The Transfer Experience of Ontario College Graduates who Further their Education

An Analysis of Ontario's College Graduate Satisfaction Survey

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Introduction

The ability of students to move between colleges and universities is an activity, often expected by students, intended to combine the strengths of both sectors and support the pursuit of continuous lifelong learning. Students in Ontario have been ahead of educators and planners in "discovering the value of combining the strengths of the colleges in hands-on learning with the strengths of the universities in academic education" (Jones & Skolnik, 2009, p.22). The College University Consortium Council (CUCC), established in 1996, was created, in part, to facilitate such activity. The Advisory Panel on Future Directions for Postsecondary Education produced a report, *Excellence, Accessibility, Responsibility,* which endorsed the CUCC as the objective body that would facilitate "province-wide information collection and comparative analysis" to assist all stakeholders in decision-making affecting postsecondary education (Smith et al,1996, p.48). The *Investing in Students Task Force* cited the CUCC in its 2001 report, advocating, among other things, for the body to "assess and evaluate the existing mechanism" of transfer between the college and university systems (Investing in Students Task Force, 2001, p.20). Traditionally, Ontario has not held a coherent postsecondary education system with collaborative sectors, but rather two systems, college and university. The colleges were established to be comprehensive institutions that were occupation oriented and designed to meet the needs of the local community. These institutions were an alternative for those who were not inclined to purely academic pursuits and who did not have the qualifications to gain entry to university.

In 2004, in the discussion paper launching the Ontario Postsecondary Review, a student expressed his desire for "the freedom to move between programs or institutions with recognition of my previous work so that I can obtain an education as unique as I hope my career will be" (Rae, 2004, p.19). However, the paper continued by describing the existing situation as a patchwork of institutional agreements that "cover only a fraction of existing programs"; therefore, in order to "ensure that its public institutions can meet the growing expectations of students and employers, and operate as a coherent system", Ontario would need to establish a system to set "standards for credit recognition and student transferability between institutions" (p.21).

Attempts to formalize seamless pathways, however, have been confounded by a lack of data to support claims of student demand and actual movement, particularly from college to university. Ontario colleges were not established to facilitate transfer, but the pursuit of articulation agreements by the institutions themselves and the historic movement of students into universities have legitimized this function as one of its main activities.

The Ontario government's mandated collection of key performance indicators (KPIs) provides one opportunity to analyze provincial data that is systematically collected in a consistent manner. The Graduate Satisfaction Survey is used to calculate the results of two of the KPIs[1], employment rate and graduate satisfaction. Additionally, the survey asks graduates if they have enrolled in an educational institution; students identify which institution and program. In 2005,

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[1] Employed graduates are also asked for their employer contact information, used for an employer survey. This is used to calculate an additional KPI, employer satisfaction.

the colleges and the MTCU decided to expand the survey for those who indicated that they had continued their education after graduation. Therefore, in 2006-07 a modified Graduate Satisfaction Survey with new transfer related questions was introduced. These additions and changes have enabled a deeper analysis of student movement between and within institutions or sectors.

The new questions were included to capture data that could better inform colleges about the students who graduate from their respective institutions. The questions on transfer were also intended to assist the government on matters that could affect policy with respect to student movement, particularly between postsecondary sectors. In addition to documenting the program and institutional destination of graduates seeking further education, the graduate survey now gathers information on the motivation for continuing, the source of transfer information, the amount of transfer credit received, the timing of notification for credit, the relationship to the previous program, the satisfaction with the transfer experience and the satisfaction with college preparation for further studies. This report is the first comprehensive analysis of the new questions from the first year of administration (2006-07).

Literature Review

There exists considerable research about transfer in the United States where the establishment of community or junior colleges was intended to facilitate movement into four year institutions. The community college is conceived of as the most democratic institution in the United States, being the "choice for students of color and for students from less affluent family backgrounds" (Boswell and Wilson 2004, p.35). According to *Keeping America's Promise* (Boswell and Wilson 2004), minority students constitute 33.6 per cent of the student population and those whose parents had completed high school or less account for 45.3 per cent of community college participants. The percentage and amount of credit granted upon transfer becomes, therefore, the measure by which colleges are judged as to their contribution to the provision of equal opportunity or as their claim to being an agent of democratization (Cohen, 1994).

In British Columbia and Alberta, the colleges were developed in order to provide access to degree programs that may have been hampered by financial, academic or geographical barriers (Dennison, 1995), much along the same manner of community colleges in the United States. Consequently, organizations were established to facilitate transfer agreements and to actively collect related data (Dennison, 1995). The British Columbia Council on Admissions and Transfer (BCCAT) work has contributed significantly to the development of cooperation between colleges and universities (Carr, 2001), while the research has increased public confidence in the transfer process (Dennison, 2000). As well, Quebec has a unique system in which secondary school graduates wishing to pursue postsecondary education enroll in a Collège d'enseignement général et professionnel (CEGEP), consisting of either a two-year pre-university program or a three-year technical program, both of which lead to a Diploma of College Studies (DCS). Despite the known mandate of the BC, Alberta, and Quebec systems to facilitate transfer from the general arts and science areas; these provinces also have a considerable number of "applied" or technical students and /or graduates who transfer to university. In Quebec, for

example, approximately 25% of graduates of the Technical DCS under the age of 25 went on to university (Colleges Ontario, 2009).

The BCCAT report, *2008 Admissions and Transfer Experiences of Students Continuing their Post-Secondary Studies in British Columbia*, documents the survey results of former students, nine to twenty months after they leave their program of study at a B.C. college, institute, university college. The survey recorded student movement between the province's varied institutions, profiles of students who expected to transfer credits, sources of information for the transfer student, and responses to questions on the transfer experience. Highlights from the report include: 94 per cent of students enrolled in their first choice program of study, 86 per cent had received the transfer credit they expected, and 81 per cent were satisfied with the overall transfer experience. Students continuing their education were younger than those who did not; females were more likely to continue than males; arts and science students were two and a half times more likely to continue than applied program respondents; and respondents from relatively large institutions in the lower mainland were the most likely to continue their studies. Perhaps the most interesting result was that students who had learned English as their second language were more likely to continue their education than those for whom English is their mother tongue. Overall, the report concluded that "the admissions and transfer system in B.C. is working very well for students" and that "in terms of access, a large majority of continuing students reported getting into the institution, program, and all of the courses of their choice" (BCStats 2009, p. 53).

More information on the profile of the BC transfer student is contained in an earlier BCCAT report on university graduates (Dumaresq et al, 2003). The report states that 3 per cent of university graduates who transferred from college were Aboriginal, compared with 1 per cent of direct entry. Likewise, 5.6 per cent of university graduates who had been college transfer students reported disabilities, as compared with only 3.2 per cent of direct entry students. These findings demonstrate the role transfer systems may play in increasing access to university for traditionally underrepresented groups.

Ontario Research

Historically, transfer between the college and university system has been a much anticipated and concerning issue. William Davis, former Minister, originally stated in the legislature that "no able and qualified student should be prevented from going on from a College of Applied Arts and Technology to a university" and that "the university doors should always be open to capable and ambitious young men and women" (Ontario Department of Education, 1966, p.14). This position was supported in McCormack Smyth's M. Phil thesis which provides a detailed account of the establishment of the Ontario College system. After Smyth's examination of the founding circumstances, he concluded "that in future, a considerable percentage of students will be going on from the new colleges to advanced studies. Thus the bases for transfer should be refined as quickly as possible if difficulties similar to those that have arisen both in the United States and in England are to be avoided" (Smyth, 1970, p. 278).

Ontario's Postsecondary Review (2005), led by Bob Rae, was the latest provincial report criticizing the lack of progress on transfer and the paucity of data to inform the debate. The

report made a suggestion to pilot three approaches to mediate further transfer: regional/program collaboration; identification of programs requiring degree completion options; and the development of core, generic courses. The latter, although not detailed, has the appearance of being similar to the practice of transfer in British Columbia and Alberta. Although ultimately expressing faith in voluntary cooperation, the Rae report concluded that "if institutions cannot make progress under an umbrella of incentives, government should be prepared to mandate greater cooperation in the best interests of Ontario students" (Rae, 2005, p. 42). A further recommendation was that the government should establish a Council on Higher Education which, among its other responsibilities, would oversee the collection of data with respect to transfer between the college and university sectors.

Indeed, even though some historical evidence of student movement from colleges to university since the inception of the college system exists, there is a very limited amount of data on the full picture of transfer in the province of Ontario. Hard data on the movement of students in all directions – college-to-college, college-to-university, university-to-college, and university-to-university – is minimal. The lack of information relates to the number of students, their characteristics, and their overall transfer experience. There is no systematic method to collect the data.

In the province of British Columbia where colleges were mandated to facilitate transfer, a central body, the British Columbia Council on Admissions and Transfer (BCCAT) exists to support activities and to research all aspects of student movement. In Ontario, on the other hand, because colleges were not established with the transfer purpose, measuring the movement of students has not been a priority. The College University Consortium Council (CUCC), has produced some sector wide reports on mobility (Cummins, 1998, MacLennan, 2002, Compustat Consultants, 2007), as well as funding studies at Nipissing and York which tracked the performance of CAAT transfer students (Nipissing, 2007, York, 2007). It has, however, primarily focused on building its inventory of existing transfer agreements, and encouraging more agreements. Colleges Ontario, the association representing Ontario's 24 Colleges of Applied Arts and Technology, has perhaps been the only consistent source of system wide data on transfer for Ontario (Colleges Ontario, 2005, 2006, 2008, 2009). The remaining studies in Ontario have been focused on individual institutions, and often are graduate theses that have not been widely disseminated (Bell, 1996, Brown, 1993, Smith, 1998, Cameron, 2003, Decock, 2006).

The lack of data can contribute to what Eaton (1990) called the myth of the value of ignorance. She argues that in the absence of systematically collected data, institutions are reliant on anecdotal stories and information to reaffirm the continuance of current practices, eschewing the need for substantive revisions. In this environment, the effectiveness of transfer gets characterized by the number of agreements that have been signed or the establishment of initiatives and organizations; in short, the mechanisms of transfer are used as evidence of progress rather than any analysis of the transfer students themselves. The lack of data can also serve as "the basis for refusal to act on transfer issues" (p.19).

The difficulty in gathering accurate data on the movement of students from college-to-university is highlighted in a 1998 report commissioned by the College University Consortium Council. In

attempting to capture the number involved, Rodger Cummins concluded that "sound evidence that is reliable, complete and current does not appear to exist. Available sources compose a pastiche which is interesting but not conclusive." [emphasis in original] (Cummins, 1998, p. 1). Notwithstanding this difficulty, a number of different reports and studies have attempted to quantify the movement of students from colleges to universities, (Stokes, 1989; Pitman, 1993; Cummins, 1998; Rae, 2004; Colleges Ontario, 2005, 2009).

The manner in which the movement was reported, however, made comparisons impossible and accurate statements about trends difficult. Stokes (1989) declared that 3.3 per cent of *university registrants* in 1986 possessed some community college experience but concluded the *percentage of graduates* attending university had remained "relatively steady" between 1982-83 to 1986-87 (p. 8); Pitman (1993) cited *raw numbers* to illustrate a growing trend; Cummins (1998) reported on the percentage of *university applicants*, estimating that 7.8 per cent of those in 1996 had some college background; and Rae (2004), citing a special tabulation of Statistics Canada's National Graduate Survey, stated that 6 per cent of the 2000 Ontario *university bachelor graduates* had completed college. Colleges Ontario has released two reports documenting the movement of students from university to college, and from college to university. The reports use a number of sources, but most importantly they employ extracted data from the Ministry of Training, Colleges and Universities (MTCU) yearly Graduate Satisfaction Survey to identify the number of recent college graduates enrolled at a university. The Colleges Ontario mobility report showed that 8.7 per cent of Ontario's 2006-07 college graduates were attending a university six months after graduation (including collaborative degrees), an increase from 4.7 per cent of the 1999-00 graduating class (Colleges Ontario, 2005, 2009).

These mobility reports, with its use of the KPI Graduate Satisfaction Survey, have the advantage of being an extensive and consistent evaluation of student movement from college to university for graduates. The merit of this instrument is also the basis of its limitation. The Graduate Satisfaction Survey captures only those who have completed a college program and enrolled at a university immediately. A systematic count of college students who leave their program early to enroll in a university, or of college graduates who delay entry into a university program, does not appear to exist. In not including these two groups, the figures underestimate the exact amount of college-to-university transfer. The reported percentages from these reports, therefore, represent the minimum amount of movement; however, the total number of transfer students who transfer to university is difficult to estimate.

Describing the characteristics of college-to-university transfer students has been limited to a handful of master's and doctoral theses, and more recently Colleges Ontario mobility reports. Brown (1993) summarized the Cambrian student enrolling at Laurentian University as more likely to be female, with an average age of 24, without a sufficient high school average or courses to enroll directly at university and who subsequently graduated from Cambrian with a 3.10 cumulative grade point average.

Smith (1998) conducted a survey of former CAAT students who had applied to university in 1992. Based on self reported data, the summary of the characteristics showed that there were slightly more women than men and that females were younger than their male counterparts.

The majority of respondents were Canadian born, had no siblings who were attending university, and did not have the basic university admission requirements. The successful applicants had been enrolled in applied arts programs that were not formally linked to a university program.

More recent work on transfer students was completed by Decock (2006) in his study of Seneca College graduates over a five year period. The study sample involved Seneca graduates who indicated on the Graduate Student Survey that they had gone on to university. The researcher was able to merge the survey results with Seneca's information database to incorporate institutional data. The student information system contained high school and college grades as well as the results of a survey performed at student entry. The study found that an increasing number of students entered Seneca with the intent to transfer to university, and this aspiration is reflected in the percentage of graduates pursuing further education in a degree program. The early childhood education program yielded the largest number of transfer students; business programs accounted for half of the transfer students; and, the highest percentage of graduates attending university stemmed from the general arts and science program.

Greater than 80 per cent of Seneca graduates attended a Toronto university, enrolling in a program that had a close affinity with their college credential. Transfer students were more likely to be female (65 percent), enter college directly from secondary school, and always had intentions to enroll in university after graduation. Graduates reported pursuing a degree for better employment opportunities and increased status. Overall, they were satisfied with their decision to transfer even though only 63 per cent agreed that they were adequately prepared. These students would not have been able to enter directly into university based on their credentials prior to completing the diploma; however, based on self-reported data, they were successful at university earning a 3.13 grade point average or a B- letter grade. Decock concludes that an increasing number of students are consciously enrolling in colleges for the purpose of transferring to university even though colleges and their programs were not established for this function. College attendance has encouraged many students to pursue degree level studies which otherwise would not have been possible. Particularly for first-generation students, attending university may only have been accomplished by attending college first. Indeed, for these students the "movement through college to university was one born of necessity rather than choice" (p.267). By enabling the transfer student to be successful, "the university-through-college process appears to be providing access to higher education and university for families with limited postsecondary experience and who come from middle to lower socio-economic strata" (p. 267).

Previous reports which have analyzed the College Graduate Satisfaction Survey have shown that those who transfer to university within six months of graduating were more likely to be female, to be younger and have graduated from applied arts and business programs (Compustat Consultants Inc., 2007, Colleges Ontario, 2005, 2006, 2008, 2009). Additionally, graduates pursuing a degree were enrolling in programs that were related to their college program and at universities close to the college from which they had graduated. In terms of specific college programs, early childhood education had the highest number of graduates attending university, and general arts and science diploma graduates had the highest

percentage. The most common areas of study for college graduates enrolling in university are the social sciences followed by commerce.

Structure of the Report

Part one of this report, "Further Education Trends, 2002-2007", contains a detailed analysis of the original questions that have historically been part of the graduate survey. The section documents the percentage of graduates attending further post-secondary education by sector, comparing the results of the 2006-07 academic year with the five previous years. These results are further analyzed with respect to the characteristics of the graduates according to age, gender, funding status, size of institution, region of institution, college program and college credential. The graduates are then analyzed according to the destination, college and university, and some cross-tabulation with graduate and program characteristics. Part one concludes with a look at college origin, university destination and an examination of geographic mobility.

Part two, "The Transfer Experience", provides a detailed description of the results for the additional questions included in the revised questionnaire. The sections addressing reasons for returning to school and source of influence report the overall frequencies and examine selected responses by destination credential. The remaining questions are examined with a series of figures that document the frequency of responses according to destination credential, program of origin, and credential of origin.

The summary and discussion examines the implication of the results and identifies future areas of study. Finally, the appendices provide significant details of both sending and receiving institutions for the 2006-07 academic year and the previous five years.

Data Source

As an agency of the government of Ontario, the Higher Education Quality Council of Ontario (HEQCO) was provided access to the anonymized raw data files of the Graduate Satisfaction Survey for the years 2001-02 to 2006-07, resulting in over 250,000 individual graduate observations. Those surveyed included all CAAT graduates from postsecondary programs of instruction approved for funding. The requirements for the administration and the publication of KPI data are described in the Ministry of Training Colleges and Universities' Graduate and Employer KPI Survey Operating Procedure. The survey population is drawn from the administration records of each college. Each CAAT provides the names and contact information for all of its graduates and the service provider conducts a telephone survey with a target to contact a minimum of 72 per cent of the graduates on a college-wide basis. Additionally, the graduate record file of each college is examined by college auditors and reported to MTCU. In the years studied, the average response rate was 74 per cent, resulting in almost 250,000 valid responses from 2002 to 2007. The graduates were categorized according to gender, age, field of study, credential type, funding type, and size of their institution of graduation. This information, with the exception of institutional size, was obtained or derived from the graduate data record supplied by the college. Appendix 1 contains the groupings of the colleges by region and size. The occupation cluster grouping by field of study can be found in

appendix 2. Although the primary focus of the survey is on employed graduates, the survey also asks respondents whether they are attending a post secondary institution on a full or part time basis. Several new questions were added to the survey for the 2006-07 graduates to obtain more information about students who had returned to school full time. The new questions were developed by a joint college- MTCU working group, reporting to the KPI steering committee. Details and specific wording are documented in Appendix 7 and are repeated in each of the sections below.

Further Education Trends, 2002-2007

Further Education

Upon being contacted graduates are asked to disclose their status; specifically, whether they are attending an educational institution on a full or part time basis. In the 2006-07 survey, 22.5 per cent of the total 31,593 respondents stated they were enrolled full time, and another 4.2 per cent were attending part time.

Table 1 details the percentage of graduates attending further postsecondary education according to age, gender, funding status, college size, college region, program type and credential. The total in 2006-07 (26.7%) represents a slight increase from the previous year but a difference of 3.6 percentage points from the 2001-02 graduates. The overall increase since 2001-02 is reflected in each of the categories above; however, younger graduates, and graduates of preparatory and one year certificates seem to be responsible for much of the increase. A closer look at age, for example, shows an increasing percentage of graduates continuing their education. In 2006-07, 41.3 per cent of graduates under the age of 22 had pursued further education, an increase of 5.8 percentage points from 2001-02. In addition to age, the percentage of graduates from preparatory programs furthering their education has increased from 68.0 per cent in 2001-02 to 76.3 per cent in 2006-07. The percentage of graduates from 1-year college certificate programs furthering their education also increased substantially in this period from 34.5 per cent to 48.9 per cent.

Table 1. Percent of graduates enrolled in Further Education by Age, Gender, Funding Source, College Size, College Region, Program Type, and Credential, 2001-02 to 2006-07

	2001 - 02	2002 - 03	2003 - 04	2004 - 05	2005 - 06	2006 - 07
Percentage	23.04	22.91	24.88	26.47	26.34	26.67
Age						
Under 22	35.55	36.84	39.38	40.36	39.30	41.32
Between 22 and 25	21.93	20.90	22.63	23.32	23.17	23.21
Older than 25	16.36	15.83	16.00	17.33	17.49	17.76
Gender						
Female	22.60	22.88	24.30	26.29	26.12	26.58
Male	23.71	22.90	25.66	26.68	26.78	26.89
Funding						
International	36.39	31.95	31.28	31.37	24.84	24.10
Ministry	23.03	22.86	24.94	26.44	26.42	26.89
Other	16.83	18.41	15.74	13.97	12.32	14.78
College Size						
Small	27.65	25.12	28.99	32.64	30.37	30.49
Medium	23.61	24.28	26.40	26.83	26.95	27.81
Large	21.84	21.74	23.27	25.08	25.32	25.46
College Region						
Central	21.44	21.92	23.85	24.60	25.01	25.45
Eastern	23.38	22.58	22.83	25.42	25.35	25.97
Metro Toronto	21.39	20.74	22.49	23.97	24.95	24.34
Northern	30.65	28.09	32.73	34.01	31.81	33.75
Southwest	23.30	25.34	28.05	30.05	28.79	29.48
Program Type						
Business	22.03	21.14	23.01	23.80	23.88	23.57
Community service	23.18	22.39	25.57	28.27	25.52	25.73
Creative & applied arts	24.03	24.34	24.36	23.99	23.96	23.37
Health	15.35	12.44	12.13	12.65	12.89	14.11
Hospitality	18.29	20.00	21.46	23.67	23.68	23.56
Preparatory/upgrading	67.96	73.58	76.09	75.88	75.32	76.31
Engineering/technology	22.21	21.09	23.29	22.96	22.56	22.32
Credential						
College certificate	34.54	38.25	43.79	43.93	47.01	48.87
Diploma	23.91	21.91	24.05	25.39	23.81	24.34
Advanced diploma	17.88	17.37	17.50	19.33	20.43	20.18
Graduate certificate	10.68	9.98	10.93	12.67	12.67	10.96
College degree						9.91

Figure 1 contains the further education results by institution type. The 2006-07 results indicate a small increase in the number of college graduates continuing their education overall, with a slight increase from the previous year's survey in those attending college. There is a corresponding decrease in those attending university. The decline in university attendance for

2006-07 graduates follows four years of growth since 2001-02. Some of the shift in university attendance can be attributed to the inclusion of college degrees and collaborative college-university categories on the survey, as discussed in a later section.

Figure 1. Percentage of all graduates attending further education by institutional type, 2001-02 to 2006-07.
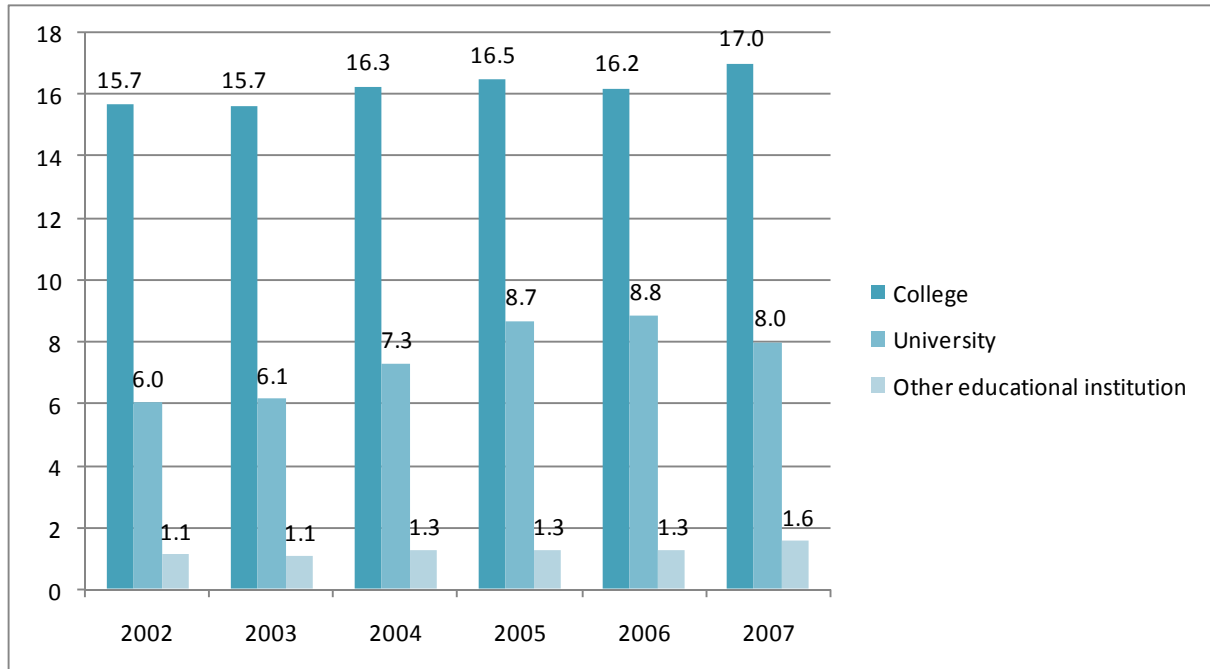
* Chart does not include missing values; i.e. those who indicated they enrolled in further education but did not answer the institution question.

Table 2 documents the percentage of 2006-07 graduates attending further education on a full or part time basis according to the postsecondary destination. Those under the age of 22 are the most likely to pursue further education with 41 per cent of graduates in this age group attending a postsecondary institution; 23 per cent of graduates between 22 and 25; and only 18 per cent of graduates older than 25 continuing. The younger group was far more likely to re-enroll in college (28 per cent vs. 12-13 per cent); however, they were also somewhat more likely to go on to university (11 per cent) than the other two age groups. The percentage of male and female graduates pursuing further education is the same; however, there is a slightly higher proportion of female graduates attending university. Females were also slightly more likely to attend part time. In 2006-07, international students were slightly less likely to further their education at a college, but went on to university at a similar rate as their counterparts.

Additionally, Table 2 shows that graduates of small colleges were more likely to enroll in further postsecondary education compared to graduates of medium and large colleges. However, the percentage of graduates from large colleges attending university was higher than medium and

small institutions. One quarter of graduates from northern colleges returned to college, the highest of all the regions. Metro Toronto had the highest percentage of graduates going on to university, at 9.8 per cent.

Table 2. Enrolment status and PSE sector by age, gender, funding, college size, region, program type, and credential for 2006-07 graduates (% graduates)

	Graduates in Further Education		Institution Type*			Not Studying	Total Number
	Full Time	Part Time	College	University	Other education		
Number of graduates	9,695	1,798	7,333	3,442	671	31,593	43,086
Percentage of graduates	22.50	4.17	17.02	7.99	1.56	73.33	100
Age							
Under 22	37.81	3.51	28.09	11.07	2.04	58.68	12,333
Between 22 and 25	19.00	4.21	12.88	8.63	1.61	76.79	17,188
Older than 25	12.98	4.78	12.28	4.32	1.06	82.24	13,267
Gender							
Female	22.20	4.38	16.74	8.24	1.47	73.42	24,175
Male	22.98	3.91	17.48	7.65	1.67	73.11	18,643
Funding							
International	21.59	2.51	14.74	8.11	1.11	75.90	1,357
Ministry	22.67	4.23	17.20	8.01	1.57	73.11	41262
Other	10.49	4.28	7.28	5.57	1.50	85.22	467
College Size							
Small	27.55	2.94	22.15	6.04	2.28	69.51	4,389
Medium	23.61	4.20	18.88	7.26	1.59	72.19	12,895
Large	21.09	4.37	15.22	8.69	1.42	74.54	25,802
College Region							
Central	20.95	4.50	15.47	8.21	1.61	74.55	10,325
Eastern	22.19	3.79	17.14	7.03	1.75	74.03	7,793
Metro Toronto	19.60	4.74	13.05	9.75	1.39	75.66	13,595
Northern	30.82	2.93	25.08	6.55	2.07	66.25	4,199
Southwest	25.72	3.76	21.93	6.22	1.30	70.52	7174
Program Type							
Business	17.42	6.15	12.73	8.87	1.86	76.43	10,052
Community service	21.17	4.57	10.81	13.14	1.62	74.27	8,755
Creative & applied arts	20.92	2.45	16.96	5.05	1.28	76.63	5,229
Health	10.95	3.16	9.75	3.28	0.93	85.89	5,372
Hospitality	20.71	2.85	20.09	2.61	0.82	76.44	2,071
Preparatory/upgrading	71.57	4.74	56.73	16.36	3.10	23.69	3,356
Engineering/technology	19.12	3.20	16.68	4.33	1.26	77.68	8,251
Credential							
College certificate	45.28	3.59	41.83	5.41	1.49	51.13	7,855
Diploma	20.19	4.15	14.27	8.41	1.53	75.66	21,783
Advanced diploma	15.09	5.09	7.51	10.66	1.93	79.82	9,576
Graduate certificate	7.61	3.35	5.64	4.42	0.82	89.04	3,549
College degree	7.74	2.17	6.19	1.86	1.86	90.09	323

*Numbers do not add to 100% due to 47 respondents who indicated they were in further education but did not indicate which institution.

An analysis by program type shows that those from health programs were less likely to be studying, with only 14 per cent enrolled in further education, compared to 76 per cent of those from preparatory/upgrading programs. Indeed graduates of preparatory/ upgrading programs had the highest percentage attending university (16.4 per cent). This is followed by 13.1 per cent and 8.9 per cent of graduates from community service programs and business programs respectively Graduates of certificate programs were the most likely to go on to college, whereas advanced diploma graduates were the most likely to go on to university.

Table 3 examines the educational destination of graduates, full and part time, according to the different credentials as offered by the particular sector. The Graduate Satisfaction Survey, asks respondents to identify the credential in which they are enrolled. For purposes of this report, and further discussion, the possible credential is defined as either a degree or a non-degree. In the case of those attending a college, a non-degree could be a college certificate, a two year diploma, an advanced diploma or a graduate certificate. For those attending university, a non-degree allocates enrollment in a diploma or certificate program. Differences in postsecondary participation are assessed according to the source of funding, credential attained, region of college, and program completed.

Table 3. Sector and credential of 2006-07 graduates, full and part time, by funding, credential, region and program

	University Degree	University non-degree	Collaborative degree	College Degree	College non-degree	# of Respondents
Funding						
International	32%	3%	5%	8%	52%	267
Ministry (non-international)	24%	4%	7%	3%	62%	8623
Credentials						
Certificate	9%	2%	6%	4%	80%	3386
Diploma	28%	5%	6%	2%	58%	4015
Advanced Diploma	46%	5%	12%	3%	34%	1285
Graduate Certificate	33%	7%	9%	2%	50%	221
Region						
Central	28%	4%	7%	4%	57%	1964
Eastern	20%	6%	6%	2%	65%	1577
Metro	33%	5%	9%	3%	50%	2467
Northern	14%	4%	6%	2%	74%	1198
Southwestern	18%	2%	6%	2%	72%	1723
Program						
Business	32%	5%	7%	2%	55%	1571
Community service	41%	8%	9%	2%	41%	1695
Creative and Applied Arts	18%	3%	5%	5%	69%	1013
Health	19%	4%	8%	2%	67%	526
Hospitality	10%	1%	2%	7%	80%	397
Preparatory/ Upgrading	17%	3%	10%	3%	68%	2282
Engineering/ Technology	17%	2%	4%	3%	74%	1449

Certificate programs consist of both one year vocationally specific programs (such as retail florist) and one year preparatory programs primarily designed for entry to other college programs. Therefore, not surprisingly, three quarters of certificate graduates who furthered their education, entered a college non-degree program. Only nine per cent of certificate graduates who went on enrolled in a university degree program, another six per cent pursued a collaborative program. Of the Ontario college advanced diploma graduates pursuing further education, 46 percent enrolled in a university degree program, considerably more than diploma graduates (28 per cent).

An examination of graduates pursuing further education by region shows that those from Metropolitan Toronto are more likely to enroll in a university degree program. They are also slightly more likely to enroll in a collaborative program. In contrast, those graduates from the northern region are more likely to enroll in a college non-degree program.

Similarly, 40 percent of graduates from community service programs furthering their education are enrolled in a university degree program, whereas 74 per cent of graduates from hospitality programs are enrolled in a college non-degree program. Finally, a larger percentage of international students are pursuing degrees both at university and college, after attaining a college credential, as compared to other students.

Overall – by credential

Table 4 below displays the top programs in terms of the number of graduates who continue their education. The percentage represents each program's share of the population attending a college or a university on a full or part time basis. These 10 programs represent 42 per cent of all graduates pursuing further education. Simultaneously, the columns show each program's share of the population of the credential within each sector. In this list, two college certificate programs, general arts and science (1-year) and preparatory health sciences, constitute the highest percentage of graduates who continue in some form of postsecondary education. Early childhood education and general arts and science (two- year), are third and fourth overall, however, these two programs make up the largest percentage of graduates going on to university programs.   It is also interesting to note that the preparatory health science graduates made up the largest percentage entering a collaborative degree, primarily due to entry to collaborative nursing degree programs. Similarly, graduates of art fundamentals programs make up the largest percentage of graduates entering college degrees, partially attributable to entry into animation and illustration degrees.

Appendix 3 examines the educational destination and credential for the top five programs of origin in terms of the percentage of graduates within each credential. Each section also reports the percentage share of the credential and the total number of programs within each credential with graduates pursuing further education.

Table 4. Top ten programs by sector and credential

Program	University Degree	University Non-degree	Collaborative Degree	College Degree	College Non-degree	total
General arts and science - one-year	7%	7%	6%	10%	10%	9%
Preparatory health sciences	2%	3%	19%	5%	9%	8%
Early childhood education	10%	10%	7%	2%	3%	5%
General arts and science	6%	6%	6%	3%	4%	5%
Police foundations	6%	8%	6%	3%	2%	4%
Art fundamentals	1%	2%	1%	12%	4%	3%
Social service worker	5%	9%	3%	1%	1%	3%
Business administration	5%	3%	4%	1%	1%	2%
Business administration - accounting	4%	3%	4%	1%	1%	2%
Business - accounting	2%	2%	1%	1%	2%	2%
Total (top 10 programs)	49%	51%	58%	38%	37%	42%

Further Education - College

The largest percentage of those returning to school, as shown in Figure 1 above, pursue a college credential, particularly a college non-degree. Table 5 below shows that overall, 82 per cent of those graduates return to their own college and only 12 per cent are enrolled in a different college of applied arts and technology. The percentage does vary by college, ranging from 68 per cent returning to Canadore to 94 per cent returning to Boréal.

Table 5. College destination of graduates by College of origin, 2006-07.

College	Returned to Own College	Returned to a Different CAAT	Other College (Non-CAAT)	Number attending college
Algonquin	88.7%	7.4%	3.9%	513
Boréal	93.5%	5.4%	1.1%	93
Cambrian	90.6%	7.2%	2.1%	470
Canadore	68.3%	22.2%	9.5%	126
Centennial	83.5%	11.1%	5.3%	243
Confederation	90.4%	6.4%	3.2%	157
Conestoga	83.6%	9.3%	7.1%	225
Durham	78.2%	15.2%	6.6%	211
Fanshawe	83.3%	11.4%	5.3%	773
Georgian	75.9%	19.2%	5.0%	261
George Brown	82.3%	13.4%	4.3%	605
Humber	84.1%	10.9%	5.0%	497
La Cité	76.0%	8.3%	15.7%	121
Lambton	70.0%	21.4%	8.6%	140
Loyalist	84.7%	10.0%	5.2%	249
Mohawk	85.6%	8.1%	6.3%	285
Niagara	74.5%	16.2%	9.3%	259
Northern	75.5%	18.1%	6.4%	94
Sault	75.2%	13.3%	11.5%	113
Seneca	77.9%	15.2%	7.0%	429
Sheridan	71.3%	20.0%	8.8%	581
St. Lawrence	74.0%	18.6%	7.4%	204
Fleming	77.5%	15.3%	7.2%	249
St. Clair	90.4%	4.4%	5.3%	436
Total	81.7%	12.4%	6.0%	7334

Table 6 displays the distribution of the percentage of graduates entering a college program according to the different program types, credentials, and college region. Younger graduates were far more likely to return to college for further education, with over one quarter of graduates under 22 returning. The enrollment patterns of males and females were fairly similar, with males slightly more likely to return to college.

Graduates from the northern and southwest region were most likely to return to college after graduation, with the southwestern region increasing the most since 2002. Conversely, only 12-13 percent of graduates from the Metro Toronto region pursue further education at a college, a proportion that has remained stable during the period of study.

In terms of program area, as would be expected, graduates of preparatory/ upgrading programs were the most likely to return to college, with over half continuing. The percentages of graduates of hospitality programs returning to college has increased the most of all program areas, from 13% to 20% of graduates now furthering their education at a college.

Table 6. Percentage of graduates returning to college by demographic and program characteristics, 2002- 2007 graduates

	2002	2003	2004	2005	2006	2007
Number of graduates	5,790	6,066	6,886	7,302	7,232	7,333
Percentage of graduates	15.7	15.7	16.3	16.5	16.2	17.0
Age						
Under 22	25.7	26.8	27.0	25.6	25.2	28.1
Between 22 and 25	13.2	12.4	12.8	12.8	12.5	12.9
Older than 25	12.3	12.0	11.9	12.7	12.2	12.3
Gender						
Female	14.9	15.3	15.5	16.1	15.8	16.7
Male	16.7	16.1	17.4	17.0	16.8	17.5
College Region						
Central	14.9	15.3	15.5	16.1	15.8	16.7
Eastern	16.7	16.1	17.4	17.0	16.8	17.5
Metro	12.4	11.9	13.0	12.6	13.2	13.1
Northern	23.6	21.5	24.3	23.8	22.5	25.1
Southwestern	16.5	18.7	20.1	21.7	20.1	21.9
Program Type						
Business	13.8	12.8	13.1	13.0	12.5	12.7
Community service	11.3	10.5	11.7	10.6	10.2	10.8
Creative & applied arts	19.3	19.3	18.7	17.6	17.3	17.0
Health	12.4	9.6	9.2	10.2	9.0	9.8
Hospitality	13.2	15.4	17.5	18.7	19.5	20.1
Preparatory/upgrading	49.7	55.9	53.2	54.9	53.5	56.7
Engineering/technology	16.9	16.7	17.9	17.3	16.5	16.7
Credential						
College certificate	31.0	33.4	36.7	37.4	39.5	41.8
Diploma	15.6	14.2	14.7	14.0	13.5	14.3
Advanced diploma	8.7	8.3	7.9	7.8	7.2	7.5
Graduate certificate	6.8	6.1	6.7	8.2	6.8	5.6
College degree						6.2

Graduates of college certificate programs were enrolling in additional college credentials at the highest rate, almost three times higher than those from diploma programs. As well, the percentages have increased from 31 to 42% over the study period, whereas the percentage of graduates moving on from other credentials has remained stable. Since preparatory/upgrading programs comprise a large proportion of one year certificate programs, this would be expected.

Indeed, the preparatory/upgrading certificate programs appear to be performing as designed with the bulk of its graduates pursuing another college program. A list of the different programs into which the majority of graduates entered ranged from horticulture, to animal care, to public relations, and to architecture. In total, preparatory/upgrading graduates enrolled in 47 different program areas offered at the colleges in Ontario; however, more than 40 per cent were enrolled in health related programs with nursing attracting the largest number within that category (more than half) (Table 7). Interestingly, many preparatory/ upgrading graduates appeared to re-enroll in the same program area. However, a closer look at the data indicates that much of this movement is from graduates of one year General Arts and Science (GAS) programs who have likely transferred to the two- year GAS diploma[2].

Table 7. College program destination of preparatory/upgrading graduates, 2006-07.

	Frequency	Percent
Business	171	9.9
Community service	175	10.1
Creative and Applied Arts	177	10.2
Health	749	43.2
Hospitality	24	1.4
Preparatory/Upgrading	257	14.8
Engineering/Technology	180	10.4
Total	1,733	100

In other program areas, graduates largely continued study within their particular area. For example, 77 per cent of graduates from media programs re-enrolled in another media program; and 76 per cent of law and security graduates continued their college education in the same area. The data does not ascertain the type of credential into which the graduate has re-enrolled. The percentage of diploma students continuing would suggest that diploma students are continuing in an advanced diploma[3].

In general, therefore, graduates largely continued their education at the same college and in many cases the same area of programming.

Further Education - University

The Graduate Satisfaction Survey has been tracking the number of students enrolled in further postsecondary, discerning between those who are continuing at a university and those

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[2] For the 2008-09 graduates, this type of transition is specifically asked about in the survey.

[3] The type of college credential was not asked of the 2006-07 graduates, but was included for 2008-2009 graduates.

furthering their education at a college. Figure 2 contains the percentages of graduates attending university by program type and year.

Figure 2. Percentage of all graduates attending university by program type, 2001-02 to 2006-07
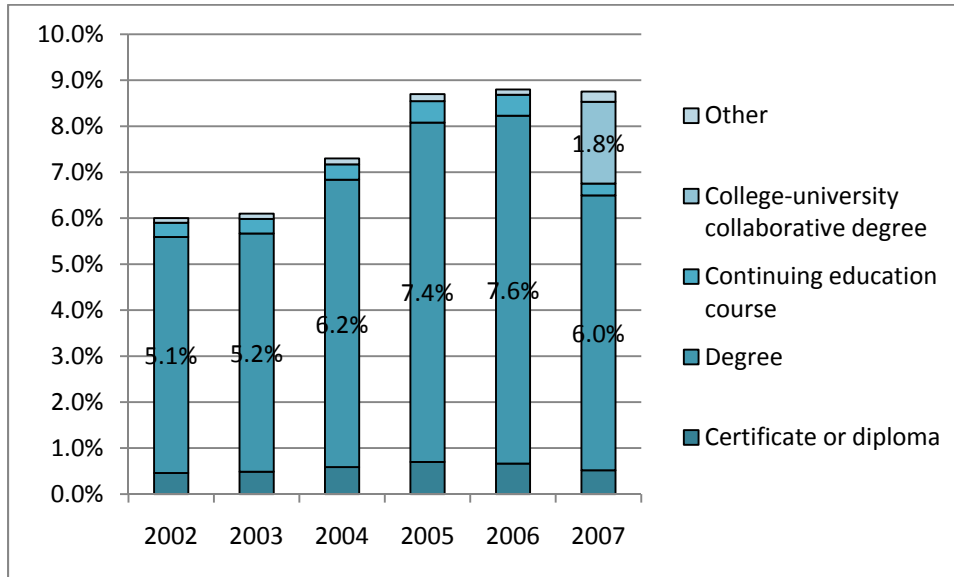
The percentage and number of college graduates going on to university after graduation from a college program has increased steadily since 2001-02, with the majority enrolling in degree programs. However, overall university attendance dropped by 0.8 per cent in 2006-07. This reduction may be explained by the inclusion of alternative destination responses in the two most recent surveys. For example, since 2006-2007 graduates have been asked about their enrolment in college-university collaborative degree programs. Collaborative degree programs, degrees conferred by universities but jointly offered by both a college and university, have existed for a number of years, but the recent proliferation of these programs has expanded opportunities for degree attainment.

Overall, the number of students enrolled in a degree program, including college, university or a college-university collaborative program total 8.5 per cent of all college graduates in 2006-07. This evidence points to an increase in the number of college graduates pursuing a degree, primarily at a university, including collaborative and college degree programs.

Which graduates are attending university?

Table 8 contains information on college graduates attending university by various characteristics. Overall, the percentage and number of graduates attending university increased between 2002 and 2006, with a slight decrease in 2007.

Table 8. Percentage of graduates enrolled in university by demographic and program characteristics, 2001-02- 2006-07 graduates

	2002	2003	2004	2005	2006	2007
Number of graduates	2,231	2,377	3,087	3,840	3,937	3,442
Percentage of graduates	6.0	6.1	7.3	8.7	8.8	8.0
Age						
Under 22	8.3	8.4	10.6	13.1	12.7	11.1
Between 22 and 25	7.4	7.4	8.5	9.3	9.3	8.6
Older than 25	2.9	3.0	3.1	3.6	4.3	4.3
Gender						
Female	6.4	6.5	7.5	9.0	9.1	8.2
Male	5.6	5.6	7.0	8.2	8.6	7.7
College Region						
Central	5.1	5.5	7.3	8.3	8.7	8.2
Eastern	5.4	5.5	6.4	8.5	8.0	7.0
Metro Toronto	7.7	7.6	8.3	10.1	10.5	9.8
Northern	5.5	5.4	7.0	8.6	7.6	6.6
Southwestern	5.5	5.8	6.6	6.9	7.5	6.2
Program Type						
Business	6.6	7.2	8.4	9.4	9.8	8.9
Community service	10.5	10.7	12.6	16.4	14.1	13.1
Creative & applied arts	3.7	3.5	4.2	4.9	5.4	5.1
Health	2.3	2.3	2.1	1.5	3.2	3.3
Hospitality	3.4	3.8	2.9	3.9	3.0	2.6
Preparatory/upgrading	15.2	14.6	20.2	18.7	19.7	16.4
Engineering/technology	4.2	3.7	4.3	4.6	5.0	4.3
Credential						
College certificate	2.3	3.4	5.6	5.0	6.3	5.4
Diploma	7.0	6.7	8.1	10.2	9.1	8.4
Advanced diploma	7.7	8.0	8.2	10.0	11.6	10.7
Graduate certificate	3.1	2.9	3.0	3.4	4.6	4.4
College degree						1.9

A larger percentage of those under 22 are attending university and this group has increased at a faster rate than other age groups. The gap has increased dramatically from 2001-02 to the 2004-05 academic year, a difference of 4 percentage points. Females are also slightly more likely to go on to university than males.

The metro Toronto colleges consistently have the highest percentages of graduates going on to university. The colleges from the central region have witnessed an increase and have moved closer to matching the percentages of those in metro Toronto. The largest colleges are in metro

Toronto, home to York and Ryerson University, which have become the destination of choice for a large number of college graduates (CUCC, 2007). Data from earlier studies have shown that most college graduates attend a local university, and certainly, those in Toronto have a greater selection of institutions in order to pursue their academic interests. However, there is also evidence of geographic movement to pursue further education. The boundaries of the central region surround metro Toronto, making the universities within the city accessible to those college graduates. As well, Toronto based universities are expanding outside of and to the edge of Toronto boundaries to attract new students. A further analysis of geographic mobility is discussed later in this report.

In terms of college program area, consistent with the discussion above on specific programs, the highest percentage of graduates attending university originated from preparatory/upgrading Ontario certificate and diploma programs. The pattern of attendance, however, is rather inconsistent, climbing to a high of 20 per cent in 2003-04 and falling in 2006-07 to a level only one percentage point above the 2001-02 figure.

Programs in the community service field had the second highest percentage of graduates attending university along with business programs. Community service programs peaked in 2004-05, followed by a drop in the subsequent two surveys. Business programs exhibited a more consistent, steady increase since the 2001-02 survey, and declined along with the others in the latest results. For both program areas, the percentage of graduates attending university in the 2006-07 survey is approximately one-third higher than was recorded in 2001-02. On the other hand, the percentage of graduates attending university from health, engineering/technology, hospitality, and creative and applied arts has changed little over the years and are all fairly consistently below five per cent.   What remains unclear is whether this pattern is the result of a perceived or real lack of affinity with university programs, lack of favourable transfer programs, lack of interest in transferring or a close alignment with the labour market.

An earlier discussion examined the specific programs within each of the college credentials. Table 9 below shows the individual program's share of college graduates, regardless of credential, attending any university, degree and non-degree programs. The list explains the dominance of community and social service programs as the field of study most likely to send graduates for university. Early childhood education, police foundations, and social service worker are first, third and fifth in the ranking of highest number of students. Preparatory is dominated by the general arts and science program, both one and two year, ranking second and fourth while the preparatory health sciences program was situated eighth. Finally, the variety of business administration programs also makes this area a prime starting point for pursuing university. These 10 programs account for more than half of all graduates attending university six months after graduation.

Table 9. Percentage of all graduates attending university by top ten programs, 2006-07

Program	Number	Percentage
Early childhood education	354	10.28
General arts and science - one-year	230	6.68
Police foundations	227	6.60
General arts and science	217	6.30
Social service worker	196	5.69
Business administration	164	4.76
Business administration - accounting	146	4.24
Preparatory health sciences	90	2.61
Child and youth worker	74	2.15
Business administration - marketing	73	2.12
Total	1771	51.43

College origin and university destination

For graduates furthering their education at a university, a breakdown by college of origin and university destination was conducted. Figures 3 and 4 contain the results for the colleges of origin in two ways. Figure 3 compares colleges on the basis of the system wide share, showing that the ten colleges shown make up 70% of system wide transfer. It is fairly consistently shown that GTA colleges have the highest system wide share of college graduates going on to university. The detailed results for the 2006-07 graduates can be found in Appendix 5.

Figure 3. Distribution of college graduates attending university, 2001-02 to 2006-07
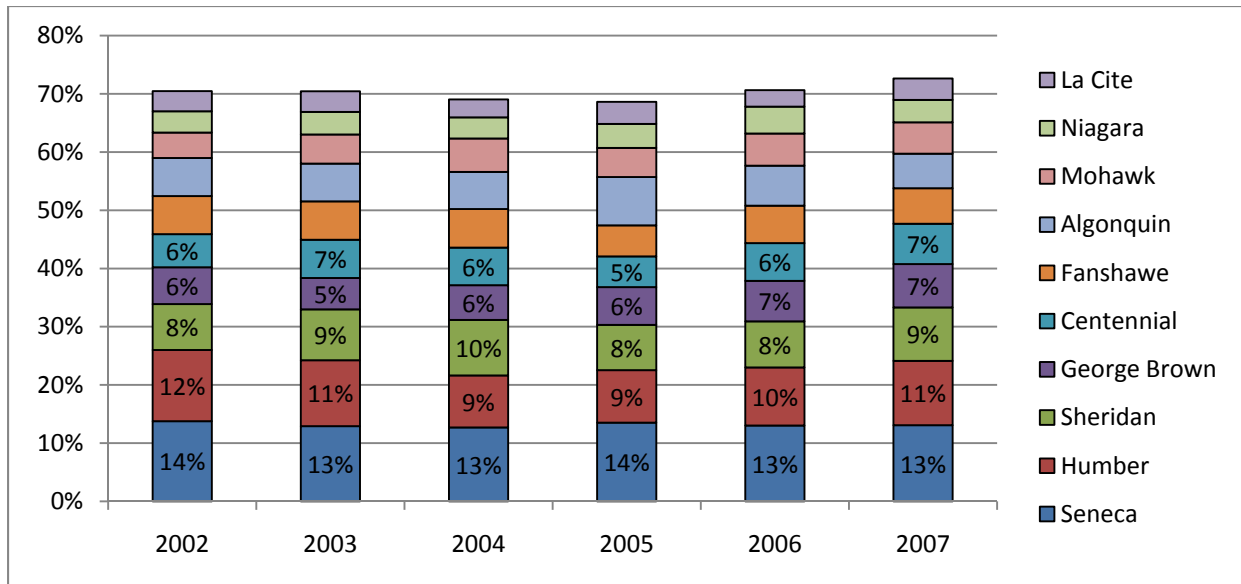
A second way of comparing the amount of transfer to university between colleges is to compare the percentage of college graduates who have enrolled in university. Figure 4 contains these results for two years, 2001-02 and 2006-07. The results show that the range from lowest to highest has increased since 2001-02, from approximately 6 per cent to 11 per cent in 2006-07. The majority of colleges have seen an increase in the percentage of graduates continuing on to university, with Centennial and Georgian Colleges showing the greatest increases.

Figure 4. Percentage of college graduates attending university, 2001-02 and 2006-07 graduates
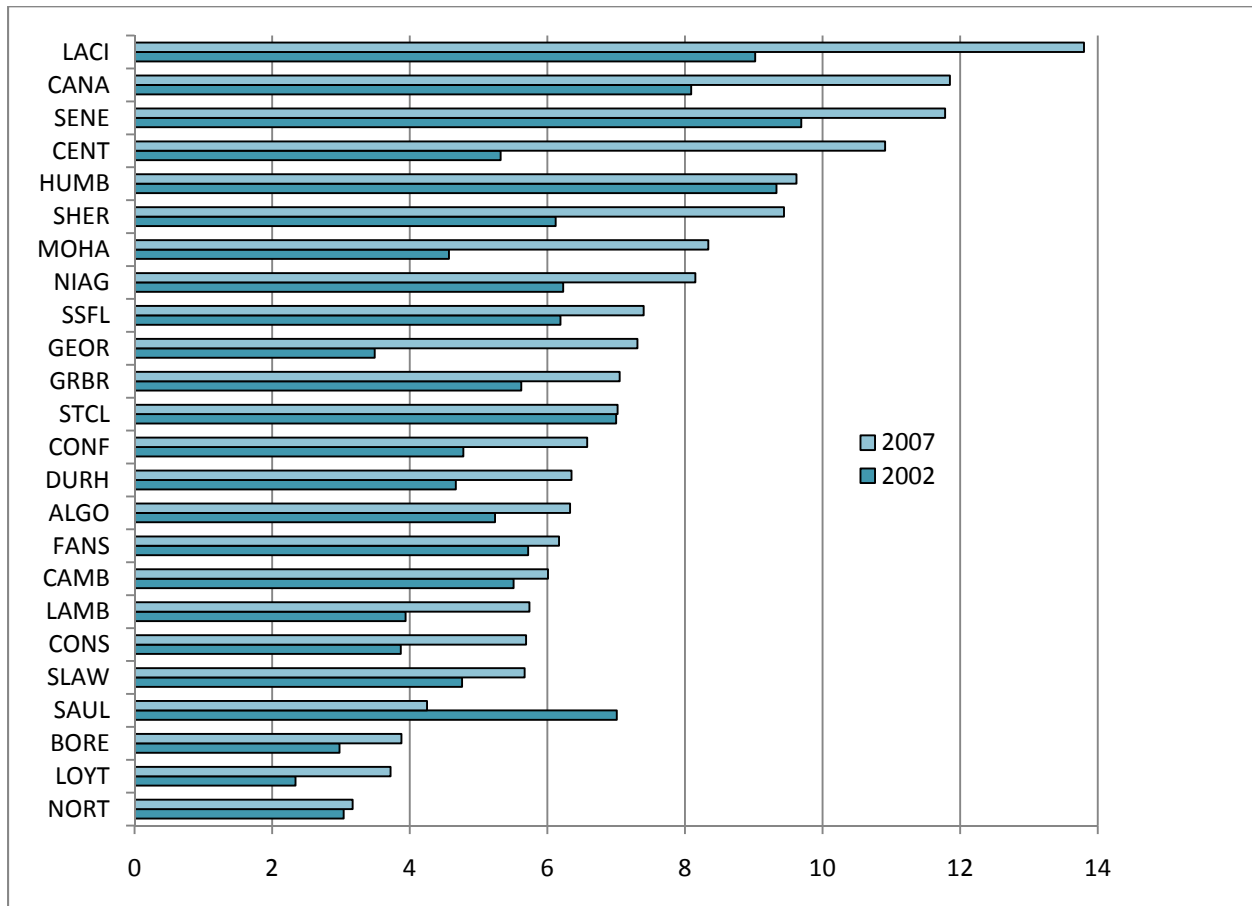
*Colleges are shown from the top in rank order, based on 2006-07 data.

La Cite, the French language college located in Ottawa, and Canadore College, located in North Bay, have the highest percentages of graduates going on to university. La Cite, in addition to having the highest transfer rate, also has the highest proportion (32%) of graduates enrolling at a university outside of Ontario. As a French language college that neighbours Quebec, it could be surmised that many of these graduates are attending university in Quebec. Canadore College's high figures may in part, be attributed to their shared campus with Nipissing University; the two schools have a formal agreement, which provides degree completion opportunities for all diploma graduates. Additionally, the GTA colleges of Seneca, Centennial, Sheridan, and Humber College also rank highly for their percentage of graduates attending university.

Figure 5 illustrates Ontario's top ten receiving universities for transfer students. These top ten receiving universities account for 80% of Ontario's transfer students. This graph shows several important patterns:

- York University, Ryerson University and "other" university have consistently ranked one, two and three respectively; In combination Ryerson and York accounted for 35 per cent of all college graduates attending university; York University has had the highest percentage in each of the years illustrated, ranging from 17 to 21 per cent;

- "Other" university experienced a significant drop of percentage share in 2006-07, presumably due to OCAD and UOIT being included in the list of options for respondents.

Figure 5. Percentage share of Ontario college graduates attending selected universities, 2001-02 to 2006-07
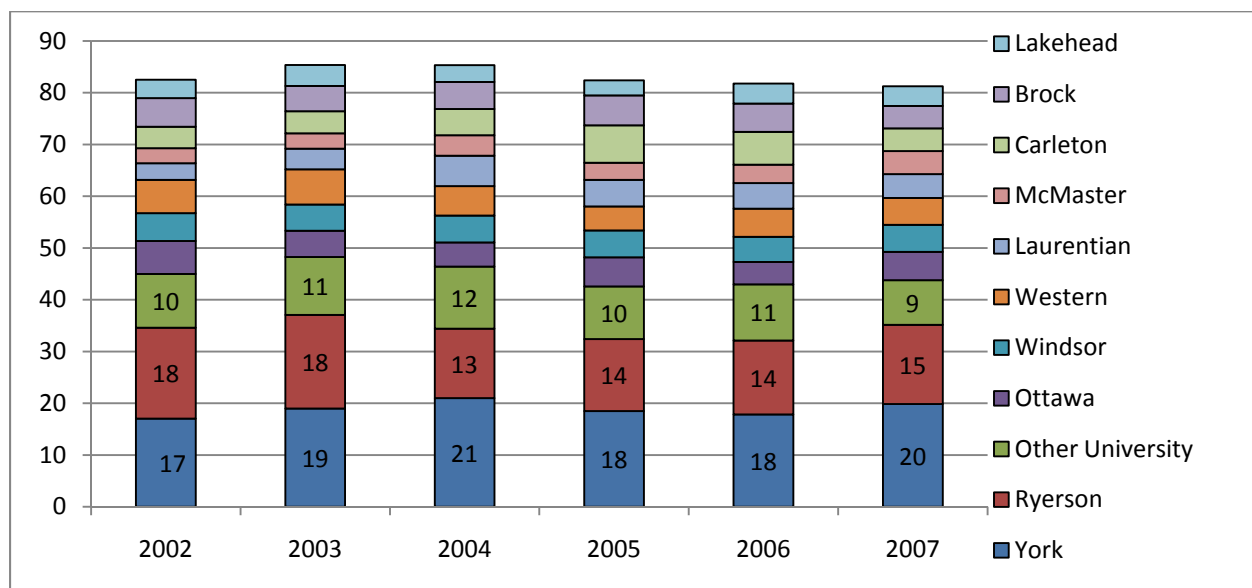
Even with the inclusion of OCAD and UOIT as specific choices, "other" university still accounted for almost nine per cent of the university bound college graduate, more than the combined total of the six Ontario universities with the lowest percentage of transfer students. The initial reaction to this figure is to assume that these 317 graduates are attending a university outside of Ontario. Another explanation could be that the respondents named an affiliate institution which was not on the set list and was unfamiliar to the surveyor, such as Algoma University College (which until recently was affiliated with Laurentian university) or King's University College (affiliated with Western). Other options in Ontario for degree level studies include Royal Military College or the private, mainly religious, institutions such as Redeemer University College. Additionally, the option of enrolling in distance learning at universities such as Athabasca University in Alberta, can mean that transfer students may be staying in Ontario, but enrolled out of province. Whether or not these graduates are enrolling in an Ontario university is important in assessing the movement of students. Should the "other" category actually represent out-of-province universities, then the message from graduates would appear to be

that there are better opportunities elsewhere and they will take advantage of these when possible.

Another important way to compare the relative amount of transfer is to take into account the share of transfer student activity. When the amount of transfer is adjusted for enrolment (share of full time transfer students divided by share of FTE enrolment), Ryerson and Lakehead had the highest amount of transfer, followed closely by two northern Ontario universities, Laurentian and Nipissing, with York having the fifth highest amount of transfer, relative to undergraduate enrolment.

Table 10. Percentage of Ontario university transfer students relative to share of Ontario university enrolment

	% full time Ontario transfer	% of Ontario FTE	Share of FT Transfer/ Share of FTE enrolment
York	23%	12%	*2.0*
Ryerson	14%	5%	*2.5*
Ottawa	6%	8%	0.8
Western	6%	9%	0.7
Windsor	6%	4%	1.5
Laurentian	5%	2%	*2.3*
Carleton	5%	5%	1.0
Brock	5%	4%	1.2
Lakehead	5%	2%	*2.5*
McMaster	4%	6%	0.7
Trent	4%	2%	1.8
Toronto	3%	16%	0.2
Guelph	3%	6%	0.6
Nipissing	3%	1%	*2.4*
Waterloo	2%	6%	0.3
UOIT	2%	1%	1.5
Wilfrid Laurier	2%	4%	0.4
OCAD	1%	1%	1.6
Queens	1%	5%	0.1

Previous evidence, however, suggests that college graduates tend to enroll in local institutions to pursue further education. An attempt to determine the extent to which college graduates attending university are moving to pursue further education is documented in Table 11 below. The regional boundaries are defined according to the first digit of the main campus of the college's or the university's postal code (Appendix 1). Mobility within or among the regions is analyzed by age, gender and program type.

Overall, it appears that college graduates are attending university within the same region as the college from which they completed their studies, likely a function of a desire to stay close to home as well as regional transfer agreements. The numerical split shows that 64 per cent stay within the region while the remaining 36 per cent enroll at a university in another region. The percentage staying within the region would have been higher except for the results from the central region where the pattern is in the opposite direction. Only 30 per cent of graduates stay within the region and 70 per cent apparently leave.

The central region is comprised of Durham, Mohawk, Niagara, Georgian and Sheridan colleges. The first three have neighbouring universities that receive the largest number of graduates: graduates from Durham attend the University of Ontario Institute for Technology; Mohawk graduates attend McMaster University; and Niagara College graduates attend Brock University. Georgian College, on the other hand, does not have a local university but hosts a university partnership centre with representation from a number of Ontario universities and elsewhere. The largest number of graduates identified Laurentian and York as the universities in which they are enrolled, whose main campuses are in Sudbury and Toronto respectively; however, each has a branch operation hosted by Georgian College's University Partnership Centre.

Sheridan College on the other hand does not have a university within its region but is within commuting distance of several in the cities of Toronto, Hamilton and Guelph. The largest receiving universities for Sheridan graduates, in order, are York University, Ryerson University, and the University of Toronto. The latter has a campus in Mississauga which is within the region but would not have been listed separately. Given that Sheridan College is the largest of the central region colleges with the greatest number of graduates pursuing a degree, it is not difficult to understand how the ratio of graduates staying within the region to those leaving is opposite to the rest of the province.

The table also examines geographic mobility by age and gender. Overall, younger students, those identified as under 22, exhibited a greater propensity to attend university in another region. The pattern, however, does vary by region. In metro Toronto, the differences between the three age groups are minimal. Conversely, graduates from southwestern colleges older than 25 are more likely to leave the region in greater percentages than those between 22 and 25, and those under 22. Graduates from colleges in the northern region display the largest difference between age groups with a 14 percentage point spread between those under 22 and those older than 25 staying within the region.

There exists, as well, a difference between male and female graduates. Overall, 66.1 per cent of female graduates enroll at a university within the region, compared to 61.5 per cent of males. These differences do not vary significantly in the separate regions except in metro Toronto. The figures show that 85.6 per cent of female graduates continue their education within the region, as compared to only 69.9 per cent of males. One possible explanation of this variance could be the number of graduates from engineering programs who leave the region. A cross-tabulation with program type shows that half of engineering students from metro Toronto colleges leave the region. In fact, of the fifty metro Toronto graduates who transferred from engineering diploma programs to an engineering degree, over half went to either Lakehead or McMaster, both of which have transfer agreements in engineering.

Graduates of preparatory programs have a tendency to remain within their region in noticeably greater numbers than graduates from other program types. Overall, 74.4 per cent enroll at a university within the same region, a number reduced by the impact of the central region. Nevertheless, even here, 42 per cent remain from the preparatory program in stark contrast to 30 per cent of all the graduates in the central region. The availability of opportunities for graduates of preparatory programs, therefore, appears to be more widely dispersed throughout the province.

Table 11. Region destination by age categories, gender, program type and college origin

		Central		Eastern		Metro Toronto		Northern		Southwestern		All regions	
		Other Regions	Same Region	Other Regions	Same Region	Other Regions	Same Region	Other Regions	Same Region	Other Regions	Same Region	Other Regions	Same Region
Age	Under 22	70.7	29.3	31.3	68.7	21.3	78.7	26.0	74.0	23.2	76.8	37.8	62.2
	between 22 and 25	70.1	29.9	33.9	66.1	20.9	79.1	19.4	80.6	25.3	74.7	35.4	64.6
	Older than 25	69.3	30.7	34.4	65.6	23.0	77.0	12.1	87.9	29.2	70.8	33.9	66.1
Gender	Female	71.4	28.6	33.3	66.7	14.4	85.6	19.1	80.9	23.0	77.0	33.9	66.1
	Male	68.0	32.0	31.4	68.6	30.1	69.9	23.8	76.2	27.0	73.0	38.5	61.5
Program Area	Business	80.3	19.8	37.5	62.5	17.9	82.1	27.8	72.2	31.5	68.5	36.9	63.1
	Community Service	70.3	29.7	24.8	75.2	23.2	76.8	20.7	79.4	23.2	76.8	36.1	63.9
	Creative and Applied Arts	81.4	18.6	52.2	47.8	13.7	86.3	7.7	92.3	35.0	65.0	43.7	56.3
	Health	66.7	33.3	71.4	28.6	5.3	94.7	33.3	66.7	38.5	61.5	34.1	65.9
	Hospitality	100.0	0.0	60.0	40.0	43.5	56.5	33.3	66.7	0.0	100.0	53.3	46.7
	Preparatory/ Upgrading	57.6	42.4	20.3	79.7	12.9	87.1	19.2	80.8	13.8	86.2	25.6	74.4
	Engineering/ Technology	50.0	50.0	36.2	63.8	50.0	50.0	17.7	82.4	30.0	70.0	42.3	57.7
Credential	1 yr certificate	63.0	37.0	24.0	76.0	13.6	86.4	13.9	86.1	14.3	85.7	23.8	76.3
	2 yr diploma	67.8	32.2	34.1	65.9	22.5	77.5	24.7	75.3	28.5	71.5	38.6	61.4
	3 yr diploma	77.4	22.6	29.4	70.6	23.9	76.1	20.0	80.0	24.2	75.8	37.1	62.9
	Graduate certificate	76.5	23.5	52.9	47.1	14.5	85.5	0.0	100.0	50.0	50.0	32.1	67.9
	College degree			100.0	0.0	66.7	33.3			100.0	0.0	80.0	20.0
Total		70.4	29.6	32.7	67.3	21.7	78.3	20.8	79.2	24.9	75.1	36.1	63.9

Summary Part One

The first part of this report was an examination of 2006-07 college graduates pursuing further education at college and university including a selected comparison to previous years, a detailed look at the program of origin, and an accounting of the destination and credential of enrolment. The data shows, among many results, that:

- Since 2001-02, there has been an overall increase in the percentage of graduates continuing their education, particularly for university attendance;

- the largest percentage of students pursuing further education are under 22, began at small colleges in certificate preparatory/upgrading programs, and are enrolled fulltime;

- graduates from metro Toronto colleges were more likely to enroll in a university degree program while graduates from the northern region were more likely to enroll in a college non-degree program;

- 81.7% of graduates continuing their education in a college program returned to the college from which they graduated;

- the combination of one and two year general arts and science programs constituted the highest number of college graduates attending university. The combination of business administration programs was second, and early childhood education was third;

- York University and Ryerson University continue to be the two largest receiving universities, and "other university" ranks third; however when accounting for enrolment Ryerson and the Northern universities enroll the highest amount of college graduates relative to system share of enrolment.

- four colleges exceed 10 per cent of their graduates attending university: La Cité, Canadore, Seneca, and Centennial; and,

- college graduates primarily attend university within the same region as the college from which they completed their studies.

The Transfer Experience

The following section contains the detailed results of the "new" survey questions which were added to the Graduate Satisfaction Survey for the 2006-07 graduates (see Appendix 7).

Reasons for Pursuing Further Education

Once the respondents had identified the institution they were attending and the program in which they were enrolled, full time and part time students were asked to rate their reasons for continuing. A list of 12 reasons were provided and respondents were asked to state whether each one was a "major", "minor" or "not a reason" for returning to postsecondary education. Table 12 contains the responses by reason, for full time students only, in order of overall importance. The results show, that with a few exceptions, the reasons for continuing their education are similar for each destination.

Table 12. All reasons for returning to continue with education by destination

		Major Reason	Minor Reason	Not a Reason	Number of respondents
More opportunities for career advancement	**College**	85.3%	10.3%	4.4%	5906
	University	90.5%	7.2%	2.3%	2884
	Others	88.9%	8.0%	3.1%	485
To get diploma/ certificate/ degree	**College**	73.8%	17.9%	8.3%	5920
	University	88.1%	9.0%	2.9%	2888
	Others	78.3%	12.1%	9.6%	488
Upgrade/ improve skills	**College**	76.6%	17.1%	6.3%	5909
	University	72.2%	21.7%	6.2%	2885
	Others	73.0%	19.7%	7.4%	488
Interest in further/ more in depth training in field	**College**	76.1%	16.0%	7.9%	5907
	University	71.9%	19.1%	8.0%	2882
	Others	71.9%	18.3%	9.9%	487
Gain theoretical knowledge/ broader education	**College**	72.1%	22.0%	5.9%	5906
	University	70.0%	24.3%	5.7%	2884
	Others	73.1%	19.1%	7.8%	487
Potential for higher income	**College**	62.8%	21.0%	16.2%	5904
	University	72.9%	19.6%	7.5%	2881
	Others	70.1%	17.1%	12.8%	485
Needed for professional designation	**College**	50.0%	26.1%	23.9%	5848
	University	57.1%	22.9%	20.0%	2958
	Others	53.4%	23.2%	23.4%	483
Interest in pursuing a different field of study	**College**	38.0%	29.9%	32.2%	5888
	University	29.9%	32.3%	37.8%	2880
	Others	32.2%	27.5%	40.2%	487
There was a formal transfer agreement between your previous and your current program	**College**	31.0%	24.8%	44.2%	5700
	University	45.3%	21.3%	33.4%	2842
	Others	39.1%	20.2%	40.8%	476
Encouragement from others (family members, friends, faculty)	**College**	29.6%	41.1%	29.3%	5907
	University	33.7%	43.4%	22.9%	2884
	Others	34.8%	37.1%	28.1%	488
No work/ job available in your field of study	**College**	19.3%	25.8%	54.9%	5847
	University	13.5%	26.8%	59.7%	2858
	Others	17.9%	24.6%	57.5%	480
Company required/ paid for it	**College**	6.8%	13.9%	79.3%	5869
	University	4.2%	14.5%	81.3%	2867
	Others	10.1%	11.2%	78.7%	483

Regardless of destination, "more opportunities for career advancement" showed the highest percentage of respondents indicating that it was a major reason for attending further postsecondary. For those attending a university, "to get diploma/certificate/degree" or obtaining a credential was a very close second. The "potential for higher income" was third, only marginally better than the remaining possibilities.

The reasons for attending university were clear –respondents wanted a credential for the increased opportunities and the income that it brings. Additionally, the desire to obtain more theoretical and in-depth knowledge was important. The least common responses were also informative. The availability of transfer agreements, a desire to switch to a different field, and lack of job opportunities in their field (60 per cent reported lack of a job was not a reason) were all considered to be relatively unimportant.

The reasons for those attending college were very similar to those attending university, however the potential for a higher income and obtaining a credential were relatively less of a priority. However, some expected differences did not arise. For example those going on to college or university were equally likely to go in order to obtain more theoretical and in-depth knowledge, as well as to upgrade skills.

Table 13 assesses the reasons for graduates to attend a university by looking at the average response by field of study. (Major reason = 3, minor reason = 2, not a reason = 1). The list descends from highest to lowest in accordance with the total average. The results show that there are only slight differences between areas of study. Graduates from hospitality programs who went on to university were slightly less likely to choose higher income, existence of a transfer agreement, and more likely to choose interest in pursuing a different field of study as reasons for pursuing further education.

Table 13. Average score of reasons for pursuing further education by graduates' field of study

	Business	Community Service	Creative &Applied Arts	Health	Hospitality	Preparatory/ Upgrading	Engineering/ technology	Total	Range
More opportunities for career advancement	2.87	2.93	2.80	2.87	2.76	2.88	2.86	2.88	**0.17**
To get diploma/ certificate/ degree	2.87	2.88	2.78	2.76	2.76	2.86	2.84	2.85	**0.12**
Upgrade/ improve skills	2.61	2.68	2.58	2.67	2.62	2.68	2.64	2.65	**0.10**
Gain theoretical knowledge/ broader education	2.56	2.65	2.66	2.66	2.60	2.72	2.68	2.64	**0.16**
Potential for higher income	2.70	2.68	2.43	2.53	*2.20*	2.58	2.67	2.63	**0.50**
Interest in further/ more in depth training in field	2.60	2.65	2.47	2.65	2.39	2.64	2.64	2.62	**0.26**
Needed for professional designation	2.32	2.33	2.22	2.40	2.31	2.47	2.38	2.35	**0.25**
Encouragement from others	2.03	2.13	1.99	1.98	2.07	2.18	2.02	2.08	**0.20**
There was a formal transfer agreement	2.13	2.09	1.84	1.92	1.56	2.01	1.89	2.03	**0.57**
Interest in pursuing a different field of study	1.77	1.91	1.95	1.86	2.36	2.27	1.79	1.92	**0.59**
No work/ job available in your field of study	1.49	1.51	1.54	1.45	1.49	1.63	1.55	1.53	**0.18**
Company required/ paid for it	1.24	1.23	1.22	1.30	1.33	1.25	1.24	1.24	**0.11**
Frequency	680	832	198	121	45	403	277	2556	

In the next series of figures (figures 6 to 9), selected reason categories are divided further according to the type of credential at university or college, for those enrolled in full time studies. The previous analysis compared the reasons graduates further their education by type of institution, the following analysis compares the reasons by both type of credential and institution type.

"More opportunities for career advancement" received the highest percentage of respondents who cited it as a major reason in all three categories. Of the graduates enrolled at a university, however, those in a non-degree program were least likely to identify it as a major reason, even less than those in a college non-degree.

Acquiring the credential in which the respondent was enrolled was the second highest reason for those enrolled in a university program. Even though this category ranked fourth for those continuing in a college program, the respondents who were completing a college degree identified it as a major reason in greater numbers.

Figure 6. Percentage citing "more opportunities for career advancement" by institution and credential
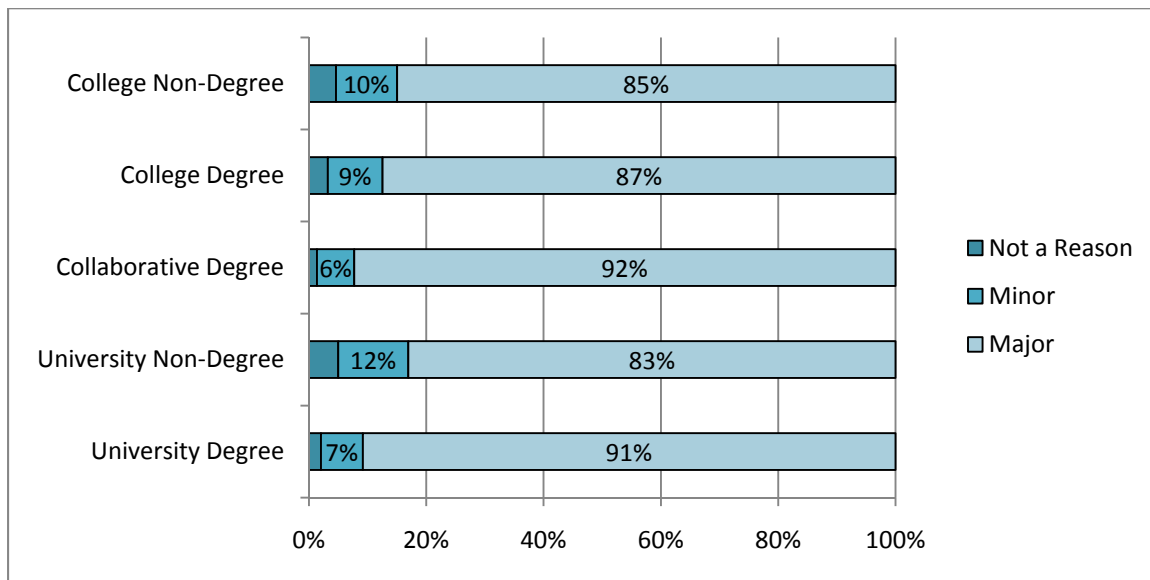
Figure 7. Percentage citing "to get diploma/certificate/degree" by institution and credential
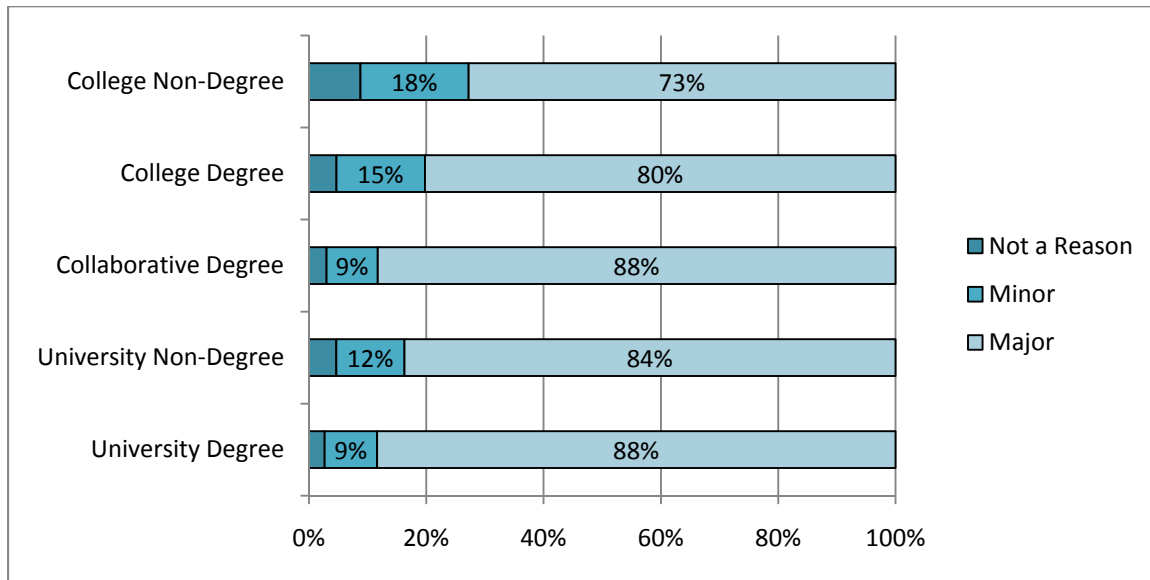
Potential for higher income was greater for those enrolled in a collaborative degree and university degree. Those in a college degree see the potential for higher income; however, they were also the most likely of any group to cite no work or job availability in their field of study as a major reason for continuing their education. Here the percentages are small, but one in five cited it as a major reason.

Figure 8. Percentage citing "potential for higher income" by institution and credential
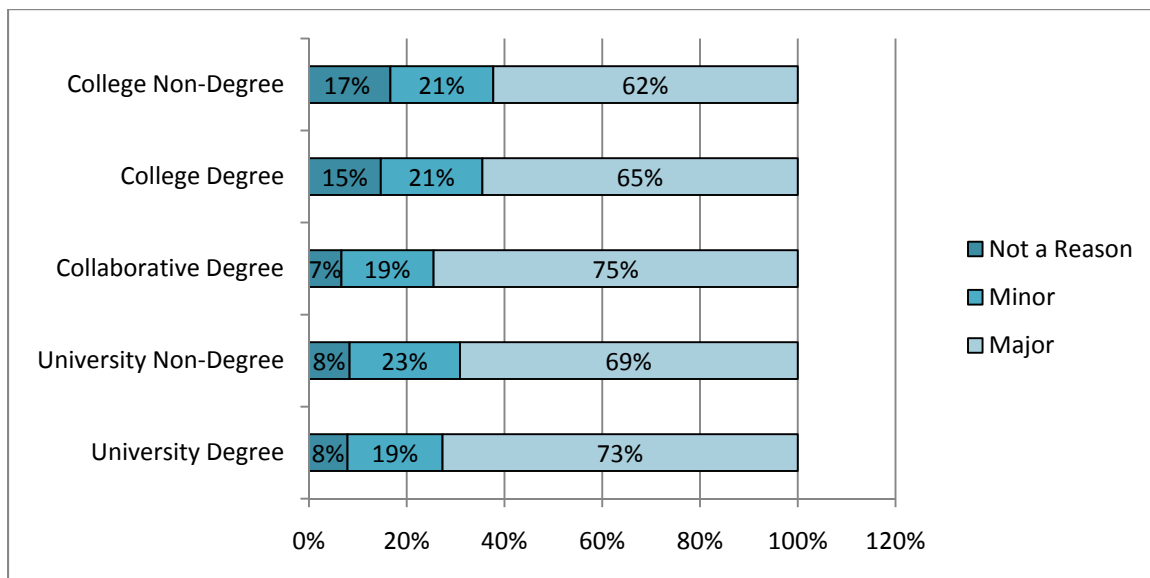
Figure 9. Percentage citing "No work/job available in field of study" by institution and credential
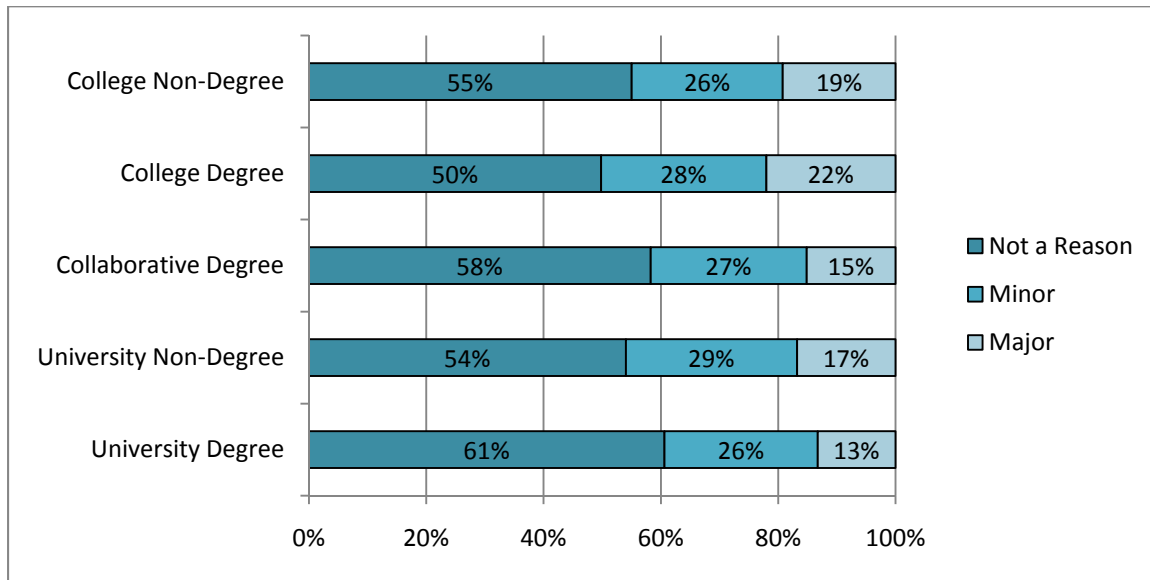
Sources of Information

The Graduate Satisfaction Survey was expanded in order to gain more information about students who continued their education and to inform policy at the college and ministry levels. A key piece in understanding students who transfer is to determine their sources of information.

Figures 10 and 11 divide the respondents according to their destination; the question asks if the items were a "major", "minor" or "not used source" when making plans for further education.

Figure 10. Sources of information for college graduates attending university six months after graduation, 2006-07
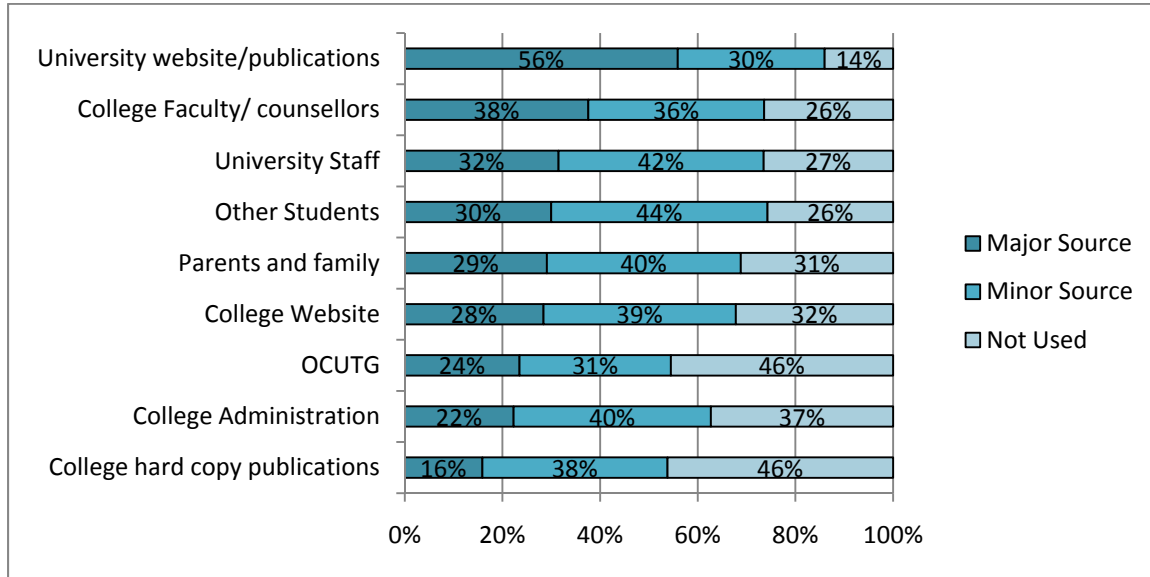
Figure 11. Sources of information for college graduates attending college six months after graduation, 2006-07
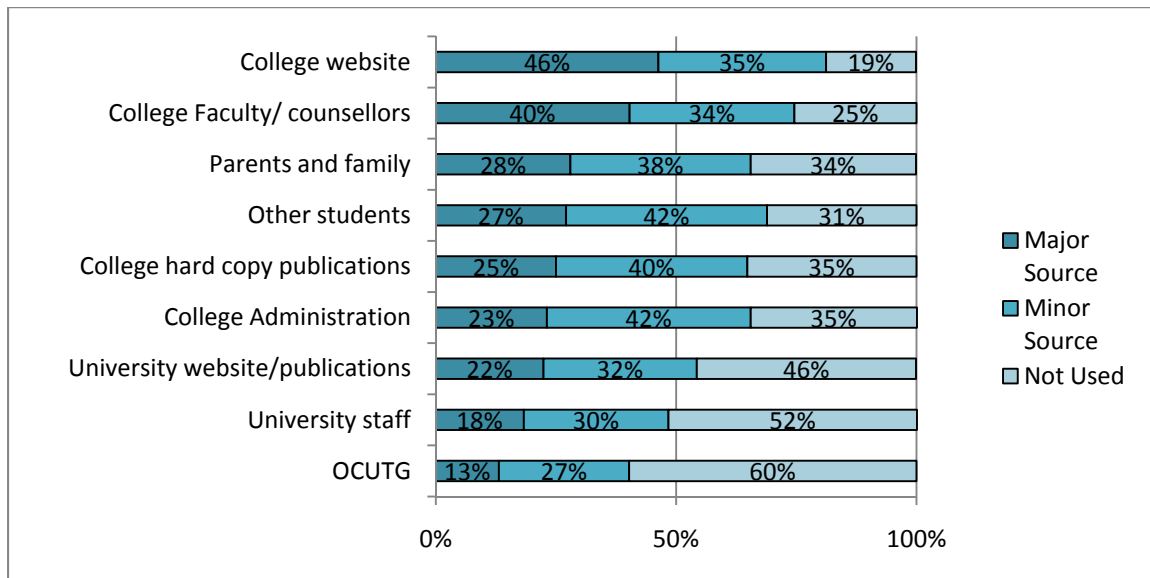
The results indicate that students who transfer are not reliant on any one source of information; rather, they obtain information from college and university material, college and university staff, friends, family and other students. Several points can be gleaned from these responses:

- Websites are the primary major source of information for graduates transferring to either college or university. Those transferring to college are most likely to use the college website, and those transferring to university are most likely to use the university website (or publications).

- For those going on to university, college faculty and counselors are also major sources of information, and more important than university staff.

- College faculty/counselors/coordinators were also a major source for of information for those attending college.

- The percentage of graduates utilizing the Ontario College University Transfer Guide was small. The Ontario College University Transfer Guide was not used by 45.5 per cent of university bound graduates.

- It is interesting to note that those who return to college indicate that they have used university based sources of information; similarly those who go on to university indicate some use of college sources of information. This indicates that college students are researching both college and university options in their decisions about further education. For example, 40 percent of those who furthered their education at a college indicated some use of the OCUTG, which is specific for college to university transfer.

Students attending a university did not receive information from college sources, with the exception of faculty/counselors/coordinators. These graduates consulted the university website and sought information from family and friends. Students continuing in college programs were also influenced by faculty/counselors/coordinators in great numbers, alongside the college website. Regardless of destination or credential, the data suggests college print publications have only a modest influence, perhaps directing the graduate to the website for further information.

In order to determine whether information sources differ according to college program, Table 14 displays the average responses to each of the sources for college graduates attending university. "Major source" was scored as 3, "minor source" as 2, and "not used" as 1. Across all programs, the university website/publications served as the "major source" of information, with college faculty/counselors/coordinators a distant second. The Ontario College University Transfer Guide and other college sources were located at the bottom of the list. Graduates of preparatory and community service programs appear more likely to use a range of sources.

Table 14. Average score for sources of information to pursue further education, by program type

	Business	Community Service	Creative & Applied Arts	Health	Hospitality	Preparatory/ Upgrading	Engineering/ technology	Total
University website/ publications	2.47	2.42	2.56	2.39	2.31	2.41	2.46	**2.44**
College Faculty/ counsellors	2.09	2.14	1.88	1.85	1.87	2.17	1.97	**2.07**
University Staff	1.99	2.11	1.99	1.89	1.9	2.05	2.06	**2.04**
Other Students	2	2.05	2.03	1.85	1.74	2.02	2.02	**2.01**
Parents and family	1.93	2.07	1.98	1.8	2.08	2.07	1.86	**2**
College Website	1.94	1.92	1.93	1.98	1.87	2.02	1.82	**1.93**
College Admin.	1.83	1.86	1.73	1.7	1.62	1.96	1.65	**1.82**
OCUTG	1.9	1.82	1.58	1.57	1.71	1.69	1.64	**1.77**
College hard copy publications	1.69	1.64	1.61	1.65	1.69	1.76	1.63	**1.67**

Timing of Decision

Previous research has shown that a sizeable number of incoming students have aspirations to pursue further education, particularly the pursuit of a degree at a university (Colleges Ontario, 2009). The revised graduate survey attempts to determine the timing of students' decisions to further their education. Students are asked to state whether their decisions occurred before entering college, at the time of enrolment, during their program, or after graduation.

The overall results (figure 12) show that 43 per cent of respondents decided before entering college that they were going to continue their education after their initial program. Another 6 per cent made the decision at the start of their program and 51 per cent of the respondents made the decision during their tenure or immediately thereafter. Graduates who continued on in college or university were similar in their timing of the decision, indicating that a large proportion of those enrolled in college see it as a bridging step to further education, either at a college or university. However, is it also interesting to note that the majority of students decide to transfer after they have started their college program.

Figure 12. Answers to question, "When did you decide that you would further your education after college graduation?" by institution type.
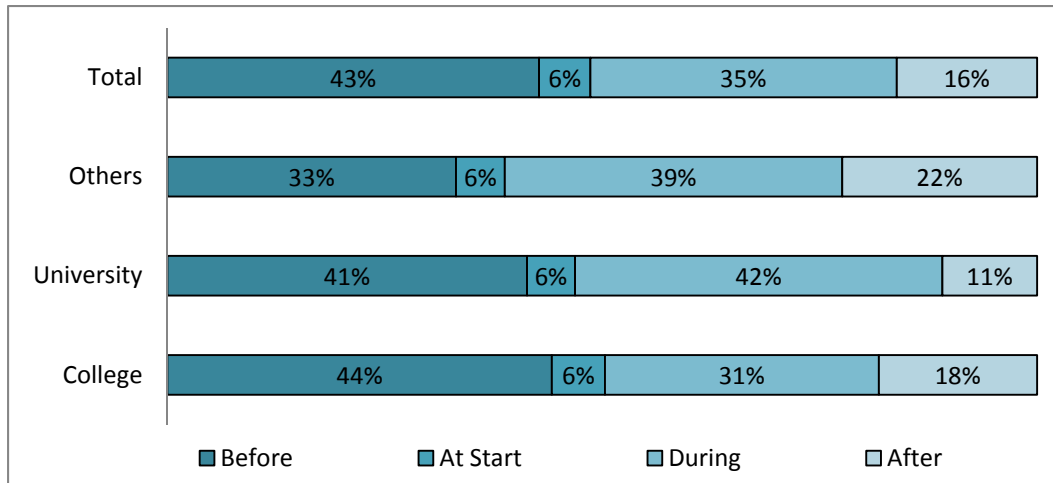
Figure 13 further divides the responses according to institution and type of credential. The patterns are fairly similar across credentials and institutions, however, for degrees offered either completely or partially through the college (collaborative), graduates were more likely to have decided before the start of their original college program.

Figure 13. Timing of decision for further education, by institution and credential
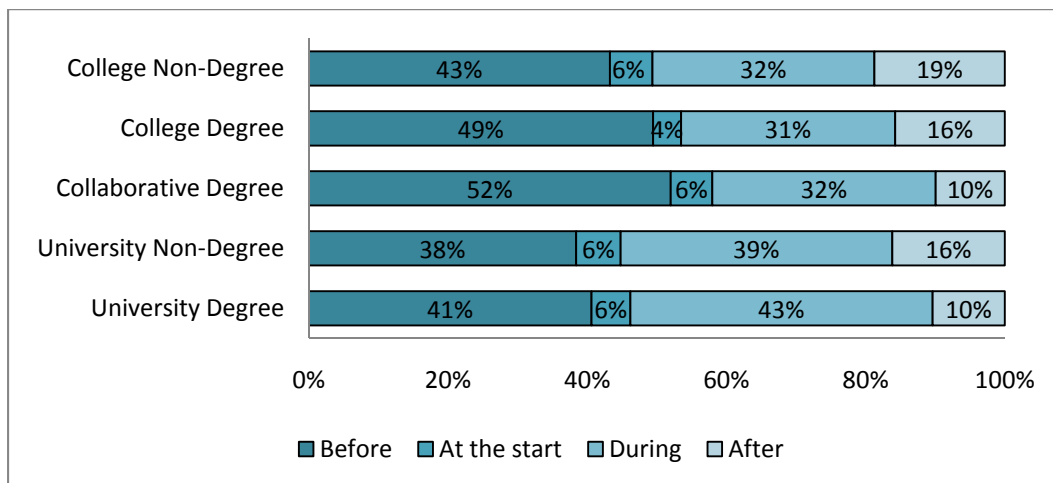
The differences are more dramatic when examining the program from which the respondents have graduated. The next two figures (14 and 15) focus on graduates who were enrolled in a university degree. Previous data identified that the largest number of graduates attending university were from business programs. When asked about the timing of their decision, these

same students were among the least likely to have made that decision before beginning their college credential (29 per cent). The timing of decision making for graduates from applied arts, community services, engineering, business and hospitality were similar, with roughly one-third deciding before entering their program, and one –half deciding to further their education during their program.   On the other hand, over half (55 per cent) of graduates from health programs decided in advance to further their education. Not surprisingly, graduates of preparatory programs had decided in overwhelming numbers (72 per cent) before they began their college program that they would further their education.

Figure 14. Timing of decision for further education, by program type of origin
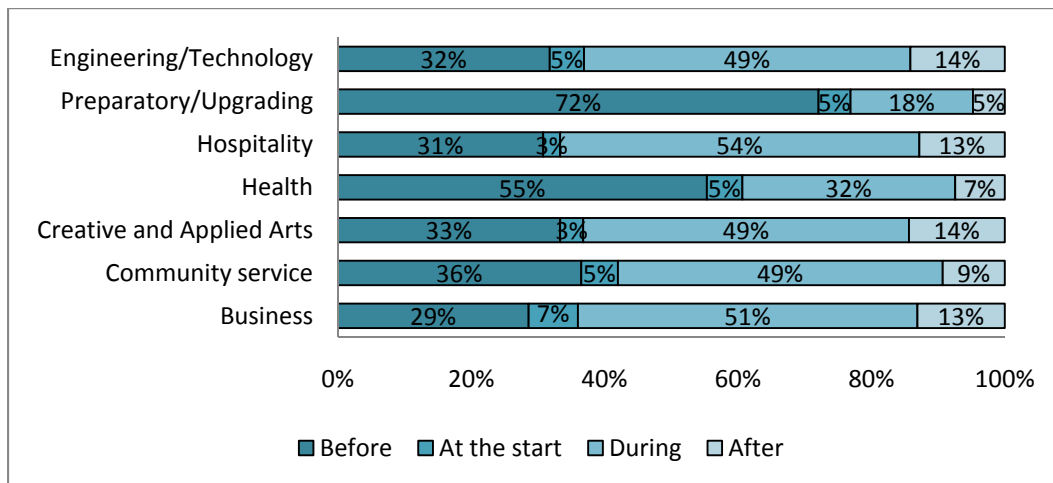
Figure 15 contains the results by credential. It appears that graduating from a program of shorter duration also means that the decision to attend university was made earlier, with graduates of one year certificate programs being much more likely to have decided before they started their program, and graduates of three year advanced diplomas the least likely. Further, since 76 per cent of one year certificate graduates who go on to university come from a preparatory program, this also explains the results for one year certificate graduates. Similarly, the advanced diploma mirrors the response of business graduates (most of whom originated in three year programs) in that the majority had decided to pursue a university education during or after their college program of study.

Figure 15. Timing of decision to further education, by credential of origin

Graduate Certificate: Before 64%, At the Start 5%, During 23%, After 8%
Advanced Diploma: Before 25%, At the Start 7%, During 55%, After 13%
Diploma: Before 40%, At the Start 6%, During 44%, After 10%
Certificate: Before 71%, At the Start 2%, During 20%, After 8%
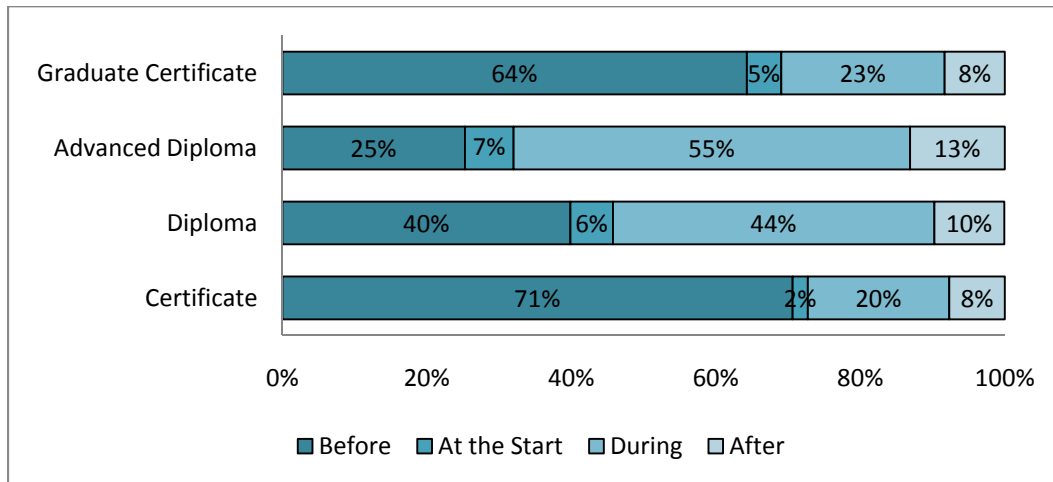
Program Affinity

The preceding data shows the percentage of graduates continuing their education. This section attempts to measure the relationship between the program of origin and the program of destination. Previous mobility reports from Colleges Ontario (2005, 2006 and 2008) utilize the graduate survey to categorize the university programs of destination. When compared to the college program of origin, one could deduce that graduates are continuing their education in a related program. Decock's study (2006) of a large Ontario college examined the direct relationship between college program of origin and university program of destination to conclude that there was a close affinity. Furthermore, Decock concluded that contrary to an earlier study, (Cummins, 1998), college graduates were consciously enrolling in university programs related to their college studies.

These conclusions are surmised based on a comparison of fields of study rather than the stated intentions or perceptions of the graduates themselves. The question is whether or not the graduates themselves perceive the affinity in the same manner. The revised Graduate Satisfaction Survey attempts to fill this gap of knowledge with a question asking respondents to evaluate the relatedness of their new program with their previous college program. The extent to which the graduate perceives the relatedness could affect the meeting of their expectations, the level of satisfaction with respect to transition, academic preparation, or goal achievement. All of these measures are discussed below.

Question 5f of the graduate survey asked graduates who were continuing their education full time to assess the relationship of their current program to their previous college program. The response categories were "very related", "somewhat related" or "not related" (Figure 16). The question assesses the graduate's perception. Overall, almost 90 per cent of the respondents felt their new program was very related (52 per cent) or somewhat related (35 per cent) to their previous college program.

Figure 16. Answers to the question, "How related is your program to your previous program?"
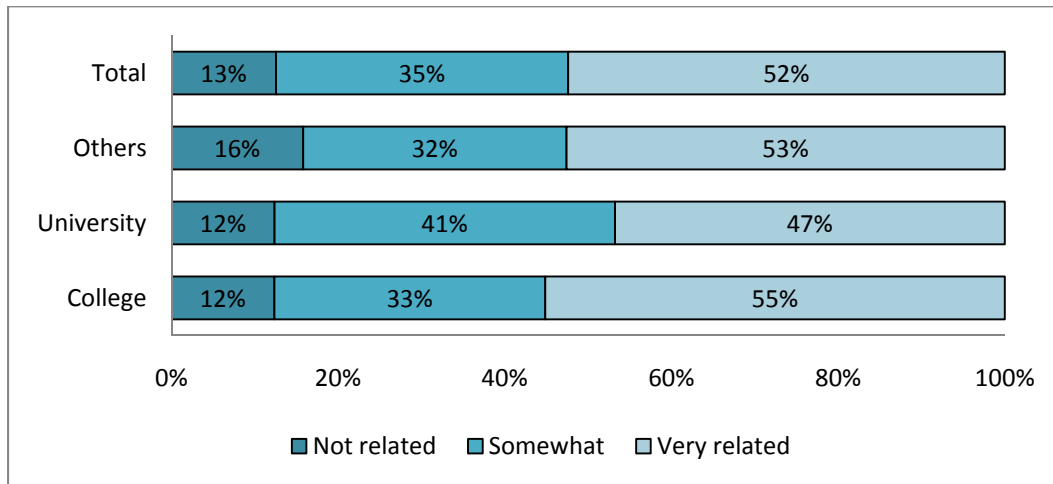
A closer look at responses according to institution and credential show variations on the balance between somewhat and very related but consistent overall perceived affinity. One pattern that does emerge is that those attending university (excluding collaborative degrees) were less likely to perceive their new program as very related to their previous studies (Figure 17).

Figure 17. Perceived affinity of new program to previous, by institution and credential
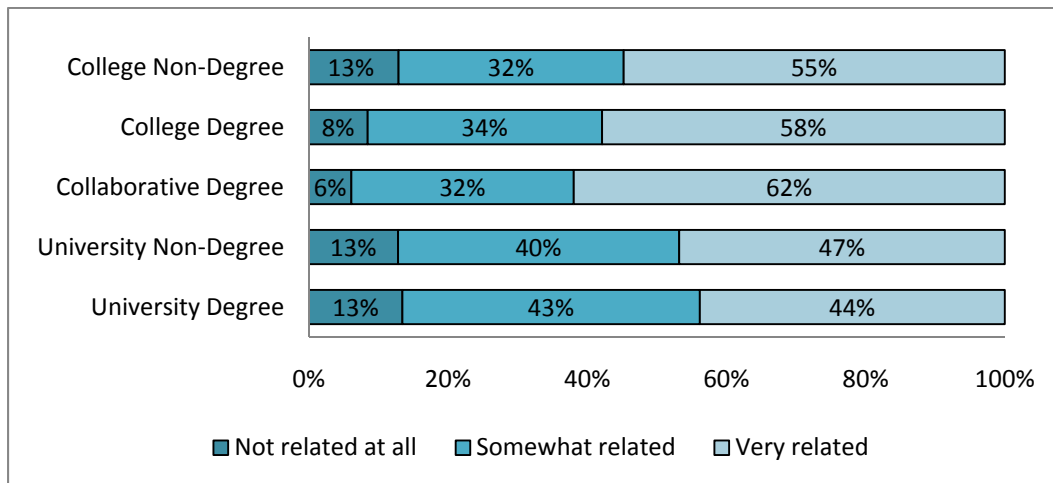
The results for those attending university reveals large differences of perceived relatedness among the original college programs of origin (Figure 18). The graduates of preparatory programs were the least likely to perceive their new program to be very related to their previous studies. Graduates of hospitality programs were the most likely to answer that that their new program was not related at all. This result should not come as a surprise, since the earlier cross tabulation of program and reasons showed that hospitality graduates were seeking a change in careers.

Figure 18. Perceived affinity of new program to previous, by program type of origin
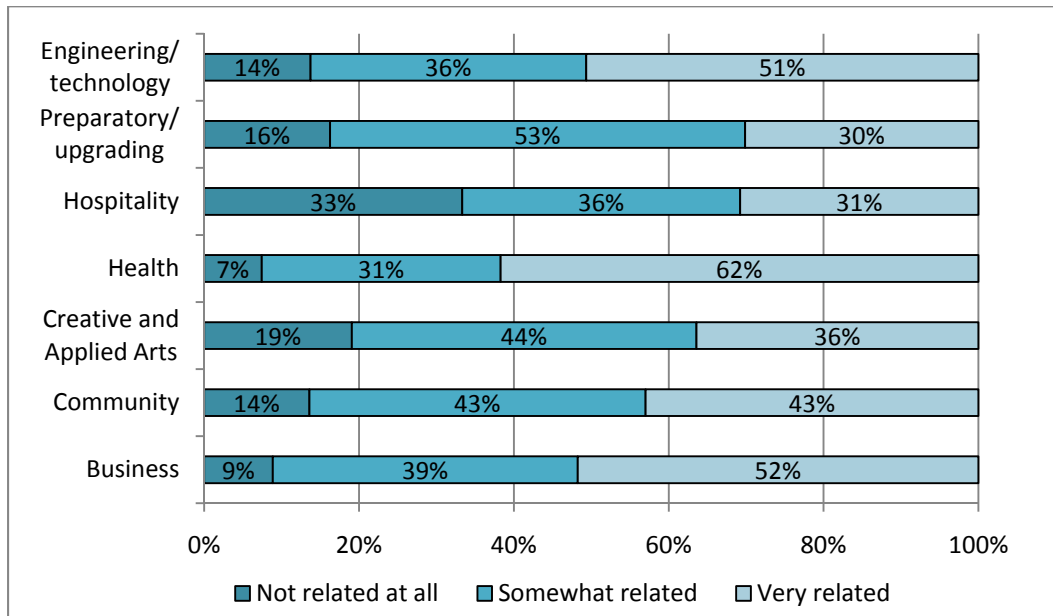
On the other hand, more than half of health, business and engineering graduates considered their new program to be very related to their previous studies. Indeed, only 7 per cent of health graduates and 9 per cent of business graduates answered that their new program was not related at all. Conversely, those originating from preparatory programs perceive less affinity with their university program of destination. These results, however, reflect the nature of a preparatory program with its less defined content focus. The specific course offerings are typically more diffuse, intending to provide a broad scope of disciplines that allow graduates to pursue programs of individual interest and ability.

Figure 19 demonstrates the differences in perceived affinity by credential type. Graduates from the more advanced and/ or longer programs considered their new program to be more related than graduates from shorter/ less advanced programs, with 59 per cent of graduates of advanced diplomas going on in a very related program, relative to only 33 per cent of graduates from a one year certificate program.

Figure 19. Perceived affinity with new program to previous, by credential type of origin
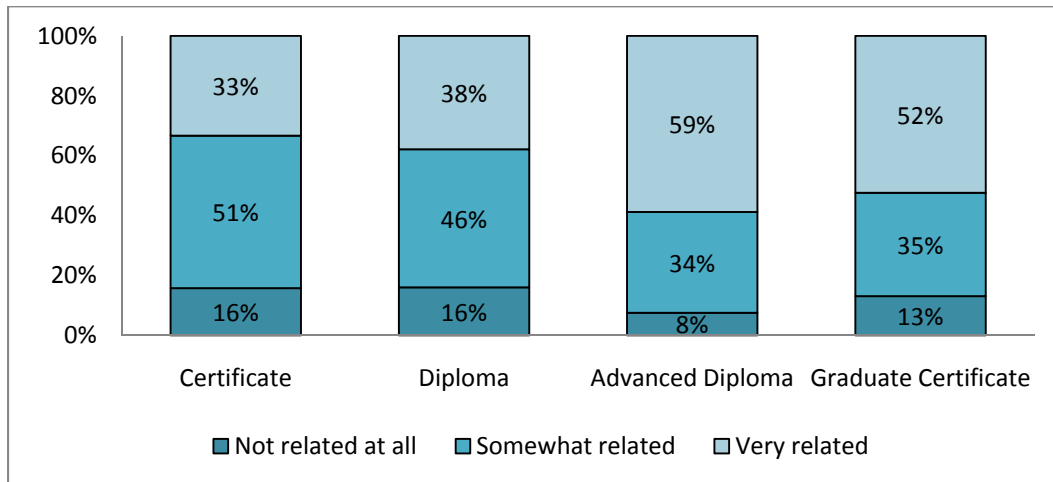
The results from the survey, therefore, suggest that graduates in general pursue further educational opportunities that are related to their initial area of study. It appears, therefore, that obtaining the degree is important, as illustrated in previous sections, but the choice of degree program reflects original career aspirations. Further evidence would require a more detailed comparison of this information with original credential aspirations.

An objective analysis of the relationship between college program of origin and university degree program of destination also reveals strong affinity. Table 15 is a cross tabulation based on the reported degree program by the graduate. Each column represents the college family of programs from which the student graduated; each row represents the university program in which the graduate is enrolled. Accordingly, 68.5 per cent of graduates from a college business program were enrolled in a commerce/ business administration degree program at a university. Similarly, 65.3 per cent of graduates from a community service college program were enrolled in a social science or related university program.

A large majority of graduates from college programs are enrolled in a closely affiliated university program. Excluding preparatory/upgrading programs, 67 per cent of college graduates are in programs related to their original programs of study. The perceived affinity, therefore, reported by the graduate survey respondents appears to match the reality of the relationship. It is evident, as well, that graduates of the preparatory programs are dispersed more widely across several university areas of study. The largest number is enrolled in social science related programs, but preparatory graduates also appear in health, humanities and related degree programs.

Table 15. Cross tabulation of college program and university degree program

	Business	Community service	Creative and applied arts	Health	Hospitality	Preparatory/ upgrading	Engineering/ technology	Total
General	1.9%	5.6%	6.0%	4.0%	2.2%	8.4%	1.8%	4.6%
Education, physical ed, recreation and leisure	0.4%	15.3%	2.5%	4.8%	6.7%	6.0%	1.4%	6.7%
Fine and applied arts	0.1%	0.0%	31.7%	0.0%	0.0%	1.2%	1.8%	2.9%
Humanities and related	2.6%	6.0%	26.6%	4.0%	8.9%	13.6%	0.7%	7.3%
Social sciences and related (excluding business)	18.7%	65.3%	12.6%	9.6%	57.8%	39.0%	11.8%	36.0%
Agricultural and biological sciences (excluding health)	0.0%	0.2%	0.0%	4.0%	4.4%	3.0%	6.5%	1.5%
Engineering and applied sciences	0.1%	0.4%	2.5%	1.6%	4.4%	0.2%	48.0%	5.8%
Health professions and occupations	0.1%	0.7%	1.0%	63.2%	4.4%	15.1%	2.5%	6.2%
Mathematics and physical sciences	3.8%	0.2%	1.5%	1.6%	0.0%	1.7%	15.8%	3.3%
Other	3.5%	5.6%	8.5%	7.2%	4.4%	7.2%	3.6%	5.4%
Commerce/ business/ administration	68.5%	0.6%	7.0%	0.0%	6.7%	4.5%	6.1%	20.4%
Number	680	835	199	125	45	403	279	2566

Note: Column headers across the top of the table indicate the college program area that the student has graduated from, and the row headers indicate the university degree program the graduate has enrolled in.

Articulation agreement

In question 5a of the graduate survey, respondents were asked to state whether or not there was an articulation agreement between their college program and the program they are currently enrolled in. In a previous section on the reasons graduates further their education, 31 per cent of college bound graduates and 45 per cent of university bound graduates indicated that transfer agreements were a major reason for transferring, indicating the importance of these agreements on subsequent pathways.

When graduates are asked whether there was an articulation agreement, Figure 20 indicates that 49 per cent of respondents said yes. When the responses are divided further by institution and credential, those graduates who were enrolled in a university degree program were most likely to indicate that there was an agreement in place (Figure 21).

Figure 20. Answers to the question, "Was there an articulation agreement between your college program and the program you are currently enrolled in that specifies how much credit you receive from your college program, or not?"
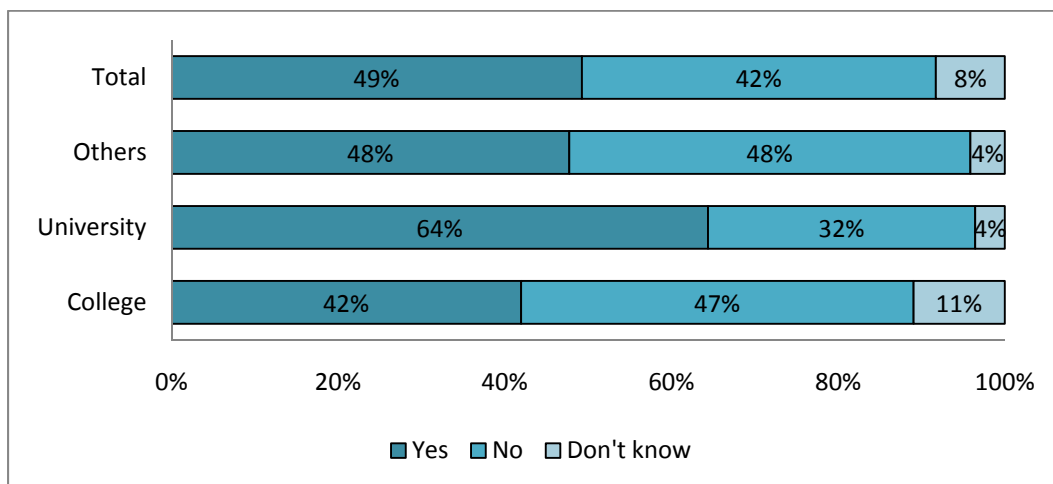
Figure 21. Existence of an articulation agreement, by institution and credential
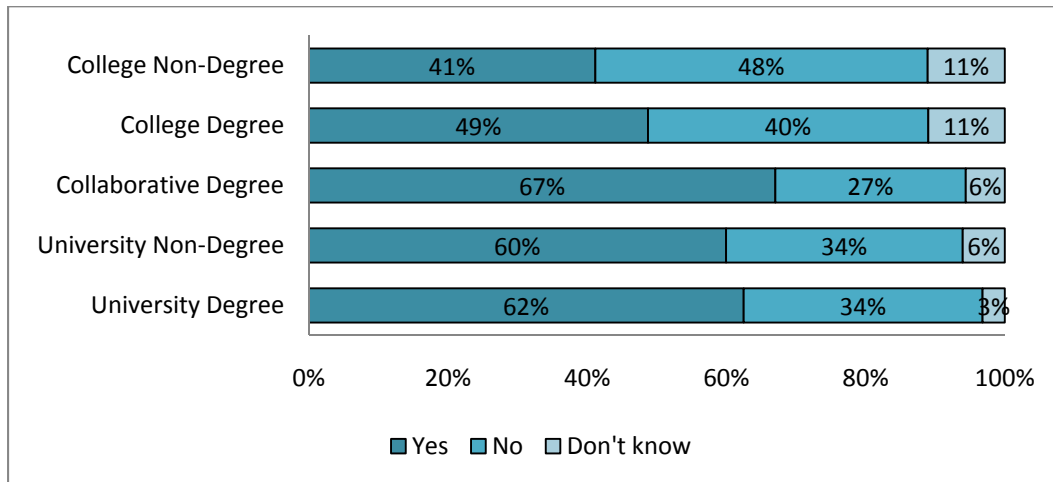
When we take a closer look at students in university degree programs, and the college program from which they graduated, we observe large differences among program areas (Figure 22). Graduates of community service programs and business programs, were more likely to state that there was an articulation agreement. In terms of college credentials, graduates of diploma and advanced diploma programs were also more likely to state there was an articulation agreement (Figure 23).

Figure 22. Existence of an articulation agreement, by program type of origin
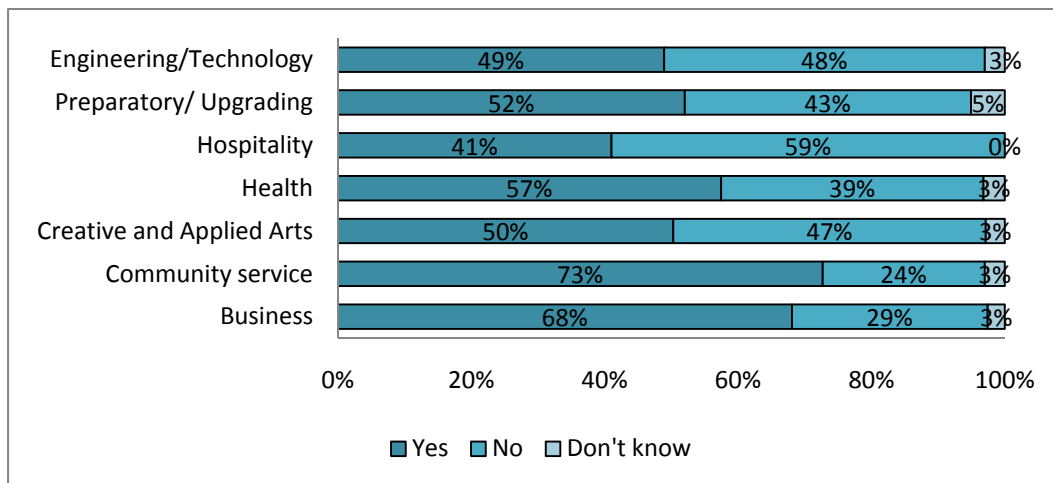
Figure 23. Existence of an articulation agreement, by college credential of origin
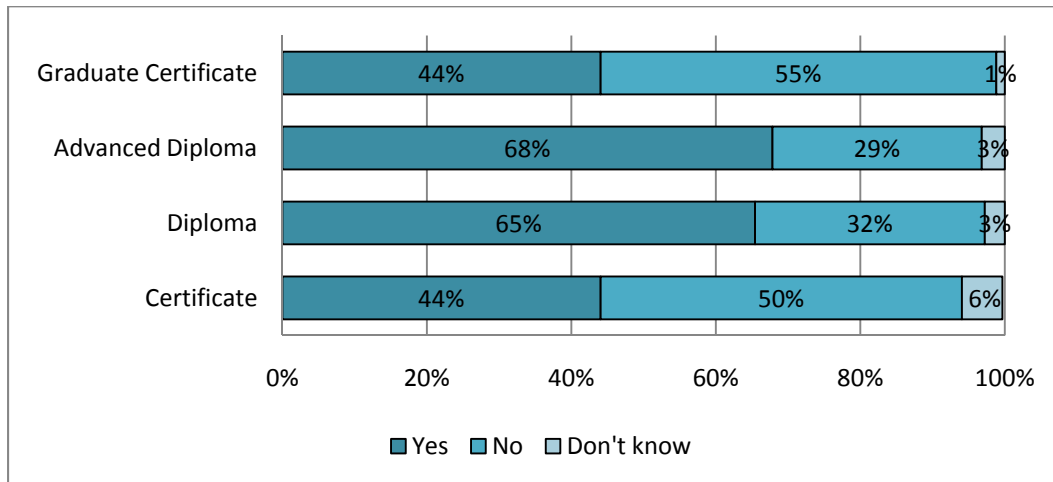
Previous research (Maclennan, 2002) indicated that the existence of transfer agreements did not translate into large numbers of students taking advantage of the signed opportunities. Given these findings, changes to agreements and the number of agreements overtime may have altered students' use. Validating the accuracy of students' perceptions are difficult at the provincial level unless someone is familiar with all of the agreements in existence. A sampling of the results from a select college, Seneca, suggests that the students cannot distinguish between a formal transfer agreement and an institutional policy on transfer. For example, a large number of Seneca College applied arts graduates, particularly from the early childhood education program continue their education at York University, typically in a social science degree; however, they are entering York University and receiving credit according to the institutional policy for the Faculty of Arts and Sciences.

Therefore, it appears that student's definition of an articulation agreement may be much broader than that set by the institution. As a result, the current wording of the question makes the students' perception an unreliable measure of the existence of articulation agreements and their effect on student movement. Subsequent surveys have altered the language in an attempt to clarify the question[4].

Transfer Credit

The next series of questions were included to ascertain the amount and timing of transfer credit notification, and to determine the degree of expectation from the graduate recipient. This was the first systematic collection of such information at the provincial level. The responses could corroborate claims from both sides of the debate on the issue of credit transfer between college and university programs.

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[4] Changed for 2008-09 graduates to "From your understanding, was there a formal transfer agreement between your previous college program, (PROGRAM NAME) and the program in which you are currently enrolled, or not?

Amount

Respondents were asked first to estimate the amount of transfer they have or will receive from the program and institution in which they are enrolled. Because of the different language used for course value among the colleges and universities, respondents were asked to estimate the amount based on the equivalency to time; that is, evaluate whether or not the amount of credit was equal to a year's worth of activity in a particular institution and program (Figure 24).

Figure 24. Responses to the statement, "Please estimate how much of your current program you have or will receive credit for."
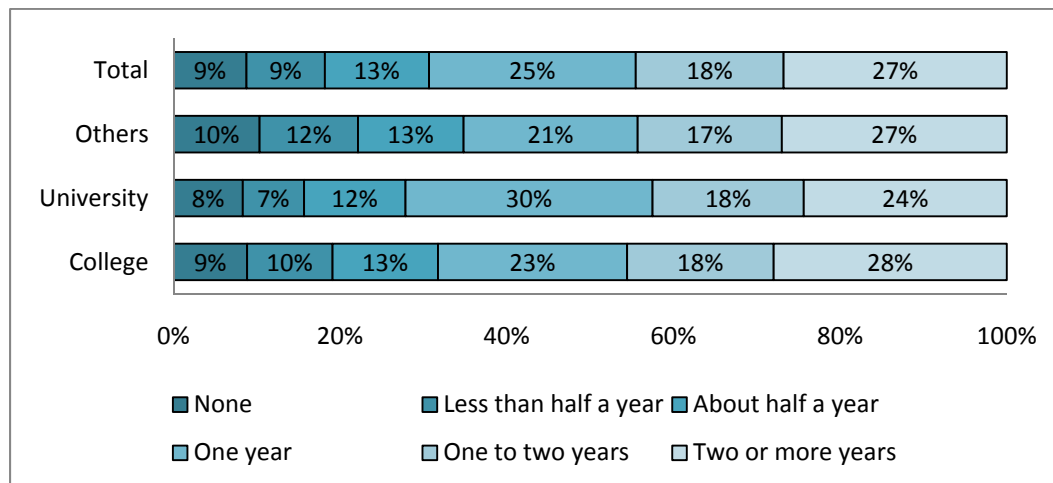
Overall, 55 per cent of the respondents indicated that they had or would receive one year or less worth of transfer credit for their college program. Similarly, 58 per cent of respondents report receiving one year or less worth of transfer credit at a university. When the data is divided according to institution and credential, the percentage of graduates receiving a year or less of credit (66 per cent) is the highest for those enrolled in a university non-degree. Those enrolled in university degrees are a close second, with 60 percent of graduates receiving a year or less of credit (Figure 25).

Figure 25. Estimate of the amount of transfer credit, by institution and credential
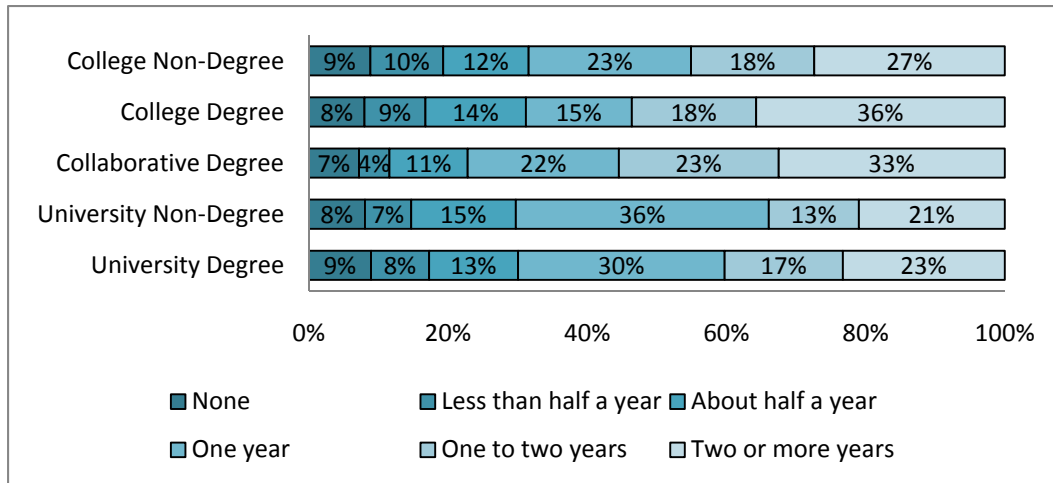
A further look at those enrolled in a university degree program follows a familiar pattern in that there are considerable differences among the previous college programs of the graduates (Figure 26). In a comparison of those who receive more or less than one year of transfer credit, the results show that the range among program areas goes from a low of 39 per cent in business programs receiving one year or less to a high of 72 per cent in health programs. A high percentage of business graduates also answered that they had received two or more years' worth of credit (33 per cent).

Figure 26. Estimate of the amount of transfer credit, by program type of origin
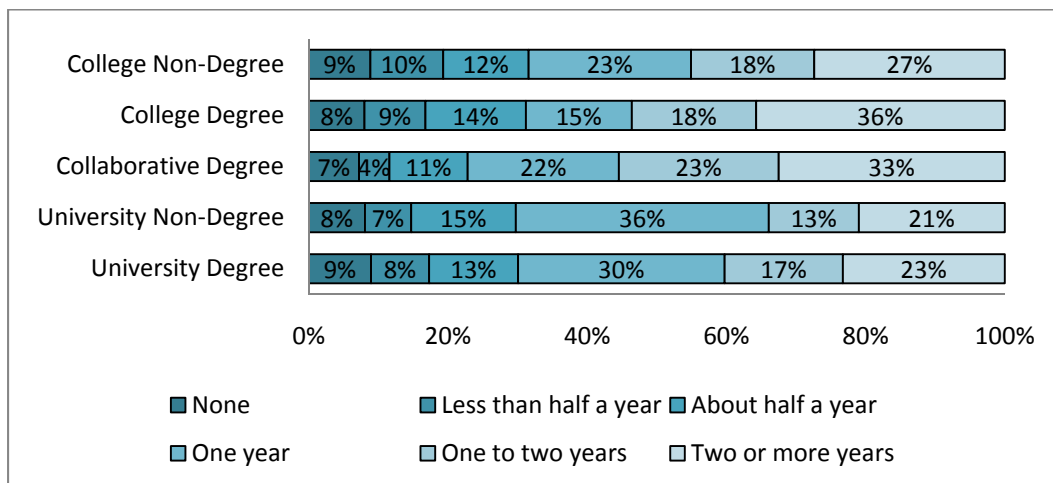
The results for this question have to be interpreted with caution. Overall, in most cases the amount of credit appears to be higher than expected. For example, 22 per cent of one- year certificate graduates indicated that they had received two or more years of credit (Figure 27). This response only makes sense if the graduate had obtained some other credential or had been previously enrolled in a degree program. Ideally, questions on future surveys would include a graduates' previous educational background in order to learn more about the amount of transfer[5]. An additional issue is with the question wording, "Please estimate how much of your current program you have or will receive credit for". Some respondents may have been confused by the phrase "or will receive credit for", and may have thought that the question was regarding the amount of credit their new program will garner. This theory is borne out by an analysis of the data that showed that two- thirds of those who said they were not applying for credit in one question indicated they had received credit in another.

Figure 27. Estimate of the amount of transfer credit, by credential of origin

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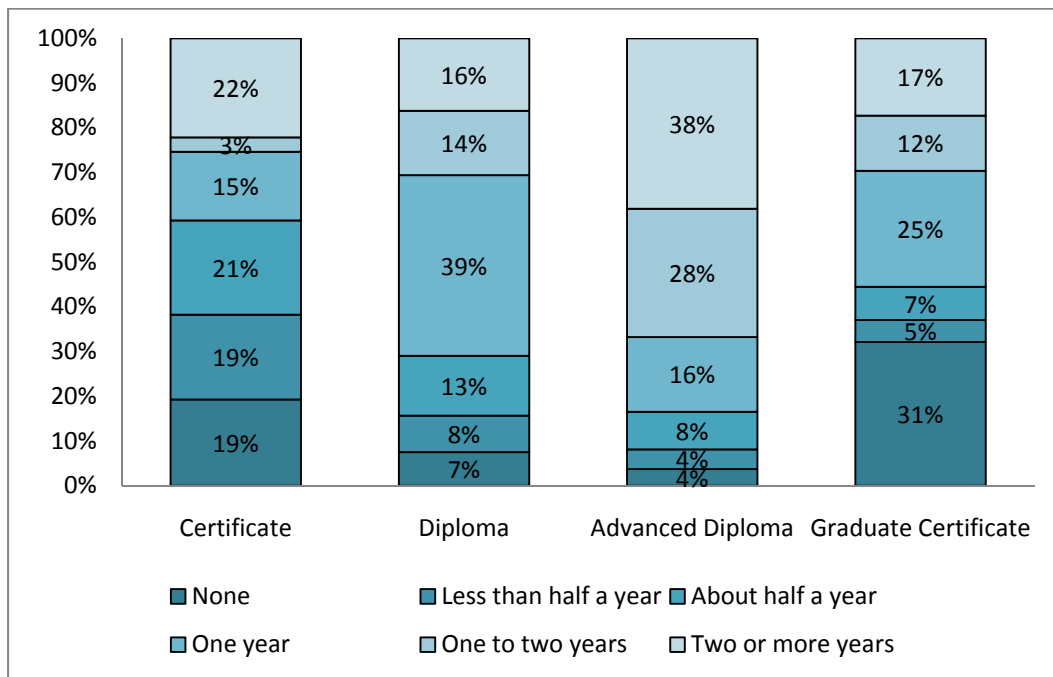
[5] An additional issue with the question on the amount of transfer is the lack of clarity or distinction between the categories. There exists potential confusion, certainly in the interpretation of the results, between the upper categories in particular because they are not mutually exclusive. This issue was dealt with by adjusting the question wording for the 2008-2009 graduates.

Timing of Notification

Respondents were asked to recall when they received notification of transfer credit. For graduates seeking to transfer, having advanced knowledge of the amount of credit they will receive could be a factor in choice of program and/or institution, as well as helping in the course selection to complete the new program. From the perspective of the sending institution, knowing when these decisions are usually made can help them guide prospective transfer students.

Overall, less than 20 per cent had received notification of credit with the offer of admission. Of those attending university, 29 per cent knew with the offer of admission. For those transferring to another college program, 14 per cent found out with offer of admission (Figure 28).

Figure 28. Answers to the question, "When did you find out whether you were receiving credit for your college program?"
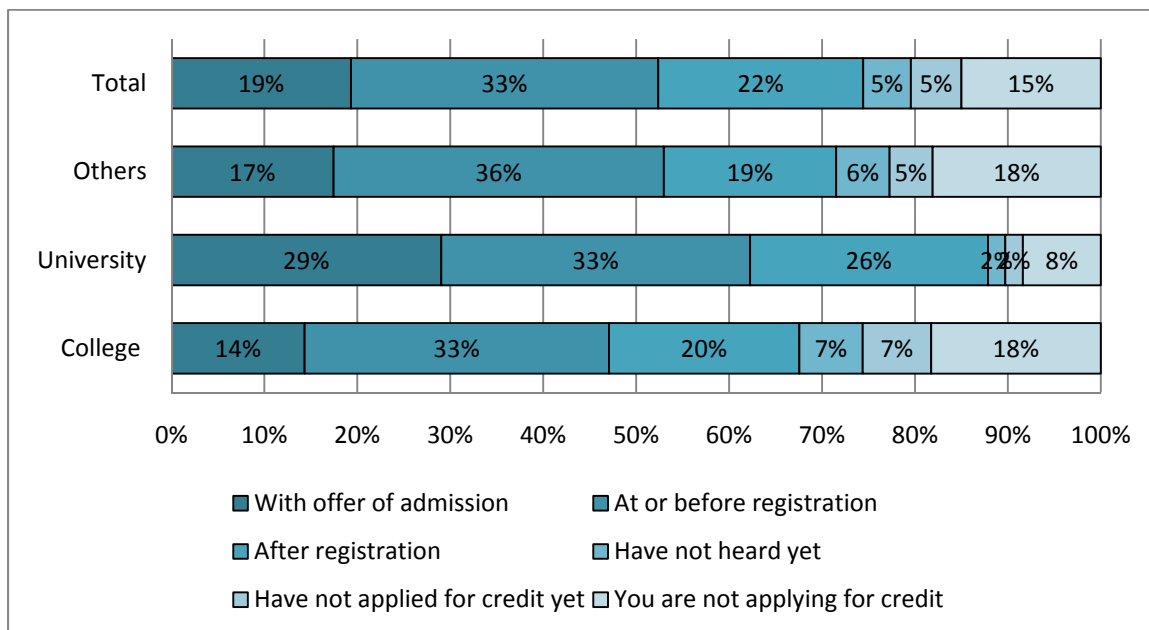
Responses by credential reveal that 30 per cent of those in a university degree receive credit notification in advance, with another 31 per cent receiving notification at or before registration (Figure 29). Those furthering their education in either a college program (degree or non-degree) were most likely not to have sought transfer credit, and of those who did, most found out later.

Figure 29. Timing of transfer credit information, by institution and credential
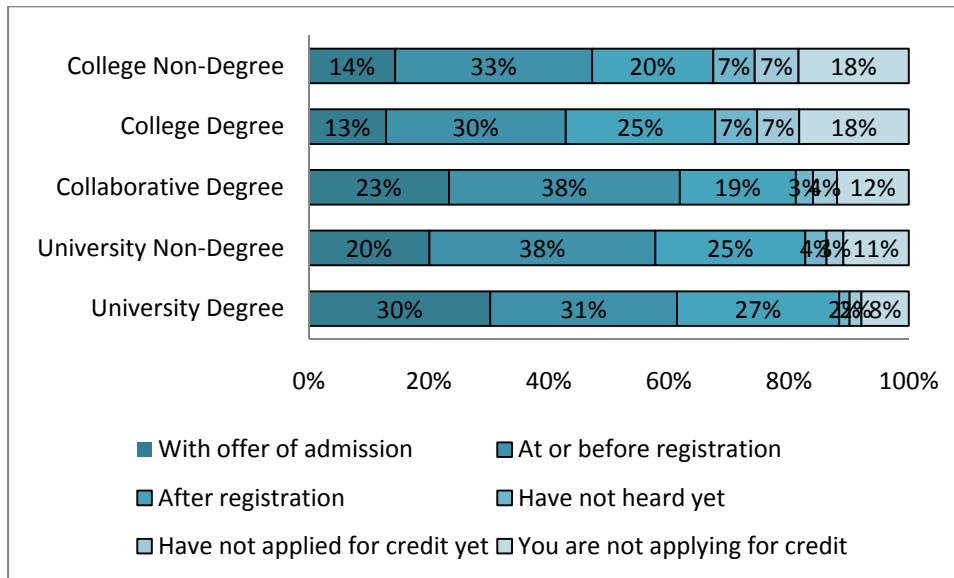
Figure 30 contains the results by program of graduation for those who subsequently enrolled in a university degree program. The percentage of graduates receiving notification with an admission offer is the highest for business or community service at 35 per cent. These programs also have the fewest numbers who are not applying for credit. The other program areas are fairly similar to each other in terms of timing of notification of credit. Overall, less than a third of graduates received credit notification before enrollment at a university. This low percentage suggest that graduates who did go on to a university degree program did not make choices according to amount of credit received. However, this data source is limited in that it cannot measure those who applied to a university degree program but did not go on due to a lack of advanced notice of transfer credit. Figure 31 shows the timing of notification by credential. It indicates that graduates of credentials of longer duration were more likely to apply for transfer credit and to find out sooner.

Figure 30. Timing of transfer credit information, by program type of origin

Engineering/Technology: With offer of admission 23%, At or before registration 31%, After registration 29%, 2% 4% 9%
Preparatory/ Upgrading: 22%, 34%, 23%, 3% 5% 13%
Hospitality: 24%, 24%, 32%, 3% 5% 13%
Health: 21%, 33%, 20%, 2% 4% 20%
Creative and Applied Arts: 28%, 27%, 29%, 5% 1% 12%
Community service: 35%, 31%, 27%, 1% 1% 4%
Business: 35%, 30%, 29%, 1% 1% 5%

Legend:
- With offer of admission
- At or before registration
- After registration
- Have not heard yet
- Have not applied for credit yet
- You are not applying for credit

Figure 31. Timing of transfer credit information, by credential of origin

Graduate Certificate: With offer of admission 20%, At or before registration 36%, After registration 10%, 24%
Advanced Diploma: 34%, 33%, 26%, 3%
Diploma: 31%, 29%, 29%, 6%
Certificate: 18%, 28%, 22%, 18%

Legend:
- With offer of admission
- At or before registration
- After registration
- Have not heard yet
- Have not applied for credit yet
- You are not applying for credit

Expectations

Graduates were also asked whether the amount of transfer credit they received matched their expectations. Overall, almost two- thirds of graduates received the expected amount of transfer credits; with 15 per cent receiving more credit than anticipated. Results varied according to destination (Figure 32). Graduates attending university programs were considerably less likely to have acquired the expected amount of credit compared to their college counterparts. Those in college programs highly report (72 per cent) receiving the expected amount of credit. When responses are disaggregated according to institution and credential, the results continue to indicate matched expectations for college degree and non-degree programs (Figure 33).

Figure 32. Responses to the statement, "Relative to what you expected, the amount of credit you received was…"
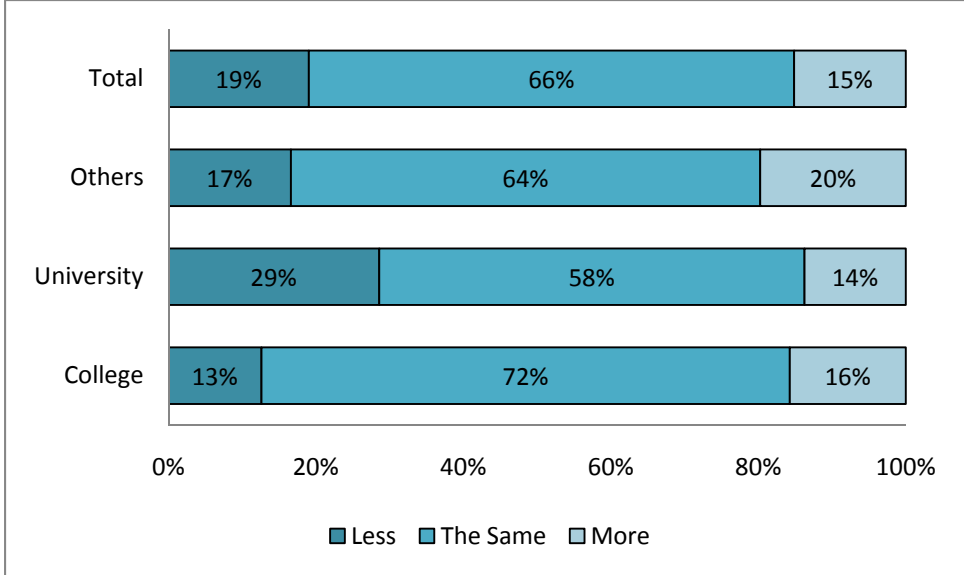
Since a high proportion of college graduates who further their education at a college return to their college of graduation, it may be the case that they would be more informed about what to expect in terms of transfer credit. To test this, a comparison of results for those who returned to their own college versus elsewhere showed that only 11 per cent of those who remained at their college received less credit than expected, compared to 20 per cent of those who attended a different college. This is more pronounced for degree programs, in that 23 per cent of those continuing in a college degree at a different college received less credit than expected, compared to only 10 per cent for those returning to their own college.

Figure 33. Receipt of the expected amount of transfer, by institution and credential

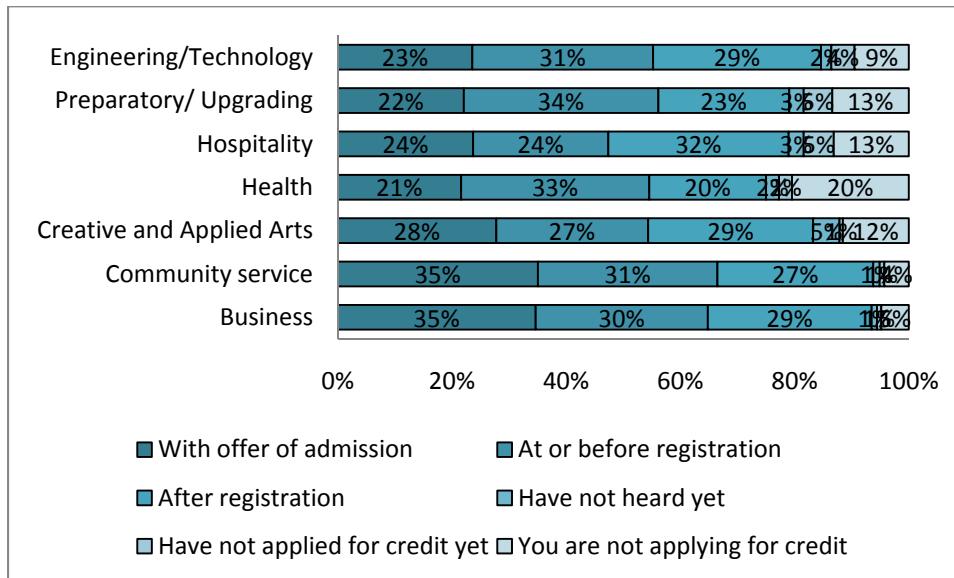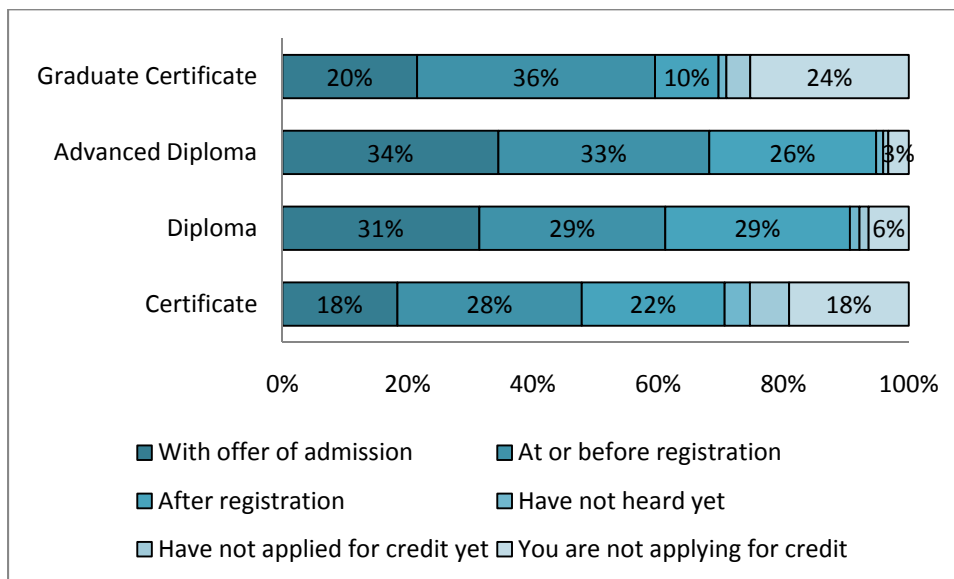| Category	Less than expected	The same as expected	More than expected
College Non-Degree	12%	72%	16%
College Degree	12%	70%	18%
Collaborative Degree	18%	69%	13%
University Non-Degree	27%	56%	17%
University Degree	31%	55%	14%
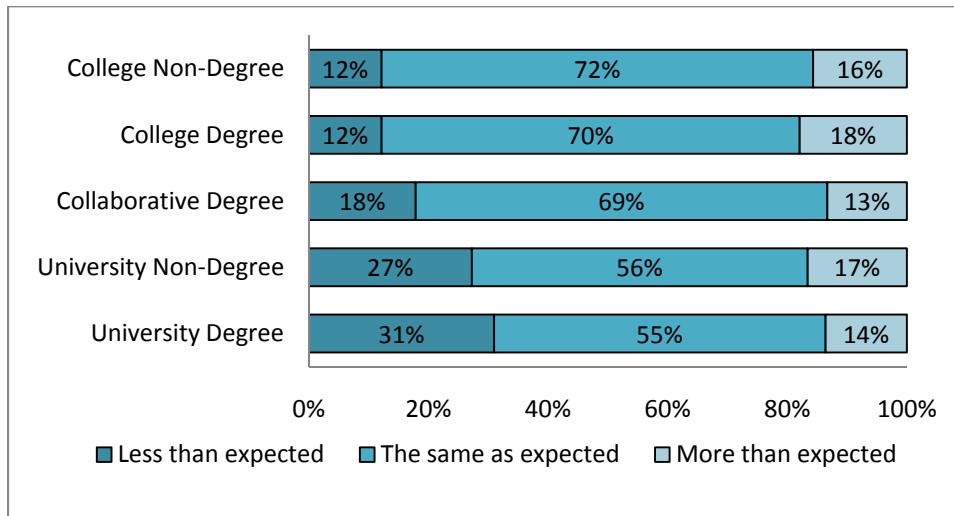
Figure 34 contains the results by program of graduation for those who subsequently enrolled in a university degree. Graduates of community service (24 per cent) were the most likely to have expectations met, however graduates of health programs (44 per cent) were the most likely to receive less credit than expected. Graduates of creative and applied arts programs exhibited divergent responses; a large percentage (38 per cent) received less than the expected amount of transfer credit but it was also the program with the highest proportion indicating that more credit than expected was received (22 per cent). Overall, these results indicate that a significant proportion of students, particularly those transferring to a different institution, are either not informed about the amount of transfer credit to expect, or the information that they do have is lacking in accuracy.

Figure 34. Receipt of the expected amount of transfer credit by program area

Program area	Less than expected	The same as expected	More than expected
Engineering/Technology	38%	55%	7%
Preparatory/ Upgrading	29%	56%	14%
Hospitality	33%	50%	17%
Health	44%	53%	3%
Creative and Applied Arts	38%	41%	22%
Community service	24%	59%	17%
Business	36%	56%	10%
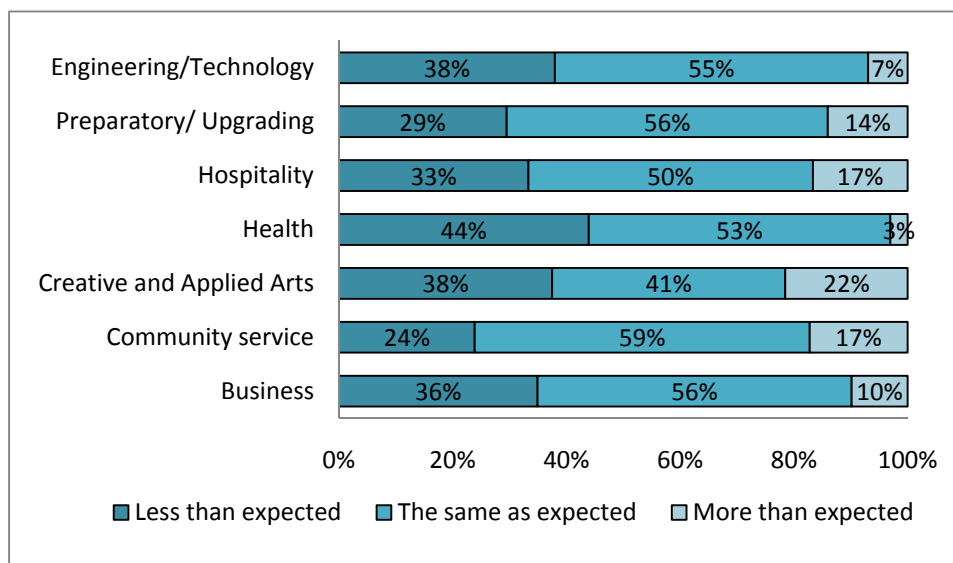
Figure 35 contains the results by college credential. Respondents from advanced diploma programs were most likely to have received less credit than they were expecting, and the least likely to have received more credit than they expected. This may be anticipated since the program is of longer duration, and expectations for transfer credit may have been higher.

Figure 35. Receipt of the expected amount of transfer, by credential of origin
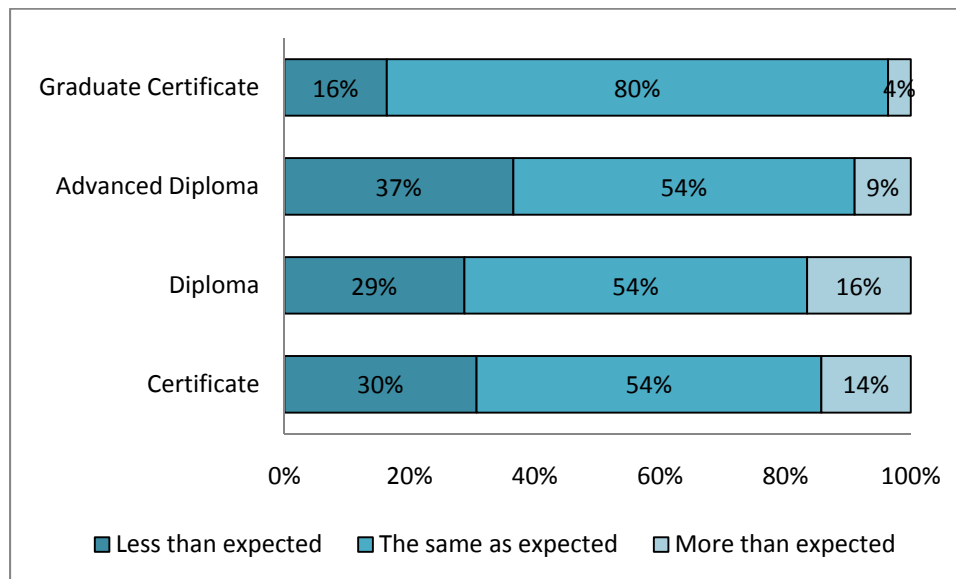
The overall responses of graduates show a large majority having received or exceeded the expected amount of transfer credit; however, reported percentages are relative to expectations, and are not necessarily a reflection of satisfaction. The responses from those who transferred to university or to a different college show a greater propensity to believe that they received less than expected. As well, the responses do not help us identify the reasonableness of the respondents' expectations. Regardless of the rationale, a large amount of unachieved expectations may have a negative impact on institutional reputation and student motivation. The provision of accurate and timely information would help manage those expectations.

Colleges' Role as Access Point to Further Education

Respondents were asked to assess whether or not they would have been accepted into their current program without having graduated from college. The question was asked to help assess whether colleges, in addition to their role in providing career education, also serve as a bridge for students without the qualifications to attend their college or university program of choice. The overall results show that a majority of respondents (55 per cent) believe they needed to

graduate before being able to enroll in their current program[6] (Figure 36). It is interesting to note that, with the exception of "other education" the numbers are similar across both institution type and credential (Figures 36 and 37). These results indicate that not only are colleges serving as a bridge to university programs, they also equally serve to prepare college graduates for further education in a college program.

Figure 36. Answers to the question, "Do you think you would have been accepted into your current program without graduating from college first?"

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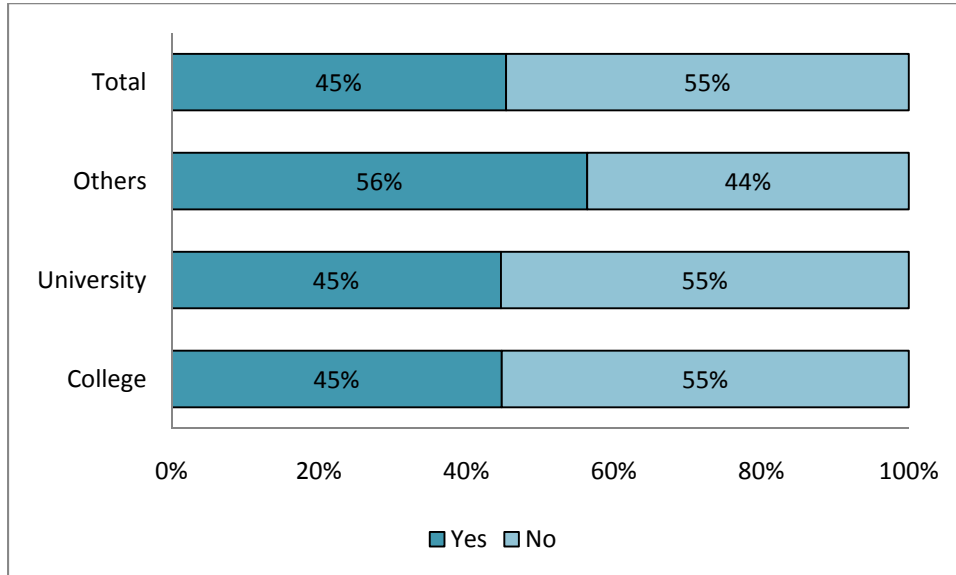
[6] This number may be somewhat high in that the wording of the question asks specifically about graduation, whereas in many cases a student could gain access to their subsequent program by having completed only part of their program, without graduating.

Figure 37. Perceived acceptance without graduation from college, by institution and credential
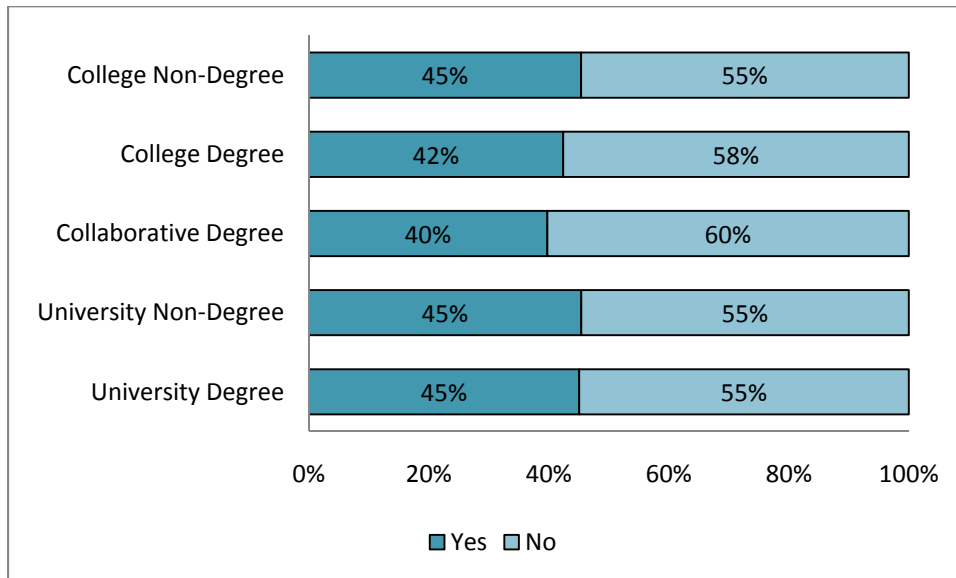
Figure 38 focuses on the results for this question by college program of graduation for those who went on to university. Preparatory programs have the highest percentage (72 per cent) of graduates reporting they did not have the credentials to enter university directly. These students appear to have believed they needed to attend college before pursuing a program at university. The graduates of health programs also had a high percentage (64 per cent) who believed they needed to graduate from their college program before continuing their education. On the other hand, a majority of graduates from engineering, applied arts, and hospitality programs (54, 52, and 56 per cent respectively) believed they would have had the credentials to enroll in university directly. The basis of that belief is difficult to determine with the limited information provided. Additional information about the background of graduates, such as previous education, would greatly assist in the interpretation of these results.

Figure 38. Perceived acceptance without graduation from college, by program type of origin
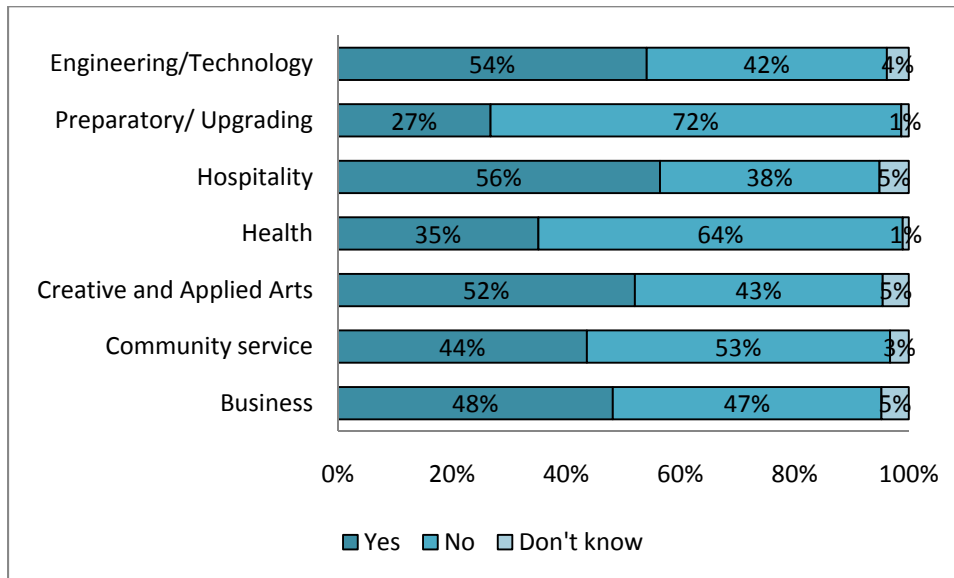
When the responses are evaluated on the basis of credential, those from certificate programs are the least likely to report they would have been accepted without the college credential (Figure 39), This indicates the critical role that certificate programs, many of which are preparatory programs, play in bridging to university programs. Graduates of three year diplomas were most likely to indicate they would have been accepted without graduating.

Figure 39. Perceived acceptance without graduation from college, by credential of origin
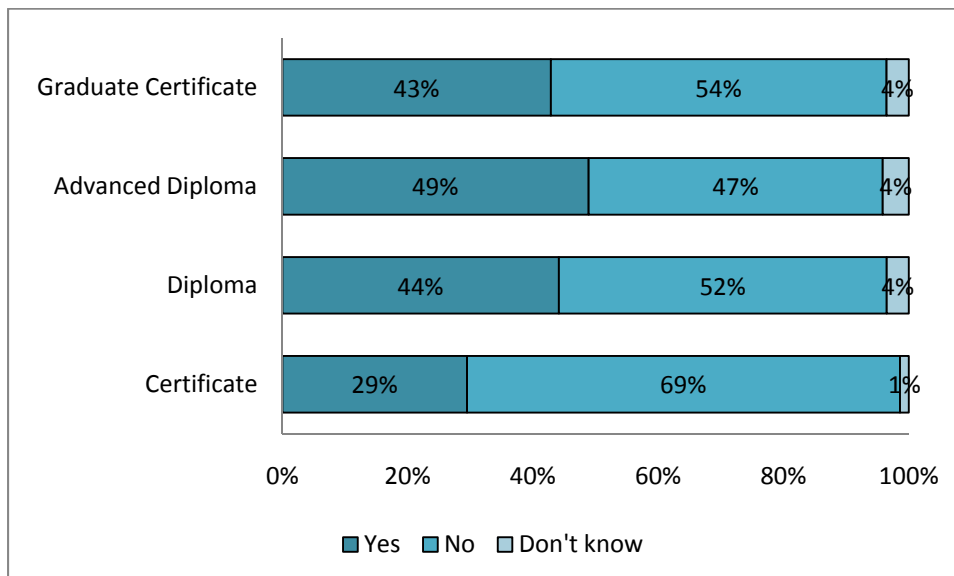
Satisfaction

The final three questions to be examined focus on satisfaction. The first two questions, developed for the college graduate attending a post-secondary institution, examine satisfaction with transition and academic preparation. The third question examines satisfaction with goal achievement and has been asked of all graduates.

Transition

Graduates who continued on were asked about their satisfaction with the overall transition. The question was intended to encompass the social integration, management of bureaucracy, and academic adjustments of the transfer experience.

Figure 40. Response to the question, "Overall, how satisfied are you with the transition experience from college to your current program?"
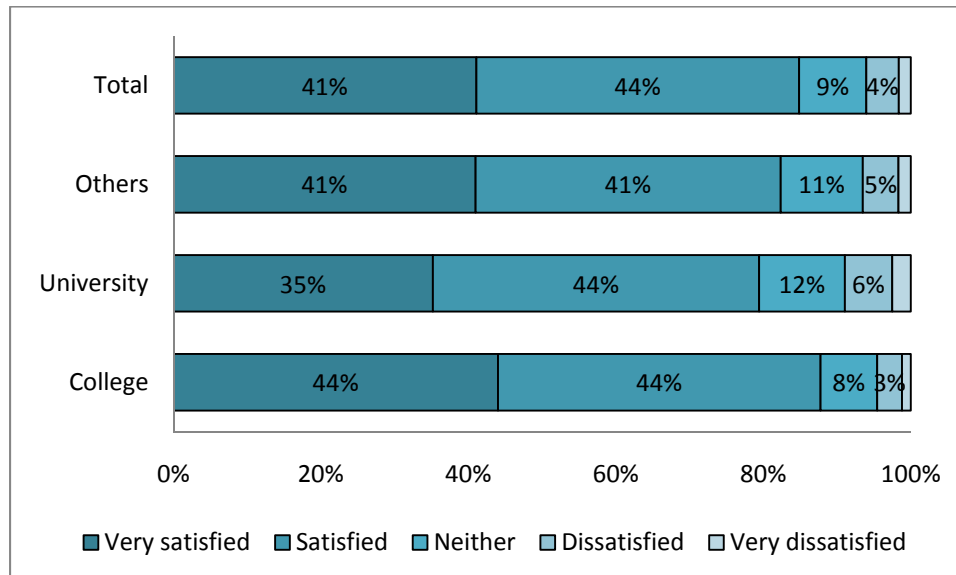
Accordingly, 85 per cent of respondents were satisfied or very satisfied with their transition experience; 9 per cent were neither satisfied nor dissatisfied, and the remaining were dissatisfied or very dissatisfied. Graduates who continued at a college were more satisfied than those attending university (88 per cent vs 79 per cent) (Figure 40).

The results show only a slight difference between degree and non-degree programs for those attending university (Figure 41). Differences by credential at the college are also minimal. . Nevertheless, the transition experience, although high in satisfaction, is still almost 10 percentage points lower for those going to university than it is for those enrolled at a college. This finding may be attributed to college graduates furthering their education at their institution of origin.

Figure 41. Satisfaction with transition to new program, by institution and credential
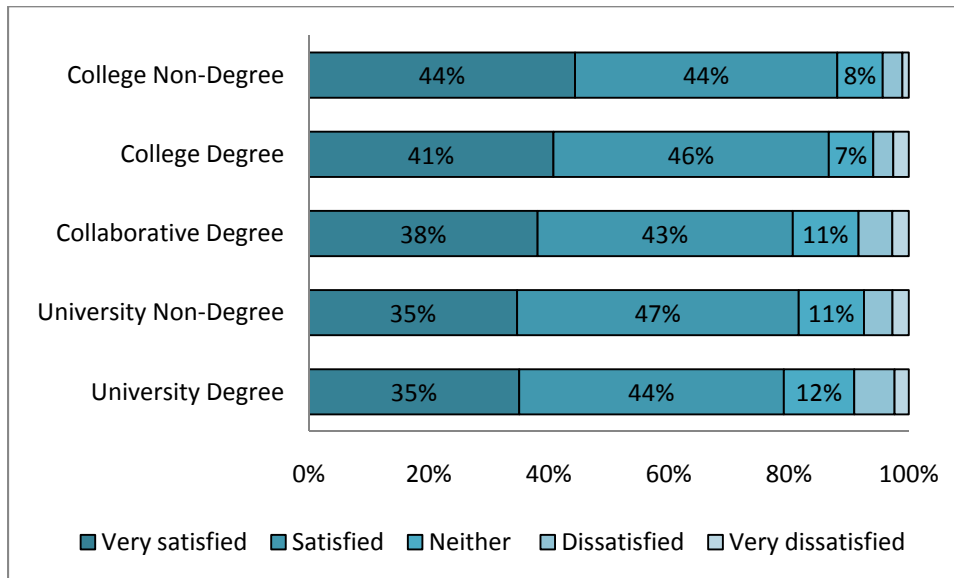
A closer analysis of graduates enrolled in university degree programs reveals differences among college programs of origin (Figure 42). Overall, 88 per cent of preparatory program graduates reported they were satisfied and very satisfied; only 5 per cent were dissatisfied. On the other hand, graduates of hospitality programs were the most dissatisfied with a total of 18 per cent who were either dissatisfied or very dissatisfied. The least satisfied group was graduates from health related programs; only 67 per cent of graduates responded that they were satisfied or very satisfied.

Figure 42. Satisfaction with transition to new program, by program type of origin
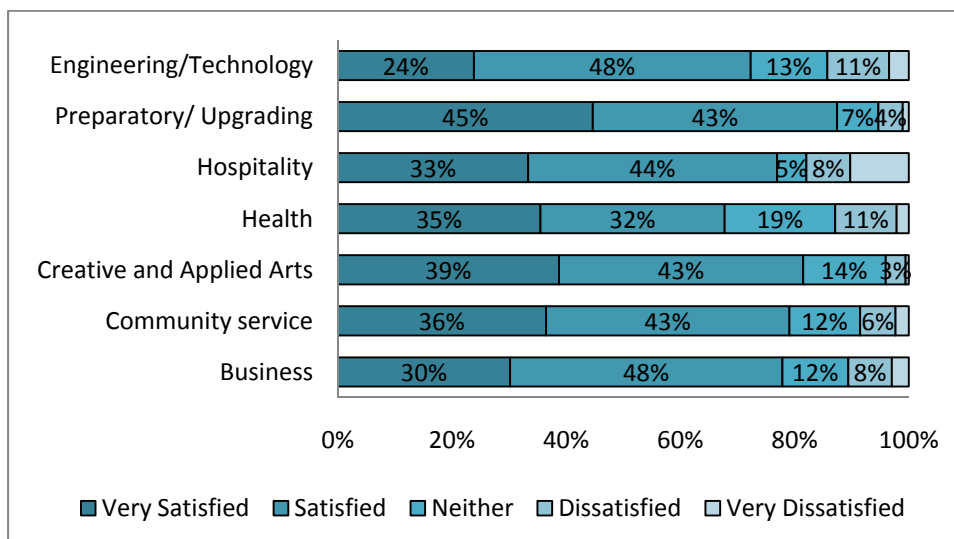
Academic preparation

Respondents were further asked to rate their level of satisfaction with academic preparation for the program in which they are currently enrolled. This question was intended to determine whether students perceive a gap between their college academics and their subsequent program.

The overall results reveal graduates who are very satisfied (39.6 per cent) or satisfied (48.2 per cent) with their academic preparation. The percentages are slightly lower for those enrolled at a university, and marginally higher for those in "other" institutions (Figure 43). A further division by credential shows that those students in a degree program at a university have the lowest overall satisfaction (84 per cent). The differences, however, are not large and on the surface there appears to be little distinction amongst those who have continued their education at college or university, in degree or non-degree programs (Figure 44).

Figure 43. Response to the question, "Overall, how satisfied are you with your academic preparation for your current program of study?"
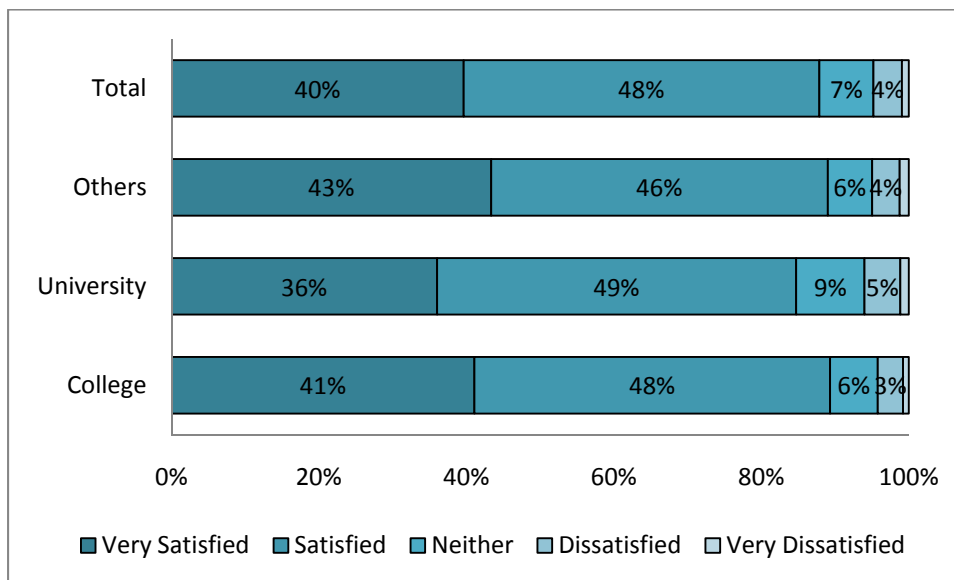
Figure 44. Satisfaction with academic preparation for new program, by institution and credential
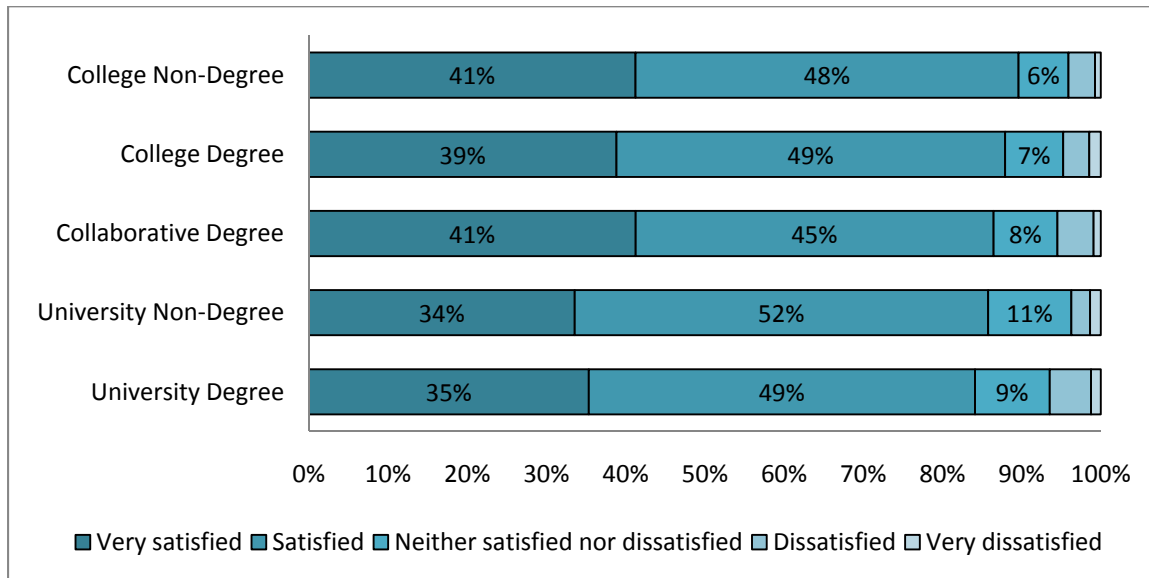
However, a more detailed evaluation of the respondents attending university reveals, as seen in some of the other results, real differences among college programs of origin. In particular, Figure 45 illustrates how graduates of preparatory programs are particularly satisfied with their academic preparation for the university degree program in which they were enrolled (91 per cent). Those same graduates largely exceeded all other program areas with 47 per cent stating they were very satisfied. Graduates of creative and applied arts programs followed with 37 per cent of respondents stating they were very satisfied. Hospitality graduates have the highest level of dissatisfaction at 18 per cent with another 18 per cent stating they were neither dissatisfied nor satisfied. However, some of these results by program have to be interpreted with caution, since hospitality graduates also are the most likely to continue their education in an unrelated program. This shift could diminish their background preparation in the subject area.

Figure 45. Satisfaction with academic preparation for new program, by program type of origin
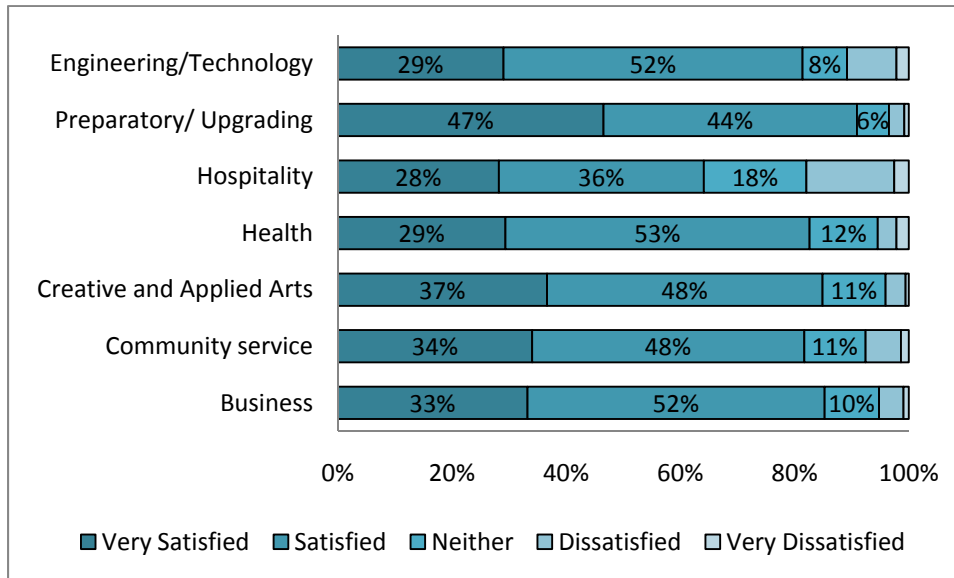
Goal achievement

The overall satisfaction of college graduates who enrolled in full time further education was compared to those who entered the workforce. The question, worded as, "How would you rate your satisfaction with the usefulness of your college education in achieving your goals after graduation?" is of particular interest since it is also used as a provincial key performance indicator.

Table 16 provides a breakdown of results for overall graduate satisfaction by pathway. Graduates who either return to study full time or who obtain a job related to their field of study were considerably more satisfied than those who are working in jobs only partially related or unrelated to their program of study. The overall satisfaction of graduates who pursue full time study has increased from 85 to 88 percent between 2002 and 2006.

Table 16. Percentage satisfied and very satisfied with usefulness of program to achieve goals by pathway after graduation.

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Full time studying	84.8%	86.0%	86.5%	88.0%	87.4%	88.2%
Job Related	91.1%	91.6%	91.5%	91.6%	91.8%	91.5%
Job Partially Related	74.8%	76.1%	74.3%	76.9%	77.3%	77.8%
Job Not Related	59.0%	58.5%	60.4%	62.1%	62.6%	63.4%

Figures 46 and 47 compare the results by institution and credential type. The results show that overall, 87 per cent of those pursuing further education were satisfied with the usefulness of

their college education in achieving their goals after graduation. Only 5 per cent were dissatisfied and the remaining 8 per cent were neither satisfied nor dissatisfied. A breakdown according to institution and credential shows little differences between those attending college or university, or those in degree or non-degree programs

Figure 46. Satisfaction with college program in assisting with goal attainment, by institution type
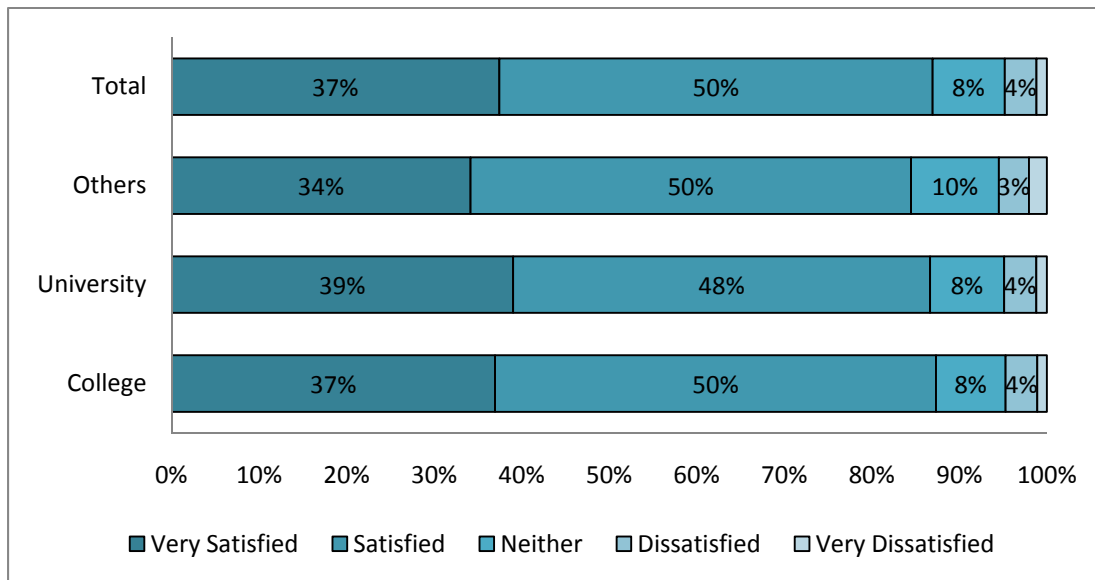
Figure 47. Satisfaction with college program in assisting with goal attainment, by institution and credential
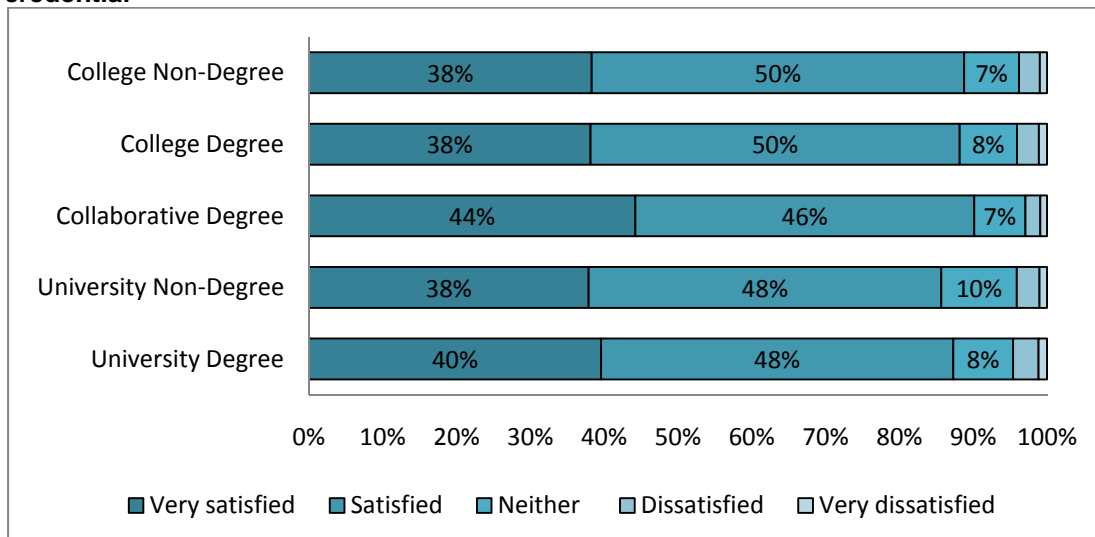
Levels of satisfaction are fairly consistent among programs of origin as illustrated in Figure 48 below. Graduates from preparatory programs have the highest percentage of very satisfied graduates (45 per cent), but are similar in overall satisfaction to those from community services or health programs. Graduates from hospitality programs have the lowest levels of satisfaction; 22 per cent of graduates report that they were very dissatisfied or dissatisfied.

Figure 48. Satisfaction with college program in assisting with goal attainment, by program type of origin
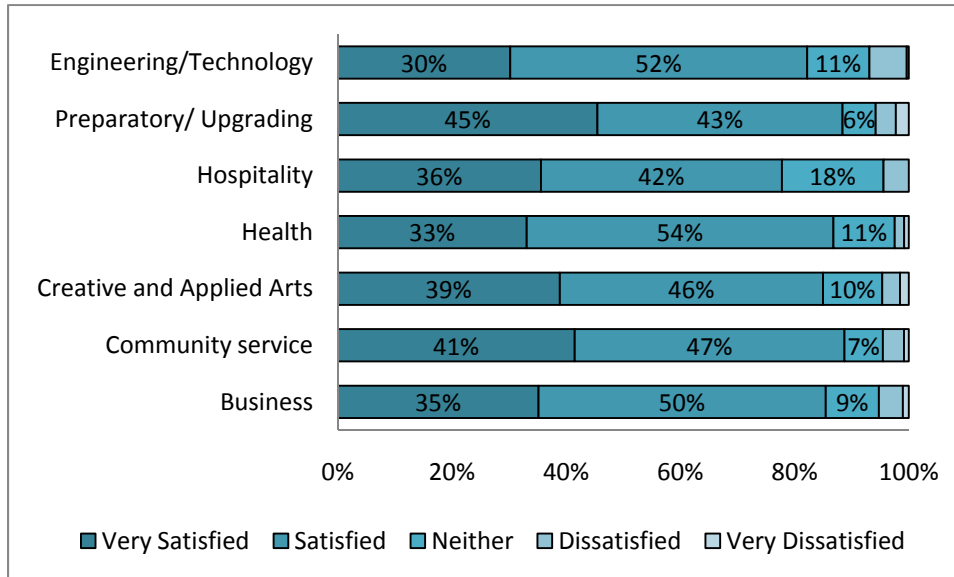
Relationships

This section analyses whether the timing of the decision to further their education and the amount of program affinity affects satisfaction with the transition experience, academic preparation, and goal achievement, specifically for those who continued on to university.

Figure 49 shows that those who decided to continue their education earlier were more likely to be very satisfied, than those who decided later. Of those who decided before entering their college program, 38 per cent were very satisfied with their overall transition experience versus 27 per cent of those who decided after graduating from their college program. Similarly, 38 per cent of those who decided earlier were very satisfied with their academic preparation versus 29 per cent of those who decided after their college program.

Figure 49. Percentage of graduates satisfied or very satisfied with transition experience, academic preparation, and goal achievement according to the timing of the decision to transfer
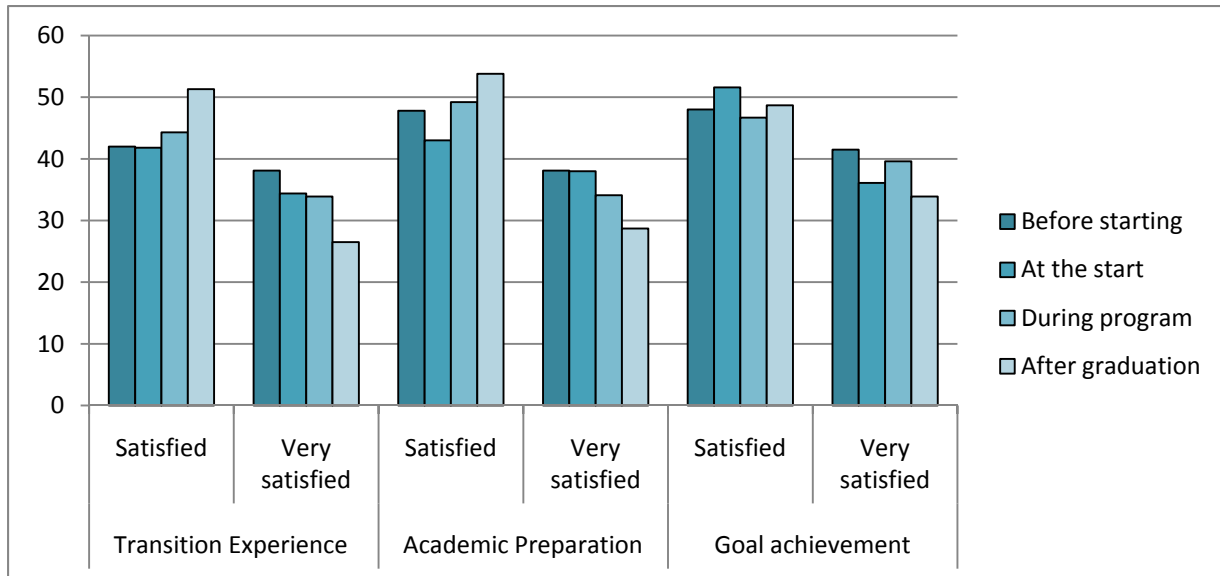
Whether the affinity between programs affects satisfaction of transfer students was also tested. Table 17 shows that those who perceive their degree program as very related are considerably more likely to be very satisfied with their transition experience, their academic preparation and the helpfulness of the college program to achieve their goals. The results are analogous to the high levels of graduate satisfaction for those who obtain jobs related to their field of study, described previously. It also may show that transfer pathways within similar areas of study may be better coordinated than pathways between unrelated areas of study.

Table 17. Percentage of graduates satisfied or dissatisfied with transition experience, academic preparation, and goal achievement according to perceived program affinity

	Very dissatisfied	Dissatisfied	Neither	Satisfied	Very satisfied	Number
Transition Experience						
Not related	3.4	6.2	13.7	48.5	28.2	291
Somewhat	2.6	6.2	13.3	47.4	30.5	931
Very related	1.9	7.4	9.5	39.6	41.7	948
All	2.4	6.7	11.7	44.1	35.1	2170
Academic Preparation						
Not related	0.7	8.7	15.2	49.1	26.3	289
Somewhat	1.2	5.6	10.7	53.7	28.8	927
Very related	1.4	3.8	6.5	43.8	44.5	949
All	1.2	5.2	9.5	48.8	35.3	2165
Goal achievement						
Not related	2.8	6.3	15.3	48.6	27.1	288
Somewhat	1.0	4.1	9.9	52.2	32.9	928
Very related	0.7	2.0	4.2	43.1	50.0	952
All	1.1	3.5	8.1	47.7	39.6	2168

Summary Part Two

Part Two was a detailed examination of the transfer experience of college graduates who furthered their education within six months of graduating in 2006-07. Highlights of the results are located below:

- "More opportunities for career advancement" was cited as a major reason for pursuing further education, regardless of destination. The potential for higher income ranked third for those enrolled at a university and sixth for those attending college;

- Students reported college and university websites as their major source of information, with college faculty/counselor/coordinators and family and friends also important;

- 43 per cent of graduates decided to pursue further education before entering college. Of those attending university, 41 per cent decided before enrolling in college and an additional 42 per cent decided during their college program;

- Preparatory graduates were more likely to have decided to pursue university before entering their college program (72 per cent), while those from other program areas were more likely to have decided to attend university during their program or upon graduation;

- Almost 90 per cent of respondents felt their new program was very or somewhat related to their previous college program;

- 60 per cent of respondents enrolled in a university degree indicated they would receive one year or less of transfer credit for their previous college education;

- Graduates attending university do not appear to make transfer decisions based on amount of transfer credit received. Overall, 70 per cent of graduates had not received transfer credit notification at the time of admission;

- Although 66 per cent overall received the expected amount of transfer credit, 29 per cent attending university stated that they received less;

- 55 per cent of graduates reported they would not have been accepted into their current program without graduation from college, with the highest percentage (72 per cent) originating from preparatory programs;

- Graduates reported high levels of satisfaction with the transition experience (84.9 per cent), academic preparation (87.8 per cent) and goal achievement (86.9 per cent); with graduates of preparatory programs the most satisfied;

- Overall, graduates pursuing further education full time were highly satisfied with the usefulness of their college education in achieving their goals.
- Graduates were most satisfied when they perceived a close affinity between their previous college program and their current degree program.

Summary and Discussion

The graduate survey provides a systematic documentation of college graduate mobility that is reliable and consistent. The addition of new questions beginning with the 2006-07 graduates will provide a better understanding of the student experience and assist the respective institutions in formulating better policies and practices. Improving the survey in key areas will provide more accurate responses, and continued tracking of the results will guide government policy directives to enhance student movement, particularly from colleges to universities.

The importance of documenting the amount of transfer overall and within particular areas of study is reinforced by a recent paper in the working paper series, *Ontario in the Creative Age*, from the Martin Prosperity Institute. Bramwell (2009) argues that "community colleges make critical contributions to Ontario's creative economy in several important ways", including

providing "career pathways for student mobility from colleges to university" (p. 2). And because the evidence shows that college graduates further their education within geographic proximity from their original post-secondary institution, more research will "offer significant potential to inform public policy in the area of human capital formation and regional economic development" (p. 22).

Reasons and Sources of Information

The results of the survey are conclusive with respect to the rationale for college graduates to pursue further education. The reasons show that it is not for lack of job opportunities that college students enroll in another program, but to enhance their earnings prospects and prestige. Regardless of institution or credential, the attainment of additional credentials is viewed as an important asset for future career and social achievement. The analysis of college graduates in pursuit of a bachelor's degree also showed that for a majority of the respondents, they understood that completion of a college credential was a necessary step to gain admittance. The college program, therefore, became a vehicle to achieve those goals.

It would appear, however, that university resources and college faculty are the major source of information assisting college students in continuing on to university, with college websites the primary source for those continuing on to college. For those colleges with a large number of students seeking to attend university, the establishment of a transfer office with supporting resources (web, paper, and staff) would assist in their mandate. For specific programs within these colleges, targeted information would greatly enhance understanding and establish more long term relationships.

The Ontario College University Transfer Guide (OCUTG), produced and maintained by the College University Consortium Council (CUCC), is an electronic guide that provides searchable information about articulation agreements between colleges and universities to assist students moving between programs and institutions. It is a listing of the existing agreements, spelling out the details and contact information to provide the students with the requisite information to make an informed decision. However, the OCUTG was only used by just over half of those who went on to university. In contrast, although not directly comparable, BC's provincial electronic transfer guide was used by 75 per cent of their respondents, second only to the receiving university's web site.

Importance of Looking at Program Level – Scope of Analysis

A tendency to evaluate student movement on the basis of overall or average numbers masks the diversity of program offerings and the structure of the concomitant curriculum. The preparatory/upgrading programs, for example, were demonstrably different from others in this analysis of student movement. The graduates are pursuing further education in percentages far exceeding those of other college programs. The program appears to be serving its function and the students within it understand that role. Better information (see survey design discussion below) will assist in understanding the needs of these students as they continue their education at college or university.

Other program areas, as well, are witnessing large percentages of graduates pursuing further education, especially into degree programming. The differences among the various types of programs necessitates a more detailed and nuanced approach to policy and curriculum development. Enhancements to facilitate student movement need to account for the specific circumstances of the individual programs, taking into consideration the nature of the discipline and the student body. Graduates of hospitality programs, for example, most often report a change in career as a reason for continuing their education. These graduates saw little affinity with their degree programming and were the least satisfied.

A closer analysis of the programs into which these respondents were enrolled would assist in determining whether this lack of affinity is a consequence of the lack of pathways available, or is a function of the nature of the student. The discrepancy with program fit appeared to have had an impact on the graduates' level of satisfaction and amount of transfer credit, which could result in eventual levels of achievement. The overall numbers are small for hospitality programs, but if there was a better understanding of the pathways, or lack thereof, and a more detailed understanding of student aspirations, college programs could enact the appropriate actions to assist future students.

The transfer experiences of graduates from the engineering/technology cluster do not fare much differently in most respects from hospitality programs. Engineering/ technology graduates are the third largest number of graduates, only slightly smaller than the community service cluster, but have the third smallest percentage of graduates enrolled at a university.

While the graduate survey allows for a reasonable accounting of student movement, it does not measure the success of these students in their further studies. Access to further education, particularly degree programs, must be accompanied by ultimate completion. Earlier, limited studies suggest that previous college students are successful academically in university degree programs but have lower rates of completion. These studies need to be updated and expanded. The opportunity to combine the knowledge of these graduate surveys with internal data from the respective institutions would form a powerful database that would approach a complete picture of the transfer phenomenon.

Transfer Experience

Despite the well known differences between the BC and the Ontario transfer systems, it is interesting to compare the survey results for transfer students between the two provinces. The BC Stats report showed that those in related programs were most likely to have met their transfer expectations. The report showed that 86 per cent received all expected credit and only 6 per cent were unsuccessful in transferring three or more credits. In contrast, in Ontario, 71.4 per cent of those who continued on in related programs received the same or more than expected credit. However, the satisfaction of Ontario transfer students is comparable to those in BC. Eighty per cent of BC's transfer students were satisfied with the admission services and application processes, while 81 per cent were satisfied with the overall transfer experience. By comparison, although the questions are not identical, 79.4 per cent of Ontario's transfer

students were satisfied with transition experience; 84.7 per cent with academic preparation; and 86.6 per cent were satisfied that college had assisted in their goal achievement.

Degrees at College and Redefining Transfer

The section "Further Education – University" reported the gradual rise in university attendance by Ontario college graduates until recently. The percentage of all graduates attending any university dropped from 8.8 per cent in 2005-06 to 8.0 per cent in 2006-07. That decline, however, was accompanied by an increase in percentage of graduates enrolled in a collaborative degree or bachelor degree in an applied area of study. Therefore, the evidence does show an increase in the percentage of graduates enrolled in a degree program, at a university, college, or one taught collaboratively. Together, the 2006-07 results represent the first time that self-reported attendance is a double-digit percentage provincially.. The increase in college graduates pursuing a collaborative degree or a bachelor degree at a college bodes for a broader definition of transfer. The standard notion that transfer represents the movement of college students into university degree programs is challenged by the introduction of bachelor degrees at colleges and the proliferation of college degrees.

Calculating Transfer

The transfer rate in Ontario, at 8 per cent, (calculated simply as the proportion of college graduates continuing on to university after graduation), is considered by many as being fairly lower than would be expected. Opponents to more direct intervention to enhance transfer take the percentage as an indicator for the overall lack of demand (Skolnik, 1995). On the other hand, proponents of implementing more direct government policies cite the figures as evidence that the system needs significant improvement. The latest mobility report from Colleges Ontario, using the same data as the current report, states that "relative to other jurisdictions surveyed, Ontario has one of the worst transfer rates" (Colleges Ontario, 2009,p.ii).

When interpreting transfer rates several issues need to be considered. One is that colleges offer a wide range of programming many of which would be inappropriate for further degree opportunities and were intended to prepare graduates for particular careers. Additionally, some students do not have any intention of transferring, although aspirations may evolve over time. Also, as noted earlier, the graduate survey only measures those who completed a college program and does not take into account those graduates who delay entrance into a degree program.

Gelin (1999) posits a "transfer readiness" model that would account for student preparedness and intentions, as well as the timing of transfer. In this model, the calculation of percentage would include first time, college students whose primary education goal was to transfer to degree granting programs as the denominator and the number who would be eligible to transfer based on grade point average within transferable courses as the numerator. In so doing, the formula accounts for student intentions and program of study. The evidence presented here identifies significant differences among programs with respect to the number of students pursuing degree qualifications. A more accurate reflection of college-to-university transfer would

be to capture the intent of all students as they enter the programs with the largest amount of movement and to track their subsequent enrolment over several years, including those who do not complete the college program. Using this more precise measure for calculating transfer would provide a better picture of student movement and help inform policy in this area. The intention would not be to enhance transfer for all college programs, but to concentrate on those with close discipline affinity and those in which there is evidence of student demand.

Another potential factor that may be mitigating the number of students who transfer is college graduates' previous education. Earlier it was posited that previous education could account for the number of students who reported larger than anticipated amount of transfer credits. A previous credential could also reduce the likelihood of pursuing further education. In the 2008-09 student satisfaction survey, 9.7 per cent of first year students have a university degree and 10.4 per cent have a college credential. The requirement or desire for additional post secondary education could be diminished as a result. The exclusion of these students from a calculation of transfer could change the reported percentage. The issue speaks to the need for inclusion of more background information in the Graduate Satisfaction Survey. The answers could assist in interpreting some of the results discussed here and in other sections. Therefore, the inclusion of a question on the previous education of all respondents to the graduate survey would aid in explaining the responses to the background questions about the amount of transfer credit and the ability to enter university directly. In the former, the responses showed an unanticipated level of transfer credit that could be explained, in part, by the addition of previous educational achievements. Colleges in metro Toronto, the source for the largest number of transfer students, attract a significant number of students who had immigrated to Canada, usually having already earned a postsecondary credential. College provides for them an opportunity to earn a Canadian credential that would enable them to access the workforce. The college program also allows for immigrant student to acquire the necessary English language requirement without which they would be unable to enter a Canadian university program. The addition of a question on previous education would not only help readers understand the responses to further education questions, but would inform colleges and government about the role colleges play in providing access to the labour market for new Canadians.

Future Study

As noted at the outset, the graduate survey is limited to graduates of college programs and cannot account for the number of college students who enroll at another postsecondary institution before completing their program of study. A study that would encompass all college students who proceed into a university program would complete the picture of mobility from college to university. Such a study could also include tracking students through programs and assessing the impact of articulated programs. Knowing the college and secondary school academic performance of these students would be beneficial with respect to predicting transfer and future success.

As well, because the graduate survey is conducted six months after the student graduates, it is not capturing those taking time out of their studies before continuing. The extent of this situation is unclear, but given the socio-economic circumstances of the typical college student, the need to earn more income before re-enrolling is a reality that is not captured in the survey. An

additional graduate survey conducted at least one year after completion of the program would be more inclusive and provide a more precise picture. The survey would also assist colleges in an evaluation of those in the workplace, especially to attain figures about graduates working and working in an occupation related to their college program.

The current questions on education in the graduate survey are also limited to those who successfully entered another postsecondary institution. We do not get any sense of the number of unsuccessful applicants nor of their personal and academic characteristics. Smith's (1998) thesis provided an evaluation of both successful and unsuccessful applicants; however, the data was from 1992 and given the changes since then, a more timely examination would be welcome.

The last section of this report attempted to provide analysis beyond the reporting of frequencies and began to investigate the relationship between key variables. The report leads to more questions than answers, which would be the subject of further analysis particularly with additional years of survey data.

Appendices

Code	College Name	College Region[7]	College Size[8]
ALGO	Algonquin College	Eastern	Large
BORE	Collège Boréal	Northern	Small
CAMB	Cambrian College	Northern	Medium
CANA	Canadore College	Northern	Small
CENT	Centennial College	Metro Toronto	Large
CONF	Confederation College	Northern	Small
CONS	Conestoga College	Southwestern	Medium
DURH	Durham College	Central	Medium
FANS	Fanshawe College	Southwestern	Large
GRBR	George Brown College	Metro Toronto	Large
GEOR	Georgian College	Central	Medium
HUMB	Humber College	Metro Toronto	Large
LACI	La Cité collégiale	Eastern	Medium
LAMB	Lambton College	Southwestern	Small
LOYT	Loyalist College	Eastern	Small
MOHA	Mohawk College	Central	Large
NIAG	Niagara College	Central	Medium
NORT	Northern College	Northern	Small
SAUL	Sault College	Northern	Small
SENE	Seneca College	Metro Toronto	Large
SHER	Sheridan College	Central	Large
SLAW	St. Lawrence College	Eastern	Medium
SSFL	Sir Sandford Fleming College	Eastern	Medium
STCL	St. Clair College	Southwestern	Medium

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[7] College region is classified according to the postal code of the college's main campus. (Eastern:K; Central:L; Metro:M; North:P; South:N)

[8] College size is classified according to MTCU audited Full time equivalent (FTE) enrolment for 2006-07. (small= <3200 FTE; medium=between 3200- 9000 FTE; Large=>9000 FTE)

Appendix 2. Grouping of field of study by MTCU occupation cluster

Code	Field of Study	Occupational Cluster Name	Nom du groupe de programmes
A16	Business	Public Relations	Relation publiques
B00	Business	BUSINESS - UNKNOWN CATEGORY	Commerce - Inconnu
B01	Business	Business Computer	Informatique de gestion
B02	Business	Office Administration - Health	Administration de bureau - médical
B03	Business	Office Administration - Legal	Administration de bureau - juridique
B04	Business	Office Administration	Administration de bureau
B06	Business	Business Management	Commerce - gestion
B07	Business	Accounting/Finance	Comptabilité financière
B10	Business	Government/Real Estate	Immobilier
B11	Business	Human Resources/Industrial Relations	Ressources humaines/relations industrielles
B12	Business	Marketing/Retail Sales	Marketing et commerce de détail
B13	Business	Materials Management	Gestion de stocks
B14	Business	Small Business	Petites entreprises
B15	Business	Business Legal	Droit commercial
B18	Business	Aviation Management	Aviation - gestion
B19	Business	Arts Administration	Administration des arts
A10	Community Service	Law and Security	Loi et sécurité
A11	Community Service	Library	Bibliothéconomie
A12	Community Service	Education	Enseignement
A13	Community Service	Child/Youth Worker	Travail auprès des enfants et des jeunes
A14	Community Service	Developmental Services Worker	Réadaptation
A15	Community Service	Recreation/Fitness	Conditionnement physique et loisirs
A17	Community Service	Social Services	Services sociaux
A18	Community Service	Community Planning	Techniques d'urbanisme

Code	Field of Study	Occupational Cluster Name	Nom du groupe de programmes
A19	Community Service	Native Community Worker	Travail communautaire auprès des autochtones
B09	Community Service	Recreation Facilities	Loisirs
A00	Creative and Applied Arts	ARTS - UNKNOWN CATEGORY	Arts Appliqués - Inconnu
A01	Creative and Applied Arts	Media	Médias
A02	Creative and Applied Arts	Performing Arts	Arts dramatiques
A03	Creative and Applied Arts	Fashion	Techniques et création de mode
A04	Creative and Applied Arts	Advertising and Design	Publicité et design
A05	Creative and Applied Arts	Art	Beaux-arts
A06	Creative and Applied Arts	Crafts	Artisanat
A07	Creative and Applied Arts	Graphic Arts/Printing	Création et production graphique
A08	Creative and Applied Arts	Horticulture	Horticulture
T00	Engineering/Technology	TECHNOLOGY - UNKNOWN CATEGORY	Technologie - Inconnu
T01	Engineering/Technology	Architectural	Architecture
T02	Engineering/Technology	Automotive	Véhicules moteurs
T03	Engineering/Technology	Chemical/Biological	Chimie et biologie
T04	Engineering/Technology	Civil	Génie civil
T05	Engineering/Technology	Drafting	Dessin industriel
T06	Engineering/Technology	Electronics	Électronique
T07	Engineering/Technology	Industrial	Génie industriel
T08	Engineering/Technology	Instrumentation	Instruments de précision
T09	Engineering/Technology	Mechanical	Mécanique
T10	Engineering/Technology	Power	Production d'énergie
T11	Engineering/Technology	Resources	Richesses naturelles
T12	Engineering/Technology	Furniture/Wood Products	Ameublement et produits du bois
T13	Engineering/Technology	Welding	Soudage
T14	Engineering/Technology	Aviation (Maintenance)	Aviation (entretien des appareils)

Code	Field of Study	Occupational Cluster Name	Nom du groupe de programmes
T15	Engineering/Technology	Aviation (Flight)	Aviation (vols)
T16	Engineering/Technology	Machining	Usinage
T17	Engineering/Technology	Marine	Technologie maritime
T18	Engineering/Technology	Geology/Mining	Géologie et mines
T19	Engineering/Technology	Technology Miscellaneous	Technologie - divers
H00	Health	HEALTH - UNKNOWN CATEGORY	Santé - Inconnu
H01	Health	Health - Miscellaneous	Santé/divers
H02	Health	Animal Care	Soins des animaux
H03	Health	Health Technology	Technologie de la santé
H04	Health	Nursing Related	Soins infirmiers et programmes connexes
B05	Hospitality	Culinary Arts	Arts culinaires
B16	Hospitality	Travel/Tourism	Voyage/tourisme
B17	Hospitality	Hospitality Management	Industrie de l'accueil - gestion
A09	Preparatory/Upgrading	Preparatory/Upgrading	Recyclage et cours préparatoires

Appendix 3. Top five programs per college credential by sector, %

MTCU Title Program	University Degree	University Non-degree	Collaborative Degree	College Degree	College Non-degree	Total
Ontario certificate (1 yr)						
General arts and science	56.3	52.6	24.0	21.2	21.4	25.1
Preparatory health science	16.3	19.3	70.1	9.6	19.7	21.8
Art fundamentals	9.4	12.3	2.0	26.0	7.9	8.5
Office administration	1.3	0.0	1.0	3.4	5.4	4.6
Personal support worker	1.9	1.8	1.5	1.4	4.7	4.1
79 total						64.0
Diploma (2 yr)						
Early childhood education	19.7	16.2	18.0	6.5	6.2	11.3
General arts and science	11.8	9.7	15.4	9.3	9.1	10.3
Police foundations	11.7	13.1	13.5	8.3	5.6	8.3
Social service worker	10.3	14.7	8.0	1.9	3.3	6.1
Business - accounting	3.3	2.7	1.6	1.9	5.2	4.2
165 total						40.3
Advanced diploma (3 yr)						
Business administration	15.8	14.8	15.3	4.4	12.5	14.3
Business administration - accounting	13.8	14.8	14.4	6.5	12.4	13.2
Child and youth worker	7.2	9.1	6.7	8.7	6.4	7.0
Mechanical engineering	7.1	3.4	5.3	4.4	5.2	5.9
Business administration – marketing	6.4	14.8	5.3	2.2	4.1	5.8
88 total						46.2
Graduate certificate (1 yr)						
Bridging to university nursing	28.4	4.4	60.7	0.0	2.5	16.2
Human resources management	9.2	4.4	3.6	20.0	8.0	7.9
Public relations	8.3	4.4	0.0	0.0	3.7	4.9
Geographic information	7.3	8.7	10.7	0.0	0.0	4.0
Accounting and information technology	1.8	0.0	3.6	40.0	3.7	3.4
79 total						36.3

Appendix 4. Number of surveyed college graduates returning to college, by institution, full or part time, 2006-07.

College	Other Colleg	ALGO	BORE	CAMB	CANA	CENT	LACI	CONS	CONF	DURH	FANS	GRBR	GEOR	HUMB	LAMB	LOYT	MOHA	NIAG	NORT	STCL	SLAW	SAUL	SENE	SHER	SSFL
ALGO	20	455	0	0	2	1	2	2	1	3	2	1	1	2	1	1	0	0	4	1	6	0	1	3	4
BORE	1	0	87	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
CAMB	10	6	0	426	4	1	0	0	4	0	3	4	3	2	1	1	2	0	0	0	2	1	0	0	0
CANA	12	3	1	10	86	0	0	1	0	0	0	1	3	0	4	0	0	2	1	0	0	0	0	1	1
CENT	13	0	0	0	0	203	0	0	0	2	0	7	1	4	0	0	0	0	0	0	0	0	12	1	0
CONF	5	1	0	1	1	0	0	0	142	0	0	0	1	0	1	0	0	3	1	0	0	1	0	0	0
CONS	16	0	0	0	0	0	0	188	0	1	5	2	3	4	0	0	2	1	0	0	0	0	2	1	0
DURH	14	3	0	0	0	4	0	1	0	165	2	3	1	5	1	0	1	3	0	0	1	0	2	0	5
FANS	41	5	1	3	2	1	0	7	1	9	644	4	11	1	8	0	9	6	0	6	0	3	2	5	4
GEOR	13	2	1	3	2	1	0	6	0	3	3	6	198	2	0	2	3	1	2	1	0	0	6	4	2
GRBR	26	4	0	0	0	18	0	0	0	6	2	498	3	17	0	1	1	2	0	2	0	0	12	13	0
HUMB	25	3	0	1	0	9	1	1	1	1	1	9	1	418	0	1	6	1	0	0	0	0	9	8	1
LACI	19	2	1	0	1	1	92	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	0	0	1
LAMB	12	1	0	0	0	1	0	9	0	0	5	0	2	0	98	0	5	2	1	3	1	0	0	0	0
LOYT	13	3	1	0	0	0	0	0	0	5	1	1	0	0	2	211	2	1	0	0	6	0	2	0	1
MOHA	18	2	0	0	0	1	0	4	0	0	5	0	0	4	0	0	244	3	0	0	0	0	0	4	0
NIAG	24	1	0	1	1	1	0	3	0	2	4	5	1	2	0	0	13	193	0	3	0	1	1	2	1
NORT	6	1	0	6	3	1	0	0	2	0	0	0	1	0	0	0	1	0	71	0	1	1	0	0	0
SAUL	13	3	0	5	0	0	0	0	2	0	1	0	0	0	0	0	1	3	0	0	0	85	0	0	0
SENE	30	4	2	0	1	12	0	0	0	2	1	17	6	10	0	1	2	1	1	0	1	0	334	3	1
SHER	51	13	3	2	0	3	0	8	0	2	5	8	3	37	1	0	7	4	0	0	4	0	16	414	0
SLAW	15	6	0	1	0	1	0	1	0	4	1	1	1	2	0	6	2	2	0	0	151	0	4	2	4
SSFL	18	5	0	0	2	0	0	2	0	6	0	1	4	1	0	3	2	0	0	1	4	0	4	3	193
STCL	23	0	0	1	1	1	0	1	0	1	3	0	1	1	2	2	2	0	0	394	1	0	1	0	0
Total	438	523	97	461	107	260	96	234	153	212	688	568	245	512	120	229	305	230	83	411	179	92	408	464	218

Appendix 5. Number of surveyed college graduates attending university, by institution, full or part time, 2006-07

College	Other University	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queens	Ryerson	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York	Nipissing	UOIT	OCAD
ALGO	21	0	94	0	6	1	2	72	2	1	0	0	0	0	0	0	2	3	1	0
BORE	3	0	0	0	0	12	0	0	0	1	0	0	0	0	0	0	0	0	0	0
CAMB	3	0	1	0	5	63	0	1	1	1	0	1	0	1	0	1	0	0	0	0
CANA	4	4	4	0	3	10	1	1	0	0	0	1	2	1	0	0	1	63	0	0
CENT	5	2	0	7	5	1	1	0	0	108	18	2	1	4	0	3	72	0	4	5
CONF	2	0	0	0	49	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CONS	7	4	0	2	0	2	8	1	0	4	0	0	24	0	9	25	1	1	0	0
DURH	14	2	1	0	2	0	2	1	0	8	5	16	0	2	0	1	5	0	33	4
FANS	24	12	4	4	6	4	6	3	0	5	1	0	3	126	0	7	4	1	0	0
GEOR	19	0	0	3	6	33	5	1	0	8	1	0	3	3	1	3	23	7	1	2
GRBR	9	4	1	5	3	5	6	1	0	103	25	2	1	1	1	2	75	0	2	10
HUMB	25	9	4	46	13	3	13	5	1	74	15	3	4	6	1	4	149	1	3	2
LACI	41	0	3	0	0	0	0	82	0	1	0	0	0	0	0	0	0	0	0	0
LAMB	1	1	1	1	1	0	1	1	0	0	0	0	0	13	0	16	0	0	0	0
LOYT	2	1	4	1	2	2	0	2	3	1	0	9	1	1	0	0	2	0	1	0
MOHA	15	23	3	5	6	3	67	1	0	12	4	0	6	3	28	0	8	0	1	0
NIAG	13	66	3	6	6	1	7	0	0	12	1	0	0	2	3	2	3	1	4	2
NORT	0	0	0	0	3	7	0	0	0	0	0	1	1	0	0	0	0	0	0	0
SAUL	15	1	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0
SENE	22	1	6	8	5	2	1	4	1	113	15	5	2	5	0	6	245	0	4	5
SHER	20	13	2	22	4	2	30	4	1	67	26	2	6	4	4	10	88	1	1	9
SLAW	16	2	16	1	1	3	0	7	11	3	0	3	0	2	0	1	2	0	1	1
SSFL	8	4	4	1	5	0	2	1	1	2	2	66	5	2	2	1	3	2	3	0
STCL	8	0	0	1	0	0	0	0	0	3	0	0	0	2	0	98	0	0	0	0
Total	297	149	151	113	131	159	153	188	21	527	113	111	59	179	49	180	683	80	59	40

Appendix 6. Percent of College graduates attending university, 2001-02-2006-07

	2002	2003	2004	2005	2006	2007
LACI	9.02	9.55	11.01	15.04	15.45	13.8
CANA	8.09	6.4	9.5	15.96	8.91	11.85
SENE	9.69	9.68	10.96	13.32	12.57	11.78
CENT	5.32	6.46	7.39	7.92	10.02	10.91
HUMB	9.33	8.64	8.36	10.42	11.08	9.62
SHER	6.12	7.08	9.3	9.65	9.68	9.44
MOHA	4.57	5.09	6.68	7.89	8.29	8.34
NIAG	6.23	6.31	7.14	8.56	9.67	8.15
SSFL	6.19	5.83	5.87	7.76	6.94	7.4
GEOR	3.49	4.09	6.91	6.58	7.85	7.31
GRBR	5.62	4.86	5.98	7.68	7.95	7.05
STCL	7	6.56	6.72	9	8.99	7.02
CONF	4.78	5.11	5.7	7.46	7.64	6.58
DURH	4.67	3.65	4.93	7.86	7.08	6.35
ALGO	5.24	5.2	6.45	9.05	7.6	6.33
FANS	5.72	5.56	6.83	6.4	7.39	6.17
CAMB	5.51	5.55	7.79	7.39	8.04	6.01
LAMB	3.94	6.76	7.04	7.11	8.99	5.74
CONS	3.87	4.87	5.55	5.74	5.62	5.69
SLAW	4.76	3.69	5.02	5.59	7.91	5.67
SAUL	7.01	8.04	9.79	12.29	9.34	4.25
BORE	2.98	3.32	5.62	4.72	6.42	3.88
LOYT	2.34	3.74	4.95	5.05	5.52	3.72
NORT	3.04	2.99	2.71	2.52	2.61	3.17
Total	6.04	6.14	7.29	8.67	8.83	7.99

SECTION GA - GRADUATE EDUCATIONAL STATUS

1. First of all, could you tell me whether you were attending an educational institution on a full-time basis or part-time basis during the week of _____?

1	Yes, full-time [708]	**-- CONTINUE**
2	Yes, part-time	**-- CONTINUE**
3	No	**-- SKIP TO Q.6**

2. And during that week, were you attending a college, a university or other institution?

01	College (Other) [709 - 710]	**-- CONTINUE**
02	Algonquin	
03	College Boreal	
04	Cambrian	
05	Canadore	
06	Centennial	
07	La Cite collégiale	
08	Conestoga	
09	Confederation	
10	Durham	
11	Fanshawe	
12	George Brown	
13	Georgian	
14	Le College des Grands Lacs	
15	Humber	
16	Lambton	
17	Loyalist	
18	Mohawk	
19	Niagara	
20	Northern	
21	St. Clair	
22	St. Lawrence	
23	Sault	
24	Seneca	
25	Sheridan	
26	Sir Sandford Fleming	
51	University (Other)	**-- SKIP TO Q.4**
52	Brock	
53	Carleton	
54	Guelph	

55	Lakehead
56	Laurentian
57	McMaster
68	Nipissing
70	Ontario College of Art & Design/OCAD
69	Ontario Institute of Technology/UOIT
58	Ottawa
59	Queens
60	Ryerson
61	Toronto
62	Trent
63	Waterloo
64	Western
65	Wilfrid Laurier
66	Windsor
67	York

| 81 | Other educational institution | ➔ **SKIP TO Q.5** |
| 98 | Refused | ➔ **SKIP TO Q.5** |

3.   Was this... **READ LIST 1-4 , 6-7**

1   a different college program from the _____ (PROGRAM NAME) program
2   a college post-diploma program
3   a third year option to a two year program (e.g. a flow through program)
4   a continuing education course
6   a college applied degree
7   a degree offered jointly with a university (i.e. a collaborative program)
5   neither

IF ENROLLED IN A COLLABORATIVE PROGRAM IN Q.3, ASK Q.3a.
ELSE SKIP TO Q.4b:

3a.   And, which university is jointly offering this degree?
        51   Other university (Not listed below)
        52   Brock
        53   Carleton
        54   Guelph
        55   Lakehead
        56   Laurentian
        57   McMaster
        68   Nipissing
        70   Ontario College of Art & Design/OCAD
        69   Ontario Institute of Technology/UOIT
        58   Ottawa
        59   Queens
        60   Ryerson
        61   Toronto
        62   Trent
        63   Waterloo
        64   Western
        65   Wilfrid Laurier
        66   Windsor
        67   York
        81   Other educational institution   (Not listed above)
        98   Refused

IF ATTENDING UNIVERSITY IN Q.2, ASK Q.4,
IF ATTENDING COLLEGE IN Q2, GO TO Q.4b, ELSE GO TO Q.5

4.   Was this a university... **READ LIST 1 - 3, 5**

        1   certificate or diploma program, or
        2   degree program
        3   continuing education course
        5   degree offered jointly with a college (i.e. a collaborative program)
        4   neither **(DO NOT READ)**

IF ENROLLED IN A COLLABORATIVE PROGRAM IN Q.4, ASK Q.4a1.
ELSE SKIP TO Q.4a:

4a1.   And, which college is jointly offering this degree?

01   Other college (Not listed below)
02   Algonquin
03   College Boreal
04   Cambrian
05   Canadore
06   Centennial
07   La Cite collégiale
08   Conestoga
09   Confederation
10   Durham
11   Fanshawe
12   George Brown
13   Georgian
14   Le College des Grands Lacs
15   Humber
16   Lambton
17   Loyalist
18   Mohawk
19   Niagara
20   Northern
21   St. Clair
22   St. Lawrence
23   Sault
24   Seneca
25   Sheridan
26   Sir Sandford Fleming
81   Other educational institution (Not listed above)
98   Refused

4a.   What program did you enrol in?
        PLEASE GET THE EXACT, OFFICAL TITLE OF THE PROGRAM

        _____

        99998   None/Not applicable/Refused   **➔ GO TO Q.5**
        99999   Not reported/Don't know   **➔ GO TO Q.5**

        IF ATTENDING UNIVERSITY IN Q.2, SKIP TO Q.5:
4b.   What program did you enrol in?
        PLEASE GET THE EXACT, OFFICAL TITLE OF THE PROGRAM

        _____

        99998   None/Not applicable/Refused   **➔ GO TO Q.5**
        99999   Not reported/Don't know   **➔ GO TO Q.5**
        (NOTE TO CODER: USE THE 5 DIGIT MTCU CODES)

5.   Not asked.

5a.   Please tell me whether each of the following were a major reason, a minor reason or not a
reason at all for returning to continue with your education? **READ AND ROTATE LIST**

		Major	Minor	Not a Reason	RF	DK
A.	Potential for higher income	3	2	1	8	9
B.	No work/ job available in your field of study	3	2	1	8	9
C.	To get diploma/ certificate/ degree	3	2	1	8	9
D.	Interest in further/ more in depth training in field	3	2	1	8	9
E.	Interest in pursuing a different field of study	3	2	1	8	9
F.	Needed for professional designation	3	2	1	8	9
G.	Gain theoretical knowledge/ broader education	3	2	1	8	9
H.	Encouragement from others (family members, friends, faculty)	3	2	1	8	9
I.	More opportunities for career advancement	3	2	1	8	9
J.	Upgrade/ improve skills	3	2	1	8	9
K.	There was a formal transfer agreement between your previous and your current program	3	2	1	8	9
L.	Company required/ paid for it	3	2	1	8	9

        IF ANSWERED PART TIME IN Q1, SKIP TO Q.6, ELSE CONTINUE:

5b.   When you were making your plans for further education, please tell me whether each of the
following was a major source of information, minor source of information or not used   at all? **READ
AND ROTATE LIST**

		Major	Minor	Not Used at all	RF	DK
A.	College website	3	2	1	8	9
B.	College hard copy publications	3	2	1	8	9
C.	College faculty/ counselors/ program coordinators	3	2	1	8	9
D.	College administration, i.e. registrar's office, student services	3	2	1	8	9
E.	University website/ publications	3	2	1	8	9
F.	University staff (including registrar's office, faculty, etc.)	3	2	1	8	9]
G.	Other students (including current and former college and university students)	3	2	1	8	9
H.	Ontario College University Transfer Guide (OCUTG)	3	2	1	8	9
I.	Parents and Family	3	2	1	8	9

5c.   And, what additional source of information, if any, did you use? **PROBE UNTIL UNPRODUCTIVE.**

FOR EACH ADDITIONAL SOURCE OF INFORMATION USED IN Q5c, ASK:
5d.   Was this a major or a minor source of information? **RECORD ABOVE**

5e.   When did you decide that you would further your education after college graduation?   Was it... **READ LIST**

    1   Before entering the _____ (COLLEGE PROGRAM) Program at _____ COLLEGE [1164]
    2   At the start of the _____ (COLLEGE PROGRAM) Program at _____ (COLLEGE)
    3   During the _____ (COLLEGE PROGRAM) Program at _____ (COLLEGE)
    4   After completion of the _____ (COLLEGE PROGRAM) Program at _ (COLLEGE)
    8   Refused
    9   Don't know

5f.   How related is your current program to the _____ (COLLEGE PROGAM) at _____ (COLLEGE)? Would you say it is....... **READ LIST**

    1   Very related
    2   Somewhat related, or
    3   Not related at all
    8   Refused
    9   Don't know

5g.   Was there an articulation agreement between your college program and the program you are currently enrolled in that specifies how much credit you receive from your college program, or not?

    1   Yes
    2   No
    8   Refused
    9   Don't know

5h.   Please estimate how much of your current program you have or will receive credit for. Would it be.... **READ LIST 1- 6**

    5   Two or more years
    4   One to two years
    3   One year
    2   About half a year
    1   Less than half a year
    0   None
    9   Don't know

5i.   When did you find out whether you were receiving credit for your college program? Was it..... **READ LIST 1- 6**

    1   With offer of admission
    2   At or before registration
    3   After registration
    4   Have not heard yet   ➔ **GO TO Q.5k**
    5   Have not applied for credit yet, or   ➔ **GO TO Q.5k**
    6   You are not applying for credit   ➔ **GO TO Q.5k**
    8   Refused   ➔ **GO TO Q.5K**
    9   Don't know   ➔ **GO TO Q.5k**

5j.   Relative to what you expected, the amount of credit you received was.... **READ LIST 1-3**

    1   Less than expected
    2   The same as expected, or
    3   More than expected
    8   Refused
    9   Don't know

5k.   Do you think you would have been accepted into your current program without graduating from college first?

    1   Yes
    2   No
    8   Refused
    9   Don't know

5l.　　Overall, how satisfied are you with the transition experience from college to your current program?

　　　　5　　　Very satisfied [1171] **[New in 06s]**
　　　　4　　　Satisfied
　　　　3　　　Neither satisfied nor dissatisfied
　　　　2　　　Dissatisfied
　　　　1　　　Very dissatisfied
　　　　8　　　Refused
　　　　9　　　Don't know

5m.　　And, overall, how satisfied are you with your academic preparation for your current program of study? [1172] **[New in 06s]**

　　　　5　　　Very satisfied
　　　　4　　　Satisfied
　　　　3　　　Neither satisfied nor dissatisfied
　　　　2　　　Dissatisfied
　　　　1　　　Very dissatisfied
　　　　8　　　Refused
　　　　9　　　Don't know

* * *

34.　　And, how would you rate your satisfaction with the usefulness of your college education in achieving your goals after graduation? Please tell me if you were very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied or very dissatisfied. **[KPI measure, filtered by KPI =1, calculated as 4+5/1+2+3+4+5]**

　　　　5　　　Very satisfied [2055]
　　　　4　　　Satisfied
　　　　3　　　Neither satisfied nor dissatisfied
　　　　2　　　Dissatisfied
　　　　1　　　Very dissatisfied
　　　　8　　　Refused
　　　　9　　　Don=t know

* * *

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