

Investing for the Future: Post-Secondary Education Issues and the Canadian Federal Election



September 2008

Introduction

On October 14, 2008, Canadians will travel to the polls for the 40th Canadian General Election – only two years since the 2006 election which brought the Conservative Government to power. In preparation for the election, the Educational Policy Institute (EPI) is publishing a series of election-related papers, including an overview of the top post-secondary education issues in Canada and platform analyses of each party's positions.

This paper provides an overview of four key post-secondary education issues from a federal perspective:

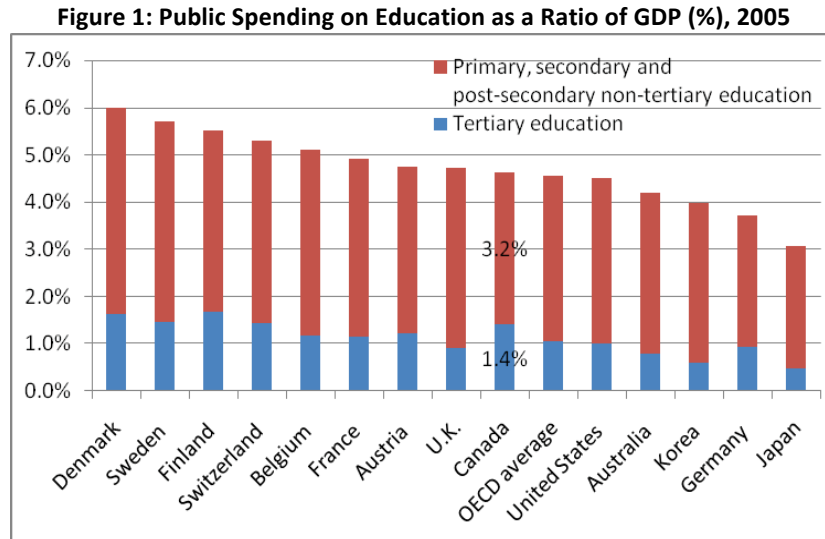
- Funding Post-Secondary Education
- Investments in Research
- Tuitions, Student Aid and Affordability
- Access and Persistence

The purpose of this document is to act as a resource for those interested in education as an election issue. It provides factual, up-to-date information on existing government policies and spending, along with key recent research findings. Later in the campaign, as each national political party releases its platforms and education policies, EPI will be releasing a guide to the party platforms.

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Funding Post-Secondary Education

Over the past five years, Canada's provincial governments have increased spending on post-secondary education by 50%, from \$13B in 2003 to \$19.5B in 2008. While public spending on all levels of education is comparable to the OECD average (4.6%), funding for post-secondary education in Canada – at 1.4% of GDP – is already substantially higher than the OECD average of 1.1% (Figure 1).



Source: OECD, *Education at a Glance* (2008)

While Canada's constitution identifies education as an area of exclusive provincial jurisdiction, this has not prevented the federal government from playing a growing role, especially in post-secondary education:

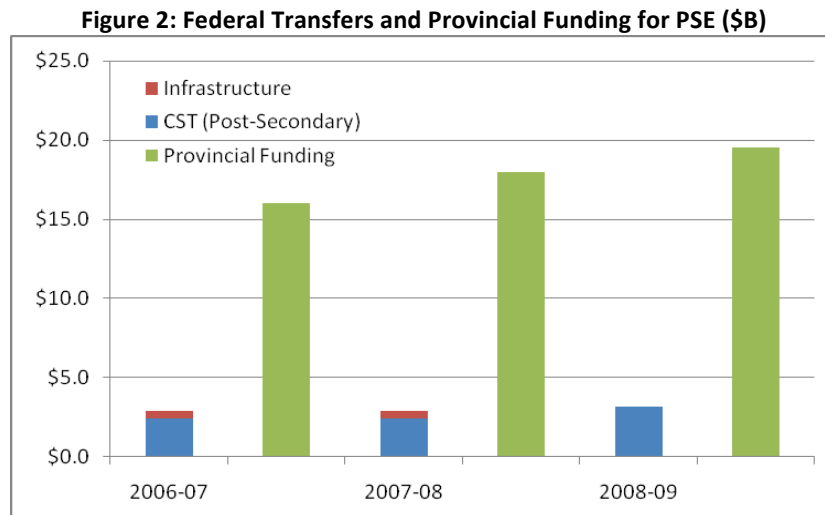
- Human Resources and Social Development Canada (HRSDC) manages a substantial portfolio of student financial aid programmes for post-secondary students, including the Canada Student Loan (CSLP) and Canada Education Savings Grant (CESG) programmes;
- Industry Canada is responsible for a number of initiatives that either directly or indirectly fund research activity within the country's post-secondary institutions;
- The Department of Finance provides tax credits to post-secondary students, along with transfer payments to provincial governments that are now at least partially earmarked for reinvestment in post-secondary education.

Ottawa's involvement in research and student financial aid are discussed in greater detail below, but one of the centre-pieces of the federal role in post-secondary education is the annual block transfers of cash and tax points to provincial governments. Established Programs Financing (to help the provinces fund health care and post-secondary education) and the Canada Assistant Plan (for social programs) were combined into the Canada Health and Social Transfer (CHST) in 1996, and then divided again into the Canada Health Transfer (CHT) and Canada Social Transfer (CST) in 2004. Broadly speaking, as these federal transfers fell in the mid-1990s and then rose again subsequently, so too did provincial spending on post-secondary education, though because these transfers were not "tied" directly to provincial spending there is no way to accurately measure how the changes affected PSE spending.

In 2008-09 the CST will grow to \$10.6B in cash and \$8.5B in tax point transfers to the provinces, and the federal government has designated \$3.2B of that total for a post-secondary funding envelope.

Over the course of the 1990s, a time of significant government austerity, Canadian universities saw the proportion of their funding from provincial government sources decline from 76% to 56%. Since 2003, most provincial governments have undertaken substantial public reviews of their post-secondary systems with a view to providing directions on new investments. Since then, public spending on universities has already rebounded from \$6.3B in 2002-03 to \$8.5B in 2006-07. Combined with a series of tuition freezes, restrictions and rebates to ensure that at least part of the increased funding would be passed on to students in the form of reduced costs, provincial funding is now growing again as a source of university operating revenues.

While a one-time transfer of \$1B for post-secondary infrastructure during 2006-07 and 2007-08 (Figure 2) and the creation of a designated and expanded \$3.2B post-secondary funding envelope within the CST in 2008-09 are both welcome news, those federal investments are still small compared to the annual investment being made by provincial governments (Figure 2), and the gap is likely to grow. While provincial funding of post-secondary education increased by between 8% and 12% for each of the past four years, the federal government has mandated increases of only 3% per year for the post-secondary component of the CST.



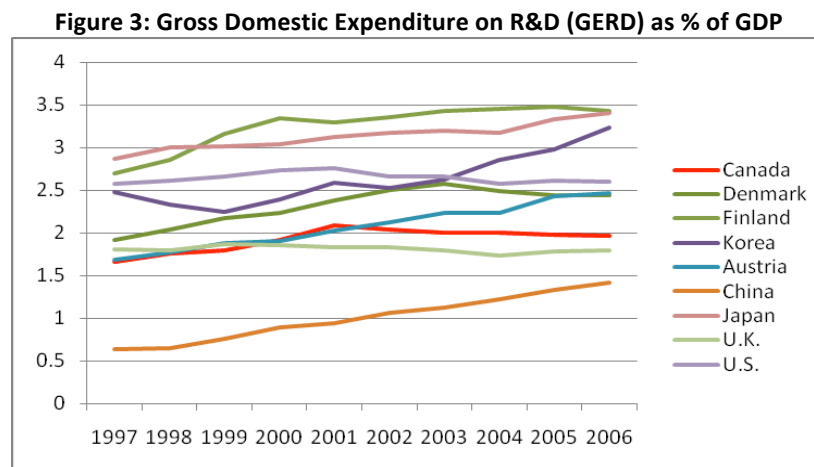
Source: Federal and Provincial Departments of Finance

Investing in Research

Nations invest in research and development (R&D) in order to ensure that their economies remain competitive and productive. If Canadians hope to maintain their high standard of living, those investments must continue to grow.

The private sector funds more than 50% of all R&D activity in Canada, though much of this is indirectly subsidized by the federal government. The Scientific Research and Economic Development (SR&ED) tax credit is one of the most generous tax subsidies in the world, and allows private sector companies to immediately expense 20% (35% for small businesses) of their R&D expenditures. This amounts to an indirect federal subsidy of at least \$3B each year, and most provinces supplement it with an additional 10%-15% of matching tax credits. The impact of the SR&ED is increasingly being called into question, however:

- R&D spending by Canadian businesses has barely increased in dollar terms in recent years (Table 4), and has actually declined as a percentage of the national total (see also Research Infosource, “Canada’s Top 100 Corporate Spenders List 2007 Analysis” and C.D. Howe Institute, “Giving With One Hand, Taking Away with the Other: Canada’s Tax System and Research and Development,” October 2006);
- As a result of little or no growth in private sector investments, Canada’s Gross Domestic Expenditure on R&D (GERD) has declined from a peak of 2.09% in 2001 (Figure 3);
- Canada’s overall investments in R&D are falling further behind the OECD average (2.2%), and other nations – including smaller ones such as Denmark, Finland, Korea, and Austria – invest substantially more of their national wealth in R&D (Figure 3).



Source: UNESCO Institute for Statistics

In addition to indirectly encouraging R&D activity through SR&ED and other programs, the federal government also makes direct investments in research and innovation. Each year, more than \$2B in R&D activities takes place within various federal government laboratories and research centres (Table 4). Another \$3B of the \$10B of R&D activity that takes place within post-secondary institutions (Table 4) is also funded by the federal government through the three major national granting councils – Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) and Social Sciences and Humanities Research Council (SSHRC) – as well as through other federal creations

such as the Canada Foundation for Innovation (CFI), which has committed more than \$4.4B to research infrastructure at post-secondary institutions and elsewhere during the past decade.

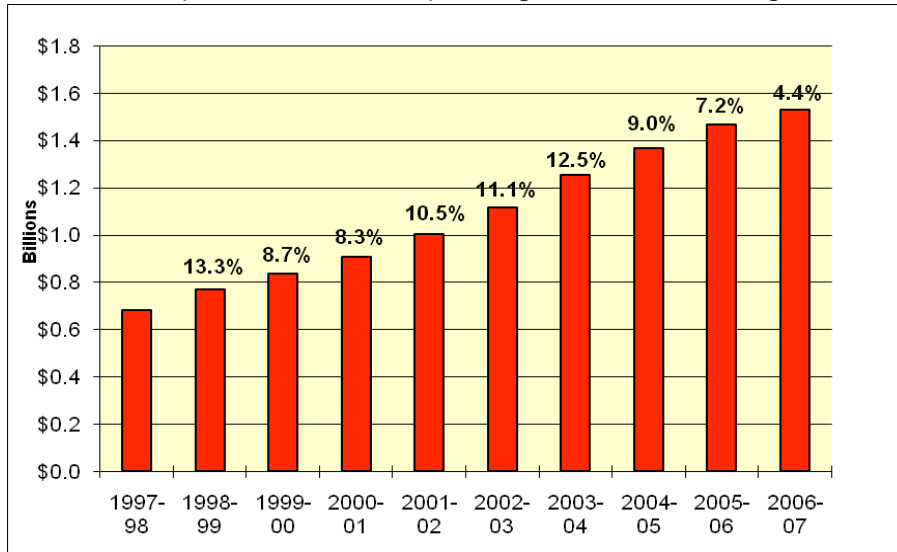
Table 4: Gross Domestic Expenditures on R&D - Performing Sector (\$B)

	2001	2002	2003	2004	2005	2006	2007
Business Sector	\$14.27	\$13.54	\$14.04	\$14.95	\$15.36	\$15.36	\$15.77
Federal Government (Intramural)	\$2.10	\$2.19	\$2.08	\$2.08	\$2.41	\$2.30	\$2.34
Post-Secondary Institutions	\$6.42	\$7.46	\$8.14	\$9.06	\$9.52	\$9.97	\$10.43
Provincial Governments	\$0.28	\$0.28	\$0.28	\$0.29	\$0.30	\$0.32	\$0.32
Private Non-Profit	\$0.06	\$0.06	\$0.09	\$0.10	\$0.11	\$0.12	\$0.12
TOTAL R&D	\$23.13	\$23.53	\$24.63	\$26.48	\$27.70	\$28.07	\$28.98

Source: Statistics Canada

In less than a decade, federal funding of the Tri-Council (CIHR, NSERC, SSHRC) has more than doubled to \$1.5B (Figure 5). If the newly created Canada Research Chair (\$250M), Indirect Costs of Research (\$300M) and Network Centres of Excellence (\$80M) programmes are also factored in, funding through the Tri-Council has almost tripled. While funding increases between 2001-05 averaged nearly 11% per year, however, they have slowed significantly since then, dropping to only 4.4% in 2007-08 (Figure 5). Furthermore, a growing portion of those smaller increases are now being targeted at mandated research priorities such as health sciences, energy, and the environment.

Figure 5: Total Tri-Council (CIHR, NSERC & SSHRC) Funding and Annual Percentage Increases in Funding



Source: CIHR, NSERC, SSHRC

Among OECD countries, Canada has among the highest proportions (next to Spain, Portugal and Greece) of its R&D being conducted by the post-secondary rather than the business sector. While universities are becoming increasingly central to Canada’s R&D effort, it is worth remembering that this is a by-product of the overall weakness of R&D activity in the wider Canadian economy.

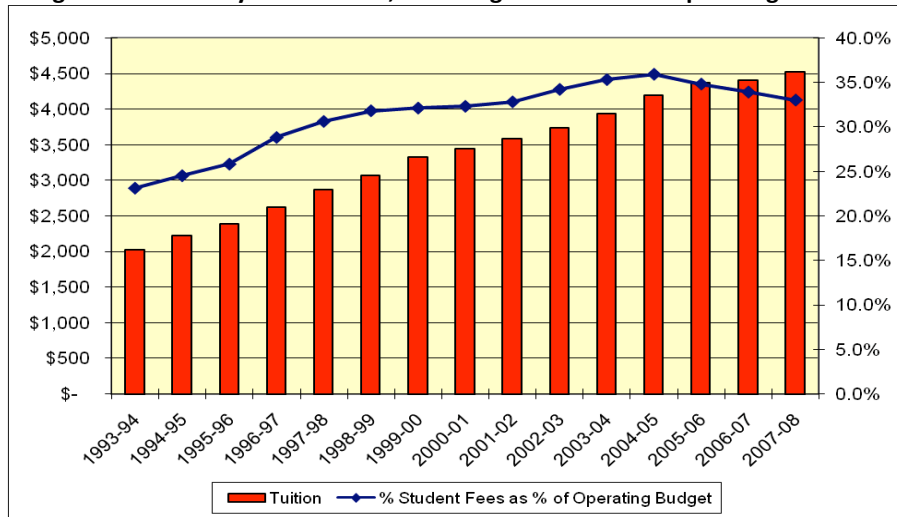
The federal government – and an increasing number of provincial governments – are also making significant investments designed to expand the number of highly qualified personnel (HQP) earning graduate degrees at Canadian universities. The number of Canadian jobs requiring graduate credentials

has grown to more than one million, and enrolments in Master’s and Ph.D. programmes have already increased by 60% during the past decade – from 65,000 to more than 100,000 – to meet that demand. This is being further encouraged through new federal initiatives like the Canada Graduate Scholarship (CGS) and ACCELERATE internship programmes. It is unclear, however, how a general expansion of admissions and enrolments will impact on the quality of university graduate programmes, or the ability of HQP graduates to find employment.

Tuition, Student Aid, and Affordability

For nearly a decade, Canada’s post-secondary institutions were expected to educate more students and expand their research and innovation capacity while reducing their reliance on public funding. Student fees were the only major source of revenue left for universities to draw upon, so university tuitions more than doubled across the country, rising from a national average of \$2,000 in 1993-94 to just over \$4,500 in 2007-08 (Figure 6, red columns), and increasing from less than a quarter to more than a third of university operating budgets (Figure 6, blue line).

Figure 6: University Tuition Fees, Including as a Source of Operating Revenue



Source: Statistics Canada, CAUBO

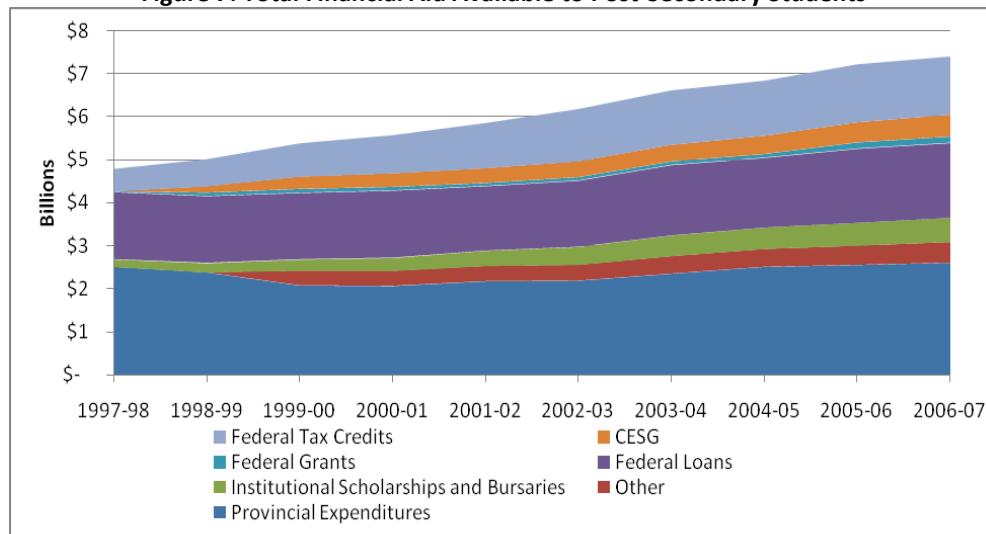
As the costs for post-secondary study increased during the past decade, the federal government became the source of more than half of all financial aid by 2006-07:

- The Canada Student Loans Program (CSLP) provides nearly \$1.8B in loans and grants for post-secondary students in the greatest financial need; it is delivered in combination with various provincial programs which provide another \$2.6B in loans and grants (Figure 7);
- Federal tax credits total nearly \$1.4B (Figure 7) and are a universal form of assistance available to students (and parents) as annual tax deductions for education-related expenses (Tuition Fee Tax Credit and Education Tax Credit), and as Student Loan Interest Credits and Scholarship Exemptions;
- Registered Education Savings Plans (RESPs) currently cost the federal government \$700M/year and were introduced in 1998 to encourage parents to invest early for their child’s post-secondary education. In combination with the Canada Education Savings Grants (CESG) and Canada Learning Bonds (CLB) for low and modest income households, these initiatives have

already encouraged investments of \$22B in RESP accounts that now account for one in three Canadian children aged 0-17. In 2006 alone, more than \$1B in RESP assets were withdrawn to support more than 190,000 post-secondary students;

- Students also receive scholarships and bursaries through other federally-funded programs such as the Canada Millennium Scholarship Foundation (\$350M/year), the Tri-Council, etc.;
- Universities now provide students with as much as \$1B/year for financial need and/or academic merit, though this is primarily at the graduate level.

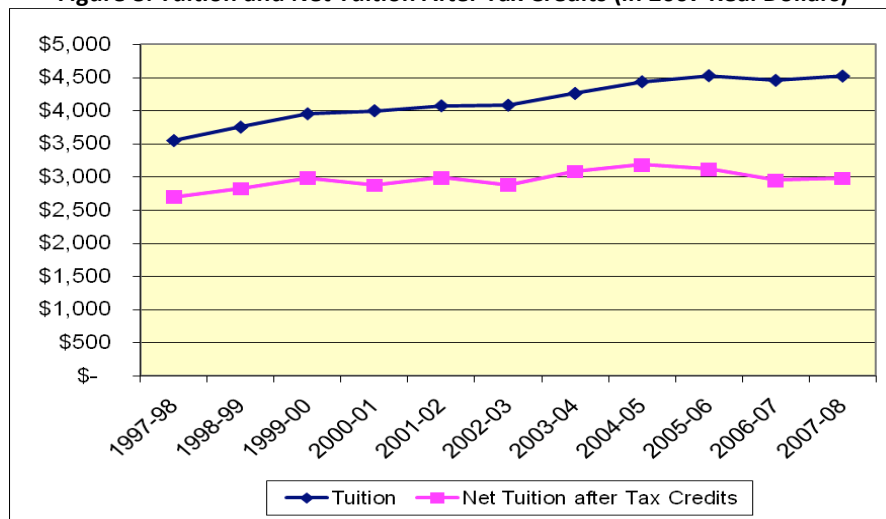
Figure 7: Total Financial Aid Available to Post-Secondary Students



Source: Educational Policy Institute, *State of Student Aid in Canada, 2006-7 (forthcoming)*

Although the past decade of tuition increases have been an obvious financial burden for Canadian students, especially at universities, the growing availability of a variety of forms of financial aid has lowered the actual 'sticker price' of a post-secondary education. When tax credits are taken into consideration, the net cost of education to students in 2007-08 actually was only \$283 higher in real dollars than it was a decade earlier (Figure 8).

Figure 8: Tuition and Net Tuition After Tax Credits (in 2007 Real Dollars)



Source: EPI, *Beyond The Sticker Price (forthcoming)*

If institutional assistance (\$1B per year for which as many as 40% of undergraduate university students were beneficiaries), RESP payouts (\$1B per year currently and 190,000 recipients), and a variety of other new provincial grants, tax credits and tuition rebates are also factored in, the net costs actually seem to be increasingly manageable for most post-secondary students. This is reinforced by other data which shows the following:

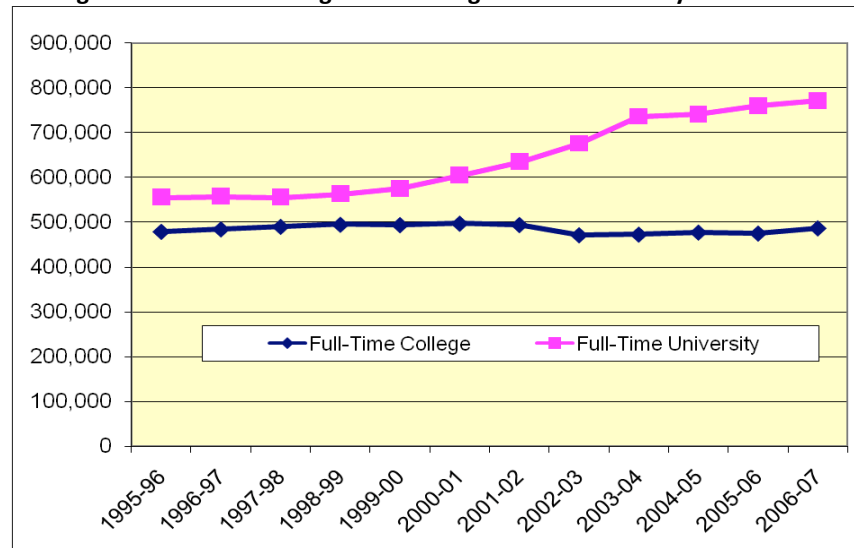
- Most provinces or post-secondary programs that underwent significant tuition increases in recent years not only experienced a negligible impact on overall participation or persistence, but actually saw enrolments increase in some cases;
- Both the proportion of post-secondary students with debt, and their average debt, appear to have largely stabilized over the past decade.

More and more research, in fact, appears to confirm that financial issues on their own are not the most important determinants impacting upon an individual student's access to and persistence in post-secondary education.

Access and Persistence

In recent years, there has been some encouraging growth in post-secondary enrolments. While community colleges continued to enrol approximately 500,000 students each year (Figure 9), university enrolments increased since 2000 by nearly 200,000 in undergraduate and more than 100,000 in graduate programs (Figure 9), and grew by more than 250,000 part-time students. Enrolment growth has been particularly significant for females, who now comprise more almost 60% of the undergraduate student body and close to 50% of all graduate students.

Figure 9: Full-time College and Undergraduate University Enrolments



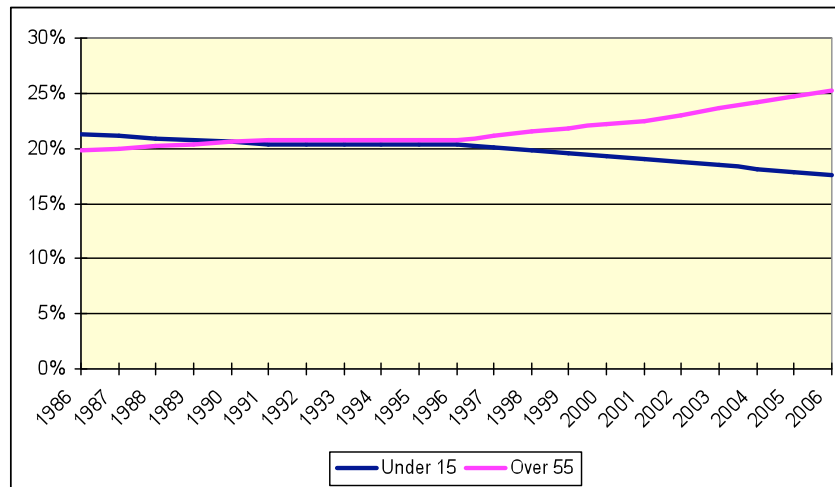
Source: Statistics Canada

Not all Canadians are attending in equal numbers, however. Studies have repeatedly shown that parental education levels are the main determinant of PSE access. This means that young people from families with higher incomes tend to be more likely to attend PSE, especially university. Also over-

represented relative to their share of the population are children of immigrants, most visible minorities, and females. Conversely, aboriginal youth, youth with disabilities and males are proportionately under-represented.

Over the long run, the improvement of access matters because of demographics. The ratio of Canadians aged 55 and older is growing, while the ratio of those aged 15 and younger is in steady decline (Figure 10). With an adult population that is rapidly aging and retiring, and with generally higher levels of skills required in the labour market, the demand for young workers with post-secondary credentials will continue to grow at a rapid pace. Current rates of post-secondary participation and completion must be maintained and increased in order to meet this demographic challenge.

Figure 10: Population Aged 19 and Younger and 55 and Older

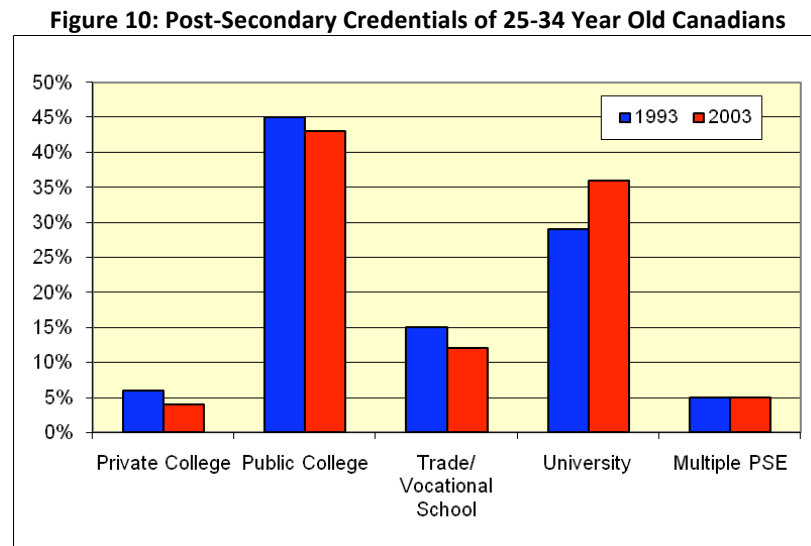


Source: Statistics Canada

Many provinces are already experiencing the demographic shift and declining enrolments within their K-12 systems, and in the Atlantic provinces it is being felt by post-secondary institutions as well. Nationally, the impact of demography will likely begin to be felt in another 3-4 years. In order to prepare for that new reality, some important challenges need to be addressed:

- Between 2000 and 2005, the average earnings of young men without a post-secondary education grew while those with a university degree decreased, which may explain why as many as one quarter of high school graduates continue to choose work over post-secondary study, particularly among males and in provinces where there is a strong labour market demand;
- While much of the recent focus has been on financial need, a growing number of studies are showing that academic achievement and parental influence account for most of the participation gap in post-secondary education. In the most recent Statistics Canada study on the issue, only about one-eighth of the difference in university-going rates between children from poor and wealthy families could be explained by “financial reasons”;
- Youth who have traditionally been especially under-represented in post-secondary education – such as those from low socio-economic backgrounds, first-generation learners and Aboriginal students – face a number of different barriers that impede access, including academic, financial, and interest and motivation;

- From 1993 to 2003, there was also a significant change in the educational choices of Canadians as more obtained university degrees while fewer earned credentials from private and public colleges and trade and vocational institutions (Figure 10).



Source: Statistics Canada

If Canada hopes to increase post-secondary participation and completion rates, and address the demographic and labour market needs of the future, both federal and provincial governments must turn their focus away from needs-based student aid programs and towards other issues. As explained recently in a publication of the Association of Universities and Colleges of Canada (AUCC), “To have a real impact on the proportion of low income students in university programs, aid programs need to focus on more than financial assistance delivered at the time of acceptance and entry to university. They need to address the range of factors that begin to affect potential higher education students much earlier on in their education.”