Compared to other Canadian provinces, British Columbia has a very well diversified post-secondary system. Despite its comprehensiveness and variety of course and program offerings, however, access has been an ongoing concern to policy makers and educators. In the mid 1980s, concern was based partly on findings such as those cited in the Report of the Standing Senate Committee on National Finance (1987). British Columbia ranked sixth in terms of the numbers of high school graduates continuing directly to post-secondary education. Special runs of Statistics Canada data demonstrated that compared to an overall transition rate in Canada of 53%, only 45% of B.C. high school graduates continued directly on to some form of post-secondary education.

Transfer rates from non-university institutions to university were also deemed problematic. The Ministry of Advanced Education and Job Training (1987) reported that in 1985, less than one third of students enrolled in academic programs in British Columbia community colleges transferred to universities. The Ministry concluded that on average less than one in four full-time students who begin college academic programs could expect to end up with a first degree.

By the late 1980s, access issues including availability, affordability, transfer, and completion prompted the Ministry of Advanced Education to adopt some of the recommendations of the Access to Advanced Education and Job Training in British Columbia (1988) report. The B.C. Council on Admissions and Transfer was created to facilitate admission to and transfer within the post-secondary system. University colleges emerged to promote university degree completion by individuals from all college regions.

Given these initiatives, has access, transfer, and completion improved since the 1980s in British Columbia? What are the patterns of student enrolment, movement, and exit from the post-secondary system? In this article, I use data generated from a longitudinal study of B.C. youth to provide an overview of participation and transfer patterns, graduation rates, aspirations and expectations of, and beliefs about, post-secondary participation, and debt load. By describing patterns of participation through the post-secondary system, findings of this study can be used to provide directions for planning and development of appropriate strategies to improve access, retention, and success within higher education.
Several key findings are reported in this article. First, participation rates by this cohort of high school graduates are much higher than previously reported. Over 70% participated in some form of post-secondary education within one year of high school graduation and by 1993, over 90% had attended a post-secondary institution. Most students attended public post-secondary institutions in British Columbia. However, despite record participation rates and optimistic educational aspirations and expectations regarding university degree attainment, non-transfer, withdrawal and non-graduation rates remained high. Finally, analyses of debt load indicate that university graduates who began their studies at non-university institutions incur higher debt loads than university graduates who began their studies at university.

Who are the Students?

In May 1989, a survey of Grade 12 graduates was conducted by the British Columbia Research Corporation and the British Columbia Institute of Technology, under contract with the Ministry of Education and the Ministry of Advanced Education and Job Training. Two of the primary purposes of this survey were to "collect fundamental, student-based information" (B.C. Research, 1990, p.2) and "to investigate reasons why students choose to go, or not to go, to post-secondary education" (p.4). A survey questionnaire entitled the Grade 12 Graduate Follow-up was sent to 10,000 graduates. Respondents (n=5345) included both non-participants and participants in the post-secondary system. The overall response rate was 54%, representing 23% of the entire cohort of 1988 high school graduates. (When undelivered questionnaires were taken into account, the adjusted response rate to the 1989 survey was 58% (of 10,000). For a detailed account of the results of this survey, see Andres Bellamy (1992) and B.C. Research (1990).

In 1993, a second follow-up survey of the 1989 survey sample was conducted by Andres (1995). The purpose of the follow-up study was to collect longitudinal data about 1) those students still in the post-secondary system, 2) those who attended a post-secondary institution but have since graduated or left the system, 3) those who were not, at the time of the first survey, in the system but have since enrolled in a post-secondary program, and 4) those who have never participated in formal post-secondary education. A mail-out survey questionnaire was sent to respondents for which data from the first survey and complementary Link File data were available. This survey generated a 39% (n=2077) response rate, which represents 9% of the entire cohort of British Columbia 1988 Grade 12 graduates. (The adjusted response rate was 48% (of 5345) (Andres, 1995).)

High School Courses and Grades

By virtue of having graduated from high school, all respondents in this study were eligible to enrol in some type of post-secondary institution in British Columbia. However,
differential post-secondary admission policies are based on two types of meritocratic criteria -- high school program of studies and senior secondary grade point averages.

Link File high school transcript data have been matched to survey data and provide information on respondents' academic backgrounds. Transcript data indicate that the majority (60%) of respondents had completed the course work in high school necessary for university admission in British Columbia. Of students with university curricular prerequisites, 13% had earned grade point averages between 2.50 and 2.99, and 45% had grade point averages of 3.00 or greater. In other words, nearly 60% of those who had taken the appropriate courses achieved GPAs of 2.50 or greater. Of those without the prerequisite course work to attend university, most were low achievers (85% had GPAs of less than 2.50); only 9% achieved GPAs greater than 3.00.

Who Continued to Post-secondary Education?

The majority (71%) of survey respondents reported that they had attended a post-secondary institution at some time during the first year following high school graduation and almost all of these participants (96%) indicated that they had attended a post-secondary institution for four or more months during the year following high school graduation. Of the post-secondary participants, 65% attended non-university institutions, and 35% attended universities.

By 1993, 91% of respondents indicated that they had attended a post-secondary institution at some time since June 1988. Hence, only 9% (n=188) of the sample has never attended any type of post-secondary institution since high school graduation. In other words, accessing the post-secondary system was not a problem for this cohort; very few have not experienced some form of post-secondary education.

Where Did They Go?

Most high school graduates stayed in B.C. and attended a public post-secondary institution. Of those entering post-secondary institutions at some time in 1988/89, 88% occupied places in public post-secondary institutions in British Columbia. Twenty-nine percent attended community colleges, 35% went to university, 21% to university colleges, and 3% to vocational or technical institutions, 5% attended out of province universities, 3% moved out of province to attend community colleges, 1% enrolled in out of province private training institutions, 2% attended private training institutions in B.C., and 3% attended other tertiary training institutions. (These figures represent the total number of post-secondary places occupied by respondents. Since some individuals attended more than one institution, the total is greater than 100%.)
Table 1 documents fluctuations in public and non-public post-secondary places occupied from 1988 to 1993. The proportion attending B.C. public post-secondary institutions remained the same in 1989-90, and declined only slightly in each subsequent year. Attendance at out of province public post-secondary institutions increased slightly from 8% in 1988/89 to 11% in 1992/93. Private post-secondary enrolments ranged from 4 to 7% over the five year period, with greater numbers attending either immediately following or five years after high school graduation.

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### Aspirations and Expectations

Upon leaving high school, these graduates had very ambitious educational aspirations and expectations. The majority believed that post-secondary participation would ensure that they were better educated, prepare them for a job, increase their incomes, and allow them to access a wider choice of jobs (77%, 68%, 62% and 62%, respectively). Over 80% indicated that they wanted to earn a university degree and 60% expected to earn such a credential. Aspirations did not vary considerably by institution of entry. Seventy-six percent of vocational/technical institute participants claimed they wanted to earn a university degree, compared with 89% of community college students, 88% of university college students, and 97% of university students. However, when asked what level of education they expected to achieve, relatively few vocational/technical students (33%) expected to earn a university degree. The majority of community college (55%), university college (68%) and university students' (92%) expectations matched their aspirations. Graduates who did not attend a post-secondary institution one year following high school also held high aspirations. Whereas only 1% indicated that they were content with a high school diploma, 55% reported they wanted to earn a university degree. Expectations of non-participants were much lower. Over one quarter expected to complete only Grade 12 and 32% a non-university credential in their lifetime. However, 31% of non-participants indicated that they expected to complete a university degree. Given high aspirations and expectations of this cohort, it is interesting to compare intended and actual transfer patterns.

### Who Transferred and Who Left the System?
Almost half (48%) reported that they intended to transfer within the post-secondary system; of this group, 65% actually did transfer. However, transfer was not without problems. Forty-four percent reported that transfer entailed loss of credit for course work completed, 32% claimed they experienced difficulty registering for required courses at the transfer institution, and 21% indicated they experienced a large decline in grades following transfer.

Nearly one third of respondents reported that they had withdrawn from a post-secondary institution at some time between 1988 and 1993. Forty-one percent of withdrawals were from university, 33% from community colleges, 18% from university colleges, and only 8% from vocational or technical institutions.

**What Did They Accomplish?**

Sixty percent of respondents to the 1993 survey who participated in some form of post-secondary education since high school indicated that they had graduated from at least one type of post-secondary program and 8% indicated that they had earned more than one post-secondary credential. Figure 1 portrays graduation rates of those who entered a B.C. public post-secondary institution at some time during 1988/89.

Of those who began their studies at a university in 1988/89, 59% graduated from a university, 1% from a university college, and 2% from a community college. Twenty-nine percent of those who commenced their post-secondary education at a community college also graduated from a community college; 2% graduated from a university college, 17% graduated from a university, and 4% graduated from a vocational/technical institution. Thirty percent of students who entered a university college also graduated from this type of institution; 2% graduated from a community college and 24% from a university. Of students commencing at a vocational/technical institution, 59% graduated from an institution of the same type.

Non-graduation rates also vary by institution of entry. Overall, 40% of those who commenced studies in 1988/89 reported that they had not graduated from any post-secondary institution. However, as indicated in Figure 1, of those who began their studies at a university, the non-graduation rate was 36%; non-graduation by students whose first institution of entry was community college, university college, and technical/vocational students was 46%, 40% and 39% respectively.

One way of examining successful transfer and completion within the system is to control for academic preparation and intention to transfer. In this study, 532 students who had the requisite high school course work and grade point averages (above 2.75) to attend university began their studies in 1988/89 at a non-university (community college or university college) institution with the intention to transfer to university. Of this group, graduation rates were as follows: 21% from university, 21% from community college, 5% from university college, and 4% from a vocational/technical institute. By 1993, 44% had not graduated from any institution. Of the 342 students with the same academic preparation who attended universities directly from high school, 61% graduated from
university, less than 4% graduated from a non-university institution, and 35% had not graduated at all.

Nineteen percent of post-secondary graduates indicated that they earned certificates, with the majority (78%) taking less than one year to complete their programs of study. Nearly 25% of graduates earned diplomas, two thirds of whom required more than three years to complete their study. Fifty-four percent of graduates in this cohort earned bachelors degrees and virtually all studied for at least four years. Only 2% of respondents earned apprenticeship tickets, the majority of which took less than one year to obtain.

How Did They Finance Their Studies, and What Do They Owe?

Post-secondary participants were asked to specify the main sources of financing for their post-secondary education. Almost 60% of respondents indicated that they received parental support for their studies, over two thirds indicated that they financed their studies through earnings from full time work, and 50% identified part-time work as a source of income. Over 40% of students indicated that they had received some form of bursary or scholarship.

Almost 40% of post-secondary participants indicated that they had, at one time or another, received a student loan. The majority (60%) reported that they had received less than $10,000, 32% received between $10,000 and $20,000 and almost 10% had received over $20,000 in student loans.

Figure 2 depicts the total amount of student loans accrued by respondents who began their studies in public B.C. post-secondary institutions during 1988/89. The pattern of debt load across institutions is very similar. That is, those commencing at community colleges and university colleges do not appear to incur less debt than those students who enter directly into university.

Figure 3 illustrates debt load for university graduates by 1988/89 institution of entry. As Figure 3 indicates, students who began studies at a non-university institution and transferred to university to complete a degree were more likely to have student loans and accumulated higher debt loads. Specifically, 47% of university graduates who began their studies at a non-university institution compared with 37% of university graduates who began their studies at university held student loans. Also, debt loads by students who transferred from non-university institutions to complete university degrees was higher than debt loads of university graduates who commenced first year at university.

Conclusion

Post-secondary participation rates of the Class of ‘88 are remarkably high. Discrepancies with other available statistics are explained partly by sample bias inherent in survey research and incorporation of a definition of post-secondary participation that includes
non-public and out of province institutions. Nonetheless, it appears that this cohort was very successful in accessing the post-secondary system.

Retention and completion rates are much less encouraging. Although two-thirds of students who intended to transfer actually did, difficulties encountered during the transfer process suggest that the system is far from seamless. Non-graduation rates, regardless of institution of entry, remain high. Overall, slightly under half of students entering post-secondary institutions in 1988/89 have never graduated from any post-secondary institution.

The findings of this study indicate that policy initiatives and strategies should focus on transfer, retention, and student financial assistance. However, given the impending threats to post-secondary funding and increases in tuition fees, we must not become complacent about monitoring initial access to the post-secondary system.

References


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