Deciding to Transfer: A Study of College to University Choice
Updated for Internal Transfer

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Abstract
This is a culmination of three related studies of how students make choices within binary systems of post-secondary education: school to college or university, college to university, and college to college to university. The predecessor study investigated how high school students who had been offered admission to a college and a university chose between them. The next study is re-visited and updated here on the basis of the results of a new follow-up study that focusses particularly on internal transfer and extends data analysis to both
studies. The second study surveyed and subsequently interviewed over 200 hundred college students who indicated an interest in transferring to university. Students at five colleges with different transfer models were tracked until they left their colleges, whether or not they transferred. The objective was to learn when, why, and how students finally decide to transfer or not. The second study concluded that the articulation that students “see” is not always the articulation that planners and policy-makers “see” for them, that the “concurrent college” model performed the best and that the “traditional college” performed the worst, that availability of pathways generally promotes transfer, and that program switching or “internal transfer” prior to transfer to university is more frequent than expected. The third study followed-up the phenomenon of “internal transfer” by surveying and interviewing a second cohort of students at four of the five colleges in the second study who had also indicated an intention to transfer to university, but had first transferred to another college program before seeking admission to university. The combined results reported here of the second and third studies led to the revision of some of the conclusions of the second study, and added new conclusions about internal transfer, for example: that transferring from program to program within or among colleges prior to university entry is almost always a complete re-start of the path from college to university, is motivated by concern about the credential to job market match, and is oriented as much to transfer of credit as to credential recognition.

Key words: student transfer, transfer pathways, system articulation, student retention, labour market match
Introduction

A predecessor study to the two studies discussed here investigated the effects of articulation on the choices that secondary school students make among the colleges and universities that they attend revealed, among other things, that relatively few students who are admissible to both college and university form a plan to transfer from one to another (Lang, 2009). For such students, transfer was shown to be a coincidental behaviour that occurs after leaving secondary school. But other studies also report that relatively large proportions of students later indicate, after entering college, an interest in transferring. In other words, the coincidental behaviour at some point becomes a planned behaviour, which coincides with Leigh and Gill’s report about the “incremental aspiration effect” that occurs after students enter college (2004). The transition from coincidental to planned is at the nub of the two studies reported here, the results of which may inform system policy and institutional practice about the forms of articulation and that most promote transfer in terms of the choices that students make.

What factors influence the transition from “coincidental” to “planned”? The question is not simple. The idiom of supply and demand is often used to describe what might be called a political economy of transfer: rates of transfer from college to university may be affected more by the availability of access to university than by demand from college students. Availability of access is not only an arithmetic matter of university capacity. It is also a matter of regulations for admission and the recognition of credits at both the college level and the university level. Student demand for access can change as
workforce opportunities change. In turn, policy-makers call variously for the removal of “barriers” to transfer by installing “pathway” agreements that articulate relations between colleges and universities. The pathways typically are designed to be direct in three steps: secondary school to college program to university program, with no intervening stops. We, however, know from the original, or first, of the two studies discussed here that for some students, there is an additional college stop as they transfer internally before applying to a four-year baccalaureate program.

Because of the complexity of transfer and articulation, we cannot assume that students perceive the process in the same way that policy-makers and institutions do as “articulators.” The sub-title of James Scott's Seeing Like a State (1998) explains the special significance of process in understanding the behaviour of students vis-à-vis transfer. The sub-title is How Certain Schemes to Improve the Human Condition Have Failed. Scott was not referring to articulation in higher education but if he had, he might have described it as a "social simplification" in which what system planners “see” and what students as users “see” are different. Barbara Townsend (2001) makes a similar point, observing that plans and behaviours of students neither necessarily nor frequently align with policies and priorities set by policy-makers at the system level. This perhaps explains why internal transfer is a phenomenon that functions below the surface of larger investigations of transfer.

The new study and the consequent second-look at the study that immediately preceded it were designed to allow for a very similar possibility: that with regard to transfer, what system planners and institutions “see” and
what students “see” may not be the same. What do students see? For example, one finding from the two combined studies indicates that differences in viewpoint can extend even to nomenclature. Based on an NVivo analysis, most participants in both studies construed “transfer” either as switching from a college to a university without graduating first from college, or switching from one college program to another before applying to university. Otherwise they described themselves as college “graduates” who were “applicants” for admission to university. Another example, also from the NVivo documentary analysis in the second study, is that only one college in Ontario – coincidentally, not one in either the first or second study – used the term “internal transfer” or any other term like it in its information for enrolled students. We also see that there are synonyms for internal transfer, for example “lateral transfer” and “transfer within.”

The Original Study

The original and previously reported on study investigated the “choice” process as it occurred among students who were already in college. It asked how, when, and why students formed a plan, and made a decision to transfer (Lang, 2014). The study was undertaken at five colleges in Ontario in Canada: a “concurrent campus” college, a “university center” college, a “traditional community college,” a college with a large number of articulation agreements with universities, and a college in a location where there is no nearby university. The inclusion of the last category of college was important to introduce geography as a factor in students’ choices. Readers will recognize that this typology of colleges closely aligns with that set-out by
Floyd, Skolnik, and Walker (2005). Bahr (2012) also reported about the effects of different types of colleges on student performance, including interest in transfer.

There was a further typology. Two of the colleges were alike in the sense that they both had large numbers of "pathways" but were different in that almost all of one college’s pathway agreements were with universities outside the country as well as outside the province. The other college’s pathways were the reverse: there were a few outside the province and the majority were within the province. Thus, one could say that the pathways at the first college were outside the provincial system and therefore largely "unarticulated" while the others were within the system and largely "articulated."

The colleges that were studied had other key characteristics in common. All except one conducted a survey of entering students that asked, among many other things, whether or not students planned to transfer. Potential participants were selected randomly from students who on these surveys indicate an interest in transferring. In the case of the fifth college, an information session on transfer was added to the new student orientation program at which the survey was administered. Within the context of the research questions and methodology, “interest” meant literally that. It did not necessarily mean that participants were, on entry to college, committed to transferring or had actually applied for transfer. Each college had programs with exit points after one, two, and three years.

The original study tracked a single cohort over a three and one-half year period, September 2010 to June 2014 (Lang and Lopes, 2014). Approximately 220 students
formed the cohort in the first year. Students were also added to take into account mid-year entry. Some students left after first year without graduating, others after second year, either graduating or not, and some chose to continue to take optional third year programs. Some transferred internally to other college programs, which in turn resulted in their participation spanning more than three years. Some of that number were still enrolled in college programs at the end of the study. Hence, the third or follow-up study.

The cohorts were assembled in a planned sequence. To start, a random selection was made from all students who entered their respective college for the first time in either September or January, and who completed the college’s entering student survey. Next, on the basis of their responses to the institutional surveys, all students who expressed an interest in transferring were invited to information sessions at their colleges at which they were asked to complete a second survey exclusively about transfer. At these sessions, students were asked whether or not they were still interested in transfer. Those who indicated that they were still interested were then asked to complete a shorter survey more specific to the project and sign a consent form. These students continued on to the interview stage. Those who were no longer interested in transfer completed the same survey but without an invitation to continue. Of 675 students completed the transfer-specific surveys, 288 who were still interested in transfer. Two-hundred and twenty-four of the 288 students consented to continue in the study and were interviewed at least once in each of the following three years and one-half years (or less often for students who transferred, graduated, or withdrew). The cohort was tracked over a three and one-half year period, which
based on research literature and data available when the study was designed was a reasonable expectation.

Students who consented were interviewed at least once. The interviews in both studies were semi-structured. In the end for each of the participating students, a research dossier was assembled. Each dossier contained:

- Written records of interviews, at least one conducted in each year of study.
- Academic transcript of courses taken, grades, and basis of admission, including secondary school GPA.
- Results of the entering survey.
- Results of a survey specific to the study, conducted in each year of the study. The initial administration of this survey also included numerous vital statistics: gender, parental income, education level of parents, postal code (for purposes of determining SES), perceived academic strength, perceived financial capability, as well as information about attitudes towards transfer.

In the end, 169 of the 224 students in the original study who started were tracked to the point at which they either dropped-out, transferred, graduated, or withdrew from the study. Of the 169, 125 were interviewed in their second and, in some cases, third years of college study. These transitions coincided approximately with normal rates of retention and transfer at each participating college. They were, however, much higher than the rates of retention of college students interested in transfer in an American study conducted in 2006 (Hagedorn, et al.) The sample in that study, however, included students at the remedial level as well at the diploma and associate degree levels. Colleges in Ontario provide relatively little remedial instruction.
The Follow-up Study

The methodology of the second or follow-up study was essentially an extension and update of the original study, with four exceptions. Only students who were in a different program from the one in which they were originally enrolled were included. Of the five colleges in the original study, only four were included in the follow-up study. Sixty-one students attended information sessions and completed surveys. Of those, 44 continued on to the interview stage. They were not students who had participated in the original study, but the number was proportionally the same as the number of students in the original study who were still enrolled after three and one-half years. The third difference was an NVivo analysis of interview transcriptions from both studies, and of the information, regulations, application forms, and other documentation that the colleges provided to students who sought to transfer internally.

Putting the Studies Together

The original study made particular note of an unexpectedly high rate of internal transfer prior to students’ completing pathways to university. Because that finding was unexpected, that study could report it, but not explain it. Although participant samples of the two studies were drawn from student populations that differed only in terms of timing, the studies were so similar in terms of methodology that four sets of results and data were available for final analysis:

1. The original
2. The original study as modified by NVivo analysis, which was not part of that study’s research design.
3. The follow-up study
4. A combination of the original study as modified by NVivo analysis and findings of the follow-up study. The combination increased the overall sample size by 19 per cent.

The same statistical tests were applied to the second, third, and fourth data sets as were applied to the first. Any parts of the original study that were unaffected by the combined analysis are not repeated here.

Survey Results

First an important prefatory note about the surveys: when the results of the surveys were compared statistically, no significant variations were found between responses of students who consented to continue in the study and those who did not. In other words, students who expressed no interest in continuing to the interview stage saw transfer in the same terms as students who were interested enough to continue. The significance of this was that students who had less interest in transfer or whose interest waned had formed that view on the basis of the same information and reasoning on which students who did have an interest in transfer relied. In other words, they were equally informed. This result was repeated in the follow-up study, as could be expected given that participants by that time would have been enrolled for, at least, more than three years.

Reasons for Transfer

The original study survey, which was repeated in the follow-up study, gave 39 Likert-scaled reasons for transfer. About a third of students in the original study reported that they always wanted to go to university but poor marks prevented them from attending university. This is single most different response between the two
studies. This reason was cited by almost 50 per cent of the students in the follow-up study. Although not a difference between the two studies, it is worth explaining also that equal numbers had a more positive perspective reporting a preference for a mixture of college and university, and expressing the view that college was a good “first step” in a post-secondary education. That these numbers were about a third in both cases is significant because in the overall Ontario college student population only about 20 per cent report that “further study” is their main goal for enrolling (ACAATO, 2006).

Even after transferring internally, students still attached more importance to “further study” than did the general population of college students. About one-quarter of students in the original study expressed concern over the ability to transfer credits. But twice that number were more concerned about admissibility to university by transfer. In the follow-up study these numbers changed to almost exactly 50-50. Advice from employers was much more important motivating factor to students in the follow-up study. In the original study only seven per cent of the students cited it as a reason for their decisions. The percentage rose to just under 30 per cent in the follow-up study.

Regarding internal transfer, students in the third study did not report different reasons for their interest in transferring to university. Nor were they less interested in transfer. The split between reasons for their choices as almost 50-50. Two primary but mutually exclusive reasons were given for transferring internally instead of moving more rapidly or “on schedule” to seek university admission. The fact that they had switched programs in order to improve their chances for admission to
university implied a greater interest in transfer than in completion. For some students, it also disclosed a not unsurprising concern about grades. Admission among students who transferred internally meant entry to a specific university program, instead of to university generally. The second reason was different from the first. Other students explained transferring internally as a necessary means of keeping pace with the job market. The obverse – less concern about credit transfer – was expressed at the same time.

There was a third but minority reason for transferring internally: “I changed my mind.” Students who put this reason forward went, in most cases, on to explain that their initial program choice had not been certain in the first place. The reasoning of these students was much like that of students in the original study who had chosen college over university as a means of helping them decide on a career and “find themselves.

**Differences among colleges**

In order to compare differences among colleges, a Kruskal-Wallis test was used to compare median scores in both studies between students at the participating colleges. This test is similar to an ANOVA but preferable when the data are measured on an ordinal scale and do not meet the assumptions of ANOVA. One possible survey answer was “Do not know.” These answers were treated as missing data. The Kruskal-Wallis test was run 39 times for each of the survey’s 39 questions in both studies. There were few differences in the patterns of responses between colleges except the following, some of which are not firmly conclusive because of the large number of statistical tests that were applied to these data and variability among sample sizes.
Parental influence was lower in the follow-up study, as could be expected given the three years of experience that students had by that time. The ranked pattern, however, did not change. Parental advice was less important to students at the “traditional community college” than to students at other colleges. Students at the “concurrent college” placed a higher importance on staying at home and near work than students at the other colleges. This was repeated in the follow-up study, and may explain a preference for “transferring within” instead of “transferring out.” Only at the “traditional community college” did students report that their plans were influenced by friends, but then only “somewhat” on the Likert-scale. This difference was repeated but more pronounced in the follow-up study, perhaps because by this point students may have had more friends – former students – who had entered either the workforce or a university. Otherwise the scaled results were the same in both studies and in the combination of the two.

At the “traditional community college,” the number of students who reported being concerned about the ability to transfer credits from college to university was much lower than average number (just over 10 per cent compared to the just over 25 per cent average). In the second study this was partially explained by NVivo analysis that indicated that that college provided less information than any other college about transferring credits internally.

For all colleges in the follow-up study concern about GPA was greater than in the original study, but with a reversed order of frequency: most frequent in the “university center” college followed in declining order by
the college in a location where there was no nearby university, the “traditional community college,” and the college with a large number of articulation agreements with universities.

**Differences based on process**

Based mainly on the NVivo documentary analysis, some differences were found in the institutional processes for internal transfer. In some cases, there were no procedurally separate forms, or instructions for internal transfer other than those for initial admission. In other words, “start over.” Not surprisingly, rates of internal transfer in these cases were relatively low. Although no college documents explained this aspect of the process, in interviews, students interpreted it as attaching more importance to grades than to job market employability. This interpretation should not be taken as criticism. Some students themselves placed GPA ahead of matching the labour market.

The colleges that had separate procedures for internal transfer followed basically two models. One was conventional in that the procedures for transferring internally were substantially the same as those for students applying from outside the college. Transfer of credits was permitted but very limited, the rules and regulations around credit transfer were spelled-out beforehand, but the actual determination of credit transfer was made case by case after admission. In other words, prior to applying and being admitted, students could not be certain about carrying credits over from one program to another. NVivo analysis confirmed, however, that in practical effect those rules and regulations were the same for students applying for admission from outside the college as for students seeking to transfer
The other models were more generous in awarding transfer credit, and were found in colleges with robust general arts and science or liberal studies programs for which pathways were in place leading either to university admission or other college programs. Students could determine ahead of time, even without applying for admission, which course credits could be transferred to a different program. In other words, these processes looked a lot like formal college to university pathways, even though they were not intended as such. These arrangements, however, applied almost exclusively to students transferring internally from the general arts and science or liberal studies programs, or from one program to another within the same faculty, for example, a school of social and community services.

The college with the highest rate of internal transfer was the “traditional college.” The reason, however, was unrelated to the processes for transferring internally. It had to do with the college’s planning and budget process. Program budgets were not contingent on enrolment. Thus, losing a student to another program or gaining one from another had no financial consequence. Students at this college reported that they received most of their information about transferring internally to another program from their instructors instead of from registrars or other conventional sources of information about admission and transfer.

Findings and Observations

Did the type of college attended affect the rate transfer? There are two ways to answer this question. In the original study, unmodified by combination with the
results of the third study, the answer in terms of probability was yes for two types of college, and no for the other three. The “concurrent campus college’s” rate of transfer was seven points higher than the average rate for all five participating colleges. The “traditional community college” was below the average by six points. The other three were tightly clustered around an average transfer rate of 26 per cent.

The reader may be tempted to ask how these rates compare to province-wide rates. Those rates are known but are not comparable because they are calculated on the basis of the entire college student population, as are the previously mentioned American rates. Gelin (1999) provides an excellent explanation of the risks in comparing transfer rates jurisdiction by jurisdiction. The studies at hand examined only students who expressed a prior interest in transfer. If the reader instead were to ask how the rates compare to one another only, there is more certain answer: the “concurrent campus college” outperformed the others, and the “traditional community college” underperformed the others. The performances of the remaining three colleges were statistically the same.

Combining the original study and the follow-up study did not change the ranked order of the remaining four colleges. However, the “traditional community college” fell farther below average. The college with no university nearby fell to slightly below average. This could be explained by a preference that students in the original study had for attending a university near their homes; the choice was too limited, thus leading to either not transferring or internally transferring and ending their “pathway” with a college diploma, but not the one they initially sought. The average transfer rate rose to 31 per
cent with the combination of the results of the original study, an almost 20 per cent jump. Individual increases college-by-college ranged from a gain of four points to a gain of ten points. Regardless of the type of college, internal transfers propped up the overall rate of transfer.

Of those three colleges, two were the ones with approximately the same large number of pathways agreements, but whose agreements respectively either were almost entirely outside the province and country or were mainly with universities within the province. The performance of those two colleges were also statistically the same. The implications are twofold: articulation and pathways are separate factors in transfer performance, and, since the rates of transfer at the two colleges are statistically the same, the number of pathways may be more influential than the extent of articulation. This may corroborate Roksa and Keith’s (2008) finding that the policy purpose of systematic articulation is less to raise the rate of transfer than to increase the transfer of credit. That did not change in the third study, probably because the number pathway opportunities did not change within the short period of time between the two studies.

Combining the results of the two studies changed this picture somewhat. The average GPA for all students in the follow-up study was lower than the average GPA for all students in the original study, including those at the “concurrent college.” “Minimally qualified” thus in the third study had a different point of reference than it did in the second study. This is in turn may explain why a concern about grades was, according to the third study, a greater reason for internal transfer. The “concurrent campus college” continued to have the highest high school GPA average of participating students, although
its average was lower than in the original study. This may make it an outlier in terms of comparative transfer performance. In the original study, all but two of the participating students at the “concurrent campus college” had a high school GPA that qualified them for admission to at least one university in the province. Lest these rates seem high, the reader should recall that only a subset of each college’s overall population was included in the study. Only about one-fifth of students who enrol in colleges in Ontario do so in order to prepare for further study at university or elsewhere (ACAATO, 2006). This subset comprised students who were in programs that led to diplomas, and who believed that they were at least minimally qualified for transfer to university. For this type of student in the follow-up study, GPAs at the “concurrent campus” were lower than the comparable GPAs in the original study, but were still higher than those at the other colleges. For internal transfers at the “concurrent campus” in the follow-up study, the motivation to transfer internally, compared to the other colleges, was more to make an up-to-date match with the job market than to improve grades for university admission or to maximize the transfer of credit.

The original study concluded that the “concurrent campus college” model is that it is the most effective in terms of partnerships with universities, and that the “traditional community college” the least. Combining the results of the follow-up study with those of the original study came to the same conclusion, but with less certainty. The number and array of partnerships was almost the same in both studies. We know that students in the third study were more concerned about the transfer of credits than students in the original study were, and we also know that they had lower average
GPAs, and were, again on average, as concerned about admission as about the transfer of credit. On the other side of the same coin, the “traditional community college” had almost no partnerships with universities, even with the one nearby. If that college had few partnerships, one might also reasonably assume that its students were less able to transfer credits when they transferred.

Overall, 23 per cent of participating students in the original study ended in programs different from the ones in which they started. This was the population for the third study. The rate of internal transfer was highest at the “traditional community college,” where 60 per cent of the participating students switched programs. This was also the college at which the most students who could have graduated at the end of the second year opted to continue for a third year, and in a few cases more. Was this an example of “student swirl” (de los Santos and Wright, 1990; Borden, 2004) and of what Finnie and Qiu called “switching and moving” (Finnie and Qiu 2008)? These students were certainly moving among programs. Their trajectories toward graduation were not always linear, which explains why some students had to be tracked for more than three years and why a few were still enrolled when the original study concluded. But they were not “stopping out” or switching between full-time and part-time study or moving from college to college. The original study identified and discussed the difference between coincidental behavior and planned behavior. The NVivo analysis of interview transcripts in both studies indicates that internal transfer was far more planned than coincidental. For students in the follow-up study “swirl” was not random. Instead it was a means of managing uncertainty, which in the case of credit
transfer was greatest at the college with the fewest partnerships. Transferring ahead of diploma graduation was a means of managing that uncertainty in the absence of partnerships. At the “concurrent college” transferring ahead of diploma graduation, the same behaviour, seems to have had more to do with familiarity with a single partner university than to uncertainty.

Most students in the original study intended to complete their college programs before transferring. In interviews, when questioned more specifically about this, several students expressed puzzlement about why any students would not complete their programs before transferring. This view, logically, was even more predominant in the third study, otherwise transferring without graduating would have been their preferred option. There is, however, an important exception. The first exception arose among students in the original study who were in two-year diploma programs that had a third-year option. All said that they would complete the two-year diploma, but several initially were not sure whether at that point they would transfer or continue for a third year. In the end, almost exactly one-half of these students continued to a third year. Of those, only eight later transferred. What we see here is an important distinction between the commitment of students to graduating from college and their commitment to transfer. Although the commitments may have been integrated at the start, they became separated as the students progressed through their college programs. This separation was even more pronounced in the follow-up study, but, in terms of searching for certainty, with more emphasis on graduation and on a tighter match to the labour market.

Students at all colleges in both studies except those at the
“traditional community college” reported that poor grades were an important factor that prevented them from attending university. For these students, interest in transfer was clearly a coincidental behaviour. They were far more concerned about admission than the transfer of credit. Students in the follow-up study expressed the same disposition of concern. Many in both studies, although somewhat more in the follow-up study, were not concerned about the transfer of credit at all. For them, the utility value of articulation was virtually nil. These students may exemplify Scott’s and Townsend’s belief that what students “see” can be different from what system planners and policy-makers “see.” This, too, may corroborate the Roksa and Keith (2008) finding that the policy purpose of articulation pathways is less to raise the rate of transfer admission than to increase the transfer of credit.

Most students in both studies were making use of college services: tutoring services or one of the Learning Centres (math, English, accounting, career), counselling. One-third of those students reported that they were “very satisfied” by the services. This finding is significant because there are studies from the United States, (Calcagno et al., 2006 and Scott-Clayton, 2011, for example) that indicate a strong correlation between academic support and the probability of transfer. Several students commented that they hadn’t really used any services but did study in the library. None reported using a transfer office in their first year of study. Students in their second and third years of study relied on transfer offices in the colleges at which they were available. None, however, used college services to investigate internal transfer. But these services were limited to begin with. Insofar as conventional student services are concerned,
internal transfer is a solitary experience. Procedurally, based on the NVivo analysis of documentation, instructions, and forms available to students interested in transferring internally, in actual practice applying to transfer in from another college was the same as applying to transfer from within the same college.

When asked about when they began thinking about transfer as an option, a majority of students in the original study said that they began thinking about it when they started college or after they had been in college, but not before. In the follow-up study, interest in transferring internally began between early in the second year of study, with actual transfer occurring before the end of the second year. This did not make a difference between two-year and three-year diplomas.

In terms of forming a plan or seeking support, students interviewed in both studies relied on family and friends. In terms of peer influence, in the original study most students reported that their high school friends, in more or less equal numbers, attended college or university. Only a few entered the workforce. Virtually no respondents in the original study reported that their plans for transfer were influenced by their friends after the first year of study. In the third study, however, friends who had graduated and were in the workforce were far more influential.

For actual information, students in the original study tended to rely on university websites and college admissions offices. Students seeking information about internal transfer, however, had trouble finding information from any source. For “serious” information, students in the original study relied on college faculty
and, less often, employers. In the second study, reliance on faculty did not change, but reliance on employers rose almost to the point of being as important as faculty. Several commented spontaneously on the openness, approachability, and willingness to help from their college faculty. From this, however, one should not conclude that the information provided by college faculty always promoted transfer. At three of the participating colleges in the original study, students whose interest in transfer declined as they were tracked through the study reported that some faculty discouraged transfer as being unnecessary for employment in their intended field. This phenomenon was most notable in police administration programs and marketing programs.

Although many students in the original study, when first interviewed, reported a plan to transfer, the plans were nebulous. None of the interviewees at that point had specific information on how the transfer process would work, what the optimal point for transfer would be, or what they would need to do to prepare. This finding is very similar to a finding reported by Andres (1999) after studying first-year college students in British Columbia. Most students knew that they would need to get good grades, but virtually no students reported selecting courses or programs with that in mind. Program reputation was cited as the reason for program choice by slightly more than 60 per cent of participants in the original study. In the follow-up study, program reputation remained high as a reason for program choice, but was overtaken by prospect for employment. When the two studies were combined, program reputation dropped to just over 50 per cent, and prospect for employment rose to 65 per cent.
An example of coincidental but not nebulous behaviour is that across the two studies in three of the five participating colleges 51 per cent of the participating students switched their programs of study either before graduating or before transferring. Why coincidental but not nebulous? In the follow-up study of internal transfer, no student reported having on entry any plan at all – nebulous or otherwise – of switching programs. Why did internal transfer occur at such high rates, and why at some colleges more than others? These were questions taken-up in the follow-up study. Three possible explanations that arose indirectly in original and third year interviews were followed-up in the third study. One was labour market fit. Some research supports that hypothesis (Hossler, Schmit, and Vespu, 1999). Another was the absence of articulated pathways and clear protocols for internal transfer, in which case students were finding their own ways to prepare for transfer.

One of the three colleges – the “traditional community college” – had virtually no partnership agreements. But the other two – the “university centre” and the “urban college with many partnerships” – had plenty. Counterpoised, however, was the report from interviewees at the “concurrent campus college,” where only three per cent of participating students changed their programs, that internal transfers were extremely difficult without large scale loss of credit. The third possibility was that students had become ambivalent about transferring. Students who reported this were students who, at least at the time of their interviews, were finding college more difficult than expected. This was corroborated by combining GPA data from both studies. In each of the three colleges where rates of internal transfer were high, the GPAs of students who
transferred internally were lower than the average GPA. A perhaps related contrast from the same data is that the GPAs of students who transferred before graduating were higher than the GPAs of students who remained until graduation. There is at least an appearance, then, that stronger students transferred as soon as they could and weaker students stayed but did graduate, usually after transferring internally. Where college GPA makes a difference in terms of transfer is in the rate of four-year degree completion after transfer from college to university (Townsend, McNerny, and Arnold, 1999; California Postsecondary Education Commission, 2007). Degree completion after transfer is, of course, important but was outside the boundaries of both studies.

When asked in the original study if college was what they had expected, many respondents chose to talk about the level of difficulty. Most felt it was easier than they had expected. A small number thought that it was more difficult. Regardless of the level of difficulty, most students mentioned that the workload was heavier than they anticipated. This, according to Finnie and Qiu (2008), might have had an effect on internal transfer, but students who commented on the heavier weight of their academic workloads were as prevalent at the colleges with very low rates of internal transfer as well as those with very high rates. Among students in the follow-up study, reality and expectations were the same but more certain, a finding that was to be expected because by then participating students would have plenty of information about levels of difficulty among programs. Four out of every five students in the follow-up survey said that they took degree of difficulty into account in deciding to transfer internally.
A Pooled Two-Sample t-test was conducted to determine if, in terms of mean college GPAs, there was a statistically significant difference between the mean GPA for students who dropped out of college, the mean GPA for students who either graduated or were still enrolled at the end of the original study, and the mean GPA of internal transfer students in both studies. The results indicate that there was not a statistically-significant relationship between participating students’ GPAs and their program choices prior to internal transfer. Hence, there is sufficient statistical evidence to conclude, within the limits of the studies, that GPA does directly relate to program choices that students make when transferring internally. There was an almost complete convergence between below average GPA and the students in the follow-up study who gave a concern about grades as their principal reason for switching programs. Only about 20 per cent of the participants in the original study said that they had chosen their college program with a view towards transferring. The percentage was double among students in the study of internal transfer. A smaller percentage -- about 14 per cent -- (in other words, about three-quarters of the 20 per cent) said they on entry were considering other college certificate and diploma programs as well as university when they completed their current programs. In the original study three times as many of the students who considered alternative programs said their choice of program would be based on quality as opposed to degree of difficulty. In the follow-up study, the results were almost the opposite: three times as many put degree of difficulty ahead of quality. This finding might seem surprising but it conforms to some prior research about the unpredictability of college transfer. Adelman (1992), Lang (2009), and Scott-
Clayton (2011) reported that students do not follow carefully articulated plans but instead react coincidentally to situations that lead them to revise their college transfer decisions, including and perhaps more typically, internal transfer decisions. This understanding is also supported by a study conducted in Ontario (Warren and King, 2006) which reported that students who start college without the grades or specific courses required to start university regard transfer as contingent on their academic performance in college.

Other than concern about future employment, no students in either study reported that finances played a role about their thinking about transfer. This might seem counter-intuitive, particularly among students who transferred internally and unavoidably incurred higher costs, but it aligns with evidence from the United States that tuition fees and other costs of attending college do not affect the rate of transfer (Calcagno et al., 2006). It is also possible, given some evidence from the NVivo analysis of interview transcripts in both studies, that, as students’ progress through their college studies, they become more aware, but not necessarily better informed, about the costs and returns from their investments in post-secondary education. With that awareness, based on follow-up study interviews, came greater concern about employability and a willingness, whether or not well-informed, to incur higher costs in order ensure a good match between credentials and the labour market. Note, however, should be made that over the time span of the two studies the employment rate of college graduates in Ontario was either flat or rose slightly, and at three of the five colleges studied at or above average (Ontario Ministry of Colleges and Universities, Graduate Survey, 2013-2017).
Most centrally-planned articulation for transfer regimes are based on direct, formally defined, and linear “pathways” from college to university. In these studies, we find an example of system planners and students, as Scott and Townsend might say, “seeing” things differently, often not direct and not linear. Cowin (2013) might say that this is the type of student behaviour that makes “multi-directional” articulation preferable if not necessary. Students who participated in these studies reported at least six different actual “pathways.” In proportionally ranked descending order, and after combining the two studies (264 student participants) those pathways are:

1. Enter college, graduate with a diploma, and qualify for admission to university in a program related to their college credential. For these students, the primary objective was admission. The transferability of credits was important but not important enough to affect their university decision. This coincides with a finding of Decock et al., 2011).

2. Enter college, graduate with a diploma, and qualify for admission to university in a program related to their college credential. For these students, the admission and transferability of credits were dual and approximately equal objectives. Transferability of credits was important enough to affect their university decision.

3. Enter college, transfer internally to another college diploma program, graduate and enter university as originally planned on entry or enter the job market depending on near term workforce opportunities.

4. Enter college and transfer to university as soon as possible, regardless of number of credits transferred
or of not earning a college credential.

5. Enter college, graduate with a diploma, and qualify for admission to a university program unrelated to their college credential. For these students, the primary objective was admission. The number of credits transferred was unimportant.

6. Enter college, transfer internally to another college diploma program, graduate, abandon original plan to enter university, and instead enter the job market immediately.

Lessons Learned for Future Practice and Research

The variety of pathways that students report and follow so wide that articulation should not be so formal or so centralized as to limit the number of authentic pathways that students “see” and sometimes construct in their own. When students chose to construct their own pathways, they often did so as a means of reducing uncertainty about the match between academic credentials and the labour market. This was especially pronounced in the follow-up study.

The second lesson is closely related to the first. One of the participating colleges, between the second and third studies, began to develop a data and analytics “dashboard” that enabled tracking of several measures of institutional performance, among which are degree completion, time to degree, labour market match, and retention by program, all taking into account GPA. Based on GPA and program of initial registration, the choice and opportunity to transfer internally as an alternative to dropping-out increased the college’s rate of graduation by almost ten per cent. The college’s dashboard is still in the beta stage. Even if the dashboard were fully in place,
this result applies to only one college — albeit the largest in the studies — with a particular array of programs and standards for internal transfer. The lesson, which can only be tentative at this point, is that articulation should not be so tight and formulaic as to discourage internal transfer. Given extensive evidence about income differentials between college drop-outs and college graduates, particularly college graduates who transfer to university, the cost — either private or public — of longer time to completion is justifiable in terms of net return.

The third lesson, then, is that financial cost does not make as much difference to students’ interest in transfer as conventional wisdom assumes it does. This does not mean that maximizing transfer of credit does not result in savings, sometimes more for government than for students. What this could mean, on the basis of both studies, is that, at least, some students either do not understand the cost equation (Usher, 2005) or, when they do, they attach relatively little significance to it. In the original study, however, few participating student saw their choice as between successfully transferring to university or failing to graduate with no credential at all. For students who were interviewed in the follow-up study, that choice was a more realistic possibility. Those students reported the difficulties that they encountered in finding information about internal transfer and, when they did, about transferring credits internally. They were more aware — if, according to interview evidence, perhaps not much better informed — of the possible financial effects of increased the time to graduation. But internal transfer was still the preferred choice, in most cases in order to improve the credential-to-labour market match and long-term employability.
The fourth lesson, putting the two studies together, “internal transfer” is real and much more frequent than previously understood. Despite the complications, limits, and cost obstacles that students in the follow-up study reported about transferring internally, they found a way and a rationale to do it. Partnerships may appear to be foiled by the complication of what de los Santos and Sutton (2012), and Borden (2004) might describe as a start-stop-start “swirl.” Planners and policy-makers may wish to counter-act that. Policy tidiness notwithstanding, many students in the combined studies study “saw” pathways that were less direct and more diverse than those that planners and policy-makers “saw.”

Finally, there is a methodological lesson for future research. There is some, but not much, research into internal transfer per se. For example, as explained in this study, only one of the participating colleges was systematically keeping track of internal transfer as in independent statistic. And even in that case the initiative is very recent and still in development. In terms of data, internal transfer data are often buried in larger studies of student retention as program dropouts or new applicants. Future research and policy can benefit from a closer look at internal research as a separate phenomenon, particularly with regard to ultimate attainment, academic credential to labour market match, and credit transfer practices within colleges.

References

ACAATO, “Student Mobility within Ontario’s Postsecondary Sector,” Archive Document, 2006

Adelman, Clifford, The Way We Are: The American Community College as Thermometer.


De los Santos, Alfredo., and Farah Sutton, “Swirling Students: Articulation Between a Major Community College District and a State-supported Research University,” Community College *Journal of Research*


