Update on education

This article is adapted from *Education in Canada: Raising the standard*, published as part of the March 11, 2003 data release on education from the 2001 Census of Population. The data release is available from the Statistics Canada Web site: www12.statcan.ca/english/census01/Products/Analytic/companion/educ/pdf/96F0030XIE2001012.pdf.

Canada entered the 21st century with a population better educated than ever before. During the 1990s, the number of Canadians with college or university education increased steadily, continuing a trend that began after the Second World War. The current emphasis on higher education has its roots in three recent developments: a global and technologically advanced economy where wealth is created by increasingly well-trained workers; the arrival of highly skilled immigrants in the 1990s; and uncertain labour market conditions during the recession of the early 1990s, which encouraged young people to continue their studies.

CST What you should know about this study

The Census of Population asked people aged 15 and over to report their level of education. For this study, the population was classified into five levels based on the highest level of education completed and arranged in a hierarchy reflecting increasing time commitments to schooling.

- ❑ Less than high school graduation
- ❑ High school graduation
- ❑ Trade certificate (includes registered apprentices)
- ❑ College certificates or diplomas from community colleges, CEGEPs, schools of nursing, schools of radiology, technical institutes or private business colleges.
- ❑ University education (includes certificates below and above a bachelor's degree, bachelor's degrees, master's degrees, earned doctorates, and professional degrees in medicine, dentistry, veterinary medicine and optometry).

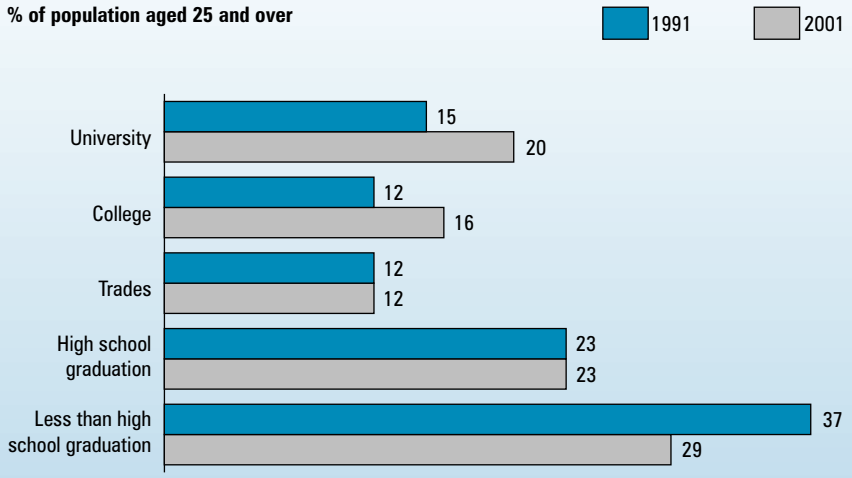
More college and university graduates

Over the past 50 years, the educational levels acquired by Canadians have grown remarkably. The proportion of individuals with a university degree, for example, surged tenfold, from 2% of the population aged 25 and over in 1951 to 20% in 2001, while the share of Canadians with less than grade 9 plunged from 55% to 11%. The trend toward university education was evident during the 1990s: the proportion of individuals aged 25 and over with a university degree rose from 15% to 20% between 1991 and 2001. Similarly, the percentage of those with a college diploma increased from 12% to 16% during this decade, while that of individuals with a trade certificate remained stable at 12%.

All in all, the number of postsecondary graduates increased by 2.7 million individuals between 1991 and 2001, a growth rate nearly three times higher than the rate at which the population aged 15 and over grew: 39% versus 14%.

Educational levels increased most dramatically for 25- to 34-year-olds. This group was aged 15 to 24 when the recession of the early 1990s hit and, as a result, many chose to continue their studies while delaying

CST **Educational attainment is improving**



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

entry into the labour market. In 2001, 28% of this group of young adults had a university qualification, 21% had a college diploma and 12% had trade credentials. In all, 61% had postsecondary credentials compared with 49% of those aged 25 to 34 in 1991.

As more and more jobs required postsecondary education, young men and women became more likely to extend their stay in their parents' home, and delay marriage and starting their own families. In the early 1990s, there was a major shift away from supporting postsecondary students through grants to student loans. With increased loan limits introduced in the mid-1990s, students received larger loans and less grant assistance. When combined with the higher costs of attending a postsecondary institution, the effect has been a dramatic increase in the average debt loads of students who borrow.[1] These factors have contributed to record high educational costs among young people and delayed economic independence from their parents.

However, education plays a crucial role in the development of individuals and society. Because education empowers people to be involved in the issues and debates affecting them and society, an educated and knowledgeable work force is vital to a strong and prosperous economy.[2] Educated people also derive other benefits from their education. It has long been known that education greatly influences the types of jobs people obtain, the likelihood of being employed and the level of employment income. Indeed, according to the 2001 Census, people with a bachelor's degree were more likely to have higher earnings than high school graduates.

Fewer people without a high school diploma

In accordance with the increasing educational attainment of Canadians, it is not surprising that the number of adults aged 25 and over who did not have a high school diploma declined by nearly 690,000 between 1991 and 2001 to just under 5.8 million Canadians (37% to 29%, respectively). The pattern was similar among the 25- to 34-year-old age group. The proportion without a high school diploma dropped from 23% in 1991 to 15% in 2001 (17% of young men and 13% of young women).

While there are fewer individuals who left high school before obtaining a diploma, those who did so still face many risks. To begin with, high school leavers are considerably more likely than high school graduates to be unemployed and have lower earnings. In addition, a host of other unfavourable conditions, such as poor health, crime, substance abuse and economic dependency[3] are associated with leaving school early. Some people eventually do recognize these risks and complete their secondary studies at a later time, while others may enrol in programs or courses outside of secondary school.

More university-educated young women than young men

In 2001, young women were less likely than young men to have not completed high school, and more likely to have a bachelor's or master's degree.[4] Women's

1. Clark, W. Winter 1998. "Paying off student loans." *Canadian Social Trends*. p. 26.
2. Statistics Canada and Council of Ministers of Education, Canada. February 2000. *Education Indicators in Canada — Report of the Pan-Canadian Education Indicators Program 1999* (Statistics Canada Catalogue no. 82-582-XIE). p. 1.
3. Gilbert, S., L. Barr, W. Clark, M. Blue and D. Sunter. 1993. *Leaving School: Results From a National Survey Comparing School Leavers and High School Graduates 18 to 20 Years of Age* (Statistics Canada Catalogue no. 81-575E). p. 4.
4. The level of schooling of 25- to 34-year-olds provides a picture of the future education profile for the entire population. Because most 25- to 34-year-olds have completed their formal schooling, their level of education provides a leading indicator of the future educational attainment of the entire population. Most young people aged 15 to 24 are still in school, so their current level of education understates the skills they will ultimately have.

presence has become more common at higher and higher levels of university education. In 1991, young women aged 25 to 34 represented just over half (51%) of bachelor's degree holders, but men remained in the majority at the master's and doctoral levels. According to the 2001 Census, young women in this age group increased their majority among bachelor's degree holders to 56% and, for the first time, outnumbered men at the master's level (52%). They still, however, fell short of men at the doctoral level (37%).

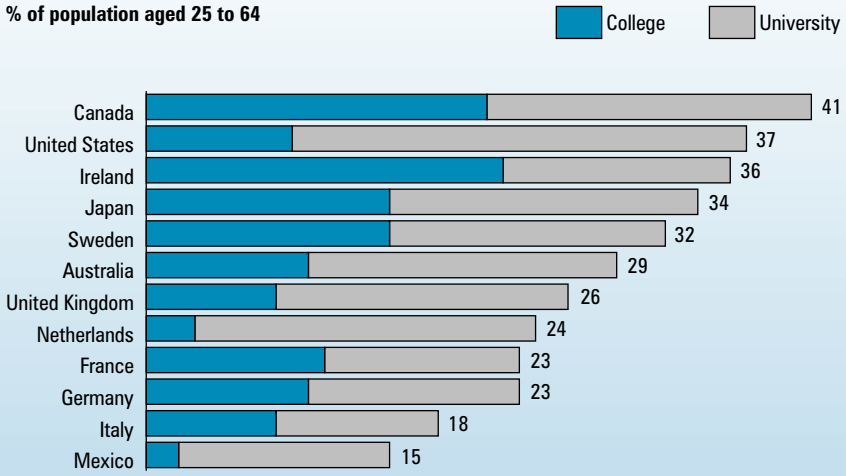
Between 1991 and 2001, educational attainment rose for both young men and women, but the growth in university credentials was stronger for young women. In 1991, equal proportions (18%) of men and women aged 25 to 34 had a university degree, certificate or diploma. By 2001, 25% of men and 30% of women had acquired these qualifications. During the 1990s, the number of university-educated women increased by 41%, while the number of men grew by 14%.

Colleges draw more women, trades more men

College education has also become more popular among young adults, increasing to 20% of 25- to 34-year-olds in 2001 from 17% in 1991, although the actual number of young college graduates declined slightly during the decade (by less than 1%). In 2001, women continued to represent the majority (58%) of young college graduates, a situation not much different from 10 years earlier.

Trades certificates and diplomas appear to be becoming less common. The proportion of young adults aged 25 to 34 holding trades certificates and diplomas decreased from 14% in 1991 to 12% in 2001 (a 28% drop in the actual number). In 2001, men accounted for 60% of young adults with a trades education, a slightly smaller majority than in 1991.

CST In 2000, Canada led OECD countries in combined college and university educational attainment



Source: Organisation for Economic Cooperation and Development, *Education at a Glance*, 2002.

Highly-educated immigrants

The Canadian labour force has benefited from the skills recent immigrants brought with them. Immigrants arriving in Canada in the 1990s had much higher levels of education than earlier entrants. In 2001, for example, 61% of recent working-age immigrants who arrived in the 1990s had qualifications above the high school level, compared with 48% of immigrants who arrived in the 1980s or 1970s. About 41% of recent immigrants were university-trained; another 13% had a college diploma and 8% a trade certificate.

Not only were recent immigrants better educated than their earlier counterparts, but they were also considerably more likely to have a university education than Canadian-born 25- to 34-year-olds, the other source of new workers. In 2001, 28% of young Canadian adults had a university education. On the other hand, recent immigrants were less likely than those born in Canada to have college (13% versus 21%) or trade (8% versus 12%) credentials. Trades qualifications have become increasingly less common among immigrants, dropping from about 14% of 1970s entrants.

Canada, a leader in educational attainment

According to the Organisation for Economic Cooperation and Development (OECD), Canada ranked fourth among OECD countries in the proportion of its working-age population (aged 25 to 64) with a university degree and second with college credentials. In 2000, 20% of Canada's working-age population had a university education, and 21% a college education.

If university and college are combined, Canada has the highest proportion of university- or college-educated working-age population among OECD countries. In 2000, 41% of Canada's population aged 25 to 64 had either a college or university education, compared with 37% in the United States, 36% in Ireland and 34% in Japan.

One reason for this situation could be that Canada offers two parallel systems of education after high school,

each requiring a high school completion for admission and each playing a key role in the development of knowledge and skills. In contrast, in most other OECD countries, either university or college is prevalent.

Education gap narrows slightly between Aboriginal and non-Aboriginal people

Among 25- to 64-year-olds who identified themselves as members of an Aboriginal group, the proportion with a high school diploma increased from 21% to 23% between 1996[5] and 2001. At the same time, the percentage of those with postsecondary credentials increased from 33% to 38%, and the share without high school diploma was down substantially from 45% to 39%.

These changes have slightly narrowed the gap between the educational attainment of Aboriginal and non-Aboriginal populations. Working-age Aboriginal people were more likely to have a trade certificate (16%) than their non-Aboriginal counterparts (13%), while 15% of Aboriginal and 18% of non-Aboriginal individuals of working age had a college education. The gap remained wide for university graduates: 8% of the Aboriginal working-age population had a university education, compared with 23% of non-Aboriginals.

Engineering most popular field of study for university men

Changes in the skill profile of university graduates over the last decade reflected technology and business trends in the 1990s. Slightly fewer than 3.7 million people aged 25 to 64 had a university education in 2001. That year, engineering (15%), business and commerce (10%) and teaching (8%) were the top three fields of study for working-age university-educated men. Teaching (20%), nursing (6%) and business and commerce (6%) were the most popular fields of study for working-age women. While the proportion of students studying engineering and business and commerce increased between 1991 and 2001, the proportion that went into teaching and nursing declined. Teaching and engineering were the top two most common fields in both 1991 and 2001, while business and commerce crept up from fourth to the third most common field.

College graduates included just over 2.9 million working-age individuals, up by 0.9 million since 1991. According to the 2001 Census, the top five fields of study for college graduates were office administration and secretarial sciences (10%), nursing (8%), financial management (8%), business and commerce (7%), and data processing and computer science technologies (6%). Data processing and computer science technologies was the only newcomer to the top five since 1991, when it ranked seventh among college graduates. During the 1990s the share of working-age college graduates in office administration and nursing declined, while the proportion of those in financial management, business and commerce, and data processing and computer science technologies grew.

Trades certificates were more common among men. Nearly 2.1 million people aged 25 to 64 held trades certificates in 2001, up by 0.2 million since 1991. This represented a 9% rise, which was less than the growth rate for the entire working-age population. The top three fields were building and construction trade (16% of trade certificate holders), mechanical engineering trades (13%) and office administration and secretarial sciences (11%). During the 1990s, the proportion of people with these trades certificates declined slightly. In the meantime, the percentage of data processing and computer science trades graduates moved into the top 10 fields with 3% of trade graduates in 2001.

Summary

The Canadian population is now better educated than ever and Canada ranks highest among OECD countries in the proportion of its working-age population with college and university education combined. Among young adults aged 25 to 34, college and university education grew in popularity, while trade/vocational education was less common in 2001 than in 1991. At the university level, young women represented a majority, not only at the bachelor's but also at the master's degree level, while men remained in the lead at the doctoral level. Immigrants who arrived in the 1990s are more likely to have a university education than Canadian-born individuals and have contributed to raising the level of education in Canada.

The economy of the 21st century will be driven by knowledge, skills, and creativity. Data from the Census show that Canadians have continued to upgrade their education in order to get good jobs to support themselves and their families. In a fast-paced, global economy, today's workplace requires not only an ability to adjust smoothly to a continuously changing environment, but also higher levels of education and skills.

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5. Comparable data does not exist for 1991.