

Research Note #8

Persistence in Post-Secondary Education in Canada: The Latest Research



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CANADA MILLENNIUM SCHOLARSHIP FOUNDATION
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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.

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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 eighth 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.

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Introduction

The most important anticipated outcome of entry into post-secondary education is graduation. Colleges and universities traditionally put considerable effort into the recruitment of new students, while governments have made facilitating access to higher education a priority. If these efforts are to bring maximum benefits in the long run, however, the students brought into post-secondary education must be successful in their studies. This success cannot be taken for granted. Indeed, the question of how students fare after initial entry into

post-secondary studies has become increasingly important as participation in higher education has grown.

The profile of the student body is evolving, as more and more students seek a college or university education in order to equip themselves with the skills and knowledge needed to succeed in the society and economy of the 21st century. The proportion of post-secondary students who are from families with no previous history of post-secondary education, from families with moderate or low incomes and of average or even below-average academic achievement has grown. So, too, has the number of post-secondary students who are Aboriginal, even if this growth has been less pronounced than many would like. These types of students not only face greater barriers to access but potentially are also more likely, for academic, financial or cultural reasons, to abandon their studies before graduation. As a recent OECD report puts it, "the growing portion of disadvantaged students enrolled in tertiary education makes the ongoing issue of their retention and programme completion an increasing important concern in tertiary education" (Santiago *et al.*, 2008, p. 50).

This paper concerns itself with the issue of persistence, defined here as the ability of students to continue their post-secondary studies from one year to the next and ultimately to proceed to the completion of their program. It should be recognized at the outset that poor persistence is not always a bad outcome. For a host of

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reasons, discontinuing studies may be the most appropriate course of action for certain individuals (Grayson & Grayson, 2003, p. 9). Generally speaking, however, “although ‘dropping out’ is not necessarily an indicator of failure from the perspective of the individual student, high drop-out rates may indicate that the education system is not meeting students’ needs” (OECD, 2008, p. 92).

More specifically, low levels of persistence pose a problem for students, institutions and societies. For students, the failure to complete their program of study leaves them without a credential that would lead to greater earnings and opportunities. For institutions, low levels of persistence signal both the poor use of resources (e.g., resources spent on recruitment and admission are not matched by continuing income in the form of tuition and per-student government funding) and poor performance in terms of teaching or administration. For societies, poor persistence results in lower educational attainment at a time when higher levels of education are important to both prosperity and quality of life. To the extent that specific groups have lower rates of success in post-secondary education than others, poor persistence can also exacerbate social inequities that are costly to society.

For these reasons, persistence is an issue of concern to policy-makers. Fortunately, as will be discussed below, policy makers in Canada can now benefit from a significant amount of new research on the persistence of Canadian post-secondary students. Both the availability of new data (most notably from Statistics Canada) and the considerable investment in recent years in research on access and student success by the Canada Millennium Scholarship Foundation has allowed the issue to be explored

in more depth than ever before. The goal of this research note is to review the latest Canadian research on persistence rates and determinants of student success and to offer some reflections on the performance of Canada’s post-secondary system.

Background

Until recently, there was relatively little research on the issue of student persistence in post-secondary education in Canada (Grayson & Grayson, 2003, p. 3). “We know very little about how many students drop out of programs, or why,” concluded a major review of post-secondary education in Ontario as recently as 2005 (Rae, 2005, p. 15). In recent years, however, new research tools have become available that are enabling Canadian researchers to examine the issue much more seriously than before.

The most important of these tools is the longitudinal *Youth in Transition Survey (YITS)* of Canadian youth conducted since 1999 by Statistics Canada. One of the ways it can be used is to study persistence, since entering and leaving education after high school is one of the main activities the survey tracks. Another tool is the Post-Secondary Student Information System (*PSIS*), which contains a vast array of student information collected by colleges and universities and passed on to Statistics Canada, including a number of personal characteristics as well as enrolment and program information. While both the *YITS* and *PSIS* data are collected by Statistics Canada, in-depth analysis of these data in order to investigate the issue of student persistence was made possible by the Millennium Research Program through its commissioned research on access and student success.

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Persistence Rates in Canada

Until recently, data on persistence in Canada were obtained from institution-specific studies and reports. A review of the literature published in 2003 by Grayson and Grayson found evidence that both first-year attrition and long-term degree completion rates in Canada were similar to those in the United States, where research on the subject has been more extensive. In both countries, first-year attrition averages about 20 to 25 percent, while over the long term about 60 percent of students beginning their studies could be expected to graduate (2003, pp. 7–8).

There are, however, several significant limitations of institution-specific data. The first is that institution-specific findings may not be generalizable and so reveal little about the performance of the post-secondary sector as a whole. The second is the inability of institution-specific studies to differentiate between students who discontinue their studies and students who simply switch to another institution. The third is that few institution-specific studies are longitudinal, and they therefore cannot distinguish between those who

drop out permanently and those who “stop out” temporarily, only to re-enter post-secondary education at a later date. As a result of the latter two issues, institution-specific studies tend to underestimate rates of persistence.

Information on persistence in Canada has greatly improved as a result of the availability of the aforementioned *YITS* data, which has tracked the behaviour of a cohort of youth over time at two-year intervals since 1999. Data obtained from a longitudinal study of a national sample of youth overcome all three limitations of institution-specific data mentioned above (see Finnie & Qiu, 2008, pp. 10-14).

The data from the so-called “*YITS-B*” cohort of youth aged 18 to 20 in 1999 provide four separate “snapshots” of their status at successive two-year intervals. The results show increases over time in the proportion participating in post-secondary education, as well as the proportion discontinuing their studies (see Table 1). The post-secondary drop-out rate rises significantly between the ages of 18 to 20 and 20 to 22 before stabilizing at 12 percent of all youth or about 15 percent of those who began post-secondary studies.

“...institution-specific studies tend to underestimate rates of persistence”

Table 1 Change in Post-Secondary Education Status over Time

Age of Youth	% of All Youth*			Discontinued Post-Secondary Studies (% of Youth Having Participated in Post-Secondary Studies)
	Graduated from or Continuing Post-Secondary Studies	Never Enrolled in Post-Secondary Studies	Discontinued Post-Secondary Studies (% of all Youth)	
18–20	57%	39%	5%	8%
20–22	60%	29%	10%	14%
22–24	64%	24%	12%	16%
24–26	67%	21%	12%	15%

*NB: Columns may not total 100% due to rounding.

Source: Shaienks, Eisl-Culkin & Bussière, 2006, p. 34, Table C1; Shaienks & Gluszynski, 2007, p. 9, 15; authors’ calculations.

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The 15 percent figure represents the proportion of post-secondary students who had discontinued their studies and not returned at the time of the fourth wave of the survey. The proportion of students who had *ever* dropped out of a program of study would, of course, be higher. As the *YITS* survey makes clear, many of those who discontinue their post-secondary studies do so only temporarily. For example:

- Shaienks, Eisl-Culkin and Bussière report that of those who had dropped out relatively early in their studies (i.e., by the time they were 18 to 20 years old), 35 percent returned within two years and 46 percent returned within four years. One in four graduated within four years of their initial decision to discontinue (2006, p. 15, 38, Table C5).
- Similarly, Finnie and Qiu find that “by one year after first having left school, 22.3 percent of college leavers and 35.6 percent of university leavers have returned. By three years later... the returns stand at 40.3 percent and 54.0 percent, respectively, for college and university leavers. These are substantial numbers” (2008, p. 29).
- Finally, Martinello’s analysis of the same data shows that “only 21.7 percent of students who did not complete their first university program ended their post-secondary education”; the equivalent figure for college students is 35 percent (2007, p. 13, 16). The remainder either transferred directly to another program or institution or re-enrolled, after a period away from studies, within the tracking period covered by the survey. Martinello goes on to show that of the 40 percent of university undergraduates who did not complete their initial program of study within the *YITS* survey tracking period, 78 percent entered a second program; for college students, the figures are 47 percent and 65 percent respectively (2007, Tables 1 and 4).

It is thus possible to calculate different rates of persistence and discontinuation depending on how this movement of students into, out of and around the post-secondary system is treated. For example, a separate analysis of the same *YITS-B* data examines the proportion of students who by the time they had reached the age of 24 to 26 (i.e., the fourth wave of the *YITS* study) had dropped out of either the college or university “stream” of post-secondary education and not returned to that stream. This approach yields a drop-out figure of 21 percent, including 16 percent of those who had started at university and 25 percent of those who had started at college (Shaienks, Gluszynski & Baynard, 2008). The difference between this figure of 21 percent and the previously noted figure of 15 percent is explained by the fact that a number of students who discontinue a university program go on to enrol in college, or vice versa. These students therefore are not “true” dropouts, in that they return to post-secondary education (albeit in another stream).

Any attempt to calculate “true” rates of persistence and discontinuation has to go beyond the “snapshot” approach that simply reports students’ status at a given moment in time, while at the same time fully taking into account both the switching of programs, institutions and post-secondary education streams and the tendency of many students to “stop out” and subsequently return to their studies. Such an endeavour has recently been completed by Finnie and Qiu (2008). Using the *YITS* data, they calculated the likelihood of a given cohort of students graduating within a specific time period, regardless of whether or not these students switched or stopped out at some point along the way.

Finnie and Qiu’s findings show that 82 percent of university students continue with their original program of study (or, in a small number of cases, graduate) after the first year, as do 74 percent of college students. Of the remaining

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18 and 26 percent respectively, a relatively small number switch programs within the same institution. Excluding these “within institution” switchers, this means that universities lose about 14 percent of their students and colleges about 20 percent after the first year of study. Yet about half of these university students and a third of these college students in fact continue their studies elsewhere—they simply switch institutions. The real proportion of those who leave post-secondary education after their initial year of studies is 7.9 percent for university students and 12.9 percent for colleges.

Taking their analysis further, Finnie and Qiu calculate that while only 54 percent of university students and 58 percent of college students graduate from their original program within five years, many of the remaining students either continue in that program or, if they discontinue it, switch programs within the same

institution or switch institutions. Some of these continuers and switchers stop out for a period of time before returning. Relatively few non-graduates can therefore be accurately classified as “dropouts.”

From an institutional perspective (i.e., excluding students who have switched programs within the same institution), the five-year drop-out rate is 26 percent for university students and 32 percent for college students. The remainder have either graduated or are continuing in their original program or another program within the same institution. These drop-out rates, however, still do not take into account those who switch institutions or who stop out and subsequently re-enrol in another program or institution at a later date and who thus are not true dropouts. Once all these “switchers” and “stop-outs” are taken into account and reclassified as either graduates or continuers,

“ Relatively few non-graduates can...be accurately classified as ‘dropouts.’ ”

Table 2 Overall Persistence Rates of Young Adults in Post-Secondary Education in Canada*

	Graduated	Still in Post-Secondary Education	Discontinued Post-Secondary Education
College			
Year 1	12.0%	75.2%	12.9%
Year 2	36.9%	45.8%	17.3%
Year 3	57.0%	25.1%	17.9%
Year 4	66.2%	14.8%	19.0%
Year 5	73.1%	8.8%	18.0%
University			
Year 1	1.1%	91.0%	7.9%
Year 2	3.6%	86.7%	9.6%
Year 3	11.2%	78.8%	9.9%
Year 4	45.0%	45.2%	9.8%
Year 5	69.4%	20.4%	10.2%

Source: Finnie & Qiu, 2008, Table 6b.

*Note: Columns may not total 100% due to rounding.

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the five-year drop-out rate falls to 10 percent for university students and 18 percent for college students (see Table 2). This represents by far the best estimate of overall persistence rates currently available in Canada, at least for young adults.

Finnie and Qiu are able to confirm this general pattern in a study of the persistence and mobility of students in Atlantic Canada using data from the Post-Secondary Student Information System (*PSIS*).¹ They analyzed the patterns of students enrolled in the twenty-two public post-secondary institutions in Atlantic Canada over a period covering the academic years 2001–02 to 2004–05. The nature of the *PSIS* data (individual records for each student in each year of study) allowed longitudinal student records to be created by linking each student file across the years of the sample. The *PSIS* data project was initially piloted in the four Atlantic provinces; thus, the most extensive and robust data were available for that

region. Statistics Canada also prioritized the processing of the Atlantic college *PSIS* data for this project, which allowed *PSIS* university and college data to be linked together for the first time.

Looking at first-year transition rates, Finnie and Qiu found that the rates of persistence, completion, switching and leaving in the Atlantic data from *PSIS* were very similar to those obtained from *YITS*. Specifically, they found that 79.8 percent of university undergraduate students continued their studies into second year (compared to 81.2 percent in the *YITS* sample), and 52.6 percent of college students did so as well (as opposed to 50.4 percent in the *YITS* sample). Twenty-three point five percent of college students graduated. Only 5.1 percent of university undergrads and 1.3 percent of college students switched programs, institutions or levels after their first year. Finally, the *PSIS* first-year leaving rate is 15.1 percent, and the first-year college leaving rate is 22.6 percent.

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Table 3 First-Year Transition Rates in the Atlantic Region in *YITS* and *PSIS*

	Continuers	Graduates	Switchers	Leavers
University				
<i>PSIS</i>	79.8%	0.1%	5.1%	15.1%
<i>YITS</i>	81.2%	0.4%	7.8%	10.5%
College				
<i>PSIS</i>	52.6%	23.5%	1.3%	22.6%
<i>YITS</i>	50.4%	27.1%	2.1%	20.4%

Source: Finnie & Qiu, 2009, Table A4.1.

1. The *PSIS* data set consists of administrative data collected from all of Canada’s public post-secondary colleges and universities. Each student who registers at a public post-secondary institution has a data record in *PSIS* for each year. More information on *PSIS* can be found at: <http://www.statcan.gc.ca/concepts/psis-siep/index-eng.htm>

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The similarity between the rates observed in the two data sets is a positive confirmation of each study’s findings. The difference in leaving rates between the two may be explained by limits that apply to the *PSIS*-based study but do not apply to the *YITS*-based one. In the nationwide *YITS* study, students can be tracked across provincial boundaries as long as they continue to respond to the surveys being applied. However, while *PSIS* itself is a national database, Finnie and Qiu did not have access to student records west of New Brunswick for their analysis. Any student who left the four Atlantic provinces was lost to the study. Thus a student who continued his or her studies outside of Atlantic Canada would appear in this study as a “leaver.”

Finnie and Qiu also used the *PSIS* data to calculate cumulative transition rates across three years of the data using a restricted sample of first-time entrants to post-secondary education, aged 17 to 20 in 2002-03. They found that 66.4 percent of university students were still studying two years after enrolling, while 24.2 percent had left their studies. In the college sector, 13.4 percent were continuing their studies, while 51 percent had graduated and 33.8 percent had left their studies (see Table 4).

Finnie and Qiu also found patterns similar to those derived from the *YITS* data for students who had at one point stopped their studies — many of these students return. Their calculations show that after factoring for returners, the actual leaving rates of entering students after two years in Atlantic Canada drop to 18.1 percent of university students and 30.8 percent of college students. (It is important to restate that students who left Atlantic Canada would appear here as leavers.)

Who Leaves Post-Secondary Education and Why?

Different studies tend to offer somewhat different portraits of the attributes and factors associated with dropping out. Conclusions reached by one study are not always replicated in others (Grayson & Grayson, 2003, p. 31). Moreover, studies often lack the instruments or the sample to allow them to assess with precision the importance of certain key factors, such as the type or amounts of student financial aid received by students or students’ ethno-cultural or socio-economic backgrounds. While these points and the need to avoid what Grayson and Grayson call the attempt to “fabricate” generalizations should be kept in mind, several patterns can nonetheless be derived from the Canadian literature on persistence reviewed for this note.²

“ Different studies...offer somewhat different portraits of the attributes and factors associated with dropping out. ”

Table 4 Cumulative Transition Rates After Two Years for Students Entering Atlantic PSE Institutions* (17- to 20-Year-Olds, 2002-03 Cohort)

	Continuers	Graduates	Switchers	Leavers
University	66.4%	0.8%	8.6%	24.2%
College	13.4%	51.0%	1.7%	33.8%

*Note: These figures do not account for students who return to studies after a year.

Source: Finnie & Qiu, 2009, Table 9.

2. One source included in the research summarized in this section is not in fact Canadian. A review of the link between persistence and student financial aid published recently by Don Hossler and his colleagues focuses almost exclusively on the American experience. However, as it summarizes the conclusions of a wide range of studies, we have decided to include it in our discussion where relevant.

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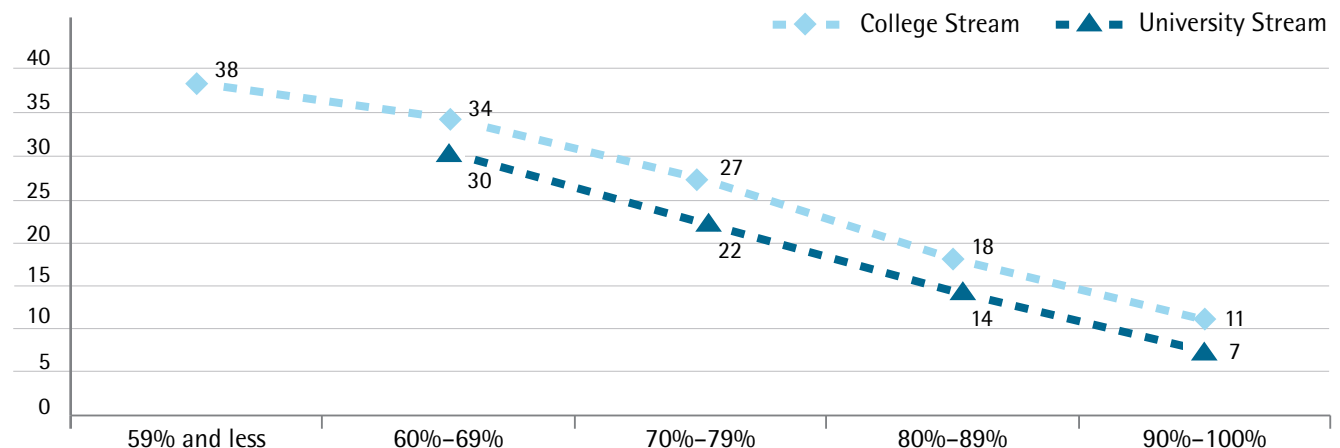
Gender, age and dependants: Men are more likely to drop out than women, and older students and students with dependent children or who become parents during their studies have greater difficulty persisting.

Academics: Academic performance and engagement at both the high school and post-secondary level are associated with persistence. As Shaienks, Gluszynski and Bayard (2008, p. 20) report with respect to high school grades and studying habits, “learning habits are developed early and often persist with progressive levels of education” (see Figure 1). Similarly, Finnie and Qiu note that “there is a strong relationship between PSE grades and PSE persistence in both the college and the university samples.... [I]t is clear that grades are a very good predictor of who is likely to change programs and who is likely to leave PSE entirely” (2008, p. 40). While weaker and less engaged students are less likely to persist, however, Shaienks and Gluszynski emphasize that a significant portion of capable students nonetheless drop out (2007, p. 19).

Parental income: The Canadian literature offers little insight into whether parental income is correlated with persistence. The *YITS* data analyzed to date are of little help in this regard because they contain no information on parental income. Parental income data is collected for a younger cohort of youth (*YITS-A*), but their progress through post-secondary education has yet to be tracked.

Financial aid: It appears that receiving need-based student assistance in the forms of loans or grants can improve persistence. At the same time, students whose financial aid package is not adequate to cover the actual cost of studying or who accumulate high levels of debt are less likely to complete their studies (Grayson & Grayson, 2003, p. 34.; Hossler *et al.*, 2008; McElroy, 2004, 2005a, 2005b, 2008). This suggests that within a financial aid package, the non-repayable grant component, which can limit the accumulation of debt by substituting for loans or alternatively provide extra funds not provided through loans, is the key component in encouraging persistence. As Hossler

Figure 1 Percentage of Post-Secondary Students Aged 24 to 26 Who Discontinued Their Original Post-Secondary Stream* by Grade Average in High School



*Note: While some of these students discontinued their studies, others switched streams.

Source: Shaienks, Gluszynski & Bayard, 2008.

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et al. put it, “loans are not as effective as grants in enhancing persistence” (2008, p. 102). This conclusion is consistent with those reached by Lori McElroy in the context of her studies of the impact of the introduction of millennium bursaries in Canada in 2000 (for a summary of McElroy’s studies, see Canada Millennium Scholarship Foundation, 2006). It is interesting to note, however, that according to Hossler and his colleagues, the real effect of financial aid (especially grants) on persistence is an “indirect” one, in that it allows students to work less, worry less and focus more on the various components of student life. They explain: “the most beneficial effect of financial aid may be that it increases students’ freedom to become more engaged in the academic and social environments of the institutions they attend. This may in turn lead to increased student persistence” (Hossler *et al.*, 2008, p. 111; see also p. 103).

Parental education: The relationship between persistence and parental education is unclear. An analysis of *YITS* data prepared for this paper shows that the proportion of students who drop out of college or university five years after beginning their studies decreases as parental education increases. Specifically, 21 percent of those whose parents did not complete high school dropped out, compared with 12 percent of those whose parents completed university. As Finnie and Qiu point out, however, the relationship holds more strongly for college students and is not so evident in the case of university students (2008, p. 33).³ Other studies offer a slightly different view. Given the important influence of parental education in the initial decision of youth to pursue a post-secondary education, Shaienks and Gluszynski find it interesting that in their analysis “drop-out rates did not differ significantly between students whose parents held various educational

attainments” (2007, p. 18). This is confirmed through further analysis of the *YITS* data conducted by Martinello, who notes that “surprisingly, parents’ education and the importance of PSE to parents were unrelated to students’ success in their first program” (2007, p. 23). According to Martinello, however, parental education is related to the decision of students to re-enrol after initially discontinuing their studies, a point that is discussed further below.

Career guidance: There is some evidence that certainty about career goals positively affects persistence. In other words, students are more likely to stay in school when there is a clear connection in their minds between their studies and their intended career path (Berger, Motte & Parkin, 2007, p. 40; Canadian Career Development Foundation, 2007, p. 21; Grayson & Grayson, 2003, p. 28).

Aboriginal status: Until recently, there has been little solid quantitative evidence available about the persistence of Aboriginal students. This has been the case despite the fact that the lower educational participation and attainment rates of Aboriginal students are well documented (see, for example, Berger, Motte & Parkin, 2007, pp. 20–22), as is the scale of the obstacles facing Aboriginal students (Malatest & Associates Ltd., 2004, p. 1). Analysis prepared for this paper confirms that the persistence rates of those Aboriginal students who do embark on post-secondary studies are lower than those of their non-Aboriginal counterparts (see Figure 2). The drop-out rate of Aboriginal post-secondary students is between 33 and 56 percent higher (depending on the age of students) than the rate for non-Aboriginals. Higher drop-out rates for Aboriginal students are also reported by Shaienks, Gluszynski and Bayard (2008). It should be noted, however, that the *YITS*

3. Finnie and Qiu speculate that the weaker effect of parental education on university persistence compared with access could be the result of a “selection effect,” whereby “individuals from disadvantaged backgrounds who get into PSE might be particularly strong achievers and do well as a result of that—perhaps overcoming certain difficulties that may in fact continue to exist” (2008, p. 36).

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sample excludes First Nations youth living on reserve. Since these students tend to face the greatest obstacles in moving through the education system, the figures presented here, if anything, can be said to overestimate the persistence rates of Aboriginal students as a whole.

In addition to studying the demographic, behavioural and attitudinal factors associated with persistence, researchers in Canada have also reported students' own explanations. One study of students two years after their final year of secondary school found that among those who had already discontinued post-secondary studies, lack of interest in their studies (29 percent) or the program not meeting expectations (27 percent) were the reasons most likely to be cited for dropping out. An additional 14 percent said they were undecided about their career. Taken together, reasons related to a lack of interest or satisfaction with their program or a lack of direction in their career were cited as the reason for discontinuing studies by 52 percent of dropouts. Financial reasons were cited by one in five (22 percent) of those who discontinued studies, while academic difficulties were cited by 12 percent (Berger, Motte & Parkin, 2007, pp. 39–40).

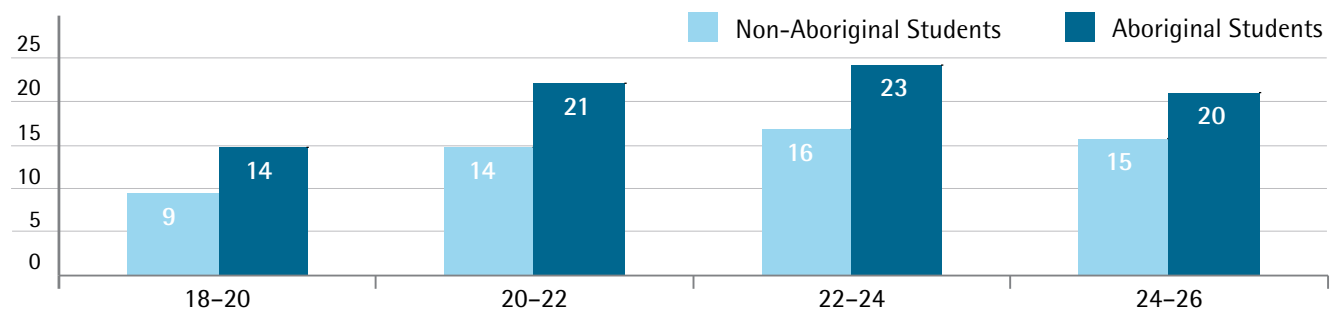
These findings are in line with those derived from the first two waves of the *YITS* study, which suggest that “among youth who had left

post-secondary education without completing their program, the major reason cited related to a lack of program fit. ... Ultimately, a notable proportion of post-secondary leavers stated that they had done so either because they didn't like their program or their program wasn't 'for them' or because they were going to change programs or schools” (Lambert *et al.*, 2004, p. 19). Specifically, one-third of those who left their studies did so because they did not like their program or did not feel it fit with their interests. Another nine percent left to change schools or programs. Financial reasons were the next most important reason: 11 percent of those who discontinued their studies did so because they did not have enough money. These results are echoed by those produced by Finnie and Qiu, who find that “students leave school mostly because the schooling is judged not to be the right thing for them or they want to do other things such as work, make a change or take a break” (2008, p. 28).

Some refinement of these findings is provided by Shaienks and Gluszynski, who examine those who had dropped out by age 24 to 26 according to whether or not they had to borrow to finance their post-secondary education. They find that for students who did not borrow, the most likely reason offered for discontinuing their studies remains that they did not like their program. For those who borrowed, on the

“...one-third of those who left their studies did so because they did not like their program or did not feel it fit with their interests ”

Figure 2 Percentage of Post-Secondary Students Who Have Discontinued Their Studies (by Age Group)



Note: The *YITS* sample excludes First Nations youth living on reserve.

Source: *YITS* (Cohort B)—special calculation.

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other hand, dissatisfaction with the program and not having enough money were equally likely to be mentioned (2007, pp. 21–22). This difference between the reasons offered by different groups of students again points to the difficulties associated with trying to develop general explanations that apply to all students who leave post-secondary education.

Resilience

In assessing why some students drop out and others persist, it is important to avoid drawing an over-simplistic contrast between those who enrol in a program of studies and stick with it and those who leave. As we have seen above, many of those who discontinue their studies subsequently re-enrol. In other words, many students make a “second attempt” at post-secondary education, and this is an important element in contributing to overall persistence rates. This point is emphasized by Shaienks and Gluszynski, who show that less than 40 percent of those who persist only attempt one program, compared to 64 percent of dropouts (2007, p. 21). As one journalist reviewing the latest data on persistence put it, “today’s students are a mobile bunch, just about as likely to take a zigzag course through college and university as they are to follow a straight line” (Church, 2008; see also Finnie & Qiu, 2008, p. 43). The difference between many of those who persist and those who drop out, therefore, is not that those who persist achieved optimal “program fit” on their first try but that they were able to make an adjustment that led them to stay enrolled.

It is in this context that Martinello’s findings on the influence of parental education become especially important. As noted above, Martinello finds that parents’ education was unrelated to students’ success in their first program. He finds, however, that “for students who left their first program, parents’ education was positively and

significantly related to the decision to re-enrol in another PSE program.” On this basis, he argues that parents’ education “appears to be correlated with students’ ability to adjust to adversity in their first program by finding and undertaking alternative programs” (2007, p. 23).

In light of this, one difference between those who persist and those who drop out can best be viewed in terms of resilience, a concept which features in health and social work literature but which has lately been the focus of career development theory and curriculum development (Canadian Career Development Foundation, 2007). In general, resilience in this context refers to “the capacity to overcome obstacles, adapt to change, recover from trauma or to survive and thrive despite adversity.” Notably, factors contributing to resilience in youth include supportive relationships with adults and parental expectations (Canadian Career Development Foundation, 2007, pp. 3–4). Thus, family background is correlated with resilience, which in turn is an essential tool that students need to persist in their studies, especially when setbacks are encountered and changes of plan required.

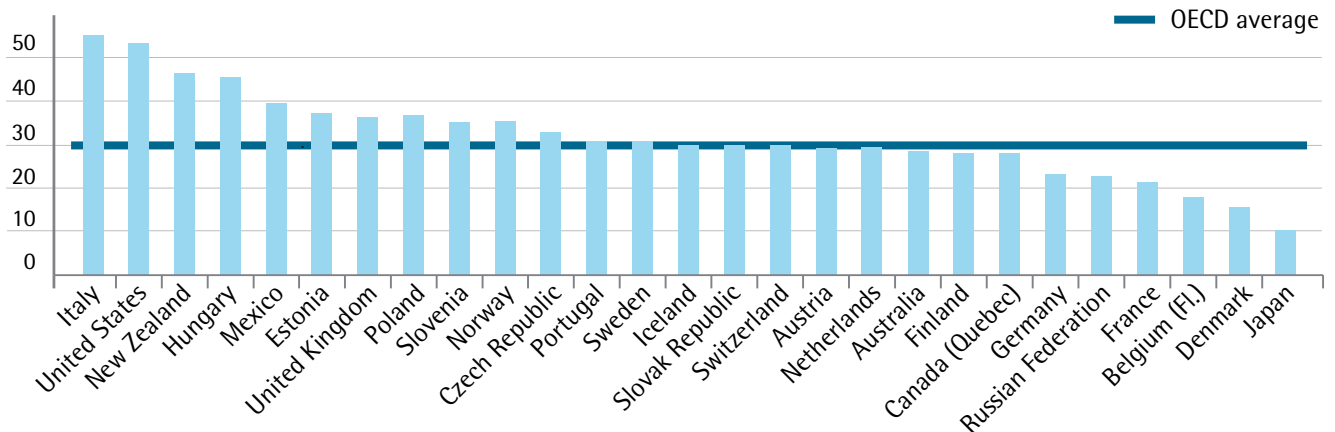
Discussion and Conclusion

In view of this emerging data about persistence of Canadian post-secondary students, a reasonable question for discussion arises: are Canada’s persistence, completion and drop-out rates good or bad? Certainly drop-out rates on the whole appear better than previously reported, although this is likely because, as was always suspected, previous institution-based studies tended to overestimate them. Looking outward, international data available from the OECD can provide some additional context for the Canadian data presented here, especially the results of the two studies by Finnie and Qiu.

“...one difference between those who persist and those who drop out can best be viewed in terms of resilience ”

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Figure 3 Proportion of Students Who Enter a Tertiary Programme and Leave Without at Least a First Tertiary Degree (2005)



Source: OECD, 2008. Table A4.1.

The international comparison seems to provide a basis for feeling positive about the Canadian situation. The OECD average drop-out rate is 31 percent (Figure 3); the Canadian result presented here (for Quebec only) is below that and among the best. Unfortunately, these international comparisons are less than perfect due to differences in methodology used to calculate dropout rates across countries as well as differences in the structure of each nation's post-secondary education system. Indeed, these differences are significant enough to render the comparisons not entirely useful. The OECD figures also do not fully account for those students who switch institutions mid-stream in a period of study or those who stop out for one or more academic years before taking up their studies again, whether at the same institution and level or at a different institution or level. The fact that the Canadian entry in the OECD figure only reflects Quebec is also, of course, less than ideal.

Given the difficulty in comparing the new data on persistence in Canada either with previous studies or with international data, it is perhaps more productive to leave aside the question of

whether our results are good or bad and focus instead in what has been learned. In this regard, the importance to policy-makers of the work done by Finnie and Qiu, Martinello and others showing the rates at which students who leave their first program of study return to some form of post-secondary education cannot be understated. Looking at the issue of persistence from a perspective that is wider than that of an individual institution provides a better sense of what is happening in the post-secondary system as a whole. This brings the discussion back to the issue of the degree of movement into, out of and through the Canadian post-secondary system. In comparison to students abandoning their studies permanently, it is clearly preferable for students to stop out and return to studies later or switch from a program in which they do not enjoy success into one in which they do. It is far from clear, however, whether this amount of switching and pausing is optimal, either from the perspective of the individual student, or from that of the system as a whole. For this reason, the paths taken by these "switchers" and "pausers" are in fact of equal if not greater interest to policy-makers than those of the "graduates" and "continuers."

"...the paths taken by these 'switchers' and 'pausers' are in fact of equal if not greater interest to policy-makers..."

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While the bottom-line completion rates may be encouraging, it remains clear that for many young people the route through the post-secondary education system is hardly straightforward. Many students would benefit from additional support—both before and after arriving on a post-secondary campus, and both financial and non-financial. As Santiago and his colleagues argue, “greater emphasis needs to be placed on equity of outcomes with policies more targeted at ensuring the success of students from under-represented groups. This would translate into more emphasis being placed on student progression throughout studies with special support and follow-up measures to assist those students at risk of failure” (Santiago *et al.*, 2008, p. 66). Universities and colleges must be able to identify their students from backgrounds that might lead them to experience challenges along the route to graduation and provide them with support programs created for and tailored to them so that they can make the necessary adjustments over time in order to succeed.

The pending demographic challenges that will make it more difficult for Canada to maintain its current number of post-secondary graduates makes this task even more important (see Berger, Motte and Parkin, 2007, Chapter 1, and Berger, 2008). The eventual decline in the youth cohort that is the traditional feeder pool for post-secondary institutions will lead to greater competition for scarcer students, and institutions will need to refine their admission processes and student support offerings in order to continue to improve their persistence and graduation rates. The findings discussed in this research note can allow governments and other policy-makers to look at persistence at the system-wide or “macro” level, but institutions will increasingly need to focus on

the “micro” level of subsets of their student populations. Their actions regarding these groups will help determine the success of the Canadian post-secondary system as a whole.

In this regard, the ongoing research by the Canada Millennium Scholarship Foundation on practices that might improve outcomes for selected groups of students is particularly relevant. The OECD’s recent overview of tertiary education lamented that “presently... there is little evidence about the effects of institutional support programmes on student outcomes” (Santiago *et al.*, 2008, p. 50). The Foundation, however, is currently completing a select number of research experiments designed to provide exactly this type of information. These experiments include Foundations for Success, a pilot project currently underway at three Ontario community colleges: Seneca College in Toronto, Mohawk College in Hamilton, and Confederation College in Thunder Bay. The Foundations for Success project is designed to respond to the concern that too few Ontario college students complete the program they initiate by directing students who are deemed to be at risk of dropping out to case managers who in turn direct them to the specific support services they need most. They also include LE,NONET, a research project designed to test the effectiveness of initiatives to improve the retention and success of Aboriginal students at the University of Victoria in British Columbia. Early results of these projects have started to become available (see University of Victoria, 2008, and Malatest, 2009). The completion of these and similar projects will hopefully make it easier for colleges and universities to initiate and shape support programs so as to improve their performance as institutions and the success of their students.

“...it remains clear that for many young people the route through the post-secondary education system is hardly straightforward”

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