Building Empowerment, Achieving Results

The BEAR Program Research Report

ONCAT PROJECT NUMBER 2015-36

Sherryl Fraser, Chair, General Arts & Science, Algonquin College
Dwight Powless, Community Liaison Resource, Algonquin College
Andre O'Bonsawin, Manager, Indigenous Initiatives, Algonquin College
Adele Yamada, Professor, General Arts & Science, Algonquin College

SUBMITTED TO
THE ONTARIO COUNCIL ON ARTICULATION AND TRANSFER

OCTOBER, 2016

We are thankful for the funding provided by the Ontario Council on Articulation and Transfer that made this research project possible.

The BEAR Program Research Project

Contents

List of Figures

List of Acronyms

AANDC – Department of Aboriginal Affairs and Northern Development

AFN – Assembly of First Nations

BEAR – Building Empowerment, Achieving Results

CICan – Colleges and Institutes Canada

CRM – Customer Relationship Management

FNMI – First Nations, Métis, and Inuit

GAS – General Arts and Science

ISP – indigenous Strategic Partnerships

MCTU - Ministry of Training, Colleges and Universities

ONCAT – Ontario Council on Articulation and Transfer

OSSGD – Ontario Secondary School Graduation Diploma

RCAP – Royal Commission on Aboriginal People

SAPLME - Supporting Aboriginal People for Labour Market Entry

TI – Tungasuvvingat Inuit

TRC - Truth and Reconciliation Commission

WPD – Workplace and Personal Development

The BEAR Program Research Project

1. Prologue

The Building Empowerment, Attaining Results (BEAR) Certificate Program is being developed through partnerships between the Algonquin College General Arts and Science Department, the Algonquin College Indigenous Strategic Partnerships (ISP) team, and the First Nations communities of Ahkwesãhsne and Pikwaganagon. The stakeholders who are building the BEAR Program – educators, administrators, community leaders, parents and students – are taking to heart the call to action put forward by the Truth and Reconciliation Commission (TRC) to create meaningful learning opportunities for our First Nations, Métis and Inuit (FNMI) youth.

On December 3, 2014, Algonquin College signed the Colleges and Institutes Canada's (CICan) historic *Indigenous Education Protocol*, an "inspirational document that reaffirms the Colleges' commitment to Indigenous education and provides a vision of how it will strive to improve and better serve Indigenous peoples" ("Algonquin College signs", 2014, para. 1). Six months later in the fall of 2015, two members of the General Arts and Science (GAS) department, Sherryl Fraser (Chair) and Adele Yamada (Communications professor) and two members of the Indigenous Strategic Partnerships (ISP) team at Algonquin College, Dwight Powless and Andre O'Bonsawin, began a series of discussions that focused on the research findings of the ISP team and the experiences of GAS Aboriginal Studies professors to better understand the challenges facing FNMI students in GAS and in the wider college. As discussions progressed, the team members realized that for a significant number of FNMI students, there is a disconnection between the students' entry level knowledge and skills and the requirements and expectations of the college programs in which they enroll. Further, for a significant number of students, this learning gap is not being adequately addressed or managed within current college program offerings and as a result, these students are unable to complete their programs successfully.

The BEAR Program Research Project

It became evident that there is a need for a preparation-type program for FNMI students on several levels. Firstly, as one of the largest colleges in Ontario, Algonquin College is positioned to take a leadership role in meeting its obligations to the promises embedded in the *Indigenous Education Protocol*. As a signatory, the college "recognize[s] that indigenous education emanates from the intellectual and cultural traditions of Indigenous peoples in Canada" and "believe[s] that Indigenous education will strengthen colleges' and institutes' contribution to improving the lives of learners and communities" ("Indigenous Education Protocol", 2016, para. 3). Secondly, despite persistent calls for restructuring and systematizing the FNMI education system so that access to learning opportunities is equitable for all Canadian children and youth, resource deficiencies and administrative failings have profoundly affected FNMI students. Even after having obtained an Ontario Secondary School Graduation Diploma (OSSGD), an alarming number of FNMI students are not prepared for the demands of post-secondary programs and require additional learning support and skills development in order to be ready for college. Thirdly, communities faced with limited post-secondary education budgets require a way to help guarantee a meaningful return on the funds they invest in their members' college education. Too often, FNMI communities find themselves sponsoring enthusiastic, optimistic young adults who on paper appear ready to tackle post-secondary studies but who soon discover the harsh reality that their 12 years of education have not prepared them in the same way as their non-FNMI peers.

The BEAR Program is designed with the intention of mitigating educational deficits, developing new skills, building new relationships, and creating new opportunities for FNMI youth. There is a huge economic imperative to ensure that FNMI communities have access to high-demand diplomas and degrees so that FNMI youth are able to develop the skills, knowledge and abilities the Canadian workforce will require. Sharpe & Arsenault (2009) state that FNMI people have a significant role to play in the economic future of Canada:

> Although Indian and Northern Affairs Canada (INAC) expects the Aboriginal population to experience demographic trends similar to those of the general Canadian population (declining birth rates and an aging population), the Aboriginal population will remain significantly younger and maintain its high growth rate relative to the non-Aboriginal population for at least the next 20 years (INAC and CMHC, 2007). Indeed, the Aboriginal population is expected to grow at an annual rate of 1.47 percent between 2006 and 2026 compared to the non-Aboriginal rate of 0.73 percent per year. Owing to its high growth rate and favourable age structure, the Aboriginal population is expected to account for at least 12.7 percent of labour force growth and 11.3 percent of employment growth from 2006 to 2026 (p. 9).

Simple demographic calculations do not tell the whole story, though. If labour market projections factor in that current FNMI participation and employment rates lag behind non-FNMI rates, and if these rates increase such that FNMI population levels reach 2006 non-FNMI levels by 2026, then "the Aboriginal population will account for 19.9 percent of labour force growth and 22.1 percent of employment growth over the 2006-2026 period" (Sharpe & Arsenault, 2009, p. 9). The researchers further state: "If in fact Aboriginal education is not made a priority, the drag on Canadian productivity caused by below-average Aboriginal education will grow as the Aboriginal population's share of Canada's labour force increases over time" (Ibid.). Now is the time to stop and redirect both the proverbial buck – and the real bucks – towards FNMI education.

To fulfil Algonquin College's commitment to the *Indigenous Education Protocol*, to work towards building new relationships with FNMI communities, and to provide educational opportunities to eager FNMI youth, the BEAR team pledged to develop a program to provide FNMI learners with the skills and knowledge they need to be successful either in additional post-secondary programs or as employable workers and to help communities leverage and maximize limited funding. Envisioning this new program as a preparatory pathway program led the group to consider the Ontario Council on Articulation and Transfer (ONCAT) as a partner, and in October 2015 the Algonquin team submitted a proposal to explore a range of research findings with the purpose of developing a model for the Building Empowerment, Attaining Results (BEAR) Program, a pathway that provides students

with the opportunity to prepare for further college studies or to enter the workforce after attaining an Ontario College Certificate. We wish to thank ONCAT for their generous support, and we are looking forward to their continued assistance as the BEAR Program is designed and implemented.

2. A Renewed Call to Action

> We believe that success in providing education to [First Nation] students can be achieved only if their needs and aspirations are appropriately identified and served by an education system that is designed to meet them (Office of the Auditor General of Canada, April 2000, Chapter 4: Indian and Northern Affairs Canada, Elementary and Secondary Education).

Despite Auditor General Sheila Fraser's call to action in 2000, and her subsequent condemnation in 2010 of the federal government's failure to "appropriately identify and serve" the educational needs of FNMI youth, the educational arrangements in place for FNMI communities remain largely ineffective. Nationally, graduation rates for on-reserve schools are under 40 percent whereas over 75 percent of the non-FNMI population graduates from high school with a recognized diploma (AFN, 2012). This discrepancy results from various factors. In contrast to non-FNMI Canadians whose education is provincially-funded and regulated, FNMI education begins at the federal level where formulas are applied to ascertain direct transfers, and funds are allocated to programs such as the First Nations Student Success Program (AFN, 2012; Bains, 2014). From the federal level, funds are distributed to seven Aboriginal Affairs and Northern Development Offices across the country, and these offices then distribute funds to the First Nations communities within their regions. The education board for each community makes the choice to pay for on-reserve education or to pay for off-reserve education in provincial schools (Bains, 2014). To gain a deeper understanding of the processes affecting both the nature and delivery of FNMI education, the on-reserve education system and the education contracts arranged between First Nations communities and provincial school boards need further examination.

The BEAR Program Research Project

On-reserve education occurs outside of provincial jurisdiction, and neither the curriculum nor teacher certification is regulated or monitored to establish compliance with provincial standards (Mendelson, 2008; Bains, 2014). Remote FNMI communities have no choice but to organize and deliver education from JK to middle school on-reserve; however, even when FNMI communities opt to fund their own schools and create and deliver curricula based on FNMI world views and cultural values, the processes or mechanisms that assess equivalencies between on-reserve education and off-reservation (provincial) education are not standardized. As a result, FNMI communities are facing "situations where First Nations youth graduate from education institutions on-reserve but cannot demonstrate a recognizable diploma to a workplace or post-secondary institution" (Canada, AANDC, 2014). In other words, on-reserve education is viewed as sub-standard. In fact, according to the Associate Director of the Fraser Institute Centre for Aboriginal Policy Studies,

> There are no minimum legislated education standards for on-reserve First Nations students. Canadian taxpayers are funding an education system in First Nations communities that has no legislated mandate for a core curriculum meeting provincial standards, no requirement that educators in First Nations schools have provincial certification, and no requirement for First Nations schools to award a recognized provincial diploma (Bains, 2014, p. 1).

This failure to institute a process to manage and correlate on-reserve education with provincial standards is not the only oversight.

In Ontario, approximately 40 percent of FNMI students live on reserves but attend school off reserve (Bains, 2014). A portion of the federal funding must be distributed to the provincial schools to cover these education costs; however, there is no standardized process in place to regulate and oversee the tuition agreements that are set up between FNMI communities and individual school boards to pay for students who live on-reserve but who leave the reserve to attend provincial elementary and high schools. In 2012 the Ontario Auditor General found that of the 25 First Nations communities surveyed, only 9 had valid tuition agreements in place and that the remaining 16 had either an expired agreement or no agreement at all (Ontario, Auditor General,

2012). Further, it was found that some First Nations had been overbilled. In one case, a community was overcharged $700,000 in one year; in another case, a community paid $1.3 million over and above the basic tuition fees over a three-year period before realizing that the services they were charged for were actually included in the base fees (Bains, 2014). More distressing was the discovery that some local school boards over-identified FNMI students as special needs students requiring special testing in addition to equipment and services, the costs of which (over $100,000 in one community) were charged back to the First Nation but which were rarely available to the students to use once in school (Ibid., 2014).

Inequality extends past invisible borders. In 2012, after three years of negotiating with the provincial and federal governments, the band school in the Waywayseecappo community four hours west of Winnipeg, Manitoba was finally allowed to join the local school board. Per-student funding within the Waywayseecappo community equated to $7,200 per year whereas students at Rossburn Collegiate, a school five kilometres away under the jurisdiction of the provincial government, were being funded at a rate of $10,500 per student annually (Sniderman, 2012). By adjusting jurisdictional authority and having the Waywayseecappo community school join the local school board, the federal government was compelled to match the provincial student funding. The Waywayseecappo community saw a $1.2 million increase ($3,200 each for 300 students) in its annual educational budget (Ibid.). In achieving funding parity with provincially-funded schools, this community was able to invest in human capital and physical resources, investments that have led to tangible improvements such as increases in student reading scores. The Waywayseecappo story highlights the fact that significant funding differences exist between on-reserve and provincially-funded schools; it is estimated that some FNMI communities receive up to 40 percent less funding per student (Ibid.). Not only are FNMI communities disadvantaged by the lack of monitoring by either the Ministry of Education or the Department of Aboriginal Affairs and

Northern Development Canada to prevent *underfunding* in comparison with provincial funding and *overcharging* for off-reserve education, there is no fully defined, regulated system in place to ensure that a comprehensive, standardized education is being provided to these students.

This is the inconceivable reality for many FNMI communities in Ontario and throughout Canada. Despite a long history of research and rhetoric that includes the Statement of the Government of Canada on Indian policy (also known as the 1969 White Paper), the 2002 and 2011 reports of the Governor General of Canada, the 2011 Report of the Standing Senate Committee on Aboriginal Peoples, and provincial initiatives such as the Ontario First Nation, Métis, and Inuit Education Policy Framework published in 2007 and the Aboriginal Post-secondary Education and Training Policy Framework published in 2011, educational opportunities for FNMI learners remain constricted and lag far behind those of non-First Nations students. The fact that as recently as three or four years ago, First Nations communities in Ontario were outrageously overcharged by provincial school boards drives home the point that the FNMI education system, a system that should be on par with the provincial education systems across the country, a system that should be comprised of a series of steps and processes and checks and balances to ensure fairness and accountability, is profoundly broken. The adage coined by renowned management consultant Joseph Juran that 90 percent of failures are caused by the process and only 10 percent of failures are caused by people sums up the ineffectiveness of the FNMI education experience. NDP MP Charlie Angus is less objective. He views the lack of government initiative to solve long-term FNMI education issues as a form of "educational apartheid" which is "based on a system of racist discrimination" in how students are funded (Sniderman, 2012, para. 10). Many of the findings in this research report lend credence to Mr. Angus' opinion: the onus is on educational institutions to build new relationships with the over 1.4 million (Stats Can, 2011) people who belong to FNMI communities to ensure that their children have access to the same educational opportunities and future possibilities as their non-FNMI peers.

The BEAR Program Research Project

Twenty years ago, the Royal Commission on Aboriginal Peoples (1996) identified an education structure that outlined functions and responsibilities for local communities, nations, multi-nation organizations, and Canada-wide networks (RCAP, 1996, 5.10.3 in Mendelson, 2008, p. 13). Echoing the need to develop a clearly defined and operationalized education system, twelve years ago, in *Sharing Our Success: Ten Case Studies in Aboriginal Schooling*, Bell et. al. (2004) concluded that three recommendations for FNMI education were imperative:

1. Recognize and empower Aboriginal school boards in ways similar to those in provincial/territorial systems;
2. Provide sufficient funding to develop and support a level of educational infrastructure and services equivalent to those provided by provinces and territories; and
3. Articulate an accountability framework that defines the relationships and responsibilities of educational stakeholders for the provision of educational equity and excellence for all Aboriginal students (Bell et al., 2004, p. 323).

Four years later, Mendelson (2008) analyzed FNMI education statistics and found that , "the absence of a legal framework for education of on-reserve First Nations residents is much more than a technical issue: It is reflective of an ongoing vacuum in federal policy which is stifling efforts to improve education for residents on reserve" (p. 3). His proposal to implement a First Nations Education Authority Act is founded on the tenet that the Act would be "shaped in partnerships" with FNMI communities (Ibid., p. 17).

Over the last few years, Algonquin College has seen an increasing number of FNMI students choose to come and study here as their first choice. At this time, there are approximately 1,200 self-identified FNMI students enrolled in programs at the College, so there is a significant need to continue open dialogues with communities to ensure that FNMI students' requirements are met. Appreciating FNMI communities as preferred clients with whom to establish effective working relationships is a step towards creating new and different partnerships. According to information obtained by the GAS Chair, the college receives revenue of close to $1 million for every 150

students who enroll in programs (reference). With the concepts of *process* and *accountability* at its core, the BEAR Program is built on the principles of inclusion, collaboration and responsibility. In recognizing the need to include effective communication strategies as well as focused, individualized support, the BEAR Program provides an opportunity to shift the relationship between the College and FNMI communities towards a long-term partnership model that embraces Customer Relationship Management (CRM) principles.

On a basic level customer relationship management is a "strategy for understanding your customers and their needs in order to optimize your interactions with them" (Canada Business Network, 2016, para 1). In keeping with this principle, discussions and consultations with stakeholder communities over the past few years have helped identify some of the key issues facing our FNMI students including academic skill gaps in English and math, unfamiliarity with post-secondary institutional norms and expectations, lower confidence levels and poor self-esteem, and an underdeveloped awareness of career options. At Algonquin College, projects implemented by the Workplace and Personal Development and Indigenous Strategic Partnerships teams over the past four years have illuminated similar issues and have led to findings and insights that inform the design of the BEAR Program. In addition to providing students with a unique preparatory pathway on the way to further post-secondary education or to entering the workforce, this one-year Ontario certificate program helps to accomplish two of the goals mandated by the *2015 Truth and Reconciliation Commission of Canada: Calls to Action* report, namely to "close identified educational achievement gaps within one generation" and to help improve "education attainment levels and success rates" (TRC, 2015, p. 6). First Nations, Métis and Inuit students have waited long enough for the opportunity to be empowered through education.

3. Dialogue and Discoveries

Programs designed to support post-secondary FNMI learners must start with a comprehensive understanding of the reasons for why these learners have struggled to be successful in post-secondary studies. With respect to research, the Aboriginal Post-secondary Education and Training Policy Framework (2011) mandates that performance measure strategies such as the following must be implemented:

- the development of standardized data-collection approaches;
- the development of policies to better identify Aboriginal learners/clients;
- program evaluations;
- improved tracking of, and results-based reporting on, Aboriginal postsecondary education investments; and
- improved reporting back to Aboriginal communities and the postsecondary education and training sectors on their collective achievements (p. 18)

Over the past few years, the Workplace and Personal Development (WPD) and Indigenous Strategic Partnerships (ISP) teams at Algonquin College have met this mandate by implementing programs, conducting studies and sharing data to "identify the barriers and opportunities for Indigenous educational persistence and employment success" (Powless & Manning, 2015, p. 1). Studies by the WPD and ISP teams include the Aboriginal Student Academic Performance Reports (Part I and II) and the Indigenous Youth Educational Persistence study. Programs developed and implemented by the ISP team include the Supporting Aboriginal People for Labour Market Entry (SAPLME) Program and the DevelopMENTOR Program. In the spirit of collaboration and exchange, Algonquin College hosted two Days of Dialogue in February 2014 and February 2015, and participants included representatives from community organizations, the Ministry of Training, Colleges and Universities

(MTCU), and Algonquin College. Key features and findings of the projects were shared with participants; questions and discussion points that arose from these dialogues became the starting points for additional areas of research. An analysis of the WPD and ISP teams' work demonstrates how the assumptions of CRM techniques, sound business practice, collaborative efforts, and thoughtful process integration have led to significant findings and vital insights which have informed the design of the BEAR Program curriculum and its delivery.

3.1 Student Performance Reports (2009-2015)

As a starting point, these reports analyzed the results for students who self-identified as Aboriginal according to questions similar to the Canada Census question set regarding Aboriginal ancestry. Using Indigenous organization and/or entity sponsor lists, students who were sponsored by a community were identified. Then this list of students was reconciled with the complete list of students who self-identified as Aboriginal to determine the number of students who were sponsored and who were not sponsored. "Non-sponsored" refers to students who were not receiving any funding support from an FNMI community or band, and "sponsored" refers to students who were being sponsored by a community or band as detailed in the Algonquin College registration database. The ISP team examined specific data relating to enrollment, retention, performance and completion measures of sponsored FNMI students and compared the results with self-identified FNMI students and to the College population overall. Key findings indicate that rather than withdrawing from programs that may not be suitable (i.e. academically demanding, mismatched career focus) early in the semester, over 40 percent of sponsored students withdraw at the end of the semester. Further, this statistic is cause for concern because it highlights the fact that a significant number of students are getting to the last level (semester 2 or 4), but they are not graduating due to incomplete and failed courses accumulated throughout their program. As far as the college is concerned, these students show on record as being "retained" even though they were

unable to complete their programs. In addition, high numbers of students are being assessed with an "all Fs" category which means that they either failed all of their courses or did not write final exams but were still registered in the system (Manning, Powless & Doyle, 2013). Other findings identified that sponsored students (almost 40 percent) were enrolled in the Faculty of Arts, Media and Design, and that about 45 percent of the students were registered in one-year GAS certificate programs which are often perceived as "preparatory" programs (Ibid.). Additionally, sponsored students were found to switch programs at a rate of 1.60 as compared to a rate 1.3 for self-identified Indigenous students and a rate of 1.28 for the college overall (Ibid.).

3.2 Supporting Aboriginal People for Labour Market Entry (SAPLME) Project

In a two-year collaboration with several FNMI community organizations, the ISP team developed the SAPLME program to help 57students (selected on the basis of perceived above average English and math skills) decide on a career path by focusing on students' strengths, abilities and values (Manning, 2013). The following components comprised the program:

1. ***Academic and Personal Strength Assessment***

   Both English and math skills were assessed through a series of tests at the Algonquin College Career and Academic Access Centre. The results for English showed that of the students tested only 33 percent met the minimum college preparedness requirement. Further, individual ESL assessments that included 30 minutes of 'speaking' and 30 minutes of 'writing' indicated that 89 percent of the students showed ESL-related language difficulties. Math testing revealed that out of the group, only 51 percent of the students met the pre-requisites for Basic Math at the college level. Additional assessment included the Myers-Briggs Type Indicator and the Strong Interest Inventory, and the results were used to tailor the vocational counselling portion of the program.

2. ***Vocational Counselling***

   Over three half-day sessions, students participated in workshops that helped them first to

identify possible career options that fit with their strengths and interests, and then to assess the values of organizations and employers to align them with the students' preferences, and finally to determine their ideal job.

3. ***One-on-one Career Counselling***

   The next step in the program provided an opportunity for students to meet with a career coach to discuss their career choices and develop a learning action plan that detailed the steps, skills and certifications required to achieve their chosen career.

4. ***Training and Certification in WHMIS and First Aid***

   To enhance their skills set and add to their resumes, students were provided with opportunities to receive training and certification in either WHMIS or CPR/First Aid.

3.3 DevelopMENTOR Program

Set up as a voluntary, one-to-one training and coaching program, the DevelopMENTOR program has assisted students find, prepare for and sustain employment with partnering companies. Over the past five years, the employment coach has guided students in discovering their physical, emotional, developmental and environmental needs in term of studying and working. Through weekly meetings, the coach has helped students understand how their behaviours and "soft" skills impact their employment experience. Once students are deemed "ready to work" by the coach, they are permitted to apply for jobs and begin working. However, during the first eight weeks of employment, students continue to receive enriched support and feedback through meetings with the employment coach and the work supervisor. At final count, all of the students who were placed in jobs as an outcome of the DevelopMENTOR program have remained successfully employed.

3.4 Indigenous Youth Educational Persistence (IYEP) Study

Many important ideas and revelations emerged from the two Days of Dialogue. One of these ideas focused on the fact that despite facing many adversities, some FNMI students demonstrate resilience and persist in attaining a post-secondary qualification. They are able to overcome obstacles and challenges and succeed in moving through education and establish productive careers. Taking a qualitative research approach, the study involved a comprehensive analysis of persistence research and models of resilience coupled with data compiled from in-depth interviews with 13 people all of whom are FNMI, have completed a post-secondary program, and who are considered to be "resilient."

4. Findings as Foundational

The WPD and ISP teams' efforts to understand and assess the educational experiences of FNMI students have helped to differentiate and articulate the challenges that these students face in moving away from their communities, in entering college underprepared for academic and social challenges, and in finding their voices as they navigate different cultural and social situations. The work of the WPD and ISP teams is augmented with additional research findings from a variety of sources to inform the ways in which the BEAR Program design and implementation can promote success in post-secondary programs.

4.1 English and Math Preparedness

The admission process at Algonquin College is two-tiered. Students are eligible to attend the college if they have the following:

- An Ontario Secondary School Diploma (OSSD) or equivalent; OR
- An Academic and Career Entrance (ACE) certificate; OR

- A General Educational Development (GED) certificate; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program)

Depending on the program, additional criteria may apply such as a minimum mark (for example, 65%) in a Grade 12 English credit or minimum math requirements. A number of GAS certificate programs have a Grade 12 English credit as a requirement, but for many of these programs there is no minimum grade requirement. This means that students who graduated from high school with scores as low as a D in Grade 12 English courses are eligible to apply for programs within GAS (and some other college departments). The fact that college entrance is possible with mature student status without a high school diploma means that the level of student preparedness is widely variable and difficult to assess prior to program entrance. However, all college programs (except those that fall under academic upgrading) presuppose English language abilities sufficient to function in a school environment: to be able to read and understand information posted online by the institution and by professors, to navigate websites and the college learning management system, and to be able to demonstrate that learning objectives have been met.

The Student Performance Reports showed significant academic skills differences between the experiences of sponsored and non-sponsored students particularly in relation to multiple program attempts. The findings indicated that 42.7 percent of sponsored students enrolled in more than one program, and although the data could not capture specific reasons, the results suggest that sponsored students who are not successful in a first attempt at a program will switch to a different program to keep trying to attain a certificate or diploma (Manning, Powless & Doyle, 2013). One of the main reasons for failures in the first program attempts relates to the level of preparedness for college in English and math. According to Powless and Manning (2015), of the sponsored students who write entrance tests as part of the application process, approximately 80 percent fail because

of a lack of competency in English and 25 percent fail because of a lack of competency in math. When students are unable to gain entrance to their program of choice due to academic under-preparedness, their next option is often to apply for certificate programs in General Arts and Science (GAS). Enrollment statistics bear this out: of the total number of sponsored students at Algonquin College, the lowest numbers (7 percent and 12 percent respectively) are enrolled in diploma programs in Media and Design and Technology and Trades whereas more than three times as many students – 30 percent – are enrolled in certificate programs in GAS. Even though a large number of sponsored students enroll in one-year programs in GAS, the graduation rate for these students is only about 30 percent. In other words, even though about a third of sponsored students are attempting certificate programs (rather than more academically rigorous two-year diploma programs) more students are being unsuccessful than are actually being successful.

The findings from the SAPLME program echo the persistent problem of academic under-preparedness. The Inuit students invited to participate were identified as more likely to benefit from the program based on their perceived above average skills in English and math. However, when English and math tests were administered by the Algonquin College Career and Academic Access Centre (CAAC), the results indicated significant gaps in foundational skills. Out of the 45 students tested, only 14 met the very minimum English skill level required for college (Powless and Manning, 2015). Further, the scores for 20 percent of the students who took part were so low that this group was ineligible for the upgrading program (Ibid.). These findings support the perception held by educators, administrators and students themselves that the education being provided to FNMI students is not 'comparable' to non-FNMI students, and that in fact, FNMI students could sometimes be up as far as two grades behind (Mendelson, 2008). The message from both the Student Performance reports and the SAPLME Program is clear: a significant number of FNMI students are underprepared in English and math skills. Statistics Canada (2011b) reports that

The BEAR Program Research Project

"Aboriginal people have lower literacy and numeracy scores than their non-Aboriginal counterparts" (para. 5), and additional research from a variety of sources (Canada Millenium Scholarship Foundation, 2005; Malatest, 2010) has tracked language barriers and lack of academic skills as impacting FNMI students' ability to be successful in the first years of post-secondary education. According to Fisher and Hoth (2010), "the centrality of language proficiency to college success has been demonstrated repeatedly by research findings indicating that postsecondary underachievement, failure, and attrition are highly correlated with academic under-preparedness, especially with respect to deficits in language proficiency" (p. 12). In terms of building curriculum for the BEAR Program, it is clear that developing English and math skills to a level of college preparedness must be a core objective; however, it is also evident that for many FNMI students, English is a second or third language. Understanding this reality is key to being able to provide students with the kind of learning support they need to overcome English language knowledge gaps.

Studies of language and ego and second language learning and acquisition highlight several salient points that need to be considered. Vygotsky (1978) believed that language is critical in the process of cognitive development and forms from social interactions. Cognitive functions are affected by the beliefs, values and tools of intellectual adaptation of the culture in which a person develops and are therefore socio-culturally determined; the way that FNMI students think about the world is determined by the language(s) they use to interact with the world. When an additional language is being learned (i.e. English or French in school), intellectual and emotional impacts are numerous. Krashen (1988) postulated five hypotheses regarding second language learning, and the fifth, the Affective Filter, outlines that a number of 'affective variables' play a facilitative role in second language acquisition. These variables include motivation, self-confidence and anxiety. For some

FNMI students, low motivation, a lack of self-esteem and anxiety can combine to 'raise' the affective filter and form a 'mental block' that prevents successful language learning.

An understanding of how ways of thinking and feeling are shaped by language and factor into second language learning is embedded in the BEAR Program. In developing English teaching and learning methods in particular, attention will be given to promoting bi-cultural knowledge and transcultural skills so that students are able to overcome language learning barriers. The goal is that students will be able to build cultural capital (Bourdieu, 1986) such that they feel confident and empowered expressing their thoughts and ideas in their first language as well as in English.

4.2 Historical, Social and Institutional Impacts

When FNMI individuals who had not completed high school were asked why they were reluctant to try to further their education, the reasons most often cited were unpreparedness and lack of confidence (Stats Can, 2011b). Even when individuals make the decision to attend post-secondary programs, Malatest (2002) suggests that family and personal issues affect FNMI students' ability to focus on schooling; on average, FNMI students tend to be older, tend to require child-care services, and tend to incur greater education costs as a result of living in rural and northern locations (Holmes, 2005). Indeed, issues relating to health, family, and finances can impact *all* post-secondary learners; however, FNMI students must find ways to manage these issues while experiencing the post-secondary system through intangible 'screens' such as the long-term and wide-reaching impacts to FNMI communities that occurred as a result of complex interactions between FNMI people and colonial settlers. The Royal Commission on Aboriginal People (RCAP) (1996) found that many of the issues that face FNMI communities today including "a loss of pride and spirituality" (Malatest, 2002, p. 15) stem from the disconnectedness, stress and pain experienced by communities when children were ripped from their families and forced to attend residential schools. According to Larsen, Jensen

& Jensen (2014), social problems during childhood have a significant influence on educational choices. The authors found that students who had to deal with mental health issues, alcoholism and criminality were less likely to continue school beyond the mandatory primary education in Denmark and that dealing with social problems accounted for 38.6 percent of the difference in probability for leaving the school system. They concluded that social problems can explain up to 30 percent of the difference in educational outcomes among students from different socioeconomic backgrounds (Ibid.). This finding is particularly relevant with respect to mature FNMI students who begin college programs without having achieved an OSSD; not graduating from high school could very well be the result of emotional, mental, and social issues that began in childhood and continue to affect their well-being.

Assimilationist policies such as enfranchisement have pervaded all areas of FNMI education and have led some communities to have an understandably wary and guarded view of post-secondary education. Stereotypes and discrimination cannot be discounted either in working towards a deeper understanding of the barriers that FNMI students face. In their research, Kirkness and Barnhardt (1991) found that discrimination was the most compelling disincentive towards higher learning. Rather than promoting openness and inclusion, post-secondary institutions represented "impersonal, intimidating and hostile environments" (p. 16) which failed to recognize Aboriginal people's cultural knowledge, traditions or core values and which demanded that they assume the "trappings of a new form of reality" significantly different from their own (Ibid.).

Although it is unfair and unreasonable to assume that FNMI students, especially those coming from remote, isolated communities, should readily and easily adapt to a "new reality" of conventional institutional norms and expectations and should somehow understand and function within these unfamiliar systems, this *is* the expectation at college or university. When students struggle, the typical institutional response is to view "lack of performance" issues in terms of "low achievement"

or "high attrition" or "poor retention" and as failures on students' parts rather than as a failure of the institution to perceive barriers inherent in the processes and practices of the institution itself (Ibid.). An understanding of the complex nature of historical, social and institutional barriers for FNMI students, particularly for sponsored students who come from communities far away, underpins the design of the BEAR Program and informs the curriculum content, delivery, and assessment methods. The research for the BEAR Program acknowledges that "skills required for success in post-secondary must be learned in the context of the non-Indigenous culture" and that "the challenge for Indigenous students is often the struggle to maintain their traditional identity while adapting to non-Indigenous expectations" (Manning, 2016, p. 4).

For sponsored students, the decision to attend college also means a move away from their community. Some students perceive the move as an opportunity to feel 'free' and experiment with adult behaviours; others, particularly those who do not live in student residences develop connections to the new 'place' –physically, emotionally, and cognitively – at a much slower rate (Holton, 2014). The researchers concluded that moving away to school is not just a stage of life; the experience is likened to a series of micro-encounters at different times in different locations which all require differing levels of connection. In terms of developing the BEAR Program, these findings highlight the need for communities, administrators, and educators to be aware of the effects that adjusting and re-adjusting to the many micro-encounters of college life can have on students within the program. Excitement and anticipation can quickly turn to confusion, loneliness, and homesickness unless first-year college students can establish attachments with faculty and other students and find a sense of 'place' in the new school community at the very start of the program.

Renowned scholar and retention theorist, Vincent Tinto, has identified three key factors that must be evident to students to retain them in post-secondary learning environments:

> …Students are more likely to persist and graduate in settings that take advising seriously; that provide clear, consistent, and easily accessible information about institutional requirements, that help students understand the roadmap to completion, and help them understand how they use that roadmap to decide upon and achieve personal goals. Second, students are more likely to persist and graduate in settings that provide support - academic, social, and personal - in ways which is both available and connected to other parts of their collegiate experience. Third, students are more likely to persist and graduate in settings that involve them as valued members of the institution. Frequency and quality of contact with faculty, staff, and students has repeatedly been shown to be an independent predictor of student persistence (2002).

Research on person-centred approaches in education reinforces Tinto's ideas and identifies learning benefits that occur from circles of care. In her study of students who transitioned back to mainstream education after having had negative experiences, Corrigan (2014) found that transition planning meetings that included the students, their parents, the teachers, the principals, and education psychologists were essential to establishing a circle of trust that viewed young people as the experts in their own lives, able to identify their particular needs and aspirations but in need of guidance. Having several supporters involved in planning a learning path helped students feel fully engaged in the process which led to a deeper sense of empowerment and increased ownership of the learning plan (Ibid.). As the students were tracked over the course of their transition back to mainstream education, increased school attendance, improved emotional understanding, improved social interaction skills and academic progress were observed (Ibid.).

The BEAR Program is based on a person-centred approach so that from the time the students begin discussions with their education counsellors in the community through to the first week of classes with their new professors and beyond, students feel that they have the support of a team who has their best interests at heart. In researching Individual Education Plans (IEPs), Szidon, Ruppar & Smith (2015) noted that "with a solid plan in place, teams can work toward developing instructional opportunities to foster skill development and effectively evaluating progress for their students" (p. 151). The premise underlying the BEAR Program is one of highly supported individualized learning

to encourage agency and enable students to work at their own pace and with different starting points and objectives depending on their skills, abilities, and needs.

4.3 Individual and Community Support

Perhaps one of the most important themes that emerged through the research findings is the connection between being successful (i.e. achieving personal goals) and having a support system (i.e. a family members, school counsellors, professors, fellow students, and friends) in place while in school. Corrigan (2014) identified "champions" – individuals who supported and advocated on behalf of students – as intrinsic to successful transitions back to mainstream education. Similarly, success in the DevelopMENTOR program is directly attributable to the regular one-on-one meetings between the employment coach and the students, where in that particular space and time every week, thought and attention was focused specifically on the concerns, questions, and efforts of individual students. Counselling sessions provided time for self-reflection, for evaluating goals and plans, and for developing new ways of perceiving the worlds of work and school. The meetings with the coach enabled students to consider their own values and beliefs and to think about how their own expectations reflected those of the college and those of an employer.

In terms of the value of individualized support, the IYEP report highlights similar findings, namely that FNMI individuals who were successful (i.e. attained a post-secondary degree), identified particular people in their lives with whom they felt a supportive bond. In many cases, encouragement and examples of meaningful and successful life choices came from parents, grandparents and other role models in the community. Discussions with elders afforded learners opportunities to engage with deeper beliefs, attitudes and values inherent in FNMI cultures that provided these successful individuals with a scope for establishing self-identity and self-awareness. The capacity to articulate a strong sense of self has been identified as key in being able to move from a subjective world view to a more objective worldview, a shift that leads to a view of the self as

transcultural, as "able to adapt to the non-Indigenous cultural norms without losing traditional values" (Manning, 2016, p. 21). The ability to acknowledge different sets of norms and function effectively within *both* cultural milieus is a key objective of the BEAR Program.

Opportunities to deepen transcultural understandings will be integrated into the curriculum. It was clear from the DevelopMENTOR program outcomes that one-to-one coaching sessions created time and space for students to ask questions, assess their feelings, consider new ideas, and develop new understandings of school and work cultures. The same strategy will be applied in the BEAR Program where weekly one-to-one coaching meetings are built into the curriculum to give students individual attention and boost motivation. Kyndt et. al. (2015) studied changes in motivation as students moved from secondary to postsecondary education and found increases in autonomous motivation can lead to adaptive achievement outcomes as internal identification factors change. The research suggests that students who may not have felt motivated in high school will experience a change in motivation and personal agency during their transition to postsecondary education as new skills and knowledge are acquired (Ibid.). The BEAR Program will help students capitalize on this shift and build transcultural skills throughout the year. Discovering abilities to function successfully in the college environment will foster self-empowerment as students navigate institutional norms and meet college expectations.

Along with providing a safe and comfortable space for students to communicate openly about their academic progress and school-related concerns, the coaching sessions are also an access point to information related to health issues (physical and mental), financial questions, housing concerns, daycare questions, and other areas, and the BEAR Program coaches will be trained to refer students to college services as needed. However, the coaching component will also help students objectively assess their own goals, skills and challenges. Asselin (2014) recommends using a person-centred tool called a 'summary of performance' to help students through this process. The summary

includes an overview of academic skills including reading, writing, and math skills; cognitive skills such as problem solving, communication skills, and the ability to pay attention; and functional skills that include independent living skills and self-determination. As they progress through the program and work weekly with their coaches, students will have opportunities for personal development and growth: "Self-awareness, self-advocacy, and decision-making are critical skills for successful transition to the college environment" (Asselin, 2104, p. 229). The success of these strategies are born out statistically: transition program students were twice as likely as other students to graduate from college on time (Ibid.). By building one-to-one coaching sessions into the BEAR Program, students will have a time and place to discuss their present college situation and explore possible career options. Woven into these discussions will be conversations about the value and importance of transferable skills.

4.4 Transferable Skills

In conjunction with developing academic skills, providing opportunities to build "soft skills" is a key component of the BEAR Program. High school students in Ireland have the opportunity to take an optional non-academic year devoted to personal and social development. This transition year offers a holistic school experience that builds knowledge of future careers, broadens conceptions of the world, and fosters self-awareness and social confidence (Clerkin, 2012). Non-academic activities within the transition year were found to improve study skills and enabled an increased capacity for self-directed learning (Ibid.). Although the BEAR Program is academic, transferable skills will be taught and practiced in courses focusing on self and career exploration: "The possession of competent study skills such as those expected of transition year students, e.g. time management, use of appropriate information resources, and productive communication with teachers, has been shown to predict academic performance and retention rates among first-year college students (Robbins et al., 2004, p. 9).

The BEAR Program Research Project

Interpersonal communications, time management and computer competency are intrinsic to the BEAR Program curriculum. In this technology-driven age, there is an assumption that all young adults are computer literate "digital natives"; however, anecdotal evidence shows that some FNMI students have limited computer experience and need guidance and exposure to a variety of computer-assisted learning environments to help develop computer literacy skills. As a mobile learning institution, Algonquin College is committed to technology-assisted program delivery. In order to provide individualized learning opportunities, the BEAR Program will include online learning programs such as PLATO, course software designed for individualized module-based learning in a variety of subjects including math and English. Effective technology integration supports learning when it is routine, transparent and connected with the curriculum. The BEAR Program will use to technology to facilitate individual learning in conjunction with "active engagement, participation in groups, frequent interaction and feedback, and connection to real-world experts" ("Why Integrate Technology", 2008, para. 2). Of particular relevance is the finding that in over ten years of studying technology integration in schools, researchers found that students who experienced a "deliberate alignment of curriculum and instruction with relevant technology" outperformed their peers, and that these positive effects were especially significant for the most disadvantaged students who struggled with English language proficiency (Appalachia Regional Comprehensive Centre, n.d.).

Using technology in classrooms is becoming commonplace; however, even with the move towards mobile learning environments that are meant to enhance pedagogy and improve students' learning experience, the majority of post-secondary institutions have yet to adapt standard classroom designs to reflect a more connected, participant-centred approach. This oversight is significant in the design of the BEAR Program. The findings from a study conducted at the University of Minnesota point to a strong connection between the interpersonal skills that students develop and

use in the classroom and the actual physical environment. Using a quasi-experimental design, Whiteside, Brooks, and Walker (2010) partnered with an instructor who taught the same course to two sections of students in radically different classrooms. The researchers found that the Active Learning Centres (ALCs), which featured circular tables large enough for eight or nine students, laptop computer connections to large LCD screens, and 360-degree glass marker boards around the classroom, facilitated student learning far beyond their initial expectations. They reported that students who took the course in the ALC had a more engaging learning experience that "forced discussion and thinking" and promoted teamwork and collaboration; moreover, the evidence suggests strongly that, independent of other factors, technologically-enhanced classrooms that provide circular tables to facilitate discussion have a significant, positive impact on student grades (Whiteside, Brooks, and Walker, 2010).

The design of the physical learning space for the BEAR Program is critical from a pedagogical perspective. A comfortable learning space that encourages inquiry-based instruction has four key underlying modes: flexibility, sensory stimulation, technology support, and a decentering of the room so that there is no single front or focal point (Collier, Watson & Ozuna, 2011). In this way, a perception of equity and equivalence is achieved within the space itself. Classrooms that diverge from the standard system of rows of seats and a podium at the front may serve as an indicator to FNMI students of an institutional shift in support of other learning modalities and transcultural skills development where alternative forms of learning (i.e. student-centred, professor-facilitated) take place. Environments that encourage interaction, discussion and teamwork reflect the kind of skills most valued by employers – interpersonal and communication skills – that are foundational in career planning.

4.5 Career Path Awareness

The Supporting Aboriginal People for Labour Market Entry (SAPLME) project highlighted the importance of focused career exploration. A combination of personality and interest inventory tests helped students identify potential career options, and then one-to-one discussions with career counsellors helped students map out the pathways (i.e. education, training, apprenticeships, etc.) needed to pursue particular careers. Discussions with SAPLME participants revealed that up until the time of the project, many of them had never had opportunities to think about a career as a trajectory of different challenges and experiences. The participants stated that the writing and planning exercises and the counselling sessions helped them gain a much broader understanding of the scope of career possibilities and the essential requirements for a variety of careers; moreover, this knowledge had a significant impact on their motivation to start on a career path (Manning, 2013). Building on these findings, the BEAR Program design will include career exploration in the curriculum through one-to-one personal development sessions with the coaches as well as in-class learning, guest lectures and field trips.

In the same way that English and math skills development will be facilitated through individual online learning, applications such as Career Cruising (https://public.careercruising.com/en/) will be part of the BEAR Program curriculum. Students will research and compile information on a wide range of jobs and will have opportunities to participate in on-campus class visits and off-site information interviews with professionals to gain a deeper understanding of the skills and abilities related to a variety of occupations. Depending on the connections that BEAR Program stakeholders are able to cultivate in the business community, there may be opportunities for students to experience brief job placements and internships. Using the DevelopMENTOR program findings as a guide, weekly coaching sessions will include discussions related to career interests and options. Certain aspects of career planning and job search can be standardized course components; however,

other learning activities will be intentionally flexible and learner-centred so that students can explore and develop individual approaches and pathways. The goal of the BEAR Program is to transition FNMI students from feeling under-prepared and aimless to feeling ready to take purposeful steps towards their future. For some students, completion of the preparatory BEAR Program may lead to further education; for others, the path may lead directly to employment. In both situations, the aim is to ensure that they feel empowered and motivated to start along their path.

5. Indigenous Perspectives

The BEAR Program began out of a strong desire to build a program that promotes the educational and personal successes of our FNMI students. In the process of the research and discussions, various iterations of the BEAR Program – what it should include, how it should be organized, what it should encourage, and who would best benefit – have emerged and taken shape. Surprisingly, the process of creating a transitional pathway for students has also led the team to reflect on the ways that the college functions as an institution. Indeed, research findings indicate that in order for FNMI students to be successful, institutions also need to transition and embrace new ways of perceiving the learning experiences of these students. This knowledge must be integrated into the program to expand expectations and create cultural capacity within the college environment itself that reflects FNMI experiences and world views.

With over 600 First Nations (Stats Can, 2016) and multiple Métis and Inuit communities across Canada, it is misleading to presume that every community shares the same cultural values or follows similar traditions; each community is unique and has its own particular teachings. However, all nations honour interconnectedness as a fundamental truth. In many FNMI communities, the circle represents interrelatedness and the wholeness of connection. To a great

extent, developing the BEAR Program has been a 'circular' activity as ideas and information have come into conversations time and again, and as perceptions and assumptions have been unravelled, reassembled, and rethought. One of the threads woven through discussions with the Algonquins of Pikwakanagan, with members of the Ahkwesãhsne community, and with staff and faculty at Algonquin College relates to the concept of indigenizing the program. The CICan *Indigenous Education Protocol* mandates that FNMI world views need to be incorporated into the content and delivery of the college curriculum to

- Capture and reflect history, including oral history, as understood by Indigenous peoples, across curriculum;
- Promote and support the preservation of Indigenous languages;
- Embed intellectual and cultural traditions of Indigenous peoples;
- Combine educational pedagogy and epistemology infused with Elder/Métis Senator knowledge;
- Confront the legacy of residential schools, recognizing the challenge of institutional settings and supporting healing and reconciliation; and
- Recognize that Indigenous knowledge can benefit all learners (e.g. environment, justice) and have processes for two-way sharing (e.g. both scientific and traditional ways) (CICan, 2016, Indigenous Learners).

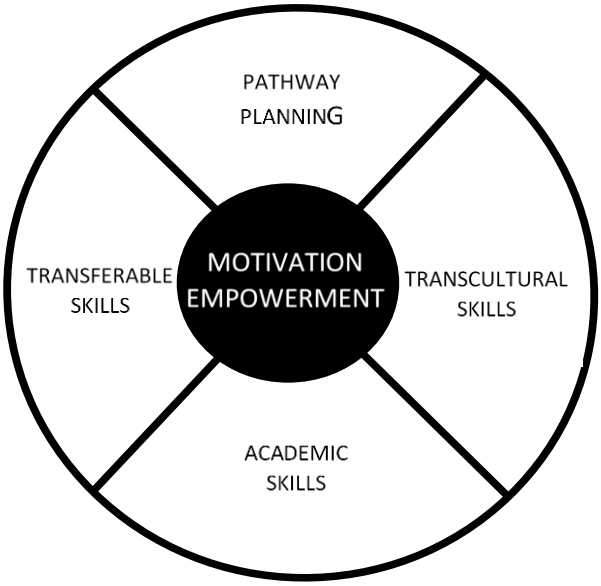
As the BEAR Program curriculum is developed, the intent is to combine FNMI perspectives with pedagogical approaches and knowledge that sustains and supports transcultural skills development. According to Nicole Bell, an Anishinaabe professor at Trent University, one of the important symbols in FNMI cultures is the Medicine Wheel:

> In many Indigenous cultures, the Medicine Wheel metaphor contains all of the traditional teachings and can therefore be used as a guide on any

> journey, including the educational process. While there is some variation in its teachings and representations, the underlying web of meaning to Medicine Wheels remains the same: the importance of appreciating and respecting the ongoing interconnectedness and interrelatedness of all things. Therefore, there is no "right" or "wrong" way of representing or using Medicine Wheels: all forms hold particular meaning to the various Indigenous nations while all transmit a common understanding of the interconnectedness and interrelatedness of all things (Bell, 2014, para. 2).

Borrowing from a holistic viewpoint, the BEAR Program is conceptualized as integrating and interconnecting four fundamental capacities essential to helping our students become successful post-secondary learners, and by extension, successful employees. Just as the components of the Medicine Wheel variously represent the relationships that exist between the seasons, the compass points, the elements, etc., the four pillars of the BEAR Program include transcultural skills, academic skills, transferable skills, and pathway planning skills. By transposing these skills onto a circle similar to a medicine wheel, the interrelationships and interconnections become visible.

FIGURE 1: THE BEAR PROGRAM CONSTRUCTED THROUGH THE MEDICINE WHEEL



The BEAR Program Research Project

5.1 Community Partnerships

Part of what makes the BEAR Program unique is the way in which the program has been developed in partnership with the FNMI communities who want to see alternatives available to their members. The first part of this paper outlines the challenges that FNMI communities face in allotting limited funds to on-reserve and off reserve K-12 education; post-secondary education also falls under the purview of community education managers. Not only must they contend with discrimination in the education 'non-system,' when it comes time to allot post-secondary funds, education liaison officers face extremely difficult choices. Just as the TRC findings and resulting calls to action begin with a true understanding of the lived experiences of FNMI people, the BEAR Program team sought input from members of the FNMI communities to better understand the struggles they face in sponsoring students in programs at Algonquin College. Meeting with community leaders, elders, education liaison officers, parents and students to listen to their concerns, understand their struggles and appreciate their hopes has helped to shape the BEAR Program.

5.1.1 Algonquins of Pikwakanagan

On Jan. 21, 2016 from 10:00 am to 12:30 pm at the Pikwakanagan Education Office (1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0), the BEAR Program team of Sherryl Fraser, Dwight Powless, Andre O'Bonsawin, and Adele Yamada met with the following Pikwakanagan community members to discuss the BEAR Program: Della Meness, Education Department Manager; Annette Sarazin , Post-secondary Counsellor; Janey Commanda, Community Representative; and Teresa Kohoko, Administrative Assistant. Over the course of the meeting, the members shared a variety of thoughts and concerns, highlights of which are summarized as follows:

- There was agreement that some students are not academically prepared to enter post-secondary programs, but they are eager to try college as an opportunity to experience living away from the community in an urban environment.
- The council members shared that about five to ten community members per year attend programs at Algonquin College. The success rate (i.e. successful completion of their program) is about 35 percent.
- The members told the group that a number of community members left school at a young age and have not been able to return. These students have reading and writing scores equivalent to grade 4 or 5.
- The group decided that community members in this situation would not be suitable BEAR Program candidates. The minimum level for English and math should be around a grade 10 to grade 11 skill level. Knowledge gaps larger than this may not be possible to "fill" in two semesters of the BEAR Program.
- At the time of the meeting, the education department had started revising the post-secondary sponsorship application process to increase the robustness of the process to ensure that students are clear on their responsibilities and duties in terms of monthly check-ins, class attendance, mid-term and final grades as part of their sponsorship.
- Members of the community expressed concern about the kind of courses that would be included in the BEAR program and stressed that for the program to be of greatest benefit to their students, opportunities to achieve college-level credits (i.e. year one English, math and science course credits) eligible for transfer towards future college (and/or university) programs should be provided.
- In addition to offering college-level courses, the education council shared their desire for FNMI-focused courses to be included in the preparatory program as well. The overall sense

was that the BEAR courses should blend FNMI perspectives and traditional ways of teaching with mainstream English, math and science courses in a way that enhances both FNMI cultural knowledge and western knowledge systems.

The Pikwakanagan Education Department continues to be enthusiastic about the BEAR Program and about working together with the Algonquin College team to develop a transition program for its community members.

5.1.2 Mohawk Council of the Akwesasne

On February 10, 2016 a meeting was held at the Akwesasne Mohawk Board of Education (AMBE), 191 Rita Lane, Akwesasne, Ontario. The participants included Norma Sunday, Post-secondary Administrator, Nathan Sunday, Youth Coordinator, and Sandra Rourke, Secondary School Coordinator and three members of the BEAR Program team, Dwight Powless, Andre O'Bonsawin, and Adele Yamada. Over the course of two hours, many aspects related to the BEAR Program were discussed:

- The education manager shared concerns regarding the accuracy of the final high school grades obtained by some of the students. The council members perceive that students are graduating from high school with passing grades (Ds) without actually having achieved the skills and knowledge necessary to be successful in post-secondary programs.
- In particular, the council members noted that high school English, math and science marks did not always accurately reflect the students' abilities in these areas and that as a consequence, the students often face challenges in post-secondary programs in which these courses are prerequisites.
- The council members expressed concern that issues with high school grade inflation are endemic. They perceive that there is a mindset to "pass" First Nations students with D

grades even if their actual skills and knowledge are lower rather than investing time and additional support to ensure that the students achieve legitimate passing marks.

- The council shared with us that sensitive, difficult situations occur when the education officers meet with students and their parents to discuss post-secondary options. Grades above an F (i.e. Cs and Ds in grade 12 English, math and science classes) are sufficient to graduate from high school and obtain an OSSGD, and having achieved a high school diploma, students and their parents believe that college is the next logical step. However, years of experience has shown the education officers that students who graduate with Cs and Ds in English, math and science classes are underprepared for college courses. When they track these students' college experiences, they find that they often end up failing one or more of the courses within their college program.
- The education council expressed their wish to have access to a college program that would simultaneously satisfy their students' (and their parents') desire to be in a post-secondary program, a right that many community members feel should be available to all students who graduate from high school while offering the prospect of genuine success to the students. As discussions continued, it was clear that the education council sees the BEAR Program as a way to satisfy the students and their parents and to ensure that limited education funds are spent wisely.
- The members were enthusiastic about having methods in place to assess student suitability while still living in the community as students start looking at college programs.
- The education council noted that there were community members who would benefit from a program like the BEAR Program but whose academic skills were too weak for the program. The idea of a pre-BEAR program was raised briefly.

- The education council stressed that they were very pleased to know that as a preparatory program, the BEAR Program falls under a different funding source than other post-secondary schooling. This means that students who are successful in the BEAR Program will be eligible to pursue further post-secondary educational opportunities and receive the maximum allowable funding.
- The Education Manager emphasized that community based assessments (in the form of English and math placement tests such as those offered through Accuplacer software) could be used to assess student skills prior to applying for college programs.
- The council members reiterated the need to track students' performance during the semester to be able to offer support as needed. They feel that it is essential to establish processes for regular communication and "checking in" with students.

Some of the concerns expressed by the participants at Pikwakanagan were echoed in the meeting at Akwesasne. In particular, both communities expressed the desire to feel confident in sponsoring all of their students, even those with "borderline" grades and vague career aspirations. The fact that the BEAR Program is designed to support development in four key areas – academic skills, transferable skills, transcultural skills, and career awareness – as students work towards attaining an Ontario College Certificate satisfies the councils' mandate to fund post-secondary education in a financially sustainable way.

5.2 New Communication Strategies

Communities are sponsoring students to attend Algonquin College at a significant cost, but there are few systems in place – either on the part of the community or on the part of the college—to support the financial and social investment that these communities are making towards their young members' post-secondary education. Extrapolating from the WPD research has provided

insight into the complex relationships that affect the way that information is shared between the communities and the college. Non-sponsored students have a direct relationship with the college in the sense that all information relating to institutional processes, academic expectations, program content, and individual assessments is communicated directly between the college and the student (barring occasional situations in which the college is authorized by a student to share information with his/her parent or guardian or other party). In other words, in the relationship between the college and the non-sponsored student, the student is viewed as the client and the college is the education provider.

When they sponsor community members to attend post-secondary institutions, bands contribute a sizable investment towards their members' future; however, the current system does not adequately reflect the role of the bands in monitoring and encouraging these sponsored students. Rather than acknowledging the role that bands could – and should – play in supporting their members' post-secondary efforts, community stakeholders are often left out of the communications loop because information sharing processes have not been clearly established. By acknowledging the FNMI communities as clients and including them in all communications, institutions can capitalize on the opportunity to establish vital relationships with the sponsoring FNMI communities and help leverage positive relationships between the college and the student, the band and the student, and the college and the band to create circles of care for FNMI sponsored students. Developing efficient and effective communication strategies with communities as part of the program delivery differentiates the BEAR Program from other college programs.

6. Best Practices

Several key components of successful transition programming emerged from research by Roybal (2014) who concluded that at least three to five of strategies need to be included to achieve

successful results as students move from middle school to high school. Similar methods can be implemented in the transition from high school to the BEAR Program:

- Planning sessions between middle school and high school
  (collaboration between community postsecondary liaison(s) and college personnel)
- Involvement of parents in school activities
  (community engagement)
- Assistance for students with homework
  (1 hour per week of one-on-one with a program coach)
- Block schedules for core classes
  (the BEAR curriculum uses block schedules for math and English)
- Small learning communities
  (the BEAR program will have a maximum of 24 students)
- Celebration of student successes
- Classes on study skills such as test-taking skills, note-taking skills, or time management
  (transferable skills learning and practice are embedded in all courses as well as personal development sessions with the coach)

As Roybal (2014) states: "Many strategies are available to promote successful transition to high school; however, research indicates that one or two strategies are not sufficient to meet the needs of all students" (p. 480), a rationale that underpins the search for best practices.

Scanning preparatory and transition programs offered at post-secondary institutions across Canada highlights several components that will be incorporated into the BEAR Program. The Mi'kmaw Kina'matnewey of Nova Scotia is a community organization committed to helping First Nations

learners prepare for post-secondary education. This group found that best practices in supporting learners can be categorized as follows:

1. ***Access and Attraction***

   The goal is to support Aboriginal communities in promoting the importance of higher education in achieving quality jobs and autonomy for communities. The methods include running career fairs and information sessions and proactive recruitment practices such as informative pamphlets, websites and summer camps to attract prospective students. It is recommended that the focus be on Aboriginal males as well as females with dependants as these groups are typically underrepresented in post-secondary recruitment. Education officers can also take time to inform students of high demand employment options within their community to help them choose realistic, practical programs. Lastly, recruitment can be directed towards younger FNMI students in middle school (or earlier) so that students view post-secondary education as a realistic option for their future.

2. ***Post-secondary Entrance***

   A key process in creating successful transition programs is ensuring that post-secondary institutions establish flexible admission policies that address the special circumstances of FNMI students without lowering admissions standards. In other words, admissions standards should evaluate students on a holistic level by considering such things as transcripts, life experiences, references and interviews.

3. ***Collaboration and Communication***

   Working with post-secondary institutions, communities are able to set up coordination committees that set and implement priorities around key community-driven programs. These committees are also able to negotiate the number of seats in particularly high-demand programs in colleges and universities that may be designated to FNMI students who meet

> program requirements and whose communities are in need of specifically trained workers (ONECA, 2011).

Another collaborative community effort to address student needs in post-secondary is the Aboriginal Transitions Research Project which involved the Indigenous Adult and Higher Learning Association of British Columbia, Heiltsuk College, the Nicola Valley Institute of Technology, and the University of Victoria. The research culminated in the publication of the Aboriginal Student Transitions Handbook in 2011 which is a 30-page document that offers a comprehensive step-by-step overview of the move from a community to a new city to attend school. Creating a handbook similar to this one in collaboration with communities would offer students in the BEAR Program (and those interested in the program) a chance to consider many aspects of post-secondary education.

6.1 Community-based Assessments

At the Nicola Valley Institute of Technology in British Columbia, FNMI students are provided with an assessment of English and math skills to check students' suitability for particular college and university programs. The comprehensive assessment takes place in the community and includes the following: in community assessment preparation, assessment invigilation (English and math), assessment reviews, the creation of individual education plans for each prospective learner, and a summary that highlights and identifies possible educational priorities and opportunities for the community. The series of meetings provides the prospective learner with the experiential learning and information necessary to start and/or return to their education journey, and if computer space is available, a Career Cruising workshop can also be administered. By aligning individual student assessment and career planning with the needs of the band, the community can implement long-term education and employment strategies to support the community socially and economically.

6.2 Week-long Orientation

As part of the Aboriginal Education and Access Program at the Red River College in Winnipeg, Manitoba and at the Native Access Program at Lakehead University, North Bay, Ontario, FNMI students are provided with a week-long orientation session. Rather than trying to condense information into two or three days, the institutions take a full week to acclimatize students. Explanations of academic courses are supplemented with information from a variety of support services so that within the first week, students are able to set up access to all of their electronic requirements (i.e. college email, WIFI, LMS, etc.), acquire textbooks and bus passes, and experience college services including the library, the fitness centre, security protocols, and trips off campus. The BEAR Program is being designed as a 14-week fall semester so that the first week will be devoted entirely to orientation activities and sessions.

6.3 Regular Student Meetings

In early September 2016, Lakehead University Native Access Program (NAP) Coordinator Jerri-Lynn Orr shared several insights in phone conversation with Adele Yamada. As was clear through the ISP teams' findings, Jerri-Lyn emphasized the need to meet one-on-one with students regularly. With an average of 30 students in the NAP annually the current system requires students to meet with counsellors regularly. New students are able to meet with their counsellors every two weeks, and second semester students tend to have one meeting per month. However, in cases where students leave the program and return later, mandatory weekly meetings are implemented to offer as much support as possible.

6.4 Housing Considerations

Jerri-Lynn's conversation was candid with respect to the main issues facing students in the NAP. Since starting work with the NAP in 2013, Jerri-Lynn has perceived housing issues as the main

concern for students. Lakehead University is experiencing a housing shortage, and Jerri-Lynn finds that there are very few affordable options for the FNMI students who move to the city from their communities. Anecdotally, Jerri-Lynn feels that about 30 percent of the students end up leaving the NAP because they cannot find appropriate housing; the stress and anxiety caused by housing issues has a huge impact on the students' ability to manage their schoolwork and be successful in their courses. Along with housing issues, access to daycare is also a huge concern for many of the NAP students. At present there are no housing or daycare facilities set up on campus to accommodate FNMI students and their families.

This issue does not offer a best practice per se, but it supports the need for on-campus or close to campus housing for FNMI students. At this time, providing accessible on-campus housing is outside of the purview of the BEAR Program; however, increasing study time, building relationships with local elementary and secondary schools to support FNMI students' families, creating opportunities for FNMI students to develop connections with the college community by living on or close to campus are all benefits that are possible when long commutes are eliminated. Living close to the campus can help free up time to study and complete coursework, and it can also help create a sense of rootedness. De Beer et al. (2009) suggested that a lengthy commuting time led to students' feeling a reduced sense of belonging or connection with the institution. As the BEAR Program nears implementation, consideration will be given to establishing housing options that reduce stress and anxiety, support time management strategies and encourage campus-centred living.

7. The BEAR Program Model

Discussions with our community partners emphasized the requirement for the preparatory BEAR program to be an Ontario Certificate program that fulfils two needs:

1. Students attain knowledge and skills in preparation for finding employment and/or
2. Students graduate with post-secondary credits that can be applied to further studies.

Community members suggested that core subjects such as English, math and science be included in the BEAR Program so as to maximize possible future pathways to health and community care professions and business and entrepreneurship programs; however, as the next phase begins, attention will be given to building a curriculum that reflects the experiences of FNMI students and that includes FNMI knowledge and perspectives. For example, the work of Dr. Greg Cajete highlights how Indigenous ways of knowing and being are part of a philosophy that signifies the relationship with the land and all life forms, and one that guides learning, development and behavior for Indigenous people (Cajete, 1994). As community members requested, FNMI perspectives will be incorporated and woven into the curriculum. In order to qualify as an Ontario Certificate program, the BEAR Program must meet the following criteria:

1. The number of hours of instruction must be between 600-700 hours; and
2. A Communications course (level 1) must be included in the curriculum

In its first year, the BEAR Program pilot will accommodate between 20 and 24 students. At this time, the communities of Pikwakanagan and Akwesasne are enthusiastic to enrol their students.

7.1 Student Selection

Strengthening the relationship between the college and the community is vital for several reasons that start with setting up initial community-based assessment (CBA) strategies to help education officers identify BEAR Program candidates. Once the BEAR Program is available, education liaison officers and managers will have an alternative program offering for their student clients who want to enroll in a post-secondary program but are not yet strong candidates for standard college

programs. Students who have poor academic records or who may have left high school without graduating, who are undecided about their careers, who have struggled with learning, or who have low self-confidence are the kind of students who are suitable for the BEAR Program. In the next phase of the BEAR Program design, processes for community-based assessment and introductory pathway planning will be developed in collaboration with the communities. Borrowing from the Nicola Valley example, additional practices could include one or more of the following: computer testing (i.e. Accuplacer) for English and math within the community, writing samples administered in the community but assessed by college faculty, candidate interviews in the community or at the college with representatives from the community and the college, personality tests, discussions with referees, and career exploration tools such as Career Cruising could all be built into the community-based assessment process.

One of the key issues concerns identifying the *minimum* skill levels required for the BEAR Program. In discussions with community members, participants mentioned that some of the students who want to pursue post-secondary education test at a grade 5 or 6 level for English and math. Although the BEAR Program is designed to provide an intensive focus on English and math in the first semester, expecting students to build five years' worth of knowledge in 14 weeks is unrealistic. Students whose skills are between grade 10 and grade 12 are likely to be the best candidates, depending on additional criteria relating to their motivation for starting a post-secondary program and their career objectives. At the application stage, the goal is to gather sufficient information about the candidate's situation and to start the process of building a circle of care for students who enroll in the program. Students who do not meet the minimum qualifications will not be eligible for the BEAR Program; however, once the BEAR Program is implemented, there may be opportunities to look at building transition-type programs for FNMI adults who require significant academic skills

upgrading and learning support in a precursor to the BEAR Program.

7.1 BEAR Orientation

The start of the school year is one of the most nerve-wracking times for new students as so many life changes – moving into a new home, figuring out transportation, finding daycare and settling children into new schools, etc. – occur within the first week or two. Planning to have orientation spread out over a week meets two important objectives: it provides students who come from away with a buffer of a day or two in case the move to Ottawa is problematic, and it provides a chance for students to pace their adjustment to life at the college. Research findings indicate that establishing connections with people at the college – administrators, faculty, and fellow students – within the first two weeks increases the likelihood of students completing their programs successfully. Rather than launch into course work immediately, holding various sessions for students throughout the first week facilitates opportunities for them to find the information they need as they need it, a method that supports a learner-centred approach. The first week also enables students to assess the suitability of the program as they meet one-on-one with the coaches. Specific elements of the orientation will be decided in the next phase of development; however, designating a full week for orientation is factored into the curriculum, that is classes and instructional hours are calculated over a 14-week semester in the fall and a 15-week semester in the winter.

7.2 BEAR Curriculum

To meet the requirements for college certificate programs, there will be approximately 22 hours of classes per week in the first semester that will take place in a dedicated space. Ideally, the classroom will reflect the learner-centred set-up (i.e. a flexible space with circular tables) with all

required technology to support a mobile learning environment. The research identified the need to focus on English and math skills development initially, so over 160 hours in the first semester are allotted to these two courses. Based on the information shared with the communities and discerned through research and best practices, additional courses that build skills and knowledge in relation to health and well-being and career explorations are also vital. Although specific components of individual courses (i.e. learning outcomes and essential employability skills) will be determined in the next phase, a tentative plan has been developed.

FIGURE 2: TENTATIVE CURRICULUM FOR SEMESTER 1

Name	Hours/Week	Notes	Total Hours
English	8 hrs/week	- PLATO used for individualized learning; class lectures and activities	112
Math 1	4 hrs/week	- PLATO used for individualized learning; class lectures and activities	56
Personal Development	1 hr/week	- Meet with coach once a week during Eng. or Math time - weekly meetings + 6 hr project	20
Health and Wellness	3 hrs/week	- aspects of physical and mental health	42
Computer Foundations	3 hrs/week	- ACSIS, Blackboard, etc. outlined during Orientation; Microsoft Office (Word, PowerPoint, Excel)	42
Career Exploration	4 hrs/week	- variety of lessons/activities (guest speakers, field trips, independent and group work, etc.)	56
		Total Hours for Semester 1	328

Again, taking into consideration best practices and research findings, the tentative weekly schedule for the BEAR Program reflects a practical start time to accommodate students who may have to manage child care and commuting. Time for completing homework, going to the library, going to the gym, etc. is also built into the two-hour daily break from Monday to Thursday, and finishing classes at 3:00 pm enables students to schedule personal and family time into every day.

Having the Career Exploration as the sole class on Fridays provides flexibility (i.e. the time of the class can be adjusted) to accommodate guest speakers and field trips.

FIGURE 3: TENTATIVE WEEKLY SCHEDULE FOR SEMESTER 1

	Monday	Tuesday	Wednesday	Thursday	Friday
9-10	English	English	English	English	
10-11					Career Exploration
11-12					
12-1					
1-2	Math 1	Health and Wellness	Math 1	Computer Foundations	
2-3					
3-4					

To meet the requirements for an Ontario College Certificate, a level one Communications course must be included, so the Communications Skills ENL5000G course, identical to the course taught in the first semester to GAS students, will be included in the second semester. Components of the ENL5000G course will be considered and elements of the course will be scaffolded into the first semester English classes to support continuity and cohesive learning. As the next phase of the BEAR Program project gets underway, discussions with content specialists at Algonquin College will take place to determine the feasibility of including a level one math course and/or science course during the winter semester. The community discussions highlighted the desire to build exemption opportunities into the BEAR Program, and so the goal moving forward is to identify math and science courses that could be included in level two and that would enable students to attain college credits transferable to future college (and potentially university) programs. The tentative curriculum is as follows:

FIGURE 4: TENTATIVE CURRICULUM FOR SEMESTER 2

Name	Hours/Week	Notes	Total Hours
Communication I ENL5000	4 hrs/week	- Equivalent to the ENL5000 course taught in first semester of GAS programs	60
Math 2 (Mathematics MAT0010) (OR SCIENCE Course)	4 hrs/week	- continuation of Math 1 (or equivalent to the MAT0010 taught in first semester of GAS programs) - possible switch to level one science	60
Personal Development	1 hr/week	- Meet with coach once a week during Career Dev. or math	15
Canadian Culture	4 hrs/week	- Overview of aspects of Canadian history, society, etc. - Opportunities to build FNMI perspectives into the course - Could have an arts focus as well - music, theatre, dance, literature, etc.	60
Computer Applications	3 hrs/week	- Web-based applications	45
Career Development	6 hrs/week	- variety of lessons/activities (guest speakers, field trips, ind. and group, etc.)	90
		Total Hours for Semester 1	330
		Total Hours for Full Year	**658**

The second semester classes will continue to take place in the space dedicated for the BEAR Program and will follow a schedule similar to the first semester for continuity:

FIGURE 5: TENTATIVE SCHEDULE FOR SEMESTER 2

	Monday	Tuesday	Wednesday	Thursday	Friday
9-10	Career Development	Comms. Skills ENL5000	Career Development	Comms. Skills ENL5000	
10-11					Computer Applications
11-12		Personal Dev.		Personal Dev.	
12-1					
1-2	Math 2 (or Science)	Canadian Culture	Math 2 (or Science)	Canadian Culture	
2-3					
3-4					

The next phase of the BEAR Program development will focus on the staffing and space requirements

needed to deliver the proposed curriculum.

7.3 BEAR Coaching

The research demonstrates that when students are provided with one-on-one coaching and are able to create a connection with their coach, they are given opportunities to access the information they require in a timely manner. In response to research findings, the BEAR Program includes a Personal Development course which focuses primarily on the student meeting with his/her coach for one hour every week to discuss academic concerns and personal issues that may require the coach to help arrange or to suggest additional counselling or support. The one-hour long meeting time is essential to the program; it is vital that the students are given the time they need to work on any aspect of their school experience that is influencing their ability to be successful.

Every BEAR student will have a designated time to meet with his/her coach every week; however, the coaching sessions will take place at the same time as the English and math classes. Depending on where students are weaker or stronger, they will either miss one hour a week of English or one hour a week of math to attend their one-on-one coaching session. The BEAR Program will require a minimum of two qualified coaches to work with 10 to 12 students each per week and in additional meeting times if needed. Dedicated space for the coaches to meet with their students is also required.

8. Next Steps

Over a year ago, the BEAR Project team began a journey to better understand the learning experiences of the FNMI students attending Algonquin College. Weekly team discussions acted as

a springboard for extensive research and outreach to FNMI communities to garner a deeper knowledge of the challenges that face students and the opportunities to make a positive, transformational impact in their lives. The research findings in this paper are necessarily broad as there are a multitude of factors to consider. Kleinman (2001) highlights that, "A successful transition requires an understanding of what is necessary in college as well as the ability to acquire new behaviors and attitudes" (p. 8); an Indigenous perspective broadens this understanding so that all stakeholders in the communities and institutions acknowledge that "the teaching and healing process is evolutionary and cyclical in nature, as is the continuum of medicine wheels, beginning with a desire to understand and identify with the balance, wholeness and interconnectedness expressed in the medicine wheel" (Bell, 2014).

The purpose of this paper is to develop an awareness of the interrelationship between the four pillars on which the BEAR Program is based – academic skills, transcultural skills, transferable skills and career awareness – and to emphasize that building these skills requires communities and post-secondary institutions to collaborate to develop processes and practices that work to deliver appropriate curricula in ways that are empathetic and encouraging. Earlier in the paper, the SAPLME project was described as an opportunity for 57 Inuit students, clients of the Tungasuvvingat Inuit (TI) Centre, to explore career readiness. After completing the program, a number of students were excited to enroll in an adult high school in Ottawa to attain their Grade 12 credits and start on their career paths; however, all of them ended up dropping out. Joan Cunha, the Employment Officer for TI, decided to enroll in the classes herself to see what the school was like. Ms. Cunha found out that the high school made no effort to welcome or relate to the Inuit students, and she quickly understood why her clients were compelled to drop out. With increased institutional awareness and understanding, however, the eagerness and determination that these students felt at the start of their journey could have been nurtured and validated. This

is precisely what the preparatory BEAR Program plans to provide to its students – a welcoming, supportive environment and plenty of meaningful, practical opportunities to become an empowered lifelong learner.

In presenting these research findings the BEAR Program team has met its initial mandate to establish a clear rationale for the development and implementation of a new preparatory program for FNMI students. Within the next few months, the team plans to transform the theoretical plans outlined in this paper into a reality for FNMI learners. We are committed to building an effective, replicable preparatory program that can be implemented at other post-secondary schools as required. Continued support from ONCAT and funding from additional sources will be essential to ensure that the BEAR Program pilot will be up and running at Algonquin College in fall 2017. We are excited to welcome FNMI students and work with them and their communities to develop expand the leadership capacity of FNMI people. In our estimation, there is no program more deserving of the time, energy and money it will take to support our FNMI students on their journeys, wherever their paths may take them.

> ….If we start down a road of shared reconciliation and restitution, we will have taken a crucial step in building a sense of ourselves and the country. It is a matter of being true to who we are, to what is fair and possible here. That consciousness, that sense of ourselves, will solidify our ability to live together and to do so in an atmosphere of justice.
>
> *John Ralston Saul, The Comeback*

9. References

Aboriginal Transitions Research Project. (2011). *Aboriginal Student Transitions Handbook.* Retrieved from https://www.uvic.ca/services/indigenous/assets/docs/Aboriginal%20Student%20Transition%20Handbook%20Final.pdf

Algonquin College signs CICan Indigenous Education Protocol. (December, 2014). Public Relations and Communications, Algonquin College, Ottawa ON Retrieved from http://www.algonquincollege.com/public-relations/2014/12/03/algonquin-college-signs-cican-indigenous-education-protocol/

Appalachia Regional Comprehensive Centre (n.d.). Research brief: Does educational technology improve student learning outcomes? Retrieved from https://www.arccta.org/sites/default/files/general_uploads/Research%20Brief%20Does%20Ed%20Tech%20Improve%20Student%20Learning.pdf

Asselin, S. B. (2014). Learning and assistive technologies for college transition. Journal of Vocational Rehabilitation, 40(3), 223-230. doi: 10.3233/JVR-140687

Assembly of First Nations [AFN]. (2012). A portrait of First Nations and education. Retrieved from: http://www.afn.ca/uploads/files/events/fact_sheet-ccoe-3.pdf

Assembly of First Nations Education, Jurisdiction, and Governance. (2014). Supporting First Nations Learners Transitioning to Post-Secondary.

Auditor General of Canada. (April 2000). Chapter 4: Indian and Northern Affairs Canada – Elementary and Secondary Education, Report of the Auditor General of Canada.

Auditor General of Ontario. (2012). Chapter 3: Education of Aboriginal Students. 2012 Annual Report of the Office of the Auditor General of Ontario. Government of Ontario.

Baechtold, M. & De Sawal, D. M. (2009). Meeting the needs of women veterans. In R. Ackerman & D. DiRamio (Eds.) Creating a veteran-friendly campus: Strategies for transition and success (pp. 35- 43). San Francisco, CA: Jossey-Bass.

Baines, R. (2014, August). Myths and realities of First Nations education. Centre for Aboriginal Policy Studies. Retrieved from: https://www.fraserinstitute.org/sites/default/files/myths-and-realities-of-first-nations-education.pdf

Bell, N. (2014). Teaching by the Medicine Wheel: An Anishinaabe framework for Indigenous education. Education Canada. Retrieved from http://www.cea-ace.ca/education-canada/article/teaching-medicine-wheel

Bourdieu, P. (1986). *The forms of capital*. In John Richardson, Ed. *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press, pp. 241-258.

Callcott, D., Knaus, M. J., Warren, J., & Wenban, A. (2014). "Network teach": How a student led organisation supports the transition to university. Australian Journal of Teacher Education, 39(8), 1-13.

Canada, Department of Aboriginal Affairs and Northern Development [AANDC]. (2014). Bill C-33, First Nations Control of First Nations Education Act Introduced in the House of Commons News Release. Government of Canada. Retrieved from http://news.gc.ca/web/article-en.do?nid=837329

Canada Millenium Scholarship Foundation. (2005). Changing Course: Improving Aboriginal Access to Post-Secondary Education in Canada. Millenium Research Note #2.

Clerkin, A. (2012). Personal development in secondary education: The Irish transition year. Education Policy Analysis Archives, 20(38), 1-18.

Colleges and Institutions Canada [CICan]. (2016). *Indigenous education protocol for colleges and institutes*. Retrieved from https://www.collegesinstitutes.ca/policyfocus/indigenous-learners/protocol/

Collier, A., Watson, W., & Ozuna, A. (2011). Classroom.NEXT: Engaging Faculty and Students in Learning Space Design. Educause Learning Initiative. Retrieved from https://library.educause.edu/~/media/files/library/2011/7/elib1102-pdf.pdf

Corrigan, E. (2014). Person centred planning 'in action': Exploring the use of person centred planning in supporting young people's transition and re-integration to mainstream education. British Journal of Special Education, 41(3), 268-288. doi: 10.1111/1467-8578.12069

DeAndrea, D.C., Nicole B. Ellison b , Robert LaRose b , Charles Steinfield b , Andrew Fioreet al., Serious social media: On the use of social media for improving students' adjustment to college, Internet and Higher Education (2011), doi:10.1016/j.iheduc.2011.05.009

deBeer, J., Smith, U., & Jansen, C. (2009). Situated' in a separated campus—Students' sense of belonging and academic performance: A case study of the experiences of students during a higher education merger. *Education as Change, 13*(1), 167–194. Greene, G. (2014). Transition of culturally and linguistically diverse youth with disabilities: Challenges and opportunities. Journal of Vocational Rehabilitation, 40(3), 239-245. doi: 10.3233/JVR-140689

Fisher, R. & Hoth, W. (2010). College-Level Literacy: An Inventory of Current Practices at Ontario's Colleges. Toronto: Higher Education Quality Council of Ontario.

Holton, M. (2014). Adapting relationships with place: Investigating the evolving place attachment and 'sense of place' of UK higher education students during a period of intense transition. Geoforum, 59, 21-29. doi: 10.1016/j.geoforum.2014.11.017

Indigenous Education Protocol for Colleges and Institutes. (2016). Colleges and Institutes Canada. Retrieved romhttps://www.collegesinstitutes.ca/policyfocus/indigenouslearners/protocol/

Kleiman, N.S. (2001). Building a highway to higher ed: How collaborative efforts are changingeducation in America. New York: The Center for an Urban Future.

Kirkness, V. and Barnhardt, R. (1991, May). First Nations and Higher Education: The Four R's-Respect, Relevance, Reciprocity, Responsibility. Journal of American Indian Education, Vol. 30, no.3

Kyndt, E., Coertjens, L., van Daal, T., Donche, V., Gijbels, D., & Van Petegem, P. (2015). The development of students' motivation in the transition from secondary to higher education: A longitudinal study. Learning and Individual Differences, 39, 114-123. doi:10.1016/j.lindif.2015.03.001

Larsen, B. Ø., Jensen, L., & Jensen, T. P. (2014). Transitions in secondary education: Exploring effects of social problems. Research in Social Stratification and Mobility, 38, 32-42. doi: 10.1016/j.rssm.2014.05.001

Malatest & Associates Ltd. (2010). Promising Practices: Increasing and Supporting Participation for Aboriginal Students in Ontario. Toronto: Higher Education Quality Council of Ontario.

Malatest & Associates Ltd. (2002). Best Practices in Increasing Aboriginal Postsecondary Enrollment Rates, report prepared for the Council of Ministers of Education (CMEC). Retrieved from http://cmec.ca/Publications/Lists/Publications/Attachments/49/malatest.en.pdf

Manning, L. (2016). Indigenous Youth Educational Persistence (IYEP): Action research for Indigenous post-secondary student success. Final Report. Indigenous Strategic Partnerships (ISP), Algonquin College, Ottawa ON

Manning, L. (2013). Supporting Aboriginal People for Labour Market Entry (SAPLME), Report for Workforce and Personal Development (WPD), Algonquin College, Ottawa ON

Manning, L., Powless, D., and Doyle, C. (2013). Aboriginal Student Performance 2009-2013: Components of Student Success Part 1, Workforce and Personal Development, Algonquin College, Ottawa ON

Mendelson, M. (2008). Improving Education on Reserves: A First Nations Education Authority Act. Calendon Institute of Social Policy. Retrieved from http://www.caledoninst.org/Publications/PDF/684ENG.pdf

Office of the Auditor General of Canada. (April 2000). Chapter 4: Indian and Northern Affairs Canada – Elementary and Secondary Education. Report of the Auditor General of Canada

Ontario, Ministry of Education (2011). First Nations Education: Education Services (Tuition) Agreements and Special Education. Government of Ontario.

Ontario, Ministry of Education (2013). School Board Funding Projections for the 2013/14 School Year. Government of Ontario.

Ontario Native Education Counselling Association (March 2011). Aboriginal Student Transitions Project. Retrieved from

http://www.oneca.com/Aboriginal%20student%20transitions%20FINAL%20031911.pdf

Orr, J. (June, 2008). First Nations Post-Secondary Education and Training Literature Review and Best Practices Leading towards recommendations for comprehensive post-secondary planning and evaluation framework for Mi'kmaw Kina'matnewey.

Powless, D., and Doyle, C. (2013). Aboriginal Student Performance 2009-2013: Components of Student Success Part 2, Workforce and Personal Development, Algonquin College, Ottawa ON

Powless, D. and Manning, L. (2015). Building on Strength: Collaborating for Indigenous student success. Indigenous Strategic Partnerships, Algonquin College, Ottawa ON

Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. Psychological Bulletin, 130(2), 261-288.

Robineau, S. (2015). DevelopMENTOR Progress Report, for Workplace and Personal Development, Algonquin College, Ottawa ON

Royal Commission on Aboriginal Peoples. (1996). Report. Ottawa: Minister of Public Works and Government Services.

Roybal, V., Thornton, B., & Usinger, J. (2014). Effective ninth-grade transition programs can promote student success. Education, 134(4), 475-487.

Saul, J. R. (2014.) *The comeback*. Toronto, Ontario: Penguin Canada Books, Ltd.

Sharpe, A. & Arsenault, J. (December, 2009). Investing in Aboriginal Education in Canada: An Economic Perspective. CPRN Research Report. Centre for the Study of Living Standards.

Sniderman, A. S., (2012). Aboriginal students: An education underclass. Maclean's. Retrieved from http://www.macleans.ca/news/canada/an-education-underclass/

Statistics Canada. (2011a). 2011 National Household Survey: Aboriginal Peoples in Canada: First Nations People, Métis and Inuit. Retrieved from http://www.statcan.gc.ca/daily-quotidien/130508/dq130508a-eng.htm

Statistics Canada. (2011b). Aboriginal Statistics at a Glance: 2nd Edition. Retrieved from http://www.statcan.gc.ca/pub/89-645-x/2015001/education-eng.htm

Szidon, K., Ruppar, A., & Smith, L. (2015). Five steps for developing effective transition plans for high school students with autism spectrum disorder. Teaching Exceptional Children, 47(3), 147-152. doi: 10.1177/0040059914559780

Tinto, V. (2002). A speech presented at the annual meeting of the American Association of Collegiate Registrars and Admission Officers, April 15, 2002, Minneapolis, Minnesota.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Whiteside, A.L., Brooks, D. C., & Walker, J.D. (2010). Making the case for space: Three years of empirical research on learning environments. Educause Review. Retrieved from http://er.educause.edu/articles/2010/9/making-the-case-for-space-three-years-of-empirical-research-on-learning-environments

Why Integrate Technology into the Curriculum? The Reasons Are Many (2010). Edutopia.

Retrieved from https://www.edutopia.org/technology-integration-introduction