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-1997	1997-98p
Preschool (4-year-olds)	**6 614**	**7 009**	**7 171**	**7 598**	**8 002**	**8 151**	**14 023**	**17 284**	**17 294**	**16 295**
Preschool (5-year-olds)	**87 755**	**88 200**	**86 341**	**85 276**	**83 530**	**85 316**	**89 912**	**95 651**	**96 087**	**95 303**
Elementary Education (youth sector)	**588 252**	**586 353**	**583 893**	**576 601**	**566 448**	**555 417**	**547 395**	**547 642**	**552 482**	**559 279**
Secondary Education (youth sector)	**459 039**	**464 122**	**473 634**	**478 571**	**495 331**	**498 306**	**498 105**	**492 629**	**486 696**	**479 740**
Elementary and Secondary Education (adult sector[1])	**234 449**	**238 766**	**238 486**	**248 825**	**223 651**	**222 531**	**223 886**	**226 317**	**222 334**	**218 040**
College[2]	**235 076**	**231 494**	**235 435**	**242 333**	**251 391**	**254 874**	**247 436**	**241 833**	**237 394**	**230 892**
Regular education	156 218	153 777	154 697	161 744	172 061	179 036	180 976	178 847	180 091	176 347
Adult education	78 858	77 717	80 738	80 589	79 330	75 838	66 460	62 986	57 303	54 545
University[3]	**241 033**	**244 534**	**245 433**	**249 048**	**256 426**	**253 344**	**244 531**	**237 810**	**230 941**	**226 976**
Undergraduate studies	205 554	207 838	207 928	209 825	214 856	210 759	201 418	194 196	187 565	183 369
Graduate studies	29 172	29 856	30 275	31 469	33 334	33 782	34 021	34 271	34 086	34 281
Postgraduate studies	6 307	6 840	7 230	7 754	8 236	8 803	9 092	9 343	9 290	9 326
Total	**1 852 218**	**1 860 478**	**1 870 393**	**1 888 252**	**1 884 779**	**1 877 939**	**1 865 288**	**1 859 166**	**1 843 228**	**1 826 525**

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)

p: Preliminary figures

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 non-credit programs.
3. Fall term. These figures include resident physicians, and some students in college or in Explorations programs; however, they exclude auditors, postdoctoral trainees, most students in Explorations programs and students from the Collège militaire Royal de Saint-Jean.

Table 2a

Full-time and part-time enrolments, by category of institution, language of instruction, level of instruction and sector, 1996-97

	Preschool		Elementary Secondary		Elementary	College[2]		University[3]	Total
	4-year-olds	5-year-olds	(Youth Sector)	(Youth Sector)	and Secondary (Adult Sector[1])	Regular Education	Adult Education		
Scool Boards	**16 985**	**91 652**	**525 973**	**410 538**	**220 683**				**1 265 831**
French	15 783	82 354	473 501	371 078	198 392				1 141 108
English	937	8 749	51 454	39 459	22 025				122 624
Native languages	265	549	1 018	1	266				2 099
Private Institutions	**59**	**4 167**	**24 847**	**74 885**	**1 269**	**16 528**	**11 399**		**133 154**
French	31	3 499	20 024	67 928	1 045	11 221	5 307		109 055
English	28	668	4 823	6 957	224	2 762	234		15 696
French and English						2 545	5 858		8 403
Public Institutions Outside the Jurisdiction of the Ministère de l'Éducation	**250**	**268**	**1 662**	**1 273**	**382**	**1 879**	**81**		**5 795**
French	140	182	1 368	1 224	382	1 793	81		5 170
English	21	16	107	48		86			278
Native languages	89	70	187	1					347
CEGEPs and Campuses						**161 684**	**45 823**		**207 507**
French						138 127	39 548		177 675
English						23 557	6 275		29 832
French and English									
Universities and Branches								**230 941**	**230 941**
French								174 060	174 060
English								56 881	56 881
Total	**17 294**	**96 087**	**552 482**	**486 696**	**222 334**	**180 091**	**57 303**	**230 941**	**1 843 228**
French	15 954	86 035	494 893	440 230	199 819	151 141	44 936	174 060	1 607 068
English	986	9 433	56 384	46 464	22 249	26 405	6 509	56 881	225 311
Native languages	354	619	1 205	2	266				2 446
French and English						2 545	5 858		8 403

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)

1. Only persons having taken courses for which credits are earned for certification purposes are included.
2. Fall term. Figures for adult education exlude students enrolled in non-credit programs.
3. Fall term. These figures include resident physicians; however, they exclude auditors, postdoctoral trainees and students in Explorations programs.

Table 2b

Full-time and part-time enrolments, by category of institution, language of instruction, level of instruction and sector, 1997-98

	Preschool		Elementary Secondary		Elementary	College[2]		University[3]	Total
	4-year-olds	5-year-olds	(Youth Sector)	(Youth Sector)	and Secondary (Adult Sector[1])	Regular Education	Adult Education		
Scool Boards	**15 907**	**91 011**	**531 816**	**404 333**	**215 817**				**1 258 884**
French	14 714	81 521	478 221	365 277	194 004				1 133 737
English	905	8 954	52 390	39 056	21 525				122 830
Native languages	288	536	1 205		288				2 317
Private Institutions	**67**	**3 908**	**25 350**	**73 806**	**1 747**	**16 348**	**12 445**		**133 671**
French	37	3 178	20 419	66 752	1 405	10 959	5 337		108 087
English	30	730	4 931	7 054	342	2 848	148		16 083
French and English						2 541	6 960		9 501
Public Institutions Outside the Jurisdiction of the Ministère de l'Éducation	**321**	**384**	**2 113**	**1 601**	**476**	**1 967**	**38**		**6 900**
French	177	282	1 759	1 542	476	1 864	38		6 138
English	29	21	108	59		103			320
Native languages	115	81	246						442
CEGEPs and Campuses						**158 032**	**42 062**		**200 094**
French						134 473	36 410		170 883
English						23 559	5 652		29 211
French and English									
Universities and Branches								**226 976**	**226 976**
French								171 779	171 779
English								55 197	55 197
Total	**16 295**	**95 303**	**559 279**	**479 740**	**218 040**	**176 347**	**54 545**	**226 976**	**1 826 525**
French	14 928	84 981	500 399	433 571	195 885	147 296	41 785	171 779	1 590 624
English	964	9 705	57 429	46 169	21 867	26 510	5 800	55 197	223 641
Native languages	403	617	1 451		288				2 759
French and English						2 541	6 960		9 501

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)

1. Only persons having taken courses for which credits are earned for certification purposes are included.
2. Fall term. Figures for adult education exlude students enrolled in non-credit programs.
3. Fall term. These figures include resident physicians; however, they exclude auditors, postdoctoral trainees and students in Explorations programs.

Table 3

Enrolments in secondary vocational education and college technical education, 1990-91 to 1997-98

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98p
SECONDARY EDUCATION[1]	**104 777**	**91 483**	**84 726**	**85 026**	**86 018**	**86 900**	**88 690**	**93 096**
Under 20 years of age[2]	23 592	20 613	18 840	18 840	19 655	22 376	25 751	26 875
20 years of age or over[3]	81 185	70 870	66 546	66 546	66 363	64 524	62 939	66 221
REGULAR PATHS	**54 484**	**57 476**	**58 023**	**58 023**	**59 771**	**66 950**	**72 990**	**75 677**
SSVD (DVS), SSVC, AVS, VEC	54 367	57 476	58 023	58 023	59 771	66 950	72 990	75 677
Long vocational	117							
Short vocational								
Under 20 Years of Age[2]	**19 469**	**17 855**	**17 066**	**16 871**	**18 015**	**20 921**	**24 530**	**25 780**
SSVD (DVS), SSVC, AVS, VEC	19 469	17 855	17 066	16 871	18 015	20 921	24 530	25 780
Long vocational								
Short vocational								
20 Years of Age or Over[3]	**35 015**	**39 621**	**41 347**	**41 152**	**41 756**	**46 029**	**48 460**	**49 897**
SSVD (DVS), SSVC, AVS	34 898	39 621	41 347	41 152	41 756	46 029	48 460	49 897
Long vocational	117							
OTHER PROGRAMS	**50 293**	**34 007**	**26 313**	**27 003**	**26 247**	**19 950**	**15 700**	**17 419**
Under 20 years of age[2]	4 123	2 758	2 207	1 609	1 640	1 455	1 221	1 095
20 years of age or over[3]	46 170	31 249	24 106	25 394	24 607	18 495	14 479	16 324
COLLEGE	**97 612**	**103 040**	**113 980**	**116 637**	**115 740**	**120 792**	**122 023**	**123 534**
Diplôme d'études collégiales (DEC-technical)	75 513	78 905	81 763	84 916	87 388	89 319	90 343	90 780
Certificat d'études collégiales (CEC)	5 792	7 738	11 412	10 576	8 517	7 338	1 209	280
Attestation d'études collégiales (AEC)	16 127	16 235	20 625	20 932	19 757	24 041	30 469	32 466
Diplôme de perfectionnement de l'enseignement collégial (DPEC)	180	162	180	213	78	94	2	8

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

p: Preliminary figures

SSVD: Secondary School Vocational Diploma (Diploma of Vocational Studies-DVS); SSVC: Secondary School Vocational Certificate; AVS: Attestation of Vocational Specialization; VEC: Vocational Education Certificate

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 calculated according to full-time equivalents and by category of employment,[1] 1987-88 to 1996-97

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
School Boards	**N/A**	**N/A**	**102 403**	**105 821**	**107 379**	**108 418**	**107 487**	**106 934**	**105 919**	**104 366**
Youth and Adult Sectors										
Teaching staff	N/A	N/A	68 730	70 867	71 958	72 079	71 170	70 518	70 331	69 667
Administrative staff	N/A	N/A	1 603	1 607	1 552	1 514	1 479	1 452	1 388	1 280
School principals	N/A	N/A	3 831	3 874	3 878	3 878	3 804	3 820	3 753	3 646
Managerial staff	N/A	N/A	796	822	842	874	859	848	802	750
Non-teaching professionals	N/A	N/A	4 320	4 486	4 563	4 767	4 803	4 691	4 530	4 257
Support staff	N/A	N/A	23 123	24 165	24 586	25 306	25 372	25 605	25 115	24 766
CEGEPs	**18 227**	**18 550**	**18 434**	**19 296**	**19 799**	**20 820**	**21 304**	**21 771**	**21 245**	**20 472**
Regular Education and Adult Education										
Teaching staff	11 151	11 176	11 085	11 669	12 264	12 863	13 405	13 919	13 652	13 224
Administrative staff	608	637	648	662	646	657	667	670	664	612
Managerial staff	294	303	304	313	315	323	335	327	307	287
Non-teaching professionals	930	1 019	1 015	1 056	1 048	1 095	1 127	1 146	1 085	1 047
Support staff	5 244	5 415	5 382	5 596	5 526	5 882	5 770	5 709	5 537	5 302
Universities[2]	**29 503**	**29 947**	**30 656**	**31 905**	**32 679**	**33 535**	**33 404**	**33 054**	**32 224**	**31 615**
Teaching and research staff	9 426	9 654	9 969	10 336	10 838	11 111	11 260	11 038	10 826	10 553
Teaching and research assistants	3 175	3 108	3 301	3 720	3 959	4 046	4 083	4 304	4 299	4 652
Executive personnel	1 265	1 284	1 305	1 308	1 343	1 347	1 348	1 305	1 291	1 218
Managerial staff	540	569	597	601	734	615	603	647	491	498
Non-teaching professionals	2 899	3 039	3 148	3 266	3 231	3 607	3 557	3 496	3 487	3 352
Support staff	12 198	12 293	12 336	12 674	12 574	12 809	12 553	12 264	11 830	11 342

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: Figures are not available.

1. All personnel activities carried out during the school year are included in the calculation of full-time equivalents for each category of employment.

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. Figures for 1996-97 are preliminary.

Table 5
Number of diplomas awarded, by level of instruction and type of diploma, 1988 to 1997

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Secondary[1]	**80 042**	**77 784**	**80 904**	**88 473**	**101 503**	**110 431**	**103 211**	**104 522**	**111 762**	**109 200**
General education	63 762	61 521	64 902	69 928	78 893	79 418	81 176	81 792	86 451	80 290
Vocational education	16 280	16 263	16 002	18 545	22 610	31 013	22 035	22 730	25 311	28 910
College	**40 992**	**40 843**	**41 303**	**41 769**	**43 294**	**44 686**	**44 683**	**43 153**	**40 764**	**42 092**
DEC (pre-university education)	24 812	24 851	24 992	25 244	25 414	24 971	25 833	25 520	24 295	25 630
DEC (technical education)	13 409	13 495	13 632	13 196	13 516	14 760	14 991	15 598	16 054	16 386
DEC without mention	813	881	832	1 053	1 228	1 541	741	322	145	6
AEC, CEC and DPEC[2]	1 958	1 616	1 847	2 276	3 136	3 414	3 118	1 713	270	70
University[3]	**45 497**	**46 756**	**48 728**	**51 329**	**53 822**	**55 277**	**56 817**	**56 015**	**55 184**	**53 277**
Bachelor's degree	24 593	24 850	25 526	26 911	27 683	28 404	28 967	28 932	29 602	28 894
Master's degree	4 666	4 905	5 166	5 404	5 823	6 082	6 604	6 414	6 547	6 514
Doctorate	608	696	712	810	915	891	959	1 037	1 087	1 143
Certificates and diplomas	15 630	16 305	17 324	18 204	19 401	19 900	20 287	19 632	17 948	16 726

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)

DEC: diplôme d'études collégiales; AEC: attestation d'études collégiales; CEC: certificat d'études collégiales; DPEC: diplôme de perfectionnement de l'enseignement collégial

1. 1987-88 to 1996-97. Following the vocational education reform, approximately 8 800 students with a CEP (certificat d'études professionnelles) also received a Secondary School Vocational Diploma in 1993.
2. Since 1994, there have been no new enrolments in programs leading to these types of certification.
3. These figures exclude diplomas awarded by the Collège militaire Royal de Saint-Jean.

Table 6

Schooling rates,[1] by age, gender, level of instruction and attendance status, 1996-97 (%)

	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	18,9	0,0	0,0	0,0	0,0	0,0	0,0	18,9	0,0	18,9
Female	19,2	0,0	0,0	0,0	0,0	0,0	0,0	19,2	0,0	19,2
Total	19,0	0,0	0,0	0,0	0,0	0,0	0,0	19,0	0,0	19,0
5-year-olds										
Male	96,5	0,0	0,0	0,0	0,0	0,0	0,0	96,5	0,0	96,5
Female	97,3	0,0	0,0	0,0	0,0	0,0	0,0	97,3	0,0	97,3
Total	96,9	0,0	0,0	0,0	0,0	0,0	0,0	96,9	0,0	96,9
15-year-olds										
Male	0,0	96,3	0,2	0,1	0,0	0,0	0,0	96,4	0,2	96,5
Female	0,0	96,5	0,1	0,1	0,0	0,0	0,0	96,5	0,1	96,7
Total	0,0	96,4	0,1	0,1	0,0	0,0	0,0	96,4	0,1	96,6
16-year-olds										
Male	1,1	89,8	2,2	1,4	0,0	0,0	0,0	92,3	2,2	94,6
Female	0,4	92,0	1,8	1,9	0,1	0,0	0,0	94,3	1,9	96,2
Total	0,8	90,9	2,0	1,6	0,1	0,0	0,0	93,3	2,1	95,4
17-year-olds										
Male	1,9	40,7	10,0	37,4	0,2	0,3	0,0	80,4	10,2	90,6
Female	0,8	29,6	7,6	53,9	0,2	0,4	0,0	84,7	7,8	92,6
Total	1,4	35,3	8,8	45,4	0,2	0,4	0,0	82,5	9,0	91,5
18-year-olds										
Male	1,8	23,8	9,7	39,5	0,7	1,8	0,1	66,9	10,5	77,4
Female	0,8	17,5	7,1	55,0	0,6	2,7	0,1	76,1	7,8	84,0
Total	1,3	20,7	8,4	47,1	0,7	2,3	0,1	71,4	9,2	80,6
19-year-olds										
Male	1,6	17,0	7,6	28,5	2,1	10,1	0,3	57,3	10,0	67,2
Female	0,7	12,3	5,6	35,8	2,5	17,1	0,5	65,8	8,5	74,4
Total	1,1	14,7	6,6	32,1	2,3	13,6	0,4	61,5	9,3	70,7

1. Schooling rates are calculated by dividing the school population of a given age on September 30, 1995, by the population of the same age on the same date. The schooling rates for 4- and 5-year-olds differ from the results presented in Section 1.3 (see the notes in that section referring to this matter).

Table 6 (cont.)

Schooling rates,[1] by age, gender, level of instruction and attendance status, 1996-97 (%)

	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	1,0	7,6	4,4	8,9	1,8	14,1	3,0	31,6	9,2	40,8
Female	0,6	5,8	3,2	9,3	2,3	19,1	4,5	34,8	10,0	44,8
Total	0,8	6,7	3,8	9,1	2,0	16,6	3,8	33,2	9,6	42,7
25-to-29-year-olds										
Male	0,7	2,9	2,3	1,8	0,8	4,2	3,5	9,5	6,6	16,1
Female	0,5	2,6	1,7	1,9	1,5	3,7	4,9	8,7	8,2	17,0
Total	0,6	2,8	2,0	1,8	1,1	3,9	4,2	9,1	7,4	16,5
30-to-39-year-olds										
Male	0,5	1,6	1,6	0,6	0,6	1,0	2,1	3,8	4,3	8,1
Female	0,5	1,8	1,4	0,9	1,4	0,9	3,0	4,1	5,9	10,0
Total	0,5	1,7	1,5	0,8	1,0	1,0	2,5	3,9	5,0	9,0
40-to-49-year-olds										
Male	0,3	0,9	1,0	0,3	0,5	0,3	1,3	1,7	2,8	4,5
Female	0,3	1,1	1,0	0,5	1,2	0,4	2,4	2,2	4,6	6,8
Total	0,3	1,0	1,0	0,4	0,8	0,3	1,9	2,0	3,7	5,6
50-to-59-year-olds										
Male	0,2	0,3	0,5	0,1	0,2	0,1	0,4	0,6	1,2	1,8
Female	0,3	0,3	0,4	0,1	0,4	0,1	0,9	0,8	1,7	2,4
Total	0,2	0,3	0,5	0,1	0,3	0,1	0,7	0,7	1,4	2,1
60 years of age or over										
Male	0,1	0,0	0,1	0,0	0,0	0,0	0,1	0,2	0,2	0,4
Female	0,2	0,0	0,1	0,0	0,0	0,0	0,1	0,3	0,2	0,5
Total	0,2	0,0	0,1	0,0	0,0	0,0	0,1	0,2	0,2	0,5