Transitioning to University: Best Practices for College Transfer Bridging Courses

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Table of Contents

Introduction	5
Literature Review	7 8 9
Environmental Scan	2 3
Inventory of Current Services and Practices at Lakehead University	7
Transfer Student Demographics at Lakehead University 17 Web Based Survey 18 Demographic Characteristics 18 Service Awareness and Usage 19 Psychological Characteristics 20 Focus Groups and Interviews 22 Transfer Transparency 23 Cultural Transitions 26	8 9 0 2 3
Best Practises in Bridging - Recommendations 34 Pre-transfer 34 Bridging 35 Maintaining Academic Momentum 36	4 5
Pilot projects 37 Peer Mentoring Program 37 Student Support Tutorials 38 Curriculum Assistant Learning Outcome Mapping 39	7 8
Best Practices Top 10 Hit List	0
LIST OF APPENDICES	1

Transitioning to University: Best Practices for College Transfer Bridging Courses

Introduction

The intent of this project was to develop a series of best practices and guidelines to inform the creation of bridging curricula and tailored supports that enhance the success of college to university transfer students while supporting all types of institutional transitions in the context of Ontario's post secondary education system.

A previous ONCAT funded project (Lakehead, 2012) identified that college transfer students entering Lakehead University through block transfer pathways had the highest retention rates and Grade Point Averages in comparison to transfer students entering with advanced standing or other types of post secondary credit. The study recommended follow up work into the characteristics and experiences of college transfer students to better understand differences in success and retention rates.

As a result of this project, we found that Lakehead University has a rich and varied context of transfer students in which to examine bridging processes including:

- College to University Block transfer with summer transition programming and curriculum (e.g. Engineering, Natural Resource Management)
- College to University Block transfer directly into various year levels (e.g. Applied Life Sciences, Business, Social Work)
- Advanced Standing students across programs with credit transfer assessed on an individual basis
- Varied and unexpected transfer students whose educational context includes:
 - Partially completing some university before transfer to Lakehead
 - Partially completing some college and some university before transfer to Lakehead
 - Partially completing a college diploma then completing a full university degree¹ before transferring credit to Lakehead University.

To unpack the characteristics and experiences of Lakehead University transfer students, apply this to scholarly research and place it within the context of the Ontario post secondary environment we engaged in the following steps:

- 1. Complete an annotated bibliography (Appendix A)
- 2. Complete a **literature review** regarding a) student satisfaction with and success resulting from university transfer processes and bridging curriculum and b) qualitative research on the lived experience of college to university transfer.

¹ Filtering methods for sending out the online survey related to this study were intended to exclude students who had a completed university degree however in some instances students with a completed degree and varying amounts of college credit were sent and completed the survey.

- 3. Complete an **environmental scan** of college to university bridging practices, programming and online resources and practices in Ontario, Canada and Internationally
- 4. Develop a formal mixed methods research process to **inventory current practices** at Lakehead University entailing:
 - a. An online survey sent to 1655 transfer students
 - b. Multiple focus groups with block transfer and advanced standing students
 - c. Individual interviews with administrative, support staff and faculty members who deal directly with transfer students and bridging programs.
- 5. Form a Working Group on Best Practices in Bridging for faculty and staff at Lakehead University to review preliminary research results and advise on the development and implementation of three **pilot projects**:
 - a. IMPACT college to university transfer student mentorship program
 - b. Enrolment Services Project (series of videos to educate students on using information captured by the myInfo online system)
 - c. Piloting a web based Curriculum Assistant application to facilitate information sharing across all university services and faculties serving transfer students

Literature Review

For the purposes of this study the concept of bridging in post secondary education refers to practices designed to assist in a student's transition from college to university studies and often relates to university orientation activities and 'pre-degree' summer transition curricula directed at college transfer students. Bridging processes are often designed to ease 'transfer shock' a concept that originates with Hills (1965) where he refers to the sudden drop in grade point average (GPA) of most students transferring from two year junior college programs to four year baccalaureate degree programs in the United States between 1923 and 1955.

Transfer shock has evolved in the Ontario context beyond simply accounting for drops in GPA experienced by college to university transfer students and takes into account the challenges of the overall social and academic transition between post secondary institutions (Gawley & McGowan, 2006; Gerhardt & Ackerman, 2014; Kerr, McCloy, & Liu, 2010). When assessing best practices in providing transition support services it is necessary to consider that:

- The Ontario college and university system rejected the American model of junior and senior colleges accepted by British Columbia and Alberta and were designed as unique separate systems designed to serve different purposes and populations (Hurlihey, 2012). This uniqueness can be viewed as a strength towards developing a highly skilled yet knowledgeable workforce in Ontario if the challenges in translating differences between the two systems are overcome.
- The process of transitioning between post secondary institutions is as unique and varied as the amount of options available to Ontario students. Within their academic and vocational lifespan students may change careers more than once and move in multiple academic directions between diplomas, degrees and postgraduate studies (Lang & Lopes, 2014). Best practices in bridging college students to university studies should begin to account for varied populations of

students and consider transfer students who have come to university through non-traditional pathways.

• The term 'transfer shock' suggests a sudden, harsh experience and should be challenged (Flaga, 2006). For the purposes of this study we considered the process of transfer as commencing during the student's process of investigating potential degree options and moving through multiple phases, each of which can be addressed by university systems to ease the process of transfer and work towards student success.

The phases in which we will examine literature to inform best practices in bridging will include: Pre-Transfer Practices, Transfer Mechanics, Bridging and Maintaining Academic Momentum.

Pre-Transfer Practices

The potential for students to consider themselves as post-secondary students begins at an early age as the learner begins to form a social and academic self concept developed and modelled as Learner Identity Formation by Briggs, Clark & Hall (2012). By visiting universities, receiving university ambassadors at their school and engaging with educational counsellors, students are more likely to see themselves as post-secondary students. Considered within the Ontario post secondary environment, learners may consider attending a college, university or both at many points in their lifespan based on their experiences and knowledge of the system in relation to the evolution of their academic and vocational self-concept. According to the literature the post secondary system in Ontario can assist students in developing their learner identity related to college to university transfer by:

- Having specific college transfer offices and transfer advisors; they are considered the most influential source of information (Lang & Lopes, 2014) and expectations (Gerhardt & Ackerman, 2014) for students considering college to university transfer after high school guidance counsellors.
- Understanding that increasingly, students plan to attend university after attending college and require access to up-to-date and accurate information on college to university pathways (Alpern, 2000)
- Implementing university campus tours and in-person information sessions conducted by university staff for potential college transfer students (Flaga, 2006) as one step in transmitting the academic and social culture (Kerr, McCloy & Liu, 2010) of the university and program to college students and staff.
- Establishing an accessible, 'one-stop shop' online resource with checklists and clear instructions on the transfer process that allow the learner to independently inform their decision to attend (Arnould, 2011; Flaga, 2006; Gerhardt & Ackerman, 2014)

Key aspects of services designed for students considering transfer relate to transmitting the academic culture and expectations of specific universities at an early stage and allowing students to fully understand the mechanics of credit transfer, amount of courses required and see a clear pathway to degree completion via online and transfer specific resources. According to Berger & Malaney (2003) the biggest predictor of transfer student satisfaction and success

was how well students prepared for their transfer and universities can apply the aforementioned strategies to aid in this preparation process.

Transfer Mechanics

To continue placing the literature into the timeline of the transfer student process, once a transfer student has committed to their university of choice and applied they generally begin a process of transfer credit assessment, tuition payments and course selection based on their program and the university credit they have received for their college studies. Chrystal, Gansemer-Topf & Laaanan (2013) fittingly characterize this component of the transfer experience as 'transfer mechanics'.

Within the mechanics of transferring credits, confusion regarding the process of determining transfer credits and obtaining academic advice regarding the enrolment process is often cited as a significant factor influencing transfer student satisfaction (Alpern, 2000; Berger & Malaney, 2003; Chrystal, Gansemer-Topf, & Laaanan, 2013; Gard, Paton, & Gosselin, 2012; Gawley & McGowan, 2006; Kerr, McCloy & Liu, 2010; McGowan & Gawley, 2006). Published literature has several suggestions to inform best practices including:

- Working towards creating a comprehensive system of transfer in Ontario clearly documenting and publishing evidence based program learning outcomes to assist faculty members and enrolment staff in making accurate transfer credit decisions (Carter, Coyle & Leslie, 2011; Kerr, McCloy & Liu, 2010)
- Since many students prefer to use online resources to navigate the enrolment process and tend to seek friends, family and alumni instead of/or before accessing formal supports (Chrystal, Gansemer-Topf, & Laaanan, 2013). empowering students to make independent decisions (including enrolment decisions) through transparent, easy to access online resources positively influences their transfer experience as a whole (Arnold, 2011).
- Demonstrating transparency and accountability in credit transfer decisions and ensuring that students do not have to take unanticipated 'make up' courses which increase the length of time required for degree completion (Gard, Paton, & Gosselin, 2012; Gawley & McGowan, 2006)

Another theme in the literature that relates to transfer mechanics is a financial component. According to Gard, Paton & Gosselin (2012) transfer students often experience a 'sticker shock' when faced with the higher cost of university tuition over college tuition. In addition to higher tuition, authors also cite the lack of scholarships and financial aid as contributing to challenges faced by transfer students (Lang & Lopes, 2014; Townsend, 2008).

Although a large portion of transfer mechanics takes place when a student applies and is enrolled through a transfer pathway, the need for transfer specific academic advising and financial aid are a continuous component of the transfer student's navigation of post secondary education. Connecting transfer students to systems that allow them to find university supports in managing the mechanics of university should also be addressed in the orientation and/or bridging curriculum provided at the institution they are transferring into.

Bridging

The practice of bridging at Lakehead University refers to spring/summer courses and activities that are undertaken by college block transfer students to prepare for entering into upper years of study in their respective programs. The primary focus of these courses is on academics and filling curriculum gaps between college and university programs however there are some aspects of bridge courses that involve developing social/professional connections and a sense of cohort. Transfer students who are receiving advanced standing are currently not involved in formal bridging activities.

Expanding the concept of bridging beyond a 'business as usual' approach requires examining the experiences and needs of transfer students so that university services can strategically direct their transition supports.

In her phenomenological study on the college to university transfer experience, Flaga (2006) found that the transition into the academic, social and physical environments of a university moved through five sequential phases: Learning Resources, Connecting, Familiarizing, Negotiating and Integrating.

At the beginning of the transfer process students gain an awareness of their (1) **learning resources** including formal university supports (academic advising, faculty, learning assistance centres), informal supports (peers, family members, past alumni) and use personal initiative (viewing websites, reading resources, attending orientation events) to gain an understanding of and (2) **connect** to personally relevant components of the academic, social and physical university environments. Once they are (3) **familiar** with their environments and supports students develop strategies to (4) **negotiate** success and ideally (5) **integrate** with the university environment, as it becomes a recognized component of their identity.

Within Flaga's framework university bridging and orientation activities can play a role in helping students learn about formal resources, connect students with informal resources and help familiarize them with the physical context of the university and surrounding community. Perhaps the concept of 'transfer shock' can be considered more as 'culture shock', and the purpose of bridging is to initiate students into the academic, social and community culture of a new post secondary institution.

Published literature on the academic transition from college to university transfers suggests it is challenging (Gawley & McGowan, 2006) however college students can manage the academic shift successfully (Kennett & Maki, 2014; Lakehead Transfer Report, 2012) with supports that:

- Connect students with informal supports (mentors, alumni, past transfer students) and peers that can transmit the academic culture of an institution in ways relevant to transfer students (Flaga, 2006; Gerhardt & Ackerman, 2014)
- Experientially connect students to formal academic learning resources (Flaga, 2006) that

show them how to succeed thus increasing their self concept and self efficacy (Cabrera, Miner & Milem, 2013) and assist in transmitting academic culture (Kerr, McCloy & Liu, 2010).

- Provide online resources that summarize differences between college and university pedagogy and assessment methods (Gerhardt & Ackerman, 2014)
- Focus transition activities on transfer students strengths (practical skill sets and prior learning) instead of focusing on perceived deficits (Kennett & Maki, 2014)
- Ensure that summer transition programming is directly geared towards college transfer students (Townsend, 2008) and accessible to people of all ages, potentially with work and family obligations, coming from different academic and employment backgrounds (Gawley & McGowan, 2006; Martinello & Stewart, 2015)
- Evaluate summer transition program key performance indicators to ensure they are contributing to student success and worth funding (Garcia & Paz, 2009)

The social transition from a college to a university context is also frequently cited in literature on transfer experiences (Chrystal, Gansemer-Topf & Laanan, 2013; Flaga, 2006; Garcia & Paz, 2009; Gard, Patton & Gosselin, 2012; Gawley & McGowan, 2006; Kerr, McCloy & Liu, 2010; Townsend, 2008).

Literature informed guidelines for creating social transition supports in bridging vary based on the context. For example, an advanced standing student with a small amount of transfer credit student attending a large university living off campus in a new city will have a different experience than a block transfer student in their home town who is able to attend an intensive summer transition program with like minded peers and develop a sense of cohort.

Some suggestions include:

- Bridging/orientation activities should include opportunities specifically designed to develop social connections with peers which are geared towards transfer students not first year students (Flaga, 2006; Garcia & Paz, 2009; Gawley & McGowan, 2006; Townsend, 2008)
- Including transfer students as information sources in orientation activities and potentially grouping block transfer students living on campus in an area of residence (Townsend, 2008)
- Although college transfer students may be less likely to search out social opportunities (McGowan & Gawley, 2006), assisting students in connecting with appropriate social supports (clubs/peers) on campus to help with social isolation and to assist in integrating into the university environment is suggested (Chrystal, Gansemer-Topf & Laanan, 2013).

Conclusion

Based on reviewing the literature, many issues surrounding the mechanics of transfer can be addressed before transfer students actually begin their university studies. Pre-emptive strategies regarding transfer credit can relieve the burden on academic resources so they can address transitioning students into the academic and social cultures of their chosen university.

Although designed specifically for direct entry students entering their first year of university, Lizzio's (2006) summary of the five care needs of students can be considered in the transfer context as well. To feel successful, students need to have a sense of capability, a sense of competence, feel connected to others, have the ability to effectively navigate the university system and integrate into the academic culture of the institution.

These five care needs strongly relate to literature regarding the process of bridging in that bridging curriculum should be specifically designed to help connect and familiarize students with formal and informal supports at the university that fast track their integration into the academic, social and physical environments.

To place this literature into both a provincial, national and international context of actual bridging practices an Environmental Scan of college to university transition programming exemplars was undertaken.

Environmental Scan

The environmental scan was conducted through a review of Ontario Colleges and Universities websites through the eyes of a potential transfer student. The websites were reviewed broadly to see what information was easily accessible to the students. Select Ontario universities were then casually contacted for further information regarding their programming.

After reviewing the Ontario context the scan was broadened to include all of Canada to examine what other provinces were doing in terms of post-secondary transfer. Strong transfer systems were found to exist in Alberta, British Columbia, and Newfoundland and Labrador. The Council of Ministers of Education, Canada (CMEC) was also discovered during this phase. The CMEC provided insight on the direction of transfer systems in each province and territory and timelines documenting their processes. It also provided a strong point of reference to examine all of the provinces in one location.

The scan also included the United States, the United Kingdom, and Australia. Little information was found though due to time constraints and a stronger focus occurring on the Canadian systems.

For a complete list of all webpage's reviewed and used during the scan refer to Appendix B

Ontario Best Practices

All Ontario universities included in the environmental scan offered forms of summer transition programming. It was often unclear based on the web based scan how many institutions have opportunities targeted specifically at college and/or university transfer students. Most were open to all students. Best practices identified through the environmental scan include outdoor adventure based transition activities as well as some unique transfer supports.

Brock University, McMaster University, and Trent University offer Outdoor Adventure based camps for new students to attend. Brock and McMaster's camps are trip based having the students leave the campus for overnight camping trips. Trent's camp keeps the students on or close to campus learning from recreational activities within the city such as rock climbing, canoeing, and hiking. These camps are not offered to specific groups of students and instead are open to all incoming students. An individual involved with one of the camps spoke of how by having all students of different backgrounds come together it allows for an interesting dynamic to form between the students. Everyone has an experience to share regardless of what brought them to their program of study, and these individual experiences are what help all of the students learn from each other (Anonymous, personal communication, January 26, 2016).

Student ambassadors are in place at Algoma University and Brock University where incoming transfer students are paired with an upper year transfer student to help guide them through the transition. At Algoma the program is structured to have the ambassadors mentor the students as well as work with the university community to promote the school and the transfer program. Brock's ambassadors meet transfer students after they take part in an information session prior to September and discuss their experiences at the school while providing a tour of the campus.

The scan brought to light that hard copy resources are still an option for students to utilize. Examples of strong transfer guides offered to students are the Algoma Transfer & Mature Student Orientation Guide, Nipissing University Transfer Guide, and Brock University Guide for College Transfer Students. Each of these guides are available online as well as hard copy. Within the guides students find key contact information, guidance on what resources are available to them, and information on what to expect in the coming year(s).

A few schools have developed websites specific to incoming students. Similar to the orientation programing during the summer months, these sites are meant for all new students. Regardless of focus, the sites contain all of the information students may want to access when adjusting to their new school and surroundings. Guidance through the application process, key dates, contact information etc. is available through these sites. A great example of a first year site is Carleton's CU Start website (see Appendix B).

Some Universities offer programing through the school year to aid students with their academic and social transitions. Some of these programs are not specifically targeted to the transfer population but available to transfer students. Transition programs included social gatherings, academic tutoring, and information sessions on topics helpful to students during their first year of study. A program that appeared to be a great option to students is Bounce Back, offered at Algoma University and the University of Guelph. The program is run during the winter term and is offered to students who finished the fall term with a 60% average or lower. Through the program students are paired with a student or faculty member to help them discover where the problem was occurring and how to improve their average.

Many schools had a transfer specific staff member who solely serves transfer students by developing/running transfer programing and/or advising transfer students coming in and attending the school. Based on discussions with transfer specific staff at various institutions it is apparent that the transfer student population in Ontario is unique and cannot be grouped with the direct entry or even mature students in all circumstances. Each transfer student has had a different path bring them to the new institution and these individual experiences must be recognized when aiding these students. Having a staff member who is dedicated to support each transfer student, as a unique individual is a best practice in bridging.

Within the Ontario context, online exemplars of bridging programs and articulation agreements were difficult to find. Learning the keywords and search tactics necessary to find online information regarding transfer practices and bridging curriculum in Ontario took a significant amount of time. The transparency of articulation agreements and transfer credit was more apparent on websites from other provinces. This finding was mirrored in conversations with transfer specific staff in Ontario who are often asked by pre-transfer students if they are able to access the university website to see each credit they will be receiving and know exactly what courses they have to take before committing to a school.

Canadian Best Practices

When examining the transfer systems and best practices of the provinces and territories it is important to recognize each provincial government has a unique way of working with their post-secondary system. Ideas and suggestions can be drawn from these practices but need to be adapted to suit the Ontario system.

Within Canada each province and territory oversees their transfer system, whether it be directly by the government or an organization that acts between the government and the institutions. In addition to province specific organizations, there are organizations that focus on transfer on a national scale. These groups include, but not limited to, the Association of Registrars of the University and Colleges of Canada, Pan-Canadian Consortium on Admissions & Transfers, Western Canadian Consortium on Admissions, and the Council of Ministers of Education, Canada.

Alberta. Alberta's transfer system is overseen by the Alberta Council on Admission and Transfer (ACAT), which reports directly to the Minister of Enterprise and Advanced Education. ACAT was developed in 1974 and since then has overseen the transfer of students moving from secondary to postsecondary as well as postsecondary to postsecondary. Annually ACAT publishes a three-year action plan to guide the council and inform the schools of where ACAT is

progressing. Along with this is the release of an annual report communicating the results of the previous year (Council of Ministers of Education, Canada, 2012).

ACAT maintains a close relationship with the British Columbia Council on Admissions and Transfer (BCCAT). An agreement was signed between the two provinces promoting interprovincial transfer by allowing institutions to apply for membership in both ACAT and BCCAT. Alberta is working with other provinces to consider transfer and mobility between them as well (CMEC, 2012).

Through examination of ACAT's website it is seen that they are efficient in keeping all reports and documents accessible to both their members and general public. The schools, which send and receive transfer students, are listed with the programs and/or courses, which are transferable for each academic year. The visual appeal of the site is not comparable to ONCAT and BCCAT but provides the information needed in an efficient manner.

British Columbia. The British Columbia Council on Admissions and Transfer (BCCAT) was established in 1989 to provide leadership and direction to the institutions within the province wishing to establish transfer and articulation agreements. BCCAT does this through the development of policy, supporting the institutions, coordinating research, and providing resources to students and the institutions. They report to the Ministry of Advanced Education (CMEC, 2012).

From examination of the BCCAT website information is easy to find and all institutions are listed for students to review. Once leaving the BCCAT site to look at individual schools the information is very transparent and for the most part has a comprehensive guide to transfer programs and also lists, in detail, course specific credits that universities give for college courses which is available to the public.

Through the Best Practices in Bridging Working Group of faculty involved in transfer at Lakehead University it was observed that the B.C. post-secondary system is similar to the United States system and therefore has pieces that would be difficult to implement within Ontario.

Manitoba. The Council on Post-Secondary Education (COPSE) coordinates the transfer system within Manitoba working as a level between the institutions and the provincial government. Along with working to support seamless pathways provincially they are also working to recognize foreign-credentials. The focus of COPSE is not solely on transfer; they also focus on the development of post-secondary education and the accessibility of post-secondary education. Manitoba is looking at other provinces to learn from their systems in an effort to improve the workings of COPSE (CMEC, 2012).

New Brunswick. New Brunswick's Post-Secondary Education, Training, and Labour (PETL) department has developed supports to allow for credit transfer within the province. In 2010 the New Brunswick Council on Articulations and Transfer (NBCAT) was established. NBCAT

works to ensure transfer between institutions is possible for students and that institutions are working cooperatively to allow for the smoothest transfer possible (CMEC, 2012).

NBCAT has an online portal which outlines course by course what credits will transfer between each school. For example ANTH 1013 Intro to Cultural Anthropology at St. Thomas University can be counted as 1st Yr Anth at the University of New Brunswick – Saint John Campus. Students can search all schools at once or narrow the search school by school.

Newfoundland and Labrador. With a small post-secondary system it appears that Newfoundland and Labrador's government oversee the transfer system. They support the transfer between schools across Canada and sign agreements with schools internationally as well. An online Transfer Guide is available to students to allow the search of programs which transfer between schools as well as a course by course list. The guide is available in print if a student wishes to see it this way. The guide also provides students with information on the Post-secondary system in general, individual institution transfer policies, and programs and/or courses which link to high school courses (CMEC, 2012).

Northwest Territories. Northwest Territories has only one post-secondary school, Aurora College, and therefore does not have a transfer system to look at. The Department of Education, Culture and Employment supports credit transfer though, even if implantation is not an option within the territory. Northwest Territories and Aurora College continually look at transfer options in other areas of the country. A priority of Aurora College is to ensure their students can seamlessly transfer to institutions to further education. To aid in this they became a member of ACAT (CMEC, 2012)

Nova Scotia. Nova Scotia Universities and the Community College work to recognize institutions and credit equivalencies between institutions. Institutions have or are working towards an online list of equivalencies for students to reference. In June 2009 a memorandum of understanding was signed by the Atlantic-region community colleges and universities to allow students to seamlessly transfer between public institutions (CMEC, 2012)

Nunavut. As of 2012 Nunavut did not have a credit-transfer agency but preparations were being made to develop a council to oversee other issues along with credit transfer. Rather than a formal post-secondary system Nunavut has an Adult Learning Strategy. On April 1st, 2013 the Department of Education was to begin to implement post-secondary policy around this (CMEC, 2012). Nunavut has one post-secondary institution, Nunavut Arctic College (Council of Ministers of Education, Canada, 2003).

Prince Edward Island. Prince Edward Island has two post-secondary institutions, the University of Prince Edward Island and Holland College. Both institutions have regular meetings to ensure they are continuing to develop processes between institutions to allow for transfer. They also look at service between institutions across Canada and internationally (CMEC, 2012).

Quebec. The ministry for advanced education, research, science and technology was created in September 2012 and has the responsibility for postsecondary education in the

province of Quebec. Post-secondary institutions are continuously working to increase pathways between technical programs and university undergraduate programs. While Quebec supports seamless transfer within the province it appears that transferring to other provinces and/or into Quebec is difficult due to very different education systems (CMEC, 2012).

Saskatchewan. Between 2006 and 2010, the Ministry of Advanced Education, Employment, and Immigration, to support credit transfer and prior learning assessment and recognition within the province, invested \$1,270,530. Originally the transfer system was overseen by the Saskatchewan Council for Admissions and Transfer (SaskCAT), but it has now dissolved. Saskatchewan now has membership in the Pan-Canadian Consortium on Admissions and Transfer (PCCAT) and the Western Canadian Consortium on Admissions and Transfer (WestCAT) (CMEC, 2012).

Yukon. With only one postsecondary institution, Yukon College, there is no organization overseeing and implementing transfer within the territory. Yukon College continuously is looking at transfer options, both credit and program, to see what opportunities exist for their students. Currently they are a member of BCCAT as well as ACAT. They work to develop and update a credit database for their students to investigate possible transfer options (CMEC, 2012).

International Best Practices

Australia. In 2008, a study supported by the Australian Government, referred to as the Bradley Study (Jackson, Dwyer, Byrnes, & Blacker 2010), reviewed the higher education system of Australia bringing to light what improvements needed to be made in order to remain a top education system on the international scale (Bradley, Noonan, Nugent, & Scales, 2008). Similar to Ontario, Australia experiences difficulties with transfer between Vocational Education and Training (VET) and Higher Education (HE) due to differences in the structure of both systems. The Australian Government responded to this through a report outlining improvements that would be made to all areas of the education system (Australian Government, 2009). Included in this were plans to aid the VET and HE systems to facilitate transfer of students increasing the number of graduates from both systems. From this came an ongoing project, the Integrated Articulation and Credit Transfer (ICAT) project that is completing research, educating VET and HE institutions on articulation agreements, and overall creating a seamless transfer system (Jackson et al., 2010).

United States of America. Similar to the Canadian provinces and territories each state has a unique system used for transfer between postsecondary institutions however it is generally accepted that two-year college programs act as feeders for four-year programs. With the scope of this project it was not possible to thoroughly investigate and report on all practices in all States. One practice worth briefly discussing is that of reverse transfers. Reverse transfer is the process of applying university credits towards an associate's degree (Marling, 2012). A student transfers from their community college prior to completing their Associates degree and can have their credits transferred back to the college to earn their associate's degree while completing their program at the 4-year institution. Reverse transfers are becoming popular across the states with the National Institute for the Study of Transfer Students educating students and institutions continually on the benefits (National Institute For The Study of Transfer Students, n.d.). In Texas it is required by the state that all public institutions participate in reverse transfer programs (Lone Star College, 2016). The process of the transfer ranges from review upon students request at Wayne State University (2016) to an automatic review of transcripts every term until the student has completed the requirements at Lone Star College (2016).

Inventory of Current Services and Practices at Lakehead University

The following is a list of services and/or practices currently employed at Lakehead to support transfer students:

- a. Discipline specific orientation Engineering (2 days), Natural Resources Management (0.5 day), Social Work (variable), Business (variable)
- b. University wide orientation separate session during Orientation week, separate sessions during the term
- c. Transfer student advisor available since Fall 2014
- d. Within program advising all programs with a block transfer have at least one specific individual with responsibility for advising transfer students. Normally it is the program Chair; in Engineering there is a specific position for this activity.
- e. University wide academic advising available to all students
- f. Student Success Advising available to all students; includes general study skills (time management, test prep, note taking, resume prep)
- g. Writing and Math Assistance centres normally only available during fall/winter terms; some by appointment during spring/summer.
- h. Presence on ONTransfer website
- i. Information available in the Academic Calendar re admissions requirements and processes
- j. Discipline specific communications regarding program requirements with applicants and potential applicants (especially Engineering and Natural Resources Management)

Transfer Student Demographics at Lakehead University

Guided by the Lakehead Transfer Report (2012) which indicates that block transfer students are often as successful and at times more successful than direct entry students, taking an inventory of current practices evolved into a mixed methods research process informed by the literature review. A web survey and qualitative interview/focus group template were developed with the intention of:

- 1. Gaining insight into the characteristics of transfer students at Lakehead University,
- 2. Understanding transfer student's awareness and use of formal university supports,
- 3. Informing best practices through the experiences of transfer students as well as faculty and staff serving transfer students

Web Based Survey

A web survey instrument (Appendix C) was developed and approved through Lakehead's Research Ethics Board and Institutional Survey Management Committee. The survey instrument (Appendix C) was sent out to 1655 transfer students who were identified through the Office of Institutional Planning and Analysis as having either partial college or university transfer credits or a completed college diploma on their transcript. Students with completed university degrees were filtered out of this study.

The survey included demographic questions regarding the characteristics, assessed awareness of and interest in using various student services of transfer students and contained three psychological scales selected to assess the student's academic motivations for enrolling at Lakehead University. These included the Academic Motivation Scale (Vallerand, Blais, Briere, & Pelletier, 1989), the Academic Resourcefulness Scale (Kennett & Maki, 2014)), and the Academic Locus of Control Scale (Trice, 1985).

The survey response rate was 9.3% (n 153) with 76 male and 76 female respondents. Ages reported ranged from 18-50 with a mean age of 24.2, which is higher than the age of direct entry students coming from high school settings. Of the respondents block transfer students (n 103) are categorized as those entering the Business, Engineering, Natural Resource Management, and Social Work programs of which Engineering and Natural Resource Management have summer transition programs.

Advance standing students (n 37) are those students who are not block transfer students but who did receive some other kind of credit for their previous post-secondary experience.

Students classified as "other" (n 14) had previously attended a college or university but did not receive any kind of transfer credit for their previous post-secondary experience. This category could likely be refined with more responses.

Demographic Characteristics

Block transfer students were primarily male students enrolled in Engineering while female block transfer students were primarily enrolled in Health and Behavioural Sciences. Considering that a 9.3% response rate may not capture a fully representative sample, there are more female advance standing students and students classified in the "other" category than there are male students. The success of the Engineering block transfer program in attracting a large number of students, the majority of whom are male, is evident.

A majority of students identified as Caucasian/White (74%). The next most frequent response was Aboriginal (6.5%). Small groups of students identified as Chinese (3.9%), Black (3.9%), Filipino (3.2%), and Arab (2.6%). Other responses included South Asian, Latin American, West Asian, Korean, and Japanese (5.7% combined) (N 154). Self-identified ethnic and cultural

associations were not particularly different for different transfer types as compared to each other or the total sample.

To account for obligations outside of their studies, we attempted to capture the extent to which transfer students at Lakehead University are supporting dependents (children or elderly parents) and their employment status.

Nearly 10% of students said they were currently supporting dependents (N 155). When organized into transfer type Block transfer students and advanced standing students had a very similar proportion of students currently supporting dependents (8.7% block, 8.1% advanced). Students categorized in the "other" category were more likely to be supporting dependents (21.4%). This may be an actual difference, but it may also be due to the small sample size of this group of students.

With respect to employment status, the majority of students were not currently employed (63%, N 154). Of those employed (N 57) 68.4% were employed part time and 31.6% employed full time.

A larger proportion of students in the advance standing and "other" categories reported being currently employed. Nearly 75% of block transfer students were not employed, while only 35.1% of advanced standing and 42.9% of students categorized in the "other" category reported not being employed.

Service Awareness and Usage

To strategically target resource allocation, our survey attempted to identify which academic and student life services transfer students were aware of and how likely they were to use these services.

Of the academic services at Lakehead University students were most aware of Student Success Centre managed programs, which consist of the Peer Assisted Learning (PAL) and Tutoring programs and associated Writing and Math Assistance Centres.

Select academic service awareness and likelihood of usage by type of transfer student is presented in Table 1. While usage and awareness levels are generally consistent across the types of transfer students, it is notable that Advanced Standing students indicated a lack of awareness regarding the Math Assistance Centre but a high likelihood of usage. Also notable was the extent to which students were unlikely to use any form of academic support service, 59% of block transfer students indicated that were unlikely to use any of the academic supports in comparison to 48% of advanced standing students and 60% of 'other' transfer students.

Table 1

Academic Student Services Awareness and Likelihood of Use							
	Block Transfer		Advanced Standing		Other		
	Awareness	Likely to Use	Awareness	Likely to Use	Awareness	Likely to Use	
Writing Assistance Centre	67%	28%	72%	43%	55%	0%	
Student Success Centre Workshops	56%	12%	64%	28%	78%	0%	
Math Assistance Centre	45%	24%	22%	67%	22%	22%	
Student Success Centre Tutoring and Peer Assisted Learning	35%	25%	64%	28%	35%	25%	

Select Student Life services awareness and likelihood of use is represented in Table 2. Transfer students were very aware and most likely to use Student Health and Counselling services (which offers both physical and mental health services) as well as Campus Athletics (which offers a range of casual and competitive athletic activities aimed at various segments of the student population). Based on the survey results, student awareness and use of Student Life services may be influenced to some extent by marketing and promotion but students also perhaps seek out these services based on need and interest.

Table	2
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Student Life Services Awareness and Likelihood of Use								
	Block Transfer		Advanced Standing		Other			
	Awareness	Likely to Use	Awareness	Likely to Use	Awareness	Likely to Use		
Student Health and Counselling	95%	45%	81%	50%	89%	33%		
Campus Athletics	93%	34%	81%	37%	100%	22%		
Aboriginal Services	73%	4%	64%	3%	33%	0%		
International Student Services	52%	2%	56%	0%	78%	11%		

Psychological Characteristics

To gain a preliminary understanding of the psychological characteristics of transfer students, measures of academic resourcefulness, motivation and locus of control were included in the survey. A portion of survey respondents exited the online survey instrument before completing the psychological tests; from a total sample of 155, 110 students completed the Academic

Resourcefulness Scale, 117 students completed the Academic Motivation Scale and 114 students completed the Academic Locus of Control scale.

Welch and Brown-Forsythe ANOVA tests were used to assess if there were differences in resourcefulness, locus of control and motivations across the types of transfer students as the best fit for unequal groups sizes and skewed scale data resulting from a large proportion of block transfer students in Engineering and Health and Behavioural Sciences.

Means for the academic resourcefulness, academic motivation and academic locus of control scales were not significantly different between transfer group types however we can cautiously examine the characteristics of all transfer students to derive some insights that could apply to future studies.

As a proposed measure of students' learned resourcefulness and thought processes in negotiating the academic challenges of university, Lakehead University transfer students' mean (M) score on the Academic Resourcefulness Scale (Kennett & Maki, 2013) was (N 110) 112.6 with a standard deviation (SD) of 17.8. This finding is similar to college transfer students at Trent University who scored M 112.47 with a SD of 19.74 (Kennett & Maki, 2012) indicating that college transfer students are academically resourceful and capable of negotiating and overcoming challenges similar to direct entry and university to university transfer students.

With respect to academic motivation, transfer students scored high on the intrinsic motivation – to know subscale of the Academic Motivation Scale (M 20.3, SD 5.7, N 117). Conceptually intrinsic motivation - to know is the idea of motivation stemming from a desire to understand things and search for meaning (Vallerand et al., 1992). This data suggest that overall, transfer students as a group, have a high desire to know and understand things as related to the following items:

- Experiencing pleasure and satisfaction from learning new things
- The pleasure I experience when I discover new things never seen before
- The pleasure I experience in broadening my knowledge about subjects which appeal to me
- My studies allow me to continue to learn about many things that interest me

Transfer students scored high on the extrinsic motivation - identified subscale of the Academic Motivation Scale (M 22.7, SD 4.8, N 115), extrinsic motivation – introjected regulation subscale of the Academic Motivation Scale (M 20.1, SD 6.8, N 116) and the extrinsic motivation - external subscale of the Academic Motivation Scale (M 21.6, SD 5.7, N 115). This data suggest that overall transfer students have a high level of extrinsic motivation that influences their behaviour and is strongly related to their identity (Vallerand et al., 1992).

For the purposes of this report, a selection of sub-scale items to highlight subscale motivations provides some useful insights:

Extrinsic Identified Subscale Items:

• University education will help me prepare better for the career I have chosen

- Eventually it will enable me to enter the job market in a field I like
- I believe a few years of education will improve my competence as a worker.

Extrinsic Introjected Subscale Items:

- To prove to myself that I am capable of completing my university degree
- To show myself that I am an intelligent person
- Because I want to show myself I can succeed in my studies

Extrinsic External Subscale Items:

- To obtain a more prestigious job later on
- Because with my previous education I would not find a higher paying job
- In order to have a better salary later on.

From a motivational perspective survey results may suggest that college students are motivated to engage in academic pursuits because they gain intrinsic pleasure from the process of learning and exploring new concepts while balancing the need to become highly educated and higher paid employees and to some extent, proving to themselves that they are equal to the challenge of university studies.

As a measure of students perceived internal ability to control and negotiate their interactions with the academic environment instead of attributing challenges to external forces beyond their control (Trice, 1985), transfer students locus of control scores (N 114, M 10.8, SD 4.6) indicate that they are more likely to feel internal control over their circumstances. Based on our analysis to date it is not apparent if a more internal locus of control is due to demographic or program related characteristics.

A table summarizing the results of psychological scale scorings is included as Appendix D.

Focus Groups and Interviews

Semi-structured focus groups and interviews were conducted at both the Thunder Bay and Orillia campuses of Lakehead University to elicit the experiences of transfer students and the faculty and staff serving transfer students at Lakehead University. Four transfer student focus groups were conducted, two for block transfer students (n 20) and two for advanced standing students (n 9). Twelve individual interviews were conducted with faculty and administrative staff in roles that served transfer students.

Focus groups and interviews were transcribed, coded and analyzed using methods informed by the grounded theory approach to qualitative analysis (Ryan & Bernard, 2003). The process included open, axial and selective coding that results in theoretical propositions that can be triangulated (Cresswell, 1998) with both existing theory and findings from the quantitative portion of this research.

Both the researcher and a research assistant analyzed the transcripts separately and then combined their codes and overarching themes to establish a reasonable degree of authenticity within the time frame of the project.

As the coding process progressed we reached a saturation point (Cresswell, 1998) and found that many of our thematic points related strongly to the literature reviewed. Therefore presentation of the themes is influenced by components of the literature review to place the perspectives of Lakehead transfer students in the context of theory development within the Ontario transfer context. Our intent in this study is to tie various components of literature relating to the lived experience of transfer students into cohesive theory grounded in the perspectives of our research participants to inform developing a list of Best Practices in Bridging. Our overarching themes include:

- Transfer Transparency: A theme related to the mechanics of transfer (Chrystal, Gansemer-Topf & Laanan, 2013) and degree to which students understand decisions made regarding transfer credits and the multiple university services involved.
- Cultural Transitions: A theme relating to the transition between the academic and socio-cultural environments of sending and receiving institutions (Kerr, McCloy & Liu, 2010; Lizzio, 2006)
- 3. **Student Supports:** A theme that focuses on the interactions between Lakehead University Transfer students and forms of formal, informal, social and academic supports.

Transfer Transparency

Student satisfaction with the process of assessing and granting transfer credit as well as the amount/type of transfer credit received was often focused on understanding the process and having a justification for the decisions made and not necessarily on how much credit was granted.

Students in more rigid block transfer programs were generally happy with the amount of credit and the transparency of the process:

"Very satisfied, it's a direct two-year transfer credit...and the only additional thing is the summer [bridging program] which is no big deal, that's totally worth it."

"I thought the transition program was good. They were pretty honest about what was expected of us coming into the transition program. Like on my letter of acceptance it informed us [of all necessary summer bridging classes]."

"In our college we had a presentation on all of our possible transfers and they're like, if you go to Lakehead you're going to need to take these courses [in the summer bridging curriculum]"

Despite the fact that block transfer programs are, "upfront with each and every student about what it is that they are going to have to take" and "understand that, the success of the student and our ability to retain them is definitely linked to them understanding what exactly it is that they're getting into" some students struggled with transparency when they realized that not

meeting the academic expectations of the summer bridge to enter block transfer program would result in a longer period of study than advertised upon acceptance.

"When I looked at my acceptance letter and saw the [summer bridging] courses, I knew I was going to be in for a third year."

"When I saw [my summer bridge courses] I didn't really think of the whole make up situation, I was just like I'm getting it done in two years, sign me up."

"I would have liked a lot more information about it [summer bridging program]."

Attempting to establish a completely transparent credit transfer process with the Ontario postsecondary context is a challenging task. Many degrees are refining/adding/dropping courses based on revolving program reviews, accreditation processes and maintaining degree standards with embedded professional designations and multiple specializations. Transfer focused staff describe the process of assessing transfer credit as "ever changing, never static...there's always new courses [at Lakehead University]...other schools are actively changing their courses...you could work on it every day and you'd still find something new tomorrow...[at some college's] we've seen changes in programs from year to year."

Faculty, chairs and administrative staff often play a large role in assessing block transfer students with one staff stating, "every application is considered individually. We're making sure the student is admissible and gets exactly the program of study that will ensure they have the background they need to do well in their program and for when they graduate."

"The edge of the block is a bit fuzzy." This statement applies when academic units are faced with balancing students getting the proper courses with minimum averages <u>and</u> meeting strict accreditation standards and professional designations. Although documentation for incoming students is designed to explain the standards required for progression without additional courses, students often don't understand the implications until they haven't met them.

For advanced standing students, whose transfer credits are assessed on an individual basis, having a specific person assist them in credit transfer process and provide explanations for credit transfer decisions enhanced the transparency of the process. Even if they questioned which courses they got credit for, having an explanation helped to resolve concerns. Several participants in the focus groups referred to the person that helped them by name or title instead of department.

"I had a hefty amount of transfer credits. I probably have 10 or around there. So the good thing was the head of [department] at Thunder Bay, had said it was okay to waive certain pre-requisites...because I had taken such a similar course that it would not make sense for me to re-do it...she just made it happen."

"I emailed them about a specific credit [because the course used the same text book] so I wanted to know how he decided that it's not equivalent...I would have appreciated if he had

explained in more detail...he did get back to me very quickly but it would have been nice to send me to an academic advisor and let me kind of talk."

"I talked to [staff name], she helped me pick my courses. I had one course that was very similar to what I took at [college]...so I sent an email and got an email back...they were very quick to respond and that was good. Of course the result was not what I wanted but at least the way they did it was good."

"I just direct them to [staff name] whenever they [transfer students] need help."

Where students experience the most confusion was regarding what are called "unspecified credits" which are credits assigned in general areas (e.g. Humanities, Science, Business) often at the 1st or 2nd year level for college courses that do not equate or have enough information for admissions staff to assign credit for a specific course at Lakehead University.

Students seemed most dissatisfied when they could not find an explanation for the credit transfer decisions, were hoping that the letter grade of their transfer courses was represented on their transcript or they were prevented, by unspecified first year courses, from taking prerequisite first year courses because the amount of first year electives is limited to a maximum of seven.

"I went from my diploma to a degree and I got three unspecified credits and that's it...they wouldn't specify what they were. [In second year] I was speaking to random professors and they're like, 'you could have gone to the head, the dean and [asked] does it transfer over? But no one had told me that."

"[Transfer credits] showed up as unspecified. So unnamed classes which can only transfer as general electives with no grade points. That's frustrating because now I'm taking again, first year [course name] but first year [course name] didn't transfer as first year [course name]."

There is the potential that transfer students do not feel comfortable questioning their credit transfers as one university staff, by coincidence, addressed this exact situation. "...we strongly encourage you [students] to speak with somebody so that they can show you how to use these credits...we've implemented a chat system...we get creative more and more every year."

Based on feedback from university administrators, case by case credit analysis is generally emphasized in university to university transfers however college transfer assessment relies more on the individual articulation agreements established through relationships between departments and/or individuals at various Ontario colleges, particularly accredited diploma programs.

Best practices in bridging grounded in the perspectives of students with regards to the credit transfer process do not necessarily centre on giving as much credit as possible. Student perspectives indicate that transparency in program requirements and credit transfer decisions should reflect what is advertised by the university and that people who are responsible for or

can explain the justification for credit transfer decisions are accessible and can engage in a negotiation/conversation with students promptly and efficiently.

Cultural Transitions

It is evident in the literature review that college to university transfer students experience a transition when moving between institutions. This shift is frequently referred to as 'transfer shock' and has been applied to academic, social and financial differences between the college and university system in Ontario.

Transfer students' transitional experiences between the academic and social culture of their sending institutions and Lakehead University were varied based on the individual's perspective and also their program of study.

Academic Culture

Summer Bridging Programs

The academic culture of summer bridging programs at Lakehead University was experienced as an academic challenge mediated by the student's level of preparation and matching curriculum covered in their college diploma. In some cases, summer bridging courses seemed to induce 'transfer shock' to an extent that students could use the experience to assess if they were matched to the academic rigours of the program.

- "throw you in the deep end to see if you can swim...transition is difficult...that's the summary. It was hard"
- "it was kind of like 'The Gauntlet'. If you couldn't make it through the transfer program then you knew university would be a little bit too difficult...which is something I'm grateful for"
- "I found a good, diverse learning community [in the summer bridge program]. Definitely a lot harder than college."
- "I found it this a lot more difficult [than college]...the transfer program was definitely a big eye opener"

Several block transfer students were appreciative of any overlapping college/university content in the summer bridge curriculum as it offered a point at which to build on their previous studies and also to boost their average grades to balance the challenges of learning new curriculum within a short time frame.

Students who were prepared in advance for the transition to the academic culture of their respective summer bridge program through their peers, college instructors and college information sessions conducted by university representatives benefitted to some extent. Accurate pre-enrolment venues for the transmission of academic culture could be considered a best practice in bridging.

"One of my good friends started at [college name] and I told her this transfer program is great"

"I was told [by a college instructor] you're going into this [block transfer program] and it's not going to be like this [college], it's going to be a thousand times harder, you're going to have to put in hours and hours a day and you're doing really well now, don't expect high marks."

"Yeah, my co-worker kind of convinced me to the do it [the transfer program] and then he said that, 'Alright, start studying.' [before getting into the program]"

"Cause in our college we had like a presentation on all of our possible transfers and they're like, if you go to Lakehead you're going to need to take these courses [in the summer bridging program]"

The challenging nature of bridging programs at Lakehead University served as an intensive introduction to the academic culture of the respective program. When students felt that they were prepared in advance and that their college learning could be applied they indicated that the bridge program was manageable. Block transfer students who were unprepared for the level of academic intensity or had significant gaps between their college curriculum and summer bridge curriculum experienced significant 'transfer shock'.

Block Transfers with No Bridge

A small amount of students from block transfer programs that provided direct entry into upper years of study without a summer bridge program completed the survey and of those none elected to participate in the student focus groups. Therefore insights into direct block transfer transitions can only be informed by faculty/staff interviews.

Several faculty supporting block transfer students without bridging curriculum found that block transfer students were similar to the direct entry students in their upper year classes with varying levels of success based on their maturity and study habits. Some had considered the potential of developing summer bridging to create faster college to university pathways but for the most part felt that summer bridge curriculum was unnecessary.

"You might have gone successfully through college, and maybe the system's different...but if you're not ready to be independent, to take care of your own, then you're just not ready. And I don't think any transition will make them ready, it has to be intrinsically."

One faculty chair found that among college transfer students there were only one or two students per cohort who struggled academically to the extent that they had to re-take classes. From the perspective of staff and faculty the transition to the academic culture of university involved a manageable change in perspectives and increased independence in academic decision-making.

"[The college students] were prepared, I only have good things to say about these programs. Their 'more hands on' technical skills are there."

"Some of them are more mature, they tend to be more mature in class. But that's a bit of a generalization. There's definitely a difference in how [college transfer students] approach

things. College, I think, trains people to follow the rules, to learn how to do things....My challenge is to say, 'Ok, we're also going to learn why we do this, why not another tool and where does this come from'...a bit of history I can weave in there as well."

While there was no feedback from this specific group of students, students in summer bridge programs mirrored the shift in academic orientation between college and university.

"In college we had similar courses, like this is how you do it versus [university courses where you learn] this is why you do it"

"A lot of my profs [in university] don't work in the field...It's just a different set up here it's more academic...there's a lot of really good [research] job opportunities here though. I got a sweet summer job coming up I would have never gotten in college."

Advanced Standing Students

The transition into the academic culture of Lakehead University for advanced standing students was generally smooth, with students finding that they could succeed and, at times, found Lakehead University classes to be easier than the courses they had taken in their sending institution.

"I thought I would have to do a lot of extra work in case I missed anything from first year, but so far it's been really straight forward."

"I honestly found my college diploma a lot harder than I find university, to be honest."

"I find the teachers...find outside sources and make it relevant in a life context, not just regurgitating information."

Students cited their level of maturity, studying what they were passionate about, personalized content from their professors and smaller class sizes in relation to other larger institutions as contributors to the ease of their transition into Lakehead University's academic context.

Several students found that with partial credit they often found themselves in first year courses and had struggles with content that overlapped with previous studies and also the maturity level of fellow students in the classroom in first year classes.

"I really wanted to be in an academic environment and classes where the professor is having discussions and people in the class are talking. That's going on in second year but in first year, in the class everyone around me was just saying some of the dumbest things ever."

"I do like the academic environment, now that I'm in second year and surrounded by people taking it a bit more seriously."

To some extent, transfer mechanics play a role in these students experiences, specifically unspecified transfer credits which did not act as pre-requisites to enter into upper year courses. Advanced standing students in this study were seeking an academically rigorous environment with like-minded peers similar to students in Gerhardt & Ackerman's study (2014); this environment is more likely to be accessed if specific first year prerequisites are captured as advance standing.

Social Culture

Summer Bridging Students

For summer bridging students, the initiation into the social culture of Lakehead University began with an intensive full time program of study. Summer bridging consisted of a program specific fixed curriculum for all students and was attended by a variety of specializations within each degree.

"It was a heavy course load, for sure, you were there for eight in the morning, every morning and we're done at eight at night because we were staying to study...it was hectic."

"The level of intensity of the summer, you don't really have time...three hour class, hour break, go back to class for two hours and then, study."

As a result of the intensive experience some students experienced a cohort bonding which was largely mediated by their class size. Larger cohorts often found common ground with peers through a similar specialization in their program of study or through past experiences at the same college. At times, in bridge cohorts with 100+ students, block transfer students found they were competing with peers for shared support resources and time with instructors.

While students did not specifically mention socially bonding as a result of scheduled social activities or through intensive classes and field experiences, both staff and students noted that block transfer students often stuck together as a group once they entered into classes with direct entry students.

"Yeah, I'd say in transfer, at least for us, I'd say the transfer students clique together and the non-transfer students clique together...it's still like that in some fourth year classes. All the university students sit on the right side of the room in lecture and all the college transfers sit on the left side of the lecture. Just cause of who you befriended, you know."

"It would please me if the students mixed more...college transfer students, especially from the same college will hang out together. They will support each other."

With one exception, the majority of block transfer focus group participants had moved to their respective campus from other cities and provinces. When discussing social aspects of their experience they did not cite family and friends (outside of school) as being a component unless they had moved with a spouse or significant other.

The bridging experience, with a 'boot camp' style intensity, created a social context of cohort bonding over the challenging academic work load and various course related activities. Few students cited engaging in organized or casual social activities within their summer bridge due to the work load, however they would reach out to alumni and student groups on campus for support in their studies and build connections in that way.

Advanced Standing Students

The experience of transitioning into the social culture of Lakehead University for advanced standing students involved aspects of integrating into the campus and community contexts.

Many advanced standing students had transferred to Lakehead University to be near their hometown where they could be supported by friends and family. They also cited smaller class sizes as a positive contributor to developing social connections with other students and their professors.

"My teacher knows my name and I can just talk to them informally."

"I found it really easy, I made friends here pretty much just on the basis that we were just in the same vicinity and were all having a conversation, which you don't get a big university. So it hasn't been a difficult transition, it's been what I expected which was a smaller environment."

Quite a few advanced standing students found social supports through campus and community groups based on their interests. Students cited the Student Union, Campus Athletics, Residence Life, Multicultural clubs, Gender Issues groups, community churches and more informal supports such as room mates and local political groups as places for social support and a finding a sense of community.

Advanced standing students experienced transition challenges into the social context based on pre-formed student groups and also perceptions of a gap in age and maturity between them and first year, direct entry students. Without a cohort bonding bridge experience, advanced standing students entered into various stages of group formation in their program of study, electives and student led groups.

"I think for me the only challenge would be coming into a situation where people do already have pre-formed relationships. So there is a feeling like, 'Oh, people already have their groups and do they want to make more friends.'"

"A lot of students [in my program] are first years, because they are living in residence they are like a group, then you get the kids who are from Thunder Bay, and they have their own group. So when you're a transfer student...you're kind of just by yourself."

"If you're older it's a bit of an isolating experience."

"I went to join a [academic] association but they actually told me, 'We don't know who you are. We've never seen you before.'...we were having a meeting about who wants to be treasurer, secretary, whatever but they didn't let me even though I was really excited and committed."

Quite a few of the advanced standing students made an attempt to attend orientation and as a result, strongly advocated for an orientation centred on mature students as many were not interested in team building activities and events that focused on transitioning from high school.

One group of advanced standing students were particularly negative about their social transition experience and cited the faculty and professors as their primary social support with secondary supports being family members and friends who were past alumni.

"Thank goodness for the [head of my department], she was so helpful with, like putting all that stuff [enrolment/orientation] together."

"My profs in [program of study] are really good, they were the ones that tell me where to go and show me what to do."

"I had an alumni I was in contact with...really intelligent person, they knew what to tell me, where to go...told me the services that were available."

"Family friend, they used to live here...I'd call them up and say, this is the problem and they'd be like, 'Okay, there are the services available to you."

Clearly, feeling comfortable in their environment, welcomed by university groups and services and having a sense of self efficacy emerged as factors strongly influencing advanced standing student's abilities to seek out and integrate with social contexts on campus and in the community. Students who felt isolated and unwelcome tended to be highly critical of the University as a whole with the exception of professors they felt a personal connection to and coursework they enjoyed.

Student Supports

Lakehead University offers a wide range of both academic and social supports that are summarized in the web survey tool. While in the web survey most students indicated that they were unaware of several supports or had thought about using supports but had yet to access them, the experience of accessing student support systems was mentioned by a large portion of focus group participants. Themes that consistently arose from transfer students and staff included academic supports, orientation activities and financial supports. Themes related to assessing transfer credit and academic advising were discussed in the Transfer Mechanics section of this report.

Program Specific Academic Supports

Students enrolled in summer bridging accessed a wide range of academic supports, often within their first week on campus. Bridging students discussed attending weekly tutorials, accessing generalized content tutors as well as seeking out content specific tutors, student success centre supports and several mentioned searching beyond campus supports for academic support. Compared to college, transfer students who felt significantly challenged in the academic transition felt that they had to show more personal initiative to find the support they needed to succeed in their programs.

In addition to formal university support services, block transfer students cited Youtube instructional videos, faculty office hours, knowledgeable peers and alumni on campus for the summer as significant sources of academic support.

Summer bridging faculty and support staff indicated that students often needed to perceive that they would require future supports or be challenged significantly before reaching out for academic assistance. At times academic services available during summer bridge courses experienced large amount of students attempting to access supports that were in excess of their resources.

Predicting times of student need and scaling academic support resources to match demand in summer bridging courses is challenging as many peer tutors are in the work force, academic assistance resources are focused primarily on supporting large numbers in Fall and Winter semesters.

For advanced standing students, faculty stood out as the primary academic support however several students indicated that they had accessed academic writing or student success supports successfully. Advanced standing students primary struggle was their level of awareness around the physical and online location of academic supports and being able to find key support staff that could assist them in navigating the system.

Orientation

Summer bridge programs contained multi-day orientation activities that introduced students to the services on campus as well as various alumni and professional associations related to their program. While these activities were intensive, block transfer students seemed to access supports and negotiate the university system as a result of program specific orientations.

Advanced standing students were invited to generalized orientation activities and cited that the focus was on high school students and first year, direct entry students. Several advanced standing students elected not to participate in orientation activities although they recognized their need for both a physical and social orientation to the campus. Advanced standing students recommended program specific orientations and/or easily navigable online resources to assist them in negotiating the process of accessing supports, finding physical locations of buildings and classrooms as well as understanding the range of social opportunities available to them during their studies.

Financial Aid

Many transfer students discussed bursary and scholarship opportunities specifically for transfer students as an area of necessary growth for summer bridging students citing the difference in college and university tuition.

"It's like shellshock too because tuition prices are substantially more from college to university. Both years in college were probably eight grand and that's like, one semester here, or a year here."

While there are specific transfer bursaries available at Lakehead University, students were unaware of how to access these bursaries. Some students cited that they had received a transfer bursary and had automatically been entered into the bursary application process upon acceptance while others seemed unaware that they were eligible for any bursaries as a transfer student.

Block transfer students questioned how scholarships scaled to match direct entry student's high school grade point averages (GPA) did not apply to their college GPA, suggesting that it would just as valuable for the university to apply entry point scholarships to college students. Students perceived that maintaining a high GPA in college is more challenging than maintaining a high GPA in high school.

"I had a 90 average or higher and I was surprised Lakehead didn't offer that [entrance scholarship]. Cause I know pretty well if you have a 90 average coming in from high school you get a full ride here. I'm pretty sure. It's surprising to me that having that in college, which should be a lot harder [you don't get a scholarship]"

Some block transfer students were aware that after their first year they would qualify for GPA based scholarships and felt confident that they would maintain their average, citing that their marks were higher in university than in college. A larger portion of block transfer students felt that it would not be possible to maintain the average required to maintain a scholarship.

One theme, notable for summer bridge students, was related to the disbursement of student loans in relation to tuition payments. While traditionally students felt that a student loan covers tuition and provides a portion for living expenses, including a summer semester tuition payment into the loan process came as a surprise for some. Several were prepared for the financial logistics of summer bridging tuition while others incurred more debt than expected to pay for living costs over the summer and fall semesters.

Best Practises in Bridging - Recommendations

Key aspects of best practices in bridging can be seen across a continuum of student experience. To represent these pathways we have developed a model (Figure 1) that represents multiple phases in which varying practices across three areas of best practices can be applied. These phases include pre-transfer, summer bridging and maintaining academic momentum and the three areas of student experience can be characterised as transfer mechanics, cultural shifts and supports.

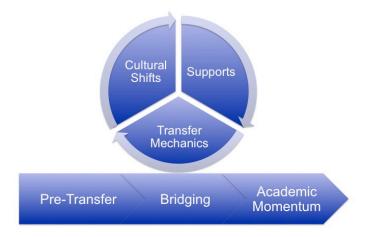


Figure 1: Key aspects of best practices in bridging

Pre-transfer

Based on the concept of learner identity formation (Briggs, Clark & Hall, 2012) students have varying perspectives on different universities and may change areas of study or select certain post secondary institutions for a wide range of reasons.

Best Practices in Transfer Mechanics for pre-transfer students involves ensuring that the process of researching transfer credits and block transfer agreements online is as transparent as possible so that high school students and guidance counsellors, college transfer advisors and potential post secondary transfer students can assess the viability of transfer as independently as possible.

Preparing potential transfer students for shifts in academic and social culture can involve transmitting institution specific aspects of the academic and social culture of receiving institutions pre-transfer through:

 Faculty visitations to potential sending institutions ranging from high schools to colleges that transmit the academic culture of programs to both students and the staff advising them.

- Online marketing of academic program strengths and standards as well as social aspects of the surrounding campus and community environment
- Hosting potential transfer students from potential sending institutions to have experiences on campus through shared educational or event based activities

Ideal pre-transfer supports for potential transfer students included transfer specific staff or staff with extensive knowledge of transfer agreements that respond efficiently and effectively to requests from sending institutions, potential students and faculty advisors regarding potential credit transfer.

An additional pre-transfer support that was found to be effective through the environmental scan of Ontario included a student friendly, "All You Need to Know" transfer guide which transfer specific staff suggested should be available in hard copy for students who were becoming invested in the transfer process.

Students often cited by name the person who had helped them negotiate their transfer arrangements and felt that during the process of assessing their credit, they needed to talk to a human being.

Bridging

At Lakehead University the bridging experience differs between varying types of transfer pathways ranging from a six week intensive summer transition program to voluntary attendance at an orientation day. For students who have made the decision to enrol and are participating in either orientation activities or a summer transition program, best practices include:

- Ensuring that the mechanics of transfer take into account mandatory prerequisites for taking upper year courses and ensuring that the amount of transfer credit received and the amount of courses necessary for degree completion, matches the expectations of students or can be justified in a transparent manner to the student.
- Recognizing that bridging and orientation activities involve aspects of integrating students into the social and academic cultures of host institutions. In our case we found several Best Practices that include:
 - Academically intensive summer transition programs that develop strong cohort bonds and engage students in academic and professional cultures/activities related to their degree of study
 - Engaging multiple strategies for delivering orientation activities including:
 - Program specific tours as a mandatory component of course components
 - Multi-day summer transition orientations that introduce students to both the physical campus and community and the academic/social support systems available at the university

- Ensuring that there are age appropriate and efficient orientation options available to mature students with varied scheduling commitments (i.e. Work/family)
- Based on attendance at orientation activities and need, transfer students discussed accessing supports and recommended Best Practices such as:
 - Scaling support services and associated resources to meet program specific demands at key periods in both summer transition programming and during the regular academic year.
 - Providing access to content specific tutors for specialized science and mathematics topics.
 - Ensuring students are aware of financial assistance and opportunities for financial aid while potentially considering entrance scholarship options similar to those offered to direct entry students.

Maintaining Academic Momentum

Douglas & Attewell (2014) discuss the importance of academic momentum as a concept related to the student experience of 'going somewhere' academically. According to their study, avoiding remedial coursework strongly increases the likelihood of retention. Based on the survey results, we would like to extend that concept to include both the strong extrinsic motivation that students indicated and focus group comments related to taking courses which felt like overlapping credits. Best Practices in bridging students requires supporting students throughout their degree to maintain a meaningful and productive academic trajectory. Some Best Practices include:

- Transfer Mechanics:
 - Allowing opportunities for students to consult with staff on overlapping course content and strongly consider re-assessing credit transfer decisions so students do not feel like they are losing momentum or running on an academic treadmill so to speak.
 - Ensuring that the transfer mapping of upper year courses for articulated agreements is accurate, updated based on changes and accessible to all the support services that are involved in assisting a student to meet graduation requirements
- Cultural Transitions:
 - Providing peer mentorship programs, potentially pairing students of varying programs, to enhance social integration into a post-secondary community of learners.
- Ensuring that students who have the potential to meet program requirements receive support and direction to avoid remedial coursework or adding extra years on to their degree process.

Pilot projects

Peer Mentoring Program

Recognizing the unique needs of many block transfer students based on their previous academic background and program of study, a Peer Mentorship program was piloted to supplement peer assisted learning and tutoring services offered by the Student Success Centre at Lakehead University. Some block transfer students, specifically in summer transition programs, indicated needing assistance on very narrow and specified content and mentioned that being assisted by upper year 'mentors' who had experience the transfer process greatly influenced their success.

According to literature reviewed in Appendix E, peer mentoring programs support students by engaging them directly with like-minded peers; creating a life-long learning culture and community; increasing retention and attracting new students; connecting students to resources on campus and in the surrounding community; supporting academic and emotional skill development including communication, resilience, and problem-solving skills; and potentially creating future agents of change and civic leaders.

30 potential mentors and mentees were recruited via posters and contact with faculty and their respective administrative staff. Mentors were incentivised by an offer to include the program on their co-curricular record. After expressing interest, mentors participated in a needs assessment (Appendix F) and a mandatory, evidence based mentorship training program (Appendix G).

Of the 30 potential participants, programming was attended by a total of 20 participants who completed needs assessments and appropriate training and were successfully paired in mentor/mentee relationships. As of March 25th, 2016 there have been four group meetings of all participants in the mentorship program and a final evaluation of the program will be conducted on March 31st, 2016 at the end of the pilot project. While the impacts of a peer mentorship program can require years to establish consistent evaluation, this final report/evaluation along with a Mentorship handbook outlining best practices will be available upon request after May 1st, 2016.

Mentorship program participants were primarily (96%) Engineering students with one pair from Business/Science. Purposes for seeking mentorship elicited from the needs assessment included seeking assistance and support with the challenges with the physical and social transition to North Western Ontario. Students moving to Thunder Bay for their studies noted things such as the differing climate and feeling a sense of isolation even within the campus community.

Based on an interim satisfaction assessment, students attending the peer mentorship pilot project sessions rated the programming highly and made several recommendations for future mentorship initiatives:

- Mentorship targeted at First Generation students who are the first in their families to attend university
- Matching college transfer students with direct entry, upper year mentors for increased integration into the university environment
- Including mentors who are alumni or professionals with proven academic/career success

The process of coordinating the Mentorship program resulted in the following suggestions for future implementation:

- A full-time dedicated resource is needed in order to ensure the matching process and resulting relationship is managed continuously otherwise there is a chance the program will yield less than optimum results,
- Marketing and promotion of mentorship programming requires the full support of faculty and administrative services to reach an optimal amount of students,
- Based on the needs assessment, mentorship coordinators may wish to experiment with mixing mentors and mentees from different programs instead of creating homogenous relationships to expand peer networks and enrich the educational experience of attending Lakehead University.

Student Support Tutorials

Transfer students are often looking for information outside of office hours and/or when in "crisis mode". This means that online information is sought. If it is readily available, it can be very useful in resolving issues and keeping students on track.

To assist transfer students in independently navigating the mechanics of university enrolment to maintain academic momentum, one pilot project was initiated to develop online video tutorials that are accessible to both future and current transfer students.

To date, 11 individual tutorials have been developed and published to Lakehead University's Youtube channel titled the "Student Support Series" and can be viewed at https://www.youtube.com/channel/UCvbGA1_0sS_QKgJ4gnloxqw

- Academic Standing
- Bursaries
- Declaring a Minor
- Degree Audit
- Enrolment Verification
- Letter of Permission
- Change of Name
- OSAP
- Program Change
- Special Exams

• The Calendar & Understanding Program Requirements

Curriculum Assistant Learning Outcome Mapping

Based on the transparency of specific course related transfer credits across university and college systems in provinces such as British Columbia and Alberta, the project team sought out tools that allow for post secondary institutions in Ontario to share course content and curriculum both internally and externally. Qualitative data elicited from faculty advisors and enrolment services indicates that a universal system for assessing credit transfer and tracking block transfer agreements in the context of cyclical program reviews, and course changes at sending and receiving post secondary institutions requires transparent systems for sharing information.

As a result of discussions that took place at an ONCAT funded Learning Outcome and Transfer Pathways colloquium, project staff and Paola Borin, a Curriculum Development Consultant at Ryerson University, were made aware of work being done at Ryerson to map such information. Ryerson then provided access to an online Curriculum Assistant tool which allows for the mapping of multiple block transfer pathways, program level learning outcomes and course level instructional tools designed to enhance learning outcomes.

Project staff participated in two phone meetings to receive informal training and advice on how to use the tool. Using a developing ONCAT funded pathway, project staff mapped out program learning outcomes and course based instances of initiating, reinforcing and mastering various program level learning outcomes to generate sample reports (Appendix H).

Demonstrations of the Curriculum Assistant Tool were conducted with administrative staff responsible for assessing transfer credit and developing/maintaining pathways. The administrative staff, including the Associate Registrar, saw the potential benefits of using an online, university wide system of mapping degree requirements, block transfer pathways and associated learning outcomes that is accessible to faculty advisors, academic advisors, admissions and enrolment services.

As of the date of this final report, the Curriculum Assistant tool is set to be forwarded to Lakehead University technology staff to ensure compatibility with current online curriculum navigation resources as well as to be assessed for potential changes in coding the program to better fit Lakehead University's academic environment.

Best Practices Top 10 Hit List

1. Create a transfer specific orientation package (online and paper) of information that is provided to all transfer students; include the link in all correspondence with students. Have hard copies available at key locations.

2. Avoid putting transfer students into first year courses unless absolutely necessary and if necessary ensure that first year courses act as prerequisites for accessing upper year classes. A large portion of individuals with some PSE have already had a "first year experience".

3. Avoid unspecified credits wherever possible. Work with departments to offer "specified" credits that can be used as prerequisites for accessing program specific upper year courses by students. Ensure that students are aware of opportunities to re-assess credits if appropriate.

4. Ensure that faculty and staff working with transfer students are well trained and able to answer questions, particularly questions regarding the reasoning behind decisions on transfer credit assessment. Maintain consistency in personnel and approach.

5. Promote a general culture of inclusiveness with all students within programs; this requires continual effort on the part of department Chairs, Directors and staff.

6. Organize informal opportunities for interaction between transfer students and department faculty, staff and students. Be persistent – initial response may be low but will gain momentum as more students learn about the events.

7. Design and advertise specific orientation activities to reflect the maturity and outside obligations of transfer students. Consider evening sessions, drop-ins, coffee breaks and summer opportunities.

8. While big events (e.g. transfer student fairs) are important, constant reminders of available resources are just as important and maybe more effective. Design of online resources is critical; access to personnel is equally important.

9. Consider adjusting scholarship standards to include non-direct as well as direct entry students.

10. Ensure discipline specific tutoring is available throughout the terms (including spring/summer) and that students are reminded of its availability constantly. Reduce the *ad hoc* nature of tutoring wherever possible as this tends to marginalize those on the edges.

LIST OF APPENDICES

- A. Annotated Bibliography
- B. Environmental Scan Website Reference List
- C. Transfer Student Web Based Survey Instrument
- D. Summary of Psychological Scale Results
- E. Peer mentorship References
- F. Mentorship Needs Assessment
- G. Peer Mentorship Training
- H. Sample learning Outcome Report
- I. Additional References