

Millennium Research Note #6

“Why Access Matters” Revisited: A Review of the Latest Research



Written by: Joseph Berger

April 2008



CANADA MILLENNIUM SCHOLARSHIP FOUNDATION
FONDATION CANADIENNE DES BOURSES D'ÉTUDES DU MILLÉNAIRE

www.millenniumscholarships.ca

*“Why Access Matters” Revisited:
A Review of the Latest Research*

Canada Millennium Scholarship Foundation

The Canada Millennium Scholarship Foundation is a private, independent organization created by an act of Parliament in 1998. The Foundation works to improve access to post-secondary education for Canadians from all backgrounds; it encourages a high level of achievement and engagement in Canadian society; and it brings people and organizations together to understand barriers and improve access to post-secondary education in Canada. Each year, the Foundation distributes \$340 million in bursaries and scholarships to students across Canada.

The Research Program

The Millennium Research Program furthers the work of the Foundation by undertaking research and pilot projects aimed at understanding and reducing barriers to post-secondary education. It ensures that policy-making and public discussion about opportunities in higher education in Canada can be informed by the best available evidence.

Research Note Series

Part of the mission of the Canada Millennium Scholarship Foundation is to improve access to post-secondary education so that Canadians can acquire the knowledge and skills needed to participate in a changing economy and society.

Higher education provides the prospects for personal fulfillment and economic advancement to which Canadians from all backgrounds are entitled. The Foundation carries out extensive research, collecting and analyzing data from surveys and pilot projects, so that we can better understand the barriers that prevent some students from making it to the post-secondary level and so that we can identify means to alleviate those barriers.

Within the broad scope of our research, we uncover certain trends, questions and issues that call for wider public dialogue. This research note, the fifth in an ongoing series examining issues of access and funding for post-secondary education, seeks to inform this dialogue and the development of new programs and policies.

“Why Access Matters” Revisited: A Review of the Latest Research

In February 2007 the Canada Millennium Scholarship Foundation issued a report entitled *The Price of Knowledge 2006–07: Why Access Matters*. The report’s central argument, that post-secondary enrolment in Canada will soon decline unless steps are taken to improve the participation rate of youth currently under-represented at colleges and universities, sparked some controversy. Since then, new evidence has been published that has nourished the discussion of enrolment forecasts, the capacity of colleges and universities to receive more students and the needs of Canada’s labour market. Like *Why Access Matters*, the more recent reports concur that the need for advanced education among Canada’s population has never been greater and will only continue to grow, and, most importantly, that demographic factors will make it increasingly challenging for Canada to graduate the number of highly skilled and educated young adults that its economy and society will require.

This research note seeks to clarify the discussion by examining the latest data on the interactions between higher education and the labour market and providing an analysis of recent reports discussing the post-secondary enrolment outlook. It also highlights new information on the benefits of post-secondary studies and provides an update on the socio-economic background of the current student body.

This note confirms the points made in *Why Access Matters* regarding the substantial influence that demographic trends will have on post-secondary enrolment in Canada during the next two decades. The tail end of the so-called “Echo Boom”—the children of the Baby Boom generation—is currently approaching adulthood. The population of 18- to 24-year-olds, which composes the majority of post-secondary students, will peak within the next five years. This will put pressure on the capacity of many of Canada’s colleges and universities to accommodate more students. By 2013–14, however, the size of the young adult population will begin to fall, and by 2016 it will be lower than it is today. Looking beyond the immediate pressures on institutional capacity, therefore, longer-term gains in enrolment depend on our ability to increase the percentage of youth who continue their studies after high school. This, in turn, can best occur if universities and colleges succeed in recruiting, enrolling and graduating more Canadians from populations currently under-represented on post-secondary campuses, specifically low-income youth, children of parents with limited post-secondary education and Aboriginal Peoples.

Labour Force

Labour force projections prepared by Statistics Canada in June 2007 underscore the need for advanced education and training

“Looking beyond the immediate pressures on institutional capacity, longer-term gains in enrolment depend on our ability to increase the percentage of youth who continue their studies after high school.”

*“Why Access Matters” Revisited:
A Review of the Latest Research*

among Canada’s shrinking working-age population. The combination of an aging population and low birth rates means that there will be fewer individuals joining the labour force to replace those retiring. By 2031, there will be two new workers for each retiree—down from the current ratio of four to one. Sustaining economic growth in the face of this trend (which Statistics Canada argues is irreversible, notwithstanding increased fertility, immigration or higher labour force participation rates) will require increased productivity. By increasing educational attainment among new members of the labour force, Canada can encourage continued productivity and economic growth as the Baby Boomers retire.

The latest labour market outlook report from Human Resources and Social Development Canada (HRSDC) echoes the findings of Statistics Canada. *Looking Ahead: A 10-Year Outlook for the Canadian Labour Market (2006–2015)* reports that nearly 70% of the non-student jobs created during the next decade will either require some post-secondary education or will be in management.¹ HRSDC projects that demand will be particularly strong for university graduates, expecting annual growth in employment of 1.6% per year until 2015. Growth in the college/apprenticeship and management categories, respectively at 1.1% and 1.2% annually, will exceed or equal economy-wide growth (HRSDC, 2007, 41–42).²

Looking Ahead projects labour imbalances by profession, arguing that a labour shortage in the fields of management and health care is on the horizon. The authors also point to a decrease in the shortage of workers in residential construction and real estate, arguing that the boom currently fuelling these sectors should subside (HRSDC, 2007, 57–58).

1. The management category is described as “a very broad group ranging from CEOs to restaurant managers.”
2. These findings are consistent with the 2004 edition of *Looking Ahead*, discussed in *Why Access Matters*.

Enrolment

A recent report prepared by Statistics Canada highlights the extent to which demographic factors will affect post-secondary enrolment in Canada. *Postsecondary Enrolment Trends to 2031: Three Scenarios*, written by Darcy Hango and Patrice de Broucker, uses a methodological approach similar to *Why Access Matters*. The authors project future enrolments based on possible participation rates that correspond to three different scenarios.

The first assumes that current participation rates remain at the level observed between 2003–04 and 2005–06; the second extends the trend in participation rate growth beginning in 1990–91; and the third assumes that male participation rates will grow to match those of females (circa 2005–06), who currently compose about 55% of the post-secondary student population. In the first case, enrolment would grow by about 50,000 by 2013–14, when it would peak, and then begin a decline that would last approximately 10 years. In 2026–27, there would be 70,000 fewer post-secondary students than in 2005–06. In the second scenario, post-secondary enrolment would continue its current growth spurt, with the addition of about 300,000 new students by 2017–18, after which enrolment would decline by about 90,000 students. In the third scenario, male enrolment would need to increase by more than 140,000 to catch up with current female enrolment.

The third scenario put forth by Statistics Canada takes a similar approach to that of *Why Access Matters*. While Hango and de Broucker focus on the post-secondary participation gap between males and females, *Why Access Matters* approached the issue

“Sustaining economic growth in the face of this trend ... will require increased productivity.”

“Why Access Matters” Revisited: A Review of the Latest Research

from a different perspective, exploring how low-income youth, first-generation youth and Aboriginal youth are under-represented on post-secondary campuses. Despite the emphasis on rather different populations, both reports point to efforts to reduce gaps in participation among target groups to offset enrolment declines brought on by a shrinking pool Canadians who are between 18 and 24 years of age (i.e., the age of most typical post-secondary students).

Hango and de Broucker also provide provincial estimates that underscore the extent to which enrolment patterns differ from one jurisdiction to another. As discussed below, the enrolment scenarios confronting post-secondary administrators and policy-makers in Ontario differ substantially from those in Atlantic Canada.

The impact of the Echo Boom and beyond is also detailed in depth in a recent publication by the Association of Universities and Colleges of Canada. *Trends in Higher Education—Volume I: Enrolment* argues that Canada’s university sector lacks the resources to adequately meet the escalating demand for education among the children of the Baby Boomers. The AUCC projects that university enrolment will grow by between 70,000 and 150,000 by 2016. This will stem in part from a projected increase in the participation rate of 19- to 22-year-olds (that is, the proportion of individuals in that age group enrolling at a university) by between one-half of a percentage point and 2.5 percentage points between 2006 and 2016. The effect of this higher rate of participation will be all the more pronounced—translating into tens of thousands of new students—because it will occur at

time when there is a growing pool of young people in the population (AUCC, 2007, 46–47).³

When the report was released, media coverage of *Trends* served to nuance the message of the Foundation’s earlier publication, which forecast falling enrolments unless gains were made in the participation rates of under-represented groups of students. While talk in the press of the myth of an enrolment bust may have suggested that *Trends* and *Why Access Matters* differed, the two agree on three fundamental points. First, they both accept Statistics Canada’s population estimates, which show that, after 2016, the number of young adults in Canada will be lower than it is today. Second, they both argue that, in view of this decrease, continued growth in the number of post-secondary students depends upon an increase in the participation rate. Third, they both agree that such a growth in the participation rate must occur if Canada is to produce the type of educated and skilled workforce needed to remain competitive and prosperous in the global knowledge economy.

Trends does not focus on projections beyond 2016, at which point most of the Echo Boom will be older than the typical post-secondary cohort (18 to 24).⁴ On the other hand, *Why Access Matters* closely examines the post-2016 period. Beyond their respective timelines, (however, both the AUCC and the Foundation reports argue that any eventual decline in the population of 18- to 24-year-olds can be offset by an increase in the participation rate. Both also suggest that a strong increase in the overall participation rate can, however, be achieved by recruiting increasing numbers of young adults who traditionally

“... a growth in the participation rate must occur if Canada is to produce the type of educated and skilled workforce needed to remain competitive and prosperous in the global knowledge economy.”

3. At current participation rates, enrolment would grow by 16,000 students.

4. The AUCC also did not examine trends in the college sector, restricting its analysis to the enrolment situation of its 92 member university and university-college institutions. Unfortunately, there is no reliable, up-to-date information on college enrolments in Canada, thus we do not know whether college enrolment growth has been stronger or weaker than university enrolment growth in recent years, and whether projections based on the university experience can be generalized to the entire post-secondary sector.

*“Why Access Matters” Revisited:
A Review of the Latest Research*

have been less likely to go to university or college. The overall post-secondary participation rate will not rise significantly if the children from well-educated or well-off parents choose to enrol in even greater numbers than they do today. The participation rates among these groups are already high, and there is comparatively little room for growth.⁵ By contrast, there are significant gains to be made among children whose parents did not earn a post-secondary degree, who earn lower incomes, or who are Aboriginal People. The problem, however, is that these are precisely the types of youth that are more likely to encounter significant barriers to access to, and persistence in, post-secondary education.

Why Access Matters argues that increasing the participation of under-represented populations is unlikely to occur automatically, without governments and universities preparing to meet the needs of a changing student body and putting in place an adequate system of student support—financial aid, academic support services and specialized student services. Clearly, universities must have access to the resources needed to modernize and expand their infrastructure and faculties, in order to ensure both that enough spaces are available for students in the next decade and that these students can benefit from a post-secondary education that is of the highest quality. Over the long term, however, universities must also expand the scope of specific strategies designed to improve the participation rate of students from traditionally under-represented groups, in order to maintain and enhance access to universities.

Viewed in this light, *Why Access Matters* and *Trends* do not so much conflict as speak to two sides of the same coin. Universities require investment to develop the capacity needed to deal with higher enrolment. If this

higher participation is really to be sustained over the longer term, however, investments in infrastructure and faculty must be accompanied by investments in supports for students, particularly first-generation, low-income and Aboriginal students.

Regionally, *Trends* identifies Ontario as something of an exception to the national experience, projecting continued growth among its youth population well into the 2020s. Similarly, Alberta is expected to maintain its current youth population size during the next two decades; Quebec’s youth cohort is expected to grow the most during the next five years before declining to 90% of current figures. In the Atlantic Provinces and Saskatchewan, the AUCC warns that institutions have already started to deal with shrinking feeder populations.

A recent report published by the Maritime Provinces Higher Education Commission (MPHEC) highlights the challenges facing the region’s post-secondary sector. The June edition of *Trends in Maritime Higher Education* reported that demographic analysts had projected growth in the region’s universities until 2009–10. The actual decline in enrolment in 2005–06 caught many by surprise, though certain data points warned that such a drop might occur (preliminary figures suggest further decline in 2006–07). The number of students under the age of 19 began to decline in 2004–05; it might have started earlier were it not for the double cohort of Ontario high school graduates in 2003–04, according to the report.

Clearly, something other than demographics is driving Maritime university enrolment. The MPHEC reports that since 2000 there has been a 4.5 percentage point decrease in the number of Nova Scotia high school graduates

“The actual decline in enrolment in 2005–06 caught many by surprise.”

5. Figure 2 describes how low-income individuals are less likely to enrol in post-secondary education than those from high-income families.

*“Why Access Matters” Revisited:
A Review of the Latest Research*

planning to enrol at a university. Similar trends have been observed in other Maritime Provinces. In turn, universities have increasingly focused recruitment efforts on students from other provinces. Additionally, college programs are becoming increasingly popular, particularly in New Brunswick and Nova Scotia. Employment indicators are trending positive for college graduates—their employment rate is approaching that of university graduates and more of them are finding work in a field related to their training.

The increasingly attractive college programs, the cost of university studies, the upcoming demographic decline and the larger regional trend of out-migration will significantly affect university attendance in the Maritimes. According to the MPHEC, undergraduate university enrolment in the region is projected to decline by 10% between 2008 and 2018.

Another recent publication, the most recent *Actuarial Report on the Canada Student Loans Program*, prepared by the Office of the Chief Actuary of Canada, casts changes in enrolment in a different light. The report argues that the post-secondary student body should be considered a subset of the population not participating in the labour force. As with HRSDC’s *Looking Ahead*, the actuarial report projects a labour shortage on the near horizon and thus argues that increased demand for labour caused by the retirement of the Baby Boomers will reduce the pool of potential students. Despite the increase in the size of the 18- to 24-year-old cohort described in *Trends*, the Actuary’s report projects declining enrolment, beginning in 2005–06 and lasting into the 2030s, as more young people choose work over school (Office of the Chief Actuary, 15).

Two organizations in the federal government have thus produced reports that lead to very

different conclusions about post-secondary enrolment. On the one hand, HRSDC’s labour force projection paper, *Looking Ahead*, highlights the need for more education among new workers to meet the demands of the economy. These jobs will require individuals to complete some post-secondary training. The *Actuarial Report on the Canada Student Loans Program*, on the other hand, argues that this same labour shortage will lure young Canadians away from higher education, implying that many of the jobs of the knowledge economy will not actually require more than a high school diploma.

While the labour market has for many years signaled the value of higher education to young Canadians, it too sends contradictory messages at times. *Barriers to Post-Secondary Education*, another report in the Canada Millennium Scholarship Foundation’s *Price of Knowledge* series published earlier this year, found that the hot labour market in Western Canada appears to be luring high school graduates away from post-secondary education. The *Looking Ahead* report, however, suggests that many of the individuals who eschew post-secondary studies soon after high school are likely to return to school at some point in time, especially if the economy cools down. In fact, the Foundation’s own study of individuals two years after they completed high school found that 70% of those who did not enrol in post-secondary education planned on doing so at some point in the future (Malatest, 2007). Though the Office of the Chief Actuary forecast may be rooted in valid, short-term labour market trends, it is worth keeping in mind that the longer term economic trends may sooner or later direct many older individuals to post-secondary education for the first time, in the process creating a larger population of mature students.

“... many of the individuals who eschew post-secondary studies soon after high school are likely to return to school at some point in time.”

*“Why Access Matters” Revisited:
A Review of the Latest Research*

Why Toronto Is Different

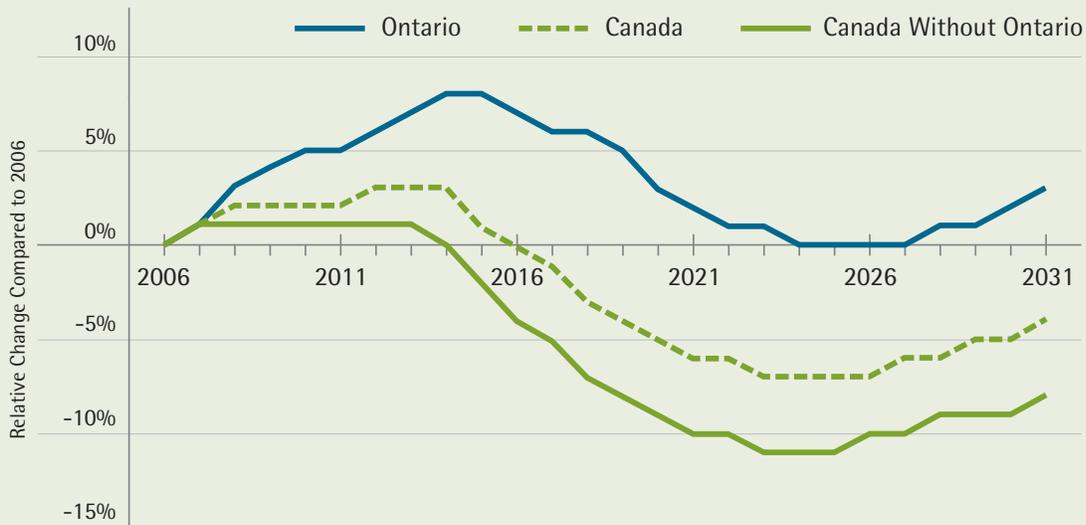
The presidents of the Greater Toronto Area’s universities have banded together to encourage governments to provide adequate funding to meet the needs of the city’s growing youth population. According to the presidents of the University of Toronto, York University, Ryerson University and the University of Ontario Institute of Technology, the city’s undergraduate student population could grow by more than 40,000 within the next 15 years. University of Toronto president David Naylor, speaking to the *Toronto Star’s* Louise Brown, warned that there are “40,000 more students coming to the GTA—that’s basically another university unless we find some smart ways to handle the crunch.” Brown also reported that the city’s fifth university, the Ontario College of Art and Design, is on the road toward expansion (Brown, 2007).

Figure 1 demonstrates the extent to which the national demographic picture differs from the situation in Ontario, where population change is fuelled largely by the Greater Toronto Area. While the country as a whole is likely to number fewer individuals aged 18 to 24 by 2016, this cohort in the Province of Ontario will experience sustained growth into the 2030s. Excluding the Ontario growth scenario from the national trend reveals the extent to which the 18- to 24-year-old population in the rest of the country will decline during the next 25 years, dropping by more than 10 per cent by the 2020s.

A report prepared by the City of Toronto argues that the city’s youth population will grow by nearly 10 percent in the next decade, in turn driving much of the population growth in the province. Both the Toronto data

“Excluding the Ontario growth scenario from the national trend reveals the extent to which the 18- to 24-year-old population in the rest of the country will decline.”

Figure 1 Projected 18- to 24-Year-Old Population Change in Ontario, Canada and Canada Excluding Ontario, 2006–2031



Source: Statistics Canada, 2005. Population Projections for Canada, Provinces and Territories – Medium Growth Scenario.

*“Why Access Matters” Revisited:
A Review of the Latest Research*

and the Statistics Canada data offer an important lesson: the national situation is remarkably different from the state of affairs in Toronto. While many of the country’s post-secondary institutions might find themselves looking to fill spaces a decade from now, Toronto’s universities and colleges may have no choice but to turn away qualified individuals. While it is conceivable that students

from the Greater Toronto Area who are unable to find a place at a Toronto university might fill some of the projected gap at universities elsewhere in Canada, it should be noted that the costs of traveling to study place an additional financial burden on both the individual student and the financial aid system as a whole.

The Benefits of Post-Secondary Education

Two recent Statistics Canada notes discuss the outcomes of post-secondary education. The *Follow-up Survey of Graduates* provides insight into the situation of college and university graduates from 2000 five years after they completed their studies. Forty-four per cent of those surveyed reported government student debt at graduation. By 2005, two in five of these had paid off all of their loans. College graduates who still owed money to government loan programs owed an average of \$8,900, while university bachelor’s degree graduates owed an average of \$14,400 and master’s and doctoral degree graduates owed \$14,300 five years after completing their studies.

Ninety per cent of graduates surveyed were employed in 2005, regardless of whether or not they had paid off their student loans. Among bachelor’s and master’s graduates, those who had completed repayment had incomes that were 20% higher than those still making payments (the figure was 13% for former college students).⁶

A January article in Statistics Canada’s *Perspectives on Labour and Income* described the labour market situation of Aboriginal Peoples in Western Canada. In addition to demonstrating that higher educational attainment was correlated with higher employment rates (among both Aboriginal and non-Aboriginal individuals), the report revealed that Aboriginal women with a university education in Western Canada are more likely to find work than non-Aboriginal university graduates—their employment rate was 11 percentage points higher. (The trend existed, but was weaker, among men—university-educated Aboriginal men had an employment rate four percentage points higher than non-Aboriginal university graduates.) Aboriginal men and women with a post-secondary certificate or diploma had higher employment rates than their non-Aboriginal counterparts. The reverse was true among those who did not complete some post-secondary education. In this case, both Aboriginal men and women had lower employment rates than non-Aboriginal individuals with similar educational attainment (Laffman and Sussman, 2007, 17).

“Aboriginal women with a university education in Western Canada are more likely to find work than non-Aboriginal university graduates.”

6. Similar conclusions were reached by Kapsalis (2006), who demonstrated that student loan defaulters had similar debt levels, but lower income, than those who did not default.

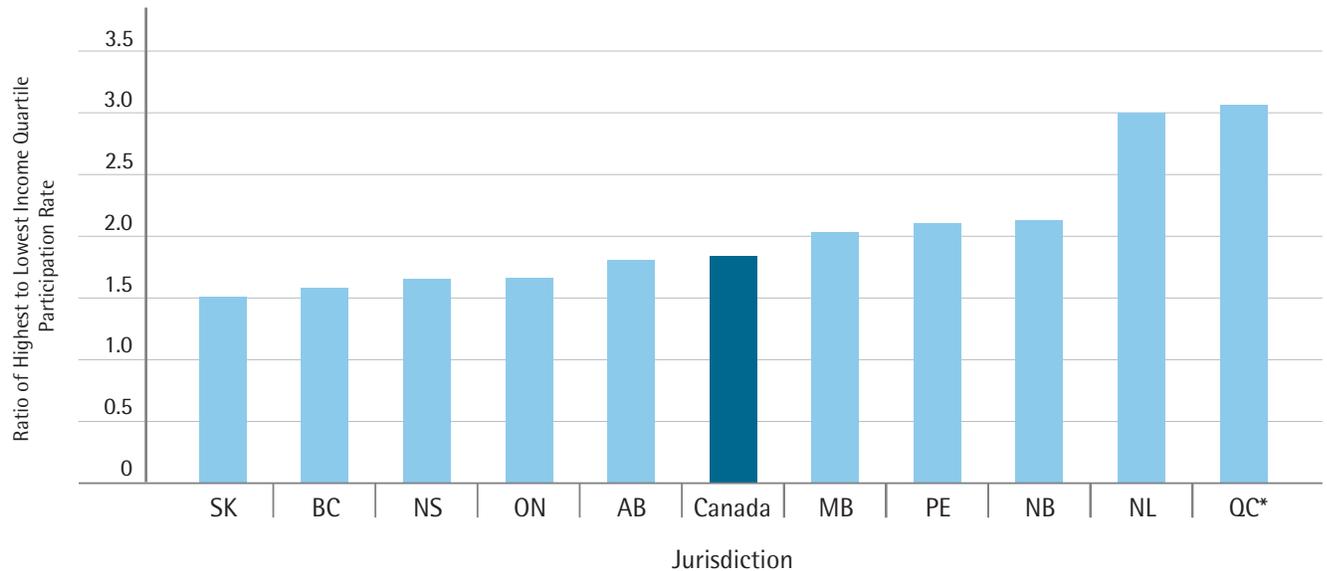
*“Why Access Matters” Revisited:
A Review of the Latest Research*

Equality of Access

The latest results from Statistics Canada’s *Youth in Transition Survey* point to the continued gap in university enrolment between low- and high-income Canadians. In 2003, 46.4% of 19-year-olds from the highest income quartile had pursued some university studies, almost double the 25.4% from the lowest income quartile. Figure 2 demonstrates that university participation is most equitable—that is, the enrolment gap between the wealthiest and least well-off youth is the smallest—in Saskatchewan, British Columbia, Nova Scotia, Ontario and Alberta. Among the population of non-university participants, youth from high-income families are more likely than those from low-income families to attend a college program, though the disparity is not nearly as large as in the university sector.

An interesting point to note, however, is that Aboriginal Peoples in Western Canada have experienced growth in educational attainment. Between 2001 and 2005, the proportion of those with a university degree has increased from 5% to 7% (among all Western Canadians, the proportion grew from 15% to 18%); meanwhile, the proportion of those with less than a high school diploma has dropped from 45% to 37% (Laffman and Sussman, 2007, 15). The proportion of those with a post-secondary certificate or diploma declined slightly for both Aboriginal and non-Aboriginal Westerners.

Figure 2 Ratio of Highest Income Quartile to Lowest Income Quartile Enrolment in University at Age 19 by Province



Source: Statistics Canada, 2007. *2003 Youth in Transition Survey (YITS), Cohort A.*

* Because of Quebec's unique CEGEP system, students typically enrol in university studies at age 19, one year later than in the rest of the country. The Quebec results are skewed, therefore, by the fact that the survey occurred before many university-based students had completed their pre-university CEGEP programs.

*“Why Access Matters” Revisited:
A Review of the Latest Research*

Conclusion

The studies presented here confirm the persistent need for higher education among more Canadians. Those who complete post-secondary education are more likely than those who do not to gain employment (the case is especially true for Aboriginal women in Western Canada) and to meet the demands of a labour market that continues to require advanced education and training from its participants. The demographic scenario described in *Why Access Matters* is echoed in the reports on enrolment trends described here. The AUCC’s *Trends* study argues that the system in many places is presently full to the brim, and that it cannot feed the needs of the economy without expansion while demographics continue to drive growing enrolment during the next 10 years. As the Statistics Canada projections demonstrate, longer-term gains in enrolment depend on facilitating access for those students facing the greatest barriers, and enhancing opportunities for those students to realize their aspirations and potential. These gains, therefore, cannot be

taken for granted and will not occur unless governments and post-secondary institutions put in place the appropriate policies, programs and funding to support a changing student body. The MPHEC and the Ontario university data reveal that the picture is different from region to region. While the Atlantic Provinces are facing a decline in enrolment, Ontario universities, and particularly those in the Greater Toronto Area, are at capacity.

Meanwhile, the current enrolment situation—particularly at the university level—remains substantially inequitable. Only one-quarter of Canadian nineteen-year-olds from the lowest income families are studying at the university level, compared to almost half of those from the wealthiest families. Though the labour market is signalling that university, college and trades education is crucial for individual and societal well being, many Canadian youth are at risk of missing out on these opportunities. It is clear that their loss will be Canada’s as well.

“...the current enrolment situation ... remains substantially inequitable.”

*“Why Access Matters” Revisited:
A Review of the Latest Research*

Bibliography

- Association of Universities and Colleges of Canada. 2007. *Trends in Higher Education – Volume 1: Enrolment*. Ottawa.
- Berger, Joseph, Anne Motte and Andrew Parkin. 2007. *The Price of Knowledge 2006–07: Why Access Matters*. Montreal: Canada Millennium Scholarship Foundation.
- Berger, Joseph, Anne Motte and Andrew Parkin. 2007. *The Price of Knowledge 2006–07: Barriers to Post-Secondary Education*. Montreal: Canada Millennium Scholarship Foundation.
- Brown, Louise. 2007. “Student boom stirs new university talk: Leading educators brainstorm ways to accommodate 40,000 undergrads.” *The Toronto Star*. July 31, 2007.
- City of Toronto. 2002. *Flashforward: Projecting Population and Employment to 2031 in a Mature Urban Area*. City Planning Division.
- Hango, Darcy, and Patrice de Broucker. *Postsecondary Enrolment Trends to 2031: Three Scenarios*. Ottawa: Statistics Canada.
- Kapsalis, Constantine. 2006. *Factors Affecting the Repayment of Student Loans*. Ottawa: Statistics Canada.
- Laffman, Jacqueline, and Deborah Sussman. 2007. “The Aboriginal labour force in Western Canada” in *Perspectives on Labour and Income*, January. Ottawa: Statistics Canada.
- Lapointe, Mario, et al. 2007. *Looking Ahead: A 10-Year Outlook for the Canadian Labour Market (2006–2015)*. Ottawa: Human Resources and Social Development Canada.
- Malatest and Associates, R. A. 2007. *The Class of 2003 High School Follow-Up Survey*. Montreal: Canada Millennium Scholarship Foundation.
- Maritime Provinces Higher Education Commission. 2007. *Surveying the Enrolment Landscape: Factors and Trends in Maritime University Enrolment 2000–2001 to 2006–2007*. Volume 5, Number 1, June 2007. Fredericton.
- Office of the Chief Actuary of Canada. 2007. *Actuarial Report on the Canada Student Loans Program as at 31 July 2006*. Ottawa: Public Works and Government Services Canada.
- Statistics Canada. 2005. *Population Projections for Canada, Provinces and Territories*.
- Statistics Canada. 2007. “Follow-up Survey of Graduates” in *The Daily*, May 2, 2007.
- Statistics Canada. 2007. “Study: Labour force projections in Canada” in *The Daily*, June 15, 2007.
- Zeman, Klarka. 2007. “A first look at provincial differences in educational pathways from high school to college and university” in *Education Matters* Vol. 4 No. 2. Ottawa: Statistics Canada.