Summary of ONCAT-funded pathways and transfer research

September 2013

1. Introduction

The following summary of ONCAT-funded research projects, undertaken by 16 research teams led by our members, provides an analysis of research that attempts to answer three fundamental lines of inquiry:

- What do we know about transfer students and what are their reasons for transferring?
- How successful and satisfied are transfer students? How successful are they compared to their non-transfer counterparts?
- What potential institutional policies and practices constitute barriers to student satisfaction and success?

(Also included in this summary is an outline of one Ontario college's efforts to map the program standards of one of its programs onto the Bologna transfer framework (Fanshawe), which, the authors argue, fills a gap in our collective understanding of the Bologna process's transfer and mobility protocols.)

Overall, the findings are consistent and identify some very clear avenues for improvement. Increasing pressure will be placed on institutional attention to these matters as the number of students seeking transfer appears to be growing. With changes to degree requirements for professional practice, the rising CAAT diploma student interest in pursuing a degree, and the sustained interest of university graduates in college graduate certificate programs, higher education institutions are finding that the transfer market is growing annually (Lakehead, p. 9) and can represent up to 25% of new registrations (Trent, p. 5). Indeed, many institutions, including La Cite as noted in their research study, have made learner mobility a strategic priority through their emphasis on offering lifelong learning opportunities to their specifically francophone student clienteles (La Cité, p.3).

2. What we know about transfer students and why they transfer

2.1 What do we know about transfer students?

Transfer students can feel like displaced strangers in their new program. "They are not really first year students because they are older, have prior post-secondary experience and have advanced standing" but may still be obligated to take reach-back (lower level) classes with first year students (Laurier, p. 8). They need accurate information to succeed but are not attracted to orientation programs targeted to younger participants (Conestoga, p. 21) and have little time for social activities (Durham 1, p. 16). As a result, they pass up "the opportunity to learn how to navigate the non-academic aspects of university and the potential of engaging in dialogue with upper-year students about academics" (Laurier. P.8). Being older, it is not surprising that transfer students tend to be more narrowly focused on their studies (Laurier, p. 8). In addition, they are "most likely to be first generation [higher education] students" (6% at Trent, p. 9), Aboriginal (12% at Lakehead, p. 11) and female (63% for colleges, HESA, p. 9; 56% at Lakehead, p. 11). The gender balance appears to reflect comparable norms with the female population ranging from 92% (UOIT, p. 2) to 39% for a list of programs biased towards technology (Conestoga, p. 13). The stress of balancing commitments to study, employment and family is a factor for many (UOIT, p. 1; Trent).

Transfer students in Ontario's universities and colleges tend to be "*appreciably older*" (Trent, p. i) and "showed considerably more variability in their ages" (Trent, p. 9) than full-time, direct-

high-school-entry students. In fact, most are over 21 years of age with a large portion significantly older (The ages of Confederation transfer students ranged from 18 to 60, although most were between the ages of 20 and 23.) A province-wide study of students transferring into CAATs from 44 different Ontario institutions found 34% to be age 25 or older (HESA, p.9). In some programs, the 25 or older cohort is significantly larger (about 60% of college Graduate Certificate transfer students (Durham 1), and about 87% in collaborative nursing program transfer students (UOIT, Phase 11).   As a result, the gap between leaving one program of study and commencing a second varies from 37% transferring within 2 years to 12% taking more than 5 years (HESA, p. 14). Clearly, learner maturity and its variability explains many differences in the behaviour of transfer and direct entry students and their distinct strengths, challenges, and needs.

Just over one-half of students transferring into a college report coming from a university (HESA, p. 10; Lakehead, p. 9) and about one in 10 Ontario university baccalaureate graduates are enrolled in a college program within 6 years after graduation (based on 2005 data, Durham 1, p.8). Of those transferring from a college, 28% reported being enrolled in a certificate program and 71% in a diploma (HESA, p. 11).

Several studies segmented the transfer student population in recognition of its diversity of program affinity, transfer credit eligibility, GPA, career choice, conflicting external pressures, economic status, cultural background and fit. The data drawn differentially from the various transfer market segments and quoted below affirms the wisdom of this approach.

2.2   Why do students transfer?

Reflective of their diversity, those students choosing to transfer report a range of reasons for their decision:
  i)   To pursue career opportunities (Conestoga, p. 17; Durham1, p. 14; Durham2, p. 11; HESA, p. 15; Confederation, p. 20; CUCC, p. 57);
  ii)   To prepare for further education or become "more educated"(Conestoga, p. 17; HESA, p. 15; CUCC, p. 49); or in a related way, the need to return due to an employer request for upgrading (Confederation, p.20) and meeting changes in professional designation (CUCC, p. 57).
  iii)   Transferring from a program that was not meeting their needs (HESA, p. 15);
  iv)   To pursue a different field of interest (HESA, p. 15);
  v)   Increase the potential to earn higher lifetime earnings (CUCC, p. 57);
  vi)   A required change in location (HESA, p. 15); and,
  vii)   Reducing cost (tuition or related expenses) (HESA, p. 15).

College transfer students tend to see the combination of diploma and degree study as having unique and valuable benefits (Conestoga, p. 26 – 27). For its part, Durham experienced an increase in the number of college students planning further higher education, rising from 16% to 21% between the years of 2000 and 2007 (Durham 1, p.8). Conversely, transfers from university to college are seeking to complement their degree learning with 'hands-on experience" (Durham 2, p. 11) which reflects a broader desire to "improve career opportunities" (HESA, p. 15).

Articulated pathways offering a significant block credit transfer appear to be attracting students pursuing further study in an aligned field. The benefits are clear: the Trent transfer

students who receive the maximum 10 credits (equal to one-half of the degree) have been admitted under an articulation agreement and proceeded "well into the upper-year courses of their majors" (Trent, p. 8). There is also evidence of growth in these pathways: a disproportionately greater representation of transfer students are registered in articulated degree programs offering block transfer credit (Trent, p. 6). Student choice to attend a distinct institution such as OCADU may "not dependent upon transfer credits" (OCADU, p.14) but Laurier, like Trent, found a link between credits granted and transfer student choice. In fact, some students "would have attended whatever institution gave them the highest number of credits" (Laurier, p. 34).

In terms of favoured program destination, the option of further college-based study tended towards health, community services and business (HESA, p. 12). Furthermore, "a majority of respondents [transferring into a college] chose to pursue a program of study that was in a different field from their prior program" (HESA, p. 11). University graduates in the college sector are much more likely (72%) than diploma graduates (52%) to select a *different* discipline of study at a college (HESA, p. 11). The greater incidence of discipline change by university graduates appears to reflect the large proportion of university transfer students whose prior study was 'arts' (49%) (HESA, p. 13). Overall, 34% transferred between institutions and into the same college program of study. While 41% of transfers into a college had completed their prior program, about 31% transferred after completing one-quarter or less of their program of study (HESA, p. 11). The studies did not attribute any student motivations for the latter.

3. The success of transfer students

Of the variety of success measures investigated by this body of research, this summary focuses on 'grades' and 'persistence.' Generally, this research confirms that transfer students' academic performance can be as strong as direct entries from high schools. While findings are not consistent, CAAT diploma transfers taken together tend to have a weaker multi-year average persistence rate than direct entries and university graduates. Recognizing that overall averages tell us little about the performance of a heterogeneous population such as CAAT transfers, a number of studies have identified cohorts and pathways with significantly stronger retention.

3.1 Transfer student grades

Several studies found that transfer students earn higher GPAs than non-transfer students (Conestoga, p. 27; Laurier, p. 1), while others found that those studying full time in highly aligned programs entering through an articulation agreement and earning a substantial block of transferable credits performed *significantly* better (Trent). Practical Nursing Diploma graduates entering the BScN degree program through a formal "bridge" also performed "at a significantly superior level" (UOIT Phase 1, p. 15). In Durham Graduate Certificate programs, university transfers generally outperform diploma graduates and those admitted with "experience equivalencies" (Durham 1, p. 27).

Not surprisingly, first semester GPA appears to be a predictor of time to program completion – a relationship that calls for closer attention.

College transfer students earning advanced standing and/or block credit outperformed direct entry students in first semester GPA (Lakehead, p. 2: Laurier, p. 4) and those transferring "through articulation agreements were, on average, considerably more successful than other CAAT entrants" (Trent, p. 10). Transfer students earning 5 or more transfer credits earned a GPA that was 11% higher than non-transfer students and 5% higher than those receiving less than 5 transfer credits (Laurier, p. 4). In a comparison of 'term averages,' Trent found that CAAT students transferring under an articulation agreement (term average of 74.1%) outperformed university transfer students (72.6%) and direct entry students (67.2%) (Trent, p. 10). On balance, university transfers achieve higher first and final term grades and overall GPA than college graduates and those admitted with `equivalent work experience` (Durham, p. 27-28), suggesting that some students admitted with "diploma completion" or "experience equivalency" may require greater academic support (Durham, p. 31).

Regression results found the female transfer students' grades were more than three percentage points higher than those of males and first generation students earned grades that were more than three percentage points lower than those whose parents had some higher education experience (Trent, p. 12).

3.2   Transfer student persistence

The multi-year persistence rates for CAAT transfer students tend to be lower on average than direct high school entries, which is reflected in both the York and Nipissing data reported in Trent, p. i), but the difference is "statistically significant if multi-year periods are considered"(Brock, p. 16). The link between age and persistence appears to be at least partially explained by the typically greater external pressures on mature students (UOIT, Trent, p. 14), and the somewhat greater tendency to study on a part-time basis. Part-time students in general are reported to be "more than 24 percentage points more likely to leave than those attending full time" (Ottawa, p. 10).

Transfer student retention appears to correlate with program affinity reflected in articulated pathways and significant credit transfer between closely aligned programs. "Drop-out rates among CAAT articulation agreement entrants ... are remarkably lower than those among any other group" (Trent, p. 14). Block credit allows these students to start later in their program. Arguably, their higher persistence rate is at least partially explained by their "shorter exposure to the risk of dropping out and, being closer to completion, have a different cost-benefit calculation for the decision to drop out"(Trent, p. 16). Transfer students "entering into third year [of degree study] are considerably less likely to leave" (Ottawa, p. 10) and exhibit "annual attrition rates [that] tend to be lower in the later stages of university study" (Lakehead Summary Report, p. 1). At Lakehead, students earning a block credit for their college study had a one-year retention rate of 89.0% as compared to direct entrants at 86.9%; those earning advance standing had a lower rate of 82.5% followed by all other college students at 79.8% (Lakehead report, p. 1).

The persistence rate of students transferring from university to a college graduate certificate program tends to be higher than for college transfer students and those admitted with equivalent work experience (Durham 1, p. 26).

4. Transfer pathway satisfaction and challenges

4.1   Transfer pathway satisfaction

Studies of 'diploma to *university degree* pathways' focused on only one receiving institution and tended to omit an overall measure of student satisfaction with the transfer process. Of those that measured this, the majority of students were satisfied (Lakehead, p. 2). At one university, about 1 in 7 college diploma transfer students were granted credits equal to half of the degree (Trent, p. 8). However, most studies identified a range of student concerns related to the credit transfer process and pathways (cited in reports from OISE, UOIT, Laurier, OCADU, and Lakehead).

One study surveyed a sample of transfer students entering each *CAAT* and reported results, findings and general conclusions drawn from the aggregated data. In addition, the study team submitted confidential comparative findings to each cooperating college. Overall, students rate their college transfer experience positively: 71% are satisfied and 60% found the process easy (HESA, p. 28). The process was informative: the proportion of applicants who started with "no understanding at all" of the transfer and admission process fell from 33% to 4% during the process. Those with a "very clear understanding" rose from 17% to 41% during the same period (HESA, p. 25). Thirty-four per cent took a day or less to prepare their application and 57% received the credit granting decision in one week or less (HESA, p. 21). The majority of respondents "received all of the credit that they expected" and those were significantly more likely to rate the process "very easy" (HESA, p. 30). Similarly, the Confederation study found that most focus group participants found the transfer process "simply, timely, and effective" (Confederation, p. 20).

Program heads, coordinators and faculty are "a major source of [student] support" (Conestoga, p. 21; UOIT) and information is consistently ranked among the most important and most often used student resource (UOIT).

4.2   Challenges

Most of these studies agree that the complexity of credit transfer and degree completion processes is confusing for students and recommend improvements. However, some student concerns appear to at least partially reflect their lack of effort in degree program selection, unrealistic expectations about transfer credit, and an inadequate understanding of the competitive nature of higher education program admissions. The research identified concerns that may be institution-specific and, in some cases, may reflect the views of relatively few respondents. The issues summarized below need to be considered in this context.

Evaluation of Credits:

Equivalencies, block credit and advanced standing are dependent on the affinity, level and learning outcomes of the prior study. As an example, Trent's credit granting data reflects this relationship: No credits are granted for 'pre-diploma' programs but up to one-half of the value of a degree is granted for honours graduates of aligned programs admitted through articulated pathways (Trent, pp. 7-8). However, there are cases in which over one-half of both university and college transfer students express dissatisfaction with the credits granted, particularly when they did not accept the rationale for the requirement to take lower courses perceived to duplicate prior study (OCADU, p. 13). So, while 74% of college transfer students received assistance in the process and about one-half of those were

"very satisfied" (HESA, p. 35), students' satisfaction appears to vary among institutions. For some, transfer pathways "appear more robust and advantageous than is likely in the case in practical application" (Laurier, p. 11) and given that some would have "attended whatever institution gave them the highest number of credits," they inevitably feel disappointed and misled (Laurier, p. 34).

Incomplete or misleading information about the recognition of credits, the transferability of granted credits to another major, or some universities' insistence of treating college baccalaureate credits "as if they're in a diploma program" (OISE, p. 47), are causes for confusion (OISE, p. 26), and frustration grows when "credits are used differently by each faculty" (OISE, p. 38). At both colleges and universities there is often little clarity as to the required evidence of prior study, how it will be used in the credit transfer process and the credential or major to which it should apply (OISE, p. 42) and this leads to the perception of arbitrariness (Laurier, p. 7) The majority of students who do not apply for credit report that they were either unaware of the credit granting process or had negative perceptions about the required workload and/or the likely return on the effort. Several studies saw the process of credit granting as characterized by "divergent expectations" and "subjectivity" (OCADU, p. 18), since the untimely communication of transfer credit decisions to students can result in program completion delays and extra costs to students.

Degree and Program Requirements and Structure

"Applying for credit and getting credits on [ones'] record is only the first step" in a process that requires "follow up on how these credits are used ... differently by each faculty" (OISE, p. 38). Over time, degree programs tend to evolve into greater specialization, options or profiles that enhance student choice, but each choice can affect the acceptability of prior credits. Admission and GPA requirements tend to vary by specialization and are further complicated by the expectations of any applicable professional certification requirements. A transfer student may be granted generic, unassigned, elective, lower level and/or unspecified credits that are applicable to their program under very specific conditions (Laurier, p.7, OISE). These all contribute to the frustration of students, who are looking for clear answers to what they feel should be straight forward questions about the program.

Application Process, Required Documentation, GPA calculation, policies and affiliated terminology

Admission to most higher education programs is competitive, admission scores are comparative with those of other applicants in the year of application and requirements vary among specializations, programs and institutions. The processes themselves are described as "multifaceted with additional steps and considerations" (OISE, p. 41). To navigate this complex environment, students are expected to "become literate in ... [the universities'] systems, structures, codes and terms" (OISE, pp. 21-22). While some students are requesting more information on the process, others may not be reading the materials they have already been given (OISE, p. 24). They may also feel buried by information on websites which are often seen to be "cluttered with too much information" (Laurier, p. 6). While 74% of college respondents received help from staff in the process and about one-half of those were "very satisfied" with that help (HESA, p. 35), others report difficulty "connecting with someone from the program" (Durham 1, p. 19) or getting different answers from different offices. Some institutions place on the prospective student

the obligation to get "in touch with the appropriate individuals at those institutions or they will not be informed correctly" (OISE, p. 41-42).

Broadly speaking, perceptions differ by institution type. For example, college affiliates are much more likely to see student confusion in the areas of policies, affiliated terminology, GPA calculation, application processes, and required documentation, while university affiliates are more likely to see confusion in degree and program requirements. Those seeking a clear timetable for program admission and credit decisions are frustrated by their frequent variation by program and faculty and are particularly frustrated by fees that seem ready to consume any savings that credit granting might promise. Of at least seven grading systems used in Ontario universities alone (OISE, p. 48), 'each ... varies along with the policies and what is transferred" (OISE, p. 44). Similarly, institutional variation in terminology represents a further challenge to comprehension (OISE, p. 44). As a result, there is "considerable confusion" (OISE, pp. 26 and 38; Durham p. 24) and those who have been out of higher education for some time find "... the admissions process ... particularly taxing" (Durham, p.24).

Issues Arising After Registration:

The diversity of the transfer student population is reflected in the range of expectations, perceptions and challenges faced when they arrive in class. Over 60% of college and university students transferring into a college certificate program report having "no difficulties after starting class" (Durham 1, p. 21). Those who did tended to identify campus-specific issues such as access to IT services, outside-class-hour help, finding out about student services, accessing career information, accessing learning support services and enhancing the alignment of web-based communications (Durham 1, p. 21-22; UOIT). Students transferring to a college from university identified differences that included "classes that are noisier and less formal," the presence of more disruptive students, and a "non-lineal college learning style"(Durham, p. 21).

Students transferring from diploma to university degree studies tend to be forewarned "about the shift from a more structured academic environment in college, to the university context in which students [are] expected to manage and motivate their own academic goals," a warning that students in the Laurier study found to be a fairly accurate warning (p.5). University faculty frequently identify differences between college and university "workload ... course content and evaluation"(Laurier, p. 8). However, students who participated in the Laurier focus group suggested that modes of evaluation differed by discipline and class size rather than by college or university (Laurier, p 6). However, transfer students do face "some difficulty in adjusting to their university's assessment model – one characterized by fewer assignments and potentially fewer opportunities for students to display their progress in working through course material and therefore potentially alter their final mark (Laurier, p. 6).

The diversity of the transfer student population can create problems in class and warrant adjustments in advising, literature, admissions, support and program architecture. In one case, for example, admission requirements thought to be insufficiently rigorous and the attendant unevenness in student ability was perceived to have "brought ... down" the class. Others in the same cohort felt they should have been better prepared for "fast pace and workload" before they started classes (Durham 1, p. 25).

A number of transfer students indicate that they need more information that would help them succeed in their program, and some have difficulty connecting with other students. While orientation and social events can help students develop the peer networks that contribute to academic engagement and success (Conestoga, pp. 21-22; Durham 1, p. 16 and 23; Laurier, pp. 8, 42), mature students tend to have "little time for social activities" (Durham 1, p. 16) and typically do not attend the orientation programs when offered (Laurier). Arguably, events organized for 16 to 18-year-olds are not necessarily attractive to more mature learners.

While many studies note the need for more information given out early in the transfer process, the gaps between the information given and transfer student experience is interesting. One study noted that *college* faculty often warned students to expect a full letter grade drop in their grades following transfer, but "most of the interviewed students noted that this was not the case"(Laurier, p. 5). Also, "most students expected a more intensive academic experience in transferring to a university program" (Laurier, p. 5) while others expected less overlap (OCADU, p. 13).

When considering student service use by college and university graduates transferring into college certificate programs, a Durham study confirms that students were most likely to use the library, food services, the bookstore, the computer commons, and study space. They were dissatisfied with the availability of campus study space and computer service (Durham, p. 22). Alternatively, very few transfer students used academic services such as peer tutoring and student liaison advising even though a number singled out their importance. It is also clear that significant differences in student service information, use and satisfaction occur between and among campuses (UOIT).

5. Options for improvement

This research offers thoughtful guidance to higher education institutions wishing to assess and improve their own pathways and transfer processes. In addition, there are some options that either support current provincial initiatives (e.g., the ONCAT student transfer information portal and extension of the student academic record) or warrant consideration. The following highlights a range of suggestions emerging from the studies' findings, conclusions and recommendations.

The HESA report pointed out the characteristics that correlated most strongly with positive assessment of college transfer processes. Ontario colleges with the most positive responses:
- Provided detailed information about the process;
- Streamlined credit transfer processes;
- Provided support to students experiencing difficulty obtaining course outlines or course descriptions;
- Assessed applications in one week or less;
- Provided justifications for both assessment results and policy positions; and,
- Demonstrated a culture of effective service (HESA, pp. 44-46).

The studies that focused on one receiving institution have generated recommendations that tend to be situation-specific. The following list summarizes those findings, conclusions and

recommendations that may have the utility of a preliminary checklist to frame reflection on other transfer pathways:

- Instituting "one online location for all formal articulation agreements and transfer credit policies" (Laurier, p. 41), using consistent terminology (OISE, pp. 51-52) and "instituting and posting policies on how college degree credits will be assessed upon transferring to Ontario universities" (OISE, p. 47);
- Implementing a reliable data base that would allow access to those student academic records across institutions that would facilitate data collection and support student advising (OISE, p. 47);
- Enhancing the engagement of and communications with secondary school guidance counsellors is a priority to facilitate the information flow to prospective future students (OISE, pp. 49-50);
- Opening communications lines and resource sharing among college and university credit transfer advisors/counsellors (OISE, p. 51);
- Providing transfer students with a clear understanding of potential differences in workload, course content and the nature of assignments and evaluation (Laurier, p. 8; Conestoga, p. 8) and communicating pathway access information early in their diploma studies (Conestoga, p. 26);
- Adopting "standard credit granting terminology" particularly in articulation agreements (OISE, pp. 50-51);
- Considering the development of a broadly applicable "grade calculator" to help students and staff to bridge different methods of grading and clarify admission score requirements (OISE, pp. 48-49);
- Ensuring that staff and students had easy access to basic information about the credit transfer process;
- Adopting "learning outcomes and experiences" as the "backbone of prearranged transfers" (OCADU, p. 18);
- Recognizing that "university and college transfer students have different needs, intentions and expectations" and serve those differently (OCADU, p.19); and,
- Clarifying the transfer of credit process and fees, improving information and communications about the credit process (OISE, pp. 5 and 6);
- "Removing the fee per transfer credit and implement[ing] an online method for submitting credit transfer forms to avoid waiting in lines" (Confederation, p.20);
- Granting credit and waving duplicate course requirements where justified by prior learning;
- Improving the methods to inform students that they may be eligible for transfer of credits or advanced standing and the use of "consistent terminologies ... for clarity" (OCADU, pp.14 and 18; Durham 1, p. 34; Durham 2, p. 15; OISE, p. 21);
- Improving the application process by introducing more standardized course descriptions within the institution and decreasing applicant anxiety by making the process more expedient (OCADU, p. 14; OISE, pp. 5 and 6);
- Offering transfer streams designed so that "the credits [that transfer students] are earning are clearly defined units of the program they are entering into"(Laurier, p. 41);
- Adding "mandatory [diploma] writing intensive courses" in transfer pathways to prepare students for "the university's different writing expectations" (Laurier, p. 41);

- Providing "the rationale for why certain college course are not equivalent to certain university courses" in order to "address the perception of arbitrariness reported by students" (Laurier, p. 42) and provide those in a timely manner (HESA);
- Improving advisory services potentially including "a university advisor at the colleges", "information sessions on college campuses", senior student coaches, "headstart programs" and "orientation week events specific to college transfer students"(p. 41-42);
- Refining admission criteria and providing information with the objective of optimizing the fit between approved students and their program choice (Durham 2, p. 29);
- Addressing student concerns about the consistency and accuracy of information from different institutional sources by "consolidate[ing], establish[ing], and communicat[ing] uniform guidelines among and for staff and faculty" (Laurier, p. 6);
- Robust and regular communication between two institutions which are partners in transfer agreements (La Cité, p. 27), specifically to ensure the accuracy of the information each partner provides to students about one another (La Cité, p. 55);
- Reviewing degree programs with the expectation of facilitating transfer: clarifying language, enhancing transparency and removing lower level course requirements which appear to duplicate the prior study of transfer students. (OCADU, pp.17 and 18);
- Implementing proven strategies to enhance transfer student preparation including bridging programs and coaching/mentoring/tutoring programs that address skill and knowledge gaps (Conestoga, pp. 27 and 28; Durham 1, p. 25);
- Providing age-appropriate "voluntary social ... opportunities" that engage mature students (Conestoga, p. 22; Durham 1, p. 16; Laurier, p. 42) and potentially bring life balance, support and networking benefits (Durham 1, pp. 34 and 35; Durham 2, p. 31 and 33);
- Helping foster the development of student support networks through project and in-class collaboration (Durham, p. 38); and,
- Providing transfer students with rich assignment feedback to help them meet new expectations and obtain better grades (Durham, p. 25).

6. Summary and conclusions

The ONCAT Transfer Pathways Research Program has affirmed that CAAT diploma transfer students are as academically successful in baccalaureate study as traditional direct entries from secondary school. Honours diploma graduates studying full-time in an aligned degree program entering with a significant block of transfer credit are generally more persistent and academically successful than direct entries. When all members of the heterogeneous, full- and part-time CAAT diploma-to-degree transfer student population is taken together, they exhibit a lower multi-year persistence rate. There is evidence that this difference relates to their greater average age and most probably the attendant pressures of life obligations. The research raises no concerns about the relative academic success and retention of university graduates who transfer to either to a university or college program.

In those studies that measured student satisfaction, the majority expressed satisfaction with the overall transfer process. The differences in study findings suggest that focus and significance of concerns varies by institution. The studies collectively suggest that the complexity of inter-institutional transfer processes is a cause for many students' confusion. Misunderstanding of reasonable degree expectations, inadequate attention to the learning gained from prior university and college study, problematic legacy practices, communication

weaknesses, terminology without consistent definitions, a lack of policy clarity or understanding, grading system variations, lengthy time lines, the absence of a provincial data base of students' academic records and the historic gap in centralized transfer pathway information all contribute to the confusion.

This body of research also highlights transfer pathway successes in which we should take considerable pride and are models for effective practices. Collectively, the research offers thoughtful findings, conclusions and recommendations that can be harnessed by universities and colleges to advance the provincial transfer environment.

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