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Forging Pathways: Students Who Transfer Between Ontario Colleges and Universities

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Introduction

The conventional pathway model in postsecondary education (PSE) has traditionally been one of simple, linear choices, where enrolment after secondary school in either college or university ultimately leads to the attainment of a credential and entry into the labour force. Today, however, PSE pathways are no longer as direct. Fewer students are entering PSE programs directly from high school (Bayard and Greenlee, 2009: 11) and students are more likely to have previous PSE experience or to attain multiple credentials than students in the past (Boothby and Drewes, 2006: 6; Bayard and Greenlee, 2009: 11; Colleges Ontario (CO), 2009). Students are opting to alternate between part- and full-time studies, switch programs, return to PSE after an absence or time in the workforce, pursue further credentials, or transfer between postsecondary institutions and even sectors.

For postsecondary mobility that occurs after graduation and within the same sector or program area, issues such as credential recognition are typically not problematic. It is when movement or transfer occurs between sectors, either before or after graduation, where policy challenges may arise, not only with relevant credential recognition, but also with the social and academic adjustment of the students. Understandably, not all transfer of course credit is appropriate. It would not be expected that students switching to different program areas, often for valid reasons, receive recognition for credits not relevant to the new program. However, when legitimate credit attainment is not acknowledged, students face issues such as frustration, discouragement and the duplication of coursework, which increases the time, effort and cost required for credential completion. As a consequence, the experiences and success of transferring students have been of interest and concern to policy makers, postsecondary institutions, student organizations, educators and students.

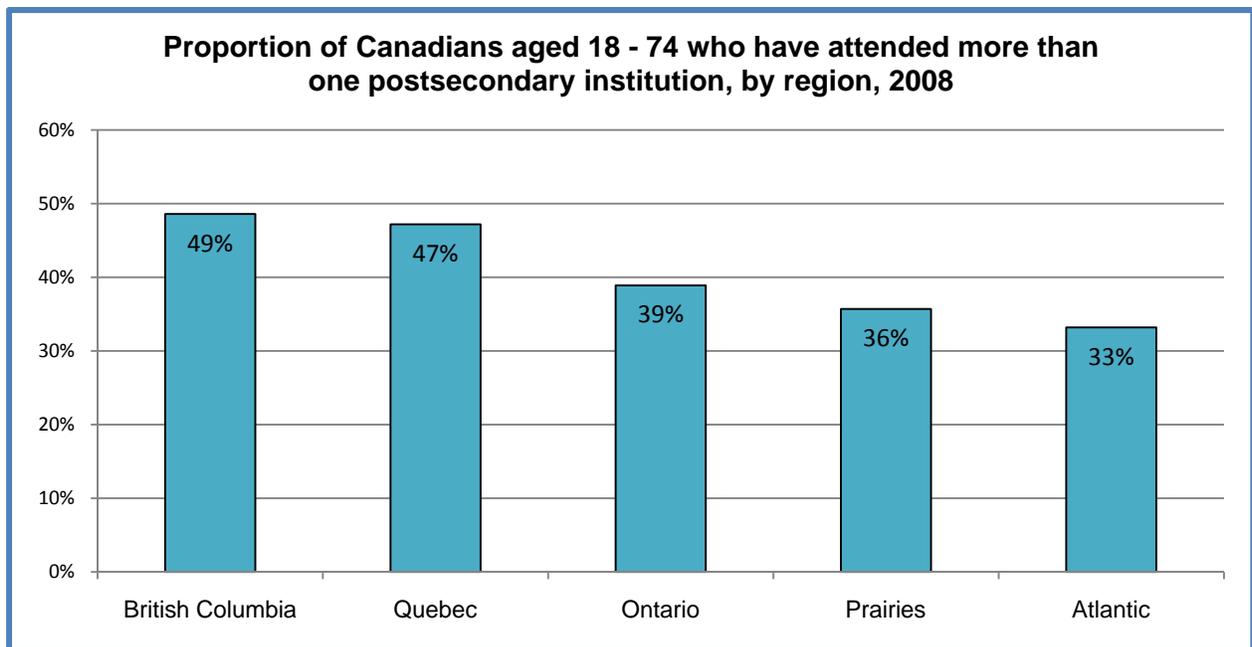
The Higher Education Quality Council of Ontario (HEQCO) is mandated to conduct research “on the development and design of various models of postsecondary education” as well as “on the means of encouraging collaboration between various postsecondary educational institutions in general and in particular in matters relating to the recognition of such institutions of courses and programs of study provided at other such institutions” (HEQCO, 2005). An understanding of student mobility between PSE sectors cuts across all four of HEQCO’s research priorities. It has implications for the participation in and accessibility of Ontario’s PSE system in terms of providing alternative pathways to higher education for potential learners. It involves questions of system design in that the student transfer experience may highlight strengths or gaps in current institutional collaboration models. The satisfaction and academic success of transfer students address the issue of learning quality. Finally, the lack of a comprehensive Ontario data set underscores the accountability challenges faced in measuring and describing student mobility and institutional collaboration.

This research note attempts to provide an account of PSE pathways, with a focus on college to college and college to university pathways, within the parameters of the current available data. The report discusses student choices to switch programs, institutions or sectors in an effort to offer some insight into how student mobility and transfer relate to HEQCO's research priorities. Although Ontario's PSE system was not designed for transfer, students and institutions are forging pathways between the sectors; it is critical to have an understanding of what is happening.

Background

In contrast to Ontario, the provinces of Alberta, British Columbia (B.C.) and Quebec, have established systems to facilitate the transfer and recognition of students' credits as they move from one institution to another. Patterns of student mobility across the Canadian provinces suggest greater mobility of postsecondary students in jurisdictions with established credit transfer systems (Canadian Council on Learning (CCL), 2009: 30-31), although the measure of mobility, (attendance at more than one postsecondary institution), encompasses not only inter-institutional transfer per se, but also the pursuit of additional credentials, such as graduate or professional degrees, and movement between regions, upon which jurisdictional credit transfer systems would have little effect (Figure 1).

Figure 1



Source: 2008 Survey of Canadian Attitudes toward Learning, Canadian Council on Learning and Statistics Canada

Levels of student mobility in British Columbia and Quebec are observed to be greater than in Ontario, but the history and structure of each provincial PSE system may contribute to this finding. The Ontario PSE system was originally designed as a binary system, consisting of separate college and university sectors, with little or no movement between the two, particularly from college to university. Nevertheless, William Davis, the Education Minister at the time of the establishment of Ontario's colleges, stated that “no able and qualified student should be prevented from going on from a College of Applied Arts and Technology to a university” (Ontario Department of Education, 1967: 13-14) leaving the option for mobility between the sectors open.

Since that time, there have been numerous calls for a more seamless PSE system in Ontario, most recently:

- *Vision 2000* in 1990 called for the expansion and improvement of opportunities for students to move between the college and university sectors (Ministry of Training, Colleges and Universities (MTCU), 1990: 172).
- In 1993, the Ontario Task Force on Advanced Training chaired by Walter Pitman provided recommendations for a formal mechanism for the recognition of credentials between colleges and universities (Pitman, 1993).
- In 1995, the Pan-Canadian Protocol on the Transferability of University Credits was signed by the provincial Ministers of Education (Council of Ministers of Education, Canada (CMEC), 1995).
- The College University Consortium Council (CUCC) was developed in 1996 with the aim to “promote and coordinate joint education and training ventures that will: aid the transfer of students from sector to sector; facilitate the creation of joint programs between colleges and universities; and, further the development of a more seamless continuum of postsecondary education in Ontario” (CUCC, 2010).
- The CUCC has also been charged with the responsibility of updating and expanding the Ontario College University Transfer Guide (OCUTG). As of July 2010, a total of 506 transfer agreements between colleges and universities were listed in the OCUTG database (OCUTG, 2010).
- The Ontario College University Degree-Completion Accord, also referred to as the Port Hope Accord, signed in 1999, outlined a series of principles and provided a “framework for the development of program to program degree completion agreements between Ontario colleges and universities” (CUCC, 1999).
- In 2002, the Council of Ministers of Education, Canada, established the CMEC Working Group on Credit Transfer to develop pan-Canadian strategies of credit transfer through an initial focus on developing and enhancing strong provincial/territorial systems.

- In 2003, all college presidents signed a Mobility and Transferability Protocol for College to College Transfer. The protocol committed the institutions to maximizing the recognition and transfer of learning acquired at other colleges (Association of Canadian Community Colleges, 2003).
- In 2004, Colleges Ontario and the College Student Alliance (CSA) presented submissions to the Rae Review calling for the need for a more coherent, integrated PSE system in order to promote student access and success (Colleges Ontario, 2004: 41-42; College Student Alliance 2004: 25). In its response, the Council of Ontario Universities (COU) recommended that the government continue to encourage collaboration between colleges and universities through improved funding, while maintaining the basic structure of Ontario's PSE system (COU, 2004: 23).
- In addressing the issue of institutional differentiation and collaboration, the Rae Review: *Ontario, a Leader in Learning* (2005) recommended that colleges and universities be required to recognize each other's related programming to create clear and efficient pathways for students (Rae, 2005: 29).
- The Pan Canadian Consortium on Admissions and Transfer (PCCAT) emerged in 2006, whose purpose includes facilitating "the implementation of policies and practices that support student mobility both within and among provinces and territories and granting of transfer credit in order to improve access to post-secondary education in Canada" (PCCAT, 2010).
- In response to the strategy of the CMEC Working Group on Credit Transfer, COU and CO established a joint task force to consider the best approach to improving the quality of, and access to PSE (CMEC, 2008: 1, 22-23) and to inform a model of an Ontario credit transfer system.
- "The Ministry of Training, Colleges and Universities established a Credit Transfer Steering Committee in 2009 to support the policy development, design and implementation of a made-in-Ontario credit transfer system. The Steering Committee is chaired by the ministry and includes representatives from the Council of Ontario Universities, Colleges Ontario, College Student Alliance, Ontario Undergraduate Student Alliance and Canadian Federation of Students-Ontario" (MTCU, personal communication, July 21, 2010).
- The 2010 Ontario Speech from the Throne announced the "Open Ontario" plan which includes commitments in the 2010 provincial budget to improve "students' ability to navigate Ontario's postsecondary system by providing additional resources to support the implementation of a credit transfer system" (Ministry of Finance, 2010).
- In July 2010 MTCU added system wide indicators on participation in the credit transfer system for the 2009-2010 multi-year accountability agreement (MYAA) report back process. For colleges, the College Graduate Survey will be used to report the

percentage of college graduates enrolled in a university in Ontario six months after graduation, graduate satisfaction with the academic preparation for university and graduate satisfaction with the transition experience to university (MTCU, 2010a). For universities, Ontario University Application Center (OUAC) data will be used to report the number of transfer applications and registrations from publicly assisted colleges in Ontario (MTCU, 2010b). Institutions have also been asked to describe a promising practice used during the year to develop and enhance credit transfer.

Accountability: What are the best ways of measuring transferability/mobility/collaboration?

To date, efforts to produce a full empirical record of various PSE pathways have been faced with the challenge of limited system-wide sources of information on student mobility within Ontario's PSE system. Data have been pieced together from a number of sources including the MTCU College Student Graduate Satisfaction Survey and the MTCU Student Satisfaction Survey (Table 1). Unfortunately, each of the instruments or sources of information listed below provides only a portion of the transfer picture. Currently, data across instruments are not easily linked with various other measures of interest such as academic performance, course selection, or employment outcomes. Many consider that the absence of a provincial body in Ontario mandated to oversee the co-ordination of and transfer between PSE sectors has further impeded the system-wide documentation of transfer activity. The establishment of such an agency to facilitate transferability throughout Ontario's PSE sector has been recommended by student organizations and by Colleges Ontario (Colleges Ontario, 2004: 41; College Student Alliance, 2009: 12).

Table 1: Sources of Information on Student Transfer in PSE

Instrument or Source	Description	Response Rate	Information Relating to Transfer	Limitations
College Graduate Satisfaction Survey MTCU	<ul style="list-style-type: none"> • annual, telephone survey • administered 6 months after graduation 	70-75%	<ul style="list-style-type: none"> • college program of graduation, current program, reasons for pursuing further education • new questions relating to transfer process and experience 	<ul style="list-style-type: none"> • no documentation for those who may have furthered their higher education more than six months after graduation • no documentation for those who may have transferred before graduation
National Survey on Student Engagement NSSE	<ul style="list-style-type: none"> • annual, online survey (in Canada) • survey first and fourth year students 	43% (average)	<ul style="list-style-type: none"> • educational background of university students • has been used to compare the engagement of transfer to direct entry students 	<ul style="list-style-type: none"> • not all universities participate each year • no documentation on credential attained or field of study
College Student Satisfaction Survey MTCU	<ul style="list-style-type: none"> • annual, in-class, paper survey • administered during second semester 	68%	<ul style="list-style-type: none"> • previous education, current program and credential, main goal for enrolling 	<ul style="list-style-type: none"> • anonymous survey, results cannot be linked to other sources • cannot distinguish

				previous Canadian vs. foreign credentials
Ontario University Graduate Survey OUAC on behalf of COU and MTCU	<ul style="list-style-type: none"> • annual, mailed, paper survey • administered two years after graduation 	24%	<ul style="list-style-type: none"> • proportion of graduates enrolled in further education by program six months and two years after graduation 	<ul style="list-style-type: none"> • no documentation for those who may have transferred before graduation • relies on respondent recall of status at 6 months after graduation
College and University Applicant Surveys Academica Group, Inc	<ul style="list-style-type: none"> • annual, online survey • administered through application centers during application process 	18-26%	<ul style="list-style-type: none"> • applicants indicate whether they have previously attended college or university • demographic profile of transfer students 	<ul style="list-style-type: none"> • not all universities participate each year • surveys applicants only
National Graduate Survey HRSDC and Statistics Canada	<ul style="list-style-type: none"> • telephone survey of graduates every five years • administered to graduates 2 years and again at 5 years after graduation 	68%	<ul style="list-style-type: none"> • education pathways of PSE graduates (both before program and after graduation) 	<ul style="list-style-type: none"> • no documentation for those who may have transferred before graduation • provincial sample sizes of transfer students may be small
Youth in Transition Survey HRSDC and Statistics Canada	<ul style="list-style-type: none"> • national, longitudinal, survey • 2 cohorts: A and B • administered to students in each cohort every two years • first cycle of cohort A administered in schools, remaining cycles administered as telephone survey • all cycles of cohort B administered by telephone 	81% (overall average for cohort B, Cycle 1) 79% (average of both cohorts, Cycle 5)	<ul style="list-style-type: none"> • educational pathways/activities of students • data includes those who transfer prior to graduation 	<ul style="list-style-type: none"> • provincial sample sizes of transfer students may be small • numbers of survey participants decline with each cycle
Postsecondary Student Information System data project Statistics Canada	<ul style="list-style-type: none"> • national, annual collection of administrative data from Canadian public postsecondary institutions 	variable number of institutions reporting	<ul style="list-style-type: none"> • information on PSE enrolment, attainment, programs, courses • aims to produce longitudinal PSE history at student level 	<ul style="list-style-type: none"> • project is not near completion • all institutions not yet participating
Ontario's College and University Application Centres OCAS, OUAC	<ul style="list-style-type: none"> • administrative data 		<ul style="list-style-type: none"> • applicants indicate whether they have previously attended college or university, for how long and whether credential obtained 	<ul style="list-style-type: none"> • data on previous PSE not always available if not required for admission to program • not all who have applied for advanced standing apply through application centers • not all institutions use centers for part-time applicants
Institution's own surveys, research & administrative records	<ul style="list-style-type: none"> • administrative, survey and research data 		<ul style="list-style-type: none"> • may provide information on experience/success of students transferring into institution 	<ul style="list-style-type: none"> • institution-specific data • most do not follow students once they leave the institution
College University Consortium Council	<ul style="list-style-type: none"> • administrative and 		<ul style="list-style-type: none"> • number and variety of 	no evidence of frequency of use of

(CUCC)/ Ontario College University Transfer Guide	research data		programs <ul style="list-style-type: none"> • category and number of articulation agreements 	individual agreements
Ontario Education Number	<ul style="list-style-type: none"> • administrative data 		<ul style="list-style-type: none"> • potential to facilitate tracking of students between programs and institutions by linking of data sets 	<ul style="list-style-type: none"> • originates in K-12 education system and not completely implemented in PSE sector

(HEQCO analysis)

Calculating the transfer rate is also an issue which clouds the measure of accountability. Across Canada and the U.S., it is generally agreed that the transfer rate is the ratio of students who transfer to the potential number of transfer students. Problems arise over what constitutes a potential transfer student. Suggestions have included institutional total head counts, the number of students completing at least a minimum number of credits, or the number of students who have graduated from the institution (Spicer and Armstrong, 1996 as cited in Decock, 2004: 3).

Comparisons of college to university transfer rates between Ontario and other jurisdictions are also difficult. In many jurisdictions, transfer occurs between articulated community-college and four year degree-granting programs, a system which is not comparable to Ontario's binary PSE system structure, where transfer has traditionally not been a formal option. Students are advised and directed in their secondary school careers to opt for either college or university preparation. Furthermore, upon examination of the Ontario college-to-university transfer rate relative to other jurisdictions, it is important to distinguish between programs in the arts and sciences and applied career programs. The rate of transfer from college applied programs in Ontario is not far below that of most other jurisdictions whereas, the transfer rate from General Arts and Science (GAS) college programs is much lower (Colleges Ontario, 2009: 10; Colleges Ontario, 2005: 17; Colleges Ontario, 2006: 31; Townsend, 2002: 6). Colleges in Ontario offer few GAS programs, relative to colleges in other jurisdictions; in 2008-2009, less than 5 per cent of Ontario's college graduates were from one- or two-year GAS programs.¹ In addition, the main purpose of GAS programs in Ontario colleges is not university transfer, but to prepare students for the colleges' career programs. It has been suggested that the overall college to university transfer rate for Ontario is lower than in other jurisdictions because enrolment in GAS programs constitutes such a small fraction of Ontario college enrolment (Clark, Moran, Skolnik & Trick, 2009: 157). Thus the interpretation of transfer rates must be made with caution. Low transfer rates may not necessarily imply that a problem exists. Lower rates may be indicative of the structure and design of a particular PSE system, or of a system where students have made initial PSE choices which are well-advised, with little need for adjustment.

¹ MTCU data, HEQCO analysis

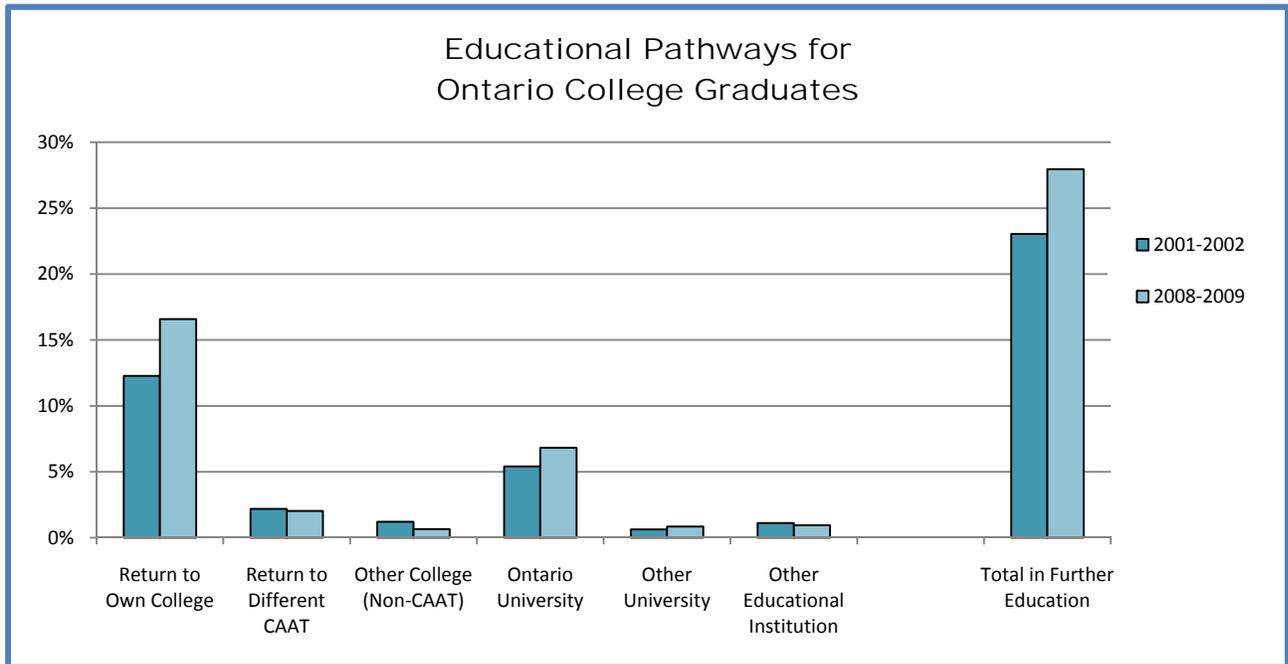
Participation: What are the effects of mobility and transfer on access?

Enhancing transfer pathways from college to university has been suggested as a means of increasing access to university, particularly for students of traditionally under-represented or at-risk groups. Improved pathways may also provide students with more accessible options in remote areas that are under-served by PSE institutions. Students who are not otherwise qualified for university, either through insufficient grades or deficiencies in prerequisite courses, may be provided an alternative pathway to university through initial preparation in the college system. Exploring the characteristics of college transfer students and the reasons for their decisions may provide some clarification of these assertions.

How Many and Where

Considerable data on the further pathways of students are available through the MTCU Graduate Satisfaction Survey. Examining college graduate pathways, in 2008-2009, approximately 28 per cent of college graduates reported that they were continuing their education within six months of graduation. Of those continuing their education, 61 per cent returned to their own college for further education, around 7 per cent transferred to another Ontario College of Applied Arts and Technology (CAAT) and approximately 25 per cent continued at an Ontario university (Figure 2). Application data collected between 1996 and 2007 from OUAC indicates that the increase in the numbers of university applicants with previous college experience has outpaced that of the general increase seen in the numbers of Ontario university applicants (CO, 2009: 13, 30).

Figure 2

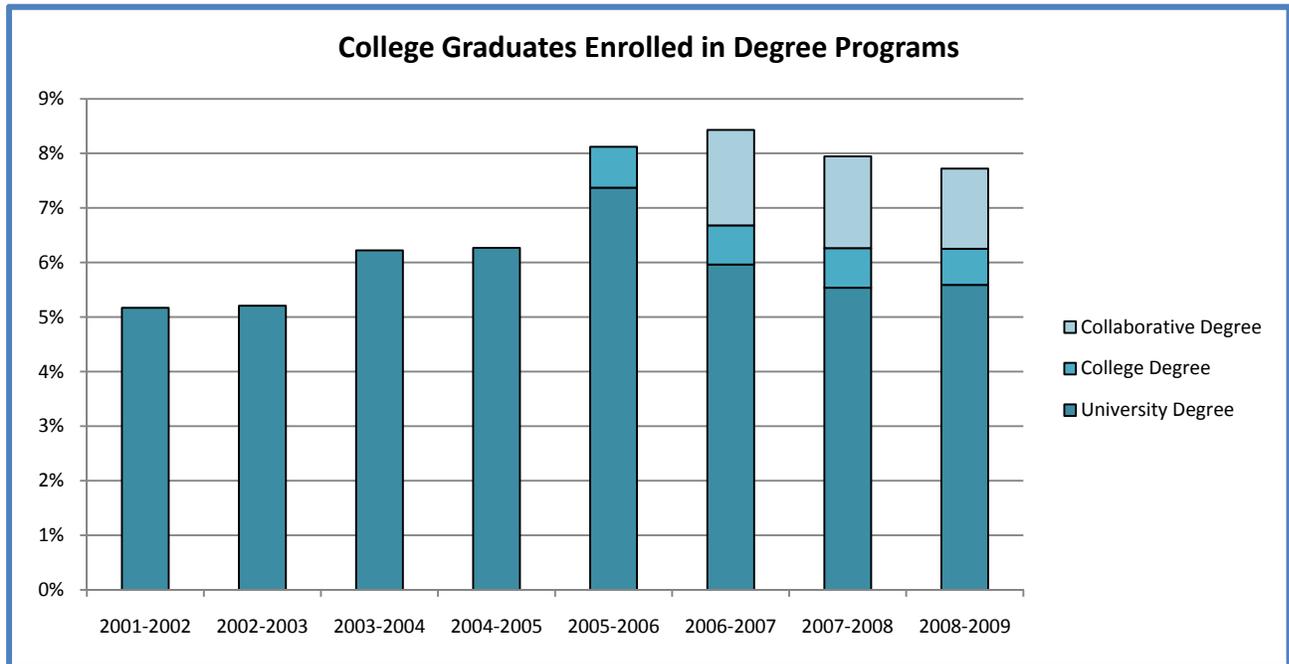


Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

The percentage of college graduates who furthered their education in a degree program rose from 5.3 per cent in 2001-2002 to a maximum of 8.4 per cent in 2006-2007 and has since declined to 7.7 per cent (Figure 3).² Since 2005-2006, the MTCU Graduate Satisfaction Survey has expanded to ask graduates about their enrolment in college applied degrees and college-university collaborative programs. These additional categories may account, in part, for the decrease in the university degree enrolment rates seen since the change in the survey (Decock, McCloy & Liu, forthcoming).

² Percentage of 2004-2005 graduates with a university degree should be treated with caution as a result of issues with responses from graduates of one Ontario university.

Figure 3



Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

Information on the university to college pathway indicates that the proportion of college students with prior university experience has been increasing as well, albeit only slightly. Ontario College Application Service (OCAS) data indicates that the percentage of college applicants with previous university experience (as evidenced by submission of a university transcript) has increased from about 6 per cent to 13 per cent between 2000 and 2007, although the proportions may be under-estimated as submission of this information is on a voluntary basis; additionally, the increase during the specified time period could be attributed, in part, to improved ease of transcript submission through electronic transmission (CO, 2009: 3). With respect to the number of college students reporting completion of a prior university degree, evidence from the MTCU Student Satisfaction Survey, which is self-reported, indicates that this proportion has increased from about 7.5 per cent in 1999-2000 to almost 9.8 per cent in 2009-2010 (HEQCO, 2009: 98; MTCU data, HEQCO analysis).

Profile of Transfer Students

Information from the MTCU Graduate Student Survey and the MTCU Student Satisfaction Survey also provides a profile of the Ontario transfer student. College graduates who transfer to a university are more likely to be female, under age 22, graduating with a “Basic Diploma” or an “Advanced Diploma” from a large college in the Metropolitan Toronto or central region of Ontario. Although York University and Ryerson University report the highest numbers of college graduates attending those institutions, two northern Ontario universities, Nipissing and

Laurentian, enrol a higher percentage of college graduates as a proportion of first year university registrants. The top originating college programs include Early Childhood Education, General Arts and Sciences (1-yr, 2-yr), Police Foundations, Social Service Worker and Business Administration. Graduates are also more likely to enrol in a related field of study. The top university destination programs include Commerce Management, Business Administration, Administrative Studies/Sciences and Psychology (CUCC, 2007: 89; Decock, McCloy & Liu, forthcoming).

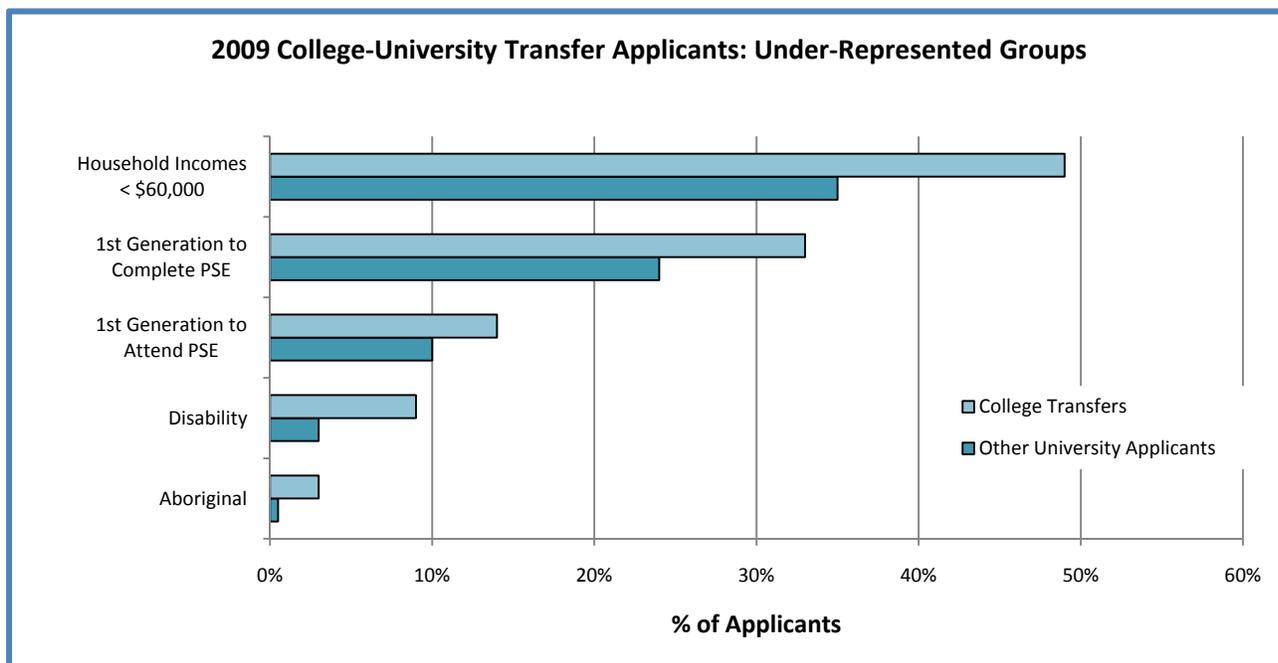
Of those college graduates continuing their education at a college, most are more likely to be young, under 22 years of age, graduating with a “College Certificate”, and graduating from a small college in the northern or southwestern region of Ontario. These graduates tend to originate in preparatory/upgrading programs and enrol at their originating college in a related field of study, most commonly Health and Applied Arts.

It has been suggested that for individuals from under-represented groups such as aboriginal students, students with disabilities, first generation students and low income students, improving transfer pathways from college to university would provide a more equitable opportunity to obtain a degree. For example, for students from the lowest income categories in Canada, the participation rate is about 50 per cent greater in colleges than in universities (Drolet, 2005: 30), indicating that colleges play an important role in equitable access to PSE. By improving the opportunities for these college students to continue on to university, the overall equity of the PSE system may be enhanced.

College Applicant Survey™(Academica Group, Inc.) data over the past five years indicate that higher proportions of university applicants from under-represented groups (Aboriginal students, students with disabilities, first generation students and low/moderate income students) are college transfer students relative to other university applicants³ (Figure 4). These preliminary data suggest that college students from under-represented groups may indeed be taking advantage of transfer opportunities to pursue further education in university. Further data collection and analysis of students’ use of transfer sources and resources in the province would be more telling.

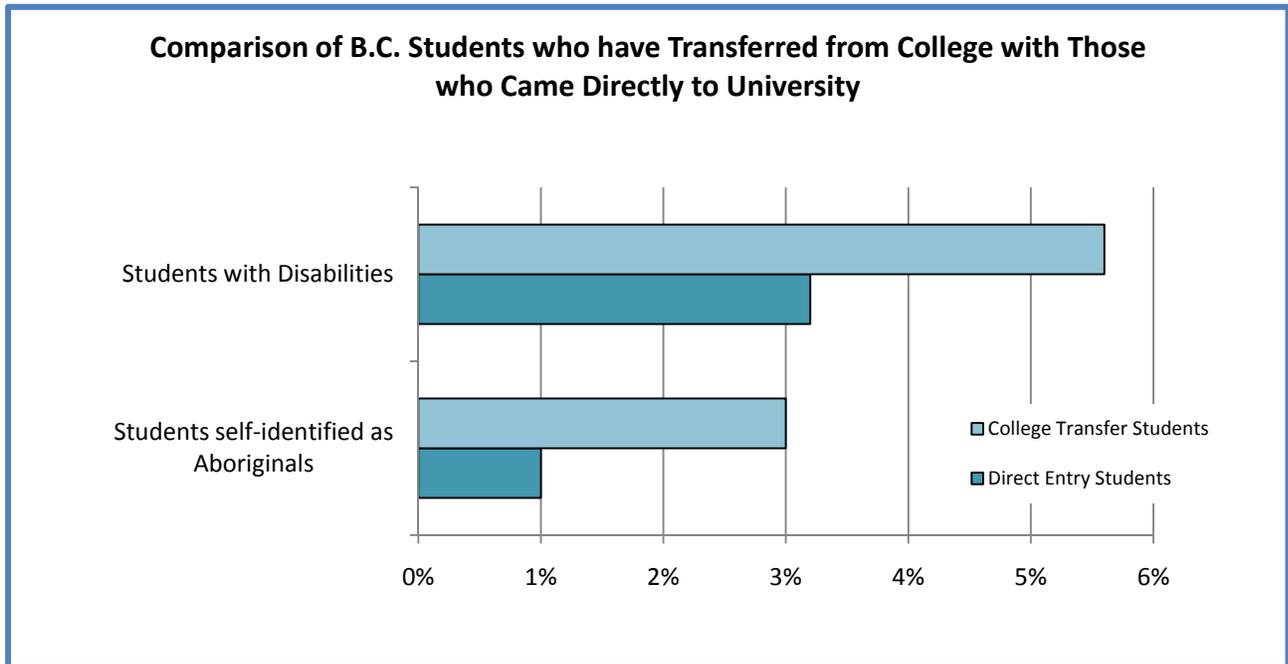
³ Results must be interpreted with caution due to the low numbers of transfer students in each group.

Figure 4



Similar findings are observed in B.C. when comparing students who have transferred from college with those who came directly to university. Students with disabilities and students who self identify as Aboriginals are more likely to be college transfer students than direct entry students (Figure 5).

Figure 5



Source: Dumaresq, Lambert-Maberly & Sudmant, 2003

With respect to college students with prior university experience, the profile is somewhat different. These students are more likely to be female, older than 25 years of age and have a first language other than French or English. Their main goal is to seek programs that will prepare them for employment/career, are less likely to be enrolled in a basic or an upgrading program, are more likely to have graduated from the university faculties of Social Sciences, Humanities, Business and Commerce and transfer to Government/Real Estate, Library, and Public Relations program clusters (CUCC, 2007: 17-18). These characteristics may reflect individuals with university credentials returning to PSE after some time in the workforce, those pursuing a second career, either voluntarily or out of necessity, or individuals with foreign university credentials pursuing a college designation to facilitate entry into the workforce.

Student Aspirations and Goals

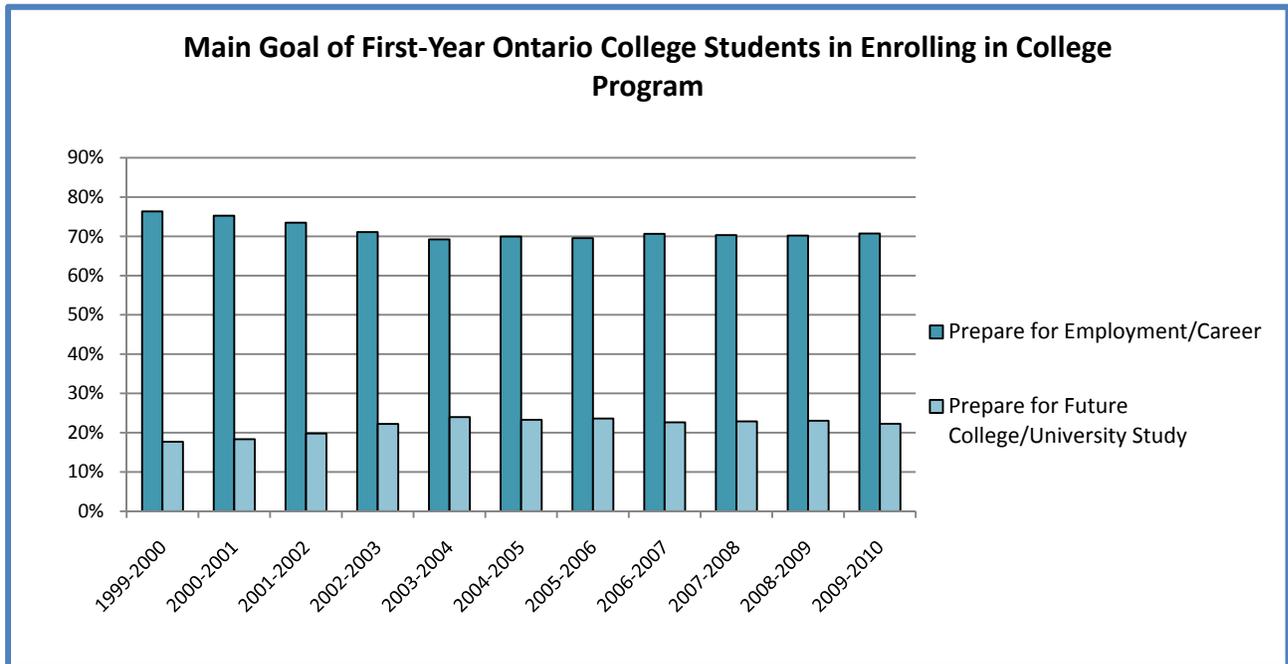
Understanding students' aspirations or goals upon initial application to college may provide some insight into their anticipated pathways. A study exploring the transition from high school to college (King and Warren, 2006), indicated that secondary school students have a perception of college playing a transitional role to university; if not accepted into any of the programs chosen at university, 11.7 per cent of year five secondary school students indicated that they would apply to college in order transfer to university later. The most recent College Applicant Survey™ (Academica Group, Inc.) indicated that 9 per cent of college applicants report that

their single main reason for applying to college was “to prepare for further university studies”, indicating an intention to continue their studies at a university.⁴ In a separate question, almost one third of applicants reported that their “ultimate academic credential” was a degree; 18 per cent intended to pursue a university Bachelor’s Degree and an additional 12 per cent intended to pursue a professional or graduate degree (CO, 2009: 1). It is interesting that even a small proportion of secondary school students and college applicants are considering the use of a college as a means of entry into university in a postsecondary system which was not intended for transfer.

The MTCU Student Satisfaction Survey provides similar results. For 22 per cent of first year college students in 2009-2010, the “main goal” of enrolling in their programs was to prepare for further college or university study, up from 18 per cent in 1999-2000 (Figure 6). These percentages vary by credential and program being pursued. Students pursuing a 1-year certificate were more likely to report their main goal to be preparing for further study, compared to those in a post-diploma (graduate) program. Certain college certificates and diplomas are preparatory educational programs (e.g. Pre-Health) with goals of further education, while others are more career-oriented, terminal programs. Aspirations for each group of students differ according to program (CO, 2009: 1-2).

⁴ Previous College Applicant Surveys have asked respondents to rate a series of items as to whether they were reasons for applying to college. In these reports, “preparation for university” was rated as a major reason by almost 25 per cent of the applicants.

Figure 6

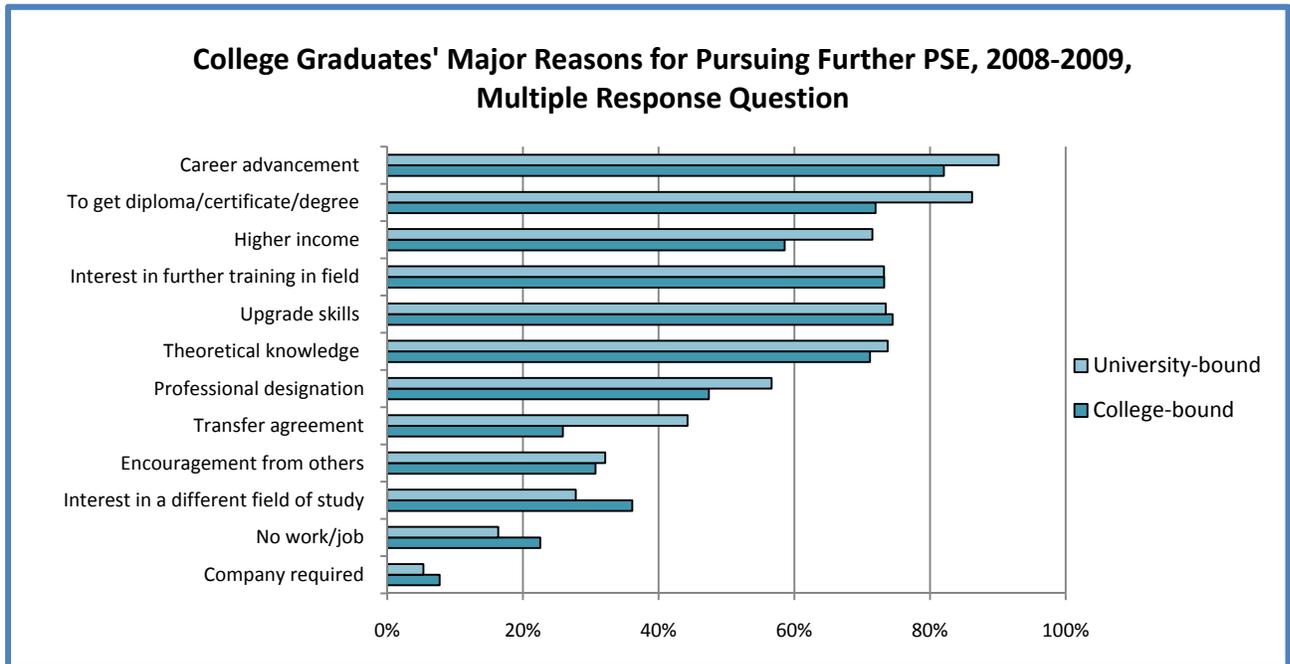


Derived from MTCU Student Satisfaction Survey, HEQCO analysis

Reasons for Continuing Higher Education

The MTCU Graduate Satisfaction Survey indicates that college graduates pursuing either university or college studies have similar reasons for continuing their education. The top reported major reasons for pursuing further education were career advancement and attainment of a diploma/certificate/degree; university-bound graduates indicated these responses at a higher rate than college-bound graduates (Figure 7). It is interesting to note that less than half of the respondents rated the existence of a transfer agreement as a major reason for continuing in PSE, although problems exist with the interpretation and understanding of this question. A study investigating the choices that eligible students make when applying to college and university concluded that for most students, plans to transfer developed after entering college and were not a major factor in the initial choice of institution (Lang, 2009: 355, 371). This study, however, did not include students who were inadmissible (or perceived themselves to be inadmissible) to university, whose choices may be determined by different factors.

Figure 7

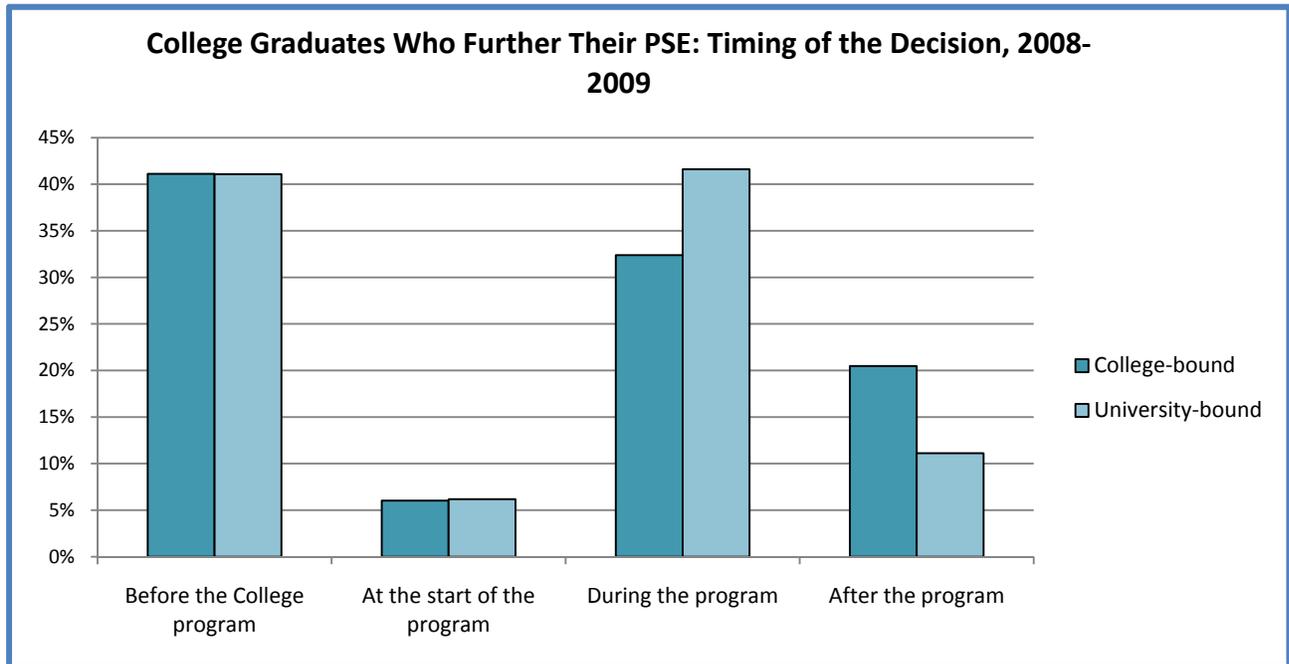


Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

Timing of Transfer Decision

The timing of college graduates' decisions to further their education also provides insight into their future aspirations. According to the MTCU Graduate Satisfaction Survey, most college graduates decided to pursue additional education either before or during their program of study (Figure 8). Not surprisingly, differences in decision timing occur by program of origin: graduates of preparatory programs, pre-health programs and General Arts and Science programs, many of which are designed to prepare students for further study, were more likely to decide on further PSE before entering their college program. Graduates from engineering, hospitality, applied arts, community service and business were more likely to decide on further PSE during their college program.

Figure 8



Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

Secondary School Preparation

Overall, about 53 per cent⁵ of graduates believed that graduation from college was required before enrolment in their destination program was possible. These findings vary by program and credential of origin: more graduates of preparatory programs, health programs, and those with college certificates believed that graduation from college was required before enrolment in their destination program was possible (Decock, McCloy & Liu, forthcoming). Students appear to consciously use preparatory college programs as transfer vehicles for further higher education when unable to enrol otherwise.

A British Columbia study at Simon Fraser University (SFU) comparing the performance of transfer students to that of direct entry secondary school students offers similar conclusions (Heslop, 2004). B.C. secondary school entrants were admitted to the university with a 78 per cent average high school grade relative to 69 per cent for B.C. college transfer students. If the secondary school average grade calculated for the study (based solely on provincial exam scores) had been used to determine eligibility for admission to the university, 77 per cent of the college transfer cohort compared to 34 per cent of the direct entry cohort would not have

⁵ 2008-2009 MTCU Graduate Satisfaction Survey, HEQCO analysis

qualified for admission. In actual fact, admission eligibility to SFU is based on a blend of school-assigned grades and provincial exam scores.

Geographic Mobility

The suggestion that transfer pathways may provide students with more accessible options in remote areas that are under-served by PSE institutions is more difficult to discern from the available data. Ontario's colleges do provide extensive local access in communities across the province. Nevertheless, college graduates continuing their education at the college level tend to do so at their originating college. Moreover, most college graduates continuing at the university level tend to do so at a university within the same geographical region as their originating college. The anomaly that exists to this pattern occurs in the central region of Ontario where 70 per cent of university-bound college graduates further their education at a university based outside of the region. This pattern may be driven by Georgian College in Barrie, which has numerous partnerships with universities at a distance. Sheridan College in Oakville may also affect this trend as it is within commuting distance of several universities outside of its region (Decock, McCloy & Liu, forthcoming). In central Ontario, at least, students in areas under-served by universities appear to be making use of the college to university pathway in order to attain a university education.

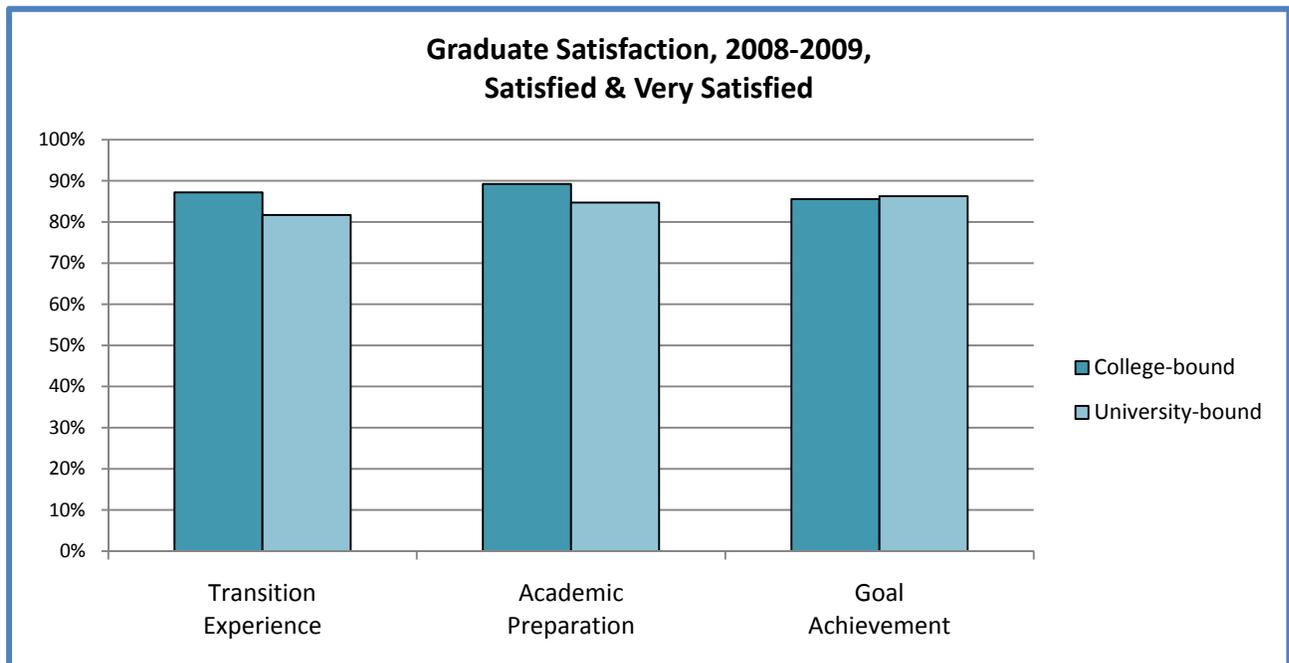
Quality: What are the effects of mobility and transfer on student satisfaction, success and learning quality?

The Transition Experience

The satisfaction and academic success of transfer students address the issue of learning quality. Further, satisfaction and success can provide insight into the strengths and gaps in the current system of institutional collaboration. Data from the MTCU Graduate Satisfaction Survey examine students' level of satisfaction with the transition process. The transfer experience encompasses such factors as managing the bureaucracy, social integration and academic adjustments. Overall, it was found that college-bound graduates were slightly more satisfied with the transition experience than university-bound graduates, but the level of satisfaction for both groups of students was high (Figure 9). Graduates of preparatory programs indicate the most satisfaction with the transition and graduates of hospitality programs indicate the least. Additionally, graduates whose destination program was more related to the program of origin also indicated greater satisfaction with the transition experience (Decock, McCloy & Liu, forthcoming).

Graduate satisfaction with academic preparation for the current program and with achievement of goals after graduation was high and similar for both university and college bound graduates (Figure 9).

Figure 9



Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

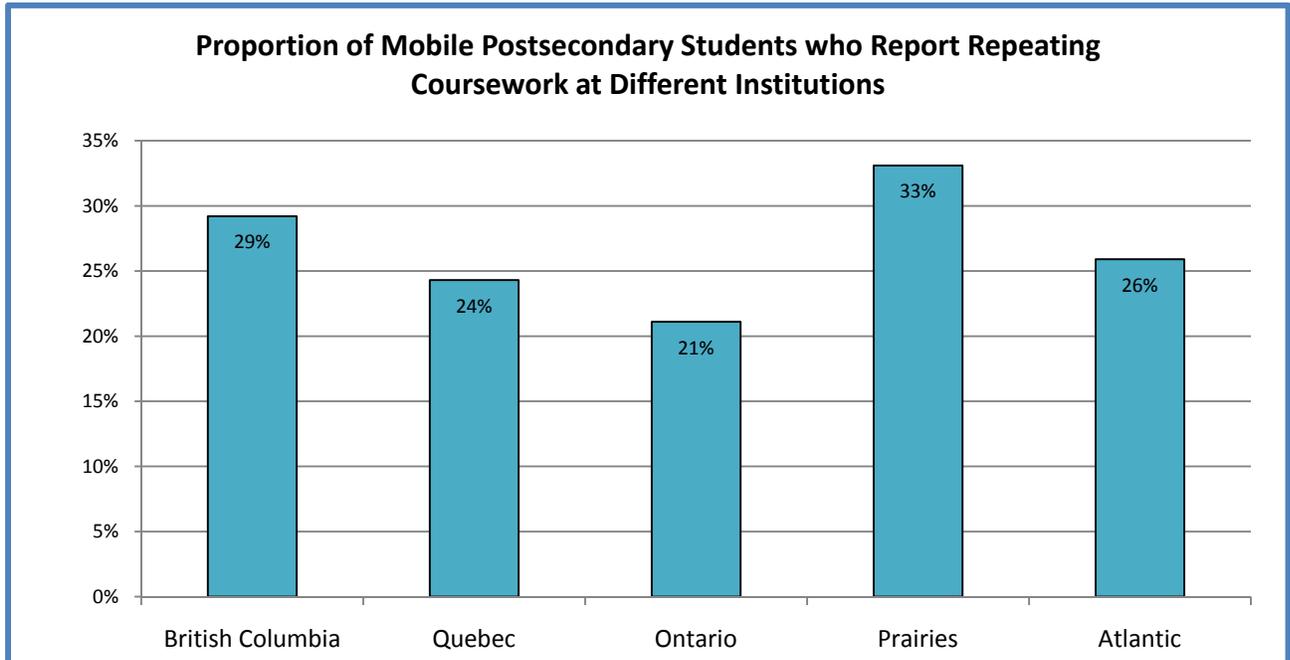
In stark contrast to these positive findings, some qualitative studies indicate considerable student confusion about college transfer credit selection with respect to the types and numbers of courses being approved and a lack of clear, accessible and consistent information regarding the transfer process (Gawley & McGowan, 2006; McGowan & Gawley, 2006). Timely provision of credit recognition also appears to be an issue. Only about 20 per cent of graduates pursuing further education received their transfer credit status with their offer of admission and about one third knew their status at or before registration.⁶ These findings confirm the confusion observed in the qualitative work and suggest gaps in the provision of timely information to prospective transfer students. The fact that these negative observations are not reflected in the level of satisfaction with the transfer experience of college graduates in Figure 9 is puzzling.

Comparing the issue of credit recognition in Ontario with other regions in Canada, however, provides some perspective. Although students in jurisdictions with established credit transfer systems such as B.C., Alberta, and Quebec may be more mobile, they are not necessarily more successful in transferring their credits from one institution to another as indicated by the proportions of students who reported repeating coursework at different institutions (Figure 10) (CCL, 2009: 31). Mobile students in this case are defined by those individuals who attended more than one postsecondary institution. This number would include not only students transferring between institutions, but also those pursuing additional credentials such as graduate or professional degrees, which would not necessarily require any transfer of credit.

⁶ 2008-2009 MTCU Graduate Satisfaction Survey, HEQCO analysis

The low proportion of students repeating courses in Ontario could reflect either that the system of articulation that exists is working well, or that much of the mobility in Ontario consists of the pursuit of additional credentials not requiring credit transfer.

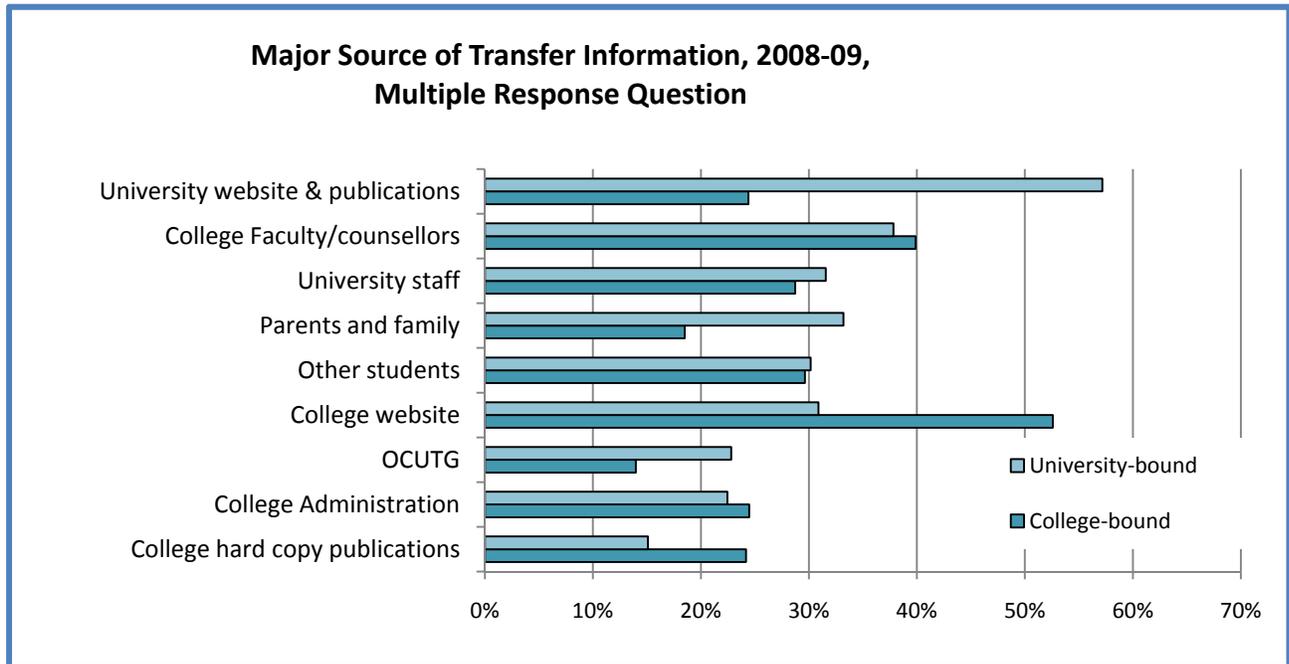
Figure 10



Source: 2008 Survey of Canadian Attitudes toward Learning, Canadian Council on Learning and Statistics Canada

Determining where Ontario students obtain information to inform their choices on transfer provides some insight into where the confusion arises and where information gaps may exist. Most college graduates, regardless of destination, employ institution appropriate web materials and consultation with faculty/counselors as the main sources of information on transfer. For both college-bound and university-bound students, the OCTUG is not a primary source of information (Figure 11) (Decock, McCloy & Liu, forthcoming).

Figure 11



Derived from MTCU Graduate Satisfaction Survey, HEQCO analysis

Social and academic integration of transfer students within an institution can depend on the student's characteristics upon entry, the nature and culture of the institution, the student's goals and outcomes of attendance at the originating institution. Qualitative research at one Ontario university on the college graduate experience in university life found that differences in age, maturity and life experience resulted in difficulties with social adjustment for some transfer students (Gawley & McGowan, 2006). Many college graduates found academic and social challenges which could be attributed to differences in the culture and mission of the sending and receiving institutions. Transfer students experiencing difficulties appeared unaware of and unprepared for such differences in culture. In addition, support services for transfer students were either not utilized effectively by the students or were perceived to be insufficient to ease the transition process (Gawley & McGowan, 2006; Townsend & Wilson, 2006). Research in the U.S. at the national level has found evidence that transfer students were less engaged than non-transfer students on a number of benchmarks, even once student precollege characteristics and institution were controlled (National Survey of Student Engagement, 2008) but differences varied when the direction of transfer (vertical or horizontal) was considered (McCormick, Sarraf, BrckaLorenz & Haywood, 2009). Conversely, the results of a B.C. study using the Undergraduate Survey on Student Satisfaction and Engagement suggested that transfer students appear to be more engaged in their learning than direct entrants, at least in the areas which emphasize the academic experience (Pendleton & Lambert-Maberly, 2006: 42).

The smoothness of the college transfer experience is often measured by a phenomenon known as transfer shock, which refers to the tendency of the GPA of college students to temporarily drop within the first year of university. Studies on transfer shock in Ontario (Gawley & McGowan, 2006) and the U.S. (Cejda, 1997) have indicated that, overall, many transfer students experience a drop in grades from college to university and some have difficulty in fully recovering college GPA levels after two years of university. Both studies found evidence that the degree of transfer shock varied by field of study.⁷

On the contrary, a recent Ontario study found no evidence that college transfer students experienced more transition difficulties than non-transfer students in their first term. Among students who were experiencing difficulty in their first semester, college transfer students improved more in the second term than non-transfer students. The authors suggested that transfer shock is a phenomenon that all entering university students experience, regardless of whether they enter from high school or college (Stewart & Martinello, forthcoming).

Student Success: GPA, Retention and Graduation

Earlier studies in B.C. and Alberta indicated that although transfer students performed well at universities, overall, they tended to achieve somewhat lower grades in university courses than direct entry students (Heslop, 2001: 27-28; University of Calgary, 2008: 9-10). This finding was attributed in part to the increased diversity of transfer students relative to direct entry students. A subsequent study controlled for secondary school achievement when comparing the academic performance of direct entry students and college transfer students at Simon Fraser University. In this case, regardless of the path chosen to enter SFU, students admitted with the same secondary school achievement level performed equally well at SFU in terms of bachelor degree completion rates, early departure rates, university failure rates, course grade performance in 400-level courses and course grade performance in other selected courses (Heslop, 2004). A recent report summarizing the profile of B.C. transfer students from 2003-2004 to 2007-2008 indicated that grades for both transfer students and direct entry students increased over time from first session to completion; by graduation, transfer students' GPAs were, on average, higher than their admission GPA and only slightly below direct entrants' grades (with the exception of one institution, where transfer students outperformed direct entrants at completion) (Lambert-Maberly, 2010: 8). In this analysis, however, the effects of secondary school achievement were not taken into account.

Recent Ontario studies measuring the success of college transfer students at several universities indicated that there were no significant differences between the final GPA/course grades of college transfer and non-transfer students (Nipissing, 2007; Stewart, 2009; Stewart & Martinello, forthcoming). Research examining student graduation revealed that the proportion of graduating college transfer students has increased over time and they are graduating earlier than a decade ago, reflecting the fact that more recent students entered university with more transfer credits than their predecessors. Despite these positive outcomes, college transfer

⁷ Results of both studies should be treated with caution due to small sample sizes

students continue to graduate at slightly lower rates than direct entry students (Nipissing, 2007; York, 2008). This may be in part a result of higher drop-out rates for college transfer students relative to direct entry students, although these rates have declined as well over the past decade (York, 2008). However, withdrawal rates may vary by institution, as one Ontario study found no difference between transfer and non-transfer students in the likelihood of withdrawal in their first year at the university (Stewart & Martinello, forthcoming).

Numerous studies have been conducted at various postsecondary institutions in the U.S. that sought to identify and evaluate factors relating to academic performance, retention and graduation of transfer students. Most studies concurred that first year academic performance after transfer and the number of credits transferred influenced the retention and graduation rates of transfer students (Luo, Williams & Vieweg, 2007; Gao, Hughes, O'Rear & Fendley, 2002) as did academic preparation/GPA prior to transfer (Glass & Harrington, 2002; Zhai & Newcomb, 2000) and gender, socio-economic status, secondary school curriculum, educational expectations and college involvement (Wang, 2009).

Post-Graduation Outcomes

Little research is available on the labour market outcomes of college and university graduates who pursued non-traditional routes towards their graduation. Most of the research that has been conducted has explored the labour market outcomes of graduates with multiple credentials or with previous postsecondary experience. The findings of one study using the 1995 follow-up of the National Graduates Survey (NGS) suggested that having previous PSE had a positive impact on earnings relative to graduates with no previous PSE, controlling for the effects of the individual, labour market and other education variables (Dubois, 2007: 17-18). Five years after graduation, the earnings premium associated with previous PSE was between 6 per cent and 16 per cent, depending on the level of previous PSE obtained. In terms of labour market status five years after graduation, graduates with prior PSE were similarly or less likely to be out of the labour force or unemployed compared to those without prior PSE. One exception to this outcome was observed for university graduates at the bachelor's level with a previous trade or college degree, who were more likely than bachelor's without prior PSE to be unemployed.

A study using the 1995 NGS examined the earnings outcomes (two years after graduation) of graduates who had obtained a prior postsecondary credential relative to graduates who had not. In most cases, further PSE was associated with higher earnings, although there was some variation by field of study. The most noteworthy exception to this finding was that university graduates who had pursued further college education earned less than graduates with one university undergraduate degree. It was suggested that these results were most likely attributable to the high earnings of university graduates in health and engineering fields, as well as differences in ability and motivation of the two groups of graduates. When disaggregating the findings by field of study, it was found that for certain liberal arts degrees, such as a degree in the social sciences, humanities or fine arts, a pursuant college diploma could result in greater earnings, particularly if the college credential was in an applied field. The study implied that it

may make less sense for graduates with an applied or technical university degree to pursue further college education because their earnings were already high (Walters, 2003).

In contrast are the results of research which draws on national census data to explore the economic returns to PSE at the bachelor's, college diploma and trades levels, over a twenty year period (Boothby & Drewes, 2006). The authors found that individuals with more than one PSE credential experienced a smaller earnings premium than those who held only one credential, with the trend for females more mixed than for males. This study appears to show little evidence that the economic rewards to multiple credentials (at these program levels) justify the added investment. However, census data does not allow for determination of when in the individual's life and in which order the multiple credentials were attained, factors which may affect the ultimate earnings of the individuals. Although it is generally assumed that additional PSE will lead to improved labour market outcomes, the research to date indicates that the observed economic rewards vary by credential or type of PSE experience obtained, field of study, the timing of credential attainment as well as individual student characteristics.

Summary and Conclusions

The issue of student mobility between postsecondary education sectors in Ontario, particularly college to university transfer, has been the subject of much discussion over the past two decades. Despite the fact that Ontario's PSE system was not originally designed with sector mobility as a priority, students and institutions are taking advantage of those transfer opportunities that do exist, forging new ones and for an increasing number of students, appear to be succeeding in furthering their postsecondary education. The preliminary findings presented in this report, within the limits of the data available, appear to provide support for the concept that the transfer process improves access to PSE, particularly for individuals from under-represented groups, those in areas under-served by universities, and those who may not yet be fully qualified for university but who aspire to attain a degree. The findings also point to areas for improvement in the current system, which would enhance the success of the students pursuing these alternative pathways in Ontario.

One of the areas for improvement addresses the challenges in measuring and describing student mobility and institutional collaboration, which can be attributed in part to the lack of a comprehensive system wide data set for Ontario. Current information about transfer is pieced together from various sources, each with limitations and none of which can be easily linked to measures of academic success. Currently, Ontario is taking steps to fully implement the Ontario Education Number, used in the K-12 sector for several years, into the PSE sector. This will greatly enhance the capacity for Ontario to track the movement of Ontario postsecondary students between institutions and sectors.

Although most Ontario transfer students were satisfied with the transition experience, there still appears to be considerable confusion regarding the types and numbers of approved transfer courses and a lack of accessible, timely and consistent information regarding the transfer process. Since most students appear to be using institutional web materials and consultation

with faculty/counselors as their major sources of transfer information, measures must be put in place to ensure that transfer policies and resources are clear, current, consistent and easily accessible. One recommendation to address this issue that has been made by various stakeholders over the years is the establishment of an agency that would take a lead role in developing system integration between colleges and universities and support assessment of credit transferability and prior learning. A more integrated system of transfer managed by a central body would also address the issue of duplication of resources: students who receive credit for relevant prior education would save time and finances; receiving institutions would have a facilitated process of credit assessment; and many of the individual articulation agreements which have been created could possibly be streamlined or combined.

Numerous transfer students encounter difficulty with social and academic integration, particularly if transfer is in the college to university direction, although the findings vary by jurisdiction, institution and student characteristics. Many experience “transfer shock” and difficulties adjusting to the nature and culture of the receiving institution. It appears that support services for transfer students are not as prevalent as those for direct entry students, and those services that do exist are in some instances unknown to or under-utilized by students. If transfer is to be made a priority, then the provision of adequate support services to ensure the success of transfer students must also be considered a priority, both at the sending institution to advise students about the process, prepare them for the transition and counsel them about potential post-graduation outcomes of their further education choices, and at the receiving institution to promote success in their pursuit of further higher education.

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