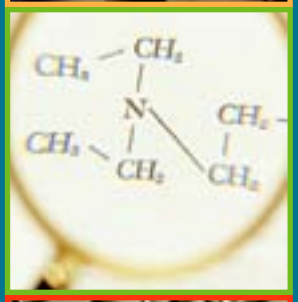
Education Indicators in Canada



Report of the Pan-Canadian Education Indicators Program 2005

PCEIP 2005

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Education Indicators in Canada

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Symbols

The following standard symbols are used in this publication

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
p	preliminary
r	revised
e	estimate
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published

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The Pan-Canadian Education Indicators Program

Background

This document is the fourth edition of *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program*.

The Pan-Canadian Education Indicators Program, or PCEIP, is a joint venture of Statistics Canada and the Council of Ministers of Education, Canada (CMEC).

In the Victoria Declaration of 1993, the provincial and territorial ministers responsible for education and training agreed to create the PCEIP. The PCEIP mission is to publish a set of statistical measures on education systems in Canada for policy makers, practitioners and the general public to evaluate the performance of education systems across jurisdictions and over time.

The first indicators published under the PCEIP banner appeared in 1996. A consultation with provincial and territorial governments and other education stakeholders the following year led to the definition of a new set of indicators, designed to address key policy issues. Similar consultations were held in the fall of 2004 and the modifications to the indicator set from those consultations will be incorporated in future editions of *Education Indicators in Canada*.

In 1999, the first PCEIP report based on the new indicator set was published, followed by a second report in 2003.

What is unique about PCEIP

The Pan-Canadian Education Indicators are not the only indicators on Canadian education systems. Within Canada, many jurisdictions have developed education indicators, or are in the process of doing so.

The diversity of education systems in Canada and differences in definitions and data collection methods often restrict meaningful interjurisdictional comparisons. The Pan-Canadian Education Indicators incorporate extensive methodological work aimed at harmonizing data across jurisdictions. Indeed, the goal of the program is to provide consistent and high-quality information on education for all of Canada to support informed decision-making, policy formulation and program development.

Internationally, the Organisation for Economic Co-operation and Development produces a set of education indicators called the *Indicators of Educational Systems (INES)*. The INES indicators compare education systems of OECD member countries. Results are published annually in *Education at a Glance: OECD Indicators*. Canada

has participated in this project since its inception in 1988. PCEIP incorporates certain INES indicators to provide an international framework for pan-Canadian and jurisdictional indicators.

Value of education indicators

Indicators combine discrete education statistics and give them context. Indicators permit comparisons—between jurisdictions, over time, and with commonly accepted standards.

Although indicators show trends and uncover interesting questions, they cannot by themselves provide explanations or permit conclusions to be drawn. Additional research will always be required to diagnose the causes of problems and suggest solutions. The aim of this report is to stimulate thinking and promote debate on education issues.

In this edition

The indicators are divided into five chapters. The first chapter, *A Portrait of the School-Age Population*, focuses on demographic trends for the population aged 5 to 29, and considers indicators of cultural diversity and low income for the population aged 5 to 24.

Chapter B, *Financing Education Systems*, looks at trends in public and private expenditures on education, examines the distribution of capital and current expenditures, and reports on student debt.

Chapter C, *Elementary-Secondary Education*, includes indicators on pre-school children, enrolment, graduation, and human resources at the elementary-secondary level. Other topics covered are information and communications technology and student achievement.

Chapter D, *Postsecondary Education*, provides similar information at the postsecondary level, looking at participation and graduation rates for apprenticeship programs and universities, as well as human resources at universities. It also covers research and development, adult education and training, and the educational attainment of the working-age population.

Finally, **Chapter E,** *Transitions and Outcomes*, looks at transitions from high school to postsecondary education and work, and provides information on labour market outcomes by level of education.

The indicators in this report were selected on the basis of two criteria: relevance for policy development and availability of data. They are based on the most recent available data. Excel tables will be updated regularly and made available on the Web.

Highlights

Chapter A: A portrait of the school-age population

Population size

- The population aged 5 to 13 is projected to decrease by about half a million between 2001 and 2011 to about 3.2 million.
- The population aged 14 to 18 is projected to peak in 2008 at 2.2 million.
- The 19 to 24 population is expected to peak in size in 2014 at about 2.7 million.
- The 25 to 29 population will increase slightly over the next few years, to 2.3 million.

Cultural diversity

- Diversity among the school-age population generally increased between 1991 and 2001.
- In Toronto and Vancouver, over 25% of the school-age population in 2001 were immigrants and approximately 20% had a home language other than English or French.
- The proportion of the school-age population with Aboriginal identity is significant and growing in Canada's Census Metropolitan Areas (CMAs) and in areas outside the CMA's in certain provinces and territories.

Low income

- In 2000, 7% of all children living with two parents were in low-income situations. Among children living in lone-parent families, the proportion was 25%.
- For those children living with one parent in 1996, over half experienced a spell of low income at some time between 1996 and 2000; for 38%, the spell lasted more than a year.

Chapter B: Financing education systems

Total expenditure on education

- Between 1997-1998 and 2001-2002, total education expenditure in Canada rose by 9% in 2001 constant dollars to $70.8 billion, with most of the increase occurring at the postsecondary level.
- In 2001-2002, an average of $2,277 per person was spent on education in Canada.
- Total public and private expenditure on education decreased from 6.4% of GDP in 1999-2000 to an estimated 6.1% in 2001-2002.
- Compared to the OECD average and G-7 countries in 2001, Canada ranked second in total expenditure in relation to GDP.

Public and private expenditure on education

- Between 1997-1998 and 2001-2002, combined federal, provincial/territorial and municipal government expenditure on education grew by 10% at the postsecondary level; expenditure at the elementary-secondary level increased by 3%.
- Between 2000 and 2002, the proportion of government spending on health increased by 2 percentage points, while the proportion spent on education declined by 0.3 percentage points.
- In 2001-2002, private expenditures had risen to $10.7 billion, a 19% increase since 1997-1998, almost four times the increase in public expenditures. Of this amount, $3.3 billion was spent at the elementary-secondary level and $7.4 billion at the postsecondary level.
- In 2003, 45% of Canadian households incurred educational expenses for such items as textbooks, school supplies and tuition costs, spending an average of $2,263.
- Undergraduate university tuition fees increased over the period 1994-1995 to 2004-2005 (in constant 2001 dollars) from an average of $2,535 to $3,863 across Canada. The share of total university revenues accounted for by student tuition and other non-government revenues increased.

Student debt

- The 2000 university graduates who borrowed from government student loan programs owed an average of $18,900 at graduation, 29% more than 1995 university graduates. College graduates of 2000 owed an average of $12,500, 19% more than 1995 college graduates.
- College and university students who graduated in 2000 who borrowed from government student loan programs had more debt two years after graduation than their 1995 counterparts.

Chapter C: Elementary-secondary education

Home to school transitions: Early childhood development and learning

- Canadian parents reported in 2001-2002 that the physical health of 4- and 5-year-old children was generally very good.
- More 4- and 5-year-old girls than boys looked at books or tried to read on their own daily.
- Approximately 60% of 4- and 5-year-olds had an adult who read to them every day.
- In 2000-2001, the vast majority of 4- and 5-year-olds had normal or advanced receptive language skills.

Elementary-secondary school participation

- Between the school years 1997-1998 and 2002-2003, enrolment in public elementary and secondary schools increased in only two provinces, Ontario and Alberta.
- There were just under 311,000 educators country-wide in 2002-2003, slightly more than five years earlier.
- Between 1997-1998 and 2002-2003, the number of educators increased more – or decreased less – than enrolments in every jurisdiction, except for Newfoundland and Labrador, Alberta, British Columbia and Yukon.

Information and communications technologies (ICT) in schools

- Less than 1% of the elementary and secondary schools in Canada were without computers in the 2003-2004 school year.
- Nine out of ten computers were connected to the Internet and available to students.
- Although most principals reported that most teachers in their schools possessed the technical skills required to use computers for administrative purpose, less than half of principals reported that more than 75% of teachers had the technical skills necessary for engaging students in using ICT effectively.
- Financing the purchase of computers and related electronic equipment was a major concern for most principals.

Student achievement

- In terms of mathematics literacy, Canada's performance on OECD's Programme for International Student Assessment (PISA) was strong, with only two countries, Hong Kong and Finland, performing significantly better than Canada.
- Across Canada, 71% of 13-year-olds and 64% of 16-year-olds reached the expected levels on the 2004 science assessment of the School Achievement Indicators Program (SAIP).
- In the SAIP writing assessment, in 2002, 84% of 13-year-olds and 61% of 16-year-olds reached the expected levels.
- With a few exceptions, the performance of boys on the SAIP writing assessment was below that of girls at both ages and in all jurisdictions. In science, there were few significant differences between boys and girls at all achievement levels.

Secondary school graduation

- The pan-Canadian high school graduation rate in 2001 was 75%.
- In 2002-2003, as in 1997-1998, graduation rates were higher for females (78%) than for males (70%).

Chapter D: Postsecondary education

Enrolment in postsecondary education

- In 2002, there were 234,500 registered apprentices in Canada, 30% more than in 1992.
- Between 1992 and 2002, the proportion of women among registered apprentices in all trades increased from 5% to 9%.
- Between 1992-1993 and 2001-2002, full-time enrolment at Canadian universities increased by 12%, while part-time enrolment was down 21%.
- Women are now in the majority in full-time undergraduate studies and their enrolment at the graduate level is almost equal to that of men. Men's share of undergraduate enrolment decreased from 47% to 42% over the 1990s.

Adult education and training

- In 2002, 4.8 million adult workers participated in formal, job-related training.
- In 2002, the rate of participation in formal, job-related training was highest among young workers and decreased with age.
- The lowest rate of participation (18%) occurred among workers with the least education (secondary school graduation or less).
- About one-quarter of working adults reported that there was job-related training that they wanted or needed to take in 2002 but did not.

Human resources

- The number of full-time university educators in 2002-2003 was down by about 3% from ten years earlier, while full-time enrolment increased 12%.
- In Canada, the median age of full-time university educators in 2002-2003 was 49.
- In 2002-2003, 35% of university faculty were aged 50 to 59, compared to 23% of the overall labour force.
- Women accounted for 30% of full-time university educators by 2002-2003, up from 21% ten years earlier.
- Between 1992-1993 and 2002-2003, average salaries of university faculty increased 20% (measured in constant 2001 dollars).

Research and development

- In 2002, Canada conducted $21.9 billion worth of research and development (R&D) (in constant 2001 dollars).
- In 2002, universities accounted for one-third of all R&D in Canada, second to the business sector, which accounted for more than half of all R&D.
- By 2002, R&D in the university sector had risen to $7.3 billion annually.

Postsecondary completions and graduation rates

- The apprenticeship branches of provincial and territorial governments reported 16,500 individuals completing registered apprenticeship programs in 2002, down 12% from 1992.
- The graduation rate for bachelor's and first professional degree programs was 31% in 2001.

- Graduation rates were higher for females than males in all of the broad disciplines in the humanities and social sciences. Graduation rates for males remained higher in the physical, natural and applied sciences, though the gap narrowed between 1992 and 2001.
- Between 1992 and 2001, the number of male university graduates decreased slightly by 1%, whereas the number of women graduates increased by 10%. In 2001, women accounted for almost 60% of graduates.
- In 2001, social and behavioural sciences and law was the field of study with the most graduates in Canada, followed closely by business, management and public administration, then education.

Educational attainment of the population aged 25 to 64

- In 2001, no other OECD nation had a higher proportion of its population aged 25 to 64 with either a college or university credential than Canada. However, in terms of the population with a university degree, Canada ranked fifth overall.

Chapter E: Transitions and outcomes

Transitions to postsecondary education and the labour market

- In 2003-2004, just over half of all students aged 17 and older were working while they attended school.

Labour market outcomes

- In 2004, the unemployment rate for 25- to 29-year-olds with less than high school stood at 15% compared to 7% for university graduates.
- In 2000, mean earnings (before taxes) were 77% higher for university graduates and 15% higher for college or trade graduates than for individuals with high school diplomas.

A

Chapter A

Chapter A figures

A portrait of the school-age population

Introduction

The school-age population (defined here as the population aged 5 to 24) is slowly changing. Its size, cultural diversity, and family characteristics are all evolving in ways and directions to which schools and teachers have to adapt. This chapter presents the evolution of some key characteristics of the school-age population and attempts to highlight some of the challenges for the education systems in Canada. These trends will have a country-wide influence but may not apply to specific local areas. Furthermore, the statistical portrait traced here could be enriched further with scores of other important statistics, on topics such as health, exposure to violence, or activities outside schools.

Indicator A1 looks at the evolution of the size of the school-age population, and the population aged 25 to 29, from 1991 to 2001, and provides projections through to 2026.

Indicator A2 presents the increasing diversity of the school-age population in terms of immigrants, visible minorities, and languages spoken at home in some of the major census metropolitan areas (CMAs) in Canada. It also traces shifts in the proportion of the school-age population with Aboriginal identity.

Indicator A3 shows the proportion of the school-age population in low-income families.

A1

Population size

Context

This indicator provides an overview of recent trends in the school-age population as a whole and at the elementary (population aged 5 to 13), secondary (aged 14 to 18), and postsecondary (aged 19 to 24) levels of education, and for the population aged 25 to 29.

Demographic information is an important factor to consider in anticipating the demand for education services. At ages when schooling is compulsory, trends in population size provide a direct indication of resource requirements of the education systems—from teacher hiring to investment in the construction and maintenance of buildings to program planning that meets the educational needs of particular sectors of the population. The relationship between population change and capacity requirement is not linear, however. For instance, students can be transported from areas where demand exceeds capacity to areas where unused capacity exists; within certain legislated limits, ratios of students to teachers can vary; and schools can operate below capacity level.

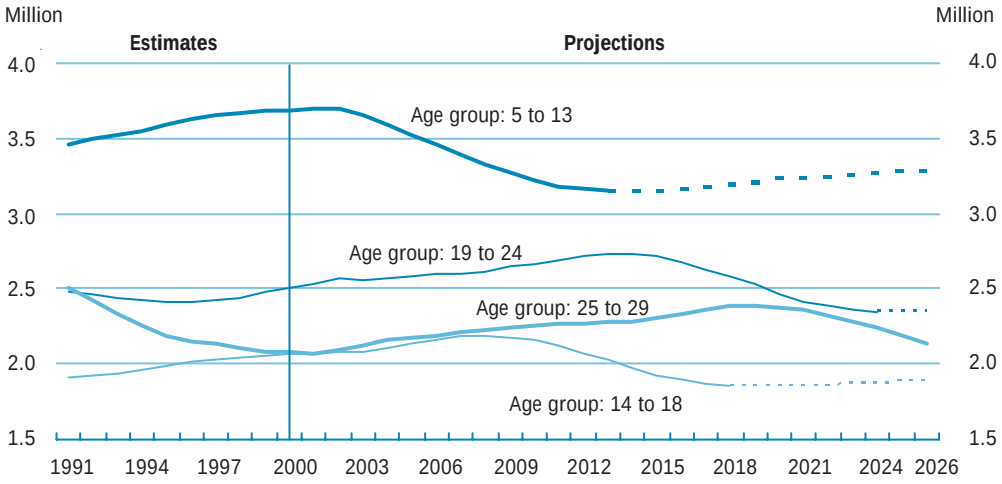
At the postsecondary level, trends in population provide a sense of the changing size of the potential "clientele."

Findings

After a long period of slow but steady growth, the school-age population is expected to peak and then start to decline over the next few years due to decreasing birth rates. Given current demographic assumptions, the population aged 5 to 13 years had already peaked at 3.7 million in 2001 (Figure A1.1 and Table A1.1). That population is projected to decrease by about half a million between 2001 and 2011 to about 3.2 million, as the smaller cohorts born in the late 1990s enter elementary schools. After 2014, it may start to slowly increase again if fertility rates remain constant from 2001 on, as assumed in the medium growth scenario of Statistics Canada's official population projections (see Appendix 2).

Figure A1.1

Estimated and projected population, age groups 5 to 13, 14 to 18, 19 to 24 and 25 to 29, Canada, 1991 to 2026



Source:
Table A1.1.

The population aged 14 to 18 years is projected to peak in 2008 at 2.2 million, 14% above the 1991 level. It is expected to then drop between 2006 and 2020 and then remain relatively stable at 1.9 million, assuming again that the 2001 fertility rates remain constant throughout the projection period.

The 19 to 24 population is expected to peak in size in 2014 at about 2.7 million and to decrease until 2024, when it is expected to stabilize at 2.3 million.

The oldest group, those aged 25 to 29, decreased in size by 17% between 1991 and 2001. Although this group is projected to increase in size after that, it is not expected to regain 1991 levels by 2026.

Due to the recent trend in fertility rates, all jurisdictions could experience a period of decline in their elementary- and secondary-school-age population. In contrast, the size of the postsecondary-aged population will increase in the medium term.

The level at which the school-age population could stabilize at the end of the projection period varies significantly by jurisdiction. British Columbia is the only jurisdiction that can expect growth between 2001 and 2026 for all age groups from age 5 to 29. Growth is also projected for Ontario over this period, except for the 5 to 13 age group. The other provinces are likely to see declines across this population group. Among the 5 to 13 age group, these declines are projected to be over 20% for Nova Scotia, Quebec, Manitoba, and Saskatchewan, and over 30% for Newfoundland and Labrador and New Brunswick. Jurisdictional differences are affected by immigration, inter-jurisdictional migration, and, in Nunavut, the high fertility rate among its Aboriginal population.

A2

Cultural diversity

Context

Using Census data, this indicator captures four major aspects of the diversity of the school-age population. It measures the proportion of the school-age population who are immigrants, who are visible minorities, and whose home language is neither English nor French. It also presents the proportions of the school-age population with Aboriginal identity.

Since 1990, an average of 225,000 immigrants of all ages has arrived in Canada every year. With the decline in births (see Indicator A1), more than half of Canada's demographic growth is currently attributable to immigration. Nearly three-quarters (73%) of the immigrants who came in the 1990s settled in just three census metropolitan areas (CMAs): Toronto, Vancouver, and Montreal. The vast majority of them have come from non-western countries: 60% from Asia and 20% from the Caribbean, Latin America and Africa. This results in a rapidly growing and increasingly diverse population in certain CMAs that contrasts with the slow-growing (or even declining) and relatively homogeneous population elsewhere.

Primarily as a result of immigration, the cultural makeup of the school-age population is growing more diverse. This diversity has an impact on teaching, support services, and school dynamics, in many ways. The challenge is to adapt the learning environment to the needs of students who are immigrant, Aboriginal, or not fluent in the teaching language, in a school community where students are from diverse cultural backgrounds.

The focus of this indicator is on areas of the most significant diversity. This is not to underestimate issues that may also arise in areas where only a small minority of the school-age population has different cultural backgrounds.

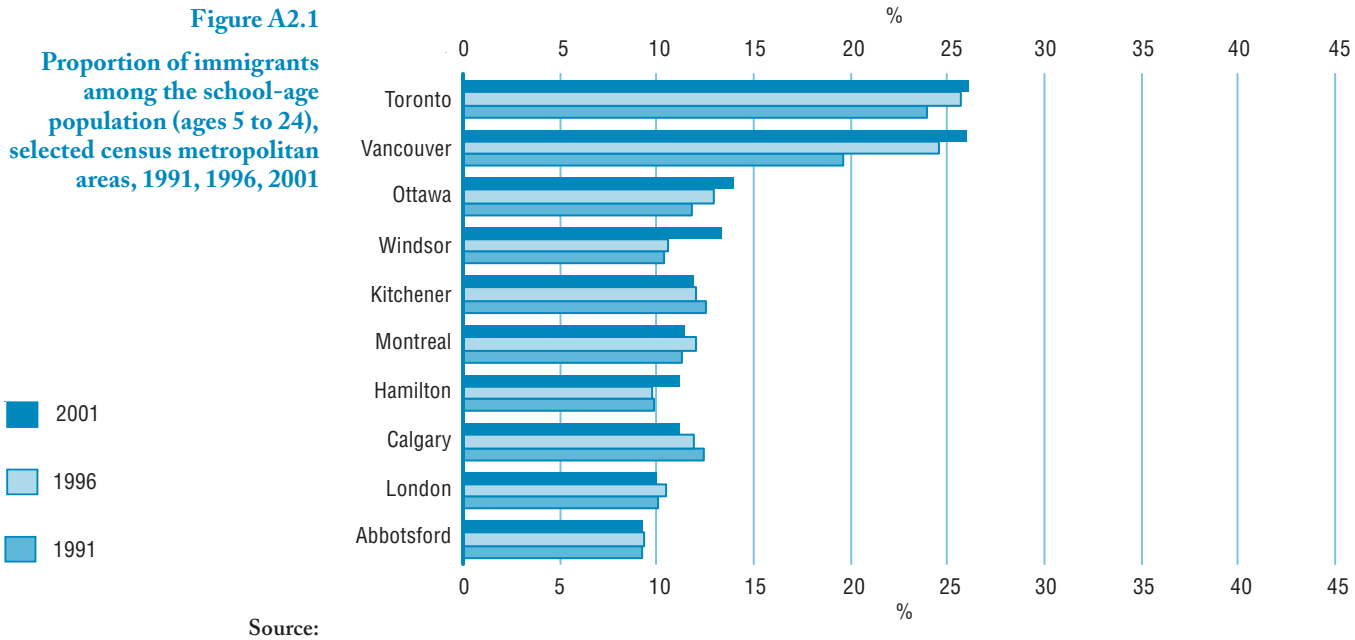
Findings

Immigration, visible minorities and non-official languages

In Toronto and Vancouver, over 25% of the school-age population in 2001 were immigrants, over 40% were visible minorities, and approximately 20% had a home language other than English or French (Figures A2.1, A2.2 and A2.3 and Tables A2.1, A2.2 and A2.3). Toronto and Vancouver are among the world's most multi-ethnic urban centres.

Figure A2.1

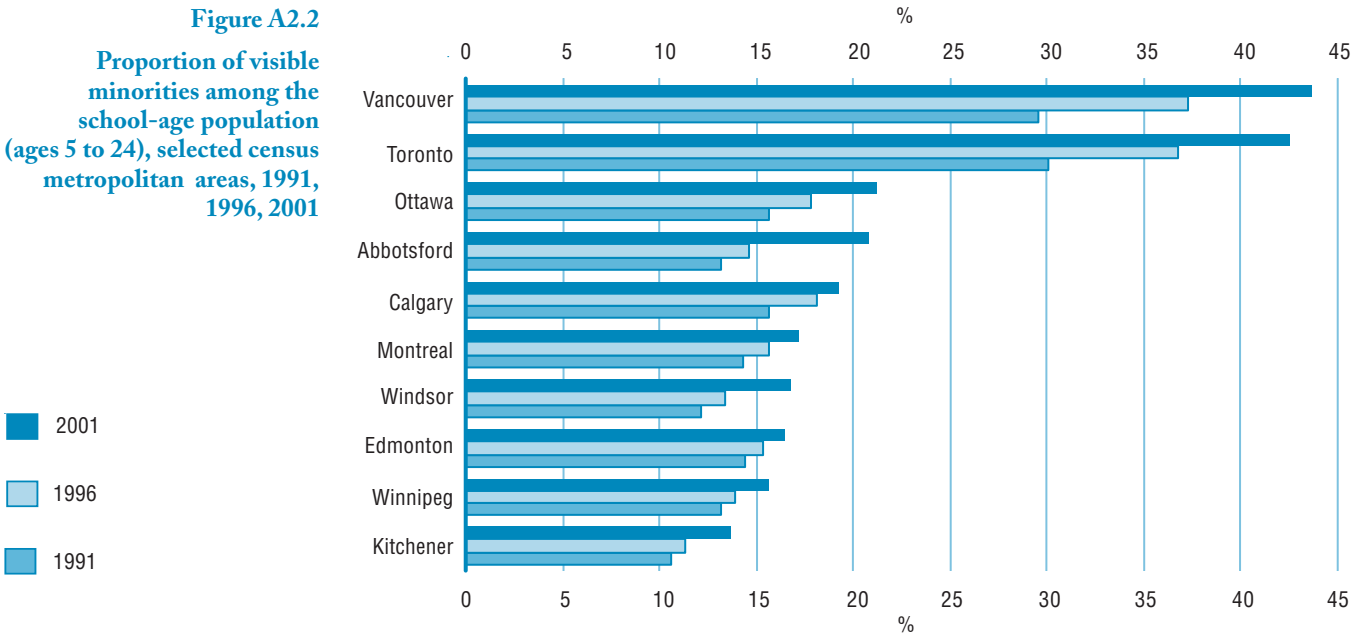
Proportion of immigrants among the school-age population (ages 5 to 24), selected census metropolitan areas, 1991, 1996, 2001



Source:
Table A2.1.

Figure A2.2

Proportion of visible minorities among the school-age population (ages 5 to 24), selected census metropolitan areas, 1991, 1996, 2001



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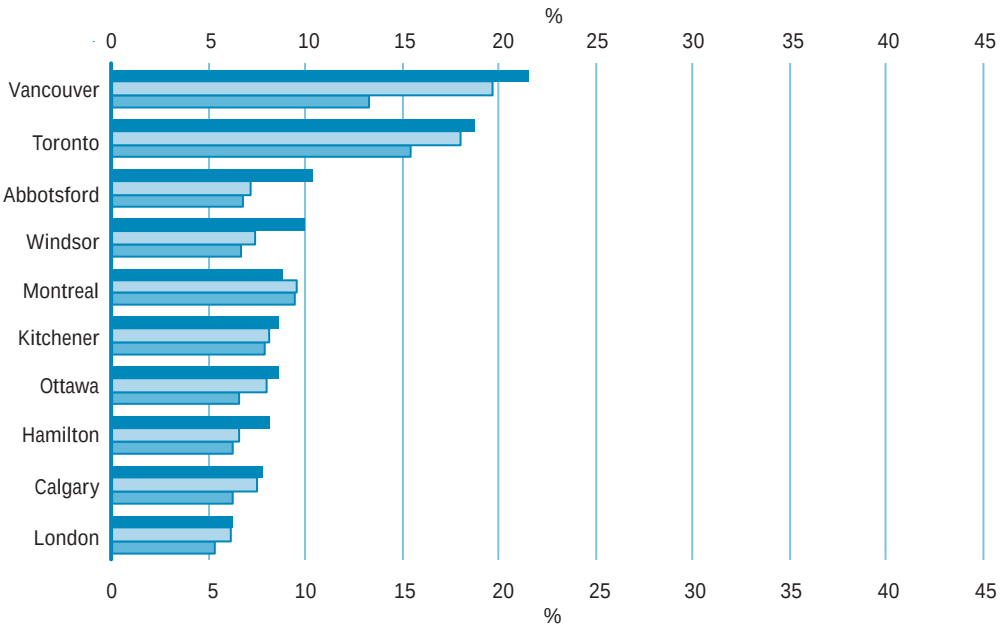


Figure A2.3

Proportion of the school-age population (ages 5 to 24) with non-official home languages, selected census metropolitan areas, 1991, 1996, 2001

Source:
Table A2.3.

The other eight CMAs where diversity is particularly significant are Montreal, Ottawa, Kitchener, Hamilton, London, Windsor, Calgary, and Abbotsford. In these CMAs in 2001, between 9% and 14% of the school-age population were immigrants, between 12% and 21% were visible minorities, and between 6% and 10% had a home language other than English or French. Comparable percentages of visible minorities among the school-age population are found also in the CMAs of Winnipeg, Edmonton, and Victoria.

Diversity generally increased between 1991 and 2001. The school-age population whose home language is neither English nor French increased in relative terms in all of the ten most diverse CMAs, except Montreal, while the proportion of immigrants declined slightly in Kitchener and Calgary, and remained stable in Montreal, London, and Abbotsford. The proportion of visible minorities, many of whom were born in Canada, grew in all ten CMAs shown in Figure A2.2.

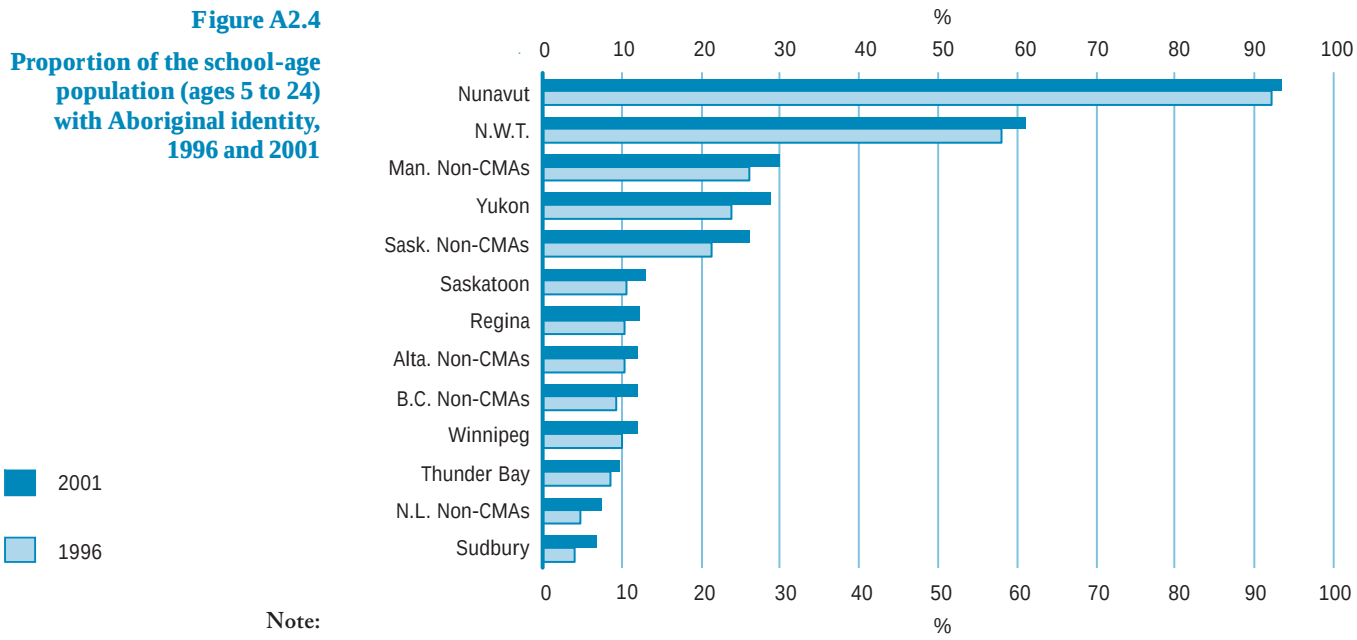
Aboriginal identity

Because the birth rate remains higher among the Aboriginal than the non-Aboriginal population, the proportion of the school-age population with Aboriginal identity is significant and growing in the CMAs and in areas outside the CMAs in certain provinces and territories (Figure A2.4 and Table A2.4). In 2001, 94% of the school-age population had Aboriginal identity in Nunavut, 61% in the Northwest Territories, and 29% in Yukon.

Among provinces, Manitoba and Saskatchewan had the highest proportions of the school-age population with Aboriginal identity in 2001, both within and outside CMAs. The non-CMA parts of Alberta, British Columbia, and Newfoundland and Labrador, as well as the CMAs of Thunder Bay and Sudbury were the other areas of the country with a high and growing proportion of the school-age population with Aboriginal identity in 2001.

Figure A2.4

Proportion of the school-age population (ages 5 to 24) with Aboriginal identity, 1996 and 2001



Note:

Nunavut and N.W.T.: data are calculated using the 1999 boundaries.

Source:

Table A2.4.

A3

Low income

Context

This indicator provides information on the proportion of the school-age population living in low-income circumstances, including the duration of low-income spells.

Family income is strongly associated with academic results. Living in low-income[1] circumstances impedes school readiness of pre-school children, reduces the likelihood of attending university and increases the likelihood of living in low-income circumstances as an adult. Information on the number and characteristics of children in low-income families can help develop appropriate policies and programs that target children most in need. Examples include pre-school and after-school programs, in-school access to computers and the Internet, and student loan programs.

Findings

The proportion of the school-age population living in low-income families differs significantly by family type. It is also influenced by economic conditions. In 2000, 7% of all children living with two parents were in low-income situations, down from a peak of 9% in 1995. Among children living in lone-parent families, the proportion was 25% in 2000, down from 36% in 1995. For those not living with their parents, most of whom were between 19 and 24 years of age, the proportion was 35% in 2000 compared to 39% in 1995 (Table A3.1).

A longitudinal perspective reveals that among children living with two parents in 1996 about one in five (22%) experienced a period of low income at some point between 1996 and 2000, due to changes in employment or family circumstances. For 12%, the period of low income lasted for more than a year (Figure A3.1 and Table A3.2).

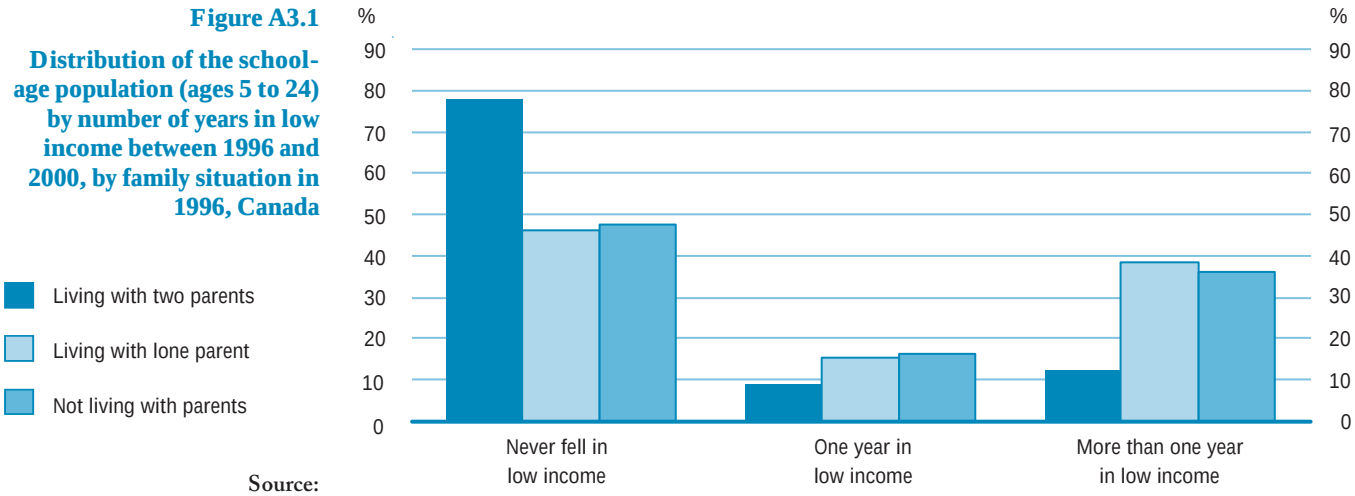
Children living in lone-parent families were much more at risk of experiencing a longer period of low income. For those living with one parent in 1996, over half experienced a spell of low income at some time between 1996 and 2000; for 38%, the spell lasted more than a year.

Finally, for those who were not living with their parents in 1996, 52% experienced low income between 1996 and 2000, with 36% having low income for more than one year.

1. See Appendix 2 for methodological information on the after-tax low-income cutoffs (LICOs) used here.

Figure A3.1

Distribution of the school-age population (ages 5 to 24) by number of years in low income between 1996 and 2000, by family situation in 1996, Canada

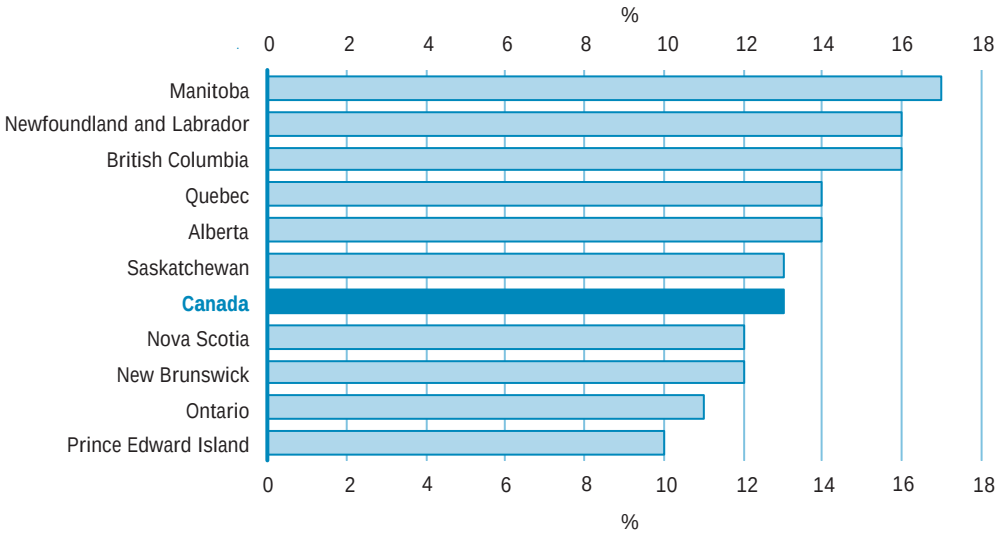


Source: Table A3.2.

In 2000, the highest proportions of the school-age population living in low income were found in Newfoundland and Labrador, Manitoba, and British Columbia. The lowest were in Prince Edward Island, Nova Scotia, New Brunswick, and Ontario. Over the 1996 to 2000 period, the provinces with the highest proportions of the school-age population who spent more than a year with an income below the low-income cutoffs (LICOs) were also Newfoundland and Labrador, Manitoba, and British Columbia, while the proportions were the lowest in Nova Scotia, Prince Edward Island, and Ontario (Figures A3.2 and A3.3).

Figure A3.2

Percentage of the school-age population (ages 5 to 24) living in low income, Canada and provinces, 2000



Source: Table A3.1.

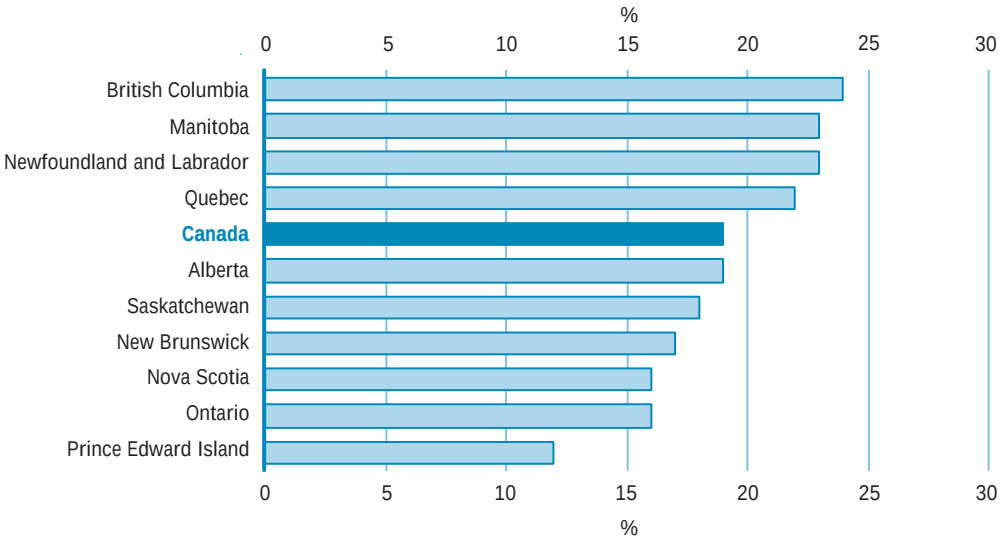


Figure A3.3

Percentage of the school-age population (ages 5 to 24) who spent more than a year in low income between 1996 and 2000, Canada and provinces

Source:
Table A3.2.

B

Chapter B

Chapter B figures

Financing education systems

Introduction

One of the key indicators of social and economic progress in Canada and in a growing number of other countries throughout the world is the proportion of youth who attain high literacy standards and complete advanced levels of education. These higher educational expectations, driven in part by the needs of a global knowledge society, have elevated education as a funding priority for many governments and private households.

While investment in education is now seen as central to the development of advanced societies, no absolute standards exist for measuring the financial resources needed to ensure optimal returns for individual students or, for that matter, to society as a whole. Nonetheless, comparisons between provinces and territories and between countries can provide a starting point for discussion by evaluating the variation that exists between jurisdictions in educational investment.

Indicator **B1** examines the combined expenditure on education in Canada by governments and private households. In addition to the overall pattern of public and private expenditures across the country, expenditure amounts are displayed per capita and in relation to gross domestic product (GDP).

Indicator **B2** looks at public expenditure relative to expenditure on other government programs, as well as private expenditure on education, including expenditure by households and by individuals on university tuition.

Finally, Indicator **B3** examines debt loads incurred by college and university students.

Total expenditure on education

B1

Context

This indicator displays total education expenditure in Canada, from both public (federal, provincial/territorial, and municipal governments) and private sources. Appendices 2 and 5 provide information on the various components that go into the calculation of expenditures.

Governments provide most of the funding for education at all levels, but many private households also pay for education services or resources. To obtain a full picture of education expenditure in Canada, this indicator includes expenditures by all orders of government, by crown corporations and agents, federal research funding councils, federal funding to schools on reserve, by the private sector and by households.

The measures reported here should be interpreted in the light of various interrelated supply and demand factors, including the demographic structure of the population, enrolment rates at different levels of education, and changes in the overall value of goods and services produced in the economy. The results cannot be used to compare provincial/territorial governments' funding commitment to education. It is also important to note that, although amounts are presented in constant dollars in order to provide a consistent picture over time, the impact of spending on education in any jurisdiction will be affected by a number of factors, including changes to the cost of living within jurisdictions.

Per student expenditure data are not available for this edition of *Education Indicators in Canada*, because comparable enrolment and expenditure data were not available at the time the publication was being prepared. Information on per-student expenditure will be included in future editions.

Findings

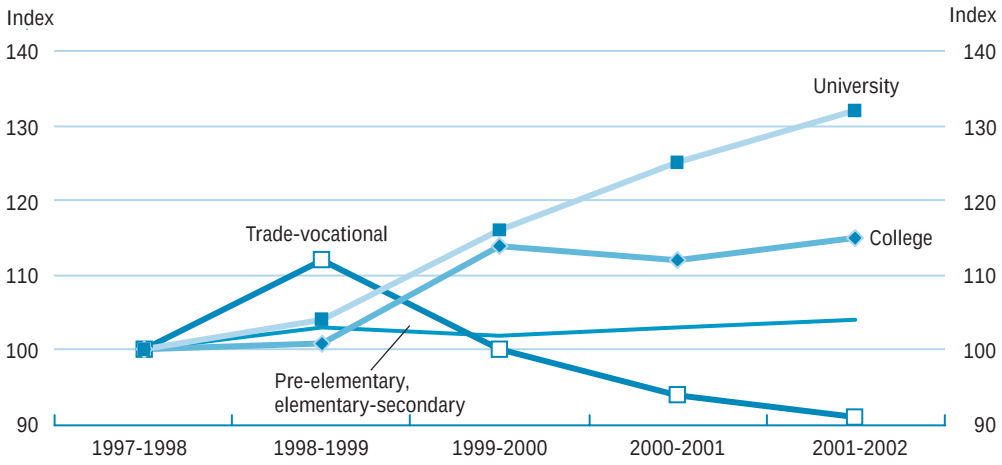
Total expenditure

Between 1997-1998 and 2001-2002, total education expenditure in Canada rose by 9% in 2001 constant dollars[1] to $70.8 billion, with most of the increase occurring at the postsecondary level (Figure B1.1 and Tables B1.1 and B1.2).

1. Unless otherwise indicated, all amounts are in 2001 constant Canadian dollars.

Figure B1.1

Indices of change in combined public and private expenditures on education by level of education, Canada, 1997-1998 to 2001-2002 (1997-1998 = 100)



Source: Tables B1.2.

Universities received the greatest share of the postsecondary increases, expenditures at this level increasing 32% over the period. Expenditure at the elementary-secondary level remained relatively flat, increasing by about 4% to $41.9 billion. In 2001-2002, 59% of all expenditure was at the elementary-secondary level and 41% at the postsecondary level (Table B1.3).

Over the four-year period, total expenditure increased across all jurisdictions, with the exception of Newfoundland and Labrador where it dropped 15%, mostly as a result of spending reductions in trade-vocational programs. The decline in expenditure in Newfoundland and Labrador was in fact a return to "normal" expenditure levels after a significant but short-term funding increase in the mid-1990s, notably for the Atlantic Groundfish Strategy. For most jurisdictions, expenditure increases were higher at the postsecondary than at the elementary-secondary level; in some jurisdictions, expenditures at the elementary-secondary level decreased or remained stable (Tables B1.1 and B1.2).

Expenditure per capita

Between 1997-1998 and 2001-2002, per capita expenditure on education increased 5% in Canada. In 2001-2002, an average of $2,277 per person was spent on education in Canada. Among jurisdictions, average per capita amounts for that year ranged from $1,999 in Prince Edward Island to $6,075 in Nunavut. Reflecting higher operating costs in the north, average per capita expenditure in the territories was more than double that of the provinces (Table B1.4).

In most jurisdictions, per capita expenditure increased by between 9% and 14% between 1997-1998 and 2001-2002. Yukon showed the greatest increase in per capita expenditure over this period, at 24%. Per capita expenditure dropped in only two provinces: in Newfoundland and Labrador, by 11%, with the end of short-term funding increases, notably for the Atlantic Groundfish Strategy, and the return to normal expenditure levels; and in Ontario, by 2%.

In interpreting this measure, comparisons between jurisdictions should be made with care. Per capita expenditures are obviously affected by changes to the size of the population as a whole, but factors that influence spending on education also need to be taken into account, such as the size of the school-age population and the cost of living. Indicators A1, C2, and D1 provide information on demographic and enrolment factors.

Expenditure relative to GDP

In Canada, total public and private expenditure on education decreased from 6.4% of GDP in 1999-2000 to an estimated 6.1% in 2001-2002 (Table B1.5). Expenditure as a proportion of GDP increased in Alberta and all three territories, and remained stable in British Columbia, while decreasing in the other provinces. Expenditures relative to GDP in 2001-2002 ranged from 18.3% in Nunavut to 5.1% in Alberta (Figure B1.2). Similar factors should be considered in evaluating these data as for per-capita spending. Appendix 6 shows changes in provincial-territorial GDP over the period.

Comparisons between jurisdictions should be made with care. Expenditures on education relative to GDP are affected by the size of, and changes in, GDP (which disadvantages provinces with large GDP or those in which GDP is growing quickly), as well as by the size and changes to the size of the school age population (which disadvantages provinces with relatively small, or a declining, school age population).

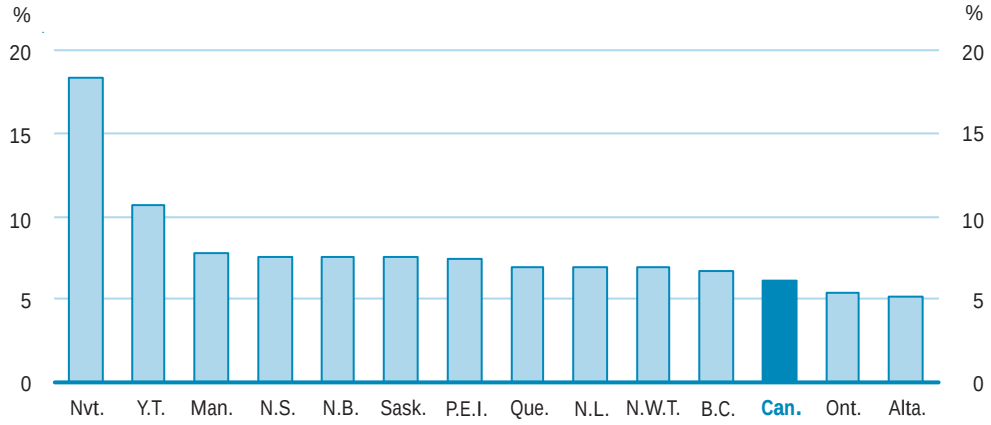


Figure B1.2

Combined public and private expenditures on education as a percentage of GDP, Canada and jurisdictions, 2001-2002

Source:
Table B1.5.

2. These amounts have been converted to US dollars, using purchasing power parities (PPPs).

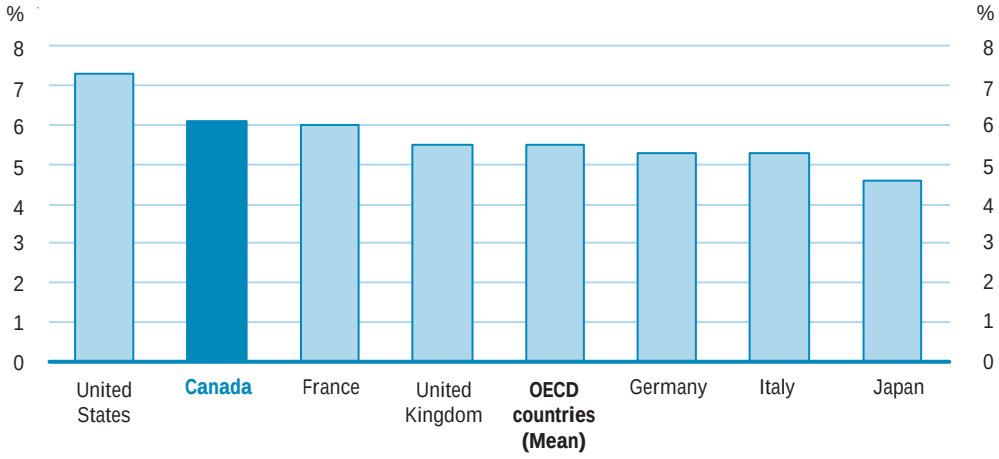
International comparisons

According to the OECD, per-student expenditure at the tertiary (university and college) level across G-7 countries in 2000 ranged from a low of $8,063 USD per student in Italy to a high of $20,358 USD in the United States. Canada ranked second at $14,983 USD[2] (Table B1.6).

Compared to the OECD average and G-7 countries in 2001, Canada ranked second in total expenditure in relation to GDP, behind the United States and slightly ahead of France (Figure B1.3 and Table B1.7).

Figure B1.3

Combined public and private expenditures on educational institutions as a percentage of GDP, all levels of education combined, G-7 countries and OECD mean, 2001



Source:
Table B1.7.

Public and private expenditure on education

B2

Context

This indicator is intended to provide policy makers with a better understanding of shifts that may be occurring in expenditures on education and to inform related discussions about student access to education in Canada.

One of the priorities for governments over the past decade has been to eliminate deficits. In this context, governments' ability to increase expenditure for education has been limited, as the needs of the sector have competed directly with those of other public priorities, such as health.

Governments in Canada provide funding to cover the costs of basic education at the elementary and secondary levels. Nonetheless, parents often incur costs for materials and supplies, and for a variety of school activities. In some cases, parents pay for private tutoring or enroll their children in private schools where they pay tuition fees.

At the postsecondary level, community colleges and universities receive substantial funding from governments, but also rely on student tuition fees as an important revenue source. Students and their parents also assume greater responsibility at this level for books and supplies, and for travel and living costs.

Appendices 2 and 5 provide information on the various components that go into the calculation of expenditures.

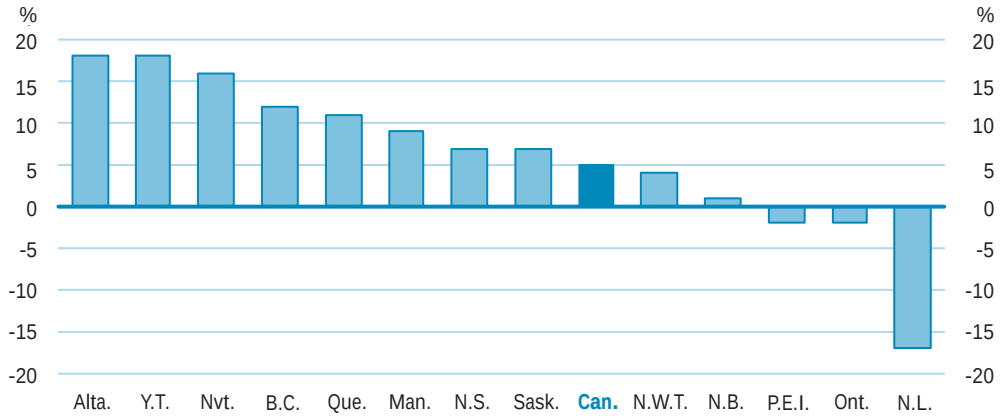
Findings

Public expenditure

Between 1997-1998 and 2001-2002, combined federal, provincial/territorial and municipal government expenditure in Canada grew by 10% at the postsecondary level; expenditure at the elementary-secondary level increased by 3% (Table B2.1 and Table B2.2). Over this period, total government expenditure on education increased across most jurisdictions, with Alberta and Yukon leading at 18% (Figure B2.1). Expenditure decreased by 2% in Prince Edward Island and Ontario, and 17% in Newfoundland and Labrador with the end of short-term funding increases, notably for the Atlantic Groundfish Strategy, and the return to normal expenditure levels.

Figure B2.1

Percentage change in public expenditures on education between 1997-1998[1] and 2001-2002, Canada and jurisdictions



1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. As a result, the data in this figure for Nunavut and the Northwest Territories apply to the 1999-2000 to 2001-2002 period.

Source:

Table B2.2.

For most jurisdictions, expenditure increases were higher at the postsecondary level than at the elementary-secondary level. However, Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and Nunavut experienced a decrease in postsecondary expenditure, due to a drop in expenditure on trade-vocational programs (Table B2.2).

In 2002, governments spent $64.5 billion[1] on all levels of education, which represented 14.7% of total public expenditures (Table B2.3). Spending on health that year accounted for 18.7% of public expenditures. Until 1999, education expenditures were higher than health expenditures, but between 2000 and 2002, spending on health increased by 2 percentage points, while spending on education declined by 0.3 percentage points, resulting in a higher proportion of public expenditures going to health than to education. Within education, public spending declined slightly more over that two-year period at the postsecondary level than for elementary-secondary education.

Private expenditure

In 1997-1998, $9.0 billion spent on education was from households and other private sources. Four years later, private expenditures had risen to $10.7 billion, a 19% increase, almost four times the increase in public expenditures. Of this amount, $3.3 billion was spent at the elementary-secondary level and $7.4 billion at the postsecondary level (Tables B2.4 and B2.5). The overall amount of private spending on education is affected by changes in participation levels, as well as by costs such as tuition fees. Information on postsecondary enrolment is provided in Indicator D1.

1. Unless otherwise indicated, all amounts are in 2001 constant Canadian dollars.

Private spending at the elementary-secondary level represented 8% of total education expenditures at that level, compared to 21% of college expenditures and 35% of university expenditures (Table B2.6). The higher proportion of private expenditures at the postsecondary level reflects the role of tuition fees, which almost all college and university students pay. Although some families send their children to private elementary-secondary schools, most schooling at this level is publicly funded.

In 2001-2002, private expenditure as a percentage of total expenditure on education ranged from 11% to 23% among the provinces, and between 2% and 4% in the territories (Figure B2.2). Private expenditure on elementary-secondary education accounted for between 2% and 6% of total spending on education in most jurisdictions. In Quebec, Manitoba and British Columbia, private spending was between 9% and 11% of total spending, and in Alberta, it was 14%.

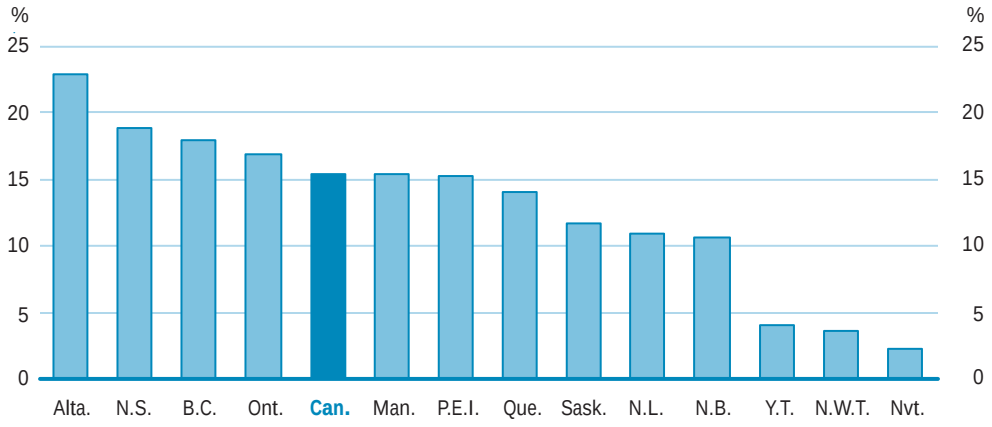


Figure B2.2

Private expenditure as a percentage of total expenditure on education, Canada and jurisdictions, 2001-2002

Source:
Table B2.6.

The proportion of private spending at the postsecondary level was higher than for elementary-secondary everywhere except Nunavut. Private spending on postsecondary education ranged between 2% and 8% in the Territories, reflecting the lack of universities in the North, as well as the relatively small percentage of the Aboriginal population that pursues postsecondary studies. Among the provinces, private spending ranged from 19% of total spending at the postsecondary level in Newfoundland and Labrador and Quebec to 39% and 40% in Alberta and Nova Scotia, respectively. Private expenditures on college were a significantly lower percentage of total expenditures than for university in all provinces except Prince Edward Island and Alberta.

Expenditure by households

In 2003, 45% of Canadian households incurred educational expenses for such items as textbooks, school supplies and tuition costs, spending an average of $2,263. The highest costs were for tuition fees: an average of $1,411 for elementary-secondary tuition among households that incurred this expense, and an average of $3,156 for postsecondary tuition.

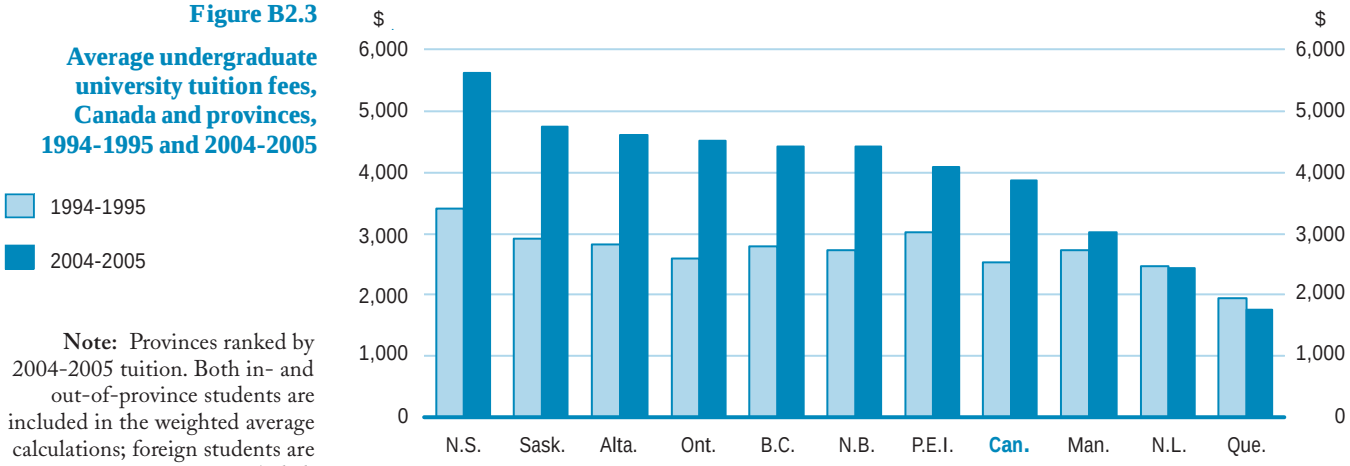
The percentage of households incurring educational expenses among the provinces ranged from 38% in Prince Edward Island to 47% in Alberta. Among those households, the average spent on elementary-secondary tuition varied widely, from less than $500 in Newfoundland and Labrador, New Brunswick, Saskatchewan and Alberta, to between $900 and $1,700 in Nova Scotia, Quebec, Manitoba, and British Columbia, and $4,500 in Ontario (Table B2.7). For households that paid postsecondary tuition, average expenditure was lowest in Quebec, at $1,331, and highest in Prince Edward Island, at $4,532. For most provinces, average spending on postsecondary tuition was between $3,100 and $4,100.

University tuition fees

Undergraduate university tuition fees increased over the period 1994-1995 to 2004-2005 (in constant 2001 dollars) from an average of $2,535 to $3,863 across Canada. Nova Scotia had the highest tuition fees in 2004-2005, at $5,602, while Quebec had the lowest at $1,762. Tuition fees in Newfoundland and Labrador and Quebec declined over this period, in constant dollars (Figure B2.3 and Table B2.8).

Figure B2.3

Average undergraduate university tuition fees, Canada and provinces, 1994-1995 and 2004-2005



Note: Provinces ranked by 2004-2005 tuition. Both in- and out-of-province students are included in the weighted average calculations; foreign students are not included.

Source:
Table B2.8.

In 1994-1995, tuition fees for various programs ranged from a low of $2,327 in Education to a high of $3,255 in Dentistry. By 2004-2005, the range had widened, with fees ranging from $3,035 in Education to $11,421 in Dentistry (Table B2.9).

Private revenues at universities

The share of total university revenues accounted for by student fees and other non-government revenues increased from 34% in 1992-1993 to 44% in 2002-2003. Among provinces in 2002-2003, Nova Scotia, at 59%, had the highest proportion of private revenues at the university level, rising from 40% ten years earlier. Quebec, at 31%, had the smallest proportion of private funding in 2002-2003, compared to 28% ten years earlier (Table B2.10).

Student debt

B3

Context

This indicator shows data on student debt from government-run student loan programs, using data for the classes of 1995 and 2000, the two most recent graduating classes for which comparable pan-Canadian survey results are available.

Public debate and concern about rising student debt has grown as the cost to households of attending postsecondary institutions has risen. Rising student debt levels among postsecondary graduates raise concerns about access to postsecondary education, especially at the university level. The student loans programs offered by the federal and provincial governments operate under the principle that access to postsecondary education should be independent of an individual's financial situation. Provincial/territorial and federal governments have recently undertaken initiatives to improve the affordability of postsecondary education. Accurate information on student debt can help to not only identify possible barriers to access, but also assist policy makers in monitoring the effectiveness of loan programs.

These data focus on graduates and do not include students who may not have completed their postsecondary studies. Non-completers who have incurred student debt may face additional repayment difficulties because of the potential impact on their employment opportunities.

Findings

Levels of student debt in Canada

Across Canada, the percentage of college graduates borrowing from government student loan programs to help finance their postsecondary education decreased slightly from 49% in 1995 to 46% in 2000; the percentage of university graduates borrowing from these programs also decreased slightly, from 54% in 1995 to 51% in 2000.[1] However, those in the 2000 cohort who held government student loan debt owed more (measured in constant dollars) at the time of graduation, as well as two years later, than their 1995 counterparts.

1. Figures for the percentage of graduates who borrowed from a government student loan program include anyone who borrowed at any time during their postsecondary studies. This definition differs from that used in PCEIP 2003, where the percentage borrowing included only those who owed money to a government student loan program at graduation. As a result, the figures for 1995 and for 1990 reported in PCEIP 2003 are not comparable to those reported in PCEIP 2005.

The 2000 university graduates who borrowed from government student loan programs owed an average of $18,900 at graduation, 29% more than 1995 university graduates (Table B3.1). Similarly, the 2000 college graduates owed an average of $12,500, 19% more than 1995 college graduates. In the two years following graduation, the university graduates of 2000 had reduced their debt by an average of 27%; the corresponding reduction for the 1995 class was 31%. In the case of college graduates, there was relatively little change in the percentage of debt repaid after two years, with the graduates of 2000 reporting having reduced their government student loan debt by 28% compared to 26% for 1995 graduates. As a result of the higher initial debt and slower or unchanged rates of repayment, 2000 college and university graduates who borrowed from government student loans programs had more debt two years after graduation than their 1995 counterparts.

Student debt by province

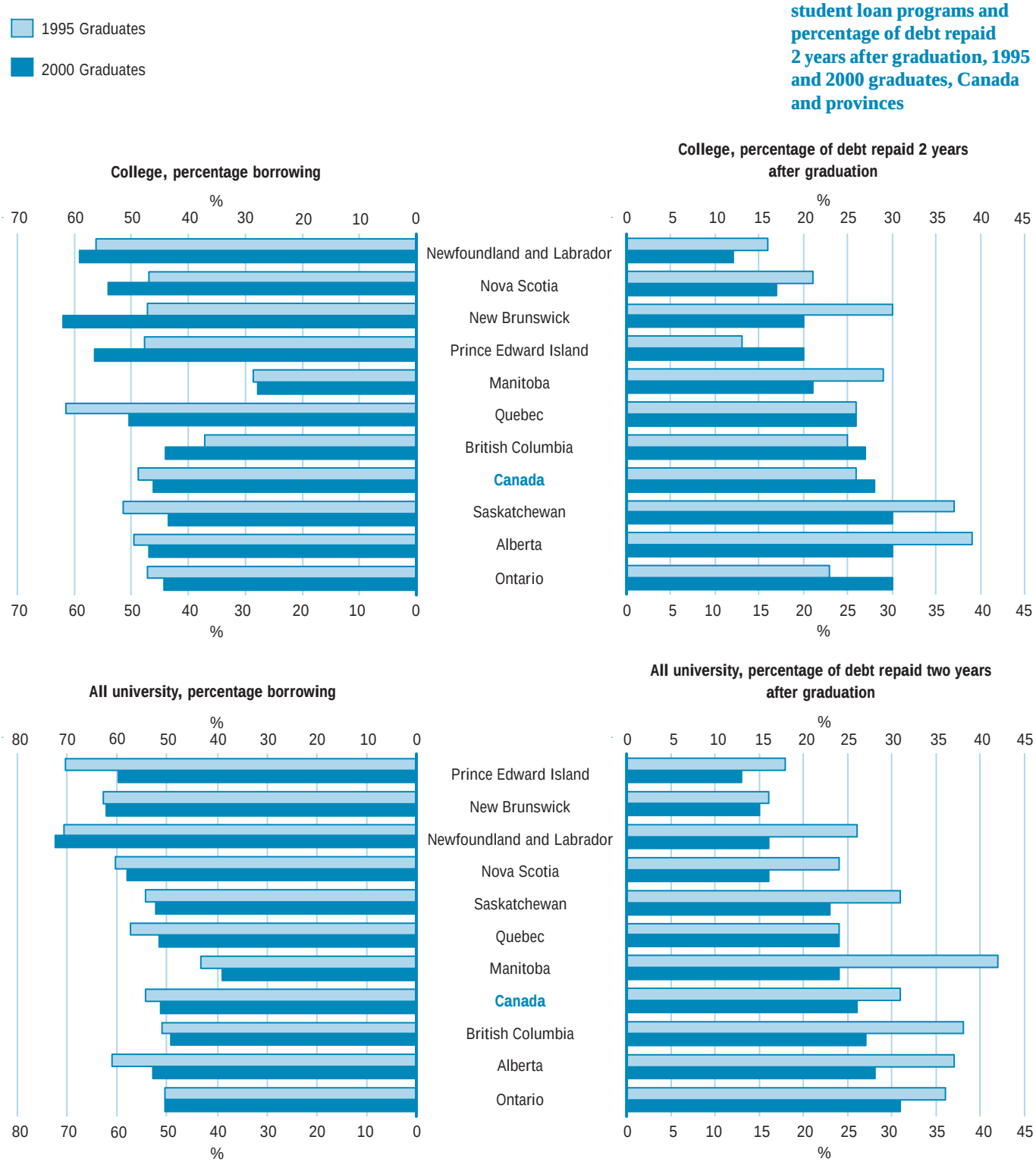
Relatively large increases in the percentage of college graduates who borrowed from government student loan programs occurred in Prince Edward Island and New Brunswick and to a lesser extent, in Nova Scotia and British Columbia (Figure B3.1 and Table B3.1). In Quebec, the percentage of college graduates who borrowed fell from 61% in 1995 to 50% in 2000 and in Saskatchewan, the percentage decreased from 52% to 44%. The percentage of college graduates who reported having borrowed from government student loan programs was more or less stable in the remaining provinces. Similarly, in most provinces, there was relatively little change in the percentage of university graduates reporting having borrowed from government student loan programs. However, Prince Edward Island, Quebec, Manitoba and Alberta saw relatively larger decreases in the percentage of university graduates reporting having borrowed.

With very few exceptions, student-loan debt levels at graduation increased for both college and university graduates between 1995 and 2000 (Figure B3.1 and Table B3.1). The exceptions are college graduates in Nova Scotia (2% decrease), Quebec (15% decrease), Saskatchewan (10% decrease), and British Columbia (6% decrease). The largest increases in average debt at graduation occurred among college graduates in Prince Edward Island, where average debt increased 75% and among university graduates in Newfoundland and Labrador and Ontario where increases in student loan debt were 60% and 47%, respectively.

Among college graduates in 2000, those in Quebec reported the lowest average amount owed at the time of graduation, $7,400. Corresponding debt levels for college graduates were highest in Newfoundland and Labrador ($15,400) and Ontario ($15,200). Quebec university graduates in 2000 also reported the lowest amount owed on government student loans upon graduation, at $13,500, on average; Manitoba and Alberta followed, with university graduates in 2000 reporting owing averages of $17,800 and $17,900. Government student loan debt levels were highest among the 2000 cohort of university graduates in Newfoundland and Labrador, at $26,900.

Figure B3.1

Percentage of graduates who borrowed from government student loan programs and percentage of debt repaid 2 years after graduation, 1995 and 2000 graduates, Canada and provinces



Notes: For graduates who incurred government student loans and who reported data two years after graduation. Provinces ordered by percentage of debt repaid 2 years after graduation, 2000 graduates.

Source: Table B3.1.

Rate of repayment

In most provinces, 2000 postsecondary graduates had paid off a smaller portion of their government student-loan debt two years after graduation than the 1995 cohort. The difference between the two cohorts is particularly notable in the case of university graduates. This is especially the case for Manitoba where 1995 university graduates reported having repaid 42% of their government student loan debt two years after graduation; for the university graduates of 2000, this percentage was only 24%. Two years after graduation, 2000 university graduates from the Atlantic provinces had reduced their debt by amounts ranging from 13% to 16%; college graduates had reduced their debt by between 12% in Newfoundland and Labrador and 20% in Prince Edward Island and New Brunswick. The rate of loan repayment generally was faster in Quebec, Ontario and the Western provinces, where 2000 university graduates had reduced their debt by between 23% and 31% and college graduates had reduced their debt by between 21% and 30%.

In comparing rates of repayment among provinces, it is important to consider economic factors that may play a role by affecting employment patterns. Indicator E2 provides information on unemployment rates by province.

Chapter C

C

Chapter C figures

Elementary-secondary education

Introduction

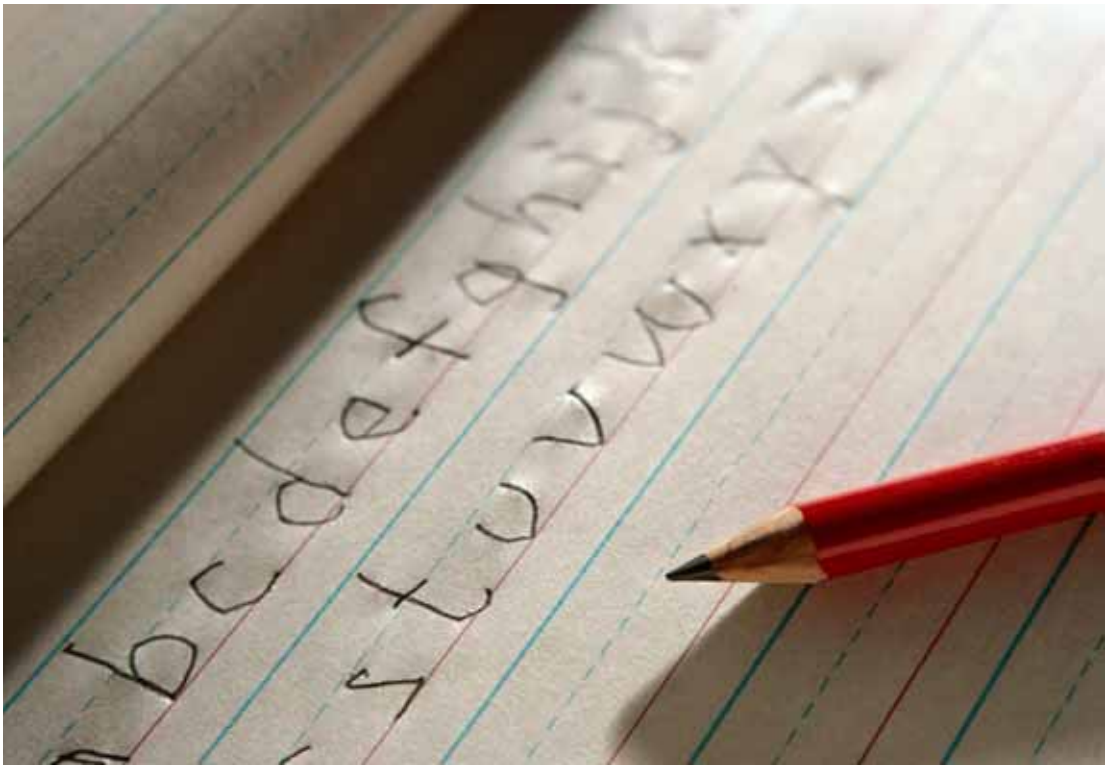
The indicators in this chapter offer an overview of pre-elementary, elementary and secondary education in Canada. Indicator C1 looks at the early years and school readiness of 4- and 5-year-olds.

Elementary-secondary enrolment reflects demographic trends, given compulsory school attendance to age 16 in most jurisdictions. In addition, kindergarten programs are now almost universal. Indicator C2 examines trends in enrolment, in the size of the educator work force and in the student-educator ratio.

The education system is increasingly reliant on information technologies. Familiarity with computers and proficiency with everyday applications are seen by many as critical skills for the next generation. Indicator C3 deals with the student–computer ratio, connectivity and impediments to better use of information technology in the school.

Closer attention to measuring outcomes has become a hallmark feature of education policy in the last ten years or more. Indicator C4 examines school achievement in such key areas as reading, mathematics and science.

The chapter closes with secondary school graduation rates, a traditional measure of educational outcomes. Indicator C5 includes comparisons to other countries as well as among jurisdictions.



Home to school transitions: Early childhood development and learning

C1

Context

This indicator examines data on the physical, social and cognitive development of 4- and 5-year-olds.

The developmental stages of early childhood are complex, multidimensional and interdependent. For example, the ability to participate in age-appropriate conversations (social and cognitive development) is in part dependent on a child's oral acuity (physical development). Among young children, general theory indicates that social development and behaviour emerge, and are enhanced through, participation in structured activities outside school and activities with friends. For any one child, his or her stage of early childhood development can influence how prepared he or she is to enter the school environment.

Long-term success in school, as well as later in life, may be influenced by what a child achieves in the first years of school. Although not the beginning of all learning, the first years in school lay the foundation in reading and writing, mathematics and science concepts. James Heckman, Nobel Prize winner in Economics, has claimed that "all the available evidence points to the great long-run value of raising the skill levels and motivation of the very young. Research in psychology and economics indicates that skill begets skill; early learning promotes later learning. Investment in the education and training of the very young earns a far higher return than investment placed in a teenager or middle age adult."[1]

In recent years, all orders of government in Canada have turned their attention to the question of whether children are ready to enter school fully prepared for the academic and social challenges they will face. This section presents pan-Canadian level data from the National Longitudinal Survey of Children and Youth (NLSCY) on the physical, social and cognitive development of 4- and 5-year-olds.

1. James Heckman, "*A response to Richard Freeman's Solving the New Inequality*", Boston Review, December/January 1996-97.

Findings

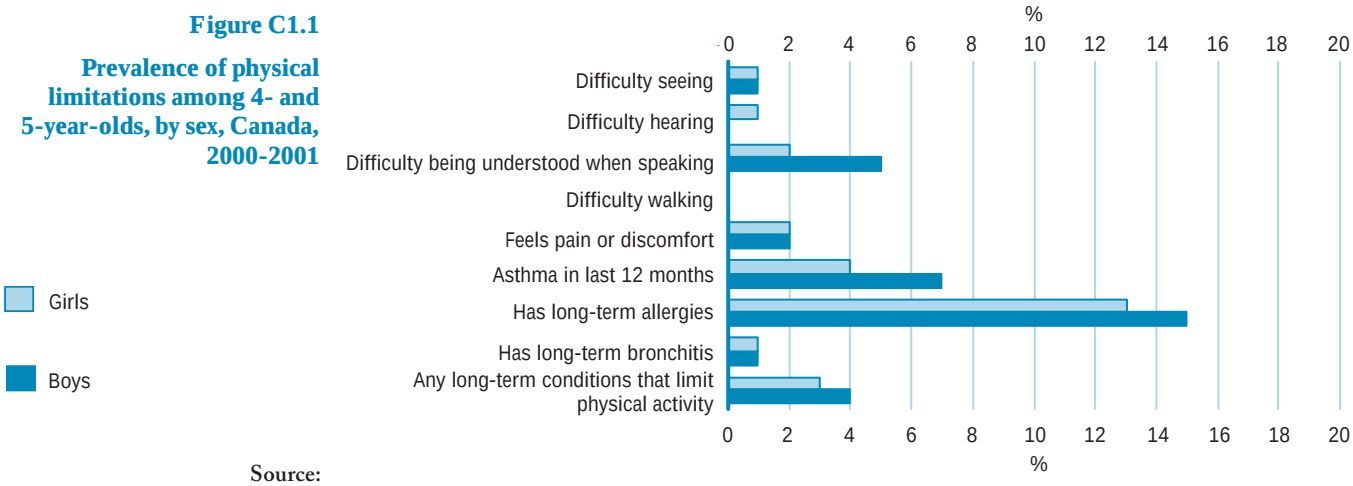
Health status

Canadian parents reported that the physical health of 4-and 5-year-old children was generally very good. In Cycle 4 of NLSCY, administered in 2000-2001, about 88% of boys and 89% of girls were considered by their parents to be in excellent or very good health (Table C1.1). This leaves about 12% (almost 100,000 children) with less than optimal general health.

Only a small proportion of 4-and 5-year-olds suffered from physical challenges that would prevent them from seeing well, hearing well, speaking distinctly or walking without support (Figure C1.1 and Table C1.1). Health problems such as asthma and allergies were markedly more prevalent than physical deficiencies: in 2000-2001, 15% of boys and 13% of girls suffered from long-term allergies. But overall, according to their parents, only 3% to 4% of these young children had long-term conditions or health problems that limited their participation in school, at play, in sports or in any other activity for children of their age.

Figure C1.1

Prevalence of physical limitations among 4- and 5-year-olds, by sex, Canada, 2000-2001



Source:
Table C1.1.

Recently released data from the Canadian Community Health Survey show that 15% of 2- to 5-year-olds are overweight and 6% are obese. This is a health area of concern that will be monitored in future PCEIP reports.[2]

Participation in activities

In 2000-2001, many young children participated in out-of-school structured activities on a regular basis (at least once a week) (Table C1.1). Participating in sports with a coach was the most popular activity: 37% of girls and 38% of boys aged 4 and 5 practiced sports on a regular basis. Girls took regular lessons in dancing, gymnastics or martial arts more often than boys. Participation in music and other art-related activities was lower, with about 9% of boys and 14% of girls participating in these on a regular basis. About 15% of 4- and 5-year-olds participated in club, group or community program activities.

2. For more information on *Nutrition: Findings from the Canadian Community Health Survey*, go to the Statistics Canada Web site at www.statcan.ca.

Exposure to books and reading

Once they enter Grade 1, children are expected to begin learning to read and write, two fundamentals largely conditioning their experience in school and beyond. Access to books and pencils and language development during the pre-school years help prepare children for the reading and writing challenges they will confront when entering Grade 1.

Although the majority of 4-year-olds, according to their parents, looked at books, magazines or comics daily at home by themselves, a gender gap emerged: 78% of girls looked at books daily, compared with only 64% of boys (Figure C1.2 and Table C1.1).

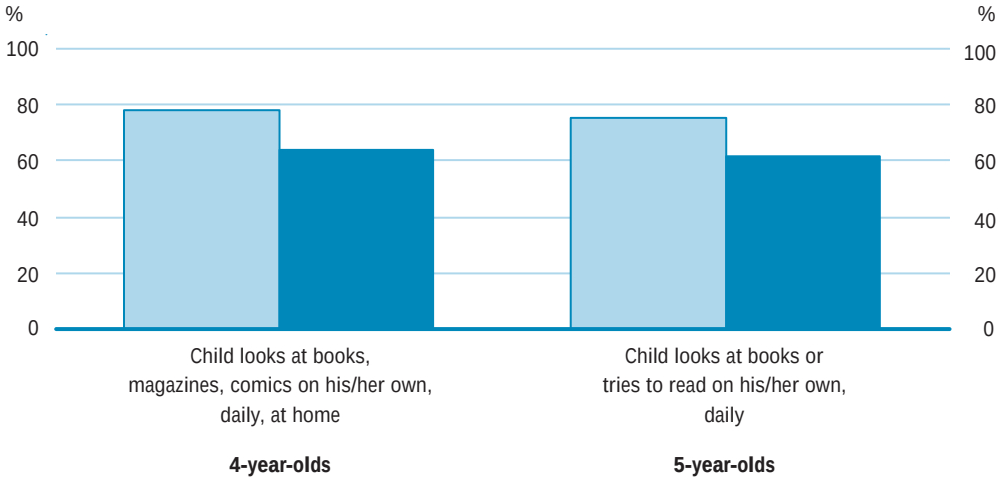


Figure C1.2

Interest in books and reading among 4- and 5-year-olds, by sex, Canada, 2000-2001

Source: Table C1.1.

Children are expected to progress from looking at books to pretending to read them. Among 5-year-olds, a large proportion of both girls (75%) and boys (62%) looked at books or tried to read on their own on a daily basis. This meant that a considerable proportion of both girls and boys did have daily contact with books.

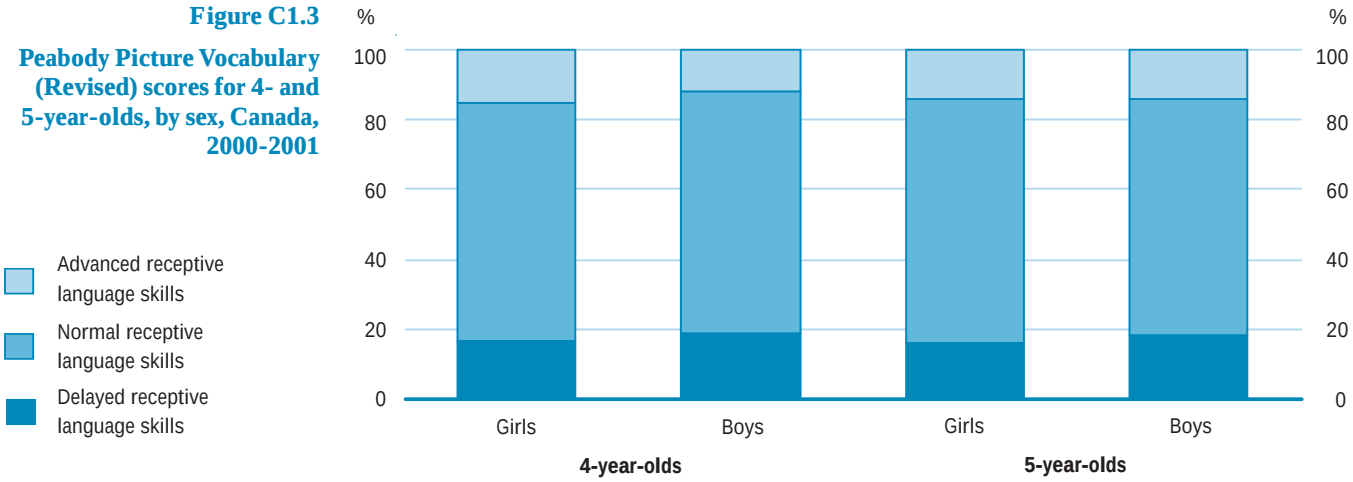
Young children develop an appetite for reading when they are surrounded by reading material, have the opportunity to see adults reading as a habit and are read to at a very early age. This seems to have been the environment for a majority of young children in 2000-2001: approximately 60% of 4- and 5-year-olds had an adult who read to them every day (Table C1.1). However, this means that over a third will enter school without this high level of familiarity with books and printed material.

Peabody Picture Vocabulary Test

The NLSCY complements the perceptions of a parent (most often the mother), by a more "objective" measure of the child's cognitive development. The *Peabody Picture Vocabulary Test—Revised* (PPVT-R) assesses receptive vocabulary at ages 4 and 5.

In 2000-2001, the vast majority of 4- and 5-year-olds had normal or advanced receptive language skills on the PPVT-R. Only about 17% performed relatively poorly. About the same proportions of boys and girls were high performers (Figure C1.3 and Table C1.2).

Figure C1.3
Peabody Picture Vocabulary (Revised) scores for 4- and 5-year-olds, by sex, Canada, 2000-2001



Source:
Table C1.2.

Findings from the NLSCY confirm that children who demonstrated some delay in motor/social development are three times as likely to have vocabulary problems two years later. And those who experienced vocabulary problems (as measured with the PPVT-R) are twice as likely to experience school achievement problems two years later.[3]

3. Ivan P. Fellegi, Presentation at "*Investing in Children: A National Research Conference*", Ottawa, October 27-29, 1998.

Elementary-secondary school participation

C2

Context

This indicator provides information on enrolment at the elementary-secondary level, as well as on the number of educators. This information is also used to provide a student-educator ratio, a measure of the human resources available to students. It is important to note that the student-educator ratio is not the same as class size, because the definition of educators is broader than just classroom teachers. The educators include all employees in the public school system (either school-based or school district-based) who are required to have teaching certification as a condition of their employment. This definition generally includes principals, vice-principals and professional non-teaching staff which includes, among others, education consultants, guidance counselors and religious and pastoral counselors.

Elementary-secondary enrolment reflects demographic trends because of compulsory school attendance. The size of the school-age population in any jurisdiction is affected not only by the birthrate within that jurisdiction, but also by migration into and out of the jurisdiction. Areas experiencing a substantive decline in school-aged population may face underutilized facilities, overstaffing and pressure to reduce program offerings. Conversely, areas where enrolments have been increasing may feel pressure to provide increased funding to maintain per-student expenditure.

Enrolment at the secondary school level is also affected by both the number of years of study required for secondary graduation and postsecondary entrance requirements. For example, in some jurisdictions, the prerequisite for postsecondary attendance is the completion of specific courses rather than a secondary school diploma.

Educators, one of the largest occupational groups in Canada, account for a workforce of close to one-third of a million in elementary-secondary education alone. Salaries of educators represent about two-thirds of total expenditures in elementary-secondary education. A number of important policy issues relate to the educator workforce, including supply and demand, gender distribution, full- versus part-time employment, and pre-service and in-service training. Working conditions are another important issue, and include time for course preparation, marking, classroom instruction, training and professional development.

It is important to note that the data presented in this indicator refer to enrolment and educators in public schools only, whereas the finance data presented in Chapter B include both public and private schools. As a result, expenditures per student cannot be calculated.

Findings

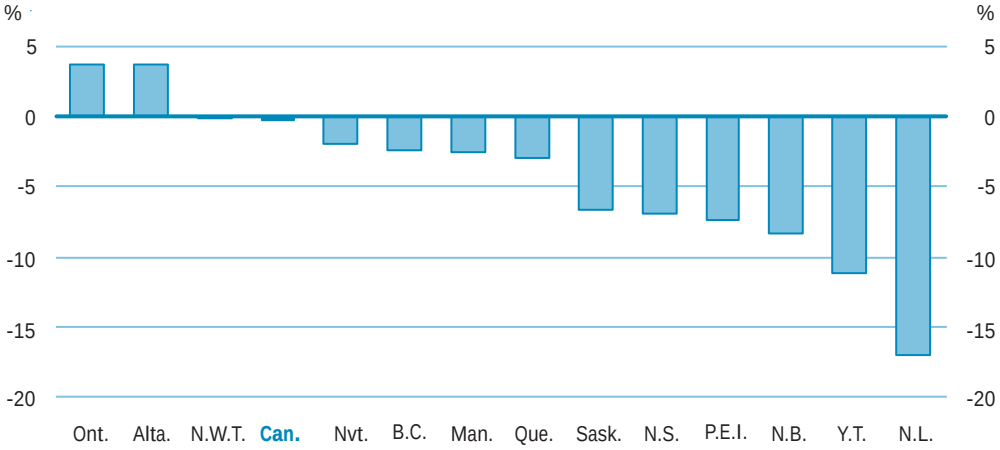
Overall enrolment

Between the school years 1997-1998 and 2002-2003, enrolment in public elementary and secondary schools increased in only two provinces, Ontario and Alberta (Figure C2.1 and Table C2.1). In the case of Ontario, this was essentially due to high levels of immigration, while in the case of Alberta, the reason was migration from other provinces.

The largest decrease occurred in Newfoundland and Labrador, where enrolment in 2002-2003 fell to 81,767, down 17% from five years earlier. This was the result mainly of an extremely strong net outflow of migration to other provinces, as well as having the lowest fertility rate in the country. Elsewhere, enrolments declined by 6% or more in the other three Atlantic provinces, Saskatchewan and Yukon. They were also down in Quebec, Manitoba and British Columbia, but to a lesser extent.

Figure C2.1

Percentage change in full-time-equivalent enrolments in public elementary and secondary schools,[1] Canada and jurisdictions,[2] 1997-1998 to 2002-2003



1. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported here are not comparable to figures reported in PCEIP 2003.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000. As a result, the overall percentage change is calculated for the period 1999-2000 to 2002-2003 for the Northwest Territories and Nunavut.

Source:
Table C2.1.

Educators

There were just under 311,000 educators country-wide in 2002-2003, a 2.7 percent increase from five years earlier. In most jurisdictions, the number of educators (measured in full-time equivalents (FTEs)) varied by less than 3% between 1997-1998 and 2002-2003. The exceptions were Alberta and Ontario, where the number of FTE educators increased by 7.7% and 4.7%, respectively and New Brunswick and Newfoundland and Labrador which saw decreases of 5.3% and 9.5%, respectively (Figure C2.2 and Table C2.2).

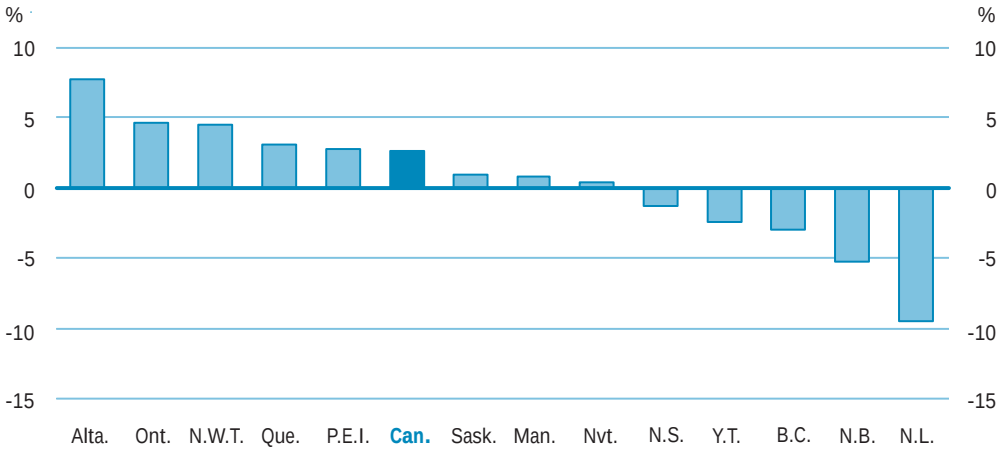


Figure C2.2

Percentage change in full-time-equivalent educators in public elementary and secondary schools,[1] Canada and jurisdictions,[2] 1997-1998 to 2002-2003

1. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported here are not comparable to figures reported in PCEIP 2003.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000. The overall percentage change is calculated for the period 1999-2000 to 2002-2003 for Nunavut and for the period 2000-2001 to 2002-2003 for the Northwest Territories.

Source:
Table C2.2.

Student-educator ratio

Between 1997-1998 and 2002-2003, the number of educators increased more – or decreased less – than enrolments in every jurisdiction, except for Newfoundland and Labrador, Alberta, British Columbia and Yukon. As a result, the student-educator ratio decreased everywhere, except in those jurisdictions (Table C2.3). A decrease in the student-educator ratio means fewer students per educator.

In 2002-2003, the number of students per educator ranged between lows of 12.1 in Yukon and 13.4 in Newfoundland and Labrador to 18.8 in Nunavut and 18.1 in Alberta (Figure C2.3 and Table C2.3).

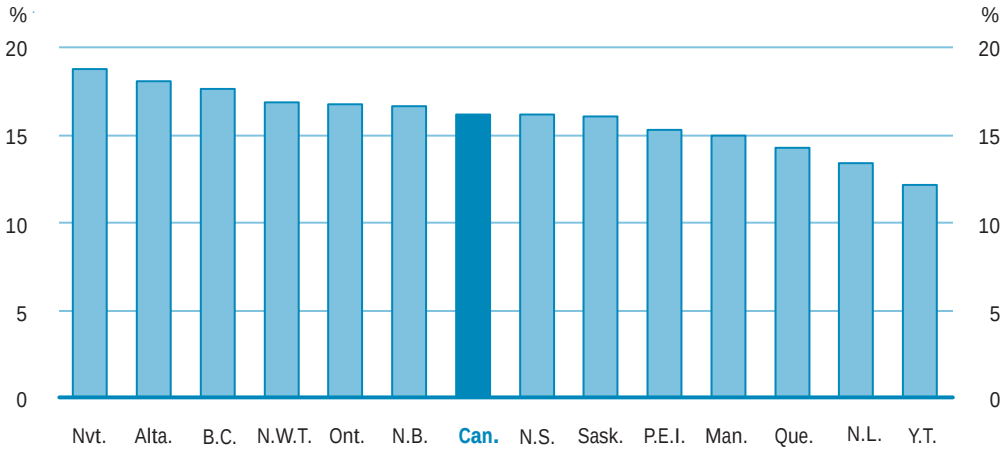


Figure C2.3

Student-educator ratio in public elementary and secondary schools,[1] Canada and jurisdictions, 2002-2003

1. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported here are not comparable to figures reported in PCEIP 2003.

Source:
Table C2.3.

The pupil-educator ratio should not be taken as a measure of classroom size. Average classroom size depends not only on the number of teachers and students, but also on the hours of instructional time per week, the per-teacher hours worked, and the division of the time between classroom instruction and other activities. It also needs to be noted that the number of educators in this indicator includes both teaching and non-teaching educators (such as school principals, librarians, guidance counselors, etc.)

Information and communications technologies (ICT) in schools

C3

Context

This indicator presents data on computers in schools, including their availability, use by students and teachers' skills in the use of computers.

Information and communications technologies (ICT) are both pervasive symbols of modern society and essential business tools. With the wide use of computers, equipping students with computer skills has become an important goal of school systems across the country.

Across Canada, education authorities have recognized the importance of integrating ICT into teaching and learning, both to prepare students for today's economy and to make the most of new learning tools. Over the past decade, considerable effort has been devoted to acquiring hardware and software for elementary and secondary schools, connecting them to the Internet, and helping educators improve their own ICT-related skills.

The 2003-2004 Information and Communications Technologies in Schools Survey (ICTSS) is a school-based survey that collected information from principals regarding ICT infrastructure in elementary and secondary schools across the country. The ICTSS also provides information on the availability of computers for use by students and teachers, the types of software applications being used, and the extent to which teachers are perceived by principals to have the technical skills needed to effectively incorporate ICT into the curriculum.

Findings

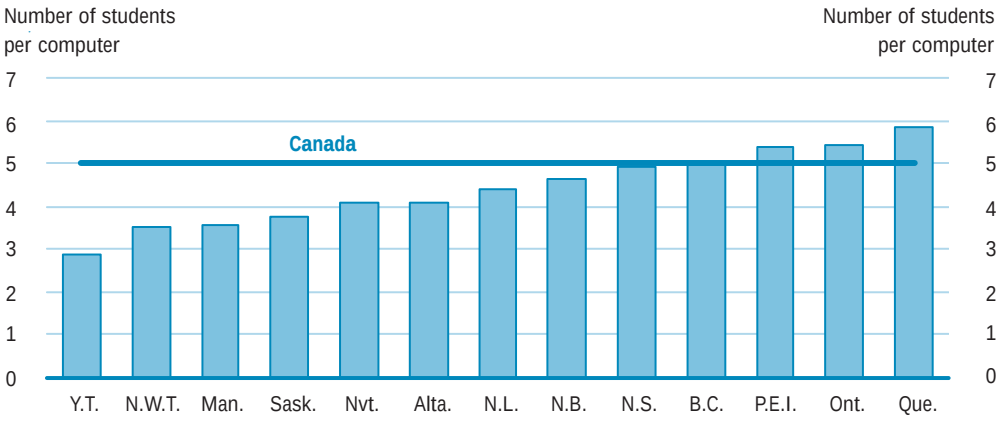
Students per computer

Almost all principals reported that their schools used desktop computers or laptops for educational purposes during the 2003-2004 school year. Less than 1% of the elementary and secondary schools in Canada were without computers. Overall, it is estimated that more than one million computers were available for educational use in schools throughout Canada. Connectivity has become widespread as well — within schools, nine out of ten computers were connected to the Internet and available to students.

The median number of students per computer varied widely across provinces and territories (Figure C3.1 and Table C3.1). Yukon had the lowest ratio (i.e. fewer students per computer), while Prince Edward Island, Quebec and Ontario had the highest number of students per computer.

Figure C3.1

Student-to-computer ratio (median), Canada and jurisdictions, school year 2003-2004



Source:
Table C3.1.

The student-to-computer ratio varies by type of school. The typical number of students per computer in small schools was lower than in larger schools; lower in secondary schools than in elementary schools; and lower in rural schools (which also tend to be small) than in urban schools. The difference between public and private schools was negligible.

Types of software applications

The educational software available to students in schools in 2003-2004 consisted mainly of curriculum-embedded programs, Internet browsers and educational, drill and practice programs. Applications available to students varied according to the size and instructional level of the school. Secondary schools generally provided students with access to a wider range of software applications than elementary schools. Similarly, large schools provided access to a wider range of software than small schools.

According to school principals, word processing software was the application most often incorporated into teaching practices, with 78% of the principals reporting that it was used either "most of the time" or "always" (Figure C3.2 and Table C3.2). This was followed by Internet/Intranet (34%) and software for special needs students and/or remedial programs providing individualized learning (29%).

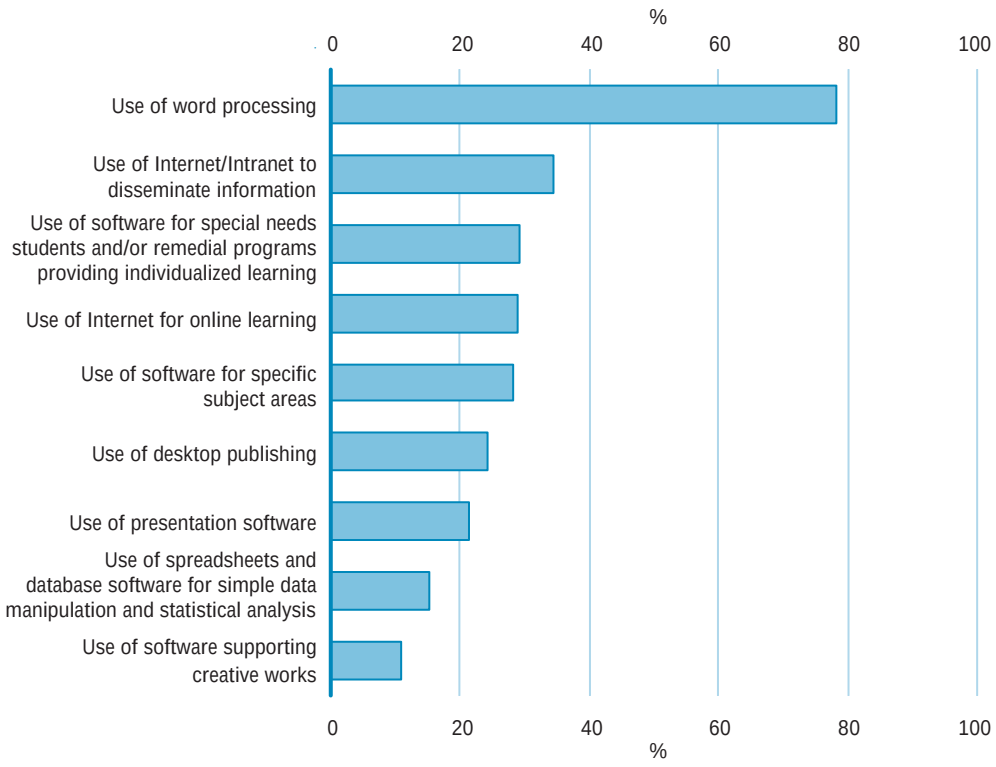


Figure C3.2

Technology applications frequently[1] incorporated into teaching practices, Canada, school year 2003-2004

1. Technology applications were defined as frequently incorporated into teaching practices when they were used "most of the time" or "always".

Source:

Table C3.2.

Teachers' computer skills

According to three out of four school principals, most teachers in their schools (more than 75%) possessed the technical skills required to use computers for administrative purposes such as preparing report cards, taking attendance or recording grades. Compared to public, large and urban schools, private schools, small schools and rural schools were less likely to report that the majority of their teachers possessed such skills.

In contrast, less than half (46%) of principals reported that more than 75% of teachers had the technical skills necessary for engaging students in using ICT effectively. Public schools were more likely than private schools, and elementary schools were more likely than secondary schools, to report that a higher proportion of teachers possessed such skills.

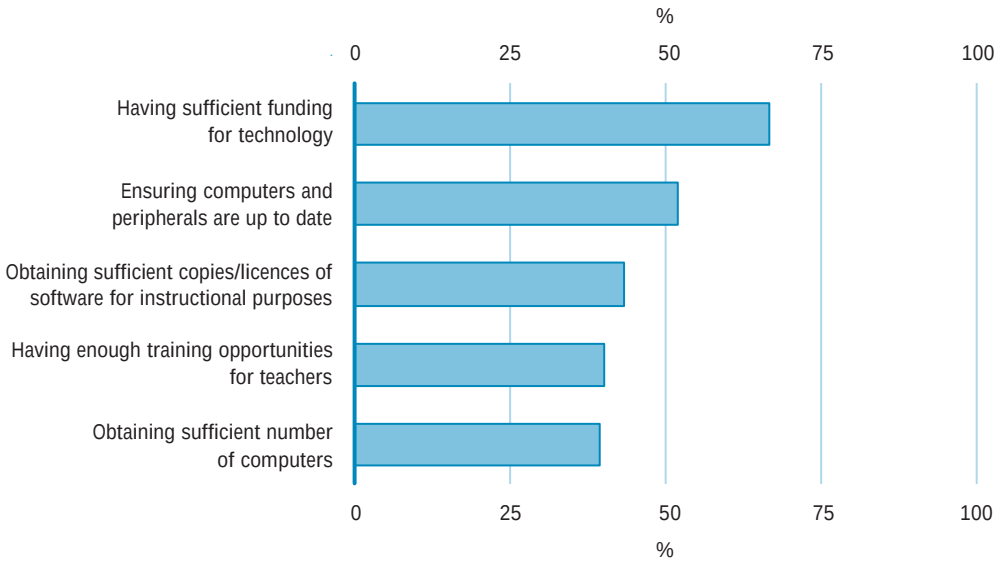
Jurisdictions differ in the extent to which principals considered teachers to be skilled in the use of ICT. Principals in Newfoundland and Labrador and in Saskatchewan were more likely to report that smaller percentages of teachers were skilled at using ICT for either administrative or teaching purposes (Table C3.3). Principals were most likely to report that 75% or more of the teachers in their schools possessed the technical skills needed to use ICT for both administrative and teaching purposes in Ontario, Alberta, British Columbia and Yukon.

Challenges to ICT use

Financing the purchase of computers and related electronic equipment was a major concern for most principals, with two out of three reporting that having sufficient funding for technology was an extensive challenge to using computers in their schools (Figure C3.3 and Table C3.4). Principals of large schools were more likely to report financial computer-related issues than those in small and medium-sized schools. Other important challenges include ensuring that computers and peripherals are up to date, obtaining sufficient copies of software for instructional purposes, having enough training opportunities for teachers and obtaining a sufficient number of computers.

Figure C3.3

Percentage of schools reporting ICT-related challenges, by type of challenge, Canada, school year 2003-2004



Source:
Table C3.4.

Student achievement

C4

Context

This indicator reports on the achievement of students in three key areas—reading, mathematics and science—and looks at the influence of socio-economic status, sex and language on achievement.

The ability to read, understand and use information is important for learning in school and throughout life. Reading literacy has an impact on an individual's ability to participate in society and to understand important public issues. Literacy is also the foundation for skills needed for Canada to compete effectively in a global marketplace.

In recent years, there has been a growing realization that the ability to use and apply key mathematics and science concepts is now necessary across a wide range of occupations and by citizens in their daily lives. As a result, jurisdictions have revised and strengthened their mathematics and science curricula to help ensure that all students are equipped with these important skills.

A key indicator of educational progress in Canada is the extent to which schools can attain high achievement levels while at the same time eliminating achievement gaps between various sub-groups of students. It is important to note that these achievement results capture the sum of all learning since birth and, to some extent, intergenerational effects.

Findings

Programme for International Student Assessment 2003

In general, Canadian students performed very well in OECD's Programme for International Student Assessment (PISA) 2003. The major focus for this assessment was mathematics, with reading and science as minor domains and problem-solving as a minor, one-time domain. The mathematics part of the assessment examined both overall mathematical literacy and literacy in four mathematics sub-domains (space and shape, change and relationships, quantity, and uncertainty). No sub-domains were measured for reading or science in 2003. (PISA 2000 had reading as its major domain and PISA 2006 will focus on science.)

In terms of mathematics literacy, Canada's performance was strong, with only two countries, Hong Kong and Finland, performing significantly better than Canada (Table C4.1). Canada had similar results to Japan, and performed significantly better than the other G7 countries. Canadian students were not as strong in the sub-domain space and shape (where eight countries had higher average scores) as they were in the other three sub-domains (Table C4.2).

Among the provinces, the average score for Alberta students was significantly higher than the Canadian results overall and in all four sub-domains. Students in the Atlantic provinces and Saskatchewan performed below the Canadian average, but above the OECD average. The exception was the space and shape and quantity sub-domains, where Prince Edward Island was slightly below the OECD average.

Looking at the relative performance of different groups of students on the same or similar assessments at different time periods shows whether the level of achievement is changing. Obviously, scores on an assessment alone cannot be used to evaluate a school system, because many factors combine to produce the average scores that are reported here, but they are one of the indicators of overall performance.

Comparable data are available through PISA for 2000 and 2003 for reading, science, and the mathematics sub-domains of space and shape and change and relationships (Tables C4.3, C4.4 and C4.5). Canada's average performance was not statistically significantly different between 2000 and 2003 for reading or mathematics – space and shape, but increased for change and relationships.

No provinces showed statistically significant differences in the space and shape sub-domain, but the average increased in change and relationships for Newfoundland and Labrador, New Brunswick, Ontario, Alberta and British Columbia. In both Prince Edward Island and Saskatchewan average reading scores dropped slightly between the two assessments. In science the Canadian average decreased slightly, reflecting lower scores in Prince Edward Island, Quebec, and Saskatchewan.

Analysis of the PISA 2000 results, which focussed mainly on literacy, found that students from higher socioeconomic families tended to show stronger literacy skills. The same result is found for PISA 2003 – students from families with higher socioeconomic status also tended to perform better in mathematics (Table C4.6).

However, compared to the OECD countries as a whole, differences in socioeconomic status had a smaller impact on student achievement in Canada. Furthermore, differences in socioeconomic status among Canadian students also were smaller than in most OECD countries.

School Achievement Indicators Program

Student achievement in science was assessed in a pan-Canadian context in 2004, through the School Achievement Indicators Program (SAIP). A nation-wide sample of 13- and 16-year-olds wrote the assessment and their results were grouped according to the level they achieved, with level 5 being the highest. The questions in the SAIP Science Assessment were designed with the expectation that most 13-year-olds would achieve level 2 or higher, while most 16-year-olds would achieve level 3 or higher.

Across Canada, 71% of 13-year-olds reached level 2 or above and 64% of 16-year-olds reached level 3 or above (Tables C4.7 and C4.8). Alberta students again performed well, with the percentage of students at or above the expected levels being statistically significantly higher than the Canadian average for both ages.

Among minority francophone students, a smaller percentage reached the expected levels than the Canadian average. There was a statistically significant difference for both 13- and 16-year-olds. For provinces other than Quebec that report results in both languages, the percentage of 13-year-old students below level 1 was between 23% and 35%. Among the older students, the differences in performance at the lowest levels between English- and French-speaking students were less pronounced.

There were few significant differences between boys and girls at all achievement levels. Among 13-year-olds, about 71% of both boys and girls achieved level 2 or above (Figure C4.1 and Table C4.9). There was a statistically significant difference among 16-year-olds, with 66% of males achieving level 3 or above compared to 62% of females (Figure C4.2 and Table C4.10). By comparison, in PISA 2003, there was a small difference among 15-year-olds in both science and mathematics in favour of boys in Canada, as well as several other countries.

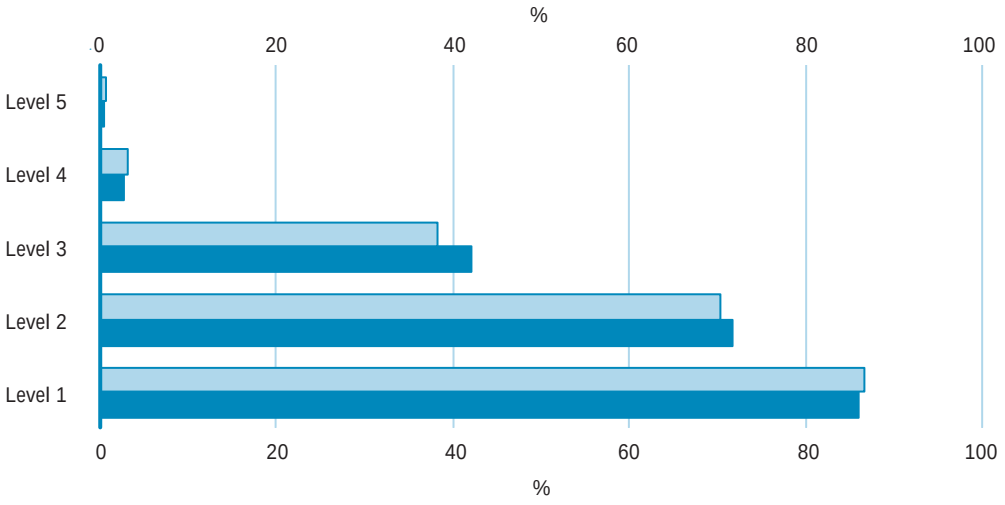


Figure C4.1

Distribution of 13-year-old students by performance level in the SAIP science assessment, by gender, Canada, 2004

Source:
Table C4.11.

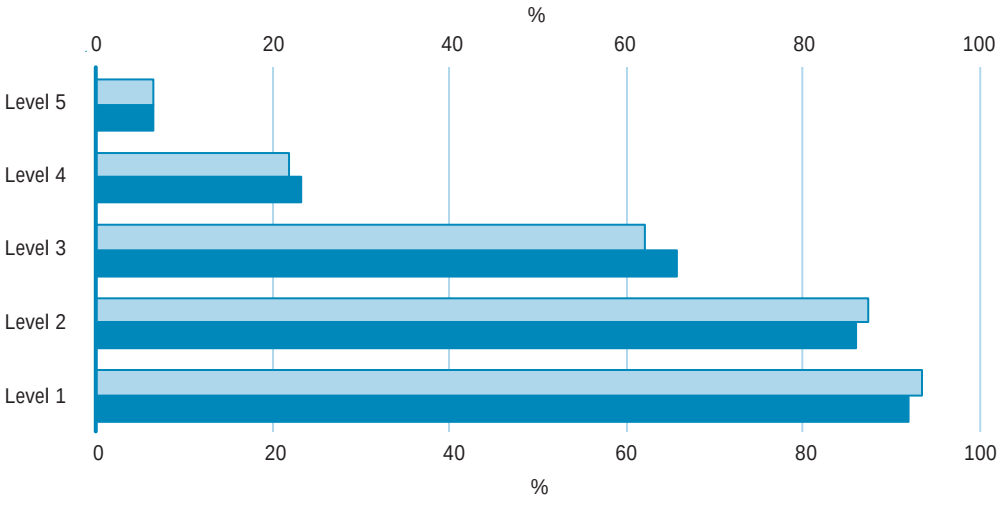


Figure C4.2

Distribution of 16-year-old students by performance level in the SAIP science assessment, by gender, Canada, 2004

Source:
Table C4.12.

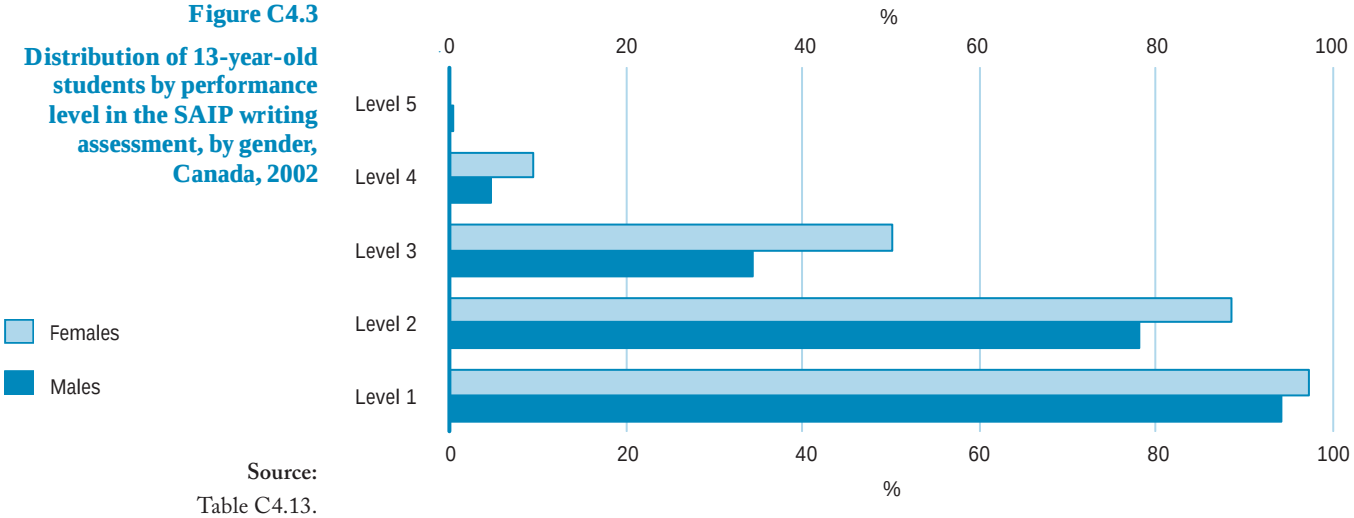
In 2002, a SAIP assessment in writing was administered. Across Canada, 84% of 13-year-olds reached level 2 or above and 61% of 16-year-olds reached level 3 or above (Tables C4.11 and C4.12). In most jurisdictions, between 10% and 15% of 16-year-old students performed at or below level 1 in writing.

The percentage of students whose performance is still at a low level at age 16 is of concern, because of the relationship between literacy and job opportunities. The percentage of low-performing students ranged between 8% among English-speaking students in Quebec to between 20% and 26% in Prince Edward Island, Ontario (francophones), Manitoba (francophones), Yukon, and Northwest Territories.

With a few exceptions, the performance of boys on the SAIP writing assessment was below that of girls at both ages and in all jurisdictions. This was also the case for both the 2000 and 2003 PISA reading assessments. At the Canada level, on SAIP, 88.5% of 13-year-old girls reached level 2 or above, compared to 78.1% of boys (Figure C4.3 and Table C4.13). By age 16, the difference was even greater: 69.4% of girls reached level 3 or above, compared to 52.9% of boys (Figure C4.4 and Table C4.14).

Figure C4.3

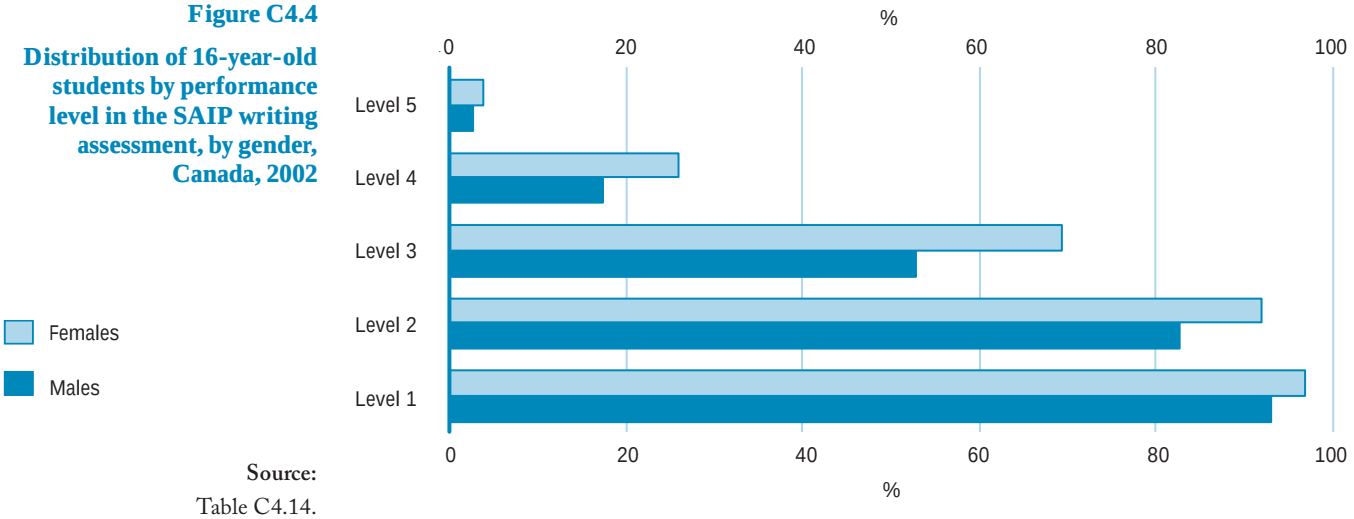
Distribution of 13-year-old students by performance level in the SAIP writing assessment, by gender, Canada, 2002



Source:
Table C4.13.

Figure C4.4

Distribution of 16-year-old students by performance level in the SAIP writing assessment, by gender, Canada, 2002



Source:
Table C4.14.

Secondary school graduation

C5

Context

This indicator presents information on recent trends in high school graduation rates, looking at overall rates, as well as comparing graduation rates at typical and after-typical ages of graduation.

High school graduation is not only a requirement for entry into some forms of postsecondary education, but is also a valuable credential in its own right. People with less than a high school education have relatively low labour force participation rates and high unemployment rates.

Graduation rates are influenced by labour market conditions. A strong labour market with plentiful job opportunities may attract youth who are past the age for compulsory school attendance but have not yet graduated. This is one reason why in New Brunswick, school attendance is compulsory until age 18. In a weak labour market, youth may be more inclined to complete secondary school as they anticipate difficulties in finding a job. Graduation rates also vary depending on the graduation requirements. Entrance requirements for postsecondary education may be linked to completion of specific courses rather than to high school graduation itself.

High school graduation rates have historically been used as a basic indicator of educational outcomes. The trend in these rates over time is seen as an indicator of access to education and, more indirectly, as a measure of achievement. Comparisons across jurisdictions may indicate the relative effectiveness of systems in attaining what is universally acknowledged as an important educational milestone. Similarly, international comparisons benchmark performance at the pan-Canadian level to that of other countries.

High school graduation rates can be produced from both administrative data (information acquired from the records of schools, school boards, or ministries or departments of education) such as the Secondary School Graduates Survey used in this section and from surveys of individuals, for example the Youth in Transition Survey (YITS). Generally, these two sources yield somewhat different estimates of graduation rates due to the methodology and coverage differences (see Appendix 2). Both sources show increases in the graduation rate over the past decade.

Findings

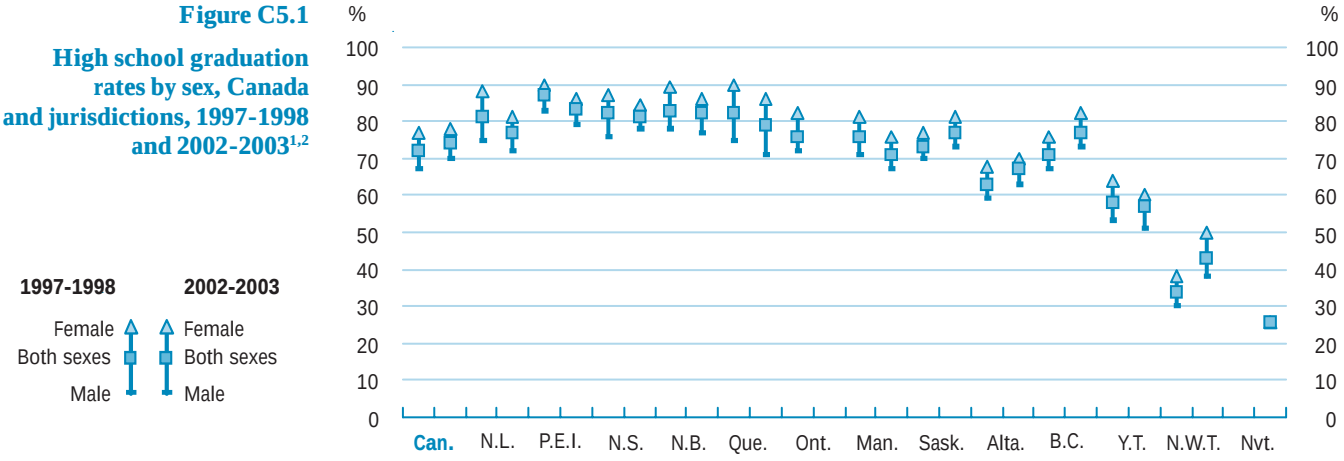
Secondary school graduation rates

The pan-Canadian graduation rate (all graduates in a given period as a percentage of the population at the typical age of graduation) in 2001 was 75%, below the OECD average of 82%. Relative to the G-7 countries, Canada's graduation rate in 2001 was well below the rates for Japan, Germany and France, but comparable to graduation rates in the United States (Table C5.1). This may indicate that further steps are required to encourage students in Canada to complete high school. However, graduation requirements vary considerably both within Canada and internationally, as do definitions of "high school graduate."

In 2002-2003, overall graduation rates were highest in Prince Edward Island, Nova Scotia and New Brunswick (Figure C5.1 and Table C5.2). The lowest were in the three territories. Among provinces, the lowest overall graduation rate occurred in Alberta where it was 67 percent.

Figure C5.1

High school graduation rates by sex, Canada and jurisdictions, 1997-1998 and 2002-2003[1,2]



Source: Table C5.2.

1. Canada rate excludes Quebec and Ontario.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Increases in the overall graduation rate between 1997-1998 and 2002-2003 in Saskatchewan and British Columbia raised those provinces to above the pan-Canadian average[1] while increases in Alberta and Northwest Territories brought them closer to the rates in the other provinces and territories. Decreases occurred in the overall graduation rate in Newfoundland and Labrador, Prince Edward Island, and Quebec; however, these provinces remained above the pan-Canadian average. Manitoba also saw a 5 percentage drop in the overall graduation rate, bringing its rate to 71 percent.

1. Data on high school graduation rates for 2002-2003 are available for all provinces and territories except Ontario. Graduates in Ontario generally represent about 37% of all graduates in Canada. Because of the elimination of Grade 13 (OAC) in Ontario, two cohorts graduated in 2002-2003. These cohorts are not reflected in the pan-Canadian average.

In Canada as a whole, in 2002-2003, as in 1997-1998, graduation rates were higher for females (78%) than for males (70%) Graduation rates were higher for females than for males in every jurisdiction, and at both time periods.

Overall graduation rates can be broken down into two components: the typical-age graduation rate, based on those graduating at the typical age of graduation or younger; and the after-typical-age graduation rate, based on those graduating after the typical age of graduation.[2] Graduation at the typical age or younger generally equates with starting school at the prescribed time and completing and graduating without interruptions or repetition of grades or of significant numbers of courses. This decomposition shows the contribution to the overall rate of those graduating "on-time" versus those graduating at a later age.

Between 1997-1998 and 2002-2003, the typical-age graduation rate rose from 62% to 67% (Table C5.2). Over the same period, the after-typical-age rate decreased from 10% to 7%. Most jurisdictions saw an increase in the typical-age graduation rate, with the increases ranging from 5 percentage points in Prince Edward Island, Saskatchewan, Alberta and Yukon to 12 percentage points in Northwest Territories.

The after-typical-age graduation rate remained an appreciable component of the overall graduation rate in some jurisdictions and points to the importance of efforts to encourage persistence and staying in school. In New Brunswick, the after-typical age graduation rate was much higher for males than for females, while in Quebec, the rate was 25% for males and 23% for females (Table C5.2).

2. It should be noted that the administrative data pertain to graduations from the regular school system only, and not the "second chance" programs. Hence, these rates are only a measure of after-typical-age graduations in the regular school system and reveal nothing about the level or trend in after-age-graduations in the "second chance" system.

Chapter D

D

Chapter D figures

Postsecondary education

Introduction

Postsecondary education has a direct impact on people's ability to compete in the labour market, on the types of jobs they obtain, and the remuneration they receive. Progress in the sciences and technology is linked to a strong research and development (R&D) sector, drawing on the abilities of highly-trained individuals. Formal education, either at the "typical" age of study, or later as an adult learner, has an important role to play in developing the human capital that is needed by individuals and jurisdictions to compete in the knowledge economy. This chapter consists of the following six sections, each focusing on a different aspect of the postsecondary education system in Canada.

Indicator **D1** provides information on student enrolment in registered apprenticeship and university programs, as well as reporting on gender differences.

Trends in participation in adult education and training are considered in Indicator **D2**, along with information about unmet training needs.

Indicator **D3** looks at university educators. In addition to showing how many educators there are in Canada and the jurisdictions, it also examines gender distribution and the age breakdown of educators as a group compared to the overall population.

Indicator **D4** presents information on the amount of R&D conducted in universities in Canada and its financing, along with selected international comparisons.

Postsecondary completions for registered apprenticeship programs and university degrees are the topic of Indicator **D5**. Also covered are completions and graduation rates by gender, and, at the university level, by field of study.

Indicator **D6** provides an international comparison of the educational attainment of Canadians.

Most of the data presented in this chapter pertain to the registered apprenticeship and university levels. Previous editions of PCEIP rounded out the postsecondary picture by including data on the trade-vocational and college sectors. At the time of writing this report, no data beyond those presented in PCEIP 2003 were available for these two levels, hence they are not presented here. (PCEIP 2003 is available at www.statcan.ca and at www.cmec.ca). The program of electronic updates to PCEIP will post updated tables for the trade-vocational and college levels once new data become available (www.statcan.ca or www.cmec.ca).

Enrolment in postsecondary education

Context

With rising secondary school graduation rates, many industrialized countries have come to view participation in postsecondary education as an important prerequisite for working and further learning.

In Canada, postsecondary programs are offered through colleges, institutes, university colleges, universities, and private institutions. Trends in enrolment provide information on the skills and knowledge that entrants to the labour force are likely to possess, as well as helping postsecondary institutions and policy makers assess the demand on the system. Data on the balance between male and female participation and how that has shifted over time help determine what steps, if any, may be needed to encourage higher levels of participation among both males and females.

D1

Findings

Registered apprenticeship

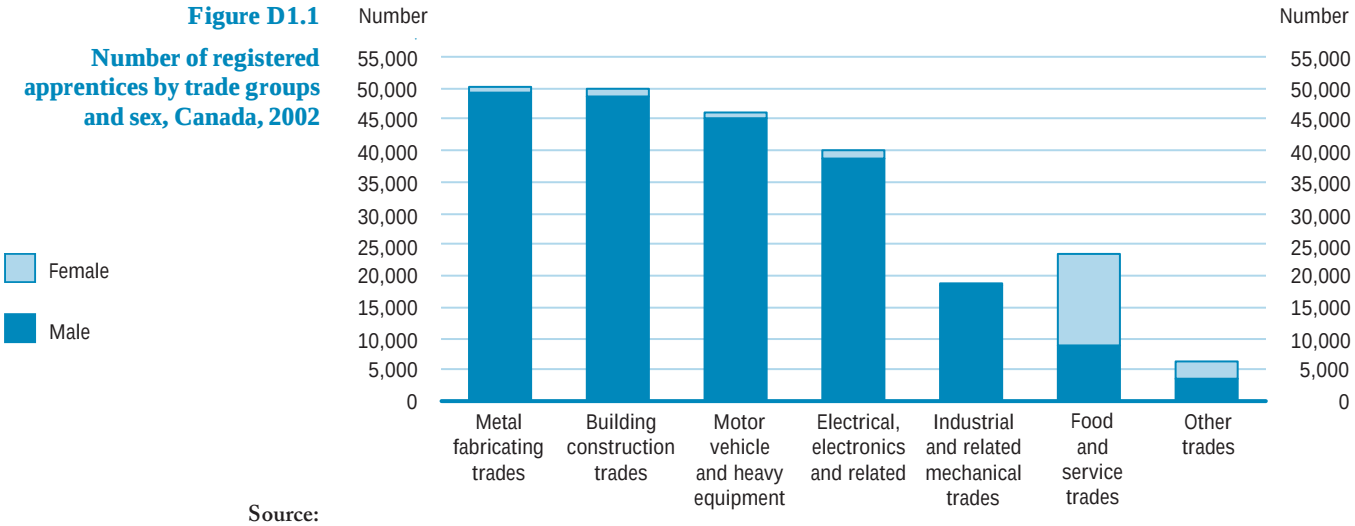
The apprenticeship training system has played a major role over the past century in enabling business and industry in Canada to remain competitive. A series of key measures on apprenticeship enrolment is presented here.

In 2002, there were 234,500 registered apprentices in Canada, 30% more than in 1992. Building construction, metal fabrication, and motor vehicle/heavy equipment trades were the largest fields, each accounting for over 45,000 registered apprentices. Over half of apprentices in 2002 were registered in Ontario and Quebec, with another 31% in Alberta and British Columbia (Tables D1.1 and D1.2). This reflects the distribution of the population.

Between 1992 and 2002, the proportion of women among registered apprentices in all trades increased from 5% to 9%. Although the number of female registered apprentices remains small, there was an increase in the percentage of female apprentices in all trades. The exception was the motor vehicle and heavy equipment field where, although there was an increase in the actual number of women registered, their share remained stable at about 2%. Females made up the majority of registered apprentices in the food and service trades, increasing from slightly less than half of all enrolments in this field in 1992 to 61% in 2002 (Figure D1.1 and Table D1.2).

Figure D1.1

Number of registered apprentices by trade groups and sex, Canada, 2002



Source:
Table D1.2.

Half of all registered apprentices in 2002 were in their twenties. Although registered apprentices under age 20 represented only 6% of all registered apprentices in 2002, the number of registered apprentices in this age group had more than tripled since 1992. The number of registered apprentices over age 40 also increased significantly (Table D1.3).

University enrolment

Between 1992-1993 and 2001-2002, full-time enrolment at Canadian universities increased by 12%, rising from 569,500 students to 635,600, with most of this growth occurring after 1997-1998. Part-time enrolment was down 21% in 2001-2002 compared to 1992-1993. There was an increase in full-time enrolment over the decade in all provinces, with British Columbia (29%) and Alberta (20%) having the strongest growth. Part-time enrolment in Alberta and British Columbia increased along with full-time enrolment over the decade (Table D1.4). Part-time enrolment in Quebec and Manitoba continued to fall into the 2000s, whereas in all other provinces it was stable or slightly higher in 2001-2002 compared to 1997-1998.

Women are now in the majority in full-time undergraduate studies and their enrolment at the graduate level is almost equal to that of men. Men's share of undergraduate enrolment decreased from 47% to 42% over the 1990s (Figure D1.2 and Table D1.5). While still in the majority for graduate enrolment, men's share dropped from 58% to 51% over the same period. Decreases in the percentage of males at the undergraduate and graduate levels are found in all provinces. (For information on the distribution of male and female graduates by level and field of study, see Figure D5.4, Tables D5.5, 5.6, and 5.7, and related text.)

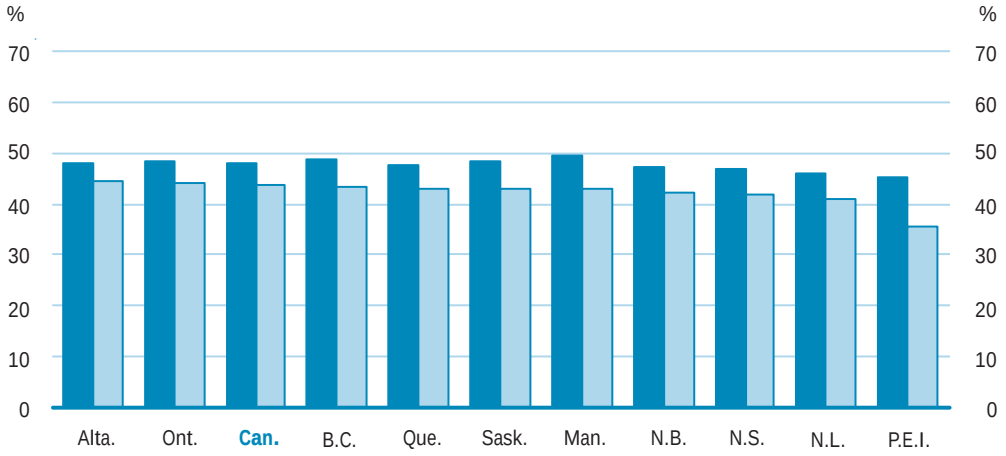


Figure D1.2

Percentage of males among full-time undergraduate enrolment, Canada and provinces, 1992-1993 and 2001-2002

Note: Provinces ranked by male undergraduate percentage in 2001-2002.

Source:

Table D1.5.

Adult education and training

D2

Context

This indicator examines patterns in adult education and training, including participation trends and unmet training needs.

Adult education and skills are important in a pan-Canadian education context. First, as Canada shifts increasingly from a resource-based to a knowledge-based economy, workplace skill requirements are evolving rapidly. Population aging means that fewer young people are entering the work force; this increases the pressure on adult learning to meet the changing needs of the labour market. As the skills required by the workplace increase, less-skilled workers may be left on the sidelines, becoming economically vulnerable. Adult education and training can help these workers to update their skills.

Second, despite Canada's high postsecondary participation rates, studies such as those based on the International Adult Literacy and Skills Survey show that many adult Canadians have low literacy levels. Continuing education is the main avenue for increasing adult literacy[1].

Findings

Incidence and trends in adult education and training

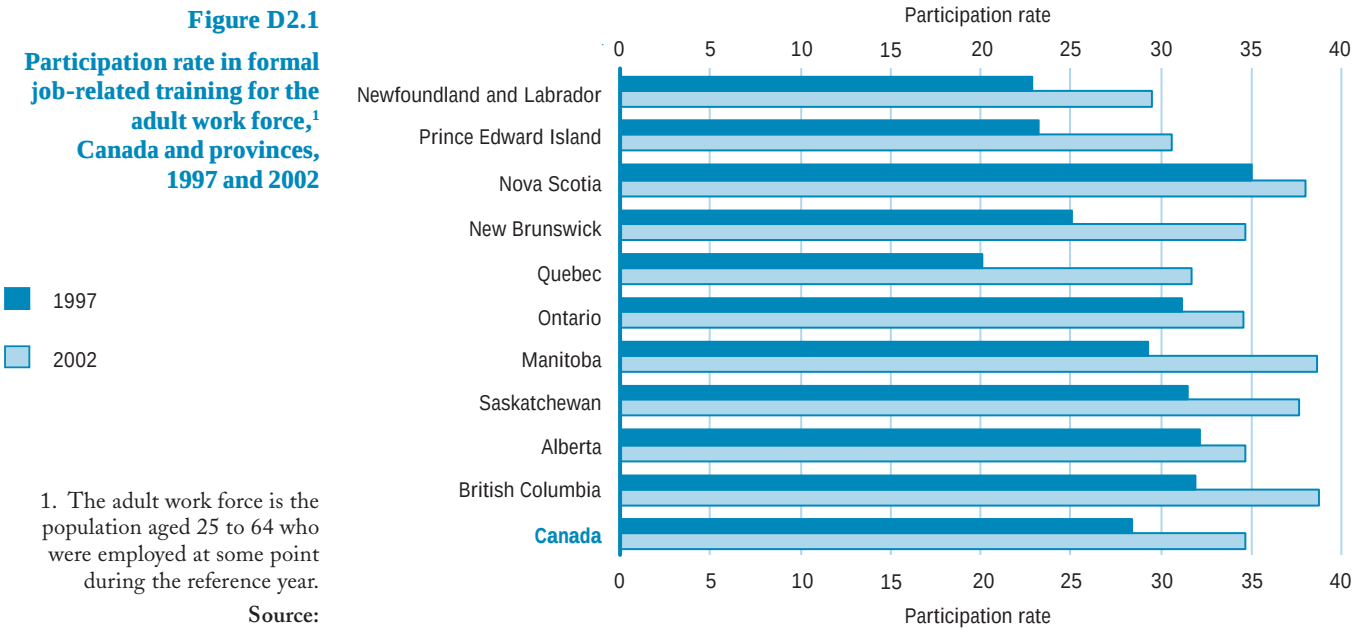
In 2002, 4.8 million adult workers (adults aged 25 to 64 who were employed at some point during the year) participated in formal, job-related training. Those workers represented slightly more than one-third of Canadian workers aged 25 to 64 (Table D2.1).

Between 1997 and 2002, the rate of participation of Canadian workers in formal, job-related training increased from 29% to 35% (Figure D2.1). The largest growth occurred in Quebec, where the participation rate increased 57% (rising from 20% to 32%). Participation also grew substantially (over 20%) in Newfoundland and Labrador, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan and British Columbia.

1. Organization for Economic Co-operation and Development and Statistics Canada, Learning a Living: First Results of the Adult Literacy and Life Skills Survey. Cat. No. 89-603-XWE, 2005.

Figure D2.1

Participation rate in formal job-related training for the adult work force,[1] Canada and provinces, 1997 and 2002



1. The adult work force is the population aged 25 to 64 who were employed at some point during the reference year.

Source:

Table D2.1.

Among men, the participation rate rose from 27% in 1997 to 33% in 2002, while women saw an increase from 31% to 37%.

In 2002, as in 1997, the rate of participation in formal, job-related training was highest among young workers and decreased with age. About 42% of workers aged 25 to 34 participated in job-related training, compared to about 35% for workers in the 35 to 44 and 45 to 54 age groups and 23% for workers aged 55 to 64 (Table D2.1). However, between 1997 and 2002, the participation rate for workers aged 55 to 64 grew at a far greater rate (over 50%) than the rate for any other age group.

In 2002, over half (52%) of workers with university credentials participated in formal, job-related training (Table D2.1). The rate was also relatively high (38%) for workers with a college or trade certificate or diploma and for workers with some (incomplete) postsecondary education. The lowest rate (18%) occurred among workers with the least education (secondary school graduation or less). Much of the increase (84%) in the overall participation in formal, job-related training between 1997 and 2002 was due to growth in participation of workers with a postsecondary certificate, diploma or university degree. Among workers who had not continued their education beyond high school, the increase was negligible.

Training intensity

In 2002, participants in formal job-related training received an average of 150 hours of training. This represents about 25 days of training, based on a training day of 6 hours, and was virtually unchanged from 1997 (156 hours, or 26 days) (Table D2.2). The number of hours of training increased especially among older participants – from 43 to 88 hours for those aged 55 to 64 and from 82 to 97 hours for those aged 45 to 54.

Changes in training intensity also varied across provinces (Figure D2.2 and Table D2.2). Average hours of training per participant increased substantially in four provinces: Nova Scotia, Ontario, Manitoba, and Saskatchewan. Workers in Newfoundland and Labrador, Prince Edward Island, Quebec, and Alberta who

participated in training received, on average, fewer hours in 2002 than in 1997, while training intensity in New Brunswick and British Columbia changed little over the period.

Participation in employer-sponsored training

Between 1997 and 2002, participation rates in employer-supported training increased only slightly, if at all, for workers in most age and educational groups. In 2002, as in previous years, workers employed in professional and managerial occupations had the highest rate of participation in employer-supported job-related training (35%), followed by white collar workers in clerical, sales and service occupations (20%), and blue collar workers (16%).

While participation rates increased to some extent in all provinces, with the exception of Ontario, Saskatchewan and Alberta, strong growth was seen only in Quebec and New Brunswick. In Ontario and Saskatchewan, participation rates remained fairly stable, while they decreased slightly in Alberta. In New Brunswick, participation rose from 19% in 1997 to 26% in 2002, an increase of over 33%. Growth was even stronger in Quebec (60%) where the participation rate in employer-supported training rose from 15% to 24% (Table D2.3).

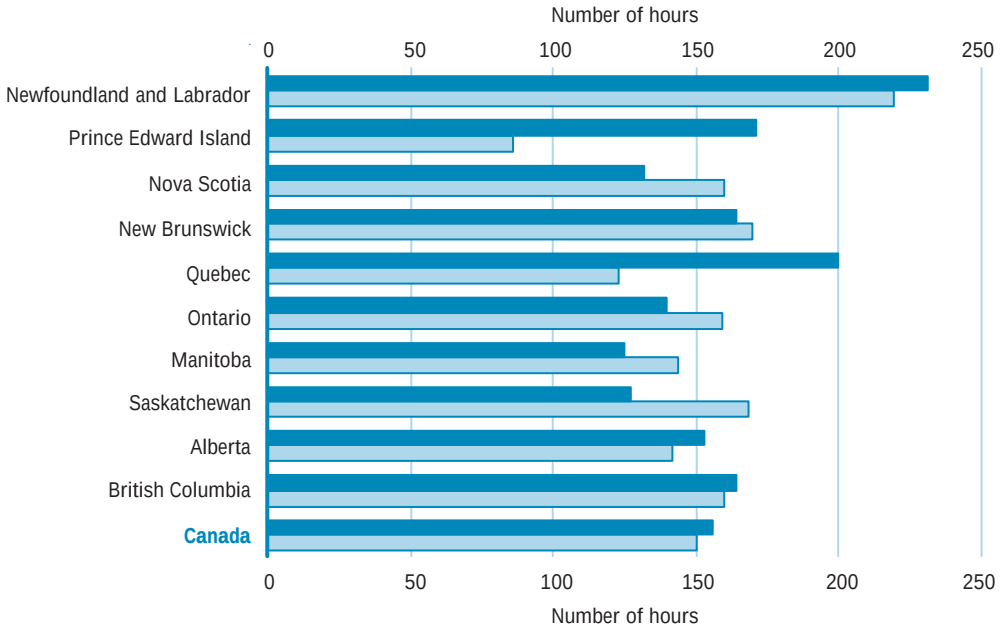


Figure D2.2

Mean annual number of hours of formal job-related training per participant, Canada and provinces, 1997 and 2002

Source:
Table D2.2.

Self-directed learning

Job-related training is not restricted to formal training. To better perform their tasks or to develop skills for a future job, workers can also learn on their own. This type of training, defined as self-directed learning, was included for the first time in the 2003 Adult Education and Training Survey (AETS).

In 2002, 33% of working adults engaged in self-directed job-related learning activities in the four weeks prior to the survey (Table D2.4). Participation rates in self-directed learning were higher among women than men (35% versus 30%) and among younger workers than older workers (38% for 25 to 34 year-olds versus 23%

for 55 to 64 year-olds). As was the case for formal job-related training, participation rates in self-directed learning were lowest for workers with the least formal education (16%).

Provincially, participation in self-directed learning mirrored patterns seen for formal training. While participation rates in informal training were slightly lower than for formal training in all provinces, the highest rates for informal training were found in provinces with the highest rates for formal training.

Unmet training needs/wants

Overall, about one-quarter (28%) of working adults reported that there was job-related training that they wanted or needed to take in 2002 but did not. This proportion was considerably higher (36%) among workers who had participated in job-related training than it was for workers who did not participate (23%) (Table D2.5).

Training participants with higher levels of education (some postsecondary or a completed diploma, certificate or degree) had the highest proportions (about 40%) reporting unmet needs/wants. The lowest proportion (18%) was found among non-participants with the lowest level of education (secondary school or less).

There were considerable similarities between training participants and non-participants in the reasons they gave for not taking training they wanted or needed. Among both groups, the most frequently cited reasons were cost, being too busy at work, a conflict between training and work schedules, and family responsibilities (Figure D2.3 and Table D2.6).

Figure D2.3

Reasons for having unmet training needs/wants, for participants and non-participants, Canada, 2002

Source:
Table D2.6.

Human resources

Context

This indicator presents information on the number of university educators, providing breakdowns by age and sex.

The issue of ageing staff is a central concern facing the management of universities. The group of educators who are now preparing for retirement was hired in the 1970s, at a time of significant growth in the postsecondary system. As the youth population declined in the 1980s, slowing enrolment growth meant fewer educators were hired during this period. Looking ahead, large numbers of faculty hired during the 1970s enrolment boom are in a position to retire over the next decade, at the same time that the population of 19- to 24-year-olds is projected to increase (see Indicator A1).

Male educators have traditionally been in the majority in universities. This indicator examines the balance between males and females, both in terms of age groups and academic rank.

D3

Findings

Number of university educators

The number of full-time university educators in 2002-2003 was down by about 3% from ten years earlier, while full-time enrolment increased 12%. The slight drop in the overall number of full-time educators was the result of a decrease of 6% and 8%, respectively, among full and associate professors and a 7% increase among other ranks of educators, which include entry-level assistant professors, lecturers and instructors. As a result of these changes, other ranks as a percentage of the full-time teaching faculty increased from 26% in 1992-1993 to 29% ten years later (Table D3.1).

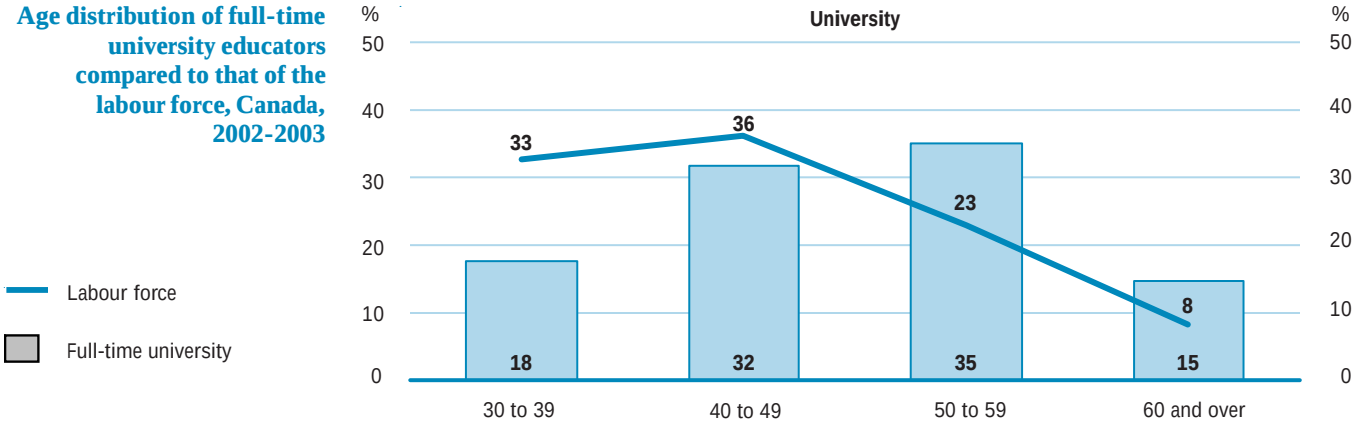
Prince Edward Island, Alberta and British Columbia were the only provinces that saw an increase in the number of full-time university educators. All other provinces experienced a decrease, though in several provinces it was slight (Table D3.3). The exception was Saskatchewan, where the number of educators was about the same as in 1992-1993. Other ranks as a percentage of full-time teaching faculty declined in Newfoundland and Labrador and Quebec and remained stable in British Columbia, while in all other provinces their proportions increased. Associated changes in the proportions of full and associate professors varied across all provinces.

Age of university educators

In Canada, the median age of full-time university educators in 2002-2003 was 49. Figure D3.1 shows that in 2002-2003, 35% of university faculty were aged 50 to 59, compared to 23% of the overall labour force. Similarly, 15% of university educators were 60 years of age or older, almost double the percentage in the overall labour force. Only 18% of university educators were aged 30 to 39, compared to 33% of the labour force.

Figure D3.1

Age distribution of full-time university educators compared to that of the labour force, Canada, 2002-2003



Sources:
Labour Force Survey, Statistics Canada; Table D3.2.

Note: Age distributions of educators and labour force are calculated as a percentage of the educator and labour force populations aged 30 and over.

Faculty aged 50 or more accounted for at least half of all faculty in six provinces: Newfoundland and Labrador, Nova Scotia, Quebec, Ontario, Manitoba, and British Columbia. This percentage was considerably smaller in Prince Edward Island where only 38% of faculty fell into this age group (Table D3.2).

Gender distribution

Women accounted for 30% of full-time university educators by 2002-2003, up from 21% ten years earlier (Figure D3.2 and Table D3.1). This was the result of a 36% increase in the number of women educators, whereas the number of male educators decreased by 14%.

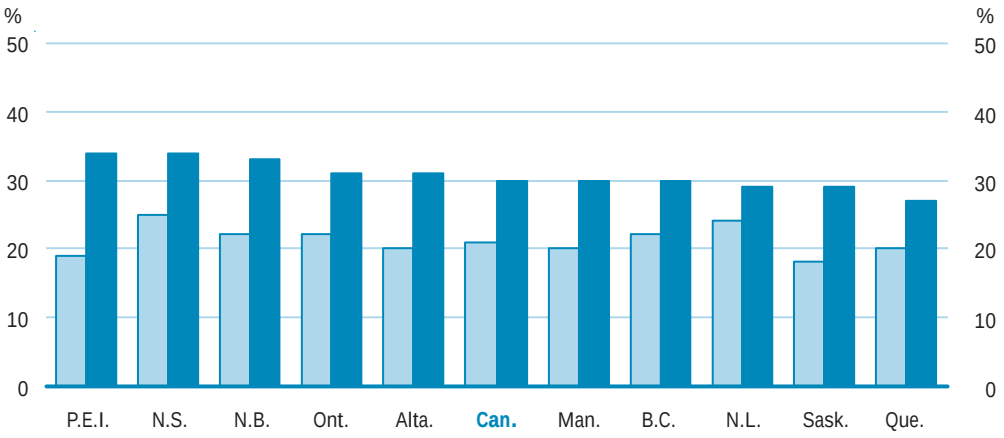


Figure D3.2

Female educators as a percentage of full-time university educators, Canada and provinces, 1992-1993 and 2002-2003

Note:

Provinces ranked by percentage in 2002-2003.

Source:

Table D3.1.

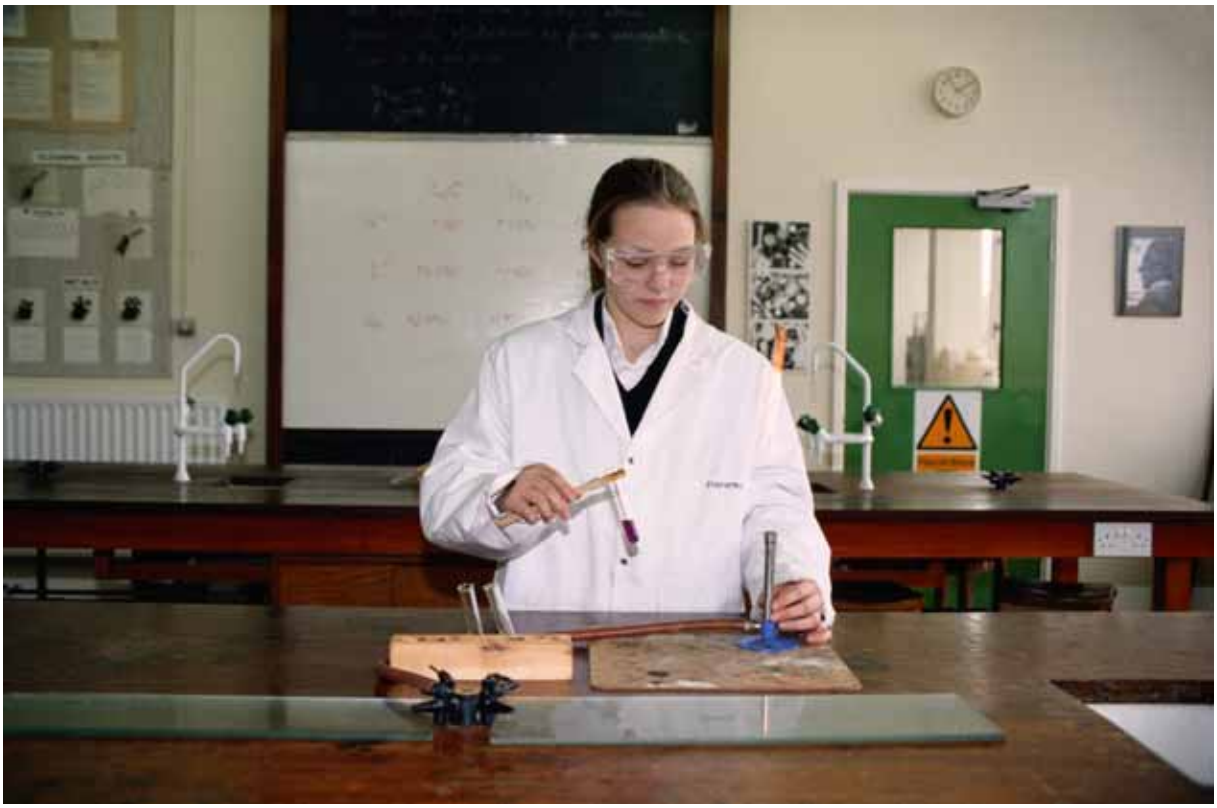
There were fewer women at higher ranks, with women accounting for 17% of full professors, 33% of associate professors, and 43% of other ranks. Nevertheless, the percentage of women among full professors almost doubled in the 10-year period. In 2002-2003, the percentage of women among full professors ranged from 12% in Newfoundland and Labrador to 22% in New Brunswick. In all jurisdictions, the proportion of female faculty increased, with the largest increases occurring in Prince Edward Island (15 percentage points) and in New Brunswick, Saskatchewan and Alberta (each at 11 percentage points).

Salary of full-time university educators

Between 1992-1993 and 2002-2003, average salaries of university faculty increased 20% (measured in constant 2001 dollars) (Table D3.3). The number of full-time university educators decreased slightly over the period, suggesting that some of the increase in average salary may have been due to the promotion of personnel to positions with higher pay. Differences across provinces also reflect variation in the distribution of faculty across fields of study as well as in the proportion of teaching staff with administrative duties. Average salaries are higher for jurisdictions that have higher proportions of faculty in programs like medicine and dentistry, and that rely to a greater extent on teaching faculty with administrative duties.

In universities, the gender gap in earnings narrowed slightly as the average salary of women educators rose from 83% of that of male educators in 1992-1993 to 87% in 2002-2003. The gender gap within academic ranks showed little change over the decade: females in each rank earned approximately 95% of what males earned. Much of the overall gender gap therefore stems from the lower representation of women in the higher ranks.

In 2002-2003, the female-to-male earnings ratio for full professors ranged from 89% in Manitoba to 100%, or gender equity, in Prince Edward Island. For associate professors, this ratio was between 93% and 97% in all provinces, except Saskatchewan, where there was no gender gap at this level.



Research and development

Context

This indicator presents contextual, financial, and output information for university research and development (R&D).

R&D in Canada is carried out in a number of sectors: business, federal and provincial/territorial governments, postsecondary institutions, and the private non-profit sector. Within this broader context, universities are important centres of R&D. Systematic, scientifically-based investigation is a core function of faculty research and an integral part of student training. This work can then be built on to develop market-ready products and processes. At the pan-Canadian level, the university sector is the second largest contributor of R&D after business. In most provinces, universities represent the primary source of such efforts.

Specific issues facing each province in relation to university R&D vary, but common threads include: finding mechanisms to fund both the direct and indirect costs of research; supporting the supply and retention of highly qualified researchers; transferring new ideas and knowledge from the university sector into the public and commercial domains; and supporting the research capacity of smaller universities.

D4

Findings

R&D as a sector, and within universities

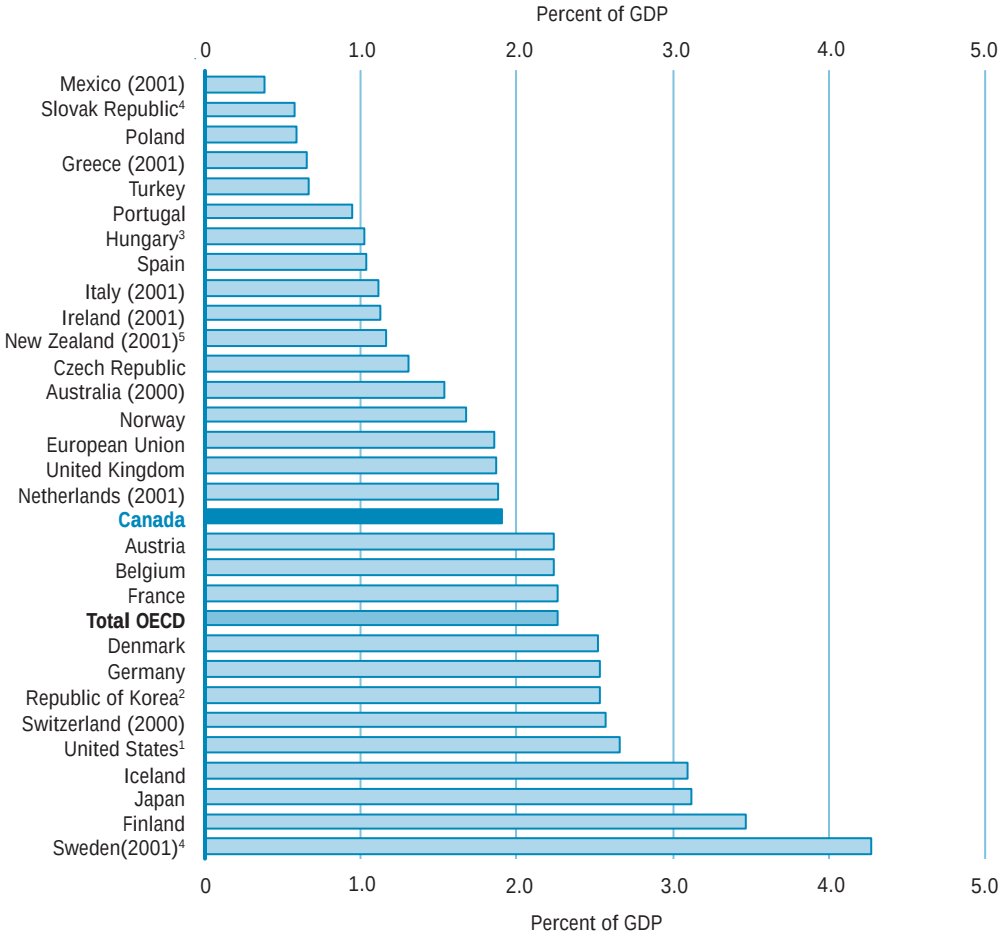
In 2002, Canada conducted $21.9 billion worth of R&D (in constant 2001 dollars). This is 72% higher than the total value of $12.7 billion performed in 1991 (Table D4.4).

One measure that is commonly used to compare the level of effort different jurisdictions put toward R&D (R&D intensity) is the ratio of R&D expenditures to gross domestic product (GDP). In 2002, Canada spent 1.9% of GDP on R&D, compared with an OECD average of 2.3%. Canada placed 11th among all OECD countries, along with the Netherlands and the United Kingdom in expenditures on R&D as a percentage of GDP (Figure D4.1 and Table D4.1).

In 2002, the ratio of R&D to GDP for Canada was 0.3 percentage points higher than in 1991 (1.6% in 1991 compared to 1.9% in 2002). With the exceptions of Canada and Japan, the ratio dropped slightly throughout the G-7 countries during the same period (Table D4.2).

Figure D4.1

Total domestic expenditures on R&D as percentage of GDP, Canada in relation to all OECD countries, 2002 (or latest available year)



1. Excludes most or all capital expenditures.
2. Excludes R&D in the social sciences and humanities.
3. Defence excluded (all or mostly).
4. Underestimated.
5. Break in series with previous year for which data is available.

Source:
Table D4.1.

The ratio of R&D expenditures to GDP was higher in Quebec (2.6%) and Ontario (2.0%) than in the other jurisdictions (Figure D4.2 and Table D4.2). In Prince Edward Island, Quebec, Ontario, Saskatchewan, and British Columbia, the ratio was higher in 2002 than in 1991. For all other provinces except for Newfoundland and Labrador, the ratio of R&D spending to GDP was at the same level in 2002 as it was in 1991, while it decreased from 1.1% to 0.9% in Newfoundland and Labrador.

Universities account for a large share of Canada's R&D activity. In 2002, they accounted for one-third of all R&D in Canada, second to the business sector which accounted for more than half of all R&D. In comparison, the federal government accounted for about 10 percent (Table D4.3).

In all but three provinces, the university sector was the single largest contributor to R&D in 2002, accounting for between 44% and 64% of total R&D activity. In Quebec, Ontario, and British Columbia, business was the single largest R&D-performing sector; however, universities in Ontario and Quebec still accounted for about one-third of all R&D and for 40% in British Columbia.

In all provinces, universities play a comparatively larger role in total R&D activity than do their counterparts in other G-7 countries (except Italy) and leading OECD countries. Among the G-7, other than Canada and Italy, universities accounted for between 14% and 23% of total R&D, while among the top three OECD R&D-performing countries, they accounted for between 16% and 19%.

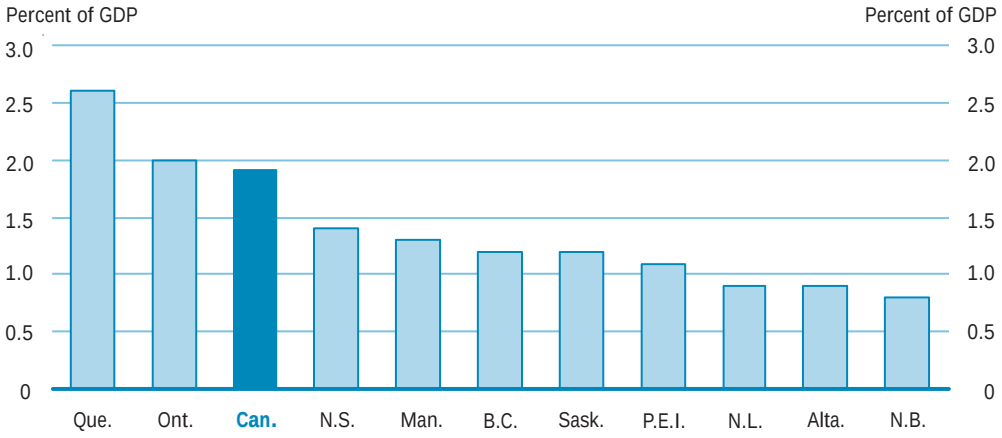


Figure D4.2

Total domestic expenditures on R&D as a percentage of GDP (national or provincial), Canada and provinces, 2002

Notes: Quebec and Ontario figures exclude federal government expenditures allocated in the National Capital Region.

Data for territories included in Canada total.

Source:

Table D4.2.

Within a province's overall R&D activities, the role played by universities depends on many factors. Chief among these are the province's involvement in R&D in general; the importance of other R&D sectors such as industry (which in turn is often tied to the structure of the economy); the distribution of R&D among basic research, applied research and development; and levels of academic research funding.

R&D contributed by universities

In 1991, universities across Canada contributed $3.9 billion (in 2001 constant dollars) worth of R&D. By 2002, R&D in the university sector had risen 87% to $7.3 billion, with most of this growth occurring in the latter half of the 1990s. R&D performed in the business sector grew by 91% over this period, though it was down 4% after 2000, whereas R&D in the university sector increased 22% between 2000 and 2002. R&D performed by the federal government, the third largest R&D performing sector in Canada, increased by 9 percent over the period, remaining fairly stable after 2000 (Table D4.4).

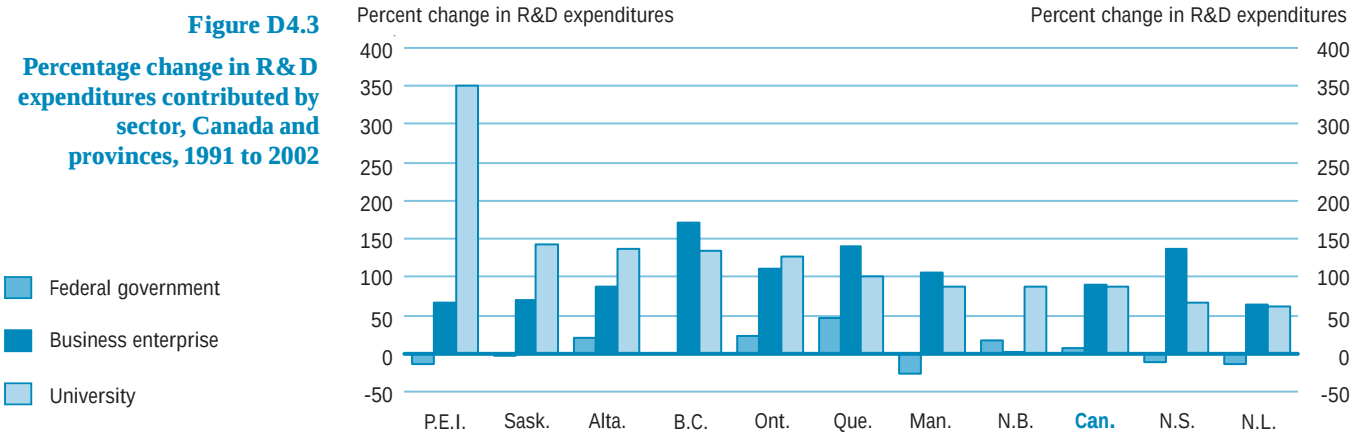
All provinces registered increases in the amount of R&D contributed by universities over the 1990s, with Prince Edward Island, Ontario, Saskatchewan, Alberta and British Columbia having increases substantially higher than the pan-Canadian average. The business sector also registered increases in the amount of R&D that it performed in all provinces, except New Brunswick. University R&D grew at a faster rate than did R&D conducted by the business sector in Newfoundland and Labrador, Prince Edward Island, New Brunswick, Ontario, Saskatchewan, and Alberta. Despite the overall increases in the amount of R&D conducted by the business sector between 1991 and 2002, the amount of R&D by the business sector began to fall after 2000 in the Atlantic provinces, Ontario, and British Columbia. R&D conducted by the federal government increased in New Brunswick, Quebec, and Ontario but for the most part at a slower pace than either the business or university sectors in these provinces (Figure D4.3 and Table D4.4).

Sources of funds for university R&D

Universities are the largest financial supporters of their own research, accounting for 46% of funding from all sources in 2002. Funds from the universities mainly cover the indirect costs of R&D and faculty salaries that are not covered by external funding. The second and third largest funding sources are the federal government, through sponsorship of university R&D (accounting for 24% of university R&D funding)

and provincial governments (11%). In 2002, business accounted for just 9% of university R&D funds (Table D4.5).

Figure D4.3
Percentage change in R&D expenditures contributed by sector, Canada and provinces, 1991 to 2002



Notes: Quebec and Ontario figures exclude federal government expenditures allocated in the National Capital Region.

Expenditures contributed by the provincial governments and private non-profit sector are not shown here because of the relatively smaller role that they play in conducting R&D in Canada.

Provinces are ranked by percentage change in university expenditure.

Source:
Table D4.4.

The two revenue streams supporting university financing of their own research activities include general university funds—essentially block grants that can be used to support R&D activity—and universities' own revenue sources—revenue generated by the university from the sale of goods and services other than direct sponsorship of R&D (see Appendix 2 for further explanation of these categories of funding as well as the glossary entry for sources of funds for university R&D).

The use of universities' own revenue sources for funding R&D increased by 157% between 1991 and 2002. As a result, universities' own revenue sources accounted for 19% of total university R&D funding in 2002, up from 14% in 1991 but down from the high of 22% in 2000. Between 1991 and 2002, general university funds as a source of funding of R&D grew by less than the average for all sources of funds (31% for general university funds as compared to 87% for all funding sources) and thereby went from accounting for 39% of total funding in 1991 to 27% in 2002 (Table D4.5).

The federal government, through sponsorship of R&D, contributed $1.8 billion of funding in 2002. Federal sponsorship increased overall by $816 million or 85% between 1991 and 2002. However, it had decreased through the mid-1990s with reinvestment beginning in 1997 through the granting councils and the introduction of new initiatives such as the Canada Foundation for Innovation.

Funding from the business sector increased 132% between 1991 and 2002. Average annual growth was slower after 2000 than during the 1990s (5% average per year since 2000 as compared to an annual average of 12% between 1991 and 2000).

On a pan-Canadian level, funding trends differ by province (Table D4.5). Universities in all provinces are the single largest sources of funds for their own research, ranging from 68% of university R&D funding in New Brunswick to 43% in British Columbia in 2002. Over the 1990s, universities in all provinces except Nova Scotia were successful in attracting higher amounts of federally-sponsored research funding. In Nova Scotia, while the dollar value of federally sponsored research funding decreased, total sponsored research still increased, mainly as a result of increases in funding from the business and non-profit sectors.

Postsecondary completions and graduation rates

D5

Context

This indicator presents trends in completions and graduation rates for registered apprenticeship programs and university degrees, by gender, and at the university level, by field of study.

Trends in postsecondary completions and graduation rates offer insights into the response of Canadian education systems to changes in the demand for skills in the labour market. This indicator covers a spectrum of postsecondary programs, from theoretical and research-based graduate programs at the university level to practical job-related apprenticeship training.

The balance between male and female graduates is one measure of equity, and information is presented here on the relative percentages of male and female graduates from registered apprenticeship and university programs.

Previous editions of PCEIP rounded out the postsecondary picture by including data on the trade-vocational and college sectors. At the time of writing this report, no data beyond those presented in PCEIP 2003 were available for these two levels, hence they are not presented here (PCEIP 2003 is available at www.statcan.ca and at www.cmec.ca). The program of electronic updates to PCEIP will post updated tables for the trade-vocational and college levels once new data become available (www.statcan.ca or www.cmec.ca).

Findings

Registered apprenticeship training

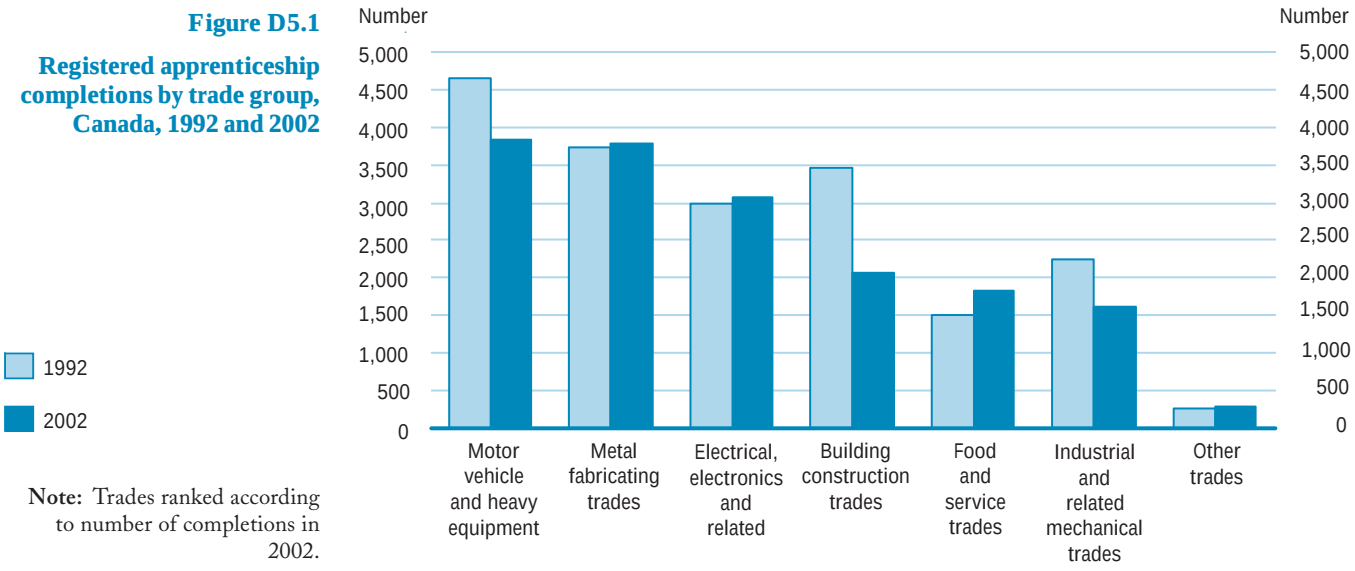
The apprenticeship branches of provincial and territorial governments reported 16,500 individuals completing registered apprenticeship programs in 2002, down 12% from 1992 (Table D5.1). Over the 1990s, the number of individuals completing registered apprenticeship programs declined in all jurisdictions, with the exceptions of Prince Edward Island (up 43%), Manitoba (up 32%), Saskatchewan (up 101%) and Alberta (up 23%).

In 2002, the largest trade groups were the motor vehicle and heavy equipment trades and the metal fabricating trades, each accounting for 23% of that year's graduates. Over the decade, the number of motor vehicle and heavy equipment completions decreased by 18%, while metal fabricating trades completions rose 2%. Building construction, and industrial and related mechanical trades also contributed to the overall decrease in registered apprenticeship completers at the Canada level. In contrast, between 1992 and 2002, the trade group with the largest increase in registered apprenticeship completions was the food and service trades, up 23%. The number of completers also increased over this time period in electrical, electronic and related trades, and other trades, though their growth rates, from 2% to 7%, were not as strong as that for the food and services group (Figure D5.1 and Table D5.1).

The food and services group was also the only trade where the majority of completers were women, at 67% of the total in 2002. In the 'other trades' group, women also had a relatively strong presence as they accounted for 44% of all completers, up from 18% in 1992. All other trades are still overwhelmingly male dominated, even though the number of women has been rising. Overall, the proportion of women among registered apprenticeship graduates almost doubled into the 2000s, rising from 5% to 9% (Table D5.2).

Figure D5.1

Registered apprenticeship completions by trade group, Canada, 1992 and 2002



Note: Trades ranked according to number of completions in 2002.

Source:

Table D5.2.

University degrees

Graduation rates from bachelor's and first professional degree programs rose steeply in the 1970s and 1980s. In 1976, the rate for Canada as a whole was 18%. By 1991, it had reached 28%. The rate climbed to a peak of 33% in 1996 where it hovered through 2001 (Figure D5.2 and Table D5.3).

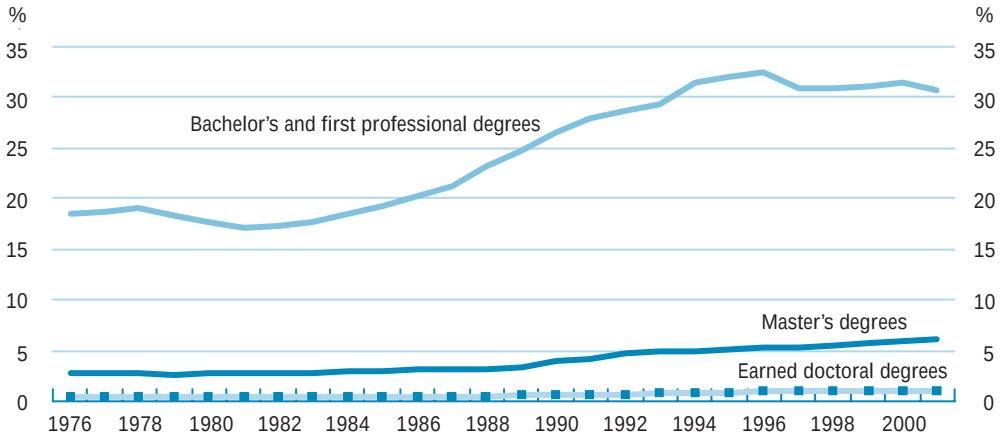


Figure D5.2

Graduation rates for university degrees, Canada, 1976 to 2001

Note: Graduation rate: total number of graduates divided by population at typical age of graduation.

Source:

Table D5.3.

Graduation rates are calculated by dividing the number of graduates by the population at the "typical" age of graduation, using the population age 22 for undergraduate degrees, age 24 for master's degrees and age 27 for doctorates. (This measure should not be confused with a graduation rate that shows graduates as a proportion of enrolment.) The graduation rate of 31% in 2001 means that the number of bachelor's and first professional graduates that year represented 31% of the population aged 22. Obviously, not all students graduate at the "typical" age and only a portion of the population aged 22 is attending university, but this measure provides an indication of involvement in education. (For more information, see Appendix 2.)

Based on the province of study, Nova Scotia posted the highest bachelor's graduation rate in 2001, at 43%, followed by Ontario (36%). The lowest rates were in British Columbia (25%), Alberta (26%) and Quebec (27%) (Figure D5.3 and Table D5.4). Graduation rates based on province of study will tend to be higher for provinces with a relatively large number of universities.[1] Note that jurisdictional differences related to average age, institutional transfer arrangements and the types of institution can have a material effect on graduation rates and care should be exercised in making comparisons.

From 1976 to 1989, the graduation rate at the master's level held steady at 3% based on province of study. The rate rose rapidly over the next few years and was 5% from 1992 to 1997, after which it rose to 6%. The number of new master's graduates more than doubled between 1976 and 2001 (Figure D5.2 and Table D5.4).

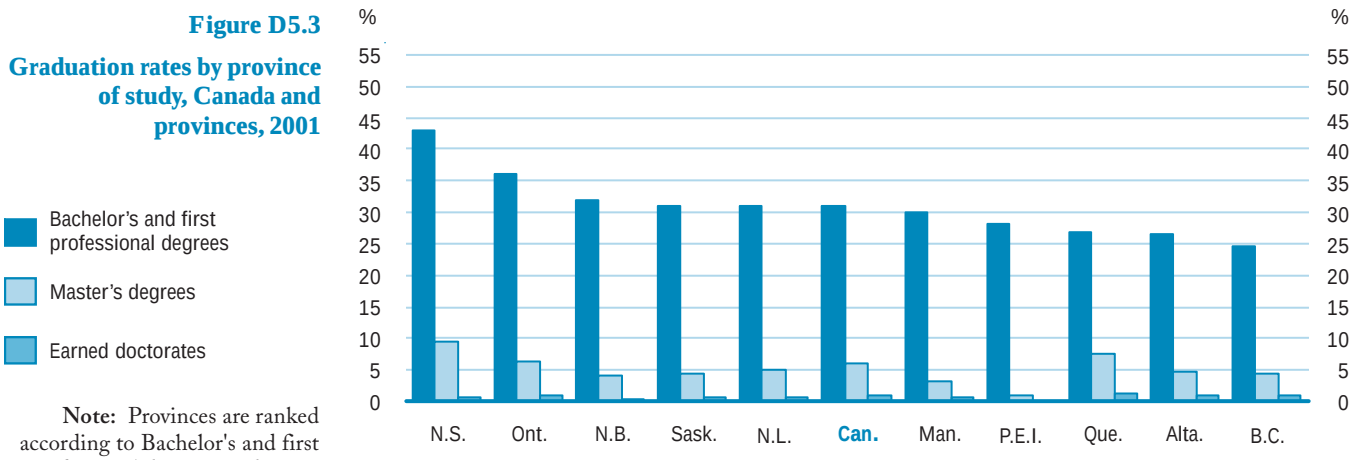
The graduation rate for doctoral students stayed almost the same, at 0.4% to 0.5%, up to 1990, then almost doubled to 0.9% by 2001 when about 3,700 doctorates were awarded.

Master's graduation rates in all provinces were higher in 2001 than in 1991. The rate in Newfoundland and Labrador more than doubled from 2% in 1991 to 5% in 2001. In Quebec, the master's graduation rate rose from 5% to 8% over the same period. The graduation rate for doctorates increased in all provinces offering this degree, with the rate doubling in Quebec (rising from 0.6% to 1.2%) and in British Columbia (rising from 0.5% to 1.0%). Prior to 1999, Prince Edward Island did not offer earned doctorates.

1. Typically, graduation rates are also reported by province of residence. However, many universities did not report that information for their graduates. As a result, comparisons across jurisdictions for graduation rates by province of residence are not available.

Figure D5.3

Graduation rates by province of study, Canada and provinces, 2001



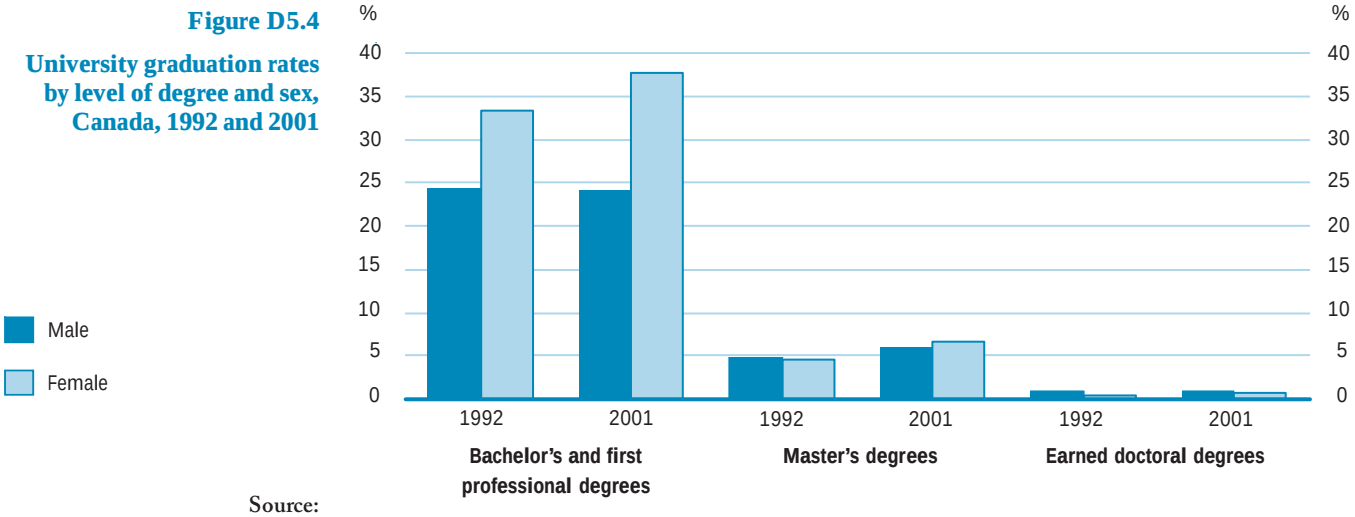
Note: Provinces are ranked according to Bachelor's and first professional degrees graduation rates.

Source:
Table D5.4.

From 1992 to 2001, university graduation rates rose at all levels for women while for men, they rose at the master's level but remained unchanged at the bachelor's and first professional degree and earned doctorate levels (Figure D5.4 and Table D5.5).

Figure D5.4

University graduation rates by level of degree and sex, Canada, 1992 and 2001



Source:
Table D5.5.

In 1992, the bachelor graduation rate for women was already above the rate for men; in 2001, the gender gap had increased. Specifically, the rate for women was 33% in 1992, compared with 24% for men. By 2001, the rates had risen to 38% for women whereas the rate for men remained unchanged.

At the master's level, the graduation rates for men and women were equal in 1992. By 2001, the rate for women (7%) had surpassed that of men (6%).

The graduation rate for doctoral students was still higher among men than women in 2001, when they stood at 1.0% and 0.8%, respectively. However, the rate for women increased by 0.3 percentage points between 1992 and 2001, whereas there was no change in the rate for men.

Field of study

In 2001, the graduation rate at the bachelor's and first professional degree level was 7% in the physical and applied sciences, compared with 16% in the humanities and social sciences (Table D5.5).

Graduation rates were higher for females than males in all of the broad disciplines in the humanities and social sciences; for example, education, visual and performing arts, and communications technologies. Graduation rates for males remained higher in the physical, natural and applied sciences, though the gap narrowed as the graduation rate for women in this discipline increased by 2 percentage points between 1992 and 2001, compared to a one percentage point increase for men. The increase in the graduation rate for women in the physical, natural and applied sciences was driven by a 1.3 percentage point increase in the physical and life sciences and technologies subfield, whereas for men, the driver was a 0.8 percentage point increase in the mathematics, computer and information sciences subfield.

Between 1992 and 2001, the number of male university graduates decreased slightly by 1%, whereas the number of women graduates increased by 10%. In 2001, women accounted for almost 60% of graduates compared to 57% nine years earlier. In all provinces, the majority of 2001 graduates were women; in Prince Edward Island, 68% were women.

The number of both women and men graduating from all of the disciplines in the humanities and social sciences, except for visual and performing arts and communications technologies, decreased between 1992 and 2001. The number of both male and female graduates increased in all of the disciplines of the physical, natural and applied sciences, with women posting higher growth rates in all disciplines except mathematics, computer and information sciences (Tables D5.6 and D5.7). There were more male than female graduates in the physical, natural and applied sciences, with the exception of physical and life sciences and technologies and agricultural and biological sciences.

In 2001, social and behavioural sciences and law was the field of study with the most graduates in Canada, followed closely by business, management and public administration, then education (Table D5.7). Social and behavioural sciences and law and business, management and public administration were the leading fields of study in almost every province.

Educational attainment of the population aged 25 to 64

D6

Context

This indicator provides an international comparison of the educational attainment of working age Canadians, those aged 25 to 64. From a life-cycle perspective, this age band roughly covers people who are old enough to have completed their education, but still young enough to work.[1]

Canada's economic prosperity and competitiveness is very much contingent upon the skills of its work force. Educational attainment, or the highest level of education completed, is one means of measuring this aspect of human capital. Indirectly, trends in attainment rates may also reflect changes in access to education and the equity of education systems.

As older workers retire and are replaced by younger, more educated workers, the educational level of the labour force rises. Shifts in the educational profile of the labour force provide insights into the impact of the retirement of different age cohorts and the demands for skills being placed on youth.

Findings

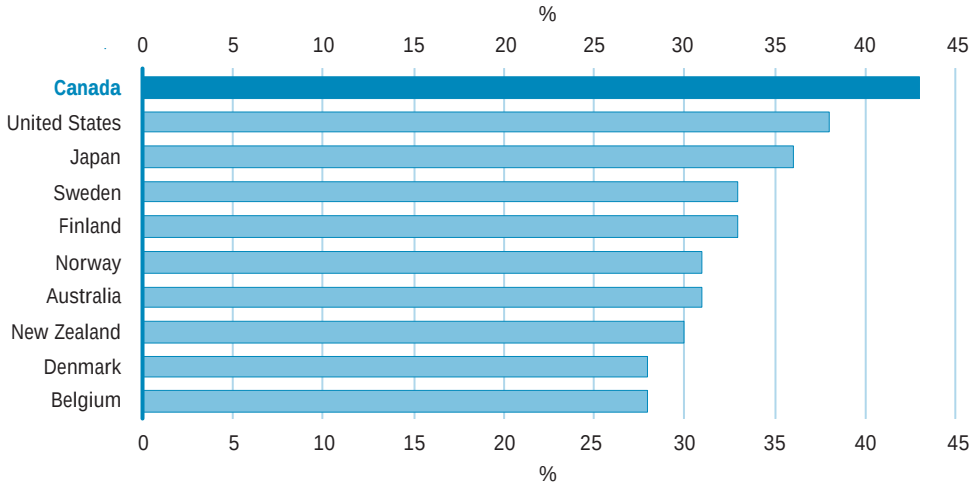
In many countries, one form of postsecondary education, either university or college, is prevalent. Canada offers two parallel systems of education after high school, both of which require a high school certificate for admission and play a key role in the development of knowledge and skills.

In 2001, no other OECD nation had a higher proportion of its population aged 25 to 64 with either a college or university credential than Canada (Figure D6.1). In 2002, 43% of Canada's population aged 25 to 64 had either a college or university education, compared with 38% in the United States, 36% in Japan, and 33% in Sweden and Finland.

1. The labour force participation rate falls off after age 55. Still, about half the population aged 55 to 64 continues to be active in the labour market.

Figure D6.1

Proportion of the population aged 25 to 64 with college or university qualifications, top ten OECD countries, 2002



Source:
Table D6.1.

In terms of the percentage of the population with a university degree, Canada ranked fifth overall, according to the OECD. In 2002, 21% of Canada's population aged 25 to 64 had a university education. In comparison, 29% of the working-age population in the United States had a university education, as did 28% in Norway, 23% in Denmark, and 22% in the Netherlands (Table D6.1).

In 2002, 22% of the working-age population in Canada had college credentials, the highest proportion among OECD countries.

Chapter E

E

Chapter E figures

Transitions and outcomes

Introduction

The transition from secondary school to the postsecondary world and into the labour market is a critical stage in the life cycle. New surveys are beginning to shed light on youth pathways through these important years. While more research is needed, it is clear that the pathways are varied and complex.

The measurement of outcomes of the education systems is essential in evaluating their performance. It is difficult to disentangle the role of the education systems from that of the communities and myriad other factors. New surveys and research are making inroads into this complex issue. In future editions of *Education Indicators in Canada*, it will be possible to expand the array of outcome measures.

Chapter E consists of two indicators.

Indicator E1 addresses transitions to postsecondary education and the labour market. Survey and administrative data are used to trace education and work patterns year by year, from age 15 to adulthood.

Indicator E2, labour market outcomes, examines unemployment rates and earnings for different levels of educational attainment, in Canada and abroad.

Transitions to postsecondary education and the labour market

Context

This indicator considers the transition from high school to postsecondary education and from education to the labour market, in 1993-1994 and 2003-2004, for Canada and the provinces.

A number of factors influence the level of participation in postsecondary education and the transition from school to the labour market. They include availability of educational programs, accessibility of financial support, labour market conditions, and real and perceived benefits of education. In Canada, the different education systems in each jurisdiction also play a role in the education path followed by students.

This indicator looks at the transitions made by the population aged 15 to 29 between levels of education and between school and the labour market. At age 15, over 95% of the population are students; by age 29, over 90% of the population have left the formal school systems. The indicator compares the pace of the transition between 1993-1994 and 2003-2004 and shows the proportion of students who combine work and school during the school year.

E1

Findings

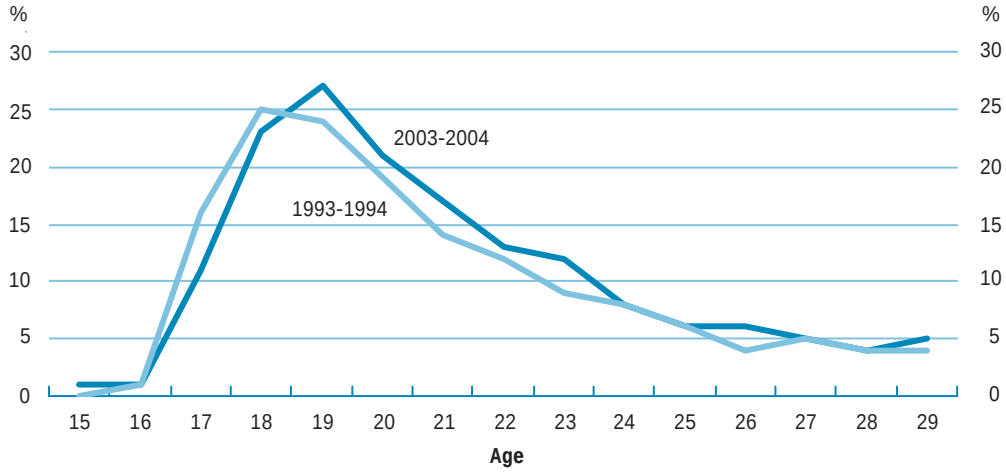
Transition to postsecondary education

The transition to postsecondary education begins to be noticeable among 17-year-olds, though in 2003-2004, fewer of them were in college or university than in 1993-1994. This is partly because a larger percentage of 17-year-olds were in secondary school in 2003 -2004. It also reflects the fact that the overall rate of participation in education at all levels for this age group was lower in 2003-2004 than in 1993-1994 (Table E1.1).

The trend to an increasing rate of participation in postsecondary education is clearer for older age groups. Between ages 19 and 23, participation rates were higher in 2003-2004 than in 1993-1994 at both the college and university levels (Figures E1.1 and E1.2). More than one-quarter of 19- to 22-year-olds were in university in 2003-2004, while college participation rates were highest for young people between the ages of 18 and 20.

Figure E1.1

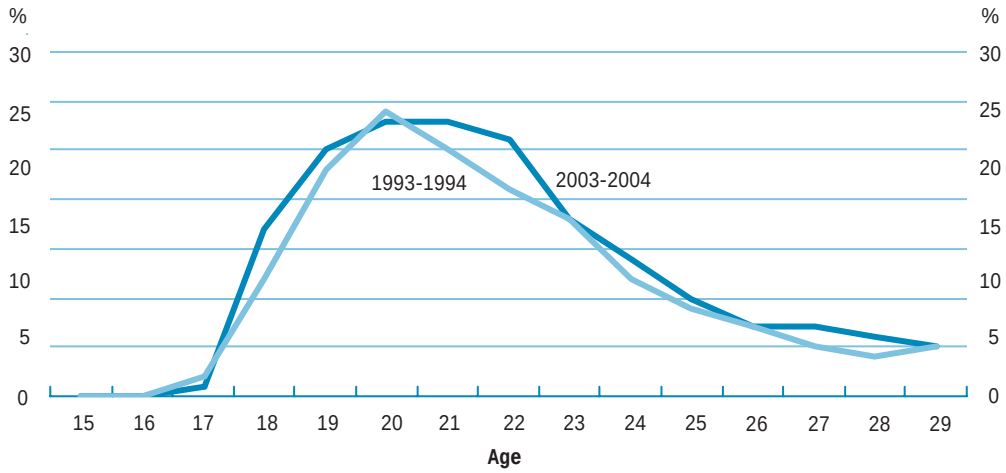
Participation rate at the college level, Canada, 1993-1994 and 2003-2004



Source: Table E1.1.

Figure E1.2

Participation rate at the university level, Canada, 1993-1994 and 2003-2004



Source: Table E1.1.

In 2003-2004, just over half of all students aged 17 and older were working while they attended school and this percentage was slightly higher for all ages than in 1993-1994. College students were the most likely to be working, with approximately 60% of students between the ages of 18 and 22 reporting that they had jobs while in school. Younger university students (below age 22) were less likely to be working, with fewer than half holding jobs and studying (Table E1.2).

Transitions between education and the labour market

Most 15-year-olds are attending school at the elementary-secondary level and are not working; this combination accounted for 70% of that age group in 2003-2004. Another 25% were both attending school and working (Table E1.3).

By age 18, much greater variety is evident in the combinations of schooling and work, reflecting the fact that transitions are underway. In 2003-2004, 17% of 18-year-olds were attending elementary-secondary school and working, while 14% were at that level and not working; 14% were college students with a job and 9% were college students without a job; 6% were working while attending university, while 11% were university students who did not have a job; finally, 20% were working and not going to school (Table E1.3).

At age 20, university accounts for a peak share of the student population: 13% are attending and working, another 15% are attending but not working. Among all of the education/labour force combinations, the largest group at age 20 is the employed non-student category, with 36% of the population.

At age 25, 83% of the population have completed their education: among them, 68% are working, 7% are looking for work and 8% are not in the labour force. Among 25-year-olds studying at the university or college level, a majority are also working.

Labour market outcomes

Context

This indicator shows the labour market outcomes of education in terms of unemployment and earnings.

An important goal of education is the development of responsible citizens who are able to participate as effective workers in a modern knowledge-based economy and society. This indicator focuses on two important labour market outcomes by examining differences in unemployment rates and earnings by level of educational attainment in Canada and other industrialized countries. It also looks at these differences for younger cohorts, providing indications as to how youth with different levels of education are coping in the transition from school to work.

These measures can help students and educators understand the benefits of higher education and can point to segments of the population where policy intervention may be needed.

Findings

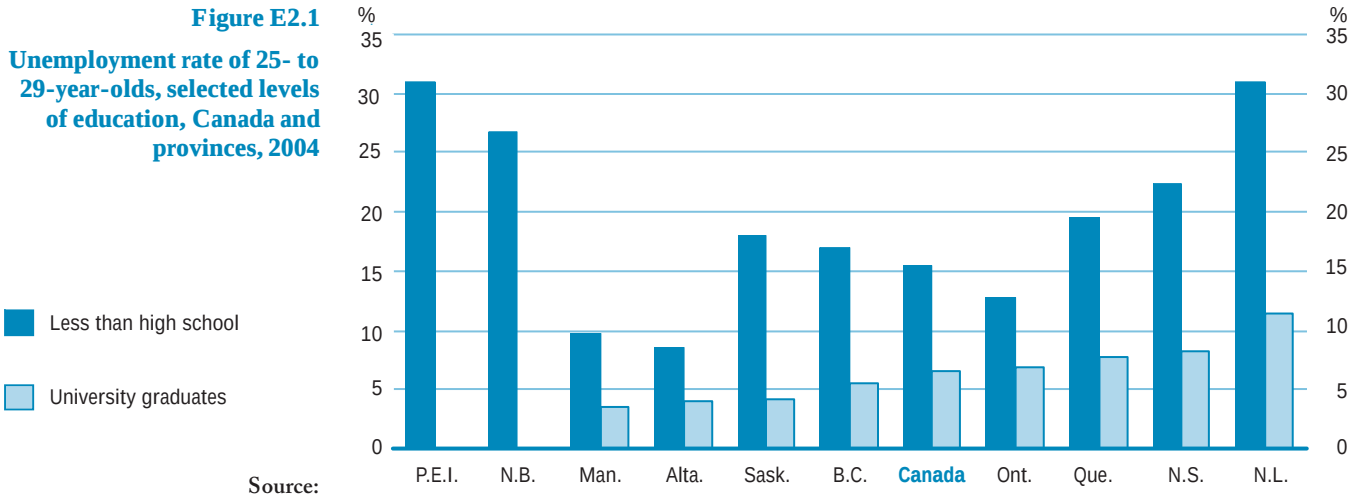
Unemployment rates and level of education

In Canada, the early 1990s were marked by a recession that peaked in 1993, with unemployment rates reaching 11%. The economy recovered in the second half of the 1990s and unemployment rates gradually dropped to 7% by 2004 (Table E2.1).

While unemployment rates were high for all individuals in the early 1990s, those with higher education fared best. At the peak of the recession, the unemployment rate for Canadians without high school completion was 17% compared to 6% for university graduates. By 2004, the unemployment rate had fallen to 13% for those with less than high school and 5% for university graduates.

In 2004, the unemployment rate for 25- to 29-year-olds with less than high school stood at 15% compared to 7% for university graduates (Figure E2.1 and Table E2.2). In 2004, the unemployment rates of university-trained 25- to 29-year-olds were between 4% and 8% in most provinces, except Newfoundland and Labrador, where they were 11%. (Due to small sample sizes in Prince Edward Island and New Brunswick, data for those provinces have been suppressed to preserve confidentiality.) On the other hand, unemployment rates for those who did not complete high school ranged from 9% in Alberta to over 30% in Prince Edward Island and Newfoundland and Labrador.

Figure E2.1
Unemployment rate of 25- to 29-year-olds, selected levels of education, Canada and provinces, 2004



Source:
Table E2.2.

Overall, unemployment rates for people with less than high school education were at least double those of university graduates in all provinces except for Ontario in 2004 and in half of them, they were more than three times higher (Table E2.2). Youth with low educational attainment are most at risk of economic marginalization, especially in weaker labour markets.

Education and earnings

Educational attainment has a strong impact on earnings. For individuals, the expectation of higher incomes is an incentive to invest in further education.

In 2001, mean earnings (before taxes) were 77% higher for university graduates and 15% higher for college or trade graduates than for individuals with high school diplomas (Figure E2.2 and Table E2.3). Those who did not complete high school earned 21% less than those who did. Comparable differences exist across industrialized countries.

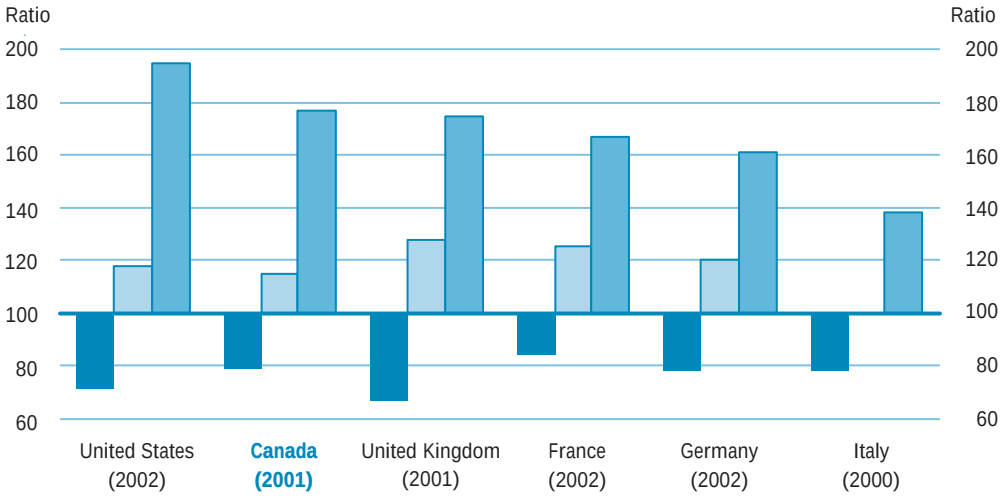


Figure E2.2

Relative earnings by level of educational attainment for 25- to 64-year-olds, G-7 countries (high school graduation =100)

Note: Countries are ranked in descending order of relative earnings for the population with university education.

Source:

Table E2.3.

Differences in mean earnings by level of education increased with age and, in 2000, peaked in the 50 to 54 age group (Figure E2.3 and Table E2.4).The gaps are largest when university graduates are compared to other workers. In the age group 25 to 29, university graduates earned an average of $31,000, or about a third more than those with less than high school who earned $21,000. In the 50 to 54 age group, university-educated workers earned an average of $61,000, more than twice the earnings of workers with less than high school ($29,000).

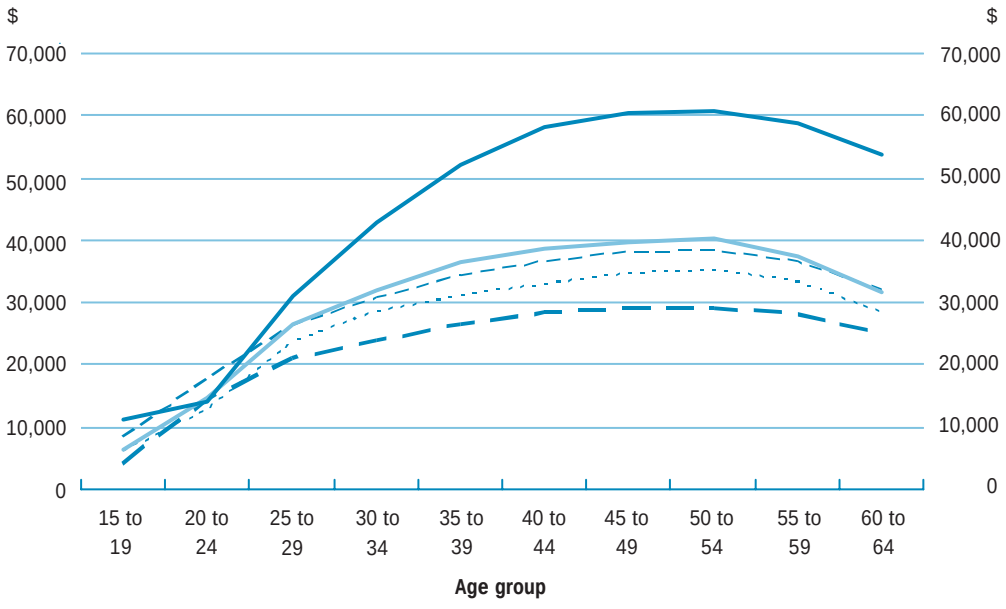


Figure E2.3

Average employment income by age group and education level, all workers, Canada, 2000

Source:

Table E2.4.

Appendices

Structure of education and training in Canada

In Canada, education is the responsibility of the ten provinces and three territories. While educational structures and institutions across the country are similar in many ways, they have been developed by each jurisdiction to respond to the particular circumstances, geographical situation, and historical and cultural heritage of the population they serve. This appendix describes the various structures and organization of education and training in Canada today.

Pre-elementary programs

Pre-elementary programs—pre-Grade 1 education offered by public, private, and federal schools, as well as schools for the visually and hearing impaired—are available to children, typically 4 or 5 years of age, in all jurisdictions.

Most jurisdictions offer one year of public pre-elementary programs, with Quebec, Ontario, Manitoba, Saskatchewan, and Alberta offering additional years (see Figure 1 at the end of this appendix). In most jurisdictions, pre-elementary programs in the year before Grade 1 are offered to children who turn 5 years of age by a certain date in the school year as specified in jurisdictional legislation. In most jurisdictions, attendance in these programs is optional, although in Newfoundland and Labrador, Nova Scotia, and New Brunswick it is mandatory. The intensity of these programs varies by jurisdiction, some offering full-day programs, some offering half-day programs, and some offering both.

In Quebec, one additional year of pre-elementary programming is publicly available to some 4-year-olds with disabilities or from low-income families. In Ontario, the provision of an additional year of pre-elementary (for 4-year-olds) is dependent on the choice of the local school board to do so, with funding coming from the Ministry of Education. In Ontario, all school boards offer this program for their students. In Manitoba, one additional year of pre-elementary programming is offered at the discretion of each school division with two school divisions currently providing this program, which is not funded by the Department of Education. Two additional years of pre-elementary programming are funded in schools in Saskatchewan communities where a significant portion of pre-school children are not ready to participate fully in the learning opportunities offered to kindergarten and Grade 1 students. These programs are not mandatory and not universal. Alberta also offers two additional fully funded years of pre-elementary programming, targeted to students with disabilities or to those who are considered talented/gifted.

Appendix 1

In addition to publicly provided programs, some private schools in all jurisdictions also offer one or more years of pre-elementary programming. However, it is important to note that private day-care programs or early childhood education programs are not offered as part of the formal education system and are not included in the data presented in this report on pre-elementary programs.

Elementary and secondary education

Public education is provided free to all Canadian citizens and permanent residents until the end of secondary school—normally at age 18. The ages for compulsory schooling vary from one jurisdiction to another; generally, schooling is required from age 6 or 7 as of a certain date as specified in jurisdictional legislation (age 5 in New Brunswick and British Columbia) to age 16. In New Brunswick, since July 1, 1999, schooling is compulsory to the age of 18 or until graduation, with all students who were in the system as of that date affected by the new regulation.

In most jurisdictions, elementary-secondary education consists of 13 years of study (from kindergarten to Grade 12). The only exception is Quebec. Quebec's system has 12 years—kindergarten, 6 years of elementary school, and 5 years of secondary school. Ontario has an additional year of kindergarten (see above), with high school ending in Grade 12. Following a major change in policy, 2002–2003 was the last year for Grade 13 in Ontario. One immediate consequence of this change was the "double cohort" of students entering the postsecondary system in 2003–2004 (comprising the last graduating class from the old system with the extra year and the first graduating class from the new system).

The elementary-secondary continuum is broken up into different grade combinations in different jurisdictions so that the point of transition between elementary and secondary school varies from jurisdiction to jurisdiction (see Figure 1 at the end of this appendix).

The organization of grades in schools varies by jurisdiction and can also vary at the local level within a jurisdiction. Elementary schools cover the first six to eight years of compulsory schooling. Afterwards, children may proceed to a middle school or junior high/intermediate school that usually covers Grade 6 or 7 to Grade 8 or 9, or they may go directly to a secondary education program. In many northern and rural communities, one school building may house all grades (kindergarten to Grade 11 or 12).

A great variety of programs—vocational (job training) as well as academic—is offered at the secondary level. Some jurisdictions offer dual credit courses that simultaneously give students both high school and postsecondary credits.

Secondary school diplomas are granted to students who pass the compulsory and optional courses of their programs.

Public funding at the pre-elementary and elementary-secondary levels comes either directly from the provincial/territorial government (e.g., New Brunswick, Ontario) or through a mix of provincial transfers and local taxes collected either by the local government or by school boards with taxing powers (e.g., Saskatchewan, Quebec). Private school funding comes primarily from fees and endowments, except in Quebec, which also provides funds for private schools (which have discretion over admission criteria). The federal government pays for the tuition fees of Aboriginal children and for children of employees who live on Federal Crown lands (National Defence, Agriculture and Transport).

Postsecondary education

Once secondary school has been successfully completed, students may apply to a college career program or to a university. Traditionally, enrolment in trade-vocational programs, such as apprenticeship or other programs geared towards preparation for employment in an occupation or trade, did not require graduation from secondary school. However, requirements are evolving so that more and more programs, especially in trades dealing with advanced technology or having implications for public safety, are now requiring high school graduation.

Apprenticeship training involves a contract between an apprentice and an employer, registered with the jurisdiction, in which the employer provides the apprentice with training and experience for a trade. Programs vary in length from two to five years, depending on the trade. Registered apprenticeship combines on-the-job experience with four- to eight-week periods of in-class training each year of the program. In most jurisdictions the in-class portion is usually taken at a postsecondary institution during the apprenticeship training. However, in Quebec, the in-class training is taken prior to beginning an apprenticeship program.

Currently there are approximately 170 registered trades in Canada, each with specific standards and training requirements as set down by each jurisdiction. In some of these 170 registered trades, apprenticeship certification is compulsory for entry into and practice of the trade, while in others, although it indicates the level of competence a holder has, apprenticeship certification is voluntary and one can practise the trade without it. Compulsory and voluntary trades vary by jurisdiction; however, there are similarities across jurisdictions in that compulsory trades commonly include those with advanced technology or that involve public safety. In 45 of the 170 registered trades, the provinces and territories have agreed on interprovincial standards. In these 45 trades, candidates who achieve a standard agreed upon among the provinces qualify for the interprovincial Red Seal and are allowed to work anywhere in Canada without further training or examination.

In this publication, data relating to trade-vocational programs in Quebec that are administered at the elementary-secondary level are reported at that level.

Postsecondary education is available in both government-supported and private institutions, some of which award degrees. A major distinction at an institutional level across all jurisdictions is made between "degree-granting" and "non-degree-granting" institutions. Degree-granting institutions—both public and private—have authority under provincial legislation to grant degrees, and include universities, university colleges, and some community colleges.

Universities typically offer four-year undergraduate programs leading to bachelor's degrees. Advanced degrees include master's degrees, generally requiring two years of study after a first degree, and doctoral degrees, requiring three to five years of postgraduate study and research as well as a dissertation. Not all universities offer advanced degrees, particularly at the doctoral level. In addition to universities, university colleges are recognized degree-granting institutions that offer three- to four-year bachelor's programs. Both universities and university colleges also offer programs leading to diplomas and certificates, but the primary emphasis is on degree programs. Additionally, a number of jurisdictions have begun to give limited degree-granting authority to community colleges. These institutions still offer diploma and certificate programs. The degree programs offered by these institutions are either two-year associate degrees or three- to four-year applied degrees in a particular area of speciality of the institution.

A university or other institution may also be affiliated or federated with another university. Federated institutions are degree-granting institutions responsible for their own administration, but under the federation agreement the granting of degrees rests with the parent institution. Affiliated institutions are ones with limited or no degree-granting authority, and in which the granting of degrees rests with the parent institution. A number of colleges have authority to offer divinity degrees, but are not in the full sense recognized degree-granting institutions.

While the majority of degree-granting institutions are public, private institutions exist in a number of provinces. For many years, there have been private institutions that offer programs in divinity. Increasingly, there are private institutions that offer degree programs in liberal arts, business, and trades.

The systems of public non-degree-granting institutions in Canada for the most part were created by provincial and territorial governments in the 1960s to provide labour market preparation programs as alternatives to the more theoretically oriented programs of universities. Depending on the province or territory, they are called colleges, regional colleges, centres, colleges of applied arts and technology, community colleges, institutes, schools, or, in Quebec, collèges d'enseignement général et professionnel (CEGEPs).

Public non-degree-granting institutions offer vocationally oriented programs in a wide range of semi-professional and technical fields, leading to diplomas and certificates and, in the case of Quebec, to diplomas and attestations. Diplomas are generally granted for successful completion of two- and three-year programs (three-year programs in Quebec), while certificate programs usually take up to one year. In Quebec, attestations are awarded for the completion of shorter technical programs, and are generally viewed as the equivalent to certificates awarded in other jurisdictions.

In Quebec, students wishing to go on to university are generally required to successfully complete a two-year pre-university program offered by CEGEPs. In some circumstances, students with a technical-stream CEGEP diploma of college studies may undertake university studies.

Several college systems offer university transfer programs—typically the first two years of a university undergraduate program, usually in cooperation with a university, at which the remainder of the program would be completed.

Private non-degree-granting institutions are subject to varying degrees of government regulation and can be classified in terms of the extent of government oversight. Recognized institutions are those that have been given authority to grant academic credentials by provincial or territorial governments through charters or legislation that provide mechanisms to ensure institutional and program quality. Non-recognized, but licensed, institutions are primarily monitored by governments with a view to consumer protection rather than institutional or program quality. Finally, non-recognized, non-licensed institutions are private institutions that are not regulated by government.

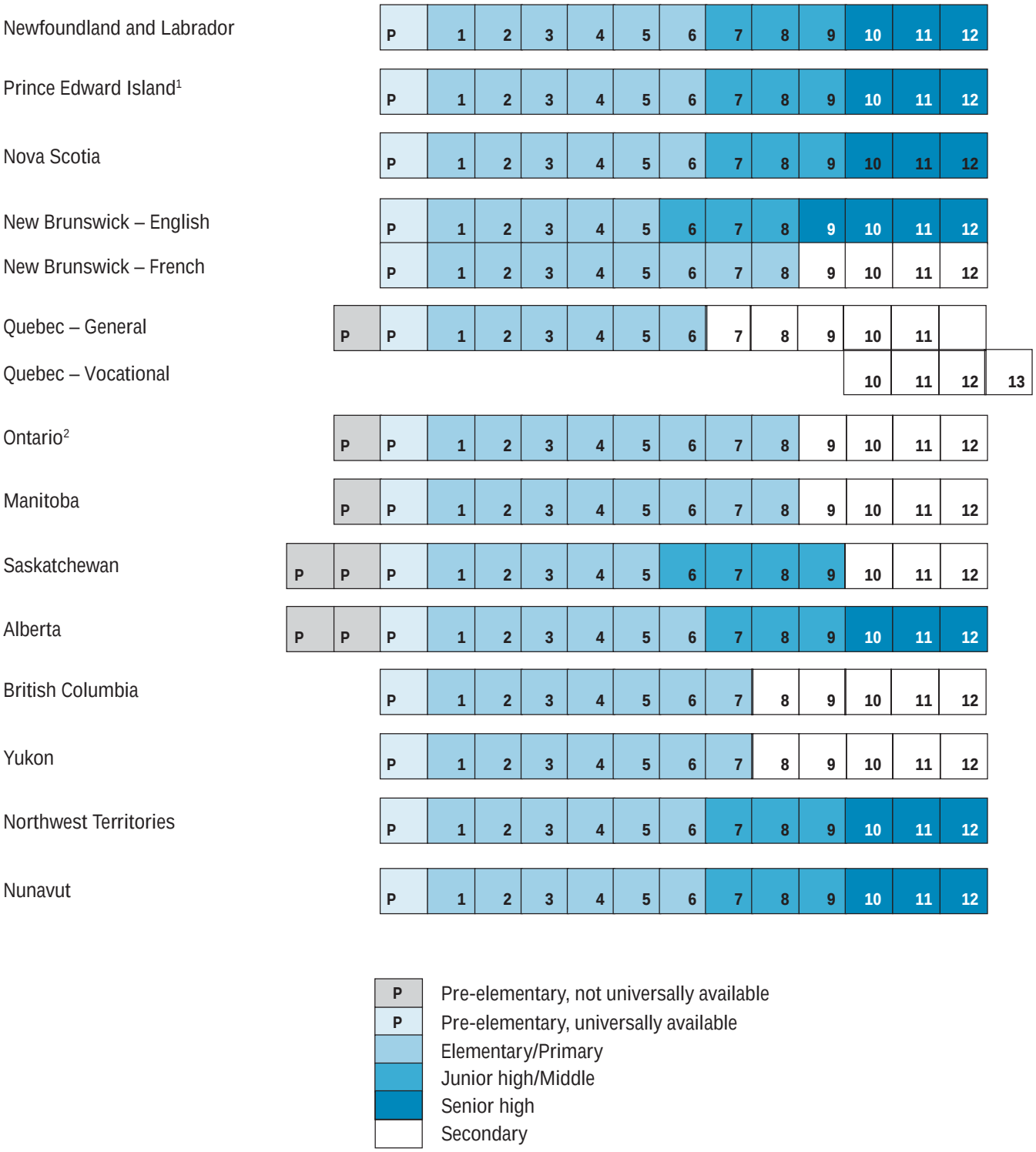
Private non-degree-granting institutions may be called colleges, institutes, schools, or academies depending on the jurisdiction. Credentials issued include diplomas and certificates, with a tendency for programs to be much shorter and more intensive than programs in public institutions. In Quebec, private subsidized institutions may also offer two-year pre-university programs and three-year technical programs.

The source of funds at the postsecondary level will depend on the nature of the institution. For universities and public non-degree granting institutions, public funding comes either directly from the federal (mostly for sponsored research) or provincial/territorial (mostly in the form of operating and capital grants) governments. Private funding for those institutions is made up of tuition and other fees, donations (including bequests), investment, and non-government grants and contracts. Private non-degree-granting institutions receive very little or no public funding, except indirectly through support to students; funding for these private institutions comes mostly from tuition fees.

For a more detailed overview of postsecondary systems in Canada, see the Web site of the Canadian Information Centre for International Credentials at http://www.cicic.ca/postsec/vol1.overview.en.stm.

Figure 1

Levels within elementry-secondary schools, by jurisdiction



1. Prince Edward Island introduced its pre-elemetary program in 2000-2001.
2. 2002-2003 is the last year for the Ontario Academic Course (13th year of high-school).

Methodological notes

Chapter A:
A portrait of the school-age population

Indicator A1: Population size

The population figures for 2001 are post-censal estimates based on the 1996 Census counts adjusted for net undercoverage. The figures for 1991 and 1996 are based on the 1991 and 1996 Censuses also adjusted for net undercoverage. The 2006 to 2026 projections have been developed starting with the population estimates as of July 1, 2000, and using assumptions on the future course of fertility and mortality, as well as international and interjurisdictional in- and out-migrations (medium-growth scenario).

Interjurisdictional migration is the movement of population from one province or territory to another, involving a permanent change in residence. A person who takes up residence in another province/territory is an out-migrant with reference to the province/territory of origin and an in-migrant with respect to the province/territory of destination. Net migration is the difference between in- and out-migrants.

The medium-growth scenario assumes that fertility and immigration remain at their current levels throughout the projections period. It also assumes that Ontario, Alberta and British Columbia gain population through interjurisdictional migrations and that all other jurisdictions lose population through interjurisdictional migrations.

Although commonly used for planning purposes, population projections should be used with caution as they are based on assumptions about the future course of demographic components. For instance, the main determinant of the school-age population, fertility, may not remain stable over the next 25 years as assumed. Furthermore, projections at the jurisdictional level should be approached with more caution because interjurisdictional migration, a component that is very volatile and difficult to forecast, has a major impact on population change in the provinces and territories.

For more detailed information, consult Statistics Canada's *Population projections for Canada, provinces and territories*, Catalogue No. 91-520-XPB, available at this address: http://dissemination.statcan.ca/english/IPS/Data/91-520-XPB.htm.

Appendix 2

Indicator A2: Cultural diversity

No notes.

Indicator A3: Low income

The low-income cutoffs (LICOs) represent an income threshold where a family is likely to spend 20% more of its income on food, shelter and clothing than the average family, leaving less income available for other expenses such as health, education, transportation and recreation. LICOs are calculated for families and communities of different sizes.

There is no internationally accepted standard for the measurement of poverty, nor is there an official definition of poverty in Canada. The LICOs produced by Statistics Canada provide one of many possible measures to monitor trends in the relative economic well-being of Canadian families. LICOs are updated annually to reflect increases in the cost of living. They are also updated periodically to reflect changes in family spending patterns. Over the longer term, with rising standards of living, the average Canadian family has spent a decreasing proportion of its total income on food, shelter and clothing. LICOs are adjusted accordingly, which means that they are a relative rather than an absolute measure of economic well-being.

LICOs are calculated using before-tax and after-tax income. The data presented in this report are based on after-tax LICOs because after-tax income is a better reflection of what a family has at its disposal to spend on basics and other commodities. The after-tax LICOs for 2000 are as follows:

After-tax low income cutoffs (1992 base) for economic families and unattached individuals, Canada, 2000

	Size of area of residence				
Family size	Rural areas	Less than 30,000*	30,000 to 99,999	100,000 to 499,999	500,000 and over
1 person	9,947	11,498	12,583	12,780	15,172
2 persons	12,138	14,030	15,353	15,594	18,513
3 persons	15,352	17,745	19,419	19,723	23,415
4 persons	19,120	22,101	24,186	24,565	29,163
5 persons	21,371	24,701	27,031	27,456	32,595
6 persons	23,622	27,301	29,877	30,346	36,027
7 or more persons	25,872	29,902	32,722	33,237	39,459

* Includes cities with a population between 15,000 and 30,000 and small urban areas (less than 15,000).

Low-income rates are calculated for families with all members of an economic family having the same low-income status. An economic family is defined as a group of two or more persons related by blood, marriage, common-law, or adoption and living in the same dwelling.

The numbers in the tables may not equal the overall population count because of missing values on some of the response items.

The Survey of Labour and Income Dynamics (SLID) is designed to follow individuals for six years. Thus, six is the maximum number of consecutive years for which the income of a given family may be estimated using SLID.

Chapter B:

Financing education systems

General

Where amounts are shown in a table for more than one year, all amounts are given in 2001 constant dollars. Where a table includes only one year of data, all amounts are shown in current dollars.

Some ministries/departments of education and training may notice differences between their expenditure data and those presented here. In order to ensure international comparability, certain adjustments have been made, which may include

- Exclusion of debt charges
- Country and jurisdictional inflation adjustment factors
- Conversion of country and jurisdictional reporting time frames to a common annual format
- Inclusion of federal government spending on education in each jurisdiction for Department of National Defence and Aboriginal schools
- Inclusion of spending by households on education
- All departmental (all orders of government) spending on education in each jurisdiction above and beyond the ministries/departments of education and training

Public expenditures shown in this chapter include (see notes under Indicator B2)

- Direct purchases by governments of educational resources (e.g., direct payments of teachers' salaries by a central or regional education ministry/department, direct payments by a municipality to building contractors for construction of school buildings, procurement of textbooks by a jurisdiction or regional authority for subsequent distribution to local authorities or schools)
- Direct payments by government agencies to educational institutions that have the responsibility of purchasing educational resources themselves (e.g., government block grants to universities, which they use to compensate personnel, a government subsidy to a private school and government payments under contract to a private firm undertaking educational research)
- Direct expenditures designated for capital projects (e.g., building expansions or construction, laboratory equipment in support of research and development)
- Public to private transfers (e.g., financial aid in the form of government scholarships and grants, special public subsidies [such as for transport, medical expenses, studies abroad], family allowances or child allowances that are contingent on student status, student loans)

Private expenditures, by households or other private entities (commercial and not-for-profit), shown in this chapter include

- Fees paid to educational institutions (e.g., tuition, registration, laboratory, lodging, meals and other services provided to students by the institution). [Note that Statistics Canada surveys only institutions and, therefore, costs for off-campus housing not provided by the institution are not included in the total amount spent.]
- Financial aid to students or households coming from private sources (e.g., scholarships from business firms and religious and other non-profit organizations)

- Direct payments by private entities to educational institutions (e.g., contributions or subsidies to vocational–technical schools, contracts let to universities for research or other services, grants to educational institutions from non-profit organizations, charitable donations (other than from households), expenditures by private employers for apprenticeship training and other school and work-based educational programs)

Because of changes in methodology for a number of source surveys introduced beginning with the 1997-1998 school year, data from earlier years are not reported in this publication for some measures.

Data are not included for private education programs for pre-junior kindergarten children for which there is no provincial regulation. Data are not included for expenditures relating to private business colleges. Enrolment data are not available for private business colleges, and the related expenditures have been excluded in the interests of comparability.

Tables B1.1, B1.2, B1.3, B1.4, B1.5, B2.1, B2.2, B2.3, B2.4, B2.5 and B2.6 contain estimates. The public component is based on planned spending as published in the jurisdictional public accounts. The private component at the pre-elementary and elementary levels is based primarily on private school enrolments and the education price index. Public institutions have a small portion of funding from private sources, which is derived from year to year by extrapolation. At the postsecondary level, estimates of private expenditures are derived using the latest enrolment estimates and non-public expenditure trends.

Indicator B1: Total expenditure on education

No notes.

Indicator B2: Public and private expenditure on education

Public accounts data from Public Institutions Division (PID), used in Table B2.1 in order to permit comparisons of spending across government programs, are not directly comparable to data from the other sources used in this indicator, which are derived from survey data. PID standardizes individual governments' accounts to provide consistent and comparable statistics. As a result, these statistics may differ from the figures published in individual government financial statements, and differ slightly from other data given here for public expenditures.

Provincial governments support college- and university-related activities in a variety of ways. They provide direct operating, capital, and other special purpose grants to institutions; financial aid to students; and research funding to faculty members. In addition to these direct expenditures, jurisdictions maintain ministries/departments and agencies to administer their college- and university-related programs and to develop public policy. The cost of all these programs and activities represents the total provincial and territorial government expenditures on college- and university-related activity.

In Table B2.3, *Social services* include social assistance, workers' compensation benefits, employee pension plan benefits, veterans' benefits and changes in equity, other social services and motor vehicle accident compensation. *Health* expenditures include hospital care, medical care, preventive care and other health services. *Other education expenditures* refers to special retraining and to spending that cannot otherwise be categorized, such as spending for language instruction to newcomers, training in

Canada's official languages, spending on language training for employees of the Government of Canada and payments by Indian and Northern Affairs on capital facilities and maintenance allocated to education.

Private revenues at universities, defined as revenue obtained from any source other than government, has, for the purposes of this indicator, been categorized as: (1) student fees, (2) non-government grants and contracts, donations, and bequests, (3) the sale of services and products, (4) investment, and (5) miscellaneous. All proportions may not add up exactly to 100 due to rounding. In 1999-2000, the Financial Information of Universities and Colleges survey began collecting data on the endowment fund of institutions. In order to maintain comparability with previous years, the revenue reported in the endowment fund was removed from the total revenue in 1999-2000.

Indicator B3: Student debt

Survey information collected from graduates on student loans includes the amounts owed to both federal and provincial student loan programs as well as the amount owed to other sources. Results presented in this report refer to borrowing from government student loan programs only. Borrowing from private sources is not included.

Debt levels refer to accumulated debt incurred at all levels of study. Debt levels for the 1995 and 2000 graduating classes have been expressed in terms of 2000 constant dollars in order to reflect the year in which the debts were incurred for 2000 graduates, and to permit an examination of changes between the two graduating classes.

Provincial data refer to the province of study, which may differ from the province of residence two years after graduation. The Canada totals include data for the territories. Separate estimates for the territories were suppressed because of high sampling errors.

Chapter C:

Elementary-secondary education

Indicator C1: Home to school transitions: Early childhood development and learning

The statistical information in this section is derived from the National Longitudinal Survey of Children and Youth (NLSCY), primarily from Cycle 4, which was conducted in 2000-2001.

It focuses on children aged 4 and 5, and is based on a nationally representative sample.

Most of the information in this section is taken from the NLSCY Parent Questionnaire, which contains the responses of the person most knowledgeable (usually the mother) about the 4- and 5-year-olds being surveyed. For several dimensions and sub-categories, the survey relies on the perceptions of the adult most familiar with the child in order to provide an indication of the child's general development and health.

The Peabody Picture Vocabulary Test-Revised (PPVT-R) is administered to 4- and 5-year-olds. This test measures children's receptive language skills or the verbal component of intelligence. It is a "normed" test; that is, participants' performances are reported and scored relative to that of an overall population. A range of scores is considered a reflection of a "normal" level of ability, taking the age of the child into consideration. Scores below the lower threshold of this range reflect a "delayed" receptive vocabulary, and scores above the higher threshold demonstrate "advanced" receptive vocabulary.

The PPVT-R is scaled to an average of 100. The range of "normal" receptive vocabulary measured by the PPVT-R covers scores from 85 to 115. A score below 85 is considered a "delayed" score, and a score above 115 is considered an "advanced" score. Scoring is adjusted to reflect different abilities of 4- and 5-year-olds.

Further references are Gillian Doherty, "Zero to Six: The Basis for School Readiness," May 1997, and Barbara A. Morrongiello, "Tapping School Readiness in the NLSCY: Measurement Issues and Solutions," September 1997, both published as Applied Research Branch Research Papers, Human Resources Development Canada (http://www.hrdc-drhc.gc.ca/sp-ps/arb-dgra/publications/research/).

Indicator C2: Enrolment and educators

No notes.

Indicator C3: Information and communications technologies (ICT) in schools

No notes.

Indicator C4: Student achievement

Data used in this section are derived primarily from the following tests:

Reading

PISA 2000 and 2003 (15-year-olds)

Writing

SAIP 2002 (13-year-olds)

SAIP 2002 (16-year-olds)

Mathematics

PISA 2000 and 2003 (15-year-olds)

Science

PISA 2000 and 2003 (15-year-olds)

SAIP 2004 (written component – 13-year-olds)

SAIP 2004 (written component – 16-year-olds)

Socioeconomic status (SES) is a term used to summarise a variety of factors, including parental education and occupation, that influence student performance. In PISA 2003, SES is measured by an index that includes information describing family structure, parental education and occupation, parental labour market participation, and whether a student's family has specific educational and cultural possessions at home.

Indicator C5: Secondary school graduation

This section reports on secondary school graduation rates using administrative data (i.e. information acquired from schools, school boards, or ministries/departments of education). It should be noted that graduation rates based on administrative data differ from those based on household survey data. Generally, graduation rates obtained from surveys of individuals are higher than those obtained from administrative records. Administrative data tend to underestimate the true graduation rate since they do not include people who complete high school outside the regular secondary school systems. Data on graduations from some secondary programs are not uniformly available across jurisdictions, and General Education Diplomas (GED), adult basic upgrading and education, and graduation from adult day school, which take place outside regular secondary school programs, are in most instances not included.

On the other hand, measures based on surveys of individuals may overestimate the percentage of graduates owing to self-reporting bias, and failure on the part of some respondents to distinguish between completing high school and graduation (receiving certification). Another source of difference at a jurisdictional level is that the survey estimates generally refer to residents of a jurisdiction at the time of the survey, including interprovincial migrants and immigrants who obtained their education in another jurisdiction or outside Canada. Administrative data, however, refer only to those enrolled in the school system of the particular jurisdiction.

Despite these differences in graduation rates, the data from each source have strengths. Presenting both together paints a clearer picture of high school graduates and leavers. The administrative data are not subject to sampling errors associated with survey data, and hence can be examined at a greater level of detail, such as gender and age. In addition, the administrative data yield regular time series, which are well suited to monitoring trends over time. Survey-based data are useful to gather background information on the characteristics of both graduates and high school leavers. This information offers insights into the reasons for leaving school and helps to inform strategies aimed at retaining students and encouraging them to complete school. Also, surveys that are longitudinal in design can examine the impact of completing or not completing school on a wide variety of social and labour market outcomes later in life.

In this report we focus on graduation (that is, obtaining a high school certificate) as distinct from completion (finishing the final year of high school with or without obtaining the certificate). Completion rates may be examined in future PCEIP reports.

Graduation rates based on administrative data. These rates are calculated by Statistics Canada based on data reported to them by ministries/departments of education and training, together with population estimates produced by the Demography Division at Statistics Canada. The data that are reported are guided by a standard set of definitions (see below) and the rates for individual jurisdictions are considered to be comparable. The graduation rates reported by OECD (Table C5.1) are based on the same methodologies and definitions. Rates are defined below at the pan-Canadian level and are defined analogously for each jurisdiction:

Graduation rate =

(sum of graduates of all ages) /

(sum of the population at the typical age of graduation)

Typical-age graduation rate =

(sum of graduates whose age is equal to or less than the typical age of graduation) /

(sum of the population at the typical age of graduation)

After-typical-age graduation rate =

(sum of graduates whose age is greater than the typical age of graduation) /

(sum of the population at the typical age of graduation)

Where

Typical age of graduation is the age at which persons complete high school if they start at the prescribed age and experience no repetition or interruption in their schooling. The typical age of graduation is 18 for all jurisdictions except Quebec, where it is 17.

Secondary school graduate: Secondary school graduation refers to completion of grade 12 in all jurisdictions except Quebec (Secondary V). Secondary school graduate statistics are presented for academic years.

Population at the typical age of graduation is obtained from population estimates produced by the Demography Division, Statistics Canada.

The following definitions apply:

Graduation rate for age cohort y =

(estimate of graduates in age cohort y) /

(estimate of the population in age cohort y)

Where

Graduates are respondents reporting that they graduated from high school by December of the reference year (1991 or 1999).

Chapter D:

Postsecondary education

Indicator D1: Enrolment in postsecondary education

Trade-vocational enrolments show only enrolments reported by publicly funded postsecondary institutions in Canada; enrolments in private postsecondary training institutes are not included.

The number of apprentices is based on data provided by provincial/territorial apprenticeship branches and includes all individuals registered in an apprenticeship program, regardless of whether or not they had been enrolled in any formal classroom training during the year.

Provincial and territorial governments coordinate apprenticeship programs in their jurisdiction. Most of the training time for an apprentice is spent on the job working with experienced tradespeople, usually over a period of 3 to 4 years. A portion of the apprenticeship program is spent in formal classroom instruction, typically offered in a college or vocational school. When this occurs, the training institute reports apprenticeship enrolments in the in-class portion only.

Enrolment data for university transfer programs include enrolment in university college programs.

Indicator D2: Adult education and training

No notes.

Indicator D3: Human resources

No notes.

Indicator D4: Research and development

Expenditures for Research and development (R&D) performed by the federal government in the National Capital Region are excluded from the Quebec and Ontario data for total domestic expenditures on R&D. This is a standard practice followed by Statistics Canada as not all expenditures made by an R&D unit are spent in the region of its physical location (e.g., supplies may be purchased from regions outside the unit's location). In the case of the National Capital Region, labour moves freely between Quebec and Ontario so that even wages and salaries paid by an R&D unit are partly spent outside the area of location. Further information on the approach, along with the actual expenditures, is available in Statistics Canada's working paper titled *Estimation of Research and Development Expenditures in the Higher Education Section, 2002-2003* (Catalogue No. 88F0006XIE—No. 019).

University expenditures on R&D are estimated by the Science Innovation and Electronic Information Division of Statistics Canada by adding the sponsored research expenditures reported by universities in the annual Financial Information of Universities and Colleges Survey to the estimations of the indirect expenditures generated by the reported sponsored research. This technique reflects recent changes made in the methods used by Statistics Canada to better estimate university R&D expenditures, first used during the 1998 estimation procedure and applied to the historical data going back to 1988. Further details are available in *Estimation of Research and Development Expenditures in the Higher Education Sector 2002-2003* (Catalogue No. 88F0006XIE—No. 019), available from Statistics Canada's Web site as part of their free products.

General university funds represent government transfers (or block grants) to universities that are used to support R&D activity. Although these funds represent indirect government spending on R&D, in pan-Canadian statistics they are allocated to university funding for R&D because of the difficulty of categorizing these funds as provincial or federal. In international data, these funds are included as part of overall government funding. The one-time grant to universities awarded by the federal government to assist in indirect costs associated with research activities taking place at the universities is included in the expenditures on research and development by the university sector ($203 million in 2001-2002 and $21 million in 2002-2003). The estimation system used to calculate indirect costs on sponsored research was adjusted to ensure that the source of this one-time grant is the federal government.

The R&D financial data are for universities and affiliated institutions including research hospitals. In 2002, there was an increase over previous years in the number of teaching hospitals for which data were reported to Statistics Canada. In 2002-2003, this reporting change is especially relevant in Quebec and British Columbia.

The source for internationally comparative statistics on R&D is the OECD. Although OECD is working to improve the international reporting of R&D statistics, comparability issues exist as noted in the international tables and figures presented here. Because of these comparability issues, it is important that the reader exercise caution in interpreting these statistics.

OECD guidelines cover the postsecondary education sector defined as all universities, colleges of technology, and other institutes of postsecondary education, whatever their source of finance or legal status. As pan-Canadian data on R&D in community colleges and similar institutions are not available as part of the current Statistics Canada data collection program, pan-Canadian data reflect R&D activity in universities and affiliated institutions only. However, OECD indicates that this difference is too small to affect the comparability of international indicators. To reflect this difference, however, pan-Canadian tables and figures make reference to the university sector, while international tables make reference to the postsecondary education sector.

Table D4.1 and Figure D4.1 compare Canada to all OECD countries. To facilitate the international discussion, subsequent comparisons make use of the G-7 and Sweden, Finland, and Iceland—non-G-7 competitor countries to Canada that are leaders among the OECD countries in terms of the level of resources that they devote to R&D and that thereby serve as useful reference points.

The deflator used to convert current R&D expenditures to constant dollars is the GDP implicit price index, which differs from the Consumer Price Index (CPI) used in Chapter B (see Appendix 6, Basic reference statistics).

Indicator D5: Postsecondary completions and graduation rates

The Enhanced Student Information System (ESIS)—a single and comprehensive survey of postsecondary programs, enrolments, and graduations—is being implemented, and, in most of the country, institutions are already reporting in ESIS format. Initial start-up problems with ESIS have limited the data available for this publication.

OECD classifies graduates in two categories: Tertiary Type A programs (ISCED 5A) are largely theory based, typically last four or more years, and are usually, but not always, offered in universities. These programs include second degree programs like a master's degree. Tertiary Type B programs (ISCED 5B) are typically shorter than those of Tertiary Type A and focus on practical, technical, or occupational skills for direct entry into the labour market. They have a minimum duration of two years.

For college and university programs, graduation rates have been calculated by relating the number of graduates to the size of the population at a typical graduation age. For apprenticeship and vocational graduations, there is no expected age at graduation, and, consequently, graduation rates have not been calculated. The typical ages at graduation that have been used in this publication are:

- College: 21
- Undergraduate: 22
- Master's: 24
- Doctorate: 27

Table D5.4 shows rates by province of study, where the graduates from universities within a province are compared to the population of that province at the typical age of graduation. The rate by province of study includes students who reside outside Canada, as well as students for whom no jurisdiction of residence is identified through the survey data. Canadian students who obtain a degree from a foreign institution are excluded.

Indicator D6: Educational attainment of the population aged 25 to 64

Educational attainment measures an individual's highest level of completed schooling and is sometimes used as a proxy measure of human capital. OECD has defined human capital as the knowledge, skills, competencies and attributes embodied in individuals that facilitates the creation of personal, social and economic well-being.

Pan-Canadian comparisons of educational attainment are based on the Census. The international comparisons of educational attainment presented here are based on OECD's *Education at a Glance, 2004*. In turn, the data that Canada submits to the OECD are from the Labour Force Survey (LFS). Levels of education derived from the Census and Labour Force Survey are as follows:

- Less than high school: persons who did not graduate from high school
- High school: high school graduates with no further education, or with some postsecondary education, but with no degree, certificate or diploma
- Trade vocational: persons with a trade certificate or diploma from vocational or apprenticeship training

- College: persons with a non-university certificate or diploma from a community college, CEGEP, or school of nursing
- University: persons with a bachelor's degree, university degree or certificate above bachelor's degree, or a certificate below bachelor's degree.

The order of these categories reflects education pathways that require increasing time commitments to schooling. Each person is classified according to the highest level completed. For example, a person holding both a college diploma and a university degree would be counted in the university category.

The three highest categories are at times merged to form a broad group of "postsecondary graduates" or persons with "qualifications above the secondary level." Trade certificates are included, even though completion of secondary school may not have been a prerequisite. However, the trades category includes registered apprenticeships obtained after a combination of classroom and on-the-job training that may take up to five years to complete. This is a significant educational investment to achieve a highly specialized skill.

In the Census, education information is gathered for the population aged 15 and over. Most young people aged 15 to 24 are still in school, so their current level of education understates the skills they will ultimately bring to the labour market. Therefore, the discussion on levels of education is primarily about the population aged 25 to 64. From a life-cycle perspective, the age group 25 to 64 roughly covers people who are old enough to have completed their formal education, but young enough to work. (The average age of retirement has been estimated at about 61, using LFS data.)

The concordance between the educational attainment levels presented in Indicator D6 and those reported by OECD, based on the 1997 International Standard Classification for Education (ISCED97), is as follows:

PCEIP educational attainment levels	OECD levels based on ISCED97
Less than high school	0, 1, 2
High school	3
Trade-vocational	4
College	5B
University	5A / 6

It should be noted that the mapping of educational attainment data from the LFS into ISCED levels is not exact, as the LFS questions were designed before the introduction of ISCED 97 and hence do not allow for some differentiations made under ISCED. For example, two types of programs are offered by CEGEPs in Quebec—two-year pre-university programs, which have been classified at the ISCED 4 level, and three-year career-oriented programs, classified at the ISCED 5B level. As the LFS questionnaire does not distinguish these separate streams within CEGEPs, both streams have been included in the college category for this publication and also in the educational attainment data, which is reported to OECD as ISCED 5B. Hence, in data published by OECD, Canadian attainment levels are slightly overstated at the ISCED 5B level and understated at the ISCED 4 level.

Chapter E:

Transitions and outcomes

Indicator E1: Transitions to postsecondary education and labour market

For the comparisons between 1993-1994 and 2003-2004 (Tables E1.1 and E1.2) and for Table E1.3, data from the LFS on school attendance and employment activities were used.

As the distribution of the youth population by single year of age is truncated at age 25 in the postsecondary education data, the number of students over age 25 was divided by the population aged 26 to 35 and the ratios were divided by ten to obtain the average participation rates for persons over age 25. The secondary education data were truncated at age 20, but no similar adjustment was made.

Indicator E2: Labour market outcomes

The Canadian data used in this section are from the LFS and the Census of Population carried out by Statistics Canada. International data are drawn from the OECD publication *Education at a Glance, 2004*.

Glossary

A

Aboriginal identity:

Refers to those persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo), and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation. In 1991 and previous Censuses, Aboriginal persons were determined using the ethnic origin question (ancestry). The 1996 Census included a question on the individual's own perception of his or her Aboriginal identity. The 2001 Census question is the same as the one used in 1996.

Academic rank:

This refers to a classification of university teaching staff according to level of academic appointment. Generally, the ranking consists of "full professor" at the top, followed by "associate professor". The "other" category refers to assistant professors, lecturers, and instructors.

After-typical-age graduation rate:

At the secondary school level, the after-typical-age graduation rate is calculated by relating the number of graduates whose age is greater than the typical age of graduation to the population at the typical age of graduation. The typical age of graduation is the age at which persons complete high school if they start at the prescribed age and experience no repetition or interruption in their schooling. The typical age of graduation is 18 for all jurisdictions except Quebec, where it is 17.

Average enrolment:

The total enrolment in elementary-secondary schools in a jurisdiction as of September 30 (October 31 for Ontario), divided by the total number of elementary-secondary schools in that jurisdiction.

Average number of students per school:

The total enrolment in elementary-secondary schools in a jurisdiction as of September 30 (October 31 for Ontario), divided by the total number of elementary-secondary schools in that jurisdiction.

Appendix 3

Average school size:

The total enrolment in elementary-secondary schools in a jurisdiction as of September 30 (October 31 for Ontario), divided by the total number of elementary-secondary schools in that jurisdiction.

B

Birth rate:

Number of births per 1,000 population.

C

Capital expenditure:

Expenditures used to purchase assets intended to last longer than one year. It is also a measure of the value of capital acquired during the year in question. These expenditures include spending for the construction, renovation or major repair of buildings and to replace or purchase new equipment.

Career technical programs (by registration status):

These programs, which are offered at community colleges, prepare students to enter occupations at a level between that of the university-trained professional and the skilled tradesperson. Secondary school completion or equivalent is a normal prerequisite for entry. These programs require at least one school year of 24 weeks or more for completion. Most take two or three years and some take longer. One-year programs lead to a certificate and the longer ones lead to a diploma.

> *Full-time/part-time*: A classification of enrolment as either full time or part time is made according to institutional definitions. Since standard pan-Canadian definitions of full-time and part-time enrolment do not exist, it can be expected that the definitions used by institutions will vary somewhat.

Census division (CD):

A Census geographical unit comprised of a group of neighbouring municipalities joined together for the purposes of regional planning and managing common services (such as police or ambulance services). These groupings are established under laws in effect in certain provinces and territories of Canada. For example, a census division might correspond to a county, a regional municipality or a regional district. In other provinces and territories where laws do not provide for such areas, Statistics Canada defines equivalent areas for statistical reporting purposes in cooperation with these provinces and territories.

Census metropolitan area (CMA):

A Census geographical unit consisting of one or more adjacent municipalities centred on a large urban area (known as the urban core). The census population count of the urban core is at least 100,000 to form a census metropolitan area (CMA). To be included in the CMA, other adjacent municipalities must have a high degree of integration with the central urban area, as measured by commuting flows derived from census place of work data. Once an area becomes a CMA, it is retained as a CMA even if the population of its urban core declines below 100,000.

Coefficient of variation:

Coefficients of variation (CV) provide a measure of the reliability of the estimate, taking into account sampling variability. In order to estimate whether two values are statistically significantly different, the following formula can be applied to approximate a 95% confidence interval:

Y ± 2 (CV x Y)/100, where Y is the estimate

This approximate confidence interval gives a range within which the true value in the population is likely to fall. If two confidence intervals do not overlap, then there is a significant statistical difference between the two estimates. It should be noted that this formula is approximate because it estimates a confidence interval that is slightly higher than the 95% level of confidence. As a result, there is a small risk that a significant difference will be identified as insignificant.

College enrolment (by registration status):

Includes enrolment in career-technical and university transfer and university college programs of postsecondary non-university institutions as well as enrolment in radiography, medical technology, health records and registered nursing programs in hospital schools.

> *Full-time/part-time*: A classification of enrolment as either full time or part time is made according to institutional definitions. Since standard pan-Canadian definitions of full-time and part-time enrolment do not exist, it can be expected that the definitions used by institutions will vary somewhat.

Common-law:

Refers to two people of the opposite sex or of the same sex who live together as a couple, but who are not legally married to each other.

Community college:

Refers to community colleges, CEGEPs, technical institutes, hospital and regional schools of nursing, and establishments providing technological training in specialized fields. In counting the number of institutions, hospital schools of radiography, medical technology and health records are included.

Compensation of staff (educators and other staff):

Expenditure on compensation of staff includes gross salaries (before deduction of taxes, contributions for retirement or health care plans, and other contributions or premiums for social insurance or other purposes), plus expenditure on retirement (actual or imputed expenditure by employers or third parties to finance retirement benefits for current educational personnel) and other non-salary compensation (fringe benefits).

Constant dollars:

Constant dollars are derived by applying a price deflator to convert expenditures displayed in a time series to a price level that existed at a certain point in time (the base year) (see Appendix 6). Constant dollars eliminate the changes in the purchasing power of the dollar over time. The result is a series as it would exist if the dollar had a purchasing power equal to the purchasing power in the base year.

Current expenditure:

Expenditures which an institution purchases and consumes within a year and which the institution purchases on an on-going basis. Examples of current expenditures include costs directly attributable to instruction such as salaries, instructional aids, administrative support, teacher development, and costs for other educators such as counsellors. In this report current expenditures are categorized further into:

Compensation of staff (educators and other staff): Expenditure on compensation of staff includes gross salaries (before deduction of taxes, contributions for retirement or health care plans, and other contributions or premiums for social insurance or other purposes), plus expenditure on retirement (actual or imputed expenditure by employers or third parties to finance retirement benefits for current educational personnel) and other non-salary compensation (fringe benefits).

Other current expenditures: Covers all non-salary related items such as spending on tuition fees and books, spending attributable to research and development, utilities, school services under contract, building operations and maintenance staff and so on. Other non-salary costs include those related to the maintenance of buildings as well as supplementary costs such as lunch programs and transportation.

E

Earnings or employment income:

Refers to total income received as wages and salaries, net income from a non-farm unincorporated business and/or professional practice, and/or net farm self-employment income.

Education expectancy:

Average duration of formal education in which a 15-year-old person can expect to enrol over his or her lifetime. It is calculated by adding the enrolment rates for each single year of age from age 15 onward.

Educational attainment:

Measures an individual's highest level of completed schooling, and is sometimes used as a proxy measure of human capital. Levels of educational attainment derived from the Census and Labour Force Survey are as follows:

Less than high school: persons who did not graduate from high school.

High school: high school graduates with no further education, or with some postsecondary education, but with no degree, certificate or diploma.

Trade-vocational: persons with a trades certificate or diploma from a vocational or apprenticeship training.

College: persons with non-university certificate or diploma from a community college, CEGEP, school of nursing.

University: persons with a bachelors degree, university degree or certificate above bachelors, or certificate below bachelors degree.

Elementary-secondary enrolment:

The head count of students enrolled in elementary and secondary schools on September 30 of the school year (October 31 in Ontario). Coverage extends to students in public and private schools, federal schools and schools for the visually and hearing impaired, including students enrolled in pre-elementary programs offered by these schools.

Elementary schools:

Include public, private, and federal schools, and schools for the visually and hearing impaired. Schools are classified as elementary if they provide Grade 6 and under or a majority of elementary grades.

Elementary-secondary schools:

Include public, private, and federal schools, and schools for the visually and hearing impaired. Schools are classified as elementary if they provide Grade 6 and under or a majority of elementary grades, and secondary if they offer Grade 7 and over or a majority of secondary grades.

Enrolment rate:

The enrolment rate for a particular level of education, or a particular age group is defined as the total enrolment expressed as a percentage of a specified age group. For example, the pre-elementary enrolment rate is the number of individuals enrolled in pre-elementary education divided by the population of 4- and 5-year-olds. The enrolment rate for 4-year-olds has been expressed as the total enrolment of 4-year-olds divided by the total 4-year-old population. The population of a particular age group is the number of persons who are that age on July 1 of the year in question.

F

Federal schools:

Include schools administered directly by the federal government, overseas schools operated by the Department of National Defence for dependants of Canadian Forces personnel, and schools operated by Indian and Northern Affairs Canada or by band councils.

Fertility rate:

Number of births per woman.

The four major urban regions in Canada:

Montréal and adjacent region, the extended Golden Horseshoe, the Calgary–Edmonton corridor, and the Lower Mainland and southern Vancouver Island. These regions are not part of Statistics Canada's standard geography units. They were defined based on population growth and density for analytical purposes for the first release of the 2001 Census results.

The extended Golden Horseshoe consists of the urban centres of Oshawa, Toronto, Hamilton, St. Catherines–Niagara, Kitchener, Guelph, and Barrie.

The Montréal and adjacent region includes Montréal, Salaberry-de-Valleyfield, Saint-Jean-sur-Richelieu, Saint-Hyacinthe, Sorel, Joliette, and Lachute.

The Lower Mainland and southern Vancouver Island consists of the urban centres of Vancouver, Abbotsford, and Chilliwack on the mainland, and Victoria, Duncan, Nanaimo, and Parksville on Vancouver Island.

The Calgary–Edmonton corridor stretches from Calgary in the south to Edmonton in the north and includes Leduc, Red Deer, and Wetaskiwin.

Full-time college educators:

This refers to all teaching staff, academic administrators, guidance counsellors employed full-time, as defined by the institution, with a contract of seven months or more. Educators on leave, presidents and principals are excluded. Teaching staff who spend at least 50% of their time teaching at the college level are classified as college educators; those who spend more than 50% of their time teaching at the trade-vocational level are classified as trade educators.

Full-time university educators:

All academic staff and senior administrators whose term of appointment is not less than 12 months. Presidents and vice-presidents are excluded.

G

G-7:

A group of the leading seven industrialized countries: Canada, France, Germany, Italy, Japan, United Kingdom, and the United States. The group remained at seven until Russia, who had attended G-7 meetings as an observer throughout the 1990s, was invited to formalize this relationship in 1997 (hence the group became the G-8).

G-8:

A group of the leading eight industrialized countries: Canada, France, Germany, Italy, Japan, Russian Federation, United Kingdom, and the United States.

Gender gap (salary):

The average salary of females as a percentage of the average salary of males.

Graduates:

Postsecondary level: Students who completed the requirements for degrees, diplomas or certificates from university, college or other postsecondary programs during the calendar year of their graduation. Only graduates from public postsecondary institutions are included.

Secondary school (from administrative data): Students who obtain a secondary school graduation certificate. Does not include people who complete high school outside the regular secondary school systems. Data on graduations from some secondary programs are not uniformly available across jurisdictions, and General Education Diplomas (GED), adult basic upgrading and education, and graduation from adult day school, which take place outside regular secondary school programs, are in most instances not included. See Appendix 2 (Methodological notes) for a discussion of the differences between graduation rates calculated from administrative data and population surveys.

Graduate enrolment (by registration status):

This includes university students in master's and doctoral degree programs or in graduate diploma and certificate programs. Full-time graduate enrolment also includes hospital residents, and since 1980, interns.

Full-time/part-time enrolment: A classification of enrolment as either full time or part time is made according to institutional definitions. Since standard pan-Canadian definitions of full-time and part-time enrolment do not exist, it can be expected that the definitions used by institutions will vary somewhat.

Graduation rates:

For college and university programs, graduation rates have been calculated by relating the number of graduates to the size of the population at a typical graduation age. For apprenticeship and vocational graduations, there is no expected age at graduation, and, consequently, graduation rates have not been calculated. The typical ages at graduation that have been used in this publication are:

- College: 21
- Undergraduate: 22
- Master's: 24
- Doctorate: 27

At the elementary-secondary level, graduation rates are calculated by relating the number of graduates of all ages to the population at the typical age of graduation, where the typical age of graduation is the age at which persons complete high school if they start at the prescribed age and experience no repetition or interruption in their schooling. The typical age of graduation is 18 for all jurisdictions except Quebec, where it is 17.

Gross Domestic Product (GDP):

Represents the total market value of a country's (or province/territory's) goods and services produced over the year.

H

High school leaver:

High school leavers are those who were not enrolled in high school and had not completed the requirements for a high school diploma.

High school leaver rate:

The high school leaver rate is the proportion of youth in a specified age group who have not completed their secondary education, and are not working toward its completion. In this report, the high school leaver rate is calculated for youth at 20 years of age because some were continuing their education after the typical age of graduation. This approach accounts for the "second chance" system in Canadian jurisdictions, whereby some youth who leave high school without completing their secondary education return to complete their studies at a later date.

Home language:

Refers to the language spoken most often or on a regular basis at home by the individual at the time of the census. In this report data are presented for persons of school age for whom the home language is neither English nor French.

Households:

Refers to a person or a group of persons (other than foreign residents) who occupy a private dwelling and do not have a usual place of residence elsewhere in Canada.

Human capital:

The knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being (this definition has been developed by the OECD and used for the purposes of this report).

I

Immigrants:

Refers to people who are, or have been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others have arrived recently. Does not include non-permanent residents who are defined as people from another country who had an employment authorization, a study authorization, or a Minister's permit, or who were refugee claimants at the time of the census and family members living here with them.

Index:

Annual cumulative percentage changes in a variable from a given base year, expressed as an index with the base year equal to 100. An index value of 140, for example, 10 years after the base year, would indicate a 40% increase in the variable over that time period.

Indirect costs of research:

Those costs that are incurred by an institution by virtue of the fact that researchers conduct sponsored or intramural research with the support of the institution. They are expenditures that cannot be identified readily and specifically with a particular project, instructional or other activity of the institution. Examples include the costs of the office of research or intellectual property management services, departmental administration, utilities, physical plant operation and maintenance, library, laboratory furniture and permanent equipment.

Intellectual property:

Discoveries, ideas and the like that can be protected for commercial gain. Includes inventions, computer software or databases, literary, artistic, dramatic or musical works, books, papers, educational materials, industrial designs, trademarks, integrated circuit topographies, new plant varieties, and know-how.

Inventions:

A subset of the overall intellectual property that includes any patentable product, process, machine, manufacture or composition of matter, or any new and useful improvement of any of these, such as new uses of known compounds.

L

Labour force:

The portion of the civilian, non-institutional population 15 years of age and over who form the pool of available workers in Canada. To be considered a member of the labour force, an individual must be working (either full-time or part-time) or unemployed but actively looking for work.

Labour force participation rate:

The participation rate represents the labour force expressed as a percentage of the population 15 years of age and over.

License:

An agreement with the client to use the institution's intellectual property for a fee or other consideration, for example equity in the company.

Licensing royalties:

Income generated from licensing (see "license").

Literacy:

The OECD initiated the Programme for International Student Assessment (PISA) to provide policy-oriented international indicators of the skills and knowledge of 15-year-old students. PISA assesses youth in three domains: reading literacy, mathematical literacy, and scientific literacy. These domains are defined in PISA as:

> *Reading literacy* is the ability to understand, use, and reflect on written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society.
>
> *Mathematical literacy* is the capacity to identify, understand and engage in mathematics, and to make well-founded judgments about the role that mathematics plays in an individual's current and future private life, occupational life, social life with peers and relatives, and as a constructive, concerned and reflective citizen.
>
> *Scientific literacy* is defined as the capacity to use scientific knowledge, to identify questions and to draw evidence-based conclusions in order to understand and help make decisions about the natural world and the changes made to it through human activity.

Lone parent:

Guardians and adults, regardless of marital status, without a partner but with children in their care.

Low income:

The income level, conveyed by Statistics Canada's low-income cutoffs (LICOs), at which a family may be in "straitened circumstances" because it has to spend significantly more of its income on the basics (food, shelter and clothing), than does the average family. The LICOs depend on family and community size.

Low-income cutoffs (LICOs):

Represent an income threshold where a family is likely to spend 20% more of its income on food, shelter and clothing than the average family, leaving less income available for other expenses such as health, education, transportation and recreation. LICOs are calculated for families and communities of different sizes.

M

Medium growth scenario:

Assumes that fertility and immigration remain at their current levels throughout the projection period. It also assumes that Ontario, Alberta and British Columbia gain population through interjurisdictional migration and that all other jurisdictions lose population through interjurisdictional migration.

O

Organisation for Economic Co-operation and Development (OECD):

A multidisciplinary international body made up of 30 member countries that offers a structure/forum for governments to consult and co-operate with each other in order to develop and refine economic and social policy. While the OECD does not set rules and regulations to settle disputes like other international bodies, it encourages the negotiation of agreements and the promotion of legal codes in certain sectors. Its work can lead to binding and non-binding agreements between the member countries to act in a formal way. The OECD is best known for its publications and statistics. Its 30 member countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

P

Participation rates:

This is calculated by taking the total enrolment of a particular level of education as a percentage of a specified population group.

Patent:

A government document providing protection for an invention so that it cannot be made, used, or sold without the permission of the patent holder. Patents for a single invention are usually taken in various countries, as the rights conferred by a patent are limited to the country in which it is granted.

Per capita expenditure:

This measure divides the spending on education in Canada, or in a province or territory, by the total population, to show how much is spent on education per person.

Per student expenditure:

This measure divides the spending on education in Canada, or in a province or territory, by the total enrolment at a given level of education, to show how much is spent on education per student at that level. Total enrolment includes full- and part-time students. This measure makes use of full-time equivalents which converts the number of part-time students into a full-time equivalent by dividing the number of part-time students by 3.5.

Pre-elementary programs:

Pre-Grade 1 programs offered by public, private and federal schools, as well as schools for the visually and hearing impaired, generally targeting children 4 or 5 years of age. It does not include early childhood education programs outside the formal education system.

Private business colleges:

Private schools, licensed or not by a jurisdiction, providing professional and vocational training for profit.

Private expenditures:

Expenditures on education by households or other private entities (commercial and not-for-profit) consisting of:

- Fees paid to educational institutions (e.g., for tuition, registration, laboratory, lodging, meals and for other services provided to students by the institution). Note that Statistics Canada surveys only institutions and, therefore, costs for off-campus housing not provided by the institution are not included in the total amount spent.
- Financial aid to students or households coming from private sources (e.g., scholarships from business firms and religious and other non-profit organizations).
- Direct payments by private entities to educational institutions (e.g., contributions or subsidies to vocational-technical schools, contracts let to universities for research or other services, grants to educational institutions from non-profit organizations, charitable donations [other than from households], expenditures by private employers for apprenticeship training and other school and work-based educational programs).

Private schools:

Operated and administered by individuals or groups. They may be either denominational or non-denominational.

Private revenues at universities:

Revenue obtained from any source other than government, categorized as:

Student fees: Payments obtained from students directly in the form of tuition and other fees.

Non-government grants and contracts, donations and bequests: Financial support received by colleges and universities from donors, wills from grants and contracts from sources other than government, the latter provided with specific stipulations.

Sales: Revenue from sales of services and products by the institution.

Investment: Revenue from dividends, bonds, mortgages, short-term notes and bank interest.

Miscellaneous revenue of colleges and universities: Commissions, royalties and fees from the use of institution-owned rights or properties, fees for services rendered, library and other similar fines, rentals, net gain or loss on the sale of fixed assets and any type of revenue not identified under other forms of revenue.

Public expenditures:

Refer to total current and capital expenditures at all levels of government. Public expenditures include:

- Direct purchases by governments of educational resources (e.g., direct payments of teachers' salaries by a central or regional education ministry, direct payments by a municipality to building contractors for construction of school buildings, procurement of textbooks by a jurisdiction or regional authority for subsequent distribution to local authorities or schools).
- Direct payments by government agencies to educational institutions that have the responsibility of purchasing educational resources themselves (e.g., government block grants to universities which they use to compensate personnel, a government subsidy to a private school, and government payments under contract to a private firm undertaking educational research).
- Direct expenditures designated for capital projects (e.g., building expansions or construction, laboratory equipment in support of research and development).
- Public to private transfers (e.g., financial aid in the form of government scholarships and grants, special public subsidies [such as for transport, medical expenses, studies abroad], family allowances or child allowances that are contingent on student status, student loans).

Note that public expenditures on education as presented in Table B2.1 are not consistent with this definition as they are derived from a different data source in order to permit comparisons of spending across governmental programs. See methodology notes in Appendix 2 for Chapter B, and B2 in particular, for further details.

Public schools:

Established and operated by local school authorities pursuant to the public schools legislation of the province or territory. Also included in this category are Protestant and Roman Catholic separate schools and schools operated in Canada by National Defence within the framework of the public schools system.

Purchasing power parities (PPPs):

The currency exchange rates that equalise 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. In other words, PPPs are the rates of currency conversion that eliminate the differences in price levels among countries. The PPPs used in this report are given in Appendix 6. PPP rates are not equivalent to general currency exchange rates.

R

Receptive vocabulary:

Receptive vocabulary in the NLSCY refers to the understood vocabulary of the child; that is, the number of words a child understands when he or she hears them spoken. A child's (or adult's) understood vocabulary level is measured relative to other individuals of the same age. In the NLSCY, receptive or understood vocabulary level is measured using the Peabody Picture Vocabulary Test – Revised.

Registered apprentices:

Based on data provided by provincial/territorial apprenticeship branches and include all individuals registered in an apprenticeship program, regardless of whether or not they had been enrolled in any formal classroom training during the year.

Registered apprenticeship completions:

Refers to those who received a Red Seal or provincial certificate for completing both the in-class and on-the-job training required by apprenticeship programs. The Red Seal or Interprovincial Standards Program was introduced in the late 1950s to make it easier for skilled workers to move across Canada without having to re-qualify in a trade when entering employment in a new province. This compares to a provincial certificate which is valid only for the province in which it is issued. The Red Seal is available in 45 trades at this time, in trades such as cabinet maker, machinist, motor vehicle body repair, roofer, bricklayer and welder.

Registered apprenticeship programs:

A program based on a contract registered with the province/territory, between the apprentice and the employer, in which the employer agrees to provide an opportunity to obtain the experience and skill required for a trade. Programs vary in length from two to five years, depending on the trade. Registered apprenticeship combines on-the-job experience with four- to eight-week periods of in-class training. In most jurisdictions, the in-class portion is usually taken at a postsecondary institution during the apprenticeship training. In Quebec, however, the in-class training is taken prior to beginning the apprenticeship program. Depending on the jurisdiction and trade, graduates of apprenticeship programs can receive both a Certificate of Apprenticeship and a Certificate of Qualification.

S

School-age population:

Comprises all individuals between the ages of 5 and 24, regardless of whether they are in school or not. This is the age range at which most people undertake their formal education.

Schools for the visually or hearing impaired:

Provide special facilities and training for visually or hearing impaired students. Most of these institutions are under direct provincial or territorial government administration.

Secondary schools:

Include public, private and federal schools, and schools for the visually and hearing impaired. Schools are classified as secondary if they offer either Grade 7 and over, or a majority of years at the secondary level.

Socio-economic status (SES):

Socioeconomic status (SES) is a term used to summarise a variety of factors, including parental education and occupation, that influence student performance. In PISA 2003, SES is measured by an index that includes information describing family structure, parental education and occupation, parental labour market participation, and whether a student's family has specific educational and cultural possessions at home.

Sources of funds for university R&D are categorized as:

Federal government: Through the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), the Canadian Institutes of Health Research (CIHR), the Canada Foundation for Innovation and federal departments and agencies.

Provincial governments: Including municipal governments.

Business enterprises: Including donations, bequests and contracts from individuals and businesses.

Private non-profit organizations: Including donations, bequests, and contracts from foundations and not-for-profit organizations.

Foreign sources: Funding entities located abroad.

Universities: Universities fund their own R&D using two revenue streams:

> *General university funds:* These represent government transfers (or block grants) to universities that are used to support R&D activity. Although in essence these funds represent indirect government spending on R&D, for the purposes of pan-Canadian statistics they are allocated to university funding due to the difficulty of categorizing these funds as provincial or federal. However in international comparisons, these funds are included as indirect government funding at the overall government level.
>
> *Own revenue sources:* This refers to self-generated revenue of universities from sources such as tuition fees, investment income, revenue from sales of services and products by the institution and license and patent incomes.

Spin-off company:

A new company created based on university R&D in which the university has an ongoing interest, established for one or more of the following reasons: (1) to license the institution's technology; (2) to fund research at the institution in order to develop technology that will be licensed by the company; (3) to provide a service that was originally offered through the institution's department or unit. Only companies started in a formal arrangement with the university are included (in other words, companies started independently by faculty members or students are not covered).

Sponsorship of university R&D:

Refers to university research that is supported either in the form of a grant or by means of a contract from a source external to the institution. Funding sources include government, business enterprises, and donors.

Step family:

A family in which at least one of the children in the household is from a previous relationship of one of the parents.

Student–computer ratio:

Total number of students enrolled in a school divided by the total number of computers in the school. This report uses data on this measure from PISA which in turn reports this ratio for schools in which 15-year-olds are enrolled.

T

Total expenditure:

Combined public and private expenditures on education.

Trades:

There are approximately 170 registered trades in Canada, each with specific standards and training requirements as set down by each province and territory. Provinces designate each trade as "compulsory" or "voluntary". In order to work in a compulsory trade an individual must either be registered as an apprentice or have the proper certification through completion of apprenticeship training. Voluntary trades also have apprenticeship programs, but registration as an apprentice or certification is not mandatory in order to work in the trade.

Trade-vocational enrolment (by registration status):

Covers students enrolled in the in-class portion of apprenticeship programs, pre-employment/pre-apprenticeship programs, academic and skill upgrading programs, language training, job readiness and orientation to work programs and special training. Trade-vocational enrolments only show enrolments reported by publicly-funded postsecondary institutions in Canada; enrolments in private post-secondary training institutes are not included.

> *Full-time/part-time enrolment*: Enrolment in programs of 25 weeks or more is identified as full time, while enrolment in programs of 24 weeks or less is considered part time. A large portion of the in-class training for apprenticeship programs is structured in study blocks of four to eight weeks, and would be classified as part time, even though the length of the apprenticeship program itself may be from two to five years. However, some jurisdictions, notably Ontario, identified the total weeks of in-class training over the whole apprenticeship period, and as a result, a large portion of the registered apprenticeship enrolments are included in the full-time data rather than the part-time. Full-time enrolment includes, for example, most of the pre-employment/pre-apprenticeship programs and some of the longer programs in academic upgrading, language and job readiness training. Part-time enrolment includes, in addition to the registered apprenticeship programs, most of the programs in skill-upgrading, orientation, job readiness and special training.

Trade-vocational programs:

Trade-vocational programs at community colleges and similar institutions are those that do not require secondary school completion and do not include continuing education or general interest programs. They include the following programs:

> *Pre-employment/pre-apprenticeship programs:* Provide basic training in a particular trade, offering entry-level skills for employment. These programs also offer the knowledge and skills required to enter an apprenticeship program.
>
> *Registered apprenticeship programs:* A program based on a contract registered with the province/territory, between the apprentice and the employer, in which the employer agrees to provide an opportunity to obtain the experience and skill required for a trade. Programs vary in length from two to five years, depending on the trade. Registered apprenticeship combines on-the-job experience with six- to eight-week periods of in-class training. In most jurisdictions, the in-class portion is usually taken at a postsecondary institution during the apprenticeship training. In Quebec, however, the in-class training is taken prior to beginning the

apprenticeship program. Depending on the jurisdiction and trade, graduates of apprenticeship programs can receive both a Certificate of Apprenticeship and a Certificate of Qualification.

Pre-vocational academic upgrading or basic training for skill development (BTSD programs): Designed to help individuals obtain or upgrade prerequisites in basic education to qualify for further training or employment. They are aimed at improving the students' knowledge in the basic subjects of mathematics, English or French, and the general sciences.

Pre-vocational language programs: These programs offer a basic knowledge of English or French. As second language programs, they are primarily aimed at recent immigrants and others whose first language is neither English nor French.

Skill upgrading or refresher programs: Designed to instruct students in new occupational methods and techniques. Students in these programs have prior training and work experience in their occupation, but require further training, in order that they may keep pace with rapid changes in their field often brought on by new technology.

Job readiness training (JRT): Designed to increase the employability of students wanting to enter or re-enter the labour force. The program assists students by providing them with career exploration, job search, life skills and basic academic training.

Orientation programs: Designed to guide students into trade or vocational occupations and provide them with job search skills. These programs are not designed to teach the skills necessary for specific employment but to provide the student with sufficient knowledge to pursue an occupation. Programs included in this category are career exploration, employment orientation for women, introduction to non-traditional occupations, industrial orientation.

Special training and other programs: Includes training programs designed for the specific needs of particular groups, industries or communities. These programs offer classroom or on-the-job training, as well as both in combination, to counter skill shortages in the labour market. Also included in this group are trade-vocational and preparatory programs that do not fall into any other major category type.

Typical-age graduation rate:

At the secondary school level this is calculated by relating the number of graduates whose age is equal to or less than the typical age of graduation to the population at the typical age of graduation. The typical age of graduation is the age at which persons complete high school if they start at the prescribed age and experience no repetition or interruption in their schooling. The typical age of graduation is 18 for all jurisdictions except Quebec, where it is 17.

U

Undergraduate enrolment (by registration status):

University students in bachelor's and first professional degree programs, undergraduate diploma and certificate programs, and non-university courses offered in universities. In the 1970s full-time undergraduate enrolment also included medical interns. Since 1980, interns have been classified as graduate students.

Full-time/part-time enrolment: A classification of enrolment as either full time or part time is made according to institutional definitions. Since standard pan-Canadian definitions of full-time and part-time enrolment do not exist, it can be expected that the definitions used by institutions will vary somewhat.

Undergraduate university tuition fees:

Undergraduate tuition fees charged to full-time Canadian students over the academic year, September to April. The undergraduate faculties used in the calculations are Agriculture, Architecture, Arts, Commerce, Dentistry, Education, Engineering, Household Sciences, Law, Medicine, Music and Science.

Unemployment rate:

Shows the unemployed as a proportion of the labour force. The unemployed persons are those who, during the reference week, were available for work and were either on temporary layoff, had looked for work in the past four weeks or had a job to start within the next four weeks. The labour force is made up of the employed and the unemployed.

Universities:

These include:

Universities: Independent institutions granting degrees in at least arts and sciences.

Colleges of theology: Independent institutions granting degrees only in theology.

Liberal arts colleges: Independent institutions granting degrees in only in arts.

Other: Independent institutions granting degrees in specialized fields other than theology (such as engineering, fine arts).

University college programs:

These refer to degree-granting programs offered by community colleges. These differ from university transfer programs also offered by some community colleges, as the college offers the degree-granting program in its entirety (that is, all the years of the degree-granting program). Community colleges offering these programs are able to do so as they have been awarded degree-granting powers in certain fields or programs of study by the jurisdiction. University college programs exist in British Columbia and to a lesser extent in Alberta. Statistics on university college enrolment are not captured and reported by Statistics Canada as part of its university statistics program, but rather with its college statistics. As of the date of production of this report, data on university college graduation were not available. However these degrees will be captured by the Enhanced Student Information System (ESIS).

University transfer programs (by registration status):

Programs of postsecondary non-university institutions that require secondary school completion to enter, and which provide a student with standing equivalent to the first or second year of a university degree program with which a student can apply for admission to subsequent senior years at a degree-granting institution. The "général" programs of the Quebec CEGEPs, completion of which is a prerequisite for entry into Quebec universities, are included in this classification.

Full-time/part-time enrolment: A classification of enrolment as either full time or part time is made according to institutional definitions. Since standard pan-Canadian definitions of full-time and part-time enrolment do not exist, it can be expected that the definitions used by institutions will vary somewhat.

V

Visible minority:

Refers to the visible minority group to which the respondent belongs. The *Employment Equity Act* defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour".

Data sources used in this publication

This appendix contains an alphabetical listing of all data sources used in this publication. An overview of each data source is provided along with contact information from which readers can obtain further details. Most of the data sources used in this publication pertain to Statistics Canada. Their contact information is:

Contact: Client Services, Centre for Education Statistics, Statistics Canada

Telephone: 1-800-307-3382 (toll free)

(613) 951-7608

Fax: (613) 951-9040

Email: educationstats@statcan.ca

The contact information for other data sources used in this report is included with the descriptions below.

Adult Education and Training Survey (AETS)

Centre for Education Statistics, Statistics Canada

Survey objectives: The Adult Education and Training Survey (AETS) is Canada's most comprehensive source of data on individual participation in formal adult education and training. It is the only Canadian survey to collect detailed information about the skill development efforts of the entire adult Canadian population. While the content of the AETS has evolved over time, the central objectives of the 2002 survey remain the same as for previous surveys in this series. The main objectives are to:

- Measure the incidence and intensity of adults' participation in job-related formal training.
- Profile employer support to job-related formal training.
- Analyze aspects of job-related training activities such as: training provider, expenses, financial support, motivations, outcomes and difficulties experienced while training.

Appendix 4

- Identify the barriers preventing individuals from participating in the job-related formal training they want or need to take;
- identify reasons explaining adults' lack of participation and of interest in job-related formal training.
- Relate adults' current participation patterns to their past involvement in and plans about future participation in job-related training .
- Measure the incidence and frequency of adults' participation in job-related informal training.
- Examine the interactions between participation in formal and informal job-related training.

Target population: The population is defined as people 25 years of age and over living in the ten provinces, excluding inmates of institutions such as prisons, hospitals, and long-term care facilities, residents of Indian reserves, and full-time members of the armed forces.

Survey frequency: 1984, 1986, 1990, 1992, 1994, 1998 and 2003.

Notes: Although data have been collected since 1984, the questionnaire structure and survey procedures were improved beginning in 1992. The 1994 AETS and the 1998 AETS were conducted based on the same methodology as the 1992 survey with only minor modifications to the questionnaire.

In 2003, the content of the AETS was revised to take into account recommendations coming from consultation exercises. As a result, more than half of the survey that was conducted in 2003 was made up of new questions and the target population was modified. The 2003 survey focused on job-related training and education while the 1998 survey gathered information on all training and education activities. Respondents were then asked if the training or education had been related to a current or future job. These changes may affect the comparability of participation rates to some unknown extent. Consequently, the changes from 1997 to 2002 could be smaller than they appear.

Annual Demographic Statistics, 2001

Statistics Canada Catalogue No. 91-213-XPB

Demography Division, Statistics Canada

The 2001 edition of this publication provides the most recent population estimates and projections up to 2006 by age group and sex, plus data on births, deaths and migrations. It groups the information by province and territory, census metropolitan area and census division, and also provides data on census families and marriages and divorces. A CD-ROM, included with the publication, contains a historical time series, which dates back to 1971 for provinces and territories, and to 1986 for census divisions and census metropolitan areas.

Census of Population Census of Population

Census Operations Division, Statistics Canada

Survey objective: To provide a detailed portrait at a single point in time on the demographic, social, and economic conditions of the population, and on its housing units.

Target population: The Census covers the entire Canadian population, defined as Canadian citizens (by birth or by naturalization), landed immigrants, and non-permanent residents together with family members who live with them. Non-permanent residents are persons living in Canada who have a Minister's permit, a student or employment authorization, or who are claiming refugee status. The Census does not count foreign residents (government representatives of another country attached to an embassy or other diplomatic body in Canada and their families, members of the Armed Forces of another country stationed in Canada and their families, and persons temporarily visiting). The Census also counts Canadian citizens and landed immigrants who are temporarily outside the country on Census Day. This includes federal and provincial government employees working outside Canada, Canadian embassy staff posted to other countries, members of the Canadian Armed Forces stationed abroad, and all Canadian crew members of merchant vessels.

Survey frequency: The Census is conducted every five years with the next Census to be conducted in 2006.

Notes: In 1991 and previous censuses, Aboriginal persons were determined using the ethnic origin question (ancestry). Beginning in 1996, a question was added on the individual's own perception of his or her Aboriginal identity. Caution should be exercised in analyzing trends for Aboriginal peoples based on Census data for 1991 and earlier. In terms of Aboriginal self-identity, it should be noted that patterns are changing. In recent years, a growing number of people who had not previously identified with an Aboriginal group are now doing so. Changes in Aboriginal participation in the Census over time also result in comparability issues.

Community College Student Information System (CCSIS)

Centre for Education Statistics, Statistics Canada

Survey objectives: This database provides enrolment and graduate statistics for postsecondary programs of community colleges. Various demographic and program-related characteristics of students and graduates are also available.

Target population: This database covers all students registered for programs that are eligible for academic credit in a postsecondary diploma, certificate, or university transfer/university level program in

community colleges in the provinces and territories. A secondary school completion or equivalent is the normal prerequisite for entry into the postsecondary programs covered by this survey. The "général" program at Quebec institutions, the completion of which is a prerequisite for entry into universities, is included. Students registered in co-op programs who are on a work assignment at the time of the survey are included in the enrolment counts as are students registered for diplomas or certificates awarded by a professional body, if such programs form part of the regular offerings of the institution.

Survey frequency: Annual, since 1969.

Notes: The Enhanced Student Information System (ESIS), initially implemented in 2000, has begun to replace current postsecondary enrolment and graduate surveys, including the CCSIS, with a single survey. Although institutions in most parts of the country are already reporting under ESIS, initial start-up problems have limited the data available for this publication. While ESIS has been designed to continue the work of the postsecondary enrolment and graduation surveys, it will address their shortcomings and providing additional policy-relevant information.

Consumer Finances, Survey of (SCF)

Income Statistics Division, Statistics Canada

Survey objectives: SCF was conducted annually up to the 1997 reference year to obtain work experience and income information from Canadian households. The survey provides up-to-date information on the distribution and sources of income, before and after taxes, for families and individuals. It was the source for estimates of income and low income in the population.

Target population: SCF includes all individuals aged 15 and over residing in households in the ten provinces, with income (i.e., earnings, investment income, government transfer payments, retirement income, or other income) during the reference year. It excludes residents of the territories, residents of Indian Reserves, full-time members of the Canadian Armed Forces and residents of institutions (e.g., prisons, hospitals, and long-term care facilities).

Survey frequency: Annual.

Notes: The Survey of Labour and Income Dynamics (SLID) replaced SCF as of the 1998 reference year. Results from SLID and SCF have been compared in detail to assess the differences and the impact on time-series consistency. Essentially, the two surveys tell the same story with respect to low income and income distribution.

Education at a Glance, 2002

Organisation for Economic Co-operation and Development (OECD)

Education at a Glance – OECD Indicators is an annual publication of the OECD that was first published in 1992. It contains data and analysis for over 30 indicators that provide insights into the functioning of education systems including the operation, evolution, and impact of education, and that reflect emerging issues on national policy agendas. The OECD indicators allow international comparisons that help countries to see their systems in light of other countries' performances. More information is available on the OECD Web site, at www.oecd.org.

Elementary-Secondary Education Statistics Project (ESESP)

Centre for Education Statistics, Statistics Canada

Survey objectives: The Elementary-Secondary Education Statistics Project is a national pilot survey that enables Statistics Canada to provide information on enrolments, graduates, educators and finance of Canadian elementary-secondary public educational institutions. This information is used mainly to meet policy and planning needs in the field of elementary-secondary education.

Target population: Annually, the department or ministry of education in each jurisdiction sends to Statistics Canada data pertaining to enrolments, graduates, educators and finance of the public elementary-secondary schools under their jurisdictions. ESESP is a census of all provinces and territories.

Survey frequency: Annual.

Notes: ESESP was first introduced by Statistics Canada in 2003.The goal of this pilot project is to replace the following surveys as the official collection tools for elementary-secondary enrolments, graduates, educators and finance data:

- Elementary-Secondary School Enrolment Survey
- Minority and Second Language Education
- Secondary School Graduates Survey
- Elementary-Secondary Education Staff Survey.

Enhanced Student Information System (ESIS)

Centre for Education Statistics, Statistics Canada

Survey objectives: The Enhanced Student Information System (ESIS) is a national survey that enables Statistics Canada to provide detailed information on enrolments and graduates of Canadian postsecondary education institutions in order to meet policy and planning needs in the field of postsecondary education. Upon full implementation, ESIS will capture annually, enrolment and graduate information from all Canadian public postsecondary institutions.

ESIS collects information pertaining to the programs and courses offered at an institution, as well as information regarding the students themselves and the program(s) and courses in which they were registered, or from which they have graduated. ESIS is also designed to collect continuing education data. This information is available from the ESIS Cross-sectional Files.

In addition, ESIS has been designed to provide longitudinal data. It creates a unique longitudinal record for each postsecondary student in Canada which will, in turn, provide a history of flows taken by a student as he/she progresses through the education system. Upon commitment from all postsecondary education institutions, ESIS will become a means of following students throughout their academic careers in order to build a comprehensive picture of student flows - that is, their mobility and pathways within Canadian postsecondary education institutions. Mobility refers to geographic movement. Pathways refer to movement among fields of study, levels of education, and registration status (full-time and part-time). This information will be available from the ESIS Longitudinal Files.

Target population: The frame used is the list of Canadian public postsecondary institutions (universities, community colleges and trade and vocational training centres) compiled by the Centre for Education Statistics of Statistics Canada. The collection unit is the Canadian postsecondary institutions. Each institution sends data pertaining to their programs and their students. ESIS population is a census of all students and graduates of all Canadian public postsecondary institutions.

Survey frequency: Annual.

Notes: ESIS replaces the University Student Information System, the Community College Student Information System and the Trade and Vocational Survey with a single survey offering common variables for all levels of postsecondary education. Historical enrolment and graduate data from the previous surveys have been converted using ESIS variable definitions and codesets to maintain the historical continuity of the statistical series.

Estimates of Canadian research and development expenditures (GERD), Canada, 1993 to 2004, and by province 1993 to 2002

Statistics Canada Catalogue No. 88E0006XIE2002015

Science, Innovation and Electronic Information Division, Statistics Canada

This publication presents the national gross domestic expenditures on research and development (GERD) from 1993 to 2004, as well as the provincial GERD from 1993 to 2002.

Federal Government Expenditures in Support of Education, Survey of

Centre for Education Statistics, Statistics Canada

Survey objectives: This survey collects data on direct federal government financial support for education at all levels by department and by province/territory. The result is a data set on actual and estimated federal spending on education. These data are also used to reconcile financial data from other sources. For example, these data provide a basis for verification of grant data as reported by institutions and for the consolidation of education expenditures.

Target population: Federal departments and agencies that are part of the *Public Service Staff Relations Act* and the *Financial Administration Act*.

Survey frequency: Annually beginning in 1982-1983.

Financial Information of Universities and Colleges, Survey of

Centre for Education Statistics, Statistics Canada

Survey objectives: Detailed data are collected on the revenue and expenditures of universities and degree-granting institutions in Canada. This survey is similar to the Survey of Financial Statistics of Community Colleges and Vocational Schools, but the university survey includes information on research and development expenditures—in fact, it is the principal source of R&D expenditures estimates in the university sector as they are reported in Canada and reported internationally for Canada.

Target population: All degree-granting universities and university-colleges in Canada.

Survey frequency: Annually, since 1972-1973.

Financial Statistics of Community Colleges and Vocational Schools

Centre for Education Statistics, Statistics Canada

Survey objectives: Detailed revenue and expenditure data are collected from community colleges and public trade-vocational schools. Supporting information is also collected to enable the breakdown of revenues by source of funds, expenditures by function (e.g., instruction) and by detailed classification (e.g., instructor salaries).

Target population: All community colleges and public trade-vocational institutions in the provinces and territories that offer educational programs at the postsecondary level and/or trade-vocational level (private institutions that only offer courses at the trade-vocational level however are not covered).

Survey frequency: Annually, since 1982.

Financial Statistics of Private Elementary and Secondary Schools, Survey of

Centre for Education Statistics, Statistics Canada

Survey objectives: This survey collects financial data from private elementary and secondary schools in Canada on school revenues by source of funds (e.g., tuition fees), expenditures by function (e.g., administration, instruction) and by detailed classification (e.g., teachers, salaries). This survey is also used to estimate private school expenditures for years when no survey is conducted.

Target population: Private elementary and secondary schools in the provinces and territories.

Survey frequency: Every three years including 2000-2001. The next data collection was in 2003-2004, with data estimated in the intermediate years.

Household Spending, Survey of (SHS)

Income Statistics Division, Statistics Canada

Survey objective: Collects information on the budget of Canadian households including expenditures, income, and changes in assets and debts over the 12-month period from January 1 to December 31 of the reference year. Also gathers information about dwelling characteristics and the household equipment owned by households as of December 31 of the reference year. The survey is used as a data source for a number of Statistics Canada products including the setting of low-income cutoffs.

Target population: Households in Canada of all sizes, be it an individual or a family. The following groups are excluded from the survey: persons living on Indian reserves or Crown lands, official representatives of foreign countries living in Canada and their families, members of religious and other communal colonies, people living in residences for senior citizens, persons living full time in institutions (for example, inmates of penal institutions or chronic care patients living in hospitals and nursing homes), and members of the Canadian armed forces living in military camps.

The population of the territories is included in the 1997, 1998, and 1999 reference years and every second year thereafter starting with 2001. In the territories, individuals living in very small communities (generally consisting of fewer than 100 households) or in unorganized areas are excluded from the target population.

Survey frequency: Annual, starting with 1997 reference year.

Notes: The SHS integrates most of the content found in the Family Expenditure Survey (FAMEX) and the Household Facilities and Equipment Survey. The last FAMEX survey covered the

1996 reference year, with the first SHS having been conducted for the 1997 reference year. Many data from these two surveys are comparable to the SHS data. However some differences related to the methodology, to data quality and to the definitions must be considered before comparing the data.

Information and Communications Technologies in Schools Survey 2003-2004

Centre for Education Statistics, Statistics Canada

Survey objective: The main purpose of this survey is to obtain critical benchmark data on the integration of ICT in education. The Information and Communications Technologies in Schools Survey (ICTSS) collects data on the infrastructure, reach and use of information and communications technologies in all elementary and secondary schools in Canada. The survey asked a variety of questions about the reach, use, infrastructure and outcomes of ICT being used in schools. The data will be used to assess the current status of ICT infrastructure and access and some usage patterns in the schools, from a Canadian perspective.

Target population: The target population for ICTSS is all elementary and secondary schools in Canada, excluding continuing education/ adult day schools, trade/vocational schools, language and cultural educational schools, home schools, community education centres and social service centres. It includes schools in all provinces and territories and also schools located in aboriginal communities.

Survey frequency: One time.

Labour Force Survey (LFS)

Labour Statistics Division, Statistics Canada

Survey objectives: To collect labour force information from the civilian, working-age population of Canada in order to provide estimates of the number and characteristics of the employed, unemployed, and persons not in the labour force. The data collected is used to publish monthly standard labour market indicators. In addition, data are collected on a wide range of variables concerning the respondents' household, family, and individual characteristics including educational attainment and school attendance.

Target population: The LFS covers the civilian, non-institutionalized population 15 years of age and over. Excluded from the survey's coverage are residents of the Yukon, Northwest Territories and Nunavut, persons living on Indian reserves, full-time members of the Canadian Armed Forces and inmates of institutions (e.g., hospitals, prisons, and long-term care facilities). Basic demographic information is also collected for all members of the selected household, regardless of age.

Survey Frequency: Monthly. Data are available from 1966.

Notes: The survey underwent major redesign in 1976 and 1997, however most data are historically consistent. The 1997 redesign resulted primarily in the addition of new questions relating to labour conditions and a restructured question flow in order to take advantage of computer-assisted interviewing software. In addition, the 1990 LFS questionnaire introduced revised questions on the educational attainment variable and therefore these data are not directly comparable to those collected prior to 1990. Beginning with the 1990 survey, data on primary and secondary education reflects the highest grade completed rather than attended. A question on high school graduation was also added as prior to 1990, for those whose highest level was Grade 11 to 13, no attempt was made to determine if the respondent actually graduated. Also with the 1990 questionnaire, any education that could be counted towards a degree, certificate or diploma from an educational institution is taken as postsecondary education. Prior to this revision, postsecondary education was limited to education that normally requires high school graduation (thereby failing to pick-up on much trade-vocational education as this does not always require high school education). Finally the changes introduced with the 1990 questionnaire allow more information to be collected on the type of postsecondary education.

Labour and Income Dynamics, Survey of (SLID)

Income Statistics Division, Statistics Canada

Survey objectives: SLID is a longitudinal survey that follows the same individuals and households for six years, tracking their educational and labour market experiences, and changes in income and family dynamics. As changes in labour and income situations can be closely related to family and personal characteristics, SLID is designed to collect extensive information on areas such as socio-demographic background, education, family composition, activity limitation, and geographic mobility, and changes in these factors. Although SLID is first and foremost a longitudinal survey, it also generates cross-sectional data, including estimates of the number of people with a job or experiencing a period of unemployment at some time during the year, and annual wage distributions.

Target population: Individuals in the ten provinces, excluding residents of institutions and persons living on Indian reserves. The labour and income questions are intended for people 16 to 69 years old, however basic demographic information is also longitudinally collected on persons 15 years of age and under, and those 69 and older from other household members.

Survey frequency: Annual, since 1993.

Notes: Starting with the 1998 reference year, SLID took over from the Survey of Consumer Finances in producing the annual, or cross-sectional, income statistics, in addition to continuing the

production of longitudinal data, which began with the first SLID survey in 1993.

Main Science and Technology Indicators

Organisation for Economic Co-operation and Development (OECD)

This biannual publication provides a set of indicators that reflect the level and structure of the efforts undertaken by OECD member countries and eight non-member economies (Argentina, China, Israel, Romania, Russian Federation, Singapore, Slovenia, Chinese Taipei) in the field of science and technology. The indicators cover the resources devoted to R&D, patent families, technology balance of payments and international trade in highly R&D-intensive industries. Also presented are the underlying economic series used to calculate these indicators. Series are presented for a reference year and for the last six years for which data are available.

National Graduates Survey (NGS)

Centre for Education Statistics, Statistics Canada

Survey objectives: The NGS is designed to measure the labour market outcomes of graduates from university, community college, and trade-vocational programs two and five years after graduation.

Target population: Persons who completed the requirements for degrees, diplomas, or certificates from public universities, community colleges, and trade-vocational programs in Canada. Specifically, the types of graduates included are:

- graduates of university programs leading to bachelor's, master's, or doctorate degrees or specialized certificates or diplomas;
- graduates of postsecondary programs (of at least one year in duration and normally requiring secondary school completion or equivalent for admission) in Colleges of Applied Arts and Technology (CAAT), Collèges d'enseignement general et professionnel (CEGEP), community colleges, technical schools, or similar institutions;
- graduates of pre-employment programs (with a normal duration of at least three months) which lead to a certificate or diploma at the skilled trade level and are offered at trade-vocational schools, as well as many community colleges and technical institutes.

Excluded from the definition of graduates are:

- graduates from private postsecondary institutions such as computer training schools or commercial secretarial schools;
- individuals who completed continuing education courses, at universities and colleges, that do not lead to degrees or diplomas;

- individuals who completed part-time trade courses, such as adult education evening courses, while employed full time;
- individuals who completed vocational programs that were not in the skilled trades and/or were less than three months in duration;
- individuals in apprenticeship programs.

Survey frequency: To date, four graduating classes have been surveyed two and five years after graduation: 1982, 1986, 1990 and 1995. The graduating class of 2000 was surveyed for the first time, two years after graduation, in 2002.

National Longitudinal Survey of Children and Youth (NLSCY)

Special Surveys Division, Statistics Canada

Survey objectives: NLSCY is a longitudinal survey, designed to follow the same group of children over several years to study their development and well-being from birth to early adulthood. The NLSCY sample permits results to be reported for the general population of 0- to 5-year-olds in addition to the longitudinal results. The study is designed to collect information about factors influencing a child's social, emotional and behavioural development and to monitor the impact of these factors on the child's development over time. The survey covers a comprehensive range of topics including the health of children, information on their physical development, learning and behaviour as well as data on their social environment (family, friends, schools and communities).

Target population: The non-institutionalized, civilian child population in Canada's 10 provinces. The children sampled by the NLSCY do not include people living on Indian reserves or Crown lands, residents of institutions, full-time members of the Canadian Armed Forces, and residents of some remote regions.

Survey frequency: Biennial, starting in 1994-1995.

Programme for International Student Assessment (PISA)

Organisation for Economic Co-operation and Development (OECD)

Survey objectives: PISA, a collaborative effort among OECD member countries, assesses youth outcomes in three domains—reading literacy, mathematical literacy, and scientific literacy—through common international tests. The PISA assessment is intended to go beyond the testing of school-based curriculum in order to assess to what degree students approaching the end of their compulsory education have mastered the knowledge and skills in each of the literacy domains that are essential for full participation in society. More specifically PISA aims to answer the following questions:

- How well are young adults prepared to meet the challenges of the future?
- Are they able to analyze, reason and communicate their ideas effectively?
- Do they have the capacity to continue learning throughout life?
- Are some kinds of teaching and school organization more effective than others?

Target population: Individuals 15 years of age who were attending school in one of the ten provinces of Canada. Students of schools located on Indian reserves were excluded, as were students of schools for those with severe learning disabilities, schools for blind and deaf students, and students who were being home-schooled. The territories choose not to participate in PISA

Survey frequency: Every 3 years with major testing domains as follows:

- 2000: reading;
- 2003: mathematics;
- 2006: science.

Contact: Coordinator, Assessment

Council of Ministers of Education, Canada (CMEC)

Tel.: (416) 962-8100

Email: See www.cmec.ca for more information

Provincial Expenditures on Education in Reform and Correctional Institutions

Centre for Education Statistics, Statistics Canada

Survey objectives: The survey is used to supplement data collected from the Provincial Public Accounts on provincial/territorial expenditures on education, which are used in the determination of total consolidated expenditures on education in Canada and published in various Statistics Canada publications.

Target population: Reform and correctional institutions in the provinces and territories.

Survey frequency: Annual, since 1970-1971.

Public Institutions Division

Statistics Canada

Public Institutions Division's statistical program is designed to measure and analyze the economic dimensions of the public sector of Canada, including its profile.

The economic dimensions consist of revenues and expenditures, assets and liabilities, debt and employment-related statistics of public sector entities. In order to measure properly the public sector, the Division must maintain an up-to-date profile of the public sector universe. The public sector includes all entities such as government departments, establishments or funds, which political authorities at all levels use to implement their social and economic policies. Government business enterprises are also part of the public sector universe.

The public sector does not include supra-national bodies such as agencies of the United Nations or other international organizations that may exist and operate within Canada.

Registered Apprenticeship Information System

Centre for Education Statistics, Statistics Canada

Survey objectives: The purpose of this survey is to obtain information on the number of apprentices registered in each province and territory and trade qualifiers receiving certification with and without Interprovincial Standard Red Seal.

Target population: All persons registered with a province or territory taking apprenticeship training and trade qualifiers receiving certification with and without Interprovincial Standard Red Seal.

Survey frequency: Annual. Since 1991, individual record data have been collected. From 1980 to 1990, aggregate data by trades was collected.

School Achievement Indicators Program (SAIP)

Council of Ministers of Education, Canada (CMEC)

Survey objectives: The provinces and territories, through the CMEC, have developed SAIP to assess the performance of 13- and 16-year-old students in mathematics content and mathematics problem-solving, reading and writing, and science. SAIP presents achievement results for Canada as a whole and for each participating province and territory. SAIP also provides results for the English and French school systems within a jurisdiction. Beginning with the 1999 science assessment, SAIP began to collect contextual information on student performance to help interpret and explain the achievement results.

Target population: Students in the 10 provinces and 3 territories aged 13 and 16 (i.e., those students who reached their 13th or 16th birthdays between September 1 and August 31 of the previous year).

Survey frequency: SAIP is a cyclical program of student assessment with the following schedule:

Mathematics	Reading and Writing	Science
1993	1994	1996
1997	1998	1999
2001	2002 (writing)	2004

Notes:

For all the assessments, student performance is reported in relation to five proficiency levels, Level 1 being the lowest and Level 5 the highest. Developers of SAIP define Level 2 as the expected performance level for 13-year-olds, and Level 3 as the expected performance level for 16-year-olds.

In each assessment, both age groups write components of the same test. Thus direct comparisons between 13- and 16-year-olds can be made.

In addition, all students also complete a student background questionnaire (approximately 30 minutes in length) on the opportunities students have to learn the subject being tested and on their attitudes toward this subject, as well as other information on their interests and activities. The teacher and principal each complete a separate questionnaire focusing on additional contextual information.

Contact: Coordinator, SAIP
Council of Ministers of Education,
Canada (CMEC)

Tel.: (416) 962-8100

Email: saip@cmec.ca

Science, Innovation and Electronic Information Division (SIEID), Science and Innovation Surveys Section

Statistics Canada

With support from government and industry partners, SIEID focuses on the development of statistical measures and indicators that facilitate the analysis of the economic and social impacts of the following activities:

- Science and Technology Activities
- Industrial Research and Development
- Human Resources and Intellectual Property
- Advanced Technologies
- Innovation
- Biotechnology
- E-Commerce
- Telecommunications
- Broadcasting
- Information Society, Research and Analysis

Secondary School Graduates Survey

Centre for Education Statistics, Statistics Canada

Survey objectives: This survey collects data on secondary school graduates by age and gender for youths in regular high school programs.

Target population: This survey collects data on all graduates of regular high school programs. For the purposes of this survey, graduates from upgrading programs for out-of-school adults, sometimes leading to "equivalency" certification but in other cases leading to regular high school graduation certification, are not included. Youths are defined as "regular high school" students if they are less than age 20.

Survey frequency: Annual.

Notes: The survey started in the early 1960s and has been modified periodically since then.

Tuition and living accommodation costs for full-time students at Canadian degree-granting institutions, Survey of

Centre for Education Statistics, Statistics Canada

Survey objectives: The survey data are used by federal and provincial governments, university and student associations, students and researchers. The information is used to analyze and assess the cost students can incur while attending a Canadian university on a full-time basis, for future planning and setting of new rates, as well as assessing the effects of an increase in rates.

Target population: All degree-granting postsecondary institutions, i.e. universities and university-colleges.

Survey frequency: Annual.

Uniform Financial System–School Boards, Survey of

Centre for Education Statistics, Statistics Canada

Survey objectives: This survey looks at the revenues and expenditures of school boards, aggregated at the jurisdictional level. Board revenues can be examined by sources of funds (e.g., local taxation), whereas expenditures can be examined by function (e.g., administration, instruction), and detailed classification (e.g., salaries and compensations, supplies and services).

Target population: All school boards in the provinces and territories.

Survey frequency: Annually.

University and College Academic Staff Survey

Centre for Education Statistics, Statistics Canada

Survey objectives: This database provides information on the number and characteristics of full-time teachers in degree-granting institutions.

Target population: Full-time teachers in degree-granting institutions.

Survey frequency: Annual.

University Student Information System (USIS)– Enrolment and Graduations

Centre for Education Statistics, Statistics Canada

Survey objectives: The USIS database provides Canada-wide enrolment and graduate statistics from degree-granting universities and colleges. Data collected enables a general profile of students and the programs they take including gender, age, citizenship, geographic source of student, level of education, field of study, type of attendance (full-time, part-time), and year of graduation.

Target population: The target population for the enrolment statistics is all students enrolled in degree-granting institutions in Canada in programs leading toward a degree, diploma or certificate. This includes students enrolled in courses as well as students who have completed their course requirements and who are engaged in thesis writing or research. Those students who are taking courses eligible for credit but who are not seeking a degree, diploma or certificate (e.g., auditors) are also included. The target population for the graduate statistics is all students who have received a degree, diploma, or certificate during the calendar year ending in December.

Survey frequency: Annual. Enrolment data are available from the 1972-1973 academic year to the present. Graduate data are from 1970 to the present.

Notes: The Enhanced Student Information System (ESIS), initially implemented in 2000, has begun to replace current postsecondary enrolment and graduate surveys, including the University Student Information System, with a single survey. While ESIS has been designed to continue the work of the postsecondary enrolment and graduation surveys, it will address their shortcomings and providing additional policy-relevant information.


PV
PMT
FV
OLD
NEW
CST
PRC
+/-
NOM%
7
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TOTAL
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6
B.EVEN
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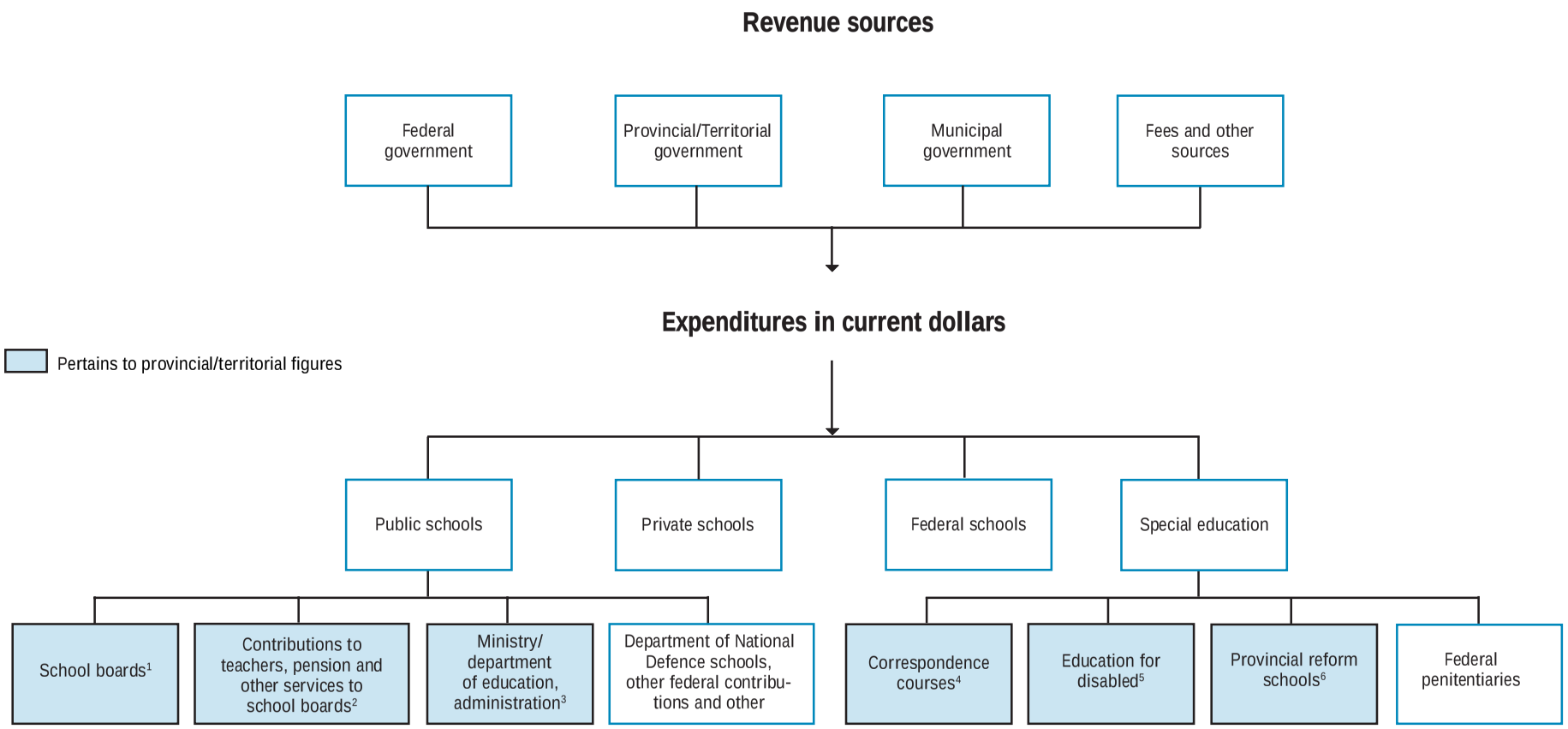
Calculation of revenues and expenditures for each jurisdiction – Elementary and secondary education



1. Ministry/department of education: Adjustments have been made in most provinces/territories to standardize fiscal year ends.
2. Ministry/department of education (public accounts) and/ or "provincial/territorial estimates".
3. Ministry/department of education. Adjustments or estimates are made in some provinces/territories where the elementary/secondary administration amount is not separated out in the public accounts or the provincial/territorial estimates.
4. In some provinces/territories, may include expenditures on correspondence courses incurred by other ministries/departments, not only ministry/ department of education.
5. In some provinces/territories, may include expenditures on correspondence courses incurred by other ministries/departments, not only ministry/ department of education.
6. Information on reform schools is obtained by a survey sent to various ministries/departments of justice, correctional services, penitentiaries or other reform school related administrative bodies.

Appendix 5

Basic reference statistics

Provinces/territories	Consumer Price Index (2001 = 100) 1999	2000	2001	2002	2003	Gross Domestic Product (GDP)[1] (excluding FISIM[2]) (in millions of dollars) 2000	2001	2002
Canada	**94.9**	**97.5**	**100.0**	**102.2**	**105.1**	**1,076,577**	**1,108,200**	**1,157,968**
Newfoundland and Labrador	96.1	99.0	100.0	102.4	105.4	13,922	14,221	16,615
Prince Edward Island	93.6	97.5	100.0	102.7	106.4	3,366	3,439	3,747
Nova Scotia	94.8	98.2	100.0	103.0	106.5	24,658	25,942	27,247
New Brunswick	95.2	98.3	100.0	103.4	106.9	20,085	20,689	21,168
Quebec	95.4	97.7	100.0	102.0	104.6	224,928	230,734	243,763
Ontario	94.3	97.0	100.0	102.0	104.8	440,759	453,931	479,556
Manitoba	95.0	97.4	100.0	101.6	103.4	34,057	35,157	36,832
Saskatchewan	94.5	97.0	100.0	102.8	105.2	33,828	33,267	34,419
Alberta	94.4	97.8	100.0	103.4	108.0	144,789	151,306	150,660
British Columbia	96.5	98.4	100.0	102.3	104.5	131,333	134,060	138,368
Yukon	95.9	98.0	100.0	100.7	102.6	1,190	1,256	1,271
Northwest Territories	96.7	98.4	100.0	102.9	104.8	2,515	2,981	3,023
Nunavut	96.7	98.4	100.0	…	…	834	876	942

Provinces/territories	Gross Domestic Product (GDP) (excluding FISIM[2]) adjusted to the fiscal year[3] (in millions of dollars) 1999-2000	2000-2001	2001-2002	Purchasing Power Parity[4] (PPP) 1999	2000	2001	Gross Domestic Product (GDP) implicit price index[5] (2001=100) 1991	1995	2000	2002
Canada	**1,005,975**	**1,084,483**	**1,120,642**	**1.19**	**1.21**	**1.20**	**85.8**	**91.1**	**98.9**	**101.0**
Newfoundland and Labrador	12,619	13,997	14,820	1.19	1.21	1.20	81.7	85.6	99.1	100.1
Prince Edward Island	3,211	3,384	3,516	1.19	1.21	1.20	87.1	88.6	97.6	102.7
Nova Scotia	23,459	24,979	26,268	1.19	1.21	1.20	86.6	90.6	97.8	99.8
New Brunswick	19,302	20,236	20,809	1.19	1.21	1.20	84.3	91.8	98.2	97.6
Quebec	214,339	226,380	233,991	1.19	1.21	1.20	88.1	92.6	98.6	101.5
Ontario	416,955	444,052	460,337	1.19	1.21	1.20	89.7	93.3	99.0	102.2
Manitoba	32,489	34,332	35,576	1.19	1.21	1.20	85.9	91.2	97.6	102.4
Saskatchewan	31,541	33,688	33,555	1.19	1.21	1.20	78.2	89.4	98.8	103.7
Alberta	124,007	146,418	151,145	1.19	1.21	1.20	71.5	76.2	97.2	97.2
British Columbia	123,524	132,015	135,137	1.19	1.21	1.20	80.4	92.0	98.8	99.9
Yukon	1,111	1,207	1,260	1.19	1.21	1.20	89.6	90.9	98.9	101
Northwest Territories	2,348	2,632	2,992	1.19	1.21	1.20	…	…	102.3	97.5
Nunavut	769	845	893	1.19	1.21	1.20	…	…	100.0	102.4

1. GDP data used in the calculation of total research and development (R&D) expenditures and university R&D expenditures as a proportion of GDP differ slightly from those presented here. The source of GDP figures used in the R&D section is Statistics Canada's Income and Expenditure Accounts Division (December 2002).
2. Financial intermediation services indirectly measured (FISIM) in the System of National Accounts is measured as the total property income receivable by financial intermediaries minus their total interest payable, excluding the value of any property income receivable from the investment of their own funds, as such income does not arise from financial intermediation.
3. GDP is estimated as $0.75(GDP_{t-1}) + 0.25(GDP_t)$, where *0.75* and *0.25* are the weights for the respective portions of the two reference periods for GDP which fall within the educational financial year.
4. PPP figures were obtained from the OECD publication *Education at a Glance*, 2000, 2001, and 2002.
5. The GDP implicit price index is used to deflate university research and development (R&D) expenditures and the source of funds of these expenditures for Canada and the provinces. The source of this index is Statistics Canada's CANSIM II Table 384-0036 (1997=100). For the purposes of this report, this index was rebased to 2001=100 by dividing the series for Canada and each province by the 2001 factor.

Appendix 6

Chapter A tables

Table A1.1

Estimates and projections, population ages 5 to 29, Canada and jurisdictions, 1991 to 2026

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
							Ages 5 to 29							
Population in thousands														
1991	**10,355**	245	49	343	286	2,536	3,846	417	381	993	1,198	11	17	12
1996	**10,202**	211	49	319	263	2,396	3,792	402	374	1,049	1,293	11	17	13
2001	**10,378**	174	47	306	247	2,377	3,968	402	365	1,125	1,354	11	17	15
2006	**10,404**	163	47	297	233	2,307	4,078	392	358	1,099	1,387	11	18	15
2011	**10,259**	145	45	282	215	2,180	4,134	379	336	1,080	1,419	10	17	15
2016	**10,075**	131	43	266	198	2,085	4,141	363	315	1,053	1,438	10	17	15
2021	**9,863**	119	41	250	182	1,984	4,119	348	295	1,027	1,456	9	17	15
2026	**9,661**	109	39	237	168	1,881	4,092	335	280	1,007	1,472	9	16	15
Indices of change														
1991	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
1996	**99**	86	99	93	92	94	99	97	98	106	108	101	99	110
2001	**100**	71	96	89	86	94	103	97	96	113	113	96	100	122
2006	**100**	66	95	87	81	91	106	94	94	111	116	94	102	123
2011	**99**	59	91	82	75	86	108	91	88	109	118	91	100	127
2016	**97**	53	87	78	69	82	108	87	83	106	120	87	99	129
2021	**95**	49	83	73	64	78	107	84	78	103	121	83	96	128
2026	**93**	45	79	69	59	74	106	81	74	101	123	81	94	127
							Ages 5 to 13							
Population in thousands														
1991	**3,456**	81	18	112	94	844	1,235	143	145	362	406	4	6	5
1996	**3,626**	70	18	113	90	826	1,356	149	144	385	458	5	7	6
2001	**3,702**	57	17	107	85	837	1,445	150	136	390	460	4	7	7
2006	**3,452**	51	15	94	75	755	1,382	133	119	359	454	3	6	6
2011	**3,184**	45	14	84	65	665	1,291	120	106	339	440	3	5	5
2016	**3,168**	42	14	81	61	646	1,296	118	105	340	452	3	5	6
2021	**3,233**	40	14	80	58	639	1,341	119	104	347	475	3	6	6
2026	**3,292**	38	14	79	56	634	1,393	119	101	349	496	3	6	6
Indices of change														
1991	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
1996	**105**	87	102	101	96	98	110	104	99	106	113	112	112	121
2001	**107**	71	96	96	90	99	117	104	94	108	113	95	115	141
2006	**100**	63	86	85	79	89	112	93	82	99	112	79	99	123
2011	**92**	56	80	75	69	79	105	84	73	93	108	71	87	115
2016	**92**	52	79	72	65	76	105	83	72	94	111	71	88	119
2021	**94**	49	80	72	62	76	109	83	72	96	117	74	93	125
2026	**95**	47	78	70	60	75	113	83	70	96	122	74	96	125

Table A1.1 (concluded)

Estimates and projections, population ages 5 to 29, Canada and jurisdictions, 1991 to 2026

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
							Ages 14 to 18							
Population in thousands														
1991	**1,909**	54	10	66	59	469	692	81	76	181	215	2	3	2
1996	**2,012**	46	10	63	53	497	721	79	80	200	255	2	3	2
2001	**2,072**	39	10	64	51	456	785	83	79	226	271	2	3	3
2006	**2,166**	35	10	63	49	479	850	83	78	224	285	2	4	3
2011	**2,118**	30	9	58	45	459	861	78	70	212	288	2	4	3
2016	**1,896**	26	8	50	38	387	783	68	59	194	274	2	3	3
2021	**1,857**	24	8	47	35	371	773	66	57	191	276	2	3	3
2026	**1,888**	23	8	47	34	368	793	66	57	195	288	2	3	3
Indices of change														
1991	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
1996	**105**	85	101	95	91	106	104	98	106	110	118	114	111	117
2001	**109**	73	105	97	87	97	114	102	104	125	126	126	109	134
2006	**113**	65	102	96	84	102	123	103	103	124	132	117	134	168
2011	**111**	57	92	87	76	98	124	97	92	117	134	102	122	158
2016	**99**	49	82	75	65	83	113	84	79	107	127	89	104	139
2021	**97**	45	80	71	60	79	112	82	76	105	128	87	102	143
2026	**99**	43	81	71	58	78	115	82	76	108	134	89	107	152
							Ages 19 to 24							
Population in thousands														
1991	**2,483**	62	12	84	70	595	951	98	81	238	283	3	4	3
1996	**2,412**	54	12	78	66	574	892	95	85	237	311	3	4	3
2001	**2,531**	45	12	75	61	610	931	94	88	276	329	2	4	3
2006	**2,592**	42	12	77	59	561	1,005	98	91	283	354	3	4	3
2011	**2,694**	37	12	77	57	577	1,079	100	89	285	371	3	5	4
2016	**2,675**	33	11	72	53	568	1,102	95	81	273	377	3	5	4
2021	**2,417**	28	10	63	45	486	1,013	83	69	250	361	2	4	3
2026	**2,348**	26	9	59	41	459	993	80	66	244	361	2	4	3
Indices of change														
1991	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
1996	**97**	87	100	92	95	96	94	97	105	100	110	100	88	97
2001	**102**	73	101	89	88	102	98	96	108	116	116	88	87	106
2006	**104**	68	102	92	85	94	106	100	112	119	125	112	99	116
2011	**108**	60	101	92	82	97	113	101	109	120	131	109	111	141
2016	**108**	54	93	85	76	95	116	96	99	115	133	100	106	138
2021	**97**	46	82	74	65	82	106	85	85	105	128	88	92	123
2026	**95**	41	79	70	59	77	104	81	81	103	128	84	89	125
							Ages 25 to 29							
Population in thousands														
1991	**2,507**	49	10	81	64	627	967	94	79	242	284	3	4	2
1996	**2,152**	42	9	66	54	499	823	79	65	211	295	3	4	3
2001	**2,074**	32	8	59	50	474	807	76	62	228	270	2	3	2
2006	**2,194**	36	10	62	50	512	841	78	71	233	295	2	3	2
2011	**2,264**	33	10	63	48	479	903	81	71	245	321	3	4	3
2016	**2,336**	30	10	64	46	484	959	82	70	247	335	3	4	3
2021	**2,356**	27	9	60	43	488	992	80	65	240	344	2	4	3
2026	**2,133**	23	8	53	37	420	913	70	56	219	327	2	4	3
Indices of change														
1991	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
1996	**86**	86	90	81	84	80	85	84	82	87	104	84	99	125
2001	**83**	65	80	73	78	76	83	81	78	94	95	64	83	124
2006	**88**	72	97	77	78	82	87	83	90	96	104	70	85	120
2011	**90**	67	99	78	75	76	93	86	90	101	113	83	93	135
2016	**93**	60	97	79	72	77	99	87	89	102	118	83	103	160
2021	**94**	54	91	74	68	78	103	85	82	99	121	77	100	160
2026	**85**	47	80	65	58	67	94	74	71	90	115	70	88	140

Sources: *Annual Demographic Statistics 2001,* Statistics Canada, Catalogue No. 91-213-XPB.
Population Projections for Canada, Provinces and Territories 2000–2026, Statistics Canada, Catalogue No. 91-520-XPB.

Table A2.1

Proportion of immigrants among the school-age population (ages 5 to 24), Canada and jurisdictions, in and out of census metropolitan areas (CMAs), 1991, 1996 and 2001

	1991	1996	2001
		%	
Canada	**9**	**10**	**10**
CMA	**13**	**14**	**15**
Non-CMA	**2**	**2**	**2**
Newfoundland and Labrador	1	1	1
St. John's	1	2	1
Non-CMA	<1	<1	<1
Prince Edward Island	1	1	1
Nova Scotia	2	2	2
Halifax	3	4	5
Non-CMA	1	1	1
New Brunswick	2	2	2
Saint John	2	1	2
Non-CMA	2	2	1
Quebec	6	6	6
Chicoutimi	1	1	1
Montréal	11	12	11
Québec	2	2	3
Sherbrooke	3	4	5
Trois-Rivières	1	1	1
Gatineau	4	4	5
Non-CMA	1	1	1
Ontario	13	14	15
Hamilton	10	10	11
Kingston	6	6	5
Kitchener	13	12	12
London	10	10	10
Oshawa	7	6	4
Ottawa	12	13	14
St. Catharines–Niagara	6	6	6
Sudbury	1	1	2
Thunder Bay	3	3	2
Toronto	24	26	26
Windsor	10	11	13
Non-CMA	3	3	3
Manitoba	7	6	6
Winnipeg	10	8	8
Non-CMA	3	3	3
Saskatchewan	2	2	2
Regina	4	4	4
Saskatoon	4	4	4
Non-CMA	1	1	1
Alberta	8	8	7
Calgary	12	12	11
Edmonton	10	10	8
Non-CMA	3	3	3
British Columbia	12	14	15
Abbotsford	9	9	9
Vancouver	20	25	26
Victoria	7	7	7
Non-CMA	4	4	3
Yukon	5	4	3
Northwest Territories[1]	2	2	2
Nunavut[1]	…	…	<1

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: 1991, 1996 and 2001 Censuses of Population, Statistics Canada.

Tables A2

Table A2.2

Proportion of visible minorities among the school-age population (ages 5 to 24), Canada and jurisdictions, in and out of census metropolitan areas (CMAs), 1991, 1996 and 2001

	1991	1996	2001
		%	
Canada	**11**	**13**	**16**
CMA	**17**	**20**	**23**
Non-CMA	**2**	**2**	**2**
Newfoundland and Labrador	1	1	1
St. John's	1	2	1
Non-CMA	1	<1	<1
Prince Edward Island	1	2	1
Nova Scotia	4	5	5
Halifax	8	9	10
Non-CMA	2	2	2
New Brunswick	1	1	2
Saint John	3	3	4
Non-CMA	1	1	1
Quebec	7	8	9
Chicoutimi	1	1	1
Montréal	14	16	17
Québec	2	2	2
Sherbrooke	3	3	3
Trois-Rivières	1	1	1
Gatineau	5	4	5
Non-CMA	1	1	1
Ontario	15	18	22
Hamilton	9	10	13
Kingston	5	6	6
Kitchener	11	11	14
London	9	10	12
Oshawa	7	7	8
Ottawa	16	18	21
St. Catharines–Niagara	5	5	6
Sudbury	2	2	3
Thunder Bay	3	3	3
Toronto	30	37	42
Windsor	12	13	17
Non-CMA	3	2	3
Manitoba	8	8	9
Winnipeg	13	14	16
Non-CMA	2	1	1
Saskatchewan	3	3	3
Regina	6	6	6
Saskatoon	6	6	6
Non-CMA	1	1	1
Alberta	10	11	12
Calgary	16	18	19
Edmonton	14	15	17
Non-CMA	3	3	3
British Columbia	17	21	26
Abbotsford	13	15	21
Vancouver	30	37	44
Victoria	9	10	12
Non-CMA	6	6	5
Yukon	4	4	3
Northwest Territories[1]	2	2	4
Nunavut[1]	…	…	<1

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: 1991, 1996 and 2001 Censuses of Population, Statistics Canada.

Table A2.3

Proportion of the school-age population (ages 5 to 24) with non-official home language, Canada and jurisdictions, in and out of census metropolitan areas (CMAs), 1991, 1996 and 2001

	1991	1996	2001
		%	
Canada	**6**	**7**	**8**
CMA	**9**	**10**	**11**
Non-CMA	**3**	**3**	**3**
Newfoundland and Labrador	<1	1	1
St. John's	<1	1	<1
Non-CMA	1	1	1
Prince Edward Island	<1	<1	<1
Nova Scotia	1	1	2
Halifax	1	2	2
Non-CMA	1	1	1
New Brunswick	1	<1	1
Saint John	<1	<1	1
Non-CMA	1	1	1
Quebec	5	5	5
Chicoutimi	<1	<1	<1
Montréal	9	10	9
Québec	1	1	1
Sherbrooke	1	2	2
Trois-Rivières	<1	<1	<1
Gatineau	2	3	3
Non-CMA	2	2	2
Ontario	8	10	10
Hamilton	6	7	8
Kingston	2	2	3
Kitchener	8	8	9
London	5	6	6
Oshawa	2	2	2
Ottawa	7	8	9
St. Catharines–Niagara	2	3	3
Sudbury	1	1	1
Thunder Bay	3	2	1
Toronto	15	18	19
Windsor	7	7	10
Non-CMA	2	2	2
Manitoba	8	8	7
Winnipeg	6	6	5
Non-CMA	10	10	9
Saskatchewan	4	4	4
Regina	2	2	2
Saskatoon	3	3	2
Non-CMA	5	5	5
Alberta	6	6	6
Calgary	6	8	8
Edmonton	6	6	6
Non-CMA	5	5	5
British Columbia	8	11	12
Abbotsford	7	7	10
Vancouver	13	20	22
Victoria	2	4	4
Non-CMA	2	3	2
Yukon	1	2	1
Northwest Territories[1]	35	33	6
Nunavut[1]	…	…	61

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: 1991, 1996 and 2001 Censuses of Population, Statistics Canada.

Table A2.4

Proportion of the school-age population (ages 5 to 24) with Aboriginal identity, Canada and jurisdictions, in and out of census metropolitan areas (CMAs), 1996 and 2001[1]

	1996	2001
	%	
Canada	**4**	**5**
CMA	**1**	**2**
Non-CMA	**7**	**9**
Newfoundland and Labrador	3	5
St. John's	1	1
Non-CMA	5	8
Prince Edward Island	1	1
Nova Scotia	2	3
Halifax	1	1
Non-CMA	3	4
New Brunswick	2	3
Saint John	1	1
Non-CMA	2	4
Quebec	1	2
Chicoutimi	1	1
Montréal	<1	<1
Québec	<1	1
Sherbrooke	<1	<1
Trois-Rivières	1	1
Gatineau	2	2
Non-CMA	3	4
Ontario	2	2
Hamilton	1	2
Kingston	1	2
Kitchener	1	1
London	2	2
Oshawa	1	1
Ottawa	1	1
St. Catharines–Niagara	1	2
Sudbury	4	7
Thunder Bay	8	10
Toronto	<1	1
Windsor	1	2
Non-CMA	4	5
Manitoba	17	20
Winnipeg	10	12
Non-CMA	26	30
Saskatchewan	17	20
Regina	10	12
Saskatoon	11	13
Non-CMA	21	26
Alberta	6	8
Calgary	3	3
Edmonton	5	6
Non-CMA	10	12
British Columbia	6	6
Abbotsford	3	4
Vancouver	2	3
Victoria	3	4
Non-CMA	9	12
Yukon	24	29
Northwest Territories[2]	58	61
Nunavut[2]	92	94

1. Data from the 1991 Census are not directly comparable.
2. Nunavut and Northwest Territories: data are calculated using 1999 boundaries.

Source: *1996 and 2001 Censuses of Population, Statistics Canada.*

Table A3.1

Percentage of the school-age population (ages 5 to 24) in low income (based on after-tax low-income cutoffs), Canada and provinces, 1990, 1995 and 2000

	1990	1995	2000
		%	
Canada			
All	**13**	**17**	**13**
Living with two parents	**6**	**9**	**7**
Living with lone parent	**31**	**36**	**25**
Not living with parents	**29**	**39**	**35**
Newfoundland and Labrador			
All	16	19	16
Living with two parents	9	12	10
Living with lone parent	46	42	40
Not living with parents	28	44	45
Prince Edward Island			
All	7	9	10
Living with two parents	4	4	5
Living with lone parent	19	28	10
Not living with parents	18	22	33
Nova Scotia			
All	11	18	12
Living with two parents	3	8	6
Living with lone parent	33	42	23
Not living with parents	29	39	31
New Brunswick			
All	13	17	12
Living with two parents	6	9	5
Living with lone parent	38	38	27
Not living with parents	24	33	34
Quebec			
All	14	19	14
Living with two parents	7	10	7
Living with lone parent	37	35	29
Not living with parents	32	48	38
Ontario			
All	11	15	11
Living with two parents	5	8	6
Living with lone parent	24	36	21
Not living with parents	26	34	34
Manitoba			
All	18	20	17
Living with two parents	10	11	9
Living with lone parent	36	36	37
Not living with parents	35	47	37
Saskatchewan			
All	16	17	13
Living with two parents	9	10	5
Living with lone parent	37	36	28
Not living with parents	31	34	30
Alberta			
All	15	19	14
Living with two parents	6	9	8
Living with lone parent	40	44	24
Not living with parents	31	40	31
British Columbia			
All	14	17	16
Living with two parents	6	11	9
Living with lone parent	28	25	24
Not living with parents	32	35	38

Sources: 1990 and 1995: Survey of Consumer Finances, Statistics Canada.
2000: Survey of Labour and Income Dynamics, Statistics Canada.

Table A3.2

Distribution of the school-age population (ages 5 to 24), by number of years in low income between 1996 and 2000, Canada and provinces

	Never in low income	Up to one year in low income	More than one year in low income	Total
		%		
Canada				
All	**70**	**11**	**19**	**100**
Living with two parents	**78**	**9**	**12**	**100**
Living with lone parent	**46**	**15**	**38**	**100**
Not living with parents	**48**	**16**	**36**	**100**
Newfoundland and Labrador				
All	67	11	23	**100**
Living with two parents	71	12	18	**100**
Living with lone parent	42	9	49	**100**
Not living with parents	57	7	36	**100**
Prince Edward Island				
All	75	13	12	**100**
Living with two parents	81	11	8	**100**
Living with lone parent	61	13	26	**100**
Not living with parents	47	27	26	**100**
Nova Scotia				
All	71	13	16	**100**
Living with two parents	81	11	8	**100**
Living with lone parent	30	16	55	**100**
Not living with parents	47	20	33	**100**
New Brunswick				
All	73	10	17	**100**
Living with two parents	82	9	8	**100**
Living with lone parent	50	13	37	**100**
Not living with parents	52	11	37	**100**
Quebec				
All	66	12	22	**100**
Living with two parents	75	10	14	**100**
Living with lone parent	44	16	40	**100**
Not living with parents	42	19	38	**100**
Ontario				
All	75	9	16	**100**
Living with two parents	83	8	10	**100**
Living with lone parent	51	13	35	**100**
Not living with parents	46	17	37	**100**
Manitoba				
All	67	9	23	**100**
Living with two parents	74	7	18	**100**
Living with lone parent	47	14	39	**100**
Not living with parents	53	12	35	**100**
Saskatchewan				
All	68	13	18	**100**
Living with two parents	76	11	13	**100**
Living with lone parent	46	22	31	**100**
Not living with parents	54	17	29	**100**
Alberta				
All	66	15	19	**100**
Living with two parents	74	13	13	**100**
Living with lone parent	50	21	29	**100**
Not living with parents	45	22	33	**100**
British Columbia				
All	66	10	24	**100**
Living with two parents	74	9	17	**100**
Living with lone parent	35	15	50	**100**
Not living with parents	56	7	37	**100**

Source: Survey of Labour and Income Dynamics, Statistics Canada.

Chapter B tables

Tables B

Chapter B tables

Table B1.1

Combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational[7]	College[7]	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Canada[1]						
1997-1998	**40,425**	**6,168**	**5,066**	**13,214**	**24,448**	**64,873**
1998-1999	**41,700**	**6,909**	**5,099**	**13,778**	**25,786**	**67,487**
1999-2000	**41,414**	**6,141**	**5 755**	**15 316**	**27,212**	**68,626**
2000-2001	**41,482**	**5,799**	**5,667**	**16,580**	**28,046**	**69,528**
2001-2002 [e]	**41,875**	**5,594**	**5,824**	**17,466**	**28,884**	**70,759**
Newfoundland and Labrador[2]						
1997-1998	598	455	39	253	747	**1,345**
1998-1999	601	339	32	262	633	**1,234**
1999-2000	598	202	36	283	520	**1,118**
2000-2001	584	200	34	285	519	**1,103**
2001-2002 [e]	597	200	42	308	550	**1,147**
Prince Edward Island						
1997-1998	137	59	30	49	137	**274**
1998-1999	155	56	23	53	132	**287**
1999-2000	152	36	22	58	116	**268**
2000-2001	151	34	23	62	119	**270**
2001-2002 [e]	153	32	25	66	123	**276**
Nova Scotia						
1997-1998	993	221	80	502	802	**1,795**
1998-1999	1,100	223	98	559	880	**1,980**
1999-2000	1,138	117	108	639	864	**2,002**
2000-2001	1,110	142	106	661	909	**2,019**
2001-2002 [e]	1,115	124	110	681	915	**2,030**
New Brunswick[3]						
1997-1998	909	228	72	346	647	**1,556**
1998-1999	924	215	83	343	641	**1,565**
1999-2000	931	273	67	358	698	**1,629**
2000-2001	858	288	76	374	738	**1,596**
2001-2002 [e]	856	274	85	381	740	**1,596**
Quebec[4]						
1997-1998	8,418	1,155	2,126	3,370	6,651	**15,070**
1998-1999	8,453	1,874	2,118	3,384	7,377	**15,829**
1999-2000	8,942	1,518	2,117	3,686	7,321	**16,263**
2000-2001	9,263	1,287	2,201	3,883	7,371	**16,634**
2001-2002 [e]	9,308	1,240	2,227	4,231	7,698	**17,006**
Ontario						
1997-1998	16,911	1,637	1,488	4,764	7,888	**24,799**
1998-1999	17,500	1,572	1,459	5,109	8,140	**25,640**
1999-2000	16,726	1,406	2,039	5,688	9,133	**25,860**
2000-2001	16,285	1,295	1,759	6,103	9,157	**25,442**
2001-2002 [e]	16,278	1,167	1,808	6,406	9,381	**25,659**
Manitoba						
1997-1998	1,756	220	99	489	808	**2,564**
1998-1999	1,813	255	99	536	890	**2,703**
1999-2000	1,849	249	110	568	928	**2,777**
2000-2001	1,887	239	119	606	964	**2,851**
2001-2002 [e]	1,884	247	117	628	992	**2,876**

Table B1.1 (concluded)

Combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational[7]	College[7]	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Saskatchewan						
1997-1998	1,456	283	65	554	902	**2,358**
1998-1999	1,476	307	66	551	924	**2,400**
1999-2000	1,464	363	65	626	1,054	**2,518**
2000-2001	1,467	332	72	678	1,082	**2,549**
2001-2002 e	1,461	336	74	723	1,133	**2,594**
Alberta						
1997-1998	3,870	755	436	1,168	2,359	**6,229**
1998-1999	4,200	900	477	1,246	2,624	**6,823**
1999-2000	4,122	823	583	1,461	2,867	**6,989**
2000-2001	4,293	859	680	1,688	3,227	**7,520**
2001-2002 e	4,409	862	671	1,756	3,289	**7,698**
British Columbia						
1997-1998	5,043	939	578	1,633	3,150	**8,193**
1998-1999	5,129	930	589	1,645	3,163	**8,292**
1999-2000	5,174	990	540	1,855	3,385	**8,559**
2000-2001	5,229	1,026	530	2,147	3,703	**8,932**
2001-2002 e	5,425	1,007	598	2,185	3,790	**9,215**
Yukon[5]						
1997-1998	88	18	8	4	30	**118**
1998-1999	81	19	7	4	30	**111**
1999-2000	84	30	8	4	41	**125**
2000-2001	82	27	8	5	40	**122**
2001-2002 e	92	30	9	4	43	**135**
Northwest Territories[5,6]						
1997-1998	221	40	45	4	88	**309**
1998-1999	218	45	43	5	92	**311**
1999-2000	122	39	35	5	79	**201**
2000-2001	117	38	37	4	79	**196**
2001-2002 e	123	43	40	4	87	**210**
Nunavut[5,6]						
1997-1998	...	...	...	...	...	**..**
1998-1999	...	...	...	...	...	**..**
1999-2000	88	38	21	1	60	**148**
2000-2001	104	28	21	1	50	**154**
2001-2002 e	123	31	16	2	49	**172**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. The data shown at the Canada level include Canada's spending on education in foreign countries (e.g., Department of National Defence schools), and undistributed expenditures.
2. The decline in expenditure in Newfoundland and Labrador was in fact a return to "normal" expenditure level after a significant but short-term funding increase in the mid-1990s, notably for the Atlantic Groundfish Strategy.
3. Although the decrease in public expenditures in New Brunswick in 2000-2001 and 2001-2002 reflects a change in employer contributions to teachers' pension plans, the actual data for 2000-2001 and 2001-2002 for New Brunswick show an increase in expenditures for school district operations at the elementary/secondary level in both years.
4. Expenditures at the elementary-secondary level in Quebec include trade-vocational expenditures administered through the elementary-secondary system.
5. Expenditures shown for the territories at the university level include student aid, as well as administrative expenditures incurred by the territories.
6. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.
7. Expenditures on private business colleges are not included.

Sources: Survey of Uniform Financial System of School Boards, Statistics Canada.
Survey of Financial Statistics of Private Elementary and Secondary Schools, Statistics Canada.
Survey of Federal Government Expenditures in Support of Education, Statistics Canada.
Survey of Financial Information of Universities and Colleges, Statistics Canada.
Financial Statistics of Community Colleges and Vocational Schools, Statistics Canada.
Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.
Provincial Expenditures on Education in Reform and Correctional Institutions, Statistics Canada.
Provincial Public Accounts.

Table B1.2

Indices of change in combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
Canada						
1997-1998	**100**	**100**	**100**	**100**	**100**	**100**
1998-1999	**103**	**112**	**101**	**104**	**105**	**104**
1999-2000	**102**	**100**	**114**	**116**	**111**	**106**
2000-2001	**103**	**94**	**112**	**125**	**115**	**107**
2001-2002 [e]	**104**	**91**	**115**	**132**	**118**	**109**
Newfoundland and Labrador						
1997-1998	100	100	100	100	100	**100**
1998-1999	101	74	83	103	85	**92**
1999-2000	100	44	92	112	70	**83**
2000-2001	98	44	88	113	69	**82**
2001-2002 [e]	100	44	109	122	74	**85**
Prince Edward Island						
1997-1998	100	100	100	100	100	**100**
1998-1999	113	95	80	107	96	**104**
1999-2000	111	61	75	118	84	**98**
2000-2001	110	58	78	126	87	**98**
2001-2002 [e]	112	55	85	134	90	**101**
Nova Scotia						
1997-1998	100	100	100	100	100	**100**
1998-1999	111	101	123	111	110	**110**
1999-2000	115	53	136	127	108	**112**
2000-2001	112	64	133	132	113	**112**
2001-2002 [e]	112	56	138	136	114	**113**
New Brunswick						
1997-1998	100	100	100	100	100	**100**
1998-1999	102	94	116	99	99	**101**
1999-2000	102	119	94	103	108	**105**
2000-2001	94	126	106	108	114	**103**
2001-2002 [e]	94	120	119	110	114	**103**
Quebec						
1997-1998	100	100	100	100	100	**100**
1998-1999	100	162	100	100	111	**105**
1999-2000	106	131	100	109	110	**108**
2000-2001	110	111	104	115	111	**110**
2001-2002 [e]	111	107	105	126	116	**113**
Ontario						
1997-1998	100	100	100	100	100	**100**
1998-1999	103	96	98	107	103	**103**
1999-2000	99	86	137	119	116	**104**
2000-2001	96	79	118	128	116	**103**
2001-2002 [e]	96	71	122	134	119	**103**
Manitoba						
1997-1998	100	100	100	100	100	**100**
1998-1999	103	116	101	110	110	**105**
1999-2000	105	113	112	116	115	**108**
2000-2001	107	109	120	124	119	**111**
2001-2002 [e]	107	112	118	128	123	**112**

Table B1.2 (concluded)

Indices of change in combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
Saskatchewan						
1997-1998	100	100	100	100	100	**100**
1998-1999	101	109	102	99	102	**102**
1999-2000	101	128	100	113	117	**107**
2000-2001	101	117	111	122	120	**108**
2001-2002 e	100	119	115	131	126	**110**
Alberta						
1997-1998	100	100	100	100	100	**100**
1998-1999	109	119	109	107	111	**110**
1999-2000	107	109	134	125	122	**112**
2000-2001	111	114	156	145	137	**121**
2001-2002 e	114	114	154	150	139	**124**
British Columbia						
1997-1998	100	100	100	100	100	**100**
1998-1999	102	99	102	101	100	**101**
1999-2000	103	105	93	114	107	**104**
2000-2001	104	109	92	131	118	**109**
2001-2002 e	108	107	103	134	120	**112**
Yukon						
1997-1998	100	100	100	100	100	**100**
1998-1999	92	102	91	106	100	**94**
1999-2000	95	162	100	104	138	**106**
2000-2001	93	148	108	122	134	**103**
2001-2002 e	104	165	109	120	144	**114**
Northwest Territories[1]						
1997-1998	…	…	…	…	…	**…**
1998-1999	…	…	…	…	…	**…**
1999-2000	100	100	100	100	100	**100**
2000-2001	96	97	106	80	100	**97**
2001-2002 e	101	110	115	80	110	**104**
Nunavut[1]						
1997-1998	..	..	..	..	..	**..**
1998-1999	..	..	..	..	..	**..**
1999-2000	100	100	100	100	100	**100**
2000-2001	118	75	99	114	84	**104**
2001-2002 e	139	83	75	229	82	**116**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000 (1999-2000=100).

Source: Table B1.1.

Table B1.3

Percentage distribution of combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	Total
Canada						
1997-1998	**62**	**10**	**8**	**20**	**38**	**100**
1998-1999	**62**	**10**	**8**	**20**	**38**	**100**
1999-2000	**60**	**9**	**8**	**22**	**40**	**100**
2000-2001	**60**	**8**	**8**	**24**	**40**	**100**
2001-2002 [e]	**59**	**8**	**8**	**25**	**41**	**100**
Newfoundland and Labrador						
1997-1998	44	34	3	19	56	**100**
1998-1999	49	27	3	21	51	**100**
1999-2000	53	18	3	25	47	**100**
2000-2001	53	18	3	26	47	**100**
2001-2002 [e]	52	17	4	27	48	**100**
Prince Edward Island						
1997-1998	50	21	11	18	50	**100**
1998-1999	54	19	8	18	46	**100**
1999-2000	57	13	8	22	43	**100**
2000-2001	56	13	9	23	44	**100**
2001-2002 [e]	55	12	9	24	45	**100**
Nova Scotia						
1997-1998	55	12	4	28	45	**100**
1998-1999	56	11	5	28	44	**100**
1999-2000	57	6	5	32	43	**100**
2000-2001	55	7	5	33	45	**100**
2001-2002 [e]	55	6	5	34	45	**100**
New Brunswick						
1997-1998	58	15	5	22	42	**100**
1998-1999	59	14	5	22	41	**100**
1999-2000	57	17	4	22	43	**100**
2000-2001	54	18	5	23	46	**100**
2001-2002 [e]	54	17	5	24	46	**100**
Quebec						
1997-1998	56	8	14	22	44	**100**
1998-1999	53	12	13	21	47	**100**
1999-2000	55	9	13	23	45	**100**
2000-2001	56	8	13	23	44	**100**
2001-2002 [e]	55	7	13	25	45	**100**
Ontario						
1997-1998	68	7	6	19	32	**100**
1998-1999	68	6	6	20	32	**100**
1999-2000	65	5	8	22	35	**100**
2000-2001	64	5	7	24	36	**100**
2001-2002 [e]	63	5	7	25	37	**100**
Manitoba						
1997-1998	68	9	4	19	32	**100**
1998-1999	67	9	4	20	33	**100**
1999-2000	67	9	4	20	33	**100**
2000-2001	66	8	4	21	34	**100**
2001-2002 [e]	66	9	4	22	34	**100**

Table B1.3 (concluded)

Percentage distribution of combined public and private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	Total
Saskatchewan						
1997-1998	62	12	3	23	38	100
1998-1999	61	13	3	23	39	100
1999-2000	58	14	3	25	42	100
2000-2001	58	13	3	27	42	100
2001-2002 e	56	13	3	28	44	100
Alberta						
1997-1998	62	12	7	19	38	100
1998-1999	62	13	7	18	38	100
1999-2000	59	12	8	21	41	100
2000-2001	57	11	9	22	43	100
2001-2002 e	57	11	9	23	43	100
British Columbia						
1997-1998	62	11	7	20	38	100
1998-1999	62	11	7	20	38	100
1999-2000	60	12	6	22	40	100
2000-2001	59	11	6	24	41	100
2001-2002 e	59	11	6	24	41	100
Yukon						
1997-1998	75	15	7	3	25	100
1998-1999	73	17	6	4	27	100
1999-2000	67	24	6	3	33	100
2000-2001	67	22	7	4	33	100
2001-2002 e	68	22	6	3	32	100
Northwest Territories[1]						
1997-1998	71	13	14	1	29	100
1998-1999	70	14	14	1	30	100
1999-2000	61	19	17	2	39	100
2000-2001	60	19	19	2	40	100
2001-2002 e	59	20	19	2	41	100
Nunavut[1]						
1997-1998	..	...	...	...	...	...
1998-1999	..	...	...	...	...	...
1999-2000	60	25	14	1	40	100
2000-2001	68	18	14	1	32	100
2001-2002 e	72	18	9	1	28	100

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: Table B1.1.

Table B1.4

Combined public and private expenditures on education per capita and index of change, Canada and jurisdictions, 1997-1998 to 2001-2002 (in 2001 constant dollars)

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.[1]	Nvt.[1]
Expenditures per capita														
1997-1998	**2,165**	2,427	2,003	1,921	2,063	2,064	2,204	2,256	2,307	2,196	2,069	3,657	..	..
1998-1999	**2,233**	2,263	2,094	2,115	2,078	2,161	2,252	2,375	2,341	2,347	2,074	3,506	..	..
1999-2000	**2,250**	2,068	1,952	2,131	2,159	2,213	2,244	2,430	2,456	2,362	2,125	4,031	4,910	5,508
2000-2001	**2,260**	2,053	1,963	2,146	2,112	2,255	2,177	2,488	2,494	2,499	2,201	3,998	4,779	5,581
2001-2002 [e]	**2,277**	2,150	1,999	2,154	2,109	2,295	2,161	2,501	2,554	2,512	2,250	4,537	5,141	6,075
Index of change (1997-1998 = 100)														
1997-1998	**100**	100	100	100	100	100	100	100	100	100	100	100	…	…
1998-1999	**103**	93	105	110	101	105	102	105	101	107	100	96	…	…
1999-2000	**104**	85	97	111	105	107	102	108	106	108	103	110	100	100
2000-2001	**104**	85	98	112	102	109	99	110	108	114	106	109	97	101
2001-2002 [e]	**105**	89	100	112	102	111	98	111	111	114	109	124	105	110

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000 (1999-2000=100).

Sources: Expenditures: Table B1.1.
Population: Annual Demographic Statistics, Cat. No. 91-213-XPB, Statistics Canada.

Table B1.5

Combined public and private expenditures on education as a percentage of GDP and index of change, Canada and jurisdictions, 1999-2000 to 2001-2002

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Expenditures as a percentage of GDP														
1999-2000[r]	**6.4**	8.0	8.0	8.1	8.1	7.2	5.9	8.2	7.4	4.8	6.5	10.5	8.0	17.7
2000-2001	**6.3**	7.8	7.9	7.8	7.7	7.2	5.6	8.1	7.7	5.0	6.7	9.7	6.6	18
2001-2002[e]	**6.1**	6.9	7.4	7.5	7.5	7.0	5.4	7.8	7.5	5.1	6.7	10.6	6.9	18.3
Index of change (1999-2000 = 100)														
1999-2000[r]	**100**	100	100	100	100	100	100	100	100	100	100	100	100	100
2000-2001	**98**	97	99	96	95	100	96	99	103	103	102	92	82	99
2001-2002[e]	**97**	89	94	96	98	97	95	96	98	103	100	109	106	104

Sources: Expenditures: Table B1.1.
GDP: Appendix 6.

Table B1.6

Combined public and private expenditures on educational institutions per student (based on full-time equivalents) in equivalent U.S. dollars converted using PPPs, at the college and university levels, G-7 countries and OECD mean, 2000

Canada	**14,983**	Japan	10,914
		United Kingdom	9,657
France	8,373	United States[2]	20,358
Germany	10,898		
Italy[1]	8,063	**OECD countries (Mean)**	**11,109**

1. Public institutions only.
2. Public and independent private institutions only.

Source: OECD, Education at a Glance 2003, Table B1.1.

Table B1.7

Combined public and private expenditures on educational institutions as a percentage of GDP, all levels of education combined, G-7 countries and OECD mean, 2001

Canada	**6.1**	Japan	4.6
		United Kingdom	5.5
France	6.0	United States	7.3
Germany	5.3		
Italy	5.3	**OECD countries (Mean)**	**5.5**

Source: OECD, Education at a Glance 2004, Table B2.1c.

Table B2.1

Public expenditures[1] on education by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Canada[2]						
1997-1998	**37,385**	**5,633**	**4,008**	**8,811**	**18,451**	**55,836**
1998-1999	**38,578**	**6,322**	**4,064**	**9,185**	**19,570**	**58,148**
1999-2000	**38,297**	**5,636**	**4,584**	**10,302**	**20,522**	**58,819**
2000-2001	**38,213**	**5,210**	**4,334**	**10,843**	**20,387**	**58,600**
2001-2002 [e]	**38,579**	**4,995**	**4,387**	**10,856**	**20,238**	**58,817**
Newfoundland and Labrador[3]						
1997-1998	574	435	25	179	640	**1,214**
1998-1999	586	328	24	185	537	**1,123**
1999-2000	576	188	34	198	419	**995**
2000-2001	562	186	32	200	418	**980**
2001-2002 [e]	575	183	38	213	434	**1,009**
Prince Edward Island						
1997-1998	135	52	16	38	106	**242**
1998-1999	154	48	14	38	100	**254**
1999-2000	149	29	13	36	78	**227**
2000-2001	149	29	15	41	85	**234**
2001-2002 [e]	151	27	17	41	85	**236**
Nova Scotia						
1997-1998	950	210	67	284	562	**1,512**
1998-1999	1,071	215	80	308	603	**1,674**
1999-2000	1,116	104	92	336	532	**1,648**
2000-2001	1,086	127	90	341	558	**1,644**
2001-2002 [e]	1,089	112	94	326	532	**1,621**
New Brunswick[4]						
1997-1998	893	215	60	242	516	**1,409**
1998-1999	907	207	70	223	500	**1,408**
1999-2000	915	262	49	237	549	**1,464**
2000-2001	842	275	61	248	583	**1,426**
2001-2002 [e]	841	264	71	247	582	**1,423**
Quebec[5]						
1997-1998	7,572	1,103	1,894	2,521	5,518	**13,091**
1998-1999	7,594	1,812	1,864	2,674	6,350	**13,944**
1999-2000	8,012	1,456	1,862	2,616	5,935	**13,947**
2000-2001	8,300	1,238	1,949	2,845	6,032	**14,332**
2001-2002 [e]	8,349	1,174	1,941	3,047	6,161	**14,511**
Ontario						
1997-1998	15,882	1,512	1,013	2,859	5,384	**21,265**
1998-1999	16,485	1,412	1,050	2,972	5,434	**21,919**
1999-2000	15,708	1,305	1,486	3,764	6,556	**22,263**
2000-2001	15,275	1,166	1,105	3,607	5,878	**21,153**
2001-2002 [e]	15,253	1,061	1,096	3,419	5,575	**20,829**
Manitoba						
1997-1998	1,624	201	89	349	639	**2,263**
1998-1999	1,674	233	87	372	692	**2,367**
1999-2000	1,709	229	95	403	728	**2,437**
2000-2001	1,735	220	101	446	767	**2,502**
2001-2002 [e]	1,733	224	102	413	739	**2,472**

Table B2.1 (concluded)

Public expenditures[1] on education by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Saskatchewan						
1997-1998	1,434	262	58	374	694	**2,128**
1998-1999	1,417	287	59	389	736	**2,153**
1999-2000	1,427	344	58	428	830	**2,257**
2000-2001	1,431	315	66	511	891	**2,323**
2001-2002 e	1,424	312	66	484	863	**2,286**
Alberta						
1997-1998	3,418	636	299	813	1,748	**5,165**
1998-1999	3,701	749	305	837	1,891	**5,592**
1999-2000	3,661	695	395	959	2,049	**5,709**
2000-2001	3,765	666	416	1,029	2,112	**5,876**
2001-2002 e	3,880	667	417	1,119	2,203	**6,083**
British Columbia						
1997-1998	4,575	795	436	1,065	2,296	**6,870**
1998-1999	4,642	794	459	1,095	2,348	**6,990**
1999-2000	4,712	862	437	1,231	2,529	**7,241**
2000-2001	4,722	894	437	1,483	2,814	**7,536**
2001-2002 e	4,904	872	486	1,447	2,805	**7,709**
Yukon[6]						
1997-1998	85	15	7	4	25	**110**
1998-1999	78	17	6	4	27	**105**
1999-2000	82	27	7	4	38	**120**
2000-2001	81	25	7	5	37	**118**
2001-2002 e	91	27	8	4	39	**130**
Northwest Territories[6, 7]						
1997-1998	219	39	42	4	84	**303**
1998-1999	216	44	42	5	91	**307**
1999-2000	120	38	32	5	75	**195**
2000-2001	114	36	33	4	73	**187**
2001-2002 e	121	42	36	4	82	**203**
Nunavut[6, 7]						
1997-1998	…	…	…	…	…	**…**
1998-1999	…	…	…	…	…	**…**
1999-2000	86	37	21	1	59	**144**
2000-2001	101	27	20	1	48	**149**
2001-2002 e	120	30	15	2	47	**167**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Includes expenditures by the federal, provincial/territorial and local levels of government.
2. The data shown at the Canada level include Canada's spending on education in foreign countries (e.g., Department of National Defence schools), and undistributed expenditures.
3. The decline in expenditure in Newfoundland and Labrador was in fact a return to "normal" expenditure level after a significant but short-term funding increase in the mid-1990s, notably for the Atlantic Groundfish Strategy.
4. Although the decrease in public expenditures in New Brunswick in 2000-2001 and 2001-2002 reflects a change in employer contributions to teachers' pension plans, the actual data for 2000-2001 and 2001-2002 for New Brunswick show an increase in expenditures for school district operations at the elementary/secondary level in both years.
5. Expenditures at the elementary-secondary level in Quebec include trade-vocational expenditures administered through the elementary-secondary system.
6. Expenditures shown for the territories at the university level include student aid, as well as administrative expenditures incurred by the territories.
7. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Sources: Survey of Uniform Financial System of School Boards, Statistics Canada.
Survey of Financial Statistics of Private Elementary and Secondary Schools, Statistics Canada.
Survey of Federal Government Expenditures in Support of Education, Statistics Canada.
Survey of Financial Information of Universities and Colleges, Statistics Canada.
Financial Statistics of Community Colleges and Vocational Schools, Statistics Canada.
Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.
Provincial Expenditures on Education in Reform and Correctional Institutions, Statistics Canada.
Provincial Public Accounts.

Table B2.2

Indices of change in public expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
Canada						
1997-1998	**100**	**100**	**100**	**100**	**100**	**100**
1998-1999	**103**	**112**	**101**	**104**	**106**	**104**
1999-2000	**102**	**100**	**114**	**117**	**111**	**105**
2000-2001	**102**	**92**	**108**	**123**	**110**	**105**
2001-2002 [e]	**103**	**89**	**109**	**123**	**110**	**105**
Newfoundland and Labrador						
1997-1998	100	100	100	100	100	**100**
1998-1999	102	75	93	103	84	**93**
1999-2000	100	43	133	110	66	**82**
2000-2001	98	43	126	111	65	**81**
2001-2002 [e]	100	42	149	119	68	**83**
Prince Edward Island						
1997-1998	100	100	100	100	100	**100**
1998-1999	114	93	84	100	94	**105**
1999-2000	110	56	80	94	73	**94**
2000-2001	110	56	93	107	80	**97**
2001-2002 [e]	112	52	105	107	80	**98**
Nova Scotia						
1997-1998	100	100	100	100	100	**100**
1998-1999	113	102	120	108	107	**111**
1999-2000	118	49	137	118	95	**109**
2000-2001	114	60	134	120	99	**109**
2001-2002 [e]	115	53	140	115	95	**107**
New Brunswick						
1997-1998	100	100	100	100	100	**100**
1998-1999	102	96	117	92	97	**100**
1999-2000	103	122	83	98	106	**104**
2000-2001	94	128	102	102	113	**101**
2001-2002 [e]	94	123	119	102	113	**101**
Quebec						
1997-1998	100	100	100	100	100	**100**
1998-1999	100	164	98	106	115	**107**
1999-2000	106	132	98	104	108	**107**
2000-2001	110	112	103	113	109	**109**
2001-2002 [e]	110	106	102	121	112	**111**
Ontario						
1997-1998	100	100	100	100	100	**100**
1998-1999	104	93	104	104	101	**103**
1999-2000	99	86	147	132	122	**105**
2000-2001	96	77	109	126	109	**99**
2001-2002 [e]	96	70	108	120	104	**98**
Manitoba						
1997-1998	100	100	100	100	100	**100**
1998-1999	103	116	98	107	108	**105**
1999-2000	105	114	107	116	114	**108**
2000-2001	107	110	114	128	120	**111**
2001-2002 [e]	107	112	115	118	116	**109**

Table B2.2 (concluded)

Indices of change in public expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational	College	University	All post-secondary	All levels combined
Saskatchewan						
1997-1998	100	100	100	100	100	**100**
1998-1999	99	110	103	104	106	**101**
1999-2000	100	131	100	114	120	**106**
2000-2001	100	120	114	137	128	**109**
2001-2002 e	99	119	114	129	124	**107**
Alberta						
1997-1998	100	100	100	100	100	**100**
1998-1999	108	118	102	103	108	**108**
1999-2000	107	109	132	118	117	**111**
2000-2001	110	105	139	127	121	**114**
2001-2002 e	114	105	140	138	126	**118**
British Columbia						
1997-1998	100	100	100	100	100	**100**
1998-1999	101	100	105	103	102	**102**
1999-2000	103	108	100	116	110	**105**
2000-2001	103	112	100	139	123	**110**
2001-2002 e	107	110	112	136	122	**112**
Yukon[1]						
1997-1998	100	100	100	100	100	**100**
1998-1999	92	108	95	106	105	**95**
1999-2000	97	179	105	103	149	**109**
2000-2001	96	164	114	122	145	**107**
2001-2002 e	107	177	116	120	153	**118**
Northwest Territories[1,2]						
1997-1998	…	…	…	…	…	**…**
1998-1999	…	…	…	…	…	**…**
1999-2000	100	100	100	100	100	**100**
2000-2001	95	95	103	80	98	**96**
2001-2002 e	101	111	113	80	110	**104**
Nunavut[1,2]						
1997-1998	…	…	…	…	…	**…**
1998-1999	…	…	…	…	…	**…**
1999-2000	100	100	100	100	100	**100**
2000-2001	118	73	97	114	81	**103**
2001-2002 e	140	81	73	229	80	**116**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Expenditures shown for the territories at the university level include student aid, as well as administrative expenditures incurred by the provinces.
2. Since the series for Nunavut starts in 1999-2000, the calculation for Northwest Territories and Nunavut is for the period 1999-2000 to 2001-2002 only (1999-2000 = 100).

Source: Table B2.1.

Table B2.3

Public expenditures[1] on education, health, social services, and non-social programs, Canada, 1990 to 2002 (in 2001 constant dollars)

	Elementary-secondary education	Post-secondary education	Other education	Education total	Non-social programs	Health	Social services	Total expenditures
				Expenditures in millions of 2001 constant dollars				
1990	31,707	19,963	2,402	54,071	179,586	50,655	91,184	**375,497**
1991	33,471	20,893	2,496	56,860	184,620	52,919	96,252	**390,652**
1992	36,502	22,156	2,815	61,472	188,218	57,018	107,818	**414,526**
1993	37,998	22,888	3,360	64,246	184,001	58,327	112,130	**418,704**
1994	37,941	22,906	3,278	64,126	182,516	58,903	115,423	**420,968**
1995	38,158	22,642	3,773	64,573	186,530	57,839	108,768	**417,711**
1996	36,967	22,726	3,519	63,213	190,405	58,346	106,809	**418,772**
1997	36,217	21,564	2,829	60,610	177,825	57,937	106,698	**403,070**
1998	35,941	22,037	3,112	61,091	171,426	60,931	106,626	**400,074**
1999	35,551	23,395	3,808	62,754	174,466	62,421	107,657	**407,298**
2000[r]	36,664	24,169	4,311	65,145	185,035	72,265	112,959	**435,405**
2001[r]	36,635	25,352	4,231	66,218	179,766	76,998	114,801	**437,783**
2002	36,410	23,537	4,139	64,518	178,719	82,017	114,231	**439,485**
				Percentage distribution of expenditures by program				
1990	8.4	5.3	0.6	14.4	47.8	13.5	24.3	**100.0**
1991	8.6	5.3	0.6	14.6	47.3	13.5	24.6	**100.0**
1992	8.8	5.3	0.7	14.8	45.4	13.8	26.0	**100.0**
1993	9.1	5.5	0.8	15.3	43.9	13.9	26.8	**100.0**
1994	9.0	5.4	0.8	15.2	43.4	14.0	27.4	**100.0**
1995	9.1	5.4	0.9	15.5	44.7	13.8	26.0	**100.0**
1996	8.8	5.4	0.8	15.1	45.5	13.9	25.5	**100.0**
1997	9.0	5.3	0.7	15.0	44.1	14.4	26.5	**100.0**
1998	9.0	5.5	0.8	15.3	42.8	15.2	26.7	**100.0**
1999	8.7	5.7	0.9	15.4	42.8	15.3	26.4	**100.0**
2000[r]	8.4	5.6	1.0	15.0	42.5	16.6	25.9	**100.0**
2001[r]	8.4	5.8	1.0	15.1	41.1	17.6	26.2	**100.0**
2002	8.3	5.4	0.9	14.7	40.7	18.7	26.0	**100.0**

Note: Data in this table allow comparisons across government programs but are not directly comparable with data in other tables.

1. Includes expenditures by the federal, provincial/territorial and local levels of government.

Source: Public Institutions Division, Statistics Canada.

Table B2.4

Private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Canada						
1997-1998	**3,040**	**535**	**1,058**	**4,403**	**5,997**	**9,037**
1998-1999	**3,123**	**588**	**1,035**	**4,593**	**6,216**	**9,339**
1999-2000	**3,117**	**505**	**1,172**	**5,014**	**6,691**	**9,808**
2000-2001	**3,269**	**509**	**1,177**	**5,497**	**7,183**	**10,452**
2001-2002 [e]	**3,296**	**511**	**1,176**	**5,752**	**7,439**	**10,735**
Newfoundland and Labrador						
1997-1998	24	20	13	73	107	**131**
1998-1999	15	11	8	76	96	**111**
1999-2000	22	14	2	85	101	**123**
2000-2001	22	14	2	85	100	**122**
2001-2002 [e]	22	14	2	86	101	**123**
Prince Edward Island						
1997-1998	1	7	13	11	31	**33**
1998-1999	1	7	10	15	32	**33**
1999-2000	3	7	10	22	39	**42**
2000-2001	3	7	10	23	40	**43**
2001-2002 [e]	3	7	10	23	40	**43**
Nova Scotia						
1997-1998	43	10	12	218	240	**284**
1998-1999	30	9	17	251	276	**306**
1999-2000	22	13	16	303	332	**354**
2000-2001	24	14	18	304	337	**361**
2001-2002 [e]	27	14	18	315	347	**374**
New Brunswick						
1997-1998	17	14	12	104	130	**147**
1998-1999	17	8	13	120	141	**158**
1999-2000	16	11	18	121	149	**165**
2000-2001	15	11	18	123	151	**166**
2001-2002 [e]	15	11	18	127	155	**170**
Quebec						
1997-1998	846	52	232	849	1,133	**1,979**
1998-1999	859	62	255	710	1,026	**1,885**
1999-2000	930	61	255	1,070	1,386	**2,316**
2000-2001	963	62	257	1,076	1,395	**2,358**
2001-2002 [e]	959	62	257	1,078	1,397	**2,356**
Ontario						
1997-1998	1,029	125	475	1,905	2,505	**3,534**
1998-1999	1,015	159	409	2,138	2,706	**3,721**
1999-2000	1,018	100	553	1,924	2,577	**3,595**
2000-2001	1,010	100	553	2,358	3,012	**4,022**
2001-2002 [e]	1,026	100	550	2,549	3,199	**4,225**
Manitoba						
1997-1998	131	19	10	140	169	**300**
1998-1999	139	22	12	163	198	**336**
1999-2000	140	19	15	165	199	**339**
2000-2001	153	19	15	179	213	**366**
2001-2002 [e]	151	19	15	194	229	**380**

Table B2.4 (concluded)

Private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (in millions of 2001 constant dollars)

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
			(millions of 2001 constant dollars)			
Saskatchewan						
1997-1998	22	21	7	180	208	**230**
1998-1999	59	20	6	162	188	**247**
1999-2000	37	19	7	198	225	**262**
2000-2001	37	22	8	200	230	**267**
2001-2002 e	37	21	8	201	230	**267**
Alberta						
1997-1998	452	119	137	355	611	**1,064**
1998-1999	499	152	172	409	733	**1,232**
1999-2000	462	128	188	502	818	**1,280**
2000-2001	528	129	188	520	836	**1,364**
2001-2002 e	529	129	188	545	863	**1,392**
British Columbia						
1997-1998	468	143	143	568	854	**1,323**
1998-1999	486	135	130	550	815	**1,301**
1999-2000	462	128	104	625	856	**1,318**
2000-2001	507	129	104	628	862	**1,369**
2001-2002 e	521	130	105	634	869	**1,390**
Yukon						
1997-1998	3	3	1	..	4	**8**
1998-1999	3	2	1	..	3	**6**
1999-2000	1	2	1	..	3	**5**
2000-2001	1	2	1	..	3	**5**
2001-2002 e	2	2	1	..	3	**5**
Northwest Territories[2]						
1997-1998	2	1	3	..	4	**6**
1998-1999	2	1	1	..	2	**4**
1999-2000	2	1	3	..	4	**6**
2000-2001	2	1	3	..	4	**6**
2001-2002 e	3	1	3	..	4	**7**
Nunavut[2]						
1997-1998	...	...	...	...	...	**...**
1998-1999	...	...	...	...	...	**...**
1999-2000	3	0	1	..	1	**3**
2000-2001	3	0	1	..	1	**4**
2001-2002 e	3	0	1	..	1	**4**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Expenditures on private business colleges are not included.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Sources: Survey of Uniform Financial System of School Boards, Statistics Canada.

Survey of Financial Statistics of Private Elementary and Secondary Schools, Statistics Canada.

Survey of Financial Information of Universities and Colleges, Statistics Canada.

Financial Statistics of Community Colleges and Vocational Schools, Statistics Canada.

Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.

Provincial Public Accounts.

Table B2.5

Indices of change in private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
Canada						
1997-1998	**100**	**100**	**100**	**100**	**100**	**100**
1998-1999	**103**	**110**	**98**	**104**	**104**	**103**
1999-2000	**103**	**94**	**111**	**114**	**112**	**109**
2000-2001	**108**	**95**	**111**	**125**	**120**	**116**
2001-2002 [e]	**108**	**95**	**111**	**131**	**124**	**119**
Newfoundland and Labrador						
1997-1998	100	100	100	100	100	**100**
1998-1999	62	57	64	104	90	**85**
1999-2000	94	68	13	116	94	**94**
2000-2001	92	67	13	115	93	**93**
2001-2002 [e]	92	68	13	117	95	**94**
Prince Edward Island						
1997-1998	100	100	100	100	100	**100**
1998-1999	83	107	74	132	102	**101**
1999-2000	175	106	73	200	125	**128**
2000-2001	180	104	72	211	129	**131**
2001-2002 [e]	184	104	72	211	129	**131**
Nova Scotia						
1997-1998	100	100	100	100	100	**100**
1998-1999	69	82	139	115	115	**108**
1999-2000	50	128	132	139	138	**125**
2000-2001	55	133	149	140	140	**127**
2001-2002 [e]	62	134	150	145	145	**132**
New Brunswick						
1997-1998	100	100	100	100	100	**100**
1998-1999	102	59	109	115	108	**108**
1999-2000	95	78	146	116	115	**112**
2000-2001	90	78	145	118	116	**113**
2001-2002 [e]	90	79	147	122	119	**116**
Quebec						
1997-1998	100	100	100	100	100	**100**
1998-1999	101	119	110	84	91	**95**
1999-2000	110	118	110	126	122	**117**
2000-2001	114	118	111	127	123	**119**
2001-2002 [e]	113	118	111	127	123	**119**
Ontario						
1997-1998	100	100	100	100	100	**100**
1998-1999	99	127	86	112	108	**105**
1999-2000	99	80	116	101	103	**102**
2000-2001	98	80	116	124	120	**114**
2001-2002 [e]	100	80	116	134	128	**120**
Manitoba						
1997-1998	100	100	100	100	100	**100**
1998-1999	106	113	122	117	117	**112**
1999-2000	106	99	151	118	118	**113**
2000-2001	117	100	152	128	126	**122**
2001-2002 [e]	115	100	152	139	135	**126**

Table B2.5 (concluded)

Indices of change in private expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002 (1997-1998 = 100)

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
Saskatchewan						
1997-1998	100	100	100	100	100	**100**
1998-1999	265	94	95	90	91	**107**
1999-2000	167	92	107	110	108	**114**
2000-2001	167	102	114	111	111	**116**
2001-2002 e	167	101	114	112	111	**116**
Alberta						
1997-1998	100	100	100	100	100	**100**
1998-1999	110	128	125	115	120	**116**
1999-2000	102	108	137	141	134	**120**
2000-2001	117	108	137	146	137	**128**
2001-2002 e	117	109	137	153	141	**131**
British Columbia						
1997-1998	100	100	100	100	100	**100**
1998-1999	104	94	91	97	95	**98**
1999-2000	99	89	73	110	100	**100**
2000-2001	108	90	73	111	101	**103**
2001-2002 e	111	91	74	112	102	**105**
Yukon						
1997-1998	100	100	100	..	100	**100**
1998-1999	78	70	70	..	70	**73**
1999-2000	40	76	75	..	76	**60**
2000-2001	36	77	75	..	76	**59**
2001-2002 e	59	77	76	..	76	**69**
Northwest Territories[2]						
1997-1998	...	...	...	...	...	**...**
1998-1999	...	...	...	...	...	**...**
1999-2000	100	100	100	..	100	**100**
2000-2001	97	102	103	..	103	**101**
2001-2002 e	145	104	104	..	104	**118**
Nunavut[2]						
1997-1998	...	...	...	...	...	**...**
1998-1999	...	...	...	...	...	**...**
1999-2000	100	100	100	..	100	**100**
2000-2001	115	101	101	..	101	**112**
2001-2002 e	115	101	102	..	102	**112**

Note: Large year-over-year variations in public and private funding to school boards are caused by accounting adjustments to prior-year surpluses and/or deficits. This means that trends should be observed over a period of years rather than from one year to the next.

1. Expenditures on private business colleges are not included.
2. Since the series for Nunavut starts in 1999-2000, the calculation for Northwest Territories and Nunavut is for the period 1999-2000 to 2001-2002 only (1999-2000 = 100).

Source: Table B2.4.

Table B2.6

Private expenditures as a percentage of total expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
			(Percentage)			
Canada						
1997-1998	**7.5**	**8.7**	**20.9**	**33.3**	**24.5**	**13.9**
1998-1999	**7.5**	**8.5**	**20.3**	**33.3**	**24.1**	**13.8**
1999-2000	**7.5**	**8.2**	**20.4**	**32.7**	**24.6**	**14.3**
2000-2001	**7.9**	**8.9**	**21.4**	**33.6**	**26.1**	**15.1**
2001-2002 [e]	**7.9**	**9.3**	**21.1**	**34.6**	**26.9**	**15.4**
Newfoundland and Labrador						
1997-1998	4.0	4.4	34.1	29.1	14.3	**9.7**
1998-1999	2.5	3.4	26.2	29.2	15.2	**9.0**
1999-2000	3.7	6.8	4.8	30.1	19.4	**11.0**
2000-2001	3.8	6.8	5.1	29.7	19.3	**11.1**
2001-2002 [e]	3.7	7.0	4.4	28.7	18.9	**10.9**
Prince Edward Island						
1997-1998	1.1	11.4	45.2	22.5	22.6	**11.9**
1998-1999	0.8	12.9	42.2	27.7	24.1	**11.5**
1999-2000	1.7	19.7	43.0	38.2	33.4	**15.5**
2000-2001	1.7	19.4	39.1	36.3	32.0	**15.4**
2001-2002 [e]	1.7	20.6	36.2	36.3	32.0	**15.3**
Nova Scotia						
1997-1998	4.4	4.7	15.5	43.4	30.0	**15.8**
1998-1999	2.7	3.8	17.5	44.9	31.4	**15.5**
1999-2000	1.9	11.4	15.0	47.4	38.4	**17.7**
2000-2001	2.2	9.8	16.9	47.2	37.6	**18.0**
2001-2002 [e]	2.4	11.0	16.4	49.1	39.5	**18.8**
New Brunswick						
1997-1998	1.8	6.1	16.8	30.1	20.1	**9.4**
1998-1999	1.8	3.8	15.8	34.9	22.0	**10.1**
1999-2000	1.7	4.0	26.3	33.7	21.4	**10.1**
2000-2001	1.8	3.8	22.3	33.1	20.6	**10.4**
2001-2002 [e]	1.8	4.0	20.0	33.9	21.1	**10.7**
Quebec						
1997-1998	10.1	4.5	10.9	25.2	17.0	**13.1**
1998-1999	10.2	3.3	12.0	21.0	13.9	**11.9**
1999-2000	10.4	4.0	12.0	29.0	18.9	**14.2**
2000-2001	10.4	4.7	11.6	27.4	18.8	**14.1**
2001-2002 [e]	10.3	5.0	11.7	26.1	18.5	**14.0**
Ontario						
1997-1998	6.1	7.6	31.9	40.0	31.8	**14.2**
1998-1999	5.8	10.1	28.0	41.8	33.2	**14.5**
1999-2000	6.1	7.1	27.1	33.8	28.2	**13.9**
2000-2001	6.2	7.9	33.4	39.5	33.9	**16.0**
2001-2002 [e]	6.3	8.6	33.4	42.7	36.5	**16.9**
Manitoba						
1997-1998	8.1	9.7	11.1	40.0	26.5	**13.3**
1998-1999	8.3	9.4	13.8	43.9	28.5	**14.2**
1999-2000	8.2	8.4	15.6	40.9	27.4	**13.9**
2000-2001	8.8	8.8	14.9	40.1	27.8	**14.6**
2001-2002 [e]	8.7	8.7	14.7	47.0	30.9	**15.4**

Table B2.6 (concluded)

Private expenditures as a percentage of total expenditures on education, by level of education, Canada and jurisdictions, 1997-1998 to 2001-2002

	Pre-elementary, elementary-secondary	Trade-vocational[1]	College[1]	University	All post-secondary	All levels combined
			(Percentage)			
Saskatchewan						
1997-1998	1.5	8.1	11.6	48.0	29.9	**10.8**
1998-1999	4.1	6.9	10.7	41.5	25.5	**11.5**
1999-2000	2.6	5.7	12.4	46.3	27.1	**11.6**
2000-2001	2.6	6.8	11.6	39.2	25.8	**11.5**
2001-2002 e	2.6	6.9	11.6	41.5	26.6	**11.7**
Alberta						
1997-1998	13.2	18.7	46.0	43.7	35.0	**20.6**
1998-1999	13.5	20.2	56.3	48.9	38.8	**22.0**
1999-2000	12.6	18.4	47.6	52.4	40.0	**22.4**
2000-2001	14.0	19.3	45.1	50.5	39.6	**23.2**
2001-2002 e	13.6	19.4	45.1	48.7	39.2	**22.9**
British Columbia						
1997-1998	10.2	18.0	32.8	53.3	37.2	**19.3**
1998-1999	10.5	17.0	28.4	50.2	34.7	**18.6**
1999-2000	9.8	14.8	23.8	50.8	33.9	**18.2**
2000-2001	10.7	14.4	23.9	42.4	30.6	**18.2**
2001-2002 e	10.6	14.9	21.7	43.8	31.0	**18.0**
Yukon						
1997-1998	4.0	19.8	19.7	..	16.9	**7.0**
1998-1999	3.4	12.7	14.4	..	11.3	**5.4**
1999-2000	1.7	8.4	14.0	..	8.6	**3.8**
2000-2001	1.5	9.2	13.0	..	8.9	**3.8**
2001-2002 e	2.2	8.6	12.9	..	8.4	**4.1**
Northwest Territories[2]						
1997-1998	0.9	2.6	7.1	...	4.8	**2.0**
1998-1999	0.9	2.3	2.4	...	2.2	**1.3**
1999-2000	1.7	3.2	9.3	..	5.6	**3.2**
2000-2001	1.8	3.4	9.3	..	5.9	**3.4**
2001-2002 e	2.5	3.0	8.6	..	5.3	**3.6**
Nunavut[2]						
1997-1998	...	...	...	...	...	**...**
1998-1999	...	...	...	...	...	**...**
1999-2000	3.0	0.1	3.4	..	1.3	**2.3**
2000-2001	3.0	0.2	3.5	..	1.6	**2.5**
2001-2002 e	2.5	0.2	4.8	..	1.6	**2.3**

1. Expenditures on private business colleges are not included.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Sources: Tables B2.1 and B2.4.

Table B2.7

Average expenditure per household on education, and percentage of households incurring education expenditures, Canada and provinces, 2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Percentage of households incurring expenditures on education	**45**	44	38	42	39	43	46	43	41	47	46
Supplies all levels	**29**	35	27	31	28	28	29	31	29	28	29
Textbooks all levels	**20**	30	10	14	15	27	19	16	17	18	17
Tuition: pre-elementary and elementary-secondary	**9**	8	F	4	7	12	4	6	18	23	8
Tuition: postsecondary	**19**	16	14	16	15	18	19	17	15	18	21
Average education expenditure per household incurring expenditure	**2,263**	1,816	2,152	2,207	1,904	1,357	2,897	1,979	1,924	2,348	2,372
Supplies all levels	**208**	167	151	207	201	177	217	198	162	265	211
Textbooks all levels	**510**	419	683	617	564	351	617	628	627	567	532
Tuition: pre-elementary and elementary-secondary	**1,411**	253	F	1,049	151	894	4,526	1,561	216	447	1,744
Tuition: postsecondary	**3,156**	3,209	4,532	4,108	3,719	1,331	4,124	2,919	3,342	3,668	3,106

Source: Survey of Household Spending, 2003, Statistics Canada.

Table B2.8

Average[1] undergraduate university tuition fees, Canada and provinces, 1994-1995 and 2004-2005 (in 2001 constant dollars)

	1994-1995	2004-2005	% change
	$	$	
Canada	**2,535**	**3,863**	**52**
Newfoundland and Labrador	2,453	2,432	-1
Prince Edward Island	3,021	4,082	35
Nova Scotia	3,395	5,602	65
New Brunswick	2,727	4,404	61
Quebec	1,945	1,762	-9
Ontario	2,609	4,508	73
Manitoba	2,731	3,020	11
Saskatchewan	2,903	4,724	63
Alberta	2,824	4,610	63
British Columbia	2,778	4,419	59

1. Both in- and out-of-province students are included in the weighted average calculations; foreign students are not included.

Source: Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.

Table B2.9

Average[1] university tuition fees by faculty, Canada, 1994-1995 and 2004-2005 (in 2001 constant dollars)

	1994-1995	2004-2005	% change
	$	$	
Faculty			
Dentistry	3,255	11,421	251
Medicine	3,111	9,462	204
Law	2,630	6,138	133
Commerce	2,424	3,537	46
Engineering	2,666	4,284	61
Science	2,577	3,820	48
Music	2,456	3,503	43
Arts	2,531	3,697	46
Agriculture	2,447	3,376	38
Architecture	2,546	3,359	32
Household sciences	2,641	3,561	35
Education	2,327	3,035	30
Undergraduate	**2,535**	**3,863**	**52**
Graduate	**2,490**	**5,084**	**104**

1. Both in- and out-of-province students are included in the weighted average calculations; foreign students are not included.

Source: Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.

Table B2.10

University and university-college revenues by source, as a percentage of total revenue, Canada and provinces, 1992-1993 and 2002-2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Government											
1992-1993	**66**	77	72	60	61	72	63	66	65	66	67
2002-2003	**56**	67	65	41	52	69	48	58	60	58	57
Student fees											
1992-1993	**14**	12	15	18	19	11	16	16	16	13	13
2002-2003	**21**	17	18	30	27	10	27	18	17	20	18
Non-government grants and contracts, donations and bequests											
1992-1993	**7**	3	4	3	5	8	7	7	6	7	7
2002-2003	**9**	4	4	7	6	10	11	12	8	8	7
Sales											
1992-1993	**8**	4	7	12	10	3	10	8	7	9	9
2002-2003	**9**	5	12	16	12	7	7	9	14	14	14
Investment											
1992-1993	**3**	2	2	3	3	2	3	3	3	4	4
2002-2003	**1**	1	1	3	2	1	1	2	0	-2	3
Miscellaneous											
1992-1993	**2**	2	0	4	2	4	1	0	2	1	1
2002-2003	**4**	7	1	3	2	3	6	1	1	1	2

Source: Survey of Financial Information of Universities and Colleges, Statistics Canada.

Table B3.1

Percentage of graduates who borrowed from government student loan programs, average debt at graduation, and percentage of debt repaid 2 years after graduation, 1995 and 2000 graduates,[1] Canada and provinces

Province of study and level of education	Percentage of graduates who borrowed		Average debt of those who borrowed at graduation		Percentage change in average debt at graduation of those who borrowed	Percentage of debt repaid 2 years after graduation	
	1995	2000	1995	2000		1995	2000
	%		(2000 dollars)			%	
Canada							
College	**49**	**46**	**10,510**	**12,500**	**19**	**26**	**28**
Bachelor's	**55**	**51**	**14,619**	**19,000**	**30**	**30**	**26**
Master's	**51**	**53**	**15,011**	**18,200**	**21**	**35**	**28**
Doctorate	**42**	**50**	**14,168**	**20,000**	**41**	**46**	**33**
All university	**54**	**51**	**14,665**	**18,900**	**29**	**31**	**27**
Newfoundland and Labrador							
College	56	59	12,670	15,400	22	16	12
Bachelor's	73	75	17,081	27,600	62	26	16
Master's	56	62	13,415	18,700	39	25	18
Doctorate	..	..	..	x	..	..	x
All university	71	72	16,783	26,900	60	26	16
Prince Edward Island							
College	48	57	7,372	12,900	75	13	20
Bachelor's	71	60	13,245	17,700	34	18	11
Master's	..	..	..	x	..	..	x
Doctorate	..	..	..	x	..	..	x
All university	70	60	13,245	18,500	40	18	13
Nova Scotia							
College	47	54	11,542	11,300	-2	21	17
Bachelor's	62	58	16,350	22,700	39	24	15
Master's	51	56	18,404	20,900	14	28	28
Doctorate	32	..	..	x	..	..	x
All university	60	58	16,562	22,600	36	25	16
New Brunswick							
College	47	62	11,267	12,300	9	30	20
Bachelor's	64	63	16,378	21,500	31	16	14
Master's	58	57	15,459	19,700	27	20	25
Doctorate	43	..	..	x	..	..	x
All university	63	62	16,297	21,400	31	16	15
Quebec							
College	61	50	8,681	7,400	-15	26	26
Bachelor's	57	49	12,865	12,600	-2	20	22
Master's	61	60	14,254	15,300	7	38	25
Doctorate	61	63	14,697	17,900	22	43	32
All university	58	52	13,129	13,500	3	24	24
Ontario							
College	47	44	11,318	15,200	34	23	30
Bachelor's	52	50	14,651	22,000	50	36	31
Master's	44	51	14,897	20,100	35	32	27
Doctorate	36	47	12,843	21,200	65	55	36
All university	51	50	14,660	21,600	47	36	31
Manitoba							
College	29	28	8,964	10,400	16	29	21
Bachelor's	44	39	12,918	17,800	38	42	23
Master's	38	36	14,629	18,300	25	40	24
Doctorate	25	..	..	x	..	..	x
All university	43	39	13,040	17,800	37	42	24

Table B3.1 (concluded)

Percentage of graduates who borrowed from government student loan programs, average debt at graduation, and percentage of debt repaid 2 years after graduation, 1995 and 2000 graduates,[1] Canada and provinces

Province of study and level of education	Percentage of graduates who borrowed		Average debt of those who borrowed at graduation		Percentage change in average debt at graduation of those who borrowed	Percentage of debt repaid 2 years after graduation	
	1995	2000	1995	2000		1995	2000
	%		(2000 dollars)		%	%	
Saskatchewan							
College	52	44	12,194	11,000	-10	37	30
Bachelor's	56	53	19,538	22,000	13	30	21
Master's	45	49	17,296	20,800	20	38	36
Doctorate	..	50	..	34,200	..	..	..
All university	54	52	19,387	22,100	14	31	23
Alberta							
College	50	47	10,511	10,800	3	39	30
Bachelor's	63	55	16,174	17,800	10	37	29
Master's	52	42	17,579	18,700	6	33	32
Doctorate	38	34	16,595	19,400	17	37	28
All university	61	53	16,293	17,900	10	37	29
British Columbia							
College	37	44	12,029	11,300	-6	25	27
Bachelor's	52	50	16,703	20,000	20	39	26
Master's	50	48	16,404	20,600	26	36	37
Doctorate	36	37	16,337	19,300	18	45	36
All university	51	49	16,656	20,100	21	39	27

1. For graduates who incurred government student loans and who reported data at both collection points (two and five years after graduation).

Source: National Graduates Survey, Statistics Canada.

Chapter C tables

Tables C

Chapter C tables

Table C1.1

Physical limitations, participation in out-of-school activities and exposure to books, 4- and 5-year-olds, by sex, Canada, 2000-2001

	Boys		Girls	
	%	Standard error	%	Standard error
Percentage of children whose general health was:				
Excellent	59	(1.6)	62	(1.6)
Very good	29	(1.5)	27	(1.4)
Good	10	(1.0)	9	(0.9)
Fair to poor	2	(0.5)	1	(0.2)
Percentage of children with:				
Difficulty seeing	1	(0.2)	1	(0.3)
Difficulty hearing	0	(0.1)	1	(0.3)
Difficulty being understood when speaking	5	(0.7)	2	(0.5)
Difficulty walking	0	(0.1)	0	(0.1)
Pain or discomfort	2	(0.5)	2	(0.5)
Asthma in last 12 months	7	(0.8)	4	(0.7)
Long-term allergies	15	(1.2)	13	(1.0)
Long-term bronchitis	1	(0.3)	1	(0.2)
Long-term condition(s) that limit participation in physical activities	4	(0.6)	3	(0.5)
Percentage of children who, in the past 12 months, on a weekly basis:				
Participated in sports that are coached	38	(1.1)	37	(1.4)
Took lessons/instruction in dance, gymnastics, martial arts, etc.	19	(1.0)	37	(1.5)
Participated in music, art or other non-sport activities	9	(0.8)	14	(1.2)
Participated in clubs, groups or community programs with leadership	13	(0.7)	16	(1.0)
Percentage of children with adult who:				
Reads to them daily	59	(1.3)	61	(1.4)
Percentage of 4-year-olds who look at books, magazines or comics daily on their own	**64**	**(2.4)**	**78**	**(2.2)**
Percentage of 5-year-olds who look at books or try to read on their own daily	**62**	**(0.9)**	**75**	**(1.4)**

Source: National Longitudinal Survey of Children and Youth, Cycle 4, 2000-2001, Statistics Canada.

Table C1.2

Peabody Picture Vocabulary Test (Revised) scores for 4- and 5-year-olds, by sex, Canada, 2000-2001

	4-year-olds				5-year-olds			
	Boys		Girls		Boys		Girls	
	%	Standard error	%	Standard error	%	Standard error	%	Standard error
Delayed receptive language skills	19	(2.5)	17	(2.4)	18	(1.6)	16	(1.4)
Normal receptive language skills	69	(2.7)	69	(2.7)	67	(1.7)	70	(1.9)
Advanced receptive language skills	12	(1.6)	15	(1.9)	14	(1.3)	14	(1.5)

Source: National Longitudinal Survey of Children and Youth, Cycle 4, 2000-2001, Statistics Canada.

Table C2.1

Full-time-equivalent enrolments in public elementary and secondary schools,[1] Canada and jurisdictions, 1997-1998 to 2002-2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.[2]	Ont.	Man.[3]	Sask.	Alta.	B.C.	Y.T.	N.W.T.[4]	Nvt.[4]
1997-1998	**5,034,731**	98,527	24,397	161,780	131,586	1,118,504	1,976,177	186,590	189,095	514,256	611,280	6,097	16,444	...
Percentage change	**..**	..	..	..	..	..	..	..	..	..	..	..	..	..
1998-1999	**5,051,566**	94,628	24,146	159,449	129,131	1,116,248	1,994,989	186,897	187,975	525,148	610,261	5,872	16,825	...
Percentage change	**0.3**	-4.0	-1.0	-1.4	-1.9	-0.2	1.0	0.2	-0.6	2.1	-0.2	-3.7	2.3	...
1999-2000	**5,052,805**	91,203	24,089	158,205	127,003	1,101,644	2,011,430	191,361	186,355	528,099	609,074	5,766	9,381	9,196
Percentage change	**0.0**	-3.6	-0.2	-0.8	-1.6	-1.3	0.8	2.4	-0.9	0.6	-0.2	-1.8	...	...
2000-2001	**5,042,469**	87,550	23,153	155,873	124,942	1,094,472	2,026,039	184,334	184,316	531,165	606,587	5,577	9,291	9,171
Percentage change	**-0.2**	-4.0	-3.9	-1.5	-1.6	-0.7	0.7	-3.7	-1.1	0.6	-0.4	-3.3	-1.0	-0.3
2001-2002	**5,042,647**	84,284	22,843	153,450	122,792	1,090,176	2,046,333	183,545	180,485	529,758	605,055	5,397	9,337	9,194
Percentage change	**0.0**	-3.7	-1.3	-1.6	-1.7	-0.4	1.0	-0.4	-2.1	-0.3	-0.3	-3.2	0.5	0.3
2002-2003	**5,021,604**	81,767	22,615	150,599	120,600	1,084,480	2,049,535	181,886	176,700	533,127	596,441	5,412	9,422	9,021
Percentage change	**-0.4**	-3.0	-1.0	-1.9	-1.8	-0.5	0.2	-0.9	-2.1	0.6	-1.4	0.3	0.9	-1.9
Percentage change 1997-1998 to 2002-2003	**-0.3**	**-17.0**	**-7.3**	**-6.9**	**-8.3**	**-3.0**	**3.7**	**-2.5**	**-6.6**	**3.7**	**-2.4**	**-11.2**	**...**	**...**

1. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported in this table are not comparable to figures reported in PCEIP 2003.
2. Includes enrolments in adult programs and professional training under the authority of the school boards or districts. Certain jurisdictions include all students whether they are funded or not while others include only funded students.
3. Until 2000-2001, includes enrolments in adult programs and professional training under the authority of the school boards or districts. Certain jurisdictions include all students whether they are funded or not while others include only funded students.
4. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000. As a result, the overall percentage change is calculated for the period 1999-2000 to 2002-2003 for the Northwest Territories and Nunavut.

Source: Elementary-Secondary Education Statistics Project, Statistics Canada.

Table C2.2

Full-time-equivalent educators[1] in public elementary and secondary schools,[2] Canada and jurisdictions, 1997-1998 to 2002-2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.[3]	Nvt.[3]
1997-1998	**302,729**	6,745	1,439	9,396	7,696	73,750	117,047	12,028	10,873	27,417	34,966	457	917	…
Percentage change	**..**	..	..	..	..	..	..	..	..	..	..	..	..	..
1998-1999	**308,150**	6,492	1,444	9,621	7,568	74,437	120,543	12,034	11,142	28,041	35,461	452	916	…
Percentage change	**1.8**	-3.7	0.3	2.4	-1.7	0.9	3.0	0.0	2.5	2.3	1.4	-1.0	-0.1	…
1999-2000	**308,502**	6,414	1,444	9,611	7,571	74,415	120,597	12,147	11,128	28,037	35,687	453	519	479.0
Percentage change	**0.1**	-1.2	0.0	-0.1	0.0	0.0	0.0	0.9	-0.1	0.0	0.6	0.2	-43.3	…
2000-2001	**311,295**	6,323	1,457	9,444	7,468	74,708	122,394	12,224	10 ,794	28,877	36,113	463	553	477
Percentage change	**0.9**	-1.4	0.9	-1.7	-1.4	0.4	1.5	0.6	-3.0	3.0	1.2	2.3	6.5	0.6
2001-2002	**311,521**	6,304	1,467	9,304	7,263	74,925	121,939	12,147	11,066	29,669	35,930	452	577	479
Percentage change	**0.1**	-0,3	0,7	-1,5	-2.7	0.3	-0.4	-0.6	2.5	2.7	-0.5	-2.4	4.4	0.5
2002-2003	**310,780**	6,102	1,479	9,276	7,285	76,025	122,577	12,129	10,985	29,517	33,901	446	578	481
Percentage change	**-0.2**	-3.2	0.8	-0.3	0.3	1.5	0.5	-0.1	-0.7	-0.5	-5.6	-1.3	0.1	0.5
Percentage change 1997-1998 to 2002-2003	**2.7**	**-9.5**	**2.8**	**-1.3**	**-5.3**	**3.1**	**4.7**	**0.8**	**1.0**	**7.7**	**-3.0**	**-2.4**	**4.5**	**0.4**

1. Full-Time Equivalent (FTE) Educator is defined as the number of full-time educators on September the 30th (or as close as possible thereafter) of the school year, plus the sum of part-time educators according to their percentage of a full-time employment allocation (determined by the province or territory).
2. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported in this table are not comparable to figures reported in PCEIP 2003.
3. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000. The overall percentage change is calculated for the period 1999-2000 to 2002-2003 for Nunavut and for the period 2000-2001 to 2002-2003 for the Northwest Territories.

Source: Elementary-Secondary Education Statistics Project, Statistics Canada.

Table C2.3

Student-educator ratio in public elementary and secondary schools,[1] Canada and jurisdictions, 1997-1998 to 2002-2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.[2]	Nvt.[2]
1997-1998	**16.6**	14.6	17.0	17.2	17.1	15.2	16.9	15.5	17.4	18.8	17.5	13.3	17.9	…
Percentage change	**..**	..	..	..	..	..	..	..	..	..	..	..	..	…
1998-1999	**16.4**	14.6	16.7	16.6	17.1	15.0	16.6	15.5	16.9	18.7	17.2	13.0	18.4	…
Percentage change	**-1.4**	-0.2	-1.4	-3.7	-0.2	-1.1	-2.0	0.1	-3.0	-0.2	-1.6	-2.7	2.4	…
1999-2000	**16.4**	14.2	16.7	16.5	16.8	14.8	16.7	15.8	16.8	18.8	17.1	12.7	18.1	19.2
Percentage change	**-0.1**	-2.4	-0.2	-0.7	-1.7	-1.3	0.8	1.4	-0.7	0.6	-0.8	-1.9	-1.6	..
2000-2001	**16.2**	13.9	15.9	16.5	16.7	14.7	16.6	15.1	17.1	18.4	16.8	12.0	16.8	19.2
Percentage change	**-1.1**	-2.6	-4.7	0.3	-0.3	-1.0	-0.8	-4.3	2.0	-2.3	-1.6	-5.4	-7.0	0.3
2001-2002	**16.2**	13.4	15.6	16.5	16.9	14.6	16.8	15.1	16.3	17.9	16.8	11.9	16.2	19.2
Percentage change	**-0.1**	-3.4	-2.0	-0.1	1.1	-0.7	1.4	0.2	-4.5	-2.9	0.3	-0.9	-3.8	-0.2
2002-2003	**16.2**	13.4	15.3	16.2	16.6	14.3	16.7	15.0	16.1	18.1	17.6	12.1	16.3	18.8
Percentage change	**0.0**	0.2	-1.8	-1.5	-2.1	-2.0	-0.4	-0.7	-1.3	0.9	4.5	1.7	0.9	-2.3

1. These data are for public schools only and do not include private schools, federal schools and schools for the visually and hearing impaired. As a result, figures reported in this table are not comparable to figures reported in PCEIP 2003.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: Elementary-Secondary Education Statistics Project, Statistics Canada.

Table C3.1

Student-to-computer ratio (median), Canada and jurisdictions, school year 2003-2004

	All schools	Instructional level of school			Location of school		Type of school		Size of school		
		Elementary	Secondary	Mixed	Urban	Rural	Public	Private	Small	Medium	Large
Canada	**5.0**	**5.5**	**4.3**	**3.4**	**5.4**	**3.8**	**4.9**	**4.7**	**3.4**	**5.0**	**6.3**
Newfoundland and Labrador	4.4	5.7	4.5	3.4	6.1	3.7	4.4	3.3	2.9	4.5	6.5
Prince Edward Island	5.4	5.4	5.6	5.9	6.2	5.4	5.6	F	3.6	5.7	6.3
Nova Scotia	4.9	5.6	4.4	4.1	5.1	4.3	4.9	5.6*	4.2	5.5	4.6
New Brunswick	4.6	5.2	3.8	3.9	5.3	3.9	4.7	3.1	3.4	5.6	6.1
Quebec	5.9	5.8	6.6	3.6	6.5	4.0	5.8	6.8	3.8	6.2	7.1
Ontario	5.4	5.8	4.1	4.2	5.6	4.6	5.5	4.5	3.7	5.2	6.5
Manitoba	3.6	4.1	3.4	2.7	4.3	2.6	3.4	3.9	2.6	4.2	5.0
Saskatchewan	3.7	4.4	3.7	3.1	4.4	3.0	3.7	2.4	3.0	3.7	5.3
Alberta	4.1	4.4	3.9	3.7	4.3	3.0	4.1	3.0	3.1	4.0	4.8
British Columbia	5.0	5.3	4.7	3.8	5.3	3.4	4.9	5.3	3.5	5.1	6.1
Yukon	2.9	3.6	3.5	2.5	3.5	2.6	2.9	F	2.9	2.7	3.3
Northwest Territories	3.5	4.3	3.9	2.8	3.6	3.5	3.3	F	1.8	3.7	4.0
Nunavut	4.1	7.7	4.0	3.6	4.1	4.1	4.1	F	3.9	4.3	8.7

Source: Information and Communications Technologies in Schools Survey 2003-2004, Statistics Canada.

Table C3.2

Types of technology applications frequently incorporated into teaching practices, Canada and jurisdictions, school year 2003-2004

All schools	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Percentage of schools with technology applications frequently[1] incorporated into teaching practices														
Use of software for special needs students and/or remedial programs providing individualized learning	**29.1**	34.1	19.6*	29.7	18.9	10.1	39.9	29.9	31.8	25.3	31.2	x	20.0*	x
Use of software for specific subject areas	**28.3**	20.7	13.4*	19.8	8.8	19.2	38.6	34.0	20.1	28.7	21.8	25.0	20.0*	x
Use of spreadsheets and database software for simple data manipulation and statistical analysis	**15.3**	5.0*	x	9.2	5.0	8.3	21.7	21.3	11.6	21.3	7.2	x	x	x
Use of word processing	**78.2**	79.7	76.9	72.9	61.2	79.7	80.3	79.6	79.1	75.0	76.8	75.0	68.6	50.0*
Use of desktop publishing	**24.1**	34.7	31.7	22.3	11.5	9.1	34.5	29.4	25.6	20.4	18.0	29.2	x	x
Use of presentation software	**21.4**	27.2	x	25.3	10.4	17.3	23.5	24.7	23.8	29.2	13.3	x	x	x
Use of software supporting creative works	**10.8**	11.7	x	8.2	3.5	7.5	14.8	7.2	8.1	10.6	9.6	x	x	x
Use of Internet/Intranet to disseminate information	**34.4**	45.5	31.0	33.5	16.7	32.6	38.4	31.5	35.3	34.5	29.2	x	25.7*	x
Use of Internet for online learning	**28.8**	51.2	39.0	30.6	15.3	22.4	30.7	30.0	37.8	30	25.3	31.8	23.5*	x
Other	**18.1**	x	x	x	x	35.0**	13.9**	x	x	x	x	x	x	x

1. Technology applications were defined as frequently incorporated into teaching practices when they were used "most of the time" or "always".

Source: Information and Communications Technologies in Schools Survey 2003-2004, Statistics Canada.

Table C3.3

Percentage of schools having teachers with technical skills needed to use ICT, Canada and jurisdictions, school year 2003-2004

All schools	Percentage of schools with teachers possessing the required technical skills to use ICT for administrative purposes				Percentage of schools with teachers possessing the required technical skills to engage students in using ICT effectively			
	Less than 25% of the teachers	From 25% to 49% of the teachers	From 50% to 74% of the teachers	75% of the teachers or more	Less than 25% of the teachers	From 25% to 49% of the teachers	From 50% to 74% of the teachers	75% of the teachers or more
Canada	**14.6**	**3.3**	**6.4**	**75.6**	**18.9**	**11.4**	**23.5**	**46.2**
Newfoundland and Labrador	32.6	9.6	7.6*	50.1	29.2	18.3	23.0	29.5
Prince Edward Island	21.3	13.7*	20.8	44.3	x	12.7*	21.0	55.9
Nova Scotia	21.1	7.6	12.5	58.7	20.0	12.1	25.1	42.8
New Brunswick	18.9	4.8	7.1	69.2	23.0	14.9	26.1	35.9
Quebec	16.4	3.9	7.3	72.5	13.0	12.2	29.6	45.2
Ontario	10.8	1.4	3.1	84.7	18.4	11.9	22.1	47.6
Manitoba	23.4	5.8	14.6	56.2	27.1	9.2	18.3	45.4
Saskatchewan	30.6	8.6	12.7	48.1	30.3	10.6	20.8	38.2
Alberta	12.7	2.2*	4.9	80.2	12.0	5.5	16.4	66.0
British Columbia	9.4	3.1*	7.1	80.3	24.3	13.4	27.2	35.2
Yukon	x	x	x	95.7	x	x	x	56.5
Northwest Territories	x	x	x	71.4	25.7*	20.0*	28.6	25.7*
Nunavut	x	x	x	71.4	42.9*	x	x	x

Source: Information and Communications Technologies in Schools Survey 2003-2004, Statistics Canada.

Table C3.4

Percentage of schools reporting ICT-related challenges, by type of challenge, Canada and jurisdictions, school year 2003-2004

All schools	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Obtaining sufficient number of computers	**39.3**	59.2	52.9	37.4	41.1	51.7	36.8	22.0	23.6	37.5	39.3	x	22.2*	27.3*
Ensuring computers and peripherals are up to date	**51.8**	71.2	55.7	51.8	64.2	57.4	50.2	35.6	34.7	53.0	54.8	x	41.7	57.1
Obtaining sufficient copies/ licences of software for instructional purposes	**43.4**	62.6	36.4	51.7	53.8	55.0	35.3	38.7	40.5	41.2	46.6	x	44.4	50.0
Having enough training opportunities for teachers	**40.1**	56.9	52.7	43.7	48.1	37.5	44.7	25.4	39.0	29.0	40.7	29.2	54.3	72.7
Having sufficient funding for technology	**66.8**	79.6	74.8	59.6	74.7	78.8	63.6	49.2	43.7	69.5	70.5	33.3	57.1	61.9

Source: Information and Communications Technologies in Schools Survey 2003-2004, Statistics Canada.

Table C4.1

Mean scores, standard errors and distribution of 15-year-old students by mathematics proficiency on the PISA mathematics combined scale,[1] Canada, provinces and selected countries, 2003

Country and province[2]	Mean		Below level 1		Level 1		Level 2		Level 3		Level 4		Level 5		Level 6	
Hong Kong - China	550	(4.5)	3.9	(0.7)	6.5	(0.6)	13.9	(1.0)	20.0	(1.2)	25.0	(1.2)	20.2	(1.0)	10.5	(0.9)
Alberta	**549**	**(4.3)**	**1.7**	**(0.3)**	**5.7**	**(0.8)**	**15.0**	**(2.1)**	**24.6**	**(1.4)**	**26.0**	**(1.7)**	**18.5**	**(1.1)**	**8.5**	**(1.4)**
Finland	544	(1.9)	1.5	(0.2)	5.3	(0.4)	16.0	(0.6)	27.7	(0.7)	26.1	(0.9)	16.7	(0.6)	6.7	(0.5)
Korea	542	(3.2)	2.5	(0.3)	7.1	(0.7)	16.6	(0.8)	24.1	(1.0)	25.0	(1.1)	16.7	(0.8)	8.1	(0.9)
British Columbia	**538**	**(2.4)**	**1.7**	**(0.3)**	**6.9**	**(0.6)**	**17.6**	**(1.0)**	**25.8**	**(1.1)**	**26.3**	**(1.0)**	**15.8**	**(0.8)**	**5.9**	**(0.6)**
Netherlands	538	(3.1)	2.6	(0.7)	8.4	(0.9)	18.0	(1.1)	23.0	(1.1)	22.6	(1.3)	18.2	(1.1)	7.3	(0.6)
Quebec	**537**	**(4.7)**	**3.3**	**(0.6)**	**7.8**	**(0.9)**	**16.2**	**(1.3)**	**23.5**	**(1.5)**	**25.6**	**(1.5)**	**16.6**	**(1.2)**	**7.0**	**(0.8)**
Liechtenstein	536	(4.1)	4.8	(1.3)	7.5	(1.7)	17.3	(2.8)	21.6	(2.5)	23.2	(3.1)	18.3	(3.2)	7.3	(1.7)
Japan	534	(4.0)	4.7	(0.7)	8.6	(0.7)	16.3	(0.8)	22.4	(1.0)	23.6	(1.2)	16.1	(1.0)	8.2	(1.1)
Canada	**532**	**(1.8)**	**2.4**	**(0.3)**	**7.7**	**(0.4)**	**18.3**	**(0.6)**	**26.2**	**(0.7)**	**25.1**	**(0.6)**	**14.8**	**(0.5)**	**5.5**	**(0.4)**
Ontario	**530**	**(3.6)**	**2.0**	**(0.4)**	**7.7**	**(0.8)**	**19.1**	**(1.1)**	**27.7**	**(1.3)**	**25.1**	**(1.3)**	**13.8**	**(1.2)**	**4.6**	**(0.8)**
Belgium	529	(2.3)	7.2	(0.6)	9.3	(0.5)	15.9	(0.6)	20.1	(0.7)	21.0	(0.6)	17.5	(0.7)	9.0	(0.5)
Manitoba	**528**	**(3.1)**	**2.8**	**(0.6)**	**8.2**	**(0.8)**	**19.2**	**(1.2)**	**26.3**	**(1.4)**	**24.5**	**(1.5)**	**14.2**	**(1.2)**	**4.8**	**(0.6)**
Macao - China	527	(2.9)	2.3	(0.6)	8.8	(1.3)	19.6	(1.4)	26.8	(1.8)	23.7	(1.7)	13.8	(1.6)	4.8	(1.0)
Switzerland	527	(3.4)	4.9	(0.4)	9.6	(0.6)	17.5	(0.8)	24.3	(1.0)	22.5	(0.7)	14.2	(1.1)	7.0	(0.9)
Australia	524	(2.1)	4.3	(0.4)	10.0	(0.5)	18.6	(0.6)	24.0	(0.7)	23.3	(0.6)	14.0	(0.5)	5.8	(0.4)
New Zealand	523	(2.3)	4.9	(0.4)	10.1	(0.6)	19.2	(0.7)	23.2	(0.9)	21.9	(0.8)	14.1	(0.6)	6.6	(0.4)
Newfoundland and Labrador	**517**	**(2.5)**	**2.9**	**(0.6)**	**9.6**	**(0.9)**	**22.2**	**(1.6)**	**27.5**	**(1.5)**	**23.6**	**(1.4)**	**11.2**	**(1.1)**	**3.0**	**(0.5)**
Saskatchewan	**516**	**(3.9)**	**3.9**	**(1.0)**	**9.9**	**(0.9)**	**20.9**	**(1.5)**	**26.7**	**(1.5)**	**23.7**	**(1.5)**	**11.7**	**(1.1)**	**3.2**	**(0.5)**
Czech Republic	516	(3.5)	5.0	(0.7)	11.6	(0.9)	20.1	(1.0)	24.3	(0.9)	20.8	(0.9)	12.9	(0.8)	5.3	(0.5)
Nova Scotia	**515**	**(2.2)**	**3.2**	**(0.5)**	**10.4**	**(0.7)**	**21.5**	**(1.1)**	**28.3**	**(1.1)**	**22.3**	**(1.4)**	**11.3**	**(1.1)**	**3.0**	**(0.6)**
Iceland	515	(1.4)	4.5	(0.4)	10.5	(0.6)	20.2	(1.0)	26.1	(0.9)	23.2	(0.8)	11.7	(0.6)	3.7	(0.4)
Denmark	514	(2.7)	4.7	(0.5)	10.7	(0.6)	20.6	(0.9)	26.2	(0.9)	21.9	(0.8)	11.8	(0.9)	4.1	(0.5)
New Brunswick	**512**	**(1.8)**	**3.7**	**(0.5)**	**10.6**	**(0.6)**	**22.8**	**(0.9)**	**27.4**	**(1.0)**	**22.0**	**(1.0)**	**10.1**	**(0.8)**	**3.4**	**(0.4)**
France	511	(2.5)	5.6	(0.7)	11.0	(0.8)	20.2	(0.8)	25.9	(1.0)	22.1	(1.0)	11.6	(0.7)	3.5	(0.4)
Sweden	509	(2.6)	5.6	(0.5)	11.7	(0.6)	21.7	(0.8)	25.5	(0.9)	19.8	(0.8)	11.6	(0.6)	4.1	(0.5)
Austria	506	(3.3)	5.6	(0.7)	13.2	(0.8)	21.6	(0.9)	24.9	(1.1)	20.5	(0.8)	10.5	(0.9)	3.7	(0.5)
Ireland	503	(2.4)	4.7	(0.6)	12.1	(0.8)	23.6	(0.8)	28.0	(0.8)	20.2	(1.1)	9.1	(0.8)	2.2	(0.3)
Germany	503	(3.3)	9.2	(0.8)	12.4	(0.8)	19.0	(1.0)	22.6	(0.8)	20.6	(1.0)	12.2	(0.9)	4.1	(0.5)
Prince Edward Island	**500**	**(2.0)**	**5.2**	**(0.5)**	**12.5**	**(1.0)**	**23.7**	**(1.6)**	**28.0**	**(1.8)**	**20.5**	**(1.2)**	**7.5**	**(0.8)**	**2.6**	**(0.7)**
OECD average	**500**	**(0.6)**	**8.2**	**(0.2)**	**13.2**	**(0.2)**	**21.1**	**(0.1)**	**23.7**	**(0.2)**	**19.1**	**(0.2)**	**10.6**	**(0.1)**	**4.0**	**(0.1)**
Slovak Republic	498	(3.3)	6.7	(0.8)	13.2	(0.9)	23.5	(0.9)	24.9	(1.1)	18.9	(0.8)	9.8	(0.7)	2.9	(0.4)
Norway	495	(2.4)	6.9	(0.5)	13.9	(0.8)	23.7	(1.2)	25.2	(1.0)	18.9	(1.0)	8.7	(0.6)	2.7	(0.3)
Luxembourg	493	(1.0)	7.4	(0.4)	14.3	(0.6)	22.9	(0.9)	25.9	(0.8)	18.7	(0.8)	8.5	(0.6)	2.4	(0.3)
Poland	490	(2.5)	6.8	(0.6)	15.2	(0.8)	24.8	(0.7)	25.3	(0.9)	17.7	(0.9)	7.8	(0.5)	2.3	(0.3)
Hungary	490	(2.8)	7.8	(0.8)	15.2	(0.8)	23.8	(1.0)	24.3	(0.9)	18.2	(0.9)	8.2	(0.7)	2.5	(0.4)
Spain	485	(2.4)	8.1	(0.7)	14.9	(0.9)	24.7	(0.8)	26.7	(1.0)	17.7	(0.6)	6.5	(0.6)	1.4	(0.2)
Latvia	483	(3.7)	7.6	(0.9)	16.1	(1.1)	25.5	(1.2)	26.3	(1.2)	16.6	(1.2)	6.3	(0.7)	1.6	(0.4)
United States	483	(2.9)	10.2	(0.8)	15.5	(0.8)	23.9	(0.8)	23.8	(0.8)	16.6	(0.7)	8.0	(0.5)	2.0	(0.4)
Russian Federation	468	(4.2)	11.4	(1.0)	18.8	(1.1)	26.4	(1.1)	23.1	(1.0)	13.2	(0.9)	5.4	(0.6)	1.6	(0.4)
Portugal	466	(3.4)	11.3	(1.1)	18.8	(1.0)	27.1	(1.0)	24.0	(1.0)	13.4	(0.9)	4.6	(0.5)	0.8	(0.2)
Italy	466	(3.1)	13.2	(1.2)	18.7	(0.9)	24.7	(1.0)	22.9	(0.8)	13.4	(0.7)	5.5	(0.4)	1.5	(0.2)
Greece	445	(3.9)	17.8	(1.2)	21.2	(1.2)	26.3	(1.0)	20.2	(1.0)	10.6	(0.9)	3.4	(0.5)	0.6	(0.2)
Serbia and Montenegro (Ser.)	437	(3.8)	17.6	(1.3)	24.5	(1.1)	28.6	(1.2)	18.9	(1.1)	8.1	(0.9)	2.1	(0.4)	0.2	(0.1)
Turkey	423	(6.7)	27.7	(2.0)	24.6	(1.3)	22.1	(1.1)	13.5	(1.3)	6.8	(1.0)	3.1	(0.8)	2.4	(1.0)
Uruguay	422	(3.3)	26.3	(1.3)	21.8	(0.8)	24.2	(0.9)	16.8	(0.7)	8.2	(0.7)	2.3	(0.3)	0.5	(0.2)
Thailand	417	(3.0)	23.8	(1.3)	30.2	(1.2)	25.4	(1.1)	13.7	(0.8)	5.3	(0.5)	1.5	(0.3)	0.2	(0.1)
Mexico	385	(3.6)	38.1	(1.7)	27.9	(1.0)	20.8	(0.9)	10.1	(0.8)	2.7	(0.4)	0.4	(0.1)	0.0	(0.0)
Indonesia	360	(3.9)	50.5	(2.1)	27.6	(1.1)	14.8	(1.1)	5.5	(0.7)	1.4	(0.4)	0.2	(0.1)	0.0	
Tunisia	359	(2.5)	51.1	(1.4)	26.9	(1.0)	14.7	(0.8)	5.7	(0.6)	1.4	(0.3)	0.2	(0.1)	0.0	
Brazil	356	(4.8)	53.3	(1.9)	21.9	(1.1)	14.1	(0.9)	6.8	(0.8)	2.7	(0.5)	0.9	(0.4)	0.3	(0.2)

1. The standard error of the estimates is included in parenthesis.
2. Jurisdictions are ordered by mean scores.

Source: Human Resources and Skills Development Canada, Statistics Canada and Council of Ministers of Education, Canada. (2004). Measuring Up: Canadian Results of the OECD PISA Study: The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving 2003. First Findings for Canadians Aged 15. Ottawa: Minister of Industry.

Table C4.2

Estimated average scores and standard errors on the PISA mathematics subscales, Canada, provinces and selected countries, 2003

Mathematics subscales					
Space and Shape			Change and Relationships		
Country and province	Estimated average	Standard error	Country and province	Estimated average	Standard error
Hong Kong - China	558	(4.8)	**Alberta**	**554**	**(4.4)**
Japan	553	(4.3)	Netherlands	551	(3.1)
Korea	552	(3.8)	Korea	548	(3.5)
Switzerland	540	(3.5)	**British Columbia**	**543**	**(2.5)**
Finland	539	(2.0)	Finland	543	(2.2)
Liechtenstein	538	(4.6)	Hong Kong - China	540	(4.7)
Alberta	**534**	**(4.3)**	Liechtenstein	540	(3.7)
Belgium	530	(2.3)	**Quebec**	**538**	**(5.0)**
Macao - China	528	(3.3)			
Quebec	**528**	**(4.5)**	**Canada**	**537**	**(1.9)**
Czech Republic	527	(4.1)			
Netherlands	526	(2.9)	Japan	536	(4.3)
New Zealand	525	(2.3)	**Ontario**	**536**	**(3.8)**
British Columbia	**523**	**(2.6)**	Belgium	535	(2.4)
Australia	521	(2.3)	**Manitoba**	**532**	**(3.2)**
			New Zealand	526	(2.4)
Canada	**518**	**(1.8)**	Australia	525	(2.3)
			Switzerland	523	(3.7)
Austria	515	(3.5)	**Newfoundland and Labrador**	**521**	**(2.6)**
Manitoba	**513**	**(3.5)**	**Saskatchewan**	**520**	**(4.1)**
Denmark	512	(2.8)	France	520	(2.6)
Ontario	**512**	**(3.6)**	Macao - China	519	(3.5)
France	508	(3.0)	**Nova Scotia**	**517**	**(2.2)**
Slovak Republic	505	(4.0)	Czech Republic	515	(3.5)
Iceland	504	(1.5)	**New Brunswick**	**513**	**(1.9)**
Saskatchewan	**500**	**(3.7)**	Iceland	509	(1.4)
Germany	500	(3.3)	Denmark	509	(3.0)
Sweden	498	(2.6)	Germany	507	(3.7)
Newfoundland and Labrador	**498**	**(2.7)**	Ireland	506	(2.4)
Nova Scotia	**498**	**(2.4)**	Sweden	505	(2.9)
New Brunswick	**498**	**(1.7)**	**Prince Edward Island**	**502**	**(2.0)**
			Austria	500	(3.6)
OECD average	**496**	**(0.7)**			
			OECD average	**499**	**(0.7)**
Poland	490	(2.7)			
Luxembourg	488	(1.4)	Hungary	495	(3.1)
Latvia	486	(4.0)	Slovak Republic	494	(3.5)
Norway	483	(2.5)	Norway	488	(2.6)
Prince Edward Island	**480**	**(2.5)**	Latvia	487	(4.4)
Hungary	479	(3.3)	Luxembourg	487	(1.2)
Spain	476	(2.6)	United States	486	(3.0)
Ireland	476	(2.4)	Poland	484	(2.7)
Russian Federation	474	(4.7)	Spain	481	(2.8)
United States	472	(2.8)	Russian Federation	477	(4.6)
Italy	470	(3.1)	Portugal	468	(4.0)
Portugal	450	(3.4)	Italy	452	(3.2)
Greece	437	(3.8)	Greece	436	(4.3)
Serbia and Montenegro (Ser.)	432	(3.9)	Turkey	423	(7.6)
Thailand	424	(3.3)	Serbia and Montenegro (Ser.)	419	(4.0)
Turkey	417	(6.3)	Uruguay	417	(3.6)
Uruguay	412	(3.0)	Thailand	405	(3.4)
Mexico	382	(3.2)	Mexico	364	(4.1)
Indonesia	361	(3.7)	Tunisia	337	(2.8)
Tunisia	359	(2.6)	Indonesia	334	(4.6)
Brazil	350	(4.1)	Brazil	333	(6.0)

Table C4.2 (concluded)

Estimated average scores and standard errors on the PISA mathematics subscales, Canada, provinces and selected countries, 2003

Mathematics subscales					
Quantity			Uncertainty		
Country and province	Estimated average	Standard error	Country and province	Estimated average	Standard error
Finland	549	(1.8)	Hong Kong - China	558	(4.6)
Hong Kong - China	545	(4.2)	**Alberta**	**556**	**(4.4)**
Alberta	**545**	**(4.0)**	**British Columbia**	**550**	**(2.4)**
Korea	537	(3.0)	Netherlands	549	(3.0)
Liechtenstein	534	(4.1)	Finland	545	(2.1)
British Columbia	**533**	**(2.3)**	**Quebec**	**542**	**(4.8)**
Macao - China	533	(3.0)			
Switzerland	533	(3.1)	**Canada**	**542**	**(1.8)**
Quebec	**531**	**(4.7)**			
Belgium	530	(2.3)	**Ontario**	**540**	**(3.6)**
Netherlands	528	(3.1)	Korea	538	(3.0)
			Manitoba	**538**	**(3.0)**
Canada	**528**	**(1.8)**	New Zealand	532	(2.3)
			Macao - China	532	(3.2)
Czech Republic	528	(3.5)	Australia	531	(2.2)
Japan	527	(3.8)	**Newfoundland and Labrador**	**530**	**(2.5)**
Ontario	**526**	**(3.8)**	Japan	528	(3.9)
Manitoba	**523**	**(3.2)**	Iceland	528	(1.5)
Australia	517	(2.1)	**Nova Scotia**	**528**	**(2.2)**
Denmark	516	(2.6)	**Saskatchewan**	**526**	**(4.0)**
Germany	514	(3.4)	Belgium	526	(2.2)
Sweden	514	(2.5)	Liechtenstein	523	(3.7)
Iceland	513	(1.5)	**New Brunswick**	**523**	**(1.8)**
Austria	513	(3.0)	Ireland	517	(2.6)
Saskatchewan	**513**	**(3.9)**	Switzerland	517	(3.3)
Newfoundland and Labrador	**512**	**(2.6)**	Denmark	516	(2.8)
Slovak Republic	513	(3.4)	**Prince Edward Island**	**515**	**(2.2)**
New Zealand	511	(2.2)	Norway	513	(2.6)
Nova Scotia	**511**	**(2.2)**	Sweden	511	(2.7)
France	507	(2.5)	France	506	(2.4)
New Brunswick	**507**	**(2.1)**			
Ireland	502	(2.5)	**OECD average**	**502**	**(0.6)**
OECD average	**501**	**0.6**	Czech Republic	500	(3.1)
			Austria	494	(3.1)
Luxembourg	501	(1.1)	Poland	494	(2.3)
Hungary	496	(2.7)	Germany	493	(3.3)
Prince Edward Island	**496**	**(2.2)**	Luxembourg	492	(1.1)
Norway	494	(2.2)	United States	491	(3.0)
Spain	492	(2.5)	Hungary	489	(2.6)
Poland	492	(2.5)	Spain	489	(2.4)
Latvia	482	(3.6)	Slovak Republic	476	(3.2)
United States	476	(3.2)	Latvia	474	(3.3)
Italy	475	(3.4)	Portugal	471	(3.4)
Russian Federation	472	(4.0)	Italy	463	(3.0)
Portugal	465	(3.5)	Greece	458	(3.5)
Serbia and Montenegro (Ser.)	456	(3.8)	Turkey	443	(6.2)
Greece	446	(4.0)	Russian Federation	436	(4.0)
Uruguay	430	(3.2)	Serbia and Montenegro (Ser.)	428	(3.5)
Thailand	415	(3.1)	Thailand	423	(2.5)
Turkey	413	(6.8)	Uruguay	419	(3.1)
Mexico	394	(3.9)	Mexico	390	(3.3)
Tunisia	364	(2.8)	Indonesia	385	(2.9)
Brazil	360	(5.0)	Brazil	377	(3.9)
Indonesia	357	(4.3)	Tunisia	363	(2.3)

Source: Human Resources and Skills Development Canada, Statistics Canada and Council of Ministers of Education, Canada. (2004). Measuring Up: Canadian Results of the OECD PISA Study: The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving 2003. First Findings for Canadians Aged 15. Ottawa: Minister of Industry.

Table C4.3

Comparison of estimated average performance in mathematics for PISA 2003 and PISA 2000 assessments, Canada and provinces

	PISA 2000		PISA 2003	
	Estimated average score	95% confidence interval	Estimated average score	95% confidence interval
Mathematics – space and shape				
Canada	515	512-518	518	505-530
Newfoundland and Labrador	489	482-496	498	485-511
Prince Edward Island	500	492-508	480	467-493
Nova Scotia	498	491-505	498	485-510
New Brunswick	497	490-504	498	485-510
Quebec	536	531-541	528	514-543
Ontario	504	498-510	512	499-526
Manitoba	517	507-527	513	499-526
Saskatchewan	507	500-514	500	486-514
Alberta	523	516-530	534	520-549
British Columbia	519	513-525	523	510-535
Mathematics – change and relationships				
Canada	**520**	517-523	**537**	526-547
Newfoundland and Labrador	**497**	491-503	**521**	510-531
Prince Edward Island	506	499-513	502	492-512
Nova Scotia	505	500-510	517	507-528
New Brunswick	**497**	492-502	**513**	503-524
Quebec	529	524-534	538	524-551
Ontario	**513**	508-518	**536**	524-548
Manitoba	523	515-531	532	521-544
Saskatchewan	517	511-523	520	508-532
Alberta	**533**	527-539	**554**	542-567
British Columbia	**525**	519-531	**543**	532-554

Note: Statistically significant differences are shown in bold. The confidence interval represents the range within which the score for the population is likely to fall, with 95% probability. Approximate Confidence Interval = average score +/- 1.96 x Standard Error. This confidence interval gives a range within which the true mean is likely to fall. If two confidence intervals overlap, there is no significant difference between the means.

Source: Human Resources and Skills Development Canada, Statistics Canada and Council of Ministers of Education, Canada. (2004). Measuring Up: Canadian Results of the OECD PISA Study: The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving 2003. First Findings for Canadians Aged 15. Ottawa: Minister of Industry.

Table C4.4

Comparison of estimated average performance in reading for PISA 2003 and PISA 2000 assessments, Canada and provinces

	PISA 2000		PISA 2003	
	Estimated average score	95% confidence interval	Estimated average score	95% confidence interval
Reading				
Canada	534	531-537	528	520-536
Newfoundland and Labrador	517	512-522	521	511-531
Prince Edward Island	**517**	512-522	**495**	486-503
Nova Scotia	521	516-526	513	504-521
New Brunswick	501	497-505	503	494-511
Quebec	536	530-542	525	514-536
Ontario	533	527-539	530	520-540
Manitoba	529	522-536	520	511-530
Saskatchewan	**529**	524-534	**512**	501-523
Alberta	550	544-556	543	532-554
British Columbia	538	532-544	535	526-544

Note: Statistically significant differences are shown in bold. The confidence interval represents the range within which the score for the population is likely to fall, with 95% probability. Approximate Confidence Interval = average score +/- 1.96 x Standard Error. This confidence interval gives a range within which the true mean is likely to fall. If two confidence intervals overlap, there is no significant difference between the means.

Source: Human Resources and Skills Development Canada, Statistics Canada and Council of Ministers of Education, Canada. (2004). Measuring Up: Canadian Results of the OECD PISA Study: The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving 2003. First Findings for Canadians Aged 15. Ottawa: Minister of Industry.

Table C4.5

Comparison of estimated average performance in science PISA 2003 and PISA 2000 assessments, Canada and provinces

	PISA 2000		PISA 2003	
	Estimated average score	95% confidence interval	Estimated average score	95% confidence interval
Science				
Canada	**529**	526-532	**519**	512-526
Newfoundland and Labrador	516	509-523	514	506-522
Prince Edward Island	**508**	503-513	**489**	481-497
Nova Scotia	516	510-522	505	498-513
New Brunswick	497	492-502	498	491-505
Quebec	**541**	534-548	**520**	508-532
Ontario	522	515-529	515	506-525
Manitoba	527	520-534	512	503-522
Saskatchewan	**522**	516-528	**506**	495-516
Alberta	546	539-553	539	527-552
British Columbia	533	527-539	527	519-535

Note: Statistically significant differences are shown in bold. The confidence interval represents the range within which the score for the population is likely to fall, with 95% probability. Approximate Confidence Interval = average score +/- 1.96 x Standard Error. This confidence interval gives a range within which the true mean is likely to fall. If two confidence intervals overlap, there is no significant difference between the means.

Source: Human Resources and Skills Development Canada, Statistics Canada and Council of Ministers of Education, Canada. (2004). Measuring Up: Canadian Results of the OECD PISA Study: The Performance of Canada's Youth in Mathematics, Reading, Science and Problem Solving 2003. First Findings for Canadians Aged 15. Ottawa: Minister of Industry.

Table C4.6

Average scores and standard errors in the PISA combined mathematics scale by quartile of family socio-economic status, Canada, provinces and selected countries, 2003

Country and province	First quartile Average	First quartile Standard error	Second quartile Average	Second quartile Standard error	Third quartile Average	Third quartile Standard error	Fourth quartile Average	Fourth quartile Standard error	Difference between first and fourth quartile
Manitoba	**504**	**(4.3)**	**524**	**(5.7)**	**538**	**(5.1)**	**559**	**(4.4)**	**56**
British Columbia	**507**	**(4.1)**	**525**	**(3.7)**	**546**	**(3.4)**	**571**	**(3.9)**	**65**
Iceland	464	(6.6)	486	(4.1)	510	(2.7)	531	(1.9)	68
Ontario	**503**	**(5.1)**	**526**	**(4.1)**	**540**	**(4.5)**	**571**	**(5.9)**	**68**
Prince Edward Island	**469**	**(4.1)**	**496**	**(4.1)**	**517**	**(4.2)**	**541**	**(5.3)**	**72**
New Brunswick	**483**	**(2.4)**	**508**	**(2.7)**	**523**	**(3.1)**	**555**	**(3.5)**	**73**
Finland	500	(3.4)	523	(2.5)	548	(2.5)	576	(2.6)	76
Canada	**486**	**(3.3)**	**510**	**(2.3)**	**532**	**(2.0)**	**563**	**(2.2)**	**77**
Saskatchewan	**477**	**(5.9)**	**521**	**(5.0)**	**524**	**(4.8)**	**556**	**(4.2)**	**79**
Newfoundland and Labrador	**485**	**(3.0)**	**516**	**(4.4)**	**532**	**(4.7)**	**565**	**(5.7)**	**79**
Alberta	**506**	**(5.1)**	**539**	**(6.7)**	**552**	**(4.5)**	**585**	**(4.9)**	**79**
Nova Scotia	**479**	**(3.2)**	**510**	**(4.0)**	**529**	**(3.5)**	**559**	**(4.1)**	**80**
Spain	452	(3.0)	477	(3.0)	506	(2.7)	534	(3.3)	82
Quebec	**502**	**(5.1)**	**531**	**(5.2)**	**556**	**(5.3)**	**584**	**(6.1)**	**82**
Mexico	365	(3.2)	406	(4.8)	424	(4.3)	452	(6.7)	87
Italy	421	(4.2)	463	(4.0)	485	(3.3)	508	(4.4)	88
Portugal	439	(3.6)	465	(4.5)	490	(3.8)	529	(3.8)	91
Ireland	457	(3.7)	494	(2.9)	519	(3.0)	549	(3.9)	92
Luxembourg	442	(2.6)	463	(3.4)	497	(2.9)	536	(2.2)	94
Korea	496	(4.3)	533	(3.6)	558	(3.7)	592	(7.0)	95
Greece	406	(4.0)	434	(4.0)	456	(4.5)	502	(4.6)	95
Japan	483	(5.4)	522	(4.2)	553	(4.7)	582	(7.1)	99
Australia	469	(5.5)	501	(2.6)	526	(2.5)	567	(2.7)	99
Austria	457	(4.9)	487	(3.4)	521	(3.1)	557	(4.3)	100
Sweden	450	(5.0)	485	(3.3)	509	(2.6)	551	(3.4)	101
Netherlands	490	(5.8)	520	(4.1)	550	(3.1)	592	(3.5)	103
Poland	448	(3.8)	484	(2.8)	513	(3.4)	551	(3.8)	103
France	458	(4.5)	505	(3.4)	531	(2.7)	564	(3.8)	106
United Kingdom	454	(3.8)	486	(2.7)	515	(3.1)	561	(3.6)	107
Norway	418	(7.3)	455	(3.3)	484	(3.1)	526	(2.8)	108
Denmark	451	(4.1)	491	(3.5)	522	(3.0)	560	(3.5)	110
New Zealand	462	(4.4)	501	(3.6)	524	(3.0)	573	(2.5)	111
United States	417	(3.9)	453	(3.3)	483	(3.3)	529	(3.1)	112
Switzerland	468	(4.2)	520	(3.1)	541	(3.7)	581	(4.8)	113
Czech Republic	456	(4.9)	498	(3.2)	532	(3.6)	574	(4.3)	118
OECD average	**423**	**(1.6)**	**481**	**(1.2)**	**510**	**(1.1)**	**546**	**(1.4)**	**123**
Slovakia	434	(5.4)	489	(2.7)	524	(2.9)	557	(4.3)	123
Germany	442	(4.5)	482	(3.7)	526	(3.6)	567	(3.6)	124
Hungary	427	(4.4)	477	(2.9)	513	(3.4)	557	(4.0)	130
Belgium	451	(4.2)	508	(3.1)	545	(2.9)	592	(2.6)	140
Turkey	394	(4.2)	434	(7.2)	475	(9.1)	553	(19.6)	159

Source: Based on data from PISA 2003.

Table C4.7

Distribution of 13-year-old students by performance level in the SAIP science assessment, Canada and jurisdictions, 2004[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Canada	**13.7**	**(0.6)**	**15.3**	**(0.6)**	**30.9**	**(0.8)**	**37.2**	**(0.8)**	**2.4**	**(0.3)**	**0.5**	**(0.1)**
	86.3	**(0.6)**	**71.0**	**(0.8)**	**40.1**	**(0.8)**	**2.9**	**(0.3)**	**0.5**	**(0.1)**		
Canada (E)	13.8	(0.7)	15.4	(0.7)	31.3	(0.9)	36.6	(0.9)	2.4	(0.3)	0.5	(0.1)
	86.2	(0.7)	70.8	(0.9)	39.5	(0.9)	2.9	(0.3)	0.5	(0.1)		
Canada (F)	13.2	(1.1)	15.2	(1.2)	29.7	(1.5)	39.0	(1.6)	2.4	(0.5)	0.5	(0.2)
	86.8	(1.1)	71.6	(1.5)	41.9	(1.6)	2.9	(0.5)	0.5	(0.2)		
Newfoundland and Labrador	20.2	(2.6)	14.2	(2.1)	36.9	(2.9)	26.6	(2.7)	1.8	(0.8)	0.3	(0.3)
	79.8	(2.4)	65.6	(2.9)	28.7	(2.7)	2.2	(0.9)	0.3	(0.3)		
Prince Edward Island	18.9	(2.8)	15.3	(2.0)	34.7	(2.7)	30.4	(2.6)	0.5	(0.4)	0.1	(0.2)
	81.1	(2.2)	65.8	(2.7)	31.1	(2.6)	0.7	(0.5)	0.1	(0.2)		
Nova Scotia (E)	18.9	(2.5)	18.0	(2.4)	31.2	(2.9)	30.4	(2.9)	1.2	(0.7)	0.2	(0.3)
	81.1	(2.5)	63.1	(3.0)	31.9	(2.9)	1.4	(0.7)	0.2	(0.3)		
Nova Scotia (F)	31.0	(5.4)	10.2	(0.0)	26.1	(0.0)	32.4	(0.0)	0.4	(0.0)	0.0	(0.0)
	69.0	(0.0)	58.8	(0.0)	32.7	(0.0)	0.4	(0.0)	0.0	(0.0)		
New Brunswick (E)	18.7	(2.4)	19.5	(2.4)	30.3	(2.8)	31.0	(2.8)	0.3	(0.4)	0.1	(0.2)
	81.3	(2.4)	61.7	(3.0)	31.4	(2.9)	0.5	(0.4)	0.1	(0.2)		
New Brunswick (F)	34.8	(2.8)	16.5	(2.2)	25.4	(2.6)	23.0	(2.5)	0.1	(0.2)	0.1	(0.2)
	65.2	(2.8)	48.6	(2.9)	23.2	(2.5)	0.2	(0.3)	0.1	(0.2)		
Quebec (E)	17.2	(2.5)	14.9	(2.3)	31.5	(3.0)	34.1	(3.1)	1.9	(0.9)	0.3	(0.4)
	82.8	(2.5)	67.9	(3.1)	36.4	(3.2)	2.2	(1.0)	0.3	(0.4)		
Quebec (F)	11.2	(2.0)	15.9	(2.3)	30.3	(2.9)	39.7	(3.1)	2.5	(1.0)	0.5	(0.5)
	88.8	(2.0)	73.0	(2.8)	42.7	(3.1)	3.0	(1.1)	0.5	(0.5)		
Ontario (E)	11.5	(2.0)	16.7	(2.4)	32.5	(3.0)	36.8	(3.0)	2.2	(0.9)	0.3	(0.4)
	88.5	(2.0)	71.8	(2.8)	39.3	(3.1)	2.5	(1.0)	0.3	(0.4)		
Ontario (F)	23.3	(2.7)	13.5	(2.2)	32.4	(3.0)	29.8	(3.0)	1.0	(0.6)	0.0	(0.0)
	76.7	(2.7)	63.2	(3.1)	30.9	(3.0)	1.0	(0.6)	0.0	(0.0)		
Manitoba (E)	17.7	(2.4)	14.7	(2.2)	30.3	(2.9)	35.0	(3.0)	1.8	(0.8)	0.4	(0.4)
	82.3	(2.4)	67.6	(2.9)	37.3	(3.0)	2.3	(0.9)	0.4	(0.4)		
Manitoba (F)	29.5	(2.4)	12.2	(1.7)	25.8	(2.3)	30.9	(2.4)	1.1	(0.5)	0.5	(0.4)
	70.5	(2.4)	58.4	(2.6)	32.6	(2.4)	1.6	(0.7)	0.5	(0.4)		
Saskatchewan	17.3	(2.2)	16.8	(2.2)	35.3	(2.8)	29.5	(2.7)	0.8	(0.5)	0.2	(0.3)
	82.7	(2.2)	65.9	(2.8)	30.5	(2.7)	1.0	(0.6)	0.2	(0.3)		
Alberta	11.8	(1.9)	10.3	(1.8)	24.4	(2.6)	47.1	(3.0)	5.4	(1.3)	1.0	(0.6)
	88.2	(1.9)	77.9	(2.5)	53.5	(3.0)	6.4	(1.5)	1.0	(0.6)		
British Columbia	16.0	(2.4)	14.3	(2.3)	31.1	(3.0)	35.6	(3.1)	2.2	(1.0)	0.7	(0.5)
	84.0	(2.4)	69.6	(3.0)	38.5	(3.2)	2.9	(1.1)	0.7	(0.5)		
Yukon	24.2	(4.4)	14.3	(1.5)	29.5	(1.9)	30.9	(2.0)	1.1	(0.4)	0.0	(0.0)
	75.8	(1.8)	61.5	(2.1)	32.0	(2.0)	1.1	(0.4)	0.0	(0.0)		
Northwest Territories	35.2	(4.1)	16.1	(1.7)	22.8	(1.9)	23.2	(1.9)	2.6	(0.7)	0.0	(0.0)
	64.8	(2.2)	48.7	(2.3)	25.8	(2.0)	2.6	(0.7)	0.0	(0.0)		

1. For each population, the first line shows the percentages of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals (± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2005). School Achievement Indicators Program (SAIP). Science III 2004.

Table C4.8

Distribution of 16-year-old students by performance level in the SAIP science assessment, Canada and jurisdictions, 2004[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Canada	**7.3**	**(0.5)**	**6.0**	**(0.4)**	**22.7**	**(0.8)**	**41.4**	**(0.9)**	**16.0**	**(0.7)**	**6.5**	**(0.4)**
	92.7	**(0.5)**	**86.7**	**(0.6)**	**64.0**	**(0.9)**	**22.6**	**(0.8)**	**6.5**	**(0.4)**		
Canada (E)	7.4	(0.5)	6.0	(0.5)	22.6	(0.8)	41.1	(1.0)	15.6	(0.7)	7.2	(0.5)
	92.6	(0.5)	86.6	(0.7)	64.0	(1.0)	22.9	(0.8)	7.2	(0.5)		
Canada (F)	6.8	(1.0)	6.1	(1.0)	23.2	(1.8)	42.6	(2.1)	17.7	(1.6)	3.6	(0.8)
	93.2	(1.0)	87.1	(1.4)	63.9	(2.0)	21.3	(1.7)	3.6	(0.8)		
Newfoundland and Labrador	9.1	(1.9)	6.5	(1.6)	22.1	(2.7)	39.2	(3.2)	14.5	(2.3)	8.6	(1.8)
	90.9	(1.9)	84.4	(2.3)	62.3	(3.1)	23.1	(2.7)	8.6	(1.8)		
Prince Edward Island	11.7	(2.0)	6.2	(1.5)	24.0	(2.7)	43.5	(3.1)	11.0	(2.0)	3.5	(1.2)
	88.3	(2.0)	82.0	(2.4)	58.0	(3.1)	14.5	(2.2)	3.5	(1.2)		
Nova Scotia (E)	10.1	(2.0)	7.0	(1.7)	23.2	(2.8)	41.6	(3.3)	13.3	(2.3)	4.8	(1.4)
	89.9	(2.0)	82.9	(2.5)	59.7	(3.3)	18.1	(2.6)	4.8	(1.4)		
Nova Scotia (F)	15.1	(2.3)	6.9	(1.6)	19.5	(2.5)	46.5	(3.2)	10.1	(1.9)	1.9	(0.9)
	84.9	(2.3)	78.0	(2.6)	58.5	(3.1)	11.9	(2.1)	1.9	(0.9)		
New Brunswick (E)	11.5	(2.0)	6.8	(1.6)	24.1	(2.7)	42.5	(3.1)	11.8	(2.0)	3.3	(1.1)
	88.5	(2.0)	81.7	(2.4)	57.6	(3.1)	15.1	(2.3)	3.3	(1.1)		
New Brunswick (F)	16.6	(2.3)	6.8	(1.6)	19.4	(2.5)	40.4	(3.1)	14.3	(2.2)	2.6	(1.0)
	83.4	(2.3)	76.6	(2.6)	57.2	(3.1)	16.8	(2.3)	2.6	(1.0)		
Quebec (E)	9.1	(2.0)	7.9	(1.9)	25.3	(3.0)	37.9	(3.4)	15.9	(2.5)	3.9	(1.3)
	90.9	(2.0)	83.0	(2.6)	57.7	(3.4)	19.8	(2.8)	3.9	(1.3)		
Quebec (F)	5.3	(1.5)	5.9	(1.5)	23.0	(2.8)	43.4	(3.3)	18.6	(2.6)	3.8	(1.3)
	94.7	(1.5)	88.8	(2.1)	65.8	(3.1)	22.4	(2.7)	3.8	(1.3)		
Ontario (E)	5.8	(1.8)	5.8	(1.8)	24.4	(3.2)	41.1	(3.7)	14.6	(2.7)	8.3	(2.1)
	94.2	(1.8)	88.4	(2.4)	64.0	(3.6)	22.9	(3.2)	8.3	(2.1)		
Ontario (F)	17.1	(2.7)	9.3	(2.0)	25.4	(3.1)	34.5	(3.4)	11.0	(2.2)	2.6	(1.1)
	82.9	(2.7)	73.6	(3.1)	48.2	(3.5)	13.6	(2.4)	2.6	(1.1)		
Manitoba (E)	11.9	(2.1)	5.6	(1.5)	23.1	(2.8)	40.9	(3.3)	14.7	(2.3)	3.8	(1.3)
	88.1	(2.1)	82.5	(2.5)	59.3	(3.3)	18.4	(2.6)	3.8	(1.3)		
Manitoba (F)	13.0	(2.9)	4.3	(1.8)	24.5	(3.7)	45.8	(4.3)	10.5	(2.7)	1.9	(1.2)
	87.0	(2.9)	82.7	(3.3)	58.2	(4.3)	12.4	(2.8)	1.9	(1.2)		
Saskatchewan	8.0	(1.7)	9.3	(1.8)	23.4	(2.7)	43.1	(3.1)	12.4	(2.1)	3.9	(1.2)
	92.0	(1.7)	82.7	(2.4)	59.3	(3.1)	16.2	(2.3)	3.9	(1.2)		
Alberta	4.9	(1.4)	4.6	(1.3)	18.0	(2.4)	40.4	(3.1)	23.3	(2.7)	8.7	(1.8)
	95.1	(1.4)	90.4	(1.8)	72.4	(2.8)	32.0	(2.9)	8.7	(1.8)		
British Columbia	10.9	(2.0)	5.8	(1.5)	19.7	(2.6)	42.0	(3.2)	15.9	(2.4)	5.7	(1.5)
	89.1	(2.0)	83.3	(2.4)	63.6	(3.1)	21.6	(2.7)	5.7	(1.5)		
Yukon	14.5	(2.3)	6.9	(1.7)	17.9	(2.6)	46.2	(3.3)	9.3	(1.9)	5.2	(1.5)
	85.5	(2.3)	78.6	(2.7)	60.7	(3.2)	14.5	(2.3)	5.2	(1.5)		
Northwest Territories	20.4	(2.6)	10.2	(1.9)	20.4	(2.6)	34.2	(3.1)	9.9	(1.9)	5.0	(1.4)
	79.6	(2.6)	69.5	(3.0)	49.1	(3.2)	14.9	(2.3)	5.0	(1.4)		

1. For each population, the first line shows the percentages of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals (± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2005). School Achievement Indicators Program (SAIP). Science III 2004.

Table C4.9

Distribution of 13-year-old students by performance level in the SAIP science assessment, by gender, Canada, 2004[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Females	13.3	(0.8)	16.3	(0.9)	32.0	(1.1)	35.2	(1.1)	2.5	(0.4)	0.6	(0.2)
			86.7	(0.8)	70.4	(1.1)	38.3	(1.1)	3.1	(0.4)	0.6	(0.2)
Males	14.0	(0.8)	14.4	(0.8)	29.7	(1.1)	39.3	(1.1)	2.3	(0.4)	0.4	(0.1)
			86.0	(0.8)	71.7	(1.1)	42.0	(1.2)	2.7	(0.4)	0.4	(0.1)
Canada	**13.7**	**(0.6)**	**15.3**	**(0.6)**	**30.9**	**(0.8)**	**37.2**	**(0.8)**	**2.4**	**(0.3)**	**0.5**	**(0.1)**
			86.3	**(0.6)**	**71.0**	**(0.8)**	**40.1**	**(0.8)**	**2.9**	**(0.3)**	**0.5**	**(0.1)**

1. For each population, the first line shows the percentage of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals(± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2005). School Achievement Indicators Program (SAIP). Science III 2004.

Table C4.10

Distribution of 16-year-old students by performance level in the SAIP science assessment, by gender, Canada, 2004[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Females	6.5	(0.6)	6.2	(0.6)	25.2	(1.1)	40.3	(1.2)	15.3	(0.9)	6.5	(0.6)
			93.5	(0.6)	87.3	(0.8)	62.1	(1.2)	21.8	(1.1)	6.5	(0.6)
Males	8.1	(0.7)	5.8	(0.6)	20.2	(1.0)	42.6	(1.3)	16.7	(1.0)	6.6	(0.6)
			91.9	(0.7)	86.1	(0.9)	65.8	(1.2)	23.2	(1.1)	6.6	(0.6)
Canada	**7.3**	**(0.5)**	**6.0**	**(0.4)**	**22.7**	**(0.8)**	**41.4**	**(0.9)**	**16.0**	**(0.7)**	**6.5**	**(0.4)**
			92.7	**(0.5)**	**86.7**	**(0.6)**	**64.0**	**(0.9)**	**22.6**	**(0.8)**	**6.5**	**(0.4)**

1. For each population, the first line shows the percentage of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals(± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2005). School Achievement Indicators Program (SAIP). Science III 2004.

Table C4.11

Distribution of 13-year-old students by performance level in the SAIP writing assessment, Canada and jurisdictions, 2002[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Canada	**4.2**	**(0.4)**	**12.3**	**(0.6)**	**41.1**	**(0.9)**	**35.2**	**(0.9)**	**6.8**	**(0.5)**	**0.4**	**(0.1)**
	95.8	**(0.4)**	**83.5**	**(0.7)**	**42.4**	**(0.9)**	**7.2**	**(0.5)**	**0.4**	**(0.1)**		
Canada (E)	4.4	(0.4)	13.2	(0.7)	42.4	(1.0)	33.2	(1.0)	6.4	(0.5)	0.3	(0.1)
	95.6	(0.4)	82.4	(0.8)	39.9	(1.0)	6.7	(0.5)	0.3	(0.1)		
Canada (F)	3.7	(0.7)	9.0	(1.1)	36.6	(1.8)	41.9	(1.8)	8.0	(1.0)	0.8	(0.3)
	96.3	(0.7)	87.3	(1,2)	50.7	(1.9)	8.8	(1.1)	0.8	(0.3)		
Newfoundland and Labrador	7.9	(1.9)	17.4	(2.6)	41.9	(3.4)	27.8	(3.1)	5.0	(1.5)	0.1	(0.2)
	92.1	(1.9)	74.8	(3.0)	32.9	(3.3)	5.1	(1.5)	0.1	(0.2)		
Prince Edward Island	5.1	(1.8)	16.9	(2.4)	44.4	(3.2)	29.9	(3.0)	3.3	(1.2)	0.3	(0.4)
	94.9	(1.4)	77.9	(2.7)	33.6	(3.1)	3.7	(1.2)	0.3	(0.4)		
Nova Scotia (E)	6.6	(1.5)	17.9	(2.4)	45.8	(3.1)	26.0	(2.7)	3.3	(1.1)	0.5	(0.4)
	93.4	(1.5)	75.6	(2.7)	29.8	(2.8)	3.8	(1.2)	0.5	(0.4)		
Nova Scotia (F)	2.6	(2.0)	24.7	(2.7)	50.2	(3.1)	20.4	(2.5)	1.7	(0.8)	0.4	(0.4)
	97.4	(1.0)	72.8	(2.7)	22.6	(2.6)	2.1	(0.9)	0.4	(0.4)		
New Brunswick (E)	5.9	(1.5)	16.5	(2.3)	43.3	(3.1)	29.9	(2.9)	4.2	(1.3)	0.2	(0.3)
	94.1	(1.5)	77.6	(2.6)	34.3	(3.0)	4.4	(1.3)	0.2	(0.3)		
New Brunswick (F)	3.9	(1.2)	17.7	(2.3)	46.7	(3.0)	28.3	(2.7)	3.2	(1.1)	0.3	(0.3)
	96.1	(1.2)	78.5	(2.5)	31.7	(2.8)	3.5	(1.1)	0.3	(0.3)		
Quebec (E)	3.7	(1.3)	17.3	(2.5)	40.5	(3.3)	32.0	(3.1)	6.1	(1.6)	0.5	(0.5)
	96.3	(1.3)	79.0	(2.7)	38.5	(3.3)	6.5	(1.7)	0.5	(0.5)		
Quebec (F)	3.4	(1.2)	8.3	(1.9)	35.1	(3.2)	43.8	(3.4)	8.6	(1.9)	0.8	(0.6)
	96.6	(1.2)	88.4	(2.2)	53.2	(3.4)	9.5	(2.0)	0.8	(0.6)		
Ontario (E)	3.4	(1.3)	11.3	(2.2)	42.0	(3.4)	35.5	(3.3)	7.5	(1.8)	0.2	(0.3)
	96.6	(1.3)	85.3	(2.4)	43.2	(3.4)	7.7	(1.8)	0.2	(0.3)		
Ontario (F)	7.8	(2.0)	12.6	(2.4)	49.2	(3.6)	27.1	(3.2)	2.7	(1.2)	0.5	(0.5)
	92.2	(2.0)	79.5	(2.9)	30.4	(3.3)	3.3	(1.3)	0.5	(0.5)		
Manitoba (E)	5.1	(1.4)	11.8	(2.0)	39.1	(3.0)	36.2	(3.0)	7.1	(1.6)	0.7	(0.5)
	94.9	(1.4)	83.0	(2.3)	44.0	(3.1)	7.8	(1.6)	0.7	(0.5)		
Manitoba (F)	4.5	(0.9)	20.5	(1.8)	46.8	(2.3)	25.6	(2.0)	2.2	(0.7)	0.3	(0.3)
	95.5	(0.9)	75.0	(2.0)	28.2	(2.0)	2.6	(0.7)	0.3	(0.3)		
Saskatchewan	3.7	(1.2)	20.9	(2.6)	43.2	(3.2)	27.2	(2.9)	4.7	(1.4)	0.3	(0.4)
	96.3	(1.2)	75.4	(2.8)	32.2	(3.0)	5.0	(1.4)	0.3	(0.4)		
Alberta	6.0	(1.7)	11.5	(2.3)	42.3	(3.5)	34.0	(3.4)	6.0	(1.7)	0.3	(0.4)
	94.0	(1.7)	82.6	(2.7)	40.2	(3.5)	6.3	(1.7)	0.3	(0.4)		
British Columbia	4.5	(1.5)	14.6	(2.5)	44.1	(3.5)	30.8	(3.2)	5.8	(1.6)	0.1	(0.2)
	95.5	(1.5)	80.8	(2.7)	36.7	(3.4)	5.9	(1.6)	0.1	(0.2)		
Yukon	6.0	(2.6)	26.4	(2.3)	36.9	(2.5)	26.1	(2.3)	4.2	(1.0)	0.3	(0.3)
	94.0	(1.2)	67.6	(2.4)	30.6	(2.4)	4.5	(1.1)	0.3	(0.3)		
Northwest Territories	11.4	(2.8)	30.9	(2.2)	35.7	(2.3)	19.1	(1.9)	2.5	(0.7)	0.4	(0.3)
	88.6	(1.5)	57.7	(2.4)	22.0	(2.0)	2.9	(0.8)	0.4	(0.3)		

1. For each population, the first line shows the percentages of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals (± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2003). School Achievement Indicators Program (SAIP). Writing III 2002.

Table C4.12

Distribution of 16-year-old students by performance level in the SAIP writing assessment, Canada and jurisdictions, 2002[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Canada	**5.5**	**(0.4)**	**7.7**	**(0.5)**	**26.2**	**(0.8)**	**39.2**	**(0.9)**	**18.1**	**(0.7)**	**3.3**	**(0.3)**
	94.5	**(0.4)**	**86.8**	**(0.6)**	**60.6**	**(0.9)**	**21.4**	**(0.8)**	**3.3**	**(0.3)**		
Canada (E)	5.0	(0.5)	8.4	(0.6)	28.8	(1.0)	39.7	(1.0)	15.9	(0.8)	2.2	(0.3)
	95.0	(0.5)	86.5	(0.7)	57.7	(1.1)	18.0	(0.8)	2.2	(0.3)		
Canada (F)	7.1	(1.1)	4.9	(0.9)	16.3	(1.5)	37.4	(2.0)	26.7	(1.8)	7.5	(1.1)
	92.9	(1.1)	88.0	(1.4)	71.7	(1.9)	34.2	(2.0)	7.5	(1.1)		
Newfoundland and Labrador	5.8	(1.8)	6.3	(1.8)	29.7	(3.4)	43.7	(3.7)	13.4	(2.6)	1.0	(0.8)
	94.2	(1.8)	87.9	(2.4)	58.2	(3.7)	14.4	(2.6)	1.0	(0.8)		
Prince Edward Island	9.2	(2.0)	11.5	(2.2)	27.6	(3.1)	37.3	(3.4)	12.4	(2.3)	2.1	(1.0)
	90.8	(2.0)	79.3	(2.8)	51.8	(3.5)	14.5	(2.5)	2.1	(1.0)		
Nova Scotia (E)	6.0	(1.7)	8.2	(1.9)	32.9	(3.3)	39.3	(3.4)	11.7	(2.3)	1.8	(0.9)
	94.0	(1.7)	85.7	(2.5)	52.8	(3.5)	13.5	(2.4)	1.8	(0.9)		
Nova Scotia (F)	0.6	(0.7)	11.9	(2.7)	44.7	(4.1)	32.7	(3.9)	9.4	(2.4)	0.6	(0.7)
	99.4	(0.7)	87.4	(2.8)	42.8	(4.1)	10.1	(2.5)	0.6	(0.7)		
New Brunswick (E)	5.2	(1.5)	8.0	(1.8)	28.4	(2.9)	42.1	(3.2)	14.6	(2.3)	1.7	(0.8)
	94.8	(1.5)	86.7	(2.2)	58.4	(3.2)	16.3	(2.4)	1.7	(0.8)		
New Brunswick (F)	4.1	(1.3)	10.0	(2.0)	29.5	(3.0)	43.6	(3.3)	11.1	(2.1)	1.7	(0.9)
	95.9	(1.3)	85.9	(2.3)	56.4	(3.3)	12.8	(2.2)	1.7	(0.9)		
Quebec (E)	3.0	(1.3)	5.2	(1.6)	25.2	(3.2)	45.0	(3.7)	18.8	(2.9)	2.9	(1.2)
	97.0	(1.3)	91.8	(2.0)	66.6	(3.5)	21.6	(3.1)	2.9	(1.2)		
Quebec (F)	7.2	(1.8)	4.1	(1.4)	14.3	(2.4)	37.5	(3.3)	28.7	(3.1)	8.3	(1.9)
	92.8	(1.8)	88.8	(2.2)	74.5	(3.0)	37.0	(3.3)	8.3	(1.9)		
Ontario (E)	5.7	(1.7)	9.2	(2.1)	27.6	(3.2)	39.4	(3.5)	16.3	(2.7)	1.8	(0.9)
	94.3	(1.7)	85.1	(2.6)	57.5	(3.6)	18.0	(2.8)	1.8	(0.9)		
Ontario (F)	7.6	(2.2)	13.2	(2.8)	34.3	(4.0)	34.3	(4.0)	9.3	(2.4)	1.3	(0.9)
	92.4	(2.2)	79.1	(3.4)	44.8	(4.2)	10.5	(2.6)	1.3	(0.9)		
Manitoba (E)	5.2	(1.5)	6.1	(1.6)	28.7	(3.1)	40.4	(3.4)	17.0	(2.6)	2.6	(1.1)
	94.8	(1.5)	88.7	(2.2)	60.0	(3.3)	19.6	(2.7)	2.6	(1.1)		
Manitoba (F)	11.6	(2.3)	10.7	(2.2)	35.3	(3.4)	33.5	(3.4)	7.9	(1.9)	0.9	(0.7)
	88.4	(2.3)	77.7	(3.0)	42.3	(3.5)	8.8	(2.0)	0.9	(0.7)		
Saskatchewan	3.2	(1.1)	9.1	(1.8)	30.6	(2.9)	42.3	(3.1)	12.9	(2.1)	1.9	(0.9)
	96.8	(1.1)	87.7	(2.1)	57.1	(3.1)	14.8	(2.2)	1.9	(0.9)		
Alberta	2.6	(1.2)	7.4	(2.0)	30.8	(3.5)	37.8	(3.6)	18.5	(2.9)	2.9	(1.3)
	97.4	(1.2)	89.9	(2.3)	59.2	(3.7)	21.4	(3.1)	2.9	(1.3)		
British Columbia	4.8	(1.6)	7.7	(2.0)	30.5	(3.4)	39.5	(3.6)	14.3	(2.6)	3.2	(1.3)
	95.2	(1.6)	87.6	(2.5)	57.0	(3.7)	17.5	(2.8)	3.2	(1.3)		
Yukon	11.3	(2.3)	15.0	(2.6)	22.9	(3.1)	36.5	(3.5)	13.2	(2.5)	1.1	(0.8)
	88.7	(2.3)	73.7	(3.2)	50.8	(3.7)	14.3	(2.6)	1.1	(0.8)		
Northwest Territories	10.4	(2.3)	15.8	(2.8)	30.7	(3.5)	28.8	(3.4)	12.0	(2.5)	2.2	(1.1)
	89.6	(2.3)	73.7	(3.3)	43.0	(3.8)	14.2	(2.7)	2.2	(1.1)		

1. For each population, the first line shows the percentages of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals (± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2003). School Achievement Indicators Program (SAIP). Writing III 2002.

Table C4.13

Distribution of 13-year-old students by performance level in the SAIP writing assessment, by gender, Canada, 2002[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Females	2.7	(0.4)	8.8	(0.7)	38.5	(1.2)	40.7	(1.2)	9.0	(0.7)	0.3	(0.1)
			97.3	(0.4)	88.5	(0.8)	50.0	(1.3)	9.4	(0.7)	0.3	(0.1)
Males	5.8	(0.6)	16.1	(0.9)	43.8	(1.3)	29.5	(1.2)	4.3	(0.5)	0.4	(0.2)
			94.2	(0.6)	78.1	(1.1)	34.3	(1.2)	4.8	(0.6)	0.4	(0.2)
Canada	**4.2**	**(0.4)**	**12.3**	**(0.6)**	**41.1**	**(0.9)**	**35.2**	**(0.9)**	**6.8**	**(0.5)**	**0.4**	**(0.1)**
			95.8	**(0.4)**	**83.5**	**(0.7)**	**42.4**	**(0.9)**	**7.2**	**(0.5)**	**0.4**	**(0.1)**

1. For each population, the first line shows the percentage of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals(± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2003). School Achievement Indicators Program (SAIP). Writing III 2002.

Table C4.14

Distribution of 16-year-old students by performance level in the SAIP writing assessment, by gender, Canada, 2002[1]

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5	
Females	3.1	(0.5)	5.1	(0.6)	22.5	(1.1)	43.4	(1.3)	22.2	(1.1)	3.9	(0.5)
			96.9	(0.5)	91.9	(0.7)	69.4	(1.2)	26.0	(1.2)	3.9	(0.5)
Males	7.0	(0.7)	10.3	(0.8)	29.7	(1.2)	35.6	(1.3)	14.5	(1.0)	2.8	(0.4)
			93.0	(0.7)	82.6	(1.0)	52.9	(1.4)	17.3	(1.0)	2.8	(0.4)
Canada	**5.0**	**(0.4)**	**7.7**	**(0.5)**	**26.3**	**(0.8)**	**39.4**	**(0.9)**	**18.2**	**(0.7)**	**3.3**	**(0.3)**
			95.0	**(0.4)**	**87.3**	**(0.6)**	**61.0**	**(0.9)**	**21.5**	**(0.8)**	**3.3**	**(0.3)**

1. For each population, the first line shows the percentage of students by highest level achieved; the second line shows the cumulative percentages of students at or above each level. The confidence intervals(± 1.96 times the standard errors) for the percentages are shown between parentheses. Results are weighted so as to correctly represent each population.

Source: CMEC (2003). School Achievement Indicators Program (SAIP). Writing III 2002.

Table C5.1

Upper secondary graduation rates, Canada and G-7 countries, 2001

Ratio of upper secondary graduates to total population at typical age of graduation (times 100) in public and private institutions

	Graduation rate (%)		
	Male	Female	Both sexes
Canada	**71**	**80**	**75**
France	82	87	85
Germany	89	94	92
Italy	76	83	79
Japan	91	95	93
United Kingdom	..	..	..
United States	70	73	72
OECD country mean	**78**	**85**	**82**

Source: OECD. Education at a Glance, 2003, Table A1.1.

Table C5.2

High school[1] graduation rates (from first educational program), by sex and age relative to typical age of graduation, Canada and jurisdictions, 1997-1998 and 2002-2003

	1997-1998			2002-2003			Difference		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Overall graduation rate									
Canada[2]	**72**	**67**	**77**	**74**	**70**	**78**	**2**	**3**	**1**
Newfoundland and Labrador[3]	81	75	88	77	72	81	-4	-3	-7
Prince Edward Island	87	83	90	83	79	86	-4	-4	-4
Nova Scotia	82	76	87	81	78	84	-1	2	-3
New Brunswick	83	78	89	82	77	86	-1	-1	-3
Quebec[4]	82	75	90	79	71	86	-3	-4	-4
Ontario	76	72	82	..	..	..	..	..	..
Manitoba[5]	76	71	81	71	67	76	-5	-4	-5
Saskatchewan	73	70	77	77	73	81	4	3	4
Alberta	63	59	68	67	63	70	4	4	2
British Columbia	71	67	76	77	73	82	6	6	6
Yukon	58	53	64	57	52	60	-1	-2	-4
Northwest Territories[6]	34	30	38	43	38	50	9	8	12
Nunavut[6]	…	…	…	26	25	26	26	25	26
Typical-age graduation rate									
Canada[2]	**62**	**57**	**67**	**67**	**62**	**72**	**5**	**5**	**5**
Newfoundland and Labrador[3]	75	67	83	71	65	77	-4	-2	-6
Prince Edward Island	71	65	79	76	70	81	5	5	2
Nova Scotia	73	66	80	76	72	79	3	6	-1
New Brunswick	69	62	78	71	64	79	2	2	1
Quebec[4]	57	49	65	54	46	63	-3	-3	-2
Ontario	51	46	57	..	..	..	..	..	..
Manitoba[5]	60	56	65	63	58	69	3	2	4
Saskatchewan	65	61	70	70	65	75	5	4	5
Alberta	55	51	59	60	56	63	5	5	4
British Columbia	62	57	67	71	66	76	9	9	9
Yukon	37	31	43	43	38	48	6	7	5
Northwest Territories[6]	18	16	20	30	28	33	12	12	13
Nunavut[6]	…	…	…	13	12	14	13	12	14
After-typical-age graduation rate									
Canada[2]	**10**	**10**	**9**	**7**	**8**	**6**	**-3**	**-2**	**-3**
Newfoundland and Labrador[3]	6	8	5	6	7	4	0	-1	-1
Prince Edward Island	15	19	12	7	9	5	-8	-10	-7
Nova Scotia	9	10	7	5	6	5	-4	-4	-2
New Brunswick	14	16	11	10	13	7	-4	-3	-4
Quebec[4]	25	26	25	24	25	23	-1	-1	-2
Ontario	26	26	25	..	..	..	..	..	..
Manitoba[5]	16	16	15	8	9	7	-8	-7	-8
Saskatchewan	8	9	7	7	8	6	-1	-1	-1
Alberta	8	8	8	7	7	7	-1	-1	-1
British Columbia	10	10	9	6	7	6	-4	-3	-3
Yukon	21	22	20	13	14	13	-8	-8	-7
Northwest Territories[6]	16	14	18	13	10	17	-3	-4	-1
Nunavut[6]	…	…	…	13	13	13	13	13	13

1. High schools include public, private and federal schools and schools for the visually and hearing impaired. Equivalencies and "General Education Diplomas" are excluded.
2. Canada rate excludes Quebec and Ontario.
3. From 1995-1996 to 1999-2000, high school graduation was based on school results only; there were no provincial examinations.
4. Secondary graduations for Quebec include graduates from adult and trade/vocational programs.
5. Until 2000-2001, includes enrolments in adult programs and professional training under the authority of the school boards or districts.
6. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: Secondary School Graduates Survey, Statistics Canada.

Chapter D tables

Tables D

Chapter D tables

Table D1.1

Number of registered apprentices, Canada and jurisdictions, 1992 and 2002

	1992	2002
Canada	**180,963**	**234,460**
Newfoundland and Labrador[1]	2,416	10,119
Prince Edward Island	427	552
Nova Scotia	4,597	5,534
New Brunswick	5,631	4,534
Quebec	50,982	50,373
Ontario	60,778	75,410
Manitoba	3,968	6,121
Saskatchewan	4,409	7,116
Alberta	27,676	52,124
British Columbia	19,277	21,730
Yukon	244	275
Northwest Territories[2]	558	427
Nunavut[2]	…	145

1. Beginning in 1997, Newfoundland and Labrador expanded its definition of registered apprentices to include students in pre-apprenticeship programs in community colleges and similar institutions.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for the Northwest Territories. This creates a break in series for the Northwest Territories in 1999-2000.

Source: Registered Apprenticeship Information System, Statistics Canada.

Table D1.2

Number of registered apprentices, by trade groups and sex, Canada, 1992 and 2002

	Male		Female				Both sexes	
	1992	2002	1992		2002		**1992**	**2002**
				% female		% female		
Total	**172,740**	**212,649**	**8,223**	**5**	**21,811**	**9**	**180,963**	**234,460**
Building construction trades	42,935	48,689	768	2	1,377	3	**43,703**	**50,066**
Electrical, electronics and related	33,935	38,898	466	1	1,011	3	**34,401**	**39,909**
Food and service trades	5,706	9,031	5,349	48	14,339	61	**11,055**	**23,370**
Industrial and related mechanical trades	14,893	18,351	158	1	316	2	**15,051**	**18,667**
Metal fabricating trades	36,266	49,131	360	1	973	2	**36,626**	**50,104**
Motor vehicle and heavy equipment	36,874	45,146	583	2	984	2	**37,457**	**46,130**
Other trades	2,131	3,403	539	20	2,811	45	**2,670**	**6,214**

Source: Registered Apprenticeship Information System, Statistics Canada.

Table D1.3

Number and percentage distribution of registered apprentices, by age group, Canada, 1992 and 2002

	1992		2002	
	Number	% distribution	Number	% distribution
Under 20	4,384	2	14,302	6
20 to 24	50,412	28	63,371	27
25 to 29	54,625	30	54,954	23
30 to 34	35,185	20	36,259	15
35 to 39	18,775	10	26,988	12
40 to 44	9,406	5	19,327	8
45 and over	8,176	5	19,259	9
Total	**180,963**	**100**	**234,460**	**100**

Source: Registered Apprenticeship Information System, Statistics Canada.

Table D1.4

University enrolment, by registration status and sex, Canada and provinces, 1992-1993, 1997-1998 and 2001-2002

	Male			Female			Both sexes[1]		
	1992-1993	1997-1998	2001-2002	1992-1993	1997-1998	2001-2002	1992-1993	1997-1998	2001-2002
Full-time students									
Total[2]									
Canada	**273,024**	**260,436**	**276,533**	**296,456**	**312,663**	**359,062**	**569,480**	**573,099**	**635,639**
Newfoundland and Labrador	5,902	5,673	5,575	7,311	7,442	8,570	**13,213**	**13,115**	**14,158**
Prince Edward Island	1,230	948	991	1,494	1,504	1,795	**2,724**	**2,452**	**2,786**
Nova Scotia	13,718	13,171	13,701	15,709	16,906	19,015	**29,427**	**30,077**	**32,745**
New Brunswick	9,029	8,365	8,299	10,081	10,138	11,381	**19,110**	**18,503**	**19,681**
Quebec	64,374	59,011	62,067	70,646	72,063	81,942	**135,020**	**131,074**	**144,009**
Ontario	111,405	104,554	112,582	119,165	122,599	141,609	**230,570**	**227,153**	**254,191**
Manitoba	10,126	9,594	10,513	10,449	11,430	14,311	**20,575**	**21,024**	**24,824**
Saskatchewan	10,962	10,540	10,507	11,886	13,324	13,754	**22,848**	**23,864**	**24,262**
Alberta	24,060	24,293	26,798	26,284	28,531	33,368	**50,344**	**52,824**	**60,166**
British Columbia	22,218	24,287	25,500	23,431	28,726	33,317	**45,649**	**53,013**	**58,817**
Undergraduate									
Canada	**223,211**	**212,852**	**223,178**	**257,097**	**268,280**	**303,905**	**480,308**	**481,132**	**527,120**
Newfoundland and Labrador	2,894	3,869	3,854	3,638	5,023	5,699	**6,532**	**8,892**	**9,562**
Prince Edward Island	1,203	920	954	1,458	1,461	1,727	**2,661**	**2,381**	**2,681**
Nova Scotia	11,712	11,497	11,712	13,775	15,206	16,972	**25,487**	**26,703**	**28,711**
New Brunswick	8,215	7,494	7,438	9,461	9,228	10,432	**17,676**	**16,722**	**17,870**
Quebec	50,905	45,425	45,596	60,168	59,271	64,814	**111,073**	**104,696**	**110,410**
Ontario	93,551	87,469	94,378	106,394	107,983	124,678	**199,945**	**195,452**	**219,056**
Manitoba	8,376	7,906	8,274	9,291	9,948	11,614	**17,667**	**17,854**	**19,888**
Saskatchewan	9,302	8,912	8,862	10,563	11,880	12,191	**19,865**	**20,792**	**21,054**
Alberta	20,116	20,492	22,334	23,173	25,030	29,119	**43,289**	**45,522**	**51,453**
British Columbia	16,937	18,868	19,776	19,176	23,250	26,659	**36,113**	**42,118**	**46,435**

Table D1.4 (concluded)

University enrolment, by registration status and sex, Canada and provinces, 1992-1993, 1997-1998 and 2001-2002

	Male			Female			Both sexes[1]		
	1992-1993	1997-1998	2001-2002	1992-1993	1997-1998	2001-2002	1992-1993	1997-1998	2001-2002
Graduate									
Canada	**41,464**	**39,794**	**43,068**	**30,242**	**35,588**	**41,704**	**71,706**	**75,382**	**84,773**
Newfoundland and Labrador	523	696	468	343	670	512	**866**	**1,366**	**980**
Prince Edward Island	13	16	21	10	21	32	**23**	**37**	**53**
Nova Scotia	1,328	1,129	1,459	1,057	1,074	1,421	**2,385**	**2,203**	**2,881**
New Brunswick	634	491	586	400	436	526	**1,034**	**927**	**1,112**
Quebec	12,010	11,749	13,283	9,195	10,900	13,196	**21,205**	**22,649**	**26,479**
Ontario	15,794	15,085	16,467	11,227	12,850	15,095	**27,021**	**27,935**	**31,562**
Manitoba	1,635	1,291	1,211	986	1,073	1,072	**2,621**	**2,364**	**2,283**
Saskatchewan	1,027	998	940	553	736	891	**1,580**	**1,734**	**1,831**
Alberta	3,399	3,267	3,871	2,514	2,918	3,543	**5,913**	**6,185**	**7,414**
British Columbia	5,101	5,072	4,762	3,957	4,910	5,416	**9,058**	**9,982**	**10,178**
Part-time students									
Total[2]									
Canada	**121,287**	**97,978**	**100,298**	**194,878**	**151,695**	**150,741**	**316,165**	**249,673**	**251,133**
Newfoundland and Labrador	1,908	1,023	1,168	2,734	1,660	1,669	**4,642**	**2,683**	**2,851**
Prince Edward Island	292	138	167	622	344	402	**914**	**482**	**569**
Nova Scotia	3,052	2,617	2,843	5,401	4,389	5,251	**8,453**	**7,006**	**8,156**
New Brunswick	1,909	1,387	1,678	3,803	2,794	3,020	**5,712**	**4,181**	**4,714**
Quebec	47,524	39,908	38,605	74,927	61,113	57,671	**122,451**	**101,021**	**96,276**
Ontario	40,832	30,152	32,835	67,646	46,103	48,086	**108,478**	**76,255**	**80,921**
Manitoba	7,224	3,971	3,410	9,789	5,825	5,910	**17,013**	**9,796**	**9,320**
Saskatchewan	3,894	2,781	2,989	6,155	4,583	4,843	**10,049**	**7,364**	**7,832**
Alberta	6,362	7,022	7,414	11,567	11,572	11,549	**17,929**	**18,594**	**18,963**
British Columbia	8,290	8,979	9,189	12,234	13,312	12,340	**20,524**	**22,291**	**21,531**
Undergraduate									
Canada	**71,881**	**57,289**	**62,169**	**124,969**	**94,596**	**98,194**	**196,850**	**151,885**	**160,392**
Newfoundland and Labrador	762	473	591	767	723	813	**1,529**	**1,196**	**1,412**
Prince Edward Island	248	120	105	538	318	217	**786**	**438**	**322**
Nova Scotia	1,309	1,358	1,493	2,406	2,199	2,605	**3,715**	**3,557**	**4,114**
New Brunswick	593	511	966	1,465	1,132	1,545	**2,058**	**1,643**	**2,514**
Quebec	29,291	22,950	23,521	52,143	39,431	39,305	**81,434**	**62,381**	**62,826**
Ontario	23,217	18,018	20,185	43,294	29,655	30,362	**66,511**	**47,673**	**50,547**
Manitoba	5,916	3,043	2,319	7,682	4,351	3,767	**13,598**	**7,394**	**6,086**
Saskatchewan	1,821	1,286	1,495	2,998	2,316	2,713	**4,819**	**3,602**	**4,208**
Alberta	2,424	2,708	4,095	4,434	4,576	7,309	**6,858**	**7,284**	**11,404**
British Columbia	6,300	6,822	7,399	9,242	9,895	9,558	**15,542**	**16,717**	**16,959**
Graduate									
Canada	**17,904**	**17,026**	**18,903**	**19,883**	**20,282**	**23,205**	**37,787**	**37,308**	**42,115**
Newfoundland and Labrador	243	280	286	274	352	306	**517**	**632**	**592**
Prince Edward Island	..	..	16	..	..	32	**..**	**..**	**48**
Nova Scotia	505	478	740	805	808	1,404	**1,310**	**1,286**	**2,151**
New Brunswick	280	252	231	343	309	338	**623**	**561**	**569**
Quebec	8,712	8,603	9,667	9,405	9,807	11,228	**18,117**	**18,410**	**20,895**
Ontario	5,528	4,385	4,401	5,756	4,963	5,068	**11,284**	**9,348**	**9,469**
Manitoba	507	352	307	684	530	553	**1,191**	**882**	**860**
Saskatchewan	525	602	476	475	647	556	**1,000**	**1,249**	**1,032**
Alberta	953	1,254	1,798	1,274	1,621	2,133	**2,227**	**2,875**	**3,931**
British Columbia	651	820	981	867	1,245	1,587	**1,518**	**2,065**	**2,568**

1. Includes enrolments for which sex was not reported.
2. Includes other program levels not listed in this table.

Source: Enhanced Student Information System (ESIS), Statistics Canada.

Table D1.5

Percentage of males relative to total full-time university enrolment, by registration status, Canada and provinces, 1992-1993 and 2001-2002

	Undergraduate		Graduate		Total	
	1992-1993	2001-2002	1992-1993	2001-2002	1992-1993	2001-2002
Canada	**46.5**	**42.3**	**57.8**	**50.8**	**47.9**	**43.5**
Newfoundland and Labrador	44.3	40.3	60.4	47.8	**44.7**	**39.4**
Prince Edward Island	45.2	35.6	56.5	39.6	**45.2**	**35.6**
Nova Scotia	46.0	40.8	55.7	50.6	**46.6**	**41.8**
New Brunswick	46.5	41.6	61.3	52.7	**47.2**	**42.2**
Quebec	45.8	41.3	56.6	50.2	**47.7**	**43.1**
Ontario	46.8	43.1	58.5	52.2	**48.3**	**44.3**
Manitoba	47.4	41.6	62.4	53.0	**49.2**	**42.4**
Saskatchewan	46.8	42.1	65.0	51.3	**48.0**	**43.3**
Alberta	46.5	43.4	57.5	52.2	**47.8**	**44.5**
British Columbia	46.9	42.6	56.3	46.8	**48.7**	**43.4**

Source: Enhanced Student Information System (ESIS), Statistics Canada.

Table D2.1

Participation rate in formal job-related training for the adult work force,[1] by sex, age, educational attainment and province, 1997 and 2002

	1997	2002
Canada	28.5	34.7
By sex		
Males	26.7	32.5
Females	30.5	37.2
By age		
25 to 34 years	32.6	41.5
35 to 44 years	29.5	34.6
45 to 54 years	27.8	33.8
55 to 64 years	14.9	22.9
By education level		
High school or less	15.7	17.9
Some postsecondary education	30.9	38.3
Completed postsecondary certificate or diploma	32.3	38.1
Completed university degree	42.8	51.7
By province		
Newfoundland and Labrador	22.9	29.5
Prince Edward Island	23.2	30.6
Nova Scotia	35.0	38.1
New Brunswick	25.1	34.7
Quebec	20.2	31.7
Ontario	31.1	34.6
Manitoba	29.3	38.6
Saskatchewan	31.5	37.7
Alberta	32.1	34.7
British Columbia	32.0	38.8

1. The adult work force is the population aged 25 to 64 who were employed at some point during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Table D2.2

Mean annual number of hours of formal job-related training per participant,[1] by sex, age, educational attainment and province, 1997 and 2002

	1997	2002
All training participants	156	150
By sex		
Males	152	153
Females	160	147
By age		
25 to 34 years	252	248
35 to 44 years	131	114
45 to 54 years	82	97
55 to 64 years	43	88
By education level		
High school or less	107	105
Some postsecondary education	165	212
Completed postsecondary certificate or diploma	141	132
Completed university degree	201	178
By province		
Newfoundland and Labrador	231	219 *
Prince Edward Island	171	86
Nova Scotia	132	160
New Brunswick	164	170 *
Quebec	200	123
Ontario	140	159
Manitoba	125	144
Saskatchewan	127	168
Alberta	153	142
British Columbia	164	160

* Numbers marked with this symbol have a coefficient of variation between 16.5% and 25% and are less reliable than unmarked numbers.

1. A participant is an employed adult who received formal, job-related training during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Tables D2

Table D2.3

Participation rate in employer-supported formal job-related training for the adult work force,[1] by sex, age, educational attainment, province, occupation group, industry and firm size, 1997 and 2002

	1997	2002
Total adult work force	22.4	25.0
By sex		
Males	21.8	23.4
Females	23.2	26.8
By age		
25 to 34 years	22.6	29.0
35 to 44 years	24.1	25.9
45 to 54 years	23.9	24.5
55 to 64 years	13.1	15.6
By education level		
High school or less	12.8	13.0
Some postsecondary education	24.0	25.8
Completed postsecondary certificate or diploma	25.2	28.1
Completed university degree	33.5	36.7
By province		
Newfoundland and Labrador	16.4	19.9
Prince Edward Island	18.0	20.3
Nova Scotia	28.4	28.9
New Brunswick	19.3	25.8
Quebec	14.9	24.0
Ontario	25.2	24.5
Manitoba	24.3	27.9
Saskatchewan	27.0	27.4
Alberta	25.8	25.1
British Columbia	23.9	26.4
By occupation group		
Professional and managerial white collar occupations	31.0	35.1
Clerical, sales and service white collar occupations	17.9	19.8
Blue collar occupations	14.3	15.7
Total goods-producing industries	18.2	18.1
Agriculture	8.0**	7.3**
Forestry, fishing, mining, oil and gas	24.4	26.9
Utilities	38.0*	46.4*
Construction	14.1	12.8
Manufacturing – durables	20.0	20.4
Manufacturing – non-durables	17.3	17.1
Total service producing industries	24.3	27.7
Wholesale trade	19.7	20.1
Retail trade	13.2	17.3
Transportation and warehousing	23.2	23.3
Finance, insurance, real estate and leasing	34.5	35.3
Professional, scientific and technical services	24.4	19.6
Management, admistrative and other support	10.7*	14.3
Educational services	31.0	42.6
Health care and social assistance	29.6	35.4
Information, culture and recreation	26.1	27.8
Accommodation and food services	6.8*	11.7
Other services	16.3	17.1
Public administration	41.4	50.6
By firm size		
Less than 20 employees	14.6	18.5
20 to 99 employees	20.8	25.1
100 to 500 employees	32.2	32.1
Over 500 employees	31.8	37.2

* Numbers marked with this symbol have a coefficient of variation between 16.5% and 25% and are less reliable than unmarked numbers.
** Numbers marked with this symbol have a coefficient of variation between 25% and 33.3% and are very unreliable.
1. The adult work force is the population aged 25 to 64 who were employed at some point during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Table D2.4

Participation rate in self-directed learning for the adult work force,[1] by sex, age, educational attainment and province, 2002

	2002
Total adult work force	32.5
By sex	
Males	30.3
Females	35.0
By age	
25 to 34 years	37.9
35 to 44 years	32.4
45 to 54 years	31.7
55 to 64 years	23.1
By education level	
High school or less	16.4
Some postsecondary education	34.0
Completed postsecondary certificate or diploma	35.4
Completed university degree	50.1
By province	
Newfoundland and Labrador	25.7
Prince Edward Island	29.7
Nova Scotia	34.1
New Brunswick	31.2
Quebec	30.5
Ontario	32.5
Manitoba	35.0
Saskatchewan	32.9
Alberta	31.5
British Columbia	36.7

1. The adult work force is the population aged 25 to 64 who were employed at some point during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Table D2.5

Proportion of participants[1] and non-participants reporting unmet training needs or wants by age, sex and educational attainment, Canada, 2002

	Training participants	Non-participants
Total	36.4	23.3
By sex		
Males	34.3	22.6
Females	38.6	24.1
By age		
25 to 34 years	38.3	31.3
35 to 44 years	37.8	26.2
45 to 54 years	35.5	19.3
55 to 64 years	27.6	12.2
By education level		
High school or less	29.6	18.0
Some postsecondary education	40.9	29.0
Completed postsecondary certificate or diploma	36.9	26.4
Completed university degree	38.0	27.1

1. The adult work force is the population aged 25 to 64 who were employed at some point during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Table D2.6

Reasons for unmet training needs or wants, training participants[1] and non-participants, Canada, 2002

	Training participants	Non-participants
Couldn't find training wanted to take	6.2	7.2
Not sure training was worth it	7.2	6.4
Training conflicted with work schedule	33.7	27.3
Did not have the prerequisites	4.3	4.5
Family responsibilities	24.0	27.4
Lack of employer support	12.7	8.5
Too busy at work	37.6	34.7
Training too expensive/could not afford	40.9	44.8
Training offered at inconvenient time	18.5	15.7
Health reasons	2.8*	3.7
Lack of confidence	2.0*	2.6*
Other	11.5	8.7

* Numbers marked with this symbol have a coefficient of variation between 16.5% and 25% and are less reliable than unmarked numbers.

1. A participant is an employed adult who received formal, job-related training during the reference year.

Source: 2003 Adult Education and Training Survey, Statistics Canada.

Table D3.1

Number of full-time educators in universities, by rank and sex, Canada and provinces, 1992-1993 and 2002-2003

	Male		Female				Both sexes	
			1992-1993		2002-2003			
	1992-1993	2002-2003	Number	% female	Number	% female	1992-1993	2002-2003
					All teaching faculty			
Canada	**29,323**	**25,273**	**7,943**	**21**	**10,780**	**30**	**37,266**	**36,053**
Newfoundland and Labrador	794	593	255	24	246	29	**1,049**	**839**
Prince Edward Island	145	134	33	19	70	34	**178**	**204**
Nova Scotia	1,538	1,319	524	25	688	34	**2,062**	**2,007**
New Brunswick	943	795	265	22	387	33	**1,208**	**1,182**
Quebec	7,120	6,160	1,804	20	2,307	27	**8,924**	**8,467**
Ontario	10,985	9,155	3,065	22	4,026	31	**14,050**	**13,181**
Manitoba	1,420	1,133	364	20	490	30	**1,784**	**1,623**
Saskatchewan	1,235	1,062	274	18	439	29	**1,509**	**1,501**
Alberta	2,578	2,442	655	20	1,080	31	**3,233**	**3,522**
British Columbia	2,565	2,480	704	22	1,047	30	**3,269**	**3,527**
					Full professors			
Canada	**13,387**	**11,532**	**1,401**	**9**	**2,393**	**17**	**14,788**	**13,925**
Newfoundland and Labrador	302	271	32	10	37	12	**334**	**308**
Prince Edward Island	47	45	0	0	9	17	**47**	**54**
Nova Scotia	599	565	69	10	109	16	**668**	**674**
New Brunswick	485	383	60	11	109	22	**545**	**492**
Quebec	3,180	3,030	369	10	689	19	**3,549**	**3,719**
Ontario	4,974	3,917	536	10	774	16	**5,510**	**4,691**
Manitoba	655	495	48	7	88	15	**703**	**583**
Saskatchewan	659	500	34	5	90	15	**693**	**590**
Alberta	1,325	1,177	147	10	259	18	**1,472**	**1,436**
British Columbia	1,161	1,149	106	8	229	17	**1,267**	**1,378**
					Associate professors			
Canada	**9,901**	**7,793**	**2,782**	**22**	**3,886**	**33**	**12,683**	**11,679**
Newfoundland and Labrador	312	224	99	24	121	35	**411**	**345**
Prince Edward Island	60	53	13	18	24	31	**73**	**77**
Nova Scotia	593	447	178	23	246	35	**771**	**693**
New Brunswick	272	218	86	24	102	32	**358**	**320**
Quebec	2,590	1,996	751	22	902	31	**3,341**	**2,898**
Ontario	3,703	2,850	992	21	1,488	34	**4,695**	**4,338**
Manitoba	461	323	133	22	143	31	**594**	**466**
Saskatchewan	359	293	116	24	153	34	**475**	**446**
Alberta	788	711	222	22	355	33	**1,010**	**1,066**
British Columbia	763	678	192	20	352	34	**955**	**1,030**
					Other ranks			
Canada	**6,035**	**5,948**	**3,760**	**38**	**4,501**	**43**	**9,795**	**10,449**
Newfoundland and Labrador	180	98	124	41	88	47	**304**	**186**
Prince Edward Island	38	36	20	34	37	51	**58**	**73**
Nova Scotia	346	307	277	44	333	52	**623**	**640**
New Brunswick	186	194	119	39	176	48	**305**	**370**
Quebec	1,350	1,134	684	34	716	39	**2,034**	**1,850**
Ontario	2,308	2,388	1,537	40	1,764	42	**3,845**	**4,152**
Manitoba	304	315	183	38	259	45	**487**	**574**
Saskatchewan	217	269	124	36	196	42	**341**	**465**
Alberta	465	554	286	38	466	46	**751**	**1,020**
British Columbia	641	653	406	39	466	42	**1,047**	**1,119**

Source: University and College Academic Staff Survey, Statistics Canada.

Table D3.2

Age distribution and median age of full-time university educators, by sex, Canada and provinces, 2002-2003

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
						Number of educators					
Male											
All ages[1]	**25,273**	**593**	**134**	**1,319**	**795**	**6,160**	**9,155**	**1,133**	**1,062**	**2,442**	**2,480**
20 to 29	**197**	0	1	11	8	43	81	12	11	12	18
30 to 39	**4,078**	68	23	178	146	911	1,577	171	172	450	382
40 to 49	**7,487**	148	49	385	258	1,890	2,575	280	336	799	767
50 to 59	**9,100**	269	46	518	296	2,279	3,239	396	352	841	864
60 and over	**4,391**	108	15	226	87	1,036	1,667	274	191	340	447
Female											
All ages[1]	**10,780**	**246**	**70**	**688**	**387**	**2,307**	**4,026**	**490**	**439**	**1,080**	**1,047**
20 to 29	**116**	1	0	8	8	18	50	5	5	11	10
30 to 39	**2,272**	45	18	124	84	473	872	113	103	245	195
40 to 49	**4,003**	86	36	273	136	886	1,451	183	161	382	409
50 to 59	**3,503**	87	16	236	126	748	1,311	149	136	350	344
60 and over	**865**	27	0	43	29	182	334	40	33	89	88
Both sexes											
All ages[1]	**36,053**	**839**	**204**	**2,007**	**1,182**	**8,467**	**13,181**	**1,623**	**1,501**	**3,522**	**3,527**
20 to 29	**313**	**1**	**1**	**19**	**16**	**61**	**131**	**17**	**16**	**23**	**28**
30 to 39	**6,350**	**113**	**41**	**302**	**230**	**1,384**	**2,449**	**284**	**275**	**695**	**577**
40 to 49	**11,490**	**234**	**85**	**658**	**394**	**2,776**	**4,026**	**463**	**497**	**1,181**	**1,176**
50 to 59	**12,603**	**356**	**62**	**754**	**422**	**3,027**	**4,550**	**545**	**488**	**1,191**	**1,208**
60 and over	**5,256**	**135**	**15**	**269**	**116**	**1,218**	**2,001**	**314**	**224**	**429**	**535**
						Percentage distribution[2]					
Male											
20 to 29	**0.8**	0.0	0.7	0.8	1.0	0.7	0.9	1.1	1.0	0.5	0.7
30 to 39	**16.1**	11.5	17.2	13.5	18.4	14.8	17.3	15.1	16.2	18.4	15.4
40 to 49	**29.6**	25.0	36.6	29.2	32.5	30.7	28.2	24.7	31.6	32.7	31.0
50 to 59	**36.0**	45.4	34.3	39.3	37.2	37.0	35.4	35.0	33.1	34.4	34.9
60 and over	**17.4**	18.2	11.2	17.1	10.9	16.8	18.2	24.2	18.0	13.9	18.0
Female											
20 to 29	**1.1**	0.4	0.0	1.2	2.1	0.8	1.2	1.0	1.1	1.0	1.0
30 to 39	**21.1**	18.3	25.7	18.1	21.9	20.5	21.7	23.1	23.5	22.7	18.6
40 to 49	**37.2**	35.0	51.4	39.9	35.5	38.4	36.1	37.3	36.8	35.5	39.1
50 to 59	**32.6**	35.4	22.9	34.5	32.9	32.4	32.6	30.4	31.1	32.5	32.9
60 and over	**8.0**	11.0	0.0	6.3	7.6	7.9	8.3	8.2	7.5	8.3	8.4
Both sexes											
20 to 29	**0.9**	**0.1**	**0.5**	**0.9**	**1.4**	**0.7**	**1.0**	**1.0**	**1.1**	**0.7**	**0.79**
30 to 39	**17.6**	**13.5**	**20.1**	**15.1**	**19.5**	**16.3**	**18.6**	**17.5**	**18.3**	**19.7**	**16.4**
40 to 49	**31.9**	**27.9**	**41.7**	**32.9**	**33.4**	**32.8**	**30.6**	**28.5**	**33.1**	**33.6**	**33.3**
50 to 59	**35.0**	**42.4**	**30.4**	**37.7**	**35.8**	**35.8**	**34.6**	**33.6**	**32.5**	**33.8**	**34.3**
60 and over	**14.6**	**16.1**	**7.4**	**13.4**	**9.8**	**14.4**	**15.2**	**19.3**	**14.9**	**12.2**	**15.2**
						Median age of educators[3]					
Male	**51**	53	48	51	49	51	51	53	50	49	50
Female	**47**	48	45	47	47	47	47	47	47	47	47
Both sexes	**49**	**52**	**47**	**50**	**48**	**50**	**49**	**50**	**49**	**49**	**49**

1. Includes a small number of cases for which age is not reported.
2. Percentage distribution is based on educators for whom age is reported.
3. Median age of educators is based on individual records for which age is reported.

Source: University and College Academic Staff Survey, Statistics Canada.

Table D3.3

Number and salary of full-time educators in universities, by rank and sex, Canada and provinces, 1992-1993 and 2002-2003 (in 2001 constant dollars)

		Canada		Newfoundland and Labrador		Prince Edward Island		Nova Scotia		New Brunswick	
		1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003
All teaching faculty											
Males	No.	**29,323**	**25,273**	794	593	145	134	1,538	1,319	943	795
Females	No.	**7,943**	**10,780**	255	246	33	70	524	688	265	387
Both sexes	**No.**	**37,266**	**36,053**	**1,049**	**839**	**178**	**204**	**2,062**	**2,007**	**1,208**	**1,182**
Females	%	**21**	**30**	24	29	19	34	25	34	22	33
Average salary[1]											
Males	$	**74,807**	**89,871**	60,397	78,029	67,012	72,886	65,437	81,494	65,759	80,706
Females	$	**62,170**	**77,851**	51,846	67,946	55,310	66,444	54,328	69,385	55,067	70,507
Both sexes	**$**	**72,135**	**86,294**	**58,322**	**75,131**	**64,818**	**70,685**	**62,625**	**77,413**	**63,473**	**77,396**
Gender gap[2]	%	**83**	**87**	86	87	83	91	83	85	84	87
Full Professors											
Males	No.	**13,387**	**11,532**	302	271	47	45	599	565	485	383
Females	No.	**1,401**	**2,393**	32	37	0	9	69	109	60	109
Both sexes	**No.**	**14,788**	**13,925**	**334**	**308**	**47**	**54**	**668**	**674**	**545**	**492**
Females	%	**9**	**17**	10	12	0	17	10	16	11	22
Average salary[1]											
Males	$	**87,102**	**105,108**	72,511	88,769	78,775	85,879	77,213	96,993	75,876	95,159
Females	$	**81,395**	**98,854**	70,991	84,837	…	86,252	69,954	92,815	69,491	90,170
Both sexes	**$**	**86,567**	**104,028**	**72,363**	**88,292**	**78,775**	**85,943**	**76,455**	**96,327**	**75,211**	**94,059**
Gender gap[2]	%	**93**	**94**	98	96	…	100	91	96	92	95
Associate Professors											
Males	No.	**9,901**	**7,793**	312	224	60	53	593	447	272	218
Females	No.	**2,782**	**3,886**	99	121	13	24	178	246	86	102
Both sexes	**No.**	**12,683**	**11,679**	**411**	**345**	**73**	**77**	**771**	**693**	**358**	**320**
Females	%	**22**	**33**	24	35	18	31	23	35	24	32
Average salary[1]											
Males	$	**70,610**	**84,499**	58,256	73,662	66,714	73,193	62,096	76,563	60,761	74,032
Females	$	**66,876**	**80,883**	58,315	71,730	66,751	71,290	59,148	73,481	57,814	71,671
Both sexes	**$**	**69,795**	**83,304**	**58,270**	**72,995**	**66,720**	**72,617**	**61,417**	**75,495**	**60,046**	**73,303**
Gender gap[2]	%	**95**	**96**	100	97	100	97	95	96	95	97
Other ranks											
Males	No.	**6,035**	**5,948**	180	98	38	36	346	307	186	194
Females	No.	**3,760**	**4,501**	124	88	20	37	277	333	119	176
Both sexes	**No.**	**9,795**	**10,449**	**304**	**186**	**58**	**73**	**623**	**640**	**305**	**370**
Females	%	**38**	**43**	41	47	34	51	44	52	39	48
Average salary[1]											
Males	$	**54,176**	**67,456**	43,733	58,262	52,919	56,552	50,391	60,211	46,353	59,269
Females	$	**51,460**	**63,870**	42,054	55,127	47,874	58,614	47,194	58,772	45,769	57,654
Both sexes	**$**	**53,137**	**65,922**	**43,039**	**56,817**	**51,180**	**57,597**	**48,970**	**59,470**	**46,131**	**58,497**
Gender gap[2]	%	**95**	**95**	96	95	90	104	94	98	99	97

Table D3.3 (concluded)

Number and salary of full-time educators in universities, by rank and sex, Canada and provinces, 1992-1993 and 2002-2003 (in 2001 constant dollars)

		Quebec		Ontario		Manitoba		Saskatchewan[1]		Alberta		British Columbia	
		1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003	1992-1993	2002-2003
All teaching faculty													
Males	No.	7,120	6,160	10,985	9,155	1,420	1,133	1,235	1,062	2,578	2,442	2,565	2,480
Females	No.	1,804	2,307	3,065	4,026	364	490	274	439	655	1,080	704	1,047
Both sexes	**No.**	**8,924**	**8,467**	**14,050**	**13,181**	**1,784**	**1,623**	**1,509**	**1,501**	**3,233**	**3,522**	**3,269**	**3,527**
Females	%	20	27	22	31	20	30	18	29	20	31	22	30
Average salary[1]													
Males	$	72,382	86,806	79,223	92,237	74,118	87,384	75,492	73,609	74,762	95,875	76,718	96,951
Females	$	62,452	77,848	65,329	80,074	58,806	71,056	61,217	65,537	61,025	80,097	63,487	82,707
Both sexes	**$**	**70,374**	**84,364**	**76,227**	**88,549**	**70,981**	**82,596**	**73,014**	**70,918**	**72,022**	**91,092**	**73,860**	**92,721**
Gender gap[2]	%	86	90	82	87	79	81	81	89	82	84	83	85
Full Professors													
Males	No.	3,180	3,030	4,974	3,917	655	495	659	500	1,325	1,177	1,161	1,149
Females	No.	369	689	536	774	48	88	34	90	147	259	106	229
Both sexes	**No.**	**3,549**	**3,719**	**5,510**	**4,691**	**703**	**583**	**693**	**590**	**1,472**	**1,436**	**1,267**	**1,378**
Females	%	10	19	10	16	7	15	5	15	10	18	8	17
Average salary[1]													
Males	$	83,048	98,247	91,546	108,645	89,472	105,524	87,204	94,363	88,307	114,246	90,523	114,510
Females	$	79,753	94,184	83,993	101,472	83,495	94,032	80,222	89,853	81,487	104,802	90,608	109,795
Both sexes	**$**	**82,705**	**97,495**	**90,826**	**107,470**	**89,061**	**103,773**	**86,896**	**93,455**	**87,631**	**112,548**	**90,530**	**113,721**
Gender gap[2]	%	96	96	92	93	93	89	92	95	92	92	100	96
Associate Professors													
Males	No.	2,590	1,996	3,703	2,850	461	323	359	293	788	711	763	678
Females	No.	751	902	992	1,488	133	143	116	153	222	355	192	352
Both sexes	**No.**	**3,341**	**2,898**	**4,695**	**4,338**	**594**	**466**	**475**	**446**	**1,010**	**1,066**	**955**	**1,030**
Females	%	22	31	21	34	22	31	24	34	22	33	20	34
Average salary[1]													
Males	$	69,710	81,537	75,808	88,674	67,512	81,679	67,198	72,202	66,292	85,036	71,679	90,783
Females	$	65,638	77,959	71,723	85,272	63,639	75,998	64,008	71,952	63,696	80,634	69,972	84,434
Both sexes	**$**	**68,795**	**80,427**	**74,954**	**87,515**	**66,638**	**79,929**	**66,430**	**72,107**	**65,723**	**83,577**	**71,336**	**88,619**
Gender gap[2]	%	94	96	95	96	94	93	95	100	96	95	98	93
Other ranks													
Males	No.	1,350	1,134	2,308	2,388	304	315	217	269	465	554	641	653
Females	No.	684	716	1,537	1,764	183	259	124	196	286	466	406	466
Both sexes	**No.**	**2,034**	**1,850**	**3,845**	**4,152**	**487**	**574**	**341**	**465**	**751**	**1,020**	**1,047**	**1,119**
Females	%	34	39	40	42	38	45	36	42	38	46	39	42
Average salary[1]													
Males	$	52,391	65,081	57,677	69,694	50,673	63,312	54,491	54,904	50,376	70,502	57,281	72,513
Females	$	49,619	61,909	54,660	66,291	48,734	59,550	53,391	52,530	48,119	65,512	53,280	67,975
Both sexes	**$**	**51,459**	**63,839**	**56,471**	**68,260**	**49,940**	**61,676**	**54,115**	**53,962**	**49,535**	**68,256**	**55,713**	**70,624**
Gender gap[2]	%	95	95	95	95	96	94	98	96	96	93	93	94

1. Data on average salaries for Saskatchewan does not include the University of Saskatchewan.
2. Gender gap is defined as the average salary of females as a percentage of the average salary of males.

Source: University and College Academic Staff Survey, Statistics Canada.

Table D4.1

Total domestic expenditures on R&D as a percentage of GDP, Canada in relation to all OECD countries, 2002 (or latest available year)

OECD countries	Domestic R&D expenditures/GDP	OECD countries	Domestic R&D expenditures/GDP
Sweden[4] (2001)	4.27	Netherlands (2001)	1.88
Finland	3.46	United Kingdom	1.87
Japan	3.12	European Union	1.86 p
Iceland	3.09	Norway	1.67
United States[1]	2.66 p	Australia (2000)	1.54
Switzerland (2000)	2.57	Czech Republic	1.30
Republic of Korea[2]	2.53	New Zealand (2001)[5]	1.16
Germany	2.53	Ireland (2001)	1.13
Denmark	2.52	Italy (2001)	1.11
		Spain	1.03
Total OECD	**2.26 p**	Hungary[3]	1.02
		Portugal	0.94
France	2.26	Turkey	0.66
Belgium	2.24 p	Greece (2001)	0.65
Austria	2.24	Poland	0.59
		Slovak Republic[4]	0.58
Canada	**1.90 p**	Mexico (2001)	0.39

1. Excludes most or all capital expenditures.
2. Excludes R&D in the social sciences and humanities.
3. Defence excluded (all or mostly).
4. Underestimated.
5. Break in series with previous year for which data is available.

Sources: OECD Main Science and Technology Indicators, 2002 No. 2, November 2002, Table 02.

Statistics Canada. Estimates of Canadian Research and Development Expenditures (GERD), Canada, 1993 to 2004, and by Province 1993 to 2002. Catalogue No. 88E0006XIE2004020.

Table D4.2

Total domestic expenditures on R&D as a percentage of GDP, Canada and jurisdictions, G-7, and leading OECD countries, 1991, 1995, 2000 and 2002

	1991	1995	2000	2002
			% of GDP	
Canada	**1.6**	**1.7**	**1.8**	**1.9**
			% of provincial/territorial GDP	
Newfoundland and Labrador	1.1	0.9	1.0	0.9
Prince Edward Island	0.7	0.6	1.1	0.8
Nova Scotia	1.4	1.4	1.5	1.4
New Brunswick	0.9	0.9	0.8	0.9
Quebec[1]	1.8	2.1	2.3	2.6
Ontario[1]	1.6	1.9	2.1	2.0
Manitoba	1.2	1.1	1.2	1.2
Saskatchewan	1.0	1.0	1.1	1.2
Alberta	1.1	1.1	0.9	1.1
British Columbia	1.0	1.0	1.2	1.3
Yukon, Northwest Territories, Nunavut[2]	0.0	0.1	0.2	..
			% of GDP	
G-7				
Canada	**1.6**	**1.7**	**1.8**	**1.9**
France[3]	2.4	2.3	2.2	2.3
Germany	2.6	2.3	2.5	2.5
Italy	1.2	1.0	1.1	1.1
Japan[4]	3.0	3.0	3.0	3.1
United Kingdom	2.1	2.0	1.9	1.9
United States[5]	2.8	2.6	2.7	2.7
Leading OECD countries				
Finland	2.1	2.4	3.4	3.5
Iceland	1.2	1.5	2.83.1	
Sweden[6]	2.9	3.6	3.8	4.3
Total OECD	**..**	**..**	**2.2** [p]	**2.3** [p]

1. Quebec and Ontario figures exclude federal government expenditures contributed in the National Capital Region.
2. Data not available by individual territory. Data for 2002 included in Canada total.
3. Data for 2000 represent break in series with previous year for which data are available.
4. Data for 1991 and 1995 exclude most or all capital expenditure.
5. Data exclude most or all capital expenditures.
6. Underestimated data. Data for Sweden are for 1999.

Sources: Statistics Canada. Estimates of Canadian Research and Development Expenditures (GERD), Canada, 1993 to 2004, and by Province 1993 to 2002. Catalogue No. 88E0006XIE2004020.

OECD Main Science and Technology Indicators, 2002 No. 2, November 2002, Table 02, for G-7 and OECD countries for 2000.

OECD Main Science and Technology Indicators, 1998 No. 1, 1998, Table 05, for G-7 and OECD countries for 1991 and 1995.

Table D4.3

Percentage of total R&D by sector, Canada and jurisdictions, G-7, leading OECD countries, 2002

	Government	Federal	Provincial	Business enterprise	Post-secondary sector	Private non-profit	All sectors
Canada	**11.2**	**9.8**	**1.4**	**55.4**	**33.2**	**0.2**	**100.0**
Newfoundland and Labrador	24.3	20.9	3.4	11.5	64.2	0.0	100.0
Prince Edward Island	25.8	25.8	0.0	12.9	61.3	0.0	100.0
Nova Scotia	22.0	20.4	1.6	17.4	60.1	0.5	100.0
New Brunswick	27.2	25.0	2.2	17.4	53.8	1.6	100.0
Quebec[1]	7.0	5.8	1.3	59.3	33.6	0.0	100.0
Ontario[1]	4.1	3.3	0.8	66.5	29.3	0.1	100.0
Manitoba	16.9	16.2	0.7	31.1	50.7	1.4	100.0
Saskatchewan	15.0	12.6	2.4	23.2	61.8	0.0	100.0
Alberta	12.2	5.6	6.6	42.3	44.3	1.2	100.0
British Columbia	6.5	5.4	1.1	53.0	39.9	0.5	100.0
Yukon, Northwest Territories and Nunavut[2]	75.0	75.0	0.0	25.0	0.0	0.0	100.0
G-7							
Canada	**11.2**	**9.8**	**1.4**	**55.4**	**33.2**	**0.2**	**100.0**
France	16.5	..	..	63.3	18.9	1.4	100.0
Germany[3]	13.7	..	..	69.2	17.0	..	100.0
Italy[3]	18.4	..	..	49.1	32.6	..	100.0
Japan	9.5	..	..	74.4	13.9	2.1	100.0
United Kingdom	9.0	..	..	67.0	22.6	1.5	100.0
United States[4]	8.8 p	..	..	70.2 p	15.9 p	5.1 p	100.0
Leading OECD countries							**100.0**
Finland	10.4	..	..	69.9	19.2	0.6	100.0
Iceland	24.5	..	..	57.2	16.1	2.2	100.0
Sweden[5]	2.8	..	..	77.6	19.4	0.1	100.0
Total OECD	10.5 p	..	..	67.9 p	18.2 p	2.9 p	100.0

1. Quebec and Ontario figures exclude federal government expenditures allocated in the National Capital Region.
2. Data not available by individual territory.
3. Government category includes private non-profit.
4. Government category includes federal or central government only. Business enterprise, postsecondary and private non-profit categories exclude most or all capital expenditures.
5. Data for Italy and Sweden are for 2001. Government, postsecondary, and private non-profit categories, exclude most or all capital expenditures.

Sources: Statistics Canada. Estimates of Canadian Research and Development Expenditures (GERD), Canada, 1993 to 2004, and by Province 1993 to 2002. Catalogue No. 88E0006XIE2004020.

OECD Main Science and Technology Indicators, 2002 No. 2, November 2002, Tables 17-20.

Table D4.4

Expenditures on R&D, by sector (in millions of 2001 constant dollars), and percentage change, Canada and provinces, 1991, 2000 and 2002

Jurisdiction and R&D contributing sector	1991 $	2000 $	2002 $	% change 1991-2002
Canada, total	**12,724**	**21,056**	**21,881**	**72**
Government	**2,379**	**2,395**	**2,450**	**3**
Federal government	**1,991**	**2,133**	**2,142**	**8**
Provincial governments	**388**	**262**	**308**	**-21**
Business enterprise	**6,328**	**12,661**	**12,112**	**91**
University	**3,887**	**5,941**	**7,267**	**87**
Private non-profit	**130**	**58**	**52**	**-60**
Newfoundland and Labrador, total	**123**	**139**	**144**	**17**
Government	45	35	35	-22
Federal government	40	30	30	-24
Provincial government	5	5	5	-2
Business enterprise	12	20	17	38
University	66	84	93	41
Private non-profit	0	0	0	
Prince Edward Island, total	**18**	**37**	**30**	**68**
Government	12	17	8	-35
Federal government	12	17	8	-35
Provincial government	0	0	0	
Business enterprise	2	5	4	95
University	5	16	18	270
Private non-profit	0	0	0	
Nova Scotia, total	**281**	**370**	**362**	**29**
Government	101	96	80	-21
Federal government	95	90	74	-22
Provincial government	6	6	6	-3
Business enterprise	30	68	63	110
University	149	204	217	46
Private non-profit	1	2	2	94
New Brunswick, total	**140**	**165**	**178**	**27**
Government	46	31	48	5
Federal government	43	27	44	3
Provincial government	3	3	4	29
Business enterprise	35	42	31	-12
University	58	90	96	65
Private non-profit	1	2	3	190
Quebec, total	**3,300**	**5,756**	**6,323**	**92**
Government	340	418	444	31
Federal government	250	358	364	45
Provincial government	90	59	80	-11
Business enterprise	1,752	3,670	3,752	114
University	1,188	1,666	2,124	79
Private non-profit	20	2	3	-85
Ontario, total	**5,488**	**9,855**	**9,618**	**75**
Government	447	397	392	-12
Federal government	298	324	318	7
Provincial government	149	73	74	-50
Business enterprise	3,510	7,064	6,398	82
University	1,440	2,388	2,820	96
Private non-profit	92	6	9	-90
Manitoba, total	**349**	**424**	**437**	**25**
Government	120	74	74	-38
Federal government	117	71	71	-39
Provincial government	4	3	3	-26
Business enterprise	79	136	136	72
University	140	194	222	58
Private non-profit	10	18	6	-41

Table D4.4 (concluded)

Expenditures on R&D, by sector (in millions of 2001 constant dollars), and percentage change, Canada and provinces, 1991, 2000 and 2002

Jurisdiction and R&D contributing sector	1991 $	2000 $	2002 $	% change 1991-2002
Saskatchewan, total	**262**	**380**	**407**	**56**
Government	74	74	61	-17
Federal government	62	64	52	-17
Provincial government	12	10	10	-19
Business enterprise	66	71	94	43
University	123	235	252	105
Private non-profit	0	0	0	0
Alberta, total	**962**	**1,377**	**1,587**	**65**
Government	182	194	193	6
Federal government	95	119	89	-6
Provincial government	87	76	104	20
Business enterprise	426	606	671	58
University	355	560	703	98
Private non-profit	0	17	19	...
British Columbia, total	**925**	**1,641**	**1,804**	**95**
Government	148	138	117	-21
Federal government	114	113	97	-15
Provincial government	34	25	21	-40
Business enterprise	412	987	957	132
University	358	505	720	101
Private non-profit	7	10	10	40

Source: Statistics Canada. Estimates of Canadian Research and Development Expenditures (GERD), Canada, 1993 to 2004, and by Province 1993 to 2002. Catalogue No. 88E0006XIE2004020.

Table D4.5

Sources of funds for university R&D expenditures in millions of 2001 constant dollars and as a percentage of total funding, Canada and provinces, 1991, 1995, 2000, and 2002[1]

Jurisdiction and source of R&D funds	1991 $	1991 Percent of total	1995 $	1995 Percent of total	2000 $	2000 Percent of total	2002 $	2002 Percent of total	Percentage change 1991-2002
Canada, total	**3886.9**	**100.0**	**4123.4**	**100.0**	**5941.3**	**100.0**	**7266.5**	**100.0**	**86.9**
Business enterprise	**270.9**	**7.0**	**331.4**	**8.0**	**567.5**	**9.6**	**629.0**	**8.7**	**132.2**
Federal government	**961.1**	**24.7**	**954.9**	**23.2**	**1325.8**	**22.3**	**1777.0**	**24.5**	**84.9**
Provincial governments	**341.4**	**8.8**	**361.0**	**8.8**	**602.2**	**10.1**	**810.5**	**11.2**	**137.4**
Private non-profit	**254.3**	**6.5**	**296.9**	**7.2**	**428.9**	**7.2**	**591.3**	**8.1**	**132.5**
Foreign sources	**13.0**	**0.3**	**27.1**	**0.7**	**50.9**	**0.9**	**98.2**	**1.4**	**655.5**
University	**2046.3**	**52.6**	**2152.2**	**52.2**	**2966.0**	**49.9**	**3360.3**	**46.2**	**64.2**
From own revenue sources	540.0	13.9	709.0	17.2	1317.6	22.2	1389.0	19.1	157.2
From general university funds[2]	1506.0	38.8	1443.0	35.0	1648.5	27.7	1971.4	27.1	30.9
Newfoundland and Labrador, total	**66.5**	**100.0**	**64.0**	**100.0**	**84.3**	**100.0**	**92.0**	**100.0**	**38.4**
Business enterprise	2.1	3.1	4.2	6.5	7.0	8.3	9.8	10.6	368.9
Federal government	19.1	28.7	16.3	25.5	23.5	27.9	28.1	30.5	47.3
Provincial government	1.2	1.7	3.7	5.8	1.5	1.8	1.3	1.4	9.7
Private non-profit	5.7	8.5	1.1	1.7	1.3	1.6	1.7	1.8	-70.7
Foreign sources	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	0.0
University	38.6	58.1	38.4	59.9	50.9	60.4	51.2	55.7	32.7
Prince Edward Island, total	**5.9**	**100.0**	**4.1**	**100.0**	**16.1**	**100.0**	**18.2**	**100.0**	**209.0**
Business enterprise	0.1	2.0	0.4	10.8	0.6	3.8	0.5	2.7	321.4
Federal government	1.8	31.4	0.9	21.6	2.8	17.2	4.2	23.0	126.5
Provincial government	0.1	2.0	0.3	8.1	0.7	4.5	0.4	2.1	237.1
Private non-profit	0.3	5.9	0.3	8.1	1.0	6.4	0.9	4.8	152.8
Foreign sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
University	3.5	58.8	2.1	51.4	11.0	68.2	12.3	67.4	254.0

Table D4.5 (concluded)

Sources of funds for university R&D expenditures in millions of 2001 constant dollars and as a percentage of total funding, Canada and provinces, 1991, 1995, 2000, and 2002[1]

Jurisdiction and source of R&D funds	1991 $	1991 Percent of total	1995 $	1995 Percent of total	2000 $	2000 Percent of total	2002 $	2002 Percent of total	Percentage change 1991-2002
Nova Scotia, total	**149.2**	**100.0**	**131.1**	**100.0**	**203.6**	**100.0**	**218.0**	**100.0**	**46.1**
Business enterprise	5.7	3.8	8.7	6.7	20.2	9.9	20.3	9.3	253.5
Federal government	53.2	35.6	34.7	26.5	40.6	20.0	50.5	23.2	-5.1
Provincial government	8.2	5.5	3.4	2.6	7.9	3.9	6.7	3.1	-18.3
Private non-profit	4.8	3.2	5.0	3.8	10.7	5.3	17.0	7.8	253.8
Foreign sources	0.0	0.0	1.5	1.1	1.7	0.9	1.4	0.6	...
University	77.2	51.7	77.9	59.4	122.4	60.1	122.0	56.0	58.1
New Brunswick, total	**57.4**	**100.0**	**62.3**	**100.0**	**89.7**	**100.0**	**95.6**	**100.0**	**66.6**
Business enterprise	4.9	8.5	4.9	7.8	4.3	4.8	2.6	2.7	-46.2
Federal government	14.2	24.7	15.4	24.7	15.5	17.2	19.6	20.5	38.2
Provincial government	3.8	6.6	4.1	6.6	2.3	2.6	2.2	2.3	-41.6
Private non-profit	2.3	4.0	3.4	5.5	4.9	5.4	5.8	6.1	151.2
Foreign sources	0.0	0.0	0.3	0.5	0.6	0.7	0.6	0.6	...
University	32.2	56.1	34.2	54.8	62.2	69.4	64.8	67.7	101.1
Quebec, total	**1188.1**	**100.0**	**1236.0**	**100.0**	**1666.9**	**100.0**	**2123.7**	**100.0**	**78.7**
Business enterprise	144.3	12.1	104.0	8.4	148.2	8.9	171.8	8.1	19.0
Federal government	242.8	20.4	253.5	20.5	381.6	22.9	518.2	24.4	113.4
Provincial government	96.4	8.1	131.0	10.6	170.5	10.2	256.6	12.1	166.3
Private non-profit	71.1	6.0	69.6	5.6	99.6	6.0	167.5	7.9	135.5
Foreign sources	4.5	0.4	9.6	0.8	12.2	0.7	25.7	1.2	471.2
University	628.9	52.9	668.3	54.1	855.0	51.3	984.1	46.3	56.5
Ontario, total	**1440.0**	**100.0**	**1616.8**	**100.0**	**2387.2**	**100.0**	**2820.2**	**100.0**	**95.8**
Business enterprise	70.3	4.9	135.1	8.4	258.3	10.8	289.3	10.3	311.7
Federal government	354.2	24.6	365.3	22.6	520.3	21.8	671.3	23.8	89.5
Provincial government	142.5	9.9	140.2	8.7	242.5	10.2	301.6	10.7	111.5
Private non-profit	102.6	7.1	135.4	8.4	209.7	8.8	234.6	8.3	128.7
Foreign sources	1.9	0.1	6.8	0.4	23.3	1.0	51.1	1.8	2584.2
University	768.5	53.4	834.2	51.6	1133.2	47.5	1272.4	45.1	65.6
Manitoba, total	**139.9**	**100.0**	**128.7**	**100.0**	**194.6**	**100.0**	**221.1**	**100.0**	**58.1**
Business enterprise	3.9	2.8	4.8	3.7	15.4	7.9	17.6	8.0	348.0
Federal government	35.2	25.1	30.2	23.4	43.1	22.2	54.8	24.8	56.0
Provincial government	6.1	4.4	5.8	4.5	14.7	7.5	15.6	7.0	153.1
Private non-profit	16.3	11.7	15.3	11.9	17.0	8.8	24.1	10.9	47.5
Foreign sources	2.8	2.0	2.2	1.7	2.4	1.2	2.3	1.0	-18.1
University	75.6	54.0	70.5	54.8	101.9	52.4	106.7	48.3	41.2
Saskatchewan, total	**122.4**	**100.0**	**128.2**	**100.0**	**235.2**	**100.0**	**252.0**	**100.0**	**105.9**
Business enterprise	4.3	3.5	8.0	6.2	10.5	4.5	15.5	6.1	263.6
Federal government	31.7	25.9	25.4	19.8	55.7	23.7	55.0	21.8	73.6
Provincial government	14.0	11.4	13.7	10.7	41.0	17.4	34.6	13.7	147.8
Private non-profit	4.6	3.8	6.4	5.0	8.6	3.6	20.8	8.3	350.7
Foreign sources	0.2	0.2	0.6	0.4	0.4	0.2	0.1	0.0	-60.0
University	67.6	55.2	73.9	57.7	119.1	50.6	125.8	49.9	86.3
Alberta, total	**354.1**	**100.0**	**375.1**	**100.0**	**558.6**	**100.0**	**702.8**	**100.0**	**98.5**
Business enterprise	16.1	4.5	28.1	7.5	50.8	9.1	43.0	6.1	167.4
Federal government	85.0	24.0	104.8	27.9	115.7	20.7	174.7	24.9	105.6
Provincial government	44.4	12.5	41.9	11.2	93.7	16.8	117.7	16.7	165.2
Private non-profit	26.5	7.5	31.1	8.3	35.0	6.3	50.4	7.2	90.4
Foreign sources	1.2	0.3	1.1	0.3	3.4	0.6	6.6	0.9	439.3
University	181.1	51.1	168.0	44.8	260.0	46.6	310.3	44.2	71.4
British Columbia, total	**357.9**	**100.0**	**380.6**	**100.0**	**505.8**	**100.0**	**720.3**	**100.0**	**101.3**
Business enterprise	16.7	4.7	33.3	8.8	52.6	10.4	58.8	8.2	252.7
Federal government	123.7	34.6	108.8	28.6	127.2	25.1	200.0	27.8	61.7
Provincial government	24.7	6.9	18.0	4.7	27.7	5.5	73.4	10.2	196.9
Private non-profit	20.3	5.7	29.7	7.8	41.5	8.2	68.4	9.5	236.2
Foreign sources	2.4	0.7	4.5	1.2	7.0	1.4	10.6	1.5	346.1
University	170.0	47.5	186.2	48.9	249.8	49.4	309.2	42.9	81.9

1. 1991, 1995, 2000 data are revised.
2. Data on general university funds are not available at the provincial level.

Source: Statistics Canada. Science, Innovation and Electronic Information Division. Science and Innovation Surveys Section.

Table D5.1

Number of registered apprenticeship completions, Canada and jurisdictions, 1992 and 2002

	1992	2002	Percentage change
Canada	**18,720**	**16,494**	**-12**
Newfoundland and Labrador[1]	363	171	-53
Prince Edward Island	40	57	43
Nova Scotia	681	439	-36
New Brunswick	622	418	-33
Quebec	2,624	2,346	-11
Ontario	6,482	4,162	-36
Manitoba	475	628	32
Saskatchewan	415	835	101
Alberta	3,802	4,664	23
British Columbia	3,119	2,691	-14
Yukon	34	28	-18
Northwest Territories[2]	63	42	-33
Nunavut[2]	…	13	

1. Beginning in 1997, Newfoundland and Labrador expanded its definition of registered apprentices to include students in pre-apprenticeship programs in community colleges and similar institutions.
2. Nunavut was created on April 1, 1999. Prior to that date, data for Nunavut were included with data for Northwest Territories. This creates a break in series for Northwest Territories in 1999-2000.

Source: Registered Apprenticeship Information System, Statistics Canada.

Table D5.2

Number of registered apprenticeship completions, by trade group and sex, Canada, 1992 and 2002

	1992				2002				Percentage change		
	Male	Female	% female	Both sexes	Male	Female	% female	Both sexes	Male	Female	Both sexes
Building construction trades	3,451	25	1	**3,476**	2,040	29	1	**2,069**	-41	16	**-40**
Electrical, electronics and related	2,853	25	1	**2,878**	3,028	54	2	**3,082**	6	116	**7**
Food and service trades	651	845	56	**1,496**	602	1,232	67	**1,834**	-8	46	**23**
Industrial and related mechanical trades	2,217	19	1	**2,236**	1,595	21	1	**1,616**	-28	11	**-28**
Metal fabricating trades	3,694	24	1	**3,718**	3,746	43	1	**3,789**	1	79	**2**
Motor vehicle and heavy equipment	4,606	43	1	**4,649**	3,764	61	2	**3,825**	-18	42	**-18**
Other trades	220	47	18	**267**	156	123	44	**279**	-29	162	**4**
Total	**17,692**	**1,028**	**5**	**18,720**	**14,931**	**1,563**	**9**	**16,494**	**-16**	**52**	**-12**

Source: Registered Apprenticeship Information System, Statistics Canada.

Tables D5

Table D5.3

Number of diplomas and degrees granted and graduation rates, by level of education, Canada, 1976 to 2001

	Number of degrees and diplomas					Graduation rates			
	College diplomas and certificates	Bachelor's and first professional degrees	Master's degrees	Earned doctoral degrees	Total	College diplomas and certificates	Bachelor's and first professional degrees	Master's degrees	Earned doctoral degrees
1976	56,655	83,292	11,555	1,693	**153,195**	12.1	18.4	2.7	0.4
1977	60,687	87,356	12,375	1,702	**162,120**	13.0	18.6	2.8	0.4
1978	64,891	89,349	12,637	1,819	**168,696**	13.7	19.1	2.8	0.4
1979	67,883	87,238	12,351	1,803	**169,275**	14.1	18.3	2.7	0.4
1980	67,343	86,410	12,432	1,738	**167,923**	13.7	17.7	2.7	0.4
1981	68,744	84,926	12,903	1,816	**168,389**	13.7	17.2	2.7	0.4
1982	71,818	87,106	13,110	1,715	**173,749**	14.2	17.3	2.7	0.4
1983	75,776	89,770	13,925	1,821	**181,292**	15.2	17.7	2.8	0.4
1984	83,557	92,856	14,568	1,878	**192,859**	16.5	18.5	2.9	0.4
1985	84,281	97,551	15,208	2,004	**199,044**	16.9	19.2	3.0	0.4
1986	81,761	101,670	15,948	2,220	**201,599**	16.9	20.2	3.2	0.5
1987	82,419	103,078	15,968	2,375	**203,840**	18.5	21.2	3.1	0.5
1988	80,096	103,606	16,320	2,418	**202,440**	19.2	23.2	3.2	0.5
1989	82,190	104,981	16,750	2,573	**206,494**	20.1	24.7	3.4	0.5
1990	82,506	109,777	17,653	2,673	**212,609**	20.1	26.5	3.9	0.5
1991	83,824	114,820	18,033	2,947	**219,624**	20.1	27.8	4.2	0.6
1992	85,949	120,745	19,435	3,136	**229,265**	20.6	28.7	4.6	0.6
1993	92,515	123,202	20,818	3,356	**239,891**	23.2	29.4	5.0	0.7
1994	95,296	126,538	21,292	3,552	**246,678**	24.2	31.6	5.0	0.8
1995	97,195	127,331	21,356	3,716	**249,598**	24.8	32.3	5.1	0.9
1996	100,978	127,986	21,558	3,928	**254,450**	25.0	32.5	5.3	0.9
1997	105,019	125,794	21,319	3,966	**256,098**	25.8	31.0	5.3	0.9
1998	113,057	124,861	22,026	3,976	**263,920**	27.7	30.8	5.6	0.9
1999	..	126,436	23,272	3,966	**..**	..	31.0	5.7	1.0
2000	..	128,568	24,228	3,860	**..**	..	31.4	5.9	0.9
2001	..	128,929	24,863	3,717	**..**	..	30.6	6.0	0.9

Note: Graduation rates are based on jurisdiction of study. Rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 21 for college diplomas, age 22 for undergraduate degrees, age 24 for master's degrees, and age 27 for earned doctorates).

Sources: University Student Information System, Statistics Canada.
Enhanced Student Information System (ESIS), Statistics Canada.
Community College Student Information System, Statistics Canada.

Table D5.4

Graduation rates, by program level and jurisdiction of study, Canada and jurisdictions, 1991 to 2001

Level and year	Typical age at graduation	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
College:														
1991	21	**20**	9	27	7	9	40	16	10	10	19	11	7	10
1992	21	**21**	10	25	7	10	42	16	9	10	19	10	5	33
1993	21	**23**	12	22	10	10	46	19	10	10	19	11	6	25
1994	21	**24**	13	25	10	12	47	20	11	11	20	13	7	32
1995	21	**25**	15	34	15	13	44	23	9	11	22	13	14	19
1996	21	**25**	20	35	29	12	37	26	9	10	21	14	9	31
1997	21	**26**	20	40	32	23	37	27	10	10	20	13	6	12
1998	21	**28**	26	53	34	26	40	30	9	8	20	14	21	17
1999	21	**..**	..	..	..	..	..	..	..	..	..	..	..	..
2000	21	**..**	..	..	..	..	..	..	..	..	..	..	..	..
2001	21	**..**	..	..	..	..	..	..	..	..	..	..	..	..
Bachelor's and first professional degrees:														
1991	22	**28**	22	21	39	26	28	31	30	31	23	18	.	.
1992	22	**29**	21	24	42	26	28	32	30	32	23	20	.	.
1993	22	**29**	22	23	42	27	30	33	31	33	23	21	.	.
1994	22	**32**	24	25	45	28	32	36	33	29	26	22	.	.
1995	22	**32**	24	27	46	30	32	37	34	31	26	22	.	.
1996	22	**33**	25	24	46	33	32	38	32	31	27	21	.	.
1997	22	**31**	26	27	47	32	30	36	31	28	26	22	.	.
1998	22	**31**	28	22	49	31	28	36	30	28	25	23	.	.
1999	22	**31**	31	28	50	32	28	36	30	29	26	24	.	.
2000	22	**31**	30	28	49	34	28	36	29	31	26	26	.	.
2001	22	**31**	31	28	43	32	27	36	30	31	26	25	.	.
Master's degrees:														
1991	24	**4**	2	0	6	3	5	5	3	3	3	3	.	.
1992	24	**5**	2	1	8	3	6	5	3	3	3	3	.	.
1993	24	**5**	3	1	8	4	6	5	3	3	4	4	.	.
1994	24	**5**	2	1	8	3	7	5	3	3	4	4	.	.
1995	24	**5**	3	0	8	4	7	5	4	4	4	4	.	.
1996	24	**5**	3	1	7	4	7	6	4	4	3	4	.	.
1997	24	**5**	3	0	8	4	7	6	4	4	4	4	.	.
1998	24	**6**	4	0	7	4	7	6	3	4	4	4	.	.
1999	24	**6**	5	1	10	4	7	6	3	4	4	5	.	.
2000	24	**6**	6	1	9	4	8	6	3	4	4	5	.	.
2001	24	**6**	5	1	10	4	8	6	3	4	5	5	.	.
Earned doctorates:														
1991	27	**1**	0	.	0	0	1	1	0	0	1	1	.	.
1992	27	**1**	0	0	0	0	1	1	0	0	1	1	.	.
1993	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1994	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1995	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1996	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1997	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1998	27	**1**	0	0	1	0	1	1	1	1	1	1	.	.
1999	27	**1**	1	0	1	0	1	1	1	1	1	1	.	.
2000	27	**1**	0	0	0	0	1	1	1	1	1	1	.	.
2001	27	**1**	1	0	1	0	1	1	1	1	1	1	.	.

Note: Graduation rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 22 for undergraduate degrees, age 24 for master's degrees, and age 27 for earned doctorates). Rates presented in this table include foreign students.

Sources: University Student Information System, Statistics Canada.

Community College Student Information System, Statistics Canada.

Enhanced Student Information System (ESIS), Statistics Canada.

Table D5.5

University graduation rates, by level of degree, sex and field of study, Canada, 1992 and 2001

	Bachelor's and first professional degrees			Master's degrees			Earned doctoral degrees		
	1992	2001	Change	1992	2001	Change	1992	2001	Change
Total males	**24.3**	**24.2**	**0.0**	**4.9**	**5.9**	**1.0**	**1.0**	**1.0**	**0.0**
Humanities and social sciences	**11.3**	**9.8**	**-1.5**	**1.6**	**1.6**	**-0.1**	**0.3**	**0.3**	**0.0**
Education	2.2	1.9	-0.3	0.5	0.4	-0.1	0.1	0.0	0.0
Visual and performing arts, and communications technologies	0.6	0.7	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Humanities	2.6	2.5	-0.1	0.5	0.4	0.0	0.1	0.1	0.0
Social and behavioural sciences, and law	5.8	4.7	-1.1	0.6	0.7	0.1	0.1	0.1	0.0
Physical, natural and applied sciences	**7.2**	**8.6**	**1.4**	**1.7**	**1.9**	**0.2**	**0.6**	**0.6**	**0.0**
Physical and life sciences, and technologies	2.1	2.2	0.1	0.5	0.5	0.0	0.3	0.3	0.0
Mathematics, computer and information sciences	1.4	2.2	0.8	0.3	0.4	0.1	0.1	0.1	0.0
Architecture, engineering and related technologies	3.3	3.7	0.4	0.9	0.9	0.1	0.2	0.2	0.0
Agriculture, natural resources and conservation	0.4	0.5	0.1	0.2	0.2	0.0	0.0	0.0	0.0
Business, management and public administration	**3.9**	**4.0**	**0.1**	**1.4**	**2.2**	**0.8**	**0.0**	**0.0**	**0.0**
Health, parks, recreation and fitness	**1.8**	**1.7**	**-0.1**	**0.2**	**0.2**	**0.0**	**0.1**	**0.1**	**0.0**
Other	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total females	**33.4**	**37.6**	**4.2**	**4.7**	**6.7**	**2.0**	**0.5**	**0.8**	**0.3**
Humanities and social sciences	**21.7**	**21.6**	**0.0**	**2.4**	**3.0**	**0.5**	**0.3**	**0.4**	**0.2**
Education	6.4	6.2	-0.2	1.1	1.1	0.0	0.1	0.1	0.0
Visual and performing arts, and communications technologies	1.3	1.5	0.2	0.1	0.2	0.1	0.0	0.0	0.0
Humanities	5.1	4.6	-0.4	0.5	0.6	0.1	0.1	0.1	0.1
Social and behavioural sciences, and law	8.9	9.3	0.4	0.7	1.0	0.4	0.1	0.2	0.1
Physical, natural and applied sciences	**3.7**	**6.0**	**2.4**	**0.9**	**1.3**	**0.5**	**0.2**	**0.2**	**0.1**
Physical and life sciences, and technologies	2.0	3.3	1.3	0.3	0.5	0.2	0.1	0.2	0.1
Mathematics, computer and information sciences	0.7	0.9	0.2	0.2	0.3	0.0	0.0	0.0	0.0
Architecture, engineering and related technologies	0.7	1.1	0.4	0.2	0.4	0.2	0.0	0.0	0.0
Agriculture, natural resources and conservation	0.2	0.7	0.4	0.1	0.2	0.1	0.0	0.0	0.0
Business, management and public administration	**4.4**	**5.4**	**1.0**	**0.9**	**1.7**	**0.7**	**0.0**	**0.0**	**0.0**
Health, parks, recreation and fitness	**3.5**	**4.3**	**0.8**	**0.4**	**0.7**	**0.2**	**0.0**	**0.1**	**0.0**
Other	**0.1**	**0.2**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total, both sexes	**28.7**	**30.8**	**2.1**	**4.8**	**6.3**	**1.5**	**0.7**	**0.9**	**0.1**
Humanities and social sciences	**16.4**	**15.6**	**-0.8**	**2.0**	**2.2**	**0.2**	**0.3**	**0.4**	**0.1**
Education	4.3	4.0	-0.3	0.8	0.8	0.0	0.1	0.1	0.0
Visual and performing arts, and communications technologies	0.9	1.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0
Humanities	3.8	3.5	-0.3	0.5	0.5	0.0	0.1	0.1	0.0
Social and behavioural sciences, and law	7.3	7.0	-0.4	0.6	0.9	0.2	0.1	0.2	0.1
Physical, natural and applied sciences	**5.5**	**7.3**	**1.9**	**1.3**	**1.7**	**0.3**	**0.4**	**0.4**	**0.0**
Physical and life sciences, and technologies	2.1	2.8	0.7	0.4	0.5	0.1	0.2	0.2	0.0
Mathematics, computer and information sciences	1.1	1.6	0.5	0.3	0.3	0.1	0.0	0.0	0.0
Architecture, engineering and related technologies	2.0	2.4	0.4	0.5	0.7	0.1	0.1	0.1	0.0
Agriculture, natural resources and conservation	0.3	0.6	0.3	0.1	0.2	0.1	0.0	0.0	0.0
Business, management and public administration	**4.2**	**4.7**	**0.5**	**1.2**	**1.9**	**0.8**	**0.0**	**0.0**	**0.0**
Health, parks, recreation and fitness	**2.7**	**3.0**	**0.3**	**0.3**	**0.4**	**0.1**	**0.0**	**0.1**	**0.0**
Other	**0.1**	**0.2**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Note: Graduation rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 22 for undergraduate degrees, age 24 for master's degrees, and age 27 for earned doctorates). Rates presented in this table include foreign students.

Source: Enhanced Student Information System (ESIS), Statistics Canada.

Table D5.6

Number of university degrees granted, by sex and field of study, Canada and provinces,[1] 1992

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Total males	**73,670**	**1,144**	**191**	**3,259**	**1,627**	**22,748**	**28,004**	**2,646**	**2,706**	**5,299**	**6,046**
Humanities and social sciences	**31,820**	**605**	**70**	**1,381**	**690**	**7,616**	**13,496**	**1,303**	**1,167**	**2,206**	**3,286**
Education	7,188	284	10	324	206	1,765	2,326	323	389	691	870
Visual and performing arts, and Communications technologies	1,703	19	3	97	21	553	635	62	59	112	142
Humanities	7,831	134	29	355	194	1,851	3,427	238	270	427	906
Social and behavioural sciences, and law	15,098	168	28	605	269	3,447	7,108	680	449	976	1,368
Physical, natural and applied sciences	**21,775**	**310**	**36**	**1,073**	**509**	**6,467**	**8,544**	**854**	**745**	**1,674**	**1,563**
Physical and life sciences, and technologies	6,280	153	26	358	149	1,480	2,479	263	176	543	653
Mathematics, computer and information sciences	4,234	48	1	164	80	1,329	1,762	157	174	272	247
Architecture, engineering and related technologies	9,813	109	9	472	237	3,265	3,851	285	260	744	581
Agriculture, batural resources and conservation	1,448	..	..	79	43	393	452	149	135	115	82
Business, management and public administration	**14,922**	**164**	**65**	**606**	**347**	**6,904**	**4,394**	**311**	**501**	**863**	**767**
Health, parks, recreation and fitness	**4,941**	**65**	**20**	**199**	**81**	**1,618**	**1,541**	**173**	**293**	**548**	**403**
Other	**212**	**..**	**..**	**..**	**..**	**143**	**29**	**5**	**..**	**8**	**27**
Total females	**95,201**	**1,301**	**307**	**4,332**	**2,121**	**31,838**	**35,543**	**3,184**	**3,301**	**6,178**	**7,096**
Humanities and social sciences	**58,027**	**936**	**178**	**2,517**	**1,259**	**15,795**	**24,396**	**2,147**	**1,921**	**3,893**	**4,985**
Education	19,050	493	36	717	498	6,013	6,018	856	959	1,751	1,709
Visual and performing arts, and communications technologies	3,290	17	11	147	38	1,123	1,303	122	61	200	268
Humanities	13,718	206	49	607	328	3,452	6,389	315	307	674	1,391
Social and behavioural sciences, and law	21,969	220	82	1,046	395	5,207	10,686	854	594	1,268	1,617
Physical, natural and applied sciences	**10,477**	**126**	**34**	**683**	**212**	**3,366**	**4,150**	**376**	**256**	**616**	**658**
Physical and life sciences, and technologies	5,255	90	28	367	133	1,445	2,086	202	105	344	455
Mathematics, computer and information sciences	2,303	20	2	84	28	836	1,005	54	77	110	87
Architecture, engineering and related technologies	2,082	16	4	168	41	828	785	44	24	108	64
Agriculture, batural resources and conservation	837	..	..	64	10	257	274	76	50	54	52
Business, management and public administration	**15,769**	**134**	**62**	**653**	**387**	**8,227**	**3,967**	**283**	**647**	**696**	**713**
Health, parks, recreation and fitness	**10,471**	**105**	**33**	**478**	**260**	**4,040**	**3,008**	**373**	**477**	**960**	**737**
Other	**457**	**..**	**..**	**1**	**3**	**410**	**22**	**5**	**..**	**13**	**3**
Total, both sexes[2]	**168,871**	**2,445**	**498**	**7,591**	**3,748**	**54,586**	**63,547**	**5,830**	**6,007**	**11,477**	**13,142**
Humanities and social sciences	**89,847**	**1,541**	**248**	**3,898**	**1,949**	**23,411**	**37,892**	**3,450**	**3,088**	**6,099**	**8,271**
Education	26,238	777	46	1,041	704	7,778	8,344	1,179	1,348	2,442	2,579
Visual and performing arts, and communications technologies	4,993	36	14	244	59	1,676	1,938	184	120	312	410
Humanities	21,549	340	78	962	522	5,303	9,816	553	577	1,101	2,297
Social and behavioural sciences, and law	37,067	388	110	1,651	664	8,654	17,794	1,534	1,043	2,244	2,985
Physical, natural and applied sciences	**32,252**	**436**	**70**	**1,756**	**721**	**9,833**	**12,694**	**1,230**	**1,001**	**2,290**	**2,221**
Physical and life sciences, and technologies	11,535	243	54	725	282	2,925	4,565	465	281	887	1,108
Mathematics, computer and information sciences	6,537	68	3	248	108	2,165	2,767	211	251	382	334
Architecture, engineering and related technologies	11,895	125	13	640	278	4,093	4,636	329	284	852	645
Agriculture, natural resources and conservation	2,285	..	..	143	53	650	726	225	185	169	134
Business, management and public administration	**30,691**	**298**	**127**	**1,259**	**734**	**15,131**	**8,361**	**594**	**1,148**	**1,559**	**1,480**
Health, parks, recreation and fitness	**15,412**	**170**	**53**	**677**	**341**	**5,658**	**4,549**	**546**	**770**	**1,508**	**1,140**
Other	**669**	**..**	**..**	**1**	**3**	**553**	**51**	**10**	**..**	**21**	**30**

1. Graduates shown by province of study.
2. Includes individuals for whom sex was not reported.

Source: Enhanced Student Information System (ESIS), Statistics Canada.

Table D5.7

Number of university degrees granted, by sex and field of study, Canada and provinces[1], 2001

	Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Total males	**72,913**	**1,100**	**194**	**2,732**	**1,613**	**21,071**	**28,512**	**2,213**	**2,318**	**6,124**	**7,036**
Humanities and social sciences	**27,067**	**401**	**80**	**865**	**527**	**6,427**	**11,705**	**884**	**839**	**2,141**	**3,198**
Education	5,533	137	29	163	125	1,284	2,205	226	249	639	476
Visual and performing arts, and communications technologies	1,917	21	1	93	22	700	710	44	49	146	131
Humanities	7,194	93	19	250	155	1,500	3,111	294	200	509	1,063
Social and behavioural sciences, and law	12,423	150	31	359	225	2,943	5,679	320	341	847	1,528
Physical, natural and applied sciences	**24,926**	**382**	**50**	**904**	**572**	**6,771**	**9,972**	**888**	**858**	**2,141**	**2,388**
Physical and life sciences, and technologies	6,401	126	19	258	129	1,364	2,655	329	137	604	780
Mathematics, computer and information sciences	6,089	85	5	185	161	1,669	2,617	153	215	431	568
Architecture, engineering and related technologies	10,572	154	26	363	209	3,381	4,174	252	348	900	765
Agriculture, natural resources and conservation	1,864	17	..	98	73	357	526	154	158	206	275
Business, management and public administration	**15,909**	**213**	**46**	**712**	**392**	**6,539**	**5,022**	**262**	**424**	**1,316**	**983**
Health, parks, recreation and fitness	**4,469**	**104**	**18**	**243**	**106**	**926**	**1,720**	**172**	**197**	**525**	**458**
Other	**542**	**..**	**..**	**8**	**16**	**408**	**93**	**7**	**..**	**1**	**9**
Total females	**105,061**	**1,756**	**411**	**4,387**	**2,387**	**30,286**	**40,000**	**3,184**	**3,376**	**8,962**	**10,312**
Humanities and social sciences	**56,807**	**887**	**193**	**2,184**	**1,178**	**13,941**	**23,761**	**1,773**	**1,638**	**4,791**	**6,461**
Education	16,607	309	68	602	340	4,238	6,235	634	738	1,979	1,464
Visual and performing arts, and communications technologies	3,966	33	..	180	51	1,367	1,458	106	75	342	354
Humanities	12,990	161	42	495	252	2,637	5,584	544	225	944	2,106
Social and behavioural sciences, and law	23,244	384	83	907	535	5,699	10,484	489	600	1,526	2,537
Physical, natural and applied sciences	**16,437**	**289**	**70**	**758**	**326**	**3,913**	**6,937**	**638**	**493**	**1,401**	**1,612**
Physical and life sciences, and technologies	8,345	175	65	373	169	1,641	3,724	375	194	710	919
Mathematics, computer and information sciences	2,830	54	2	102	55	879	1,202	52	75	161	248
Architecture, engineering and related technologies	3,294	42	3	121	74	993	1,369	76	84	296	236
Agriculture, natural resources and conservation	1,968	18	..	162	28	400	642	135	140	234	209
Business, management and public administration	**19,199**	**304**	**70**	**826**	**544**	**8,645**	**5,198**	**355**	**791**	**1,290**	**1,176**
Health, parks, recreation and fitness	**11,690**	**276**	**78**	**601**	**319**	**3,012**	**4,037**	**406**	**453**	**1,479**	**1,029**
Other	**928**	**..**	**..**	**18**	**20**	**775**	**67**	**12**	**1**	**1**	**34**
Total, both sexes[2]	**177,983**	**2,862**	**605**	**7,122**	**4,000**	**51,357**	**68,512**	**5,397**	**5,694**	**15,086**	**17,348**
Humanities and social sciences	**83,883**	**1,294**	**273**	**3,052**	**1,705**	**20,368**	**35,466**	**2,657**	**2,477**	**6,932**	**9,659**
Education	22,142	447	97	766	465	5,522	8,440	860	987	2,618	1,940
Visual and performing arts, and Communications technologies	5,883	54	1	273	73	2,067	2,168	150	124	488	485
Humanities	20,188	256	61	747	407	4,137	8,695	838	425	1,453	3,169
Social and behavioural sciences, and law	35,670	537	114	1,266	760	8,642	16,163	809	941	2,373	4,065
Physical, natural and applied sciences	**41,363**	**671**	**120**	**1,662**	**898**	**10,684**	**16,909**	**1,526**	**1,351**	**3,542**	**4,000**
physical and life sciences, and technologies	14,746	301	84	631	298	3,005	6,379	704	331	1,314	1,699
Mathematics, computer and information sciences	8,919	139	7	287	216	2,548	3,819	205	290	592	816
Architecture, engineering and related technologies	13,866	196	29	484	283	4,374	5,543	328	432	1,196	1,001
Agriculture, natural resources and conservation	3,832	35	..	260	101	757	1,168	289	298	440	484
Business, management and public administration	**35,108**	**517**	**116**	**1,538**	**936**	**15,184**	**10,220**	**617**	**1,215**	**2,606**	**2,159**
Health, parks, recreation and fitness	**16,159**	**380**	**96**	**844**	**425**	**3,938**	**5,757**	**578**	**650**	**2,004**	**1,487**
Other	**1,470**	**..**	**..**	**26**	**36**	**1,183**	**160**	**19**	**1**	**2**	**43**

1. Graduates shown by province of study.
2. Includes individuals for whom sex was not reported.

Source: Enhanced Student Information System (ESIS), Statistics Canada.

Table D6.1

Level of educational attainment in the population aged 25 to 64, OECD countries, 2002

	Less than college	College[1]	University[2]	College and university combined	Total
			%		
Australia	69	11	20	31	100
Austria	86	7	7	14	100
Belgium	72	15	13	28	100
Canada	**57**	**22**	**21**	**43**	**100**
Czech Republic[3]	88	..	12	12	100
Denmark	72	5	23	28	100
Finland	67	17	16	33	100
France	76	12	12	24	100
Germany	77	10	13	23	100
Greece	81	6	13	19	100
Hungary[3]	86	..	14	14	100
Iceland	74	6	20	26	100
Ireland	74	10	16	26	100
Italy[3]	90	..	10	10	100
Japan	64	16	20	36	100
Korea	74	8	18	26	100
Luxembourg	81	7	12	19	100
Mexico	95	3	2	5	100
Netherlands	75	3	22	25	100
New Zealand	70	15	15	30	100
Norway	69	3	28	31	100
Poland[3]	88	..	12	12	100
Portugal	91	2	7	9	100
Slovak republic	89	1	10	11	100
Spain	76	7	17	24	100
Sweden	67	15	18	33	100
Switzerland	75	9	16	25	100
Turkey[3]	91	..	9	9	100
United Kingdom	73	8	19	27	100
United States	62	9	29	38	100

1. Tertiary-Type-B education.
2. Tertiary-Type-A education and advanced research programs.
3. College included in university.

Source: OECD, Education at a Glance, 2004, Table A3.3.

Chapter E tables

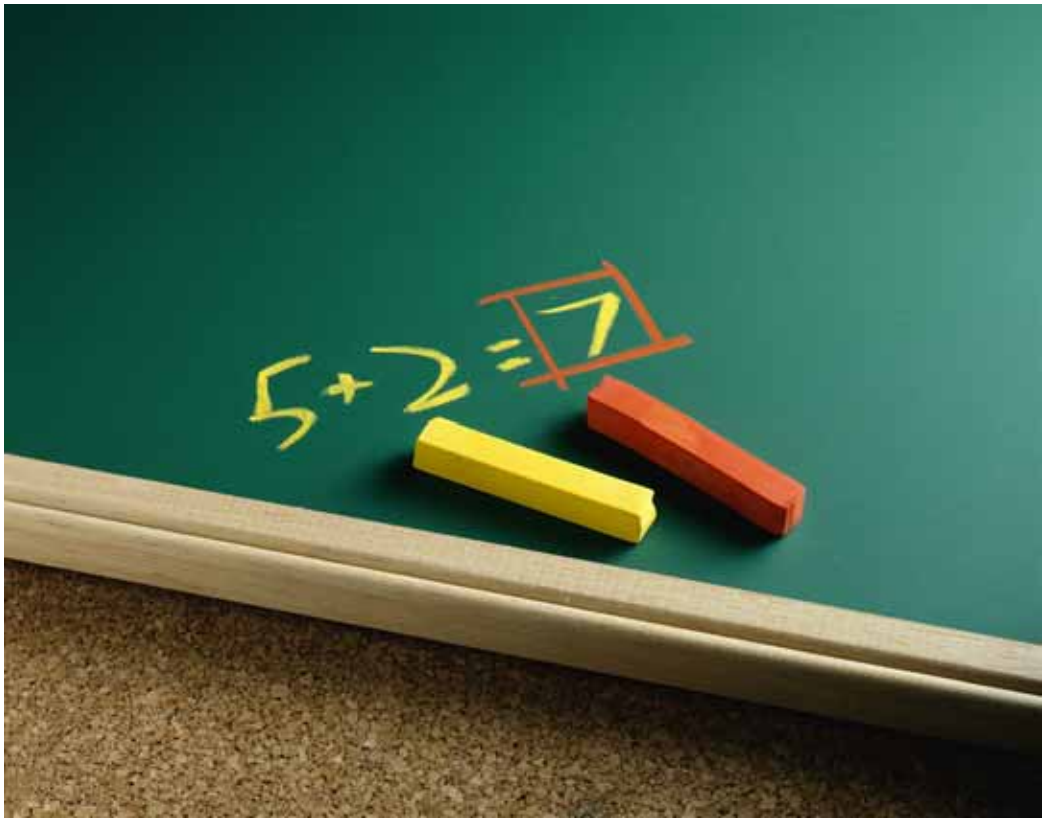

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Table E1.1

Participation rate, by education level and age, Canada, 1993-1994 and 2003-2004

	Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	%														
2003-2004															
Secondary	95	92	76	31	9	3	1	1	1	1	0	0	0	0	0
College and trades	1	1	11	23	27	21	17	13	12	8	6	6	5	4	5
University	0	0	1	17	25	28	28	26	18	14	10	7	7	6	5
Total	**96**	**93**	**88**	**71**	**61**	**52**	**46**	**40**	**31**	**23**	**16**	**13**	**12**	**10**	**10**
1993-1994															
Secondary	97	94	73	39	14	4	3	1	1	1	1	0	1	1	0
College and trades	0	1	16	25	24	19	14	12	9	8	6	4	5	4	4
University	0	0	2	12	23	29	25	21	18	12	9	7	5	4	5
Total	**97**	**95**	**91**	**76**	**61**	**52**	**42**	**34**	**28**	**21**	**16**	**11**	**11**	**9**	**9**

Source: Labour Force Survey, Statistics Canada.

Table E1.2

Proportion of students who are working, by education level and age, Canada, 1993-1994 and 2003-2004

	Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	%														
2003-2004															
Secondary	26	42	52	55	48	56	52	49	40	43	F	…	…	…	…
College and trades	0	0	51	59	62	62	61	60	56	56	54	62	53	51	60
University	…	…	33	35	43	46	51	53	53	59	53	59	62	67	63
Total	**26**	**42**	**52**	**52**	**52**	**53**	**55**	**55**	**54**	**58**	**56**	**61**	**60**	**62**	**61**
1993-1994															
Secondary	26	39	49	53	48	45	51	41	39	F	53	F	0	F	F
College and trades	…	0	40	51	55	53	54	50	48	54	49	45	57	50	40
University	…	…	29	33	32	42	53	51	50	53	54	57	67	54	63
Total	**26**	**39**	**47**	**49**	**45**	**47**	**53**	**50**	**50**	**54**	**54**	**56**	**57**	**53**	**53**

… not applicable
F too unreliable to be published
Source: Labour Force Survey, Statistics Canada.

Table E1.3

Distribution of the population aged 15 to 29 by education level, labour force status and age, Canada, 2003-2004

	Age															Total
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	15 to 29
								%								
Non-student NILF[1]	2.4	2.5	2.9	4.6	5.7	5.8	5.4	6.2	6.8	7.3	8.1	9.1	9.3	9.0	8.8	**6.3**
Non-student unemployed	0.3	1.1	2.4	4.8	6.2	6.4	6.2	7.1	7.4	6.4	6.9	6.1	6.0	5.7	5.9	**5.3**
Non-student employed	1.3	2.5	6.2	20.3	27.7	35.8	41.6	46.2	54.0	62.8	67.7	70.9	71.8	74.6	75.3	**44.1**
University employed	0.0	0.0	0.5	5.9	10.7	12.7	14.2	13.5	9.7	8.3	5.2	4.2	4.3	3.9	2.9	**6.5**
University NILF[1]	0.0	0.0	1.0	10.9	13.9	14.8	13.8	12.1	8.7	5.9	4.6	2.9	2.6	1.9	1.7	**6.4**
College employed	0.0	0.0	5.8	13.5	16.5	13.0	10.4	8.1	6.9	4.5	3.4	3.8	2.8	2.2	3.0	**6.5**
College NILF[1]	1.1	1.5	5.4	9.2	10.1	7.8	6.6	5.4	5.4	3.5	2.8	2.3	2.5	2.0	2.0	**4.5**
Primary / secondary employed	24.6	38.3	39.7	17.1	4.4	1.9	0.8	0.5	0.4	0.4	0.4	0.0	0.0	0.0	0.0	**8.5**
Primary / secondary NILF[1]	70.0	53.3	35.9	13.8	4.9	1.5	0.7	0.5	0.6	0.5	0.0	0.0	0.0	0.0	0.0	**11.8**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1. NILF = Not in the labour force.

Source: Labour Force Survey, Statistics Canada.

Table E2.1

Unemployment rates, by level of education, Canada, 1991 to 2004

	All levels	Less than high school	High school	College or trade	University
			%		
1991	10.3	15.4	10.2	8.2	4.9
1992	11.2	17.1	10.9	9.3	5.5
1993	11.4	17.1	11.6	9.7	5.9
1994	10.4	16.2	10.2	9.0	5.4
1995	9.6	15.1	9.6	8.0	5.0
1996	9.7	15.5	9.8	8.2	5.2
1997	9.2	15.7	9.2	7.5	4.8
1998	8.4	14.5	8.6	6.6	4.4
1999	7.6	13.5	7.8	5.9	4.3
2000	6.8	12.5	7.0	5.2	3.9
2001	7.2	13.1	7.2	5.8	4.6
2002	7.7	13.9	7.8	5.9	5.1
2003	7.6	13.8	7.8	5.8	5.4
2004	7.2	13.2	7.4	5.6	4.9

Source: Labour Force Survey, Statistics Canada.

Table E2.2

Unemployment rates of 25- to 29-year-olds by educational attainment, Canada and provinces, 1994 and 2004

	All levels	Less than high school	High school graduate	College or trade	University graduate
			%		
			1994		
Canada	**12**	**21**	**13**	**10**	**7**
Newfoundland and Labrador	25	40	29	23	11
Prince Edward Island	20	40	20	14	x
Nova Scotia	15	29	17	14	8
New Brunswick	14	25	16	12	6
Quebec	14	27	16	11	8
Ontario	10	16	13	9	6
Manitoba	9	14	9	10	6
Saskatchewan	8	16	9	5	x
Alberta	9	16	8	9	6
British Columbia	12	24	12	10	6
			2004		
Canada	**8**	**15**	**9**	**6**	**7**
Newfoundland and Labrador	20	31	24	19	11
Prince Edward Island	13	31	15	10	x
Nova Scotia	11	22	12	10	8
New Brunswick	9	27	12	6	x
Quebec	9	19	10	6	8
Ontario	8	13	9	7	7
Manitoba	6	10	7	4	4
Saskatchewan	6	18	8	5	4
Alberta	5	9	5	4	4
British Columbia	7	17	7	5	6

Source: Labour Force Survey, Statistics Canada.

Table E2.3

Relative earnings of the 25- to 64-year-old population with income from employment, by level of educational attainment, selected OECD countries (high school graduation = 100)

	Below high school	College or trade	University	Postsecondary
CANADA (2001)	**79**	**115**	**177**	**143**
France (2002)	84	125	167	150
Germany (2002)	78	120	161	146
Italy (2000)	78	..	138	138
United Kingdom (2001)	67	128	174	159
United States (2002)	71	118	195	186

Source: OECD, Education at a Glance, 2004 (Table A11.1a).

Table E2.4

Average employment income, by age group and education level, Canada, 2000

	Age group										
	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	**Total**
	$										
All education levels	**4,921**	**13,888**	**26,421**	**33,008**	**37,010**	**39,364**	**41,020**	**41,535**	**38,535**	**32,877**	**31,757**
Less than high school	4,002	14,383	21,161	24,013	26,593	28,303	29,177	29,014	28,060	25,047	**21,230**
High school	6,002	12,655	23,579	28,373	30,980	32,786	34,591	35,225	33,291	28,577	**25,477**
Trades	8,309	17,490	26,319	30,714	34,111	36,542	38,061	38,252	36,503	31,984	**32,743**
College	6,514	14,727	26,400	31,888	36,388	38,713	39,673	40,292	37,273	31,583	**32,736**
University	11,096	13,959	31,062	42,847	52,154	58,205	60,295	60,801	58,969	53,644	**48,648**

Source: 2001 Census of Population, Statistics Canada.

Committees and organizations

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