

ALTERNATIVE ADMISSION, FLEXIBLE TIMELINES AND
ALTERNATIVE ASSESSMENT IN INDIGENOUS POST-
SECONDARY EDUCATION

by

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ABSTRACT

The research examined successful approaches in flexible learning at First Nations University, University of Regina as the university with which First Nations University is federated and the University of New Brunswick (UNB). In particular, alternative admission, flexible timelines and alternative assessment are investigated.

Key informant interviews and secondary research on strategic priorities, policies, collective agreements and Indigenization efforts at the three institutions were completed. Findings indicate that various routes exist to gain acceptance at both universities. Alternative approaches with respect to flexible timelines and alternative assessment are not as well developed and are impacted by a range of policies and operational contexts. The research proposes that flexible learning for Indigenous students lies at the intersection of an institution's approaches and priorities for flexible learning and Indigenization. Recommendations were provided to UNB for potential improvements to mechanisms and processes to align the implementation of flexible learning for Indigenous students in the three areas of interest with UNB's strategic priorities.

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Chapter 1: Introduction

A number of drivers are pushing universities in New Brunswick and Canada to become more responsive to the needs of Indigenous¹ students and to increase their rates of retention and completion of degree programs. These include imminent shortages in numerous occupations as a result of a rapidly aging Canadian population; a dynamic and changing relationship between Canada and Indigenous peoples as a result of a number of Supreme Court decisions related to Aboriginal rights and self-determination; the impact of the Truth and Reconciliation Commission of Canada (TRC) which documented the history and legacy impacts of Indian residential schools and the recommendations contained in the TRC's *Calls to Action* document; and a growing movement both within Canada and globally to indigenize the academy as a means to improve educational outcomes of Indigenous peoples and to move towards reconciliation between Indigenous and non-Indigenous peoples so that a shared history of colonization of Indigenous peoples can be overcome.

Universities have also been experiencing a movement towards more flexible learning in response to a number of external drivers which are further detailed in the literature review in Chapter 3. Implementing strategies that provide more flexible options for Indigenous students can help to make post-secondary education more accessible to this group (Ball, 2007; Cochrane & Maposa, 2018 Ole, 2014), even though challenges such as the lack of technology or technology infrastructure in certain areas of

¹ The terms "Indigenous" and "Aboriginal" are used interchangeably in this document. The Canadian Constitution and Statistics Canada use the term "Aboriginal" to describe three groups – First Nations, Metis and Inuit peoples. More recently, government departments and organizations have begun using the term "Indigenous" to replace "Aboriginal" as a collective term for these groups since the Canadian government has adopted this term. Both terms are found in the literature.

Canada still hamper access for some Indigenous students. For example, some communities are still dealing with technological barriers such as difficulties with accessing high speed Internet, lack of local computer or Internet expertise, unreliable infrastructure elements or inexperienced instructors (Fahy, Steel & Martin, 2009; Cochrane & Maposa, 2018). Increased access to post-secondary education will contribute to improving education outcomes for Indigenous peoples. Although Indigenous student participation at the post-secondary level has seen gains, Indigenous participation and program completion at the university level continues to lag behind that of the general Canadian population for a variety of reasons briefly discussed in Chapter 2 – Current Contexts.

By identifying important factors for innovation in the three dimensions of flexible learning being explored as these relate to Indigenous post-secondary education (i.e., alternative admission policies and practices, flexible timelines and assessment and testing practices) the University of New Brunswick and other universities in the province and elsewhere in Canada will be better able to serve this growing population of learners. Increasing the numbers of Indigenous post-secondary graduates will contribute toward easing the labour market shortages projected for the future. Indigenous communities are also in the process of exercising their self-determination, building governance capacity and developing culturally relevant services in various sectors. Consequently, Indigenous communities will also benefit from the contributions that Indigenous graduates can offer their communities. Further changes to enhance Indigenous student participation in post-secondary education has the potential to benefit others in an increasingly diverse pool of existing and potential students.

The purpose of this research is twofold. First, to examine elements of innovative and successful approaches in Indigenous post-secondary education at two Canadian universities, with special attention and focus in the areas of flexible learning: alternative admission policies, flexible timelines and assessment practices. The two universities included in this study are First Nations University affiliated with the University of Regina and the University of New Brunswick (UNB) (Fredericton campus). The Mi'kmaq-Wolastoqey Centre (MWC, formerly the Mi'kmaq Maliseet Institute or MMI) and UNB identified these three aspects of flexible education as being of particular interest and consequently, they were selected as the focus of this research. Second, to undertake a review of approaches used at UNB (Fredericton campus) to further flexible learning for Indigenous students. More specifically, the research seeks to answer the following questions:

- 1) What successful approaches and strategies is UNB implementing in the areas of alternative admissions, flexible timelines and assessment in comparison to First Nations University and initiatives outlined in the literature to further flexible learning for Indigenous students?
- 2) What potential improvements can UNB consider in light of successful strategies being implemented by other universities?

This research is intended to fulfill, in part, the requirements for my Master of Education degree. However, the research was also undertaken in response to a request by MWC at the University of New Brunswick to conduct research on innovation in admissions and instructional delivery with respect to flexible timelines and assessment for Indigenous post-secondary students. MWC approached me to undertake this research

because of my work in Indigenous consultation which has involved working with provincial and federal government departments, Indigenous communities and organizations in a range of sectors such as post-secondary education, training, employment, Traditional Indigenous Knowledge with respect to natural resources and species at risk, health, mental health and child welfare. This work has included projects related to planning, program evaluation, training and collaboration between Indigenous peoples, government and industry. I am not an Indigenous person and am in fact an immigrant to Canada. But I see this work as being important to ensuring that New Brunswick and Canada develop a more equitable and just relationship with Indigenous peoples and is inclusive of people from diverse cultures.

Chapter 2 - Current Contexts of the thesis provides readers with an overview of the drivers and current contexts of Indigenous university education in New Brunswick and Canada. Within the national context, the nature of the relationship between Indigenous peoples and Canada is continually evolving with increased recognition of Aboriginal rights and self-determination by Canadian and provincial governments. However, the chapter focuses on areas more directly related to post-secondary education, such as demographics and labour market forecasts, Indigenous achievement in post-secondary education, the TRC Calls to Action which focus on post-secondary education and the movement to indigenize the academy.

The literature review in Chapter 3 provides information on flexible learning generally followed by a further review of literature in the three areas of interest for this thesis – alternative admissions, flexible timelines and alternative assessment. Indigenous

specific initiatives within these three topic areas are included in the review where available.

Chapter 4 on methodology provides a description of the methods used to undertake the current research. Following this, Chapter 5 documents the findings of the research. Finally, Chapter 6 undertakes a discussion of the findings. This chapter identifies common challenges and successes with respect to Indigenous student education at First Nations University and UNB and potential improvements that UNB could explore to further Indigenous student retention and success.

Chapter 2: Current Contexts

The context within which Canadian universities currently operate includes factors such as forecasted labour shortages as a result of a rapidly aging Canadian population and recent developments in Indigenous-Canadian dynamics such as growing public awareness of Canadian colonial practices including the Indian residential schools. This awareness has been brought about by the efforts of the Truth and Reconciliation Commission of Canada's work and the efforts of other Indigenous organizations, with support from the federal government. These demographic factors and the awareness of the lasting impacts of Canada's colonial history on Indigenous peoples has led to increased momentum to address Indigenous inclusion in post-secondary education and a growing body of literature that looks at various aspects of Indigenous participation at universities. This chapter provides a brief overview of this context.

Labour Market Forecasts, Demographics and Indigenous Educational Achievement

New Brunswick will be facing shortages in numerous occupations as a result of a rapidly aging population; literacy levels that are below the national average (Statistics Canada, 1998), and a demand for a highly skilled workforce in today's globalized, knowledge-based economy (Organization for Economic Co-Operation and Development (OECD) & Statistics Canada, 2000).

The demographics of the Indigenous population (First Nations, Métis and Inuit) are unlike that of the general population. Data from the 2016 Census showed that whereas the general population is experiencing rapid aging and only 41.6% of the general population in Canada is under the age of 35 years, 57.8% of the Indigenous population in

Canada is under the age of 35 years. The contrast is even more marked for the 0 – 24 year age group, with 43.7% of the Indigenous population in Canada falling in this age group compared to 28.4% of the general population in Canada. The trends are similar in New Brunswick, with 50.3% of the Indigenous population who were 34 years of age or younger compared to 36.6% of the general population. For the age group between 0 – 24 years in New Brunswick, 38.4% of the Indigenous population belonged to this age range compared to 25.7% of the general population (Statistics Canada, 2016a). The Indigenous population is also a rapidly growing population. It increased by 42.9% in Canada in the ten-year period between 2006 and 2016, more than four times faster than the 9.6% growth rate for the non-Indigenous population. In New Brunswick, the Indigenous population grew by 67.1% for the same period compared to 0.3% for the non-Indigenous population in the province. While the First Nations population in Atlantic Canada is relatively small (7.5% of the total First Nations population in Canada), it has more than doubled between 2006 – 2016. A major component of this increase in Atlantic Canada is likely from more First Nations people self-identifying on the Census (Statistics Canada, 2016b and 2016c).

Although the Indigenous population in New Brunswick is younger than the general population and can contribute to solutions to address forecasted labour shortages, Indigenous people have lower levels of participation and completion in post-secondary education than the general population in New Brunswick. This is also true for the Indigenous population in Canada. Indigenous educational attainment in New Brunswick has been increasing over the last two decades but the 2016 Census identified that it was

still lagging behind the general population in the area of university education (see Figures 1 and 2) (Statistics Canada, 1998 and 2016d).

Figure 1 - Highest level of education for the Indigenous identity population 15 years and older (%), New Brunswick, 2001 and 2016

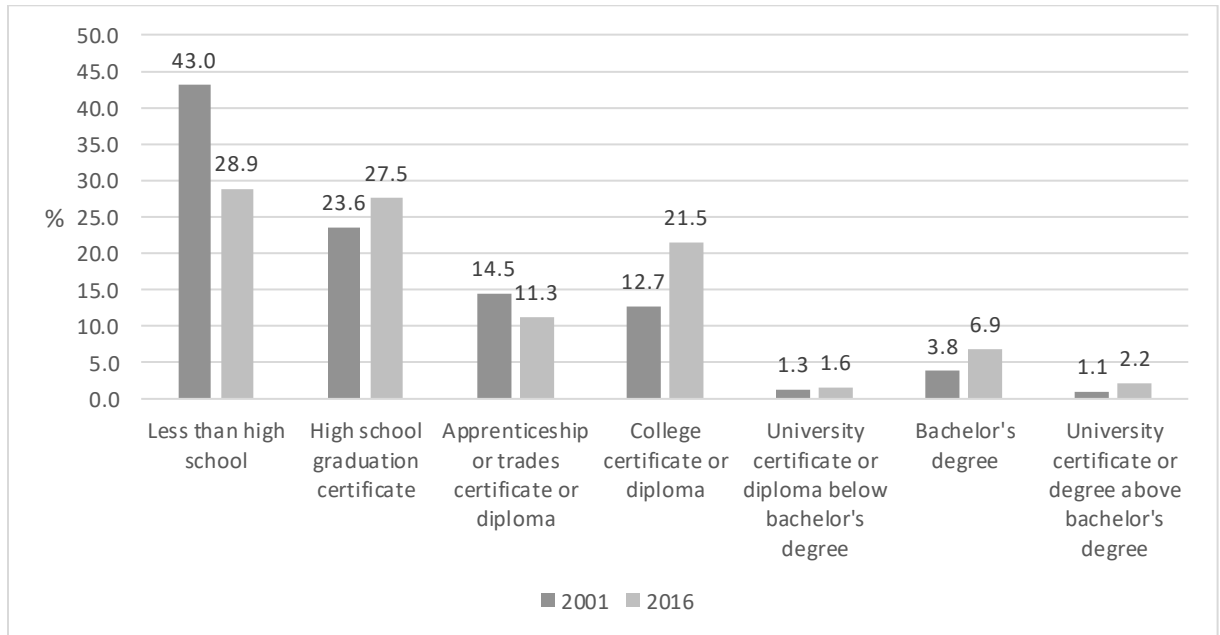
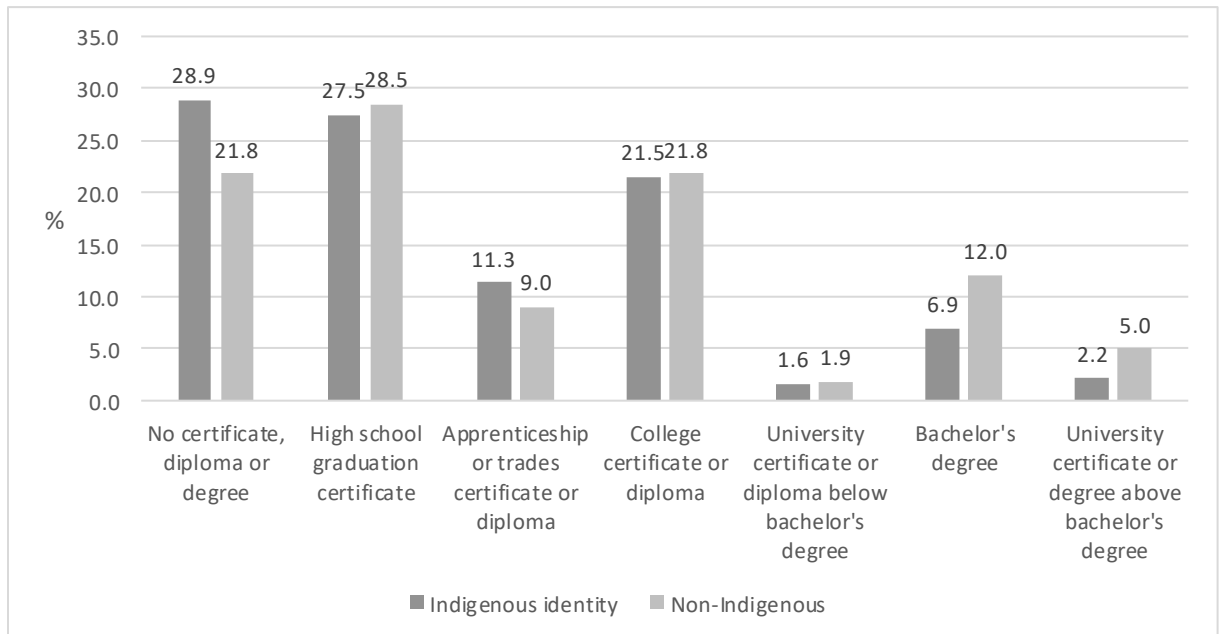


Figure 2 - Highest level of education by Indigenous identity for the population 15 years and older (%), New Brunswick, 2016



In 2016, the percentage of the Indigenous identity population in New Brunswick that had a high school diploma (27.5%) was almost the same as in the general population (28.5%) and gaps were closing in the area of trades and college. In fact, 11.3% of Indigenous people in New Brunswick had some type of trades qualification compared to only 9% of the general population in the province. At the college level, the gap had almost closed with 21.5% of the Indigenous population having a college certificate or diploma compared to 21.8% of the general population. However, the percentage of Indigenous people holding a university qualification at the Bachelor's level (6.9%) or post-graduate level (2.2%) was still much lower than in the general population (12% for those with a Bachelor's degree and 5% for those with post-graduate qualifications in the general population).

The challenges associated with Indigenous student access, retention and completion of post-secondary education have been well documented. These include the continued impacts of historical events such as residential schools; geographic barriers, especially for Indigenous people from remote communities; financial barriers and challenges; the failure of initiatives to recognize the realities of Indigenous post-secondary students' lives; lack of supports to address childcare, housing and transportation issues; limited awareness of programs and services by Indigenous youth; lack of student preparedness, and the need for more career counselling for Indigenous youth; lack of Indigenous instructors and staff (Bekann, 2016; Canada Millennium Scholarship Foundation, 2005; Holmes, 2005; Horizons Community Development Associates, 2007; King, 2008; McKeown, Vedan, Mack, Jacknife & Tolmie, 2018;

Ottman, 2013; R.A. Malatest & Associates, 2002; R. A. Malatest & Associates, 2004; R. A. Malatest & Associates & Stonechild, 2008; Usher, 2009).

Historically, the response of post-secondary institutions has been to apply more pressure on Indigenous students to adapt and integrate into the institution but since the mid-1990s, there have been more initiatives to make post-secondary education more relevant for Indigenous students and to ensure they feel a sense of belonging at an institution (Kirkness, 1995). Recommendations for improving access and success at the post-secondary level for Indigenous students include initiatives to address institutional shortfalls in the areas of financial issues, outreach, admissions policies, student support services and advising, instructional approaches, curriculum and campus facilities such as housing and daycare (Wright et al, 2008).

Over the last decade, the New Brunswick government has made greater access, retention and completion of under-represented groups in post-secondary education a strategic priority. This objective was identified in the Department of Post-Secondary Education, Training and Labour's strategic plan *Be Inspired. Be Ready. Be Better* in 2008 as well as in its most recent strategic plan for 2015 – 2018 (New Brunswick Department of Post-Secondary Education, Training and Labour, 2008 and 2015). Since 2008, the provincial government supported several initiatives at New Brunswick colleges and universities to increase Indigenous student participation in post-secondary education through the hiring of Indigenous student advisors, Indigenous student service coordinators, Elders-in-residence and the development of degree and certificate programs designed to meet the specific needs of Indigenous communities (New Brunswick Department of Post-Secondary Education, Training and Labour, 2013). With the support

of the Department of Post-Secondary Education and Training, a Steering Committee was also formed in 2009-2010 to assist in recommending an action plan to increase Indigenous participation in post-secondary education. One of the top ten recommendations of this Committee was to:

...include differentiation in pedagogy and assessment when developing curricula and providing services to Aboriginal post-secondary students. Flexibility and creativity need to be encouraged within post-secondary education institutions in terms of admission criteria, testing methodology and course delivery timeline structures, including community-based programs, e.g., apprenticeship, college and university programs offered in communities. (Steering Committee on Aboriginal Post-Secondary Education, 2010, p. 8).

The TRC's Calls to Actions

A second factor driving universities to improve programs and services for Indigenous students are the 94 recommendations in the *Calls to Action* published by the Truth and Reconciliation Commission (TRC) of Canada (2015). The mandate of the TRC was to document an accurate historical record and to educate Canadians on what happened in the Indian Residential Schools (IRS) as a way to guide and inspire Indigenous peoples and Canadians in a process of reconciliation and renewed relationships (TRC, n.d.). The *Calls to Action* are recommendations to redress the legacy impacts of the IRS including several recommendations which are specific to or involve post-secondary institutions (see Appendix A), most notably, for the purposes of this

thesis, the recommendation that education attainment level and success rates be improved.

The Movement to Indigenize the Academy

The third factor is a growing movement to indigenize the academy. Over the past two decades, Indigenization emerged as a topic of academic writing and research and its scope and depth have increased to develop into a transformative global movement. In the Canadian context, it is also seen as part of the reconciliation process called for by the TRC (Pidgeon, 2016).

Indigenization has been described as “a movement centering Indigenous knowledges and ways of being within the academy, in essence transforming institution initiatives, such as policy, curricular and co-curricular programs, and practices to support Indigenous success and empowerment.” (Pidgeon, 2016). Others have written about Indigenization as creating supportive and comfortable spaces in institutions within which Indigenous people can succeed in the completion of programs and courses and in reframing knowledge production and transmission from an Indigenous perspective since institutional frameworks, philosophy, historical assumptions, pedagogy and ways of knowing are dominated by Western or European approaches (Baehr, 2013; Battiste, Bell & Findlay, 2002; Bopp, Brown & Robb, n.d.; Munroe, Borden, Orr, Toney & Meader, 2013; Ottmann, 2013). Indigenizing the academy is also seen as part of postcolonial and decolonizing education (Battiste et al, 2002; de Leeuw, Greenwood & Lindsay, 2013; Munroe et al., 2013). According to Battiste, Bell and Findlay (2002), postcolonialism is described as “liberation from colonial imposition and from colonists taking over a

territory physically or administratively and telling the traditional people of that place what to do” (p. 88).

At a practical level, Indigenization of post-secondary institutions has been described as requiring an incorporation of Indigenous knowledge, values, voices, symbols, aesthetics, critiques and practices into the ways that knowledge is produced and shared; and involving Indigenous communities, groups and entities in decision-making. Institutions need to create spaces, mentor and support Indigenous scholars, knowledge holders and wisdom keepers and become responsive and responsible to the ambitions and aspirations of Indigenous peoples for self-determination and for overcoming the legacy impacts of a colonized history. Also needed is a re-examination of policies, practices and curricula to ensure the retention and success of Indigenous learners (e.g., culturally responsive curriculum and pedagogy, funding support and initiatives to support Indigenous students). Institutions could re-examine the layers of their institutional practices and policies to ensure that ethical research guidelines, teaching/faculty requirements and tenure review practices, admissions, program and service delivery, funding support, the look and use of physical space reflect the principles of Indigenization. Post-secondary institutions also need to ensure that non-Indigenous students have the knowledge and skills to live and work beside Indigenous peoples respectfully (Battiste et al., 2002; Bopp et al., n.d.; Munroe et al., 2013; Pidgeon, 2016; Ottman, 2013).

Gaudry and Lorenz (2018) identify that there are three distinct visions of Indigenization which exist on a spectrum — Indigenous inclusion, reconciliation Indigenization and decolonial Indigenization. Table 1 summarizes the focus, approach

and examples of how each of these visions are applied or would be implemented in Canadian universities as identified by Gaudry and Lorenz (2018). All approaches have in common a need for change to better serve and support a) Indigenous students and communities, b) Indigenous faculty and staff, and c) Indigenous-based research, curriculum and teaching resources. At one end of the spectrum, Indigenous inclusion seeks to increase the numbers of Indigenous students, faculty and staff at a university and supports are put into place so they can better adapt to existing university culture, processes and policies. However, little is done to address policy or systemic barriers for Indigenous people. In the middle of the spectrum, reconciliation Indigenization seeks common ground between Indigenous and Canadian aspirations with efforts to address systemic challenges to Indigenous participation, learning and research approaches. At the far end of the spectrum, decolonial Indigenization seeks to balance the power relationships between Indigenous people and Canadians. It is based on treaty relationships and seeks to remake educational institutions so that non-dominant ways of knowing and doing can be embraced.

Table 1 - *Spectrum of Indigenization visions in Canadian universities*

| Vision of Indigenization | Indigenous inclusion | Reconciliation Indigenization | Decolonial Indigenization |
|--------------------------|---|---|--|
| Focus | Policies which increase the number of Indigenous students, faculty and staff | Vision that locates Indigenization on common ground between Indigenous and Canadian ideals | Reorientation of knowledge production based on balancing power relations between Indigenous peoples and Canadians |
| Approach | Supports the adaptation of Indigenous people to the existing culture of a Canadian university Indigenous students, faculty and staff must take on the responsibility and adapt | Discussions on what counts as knowledge, how Indigenous and western-derived knowledge can be reconciled and the types of relationships that universities have with Indigenous communities | Rooted in decolonial approaches to teaching research and administration Treaty-based model of university governance and practice which may include a dual |

| Vision of Indigenization | Indigenous inclusion | Reconciliation Indigenization | Decolonial Indigenization |
|--------------------------------|--|---|---|
| | <p>to the intellectual worldview, teaching and research styles of the academy</p> <p>Assumes that the academy is a natural or neutral place in which knowledge is already adequately represented</p> <p>Inclusion policies may help to achieve further transformation towards Indigenization and systemic change</p> | | <p>university structure with each structure having administrative autonomy.</p> |
| <p>Implementation examples</p> | <p>Efforts to recruit and retain more Indigenous faculty</p> <p>Support for Indigenous students, faculty and staff to overcome obstacles (rather than removing obstacles)</p> | <p>Inclusion of Indigenous-specific goals in university-wide strategic plans</p> <p>Establishment of Indigenous advisory and/or reconciliation committees</p> <p>Land and territory acknowledgements.</p> <p>Clear articulation of Indigenization goals</p> <p>Efforts to alter the university's structure</p> <p>Education of faculty, staff and students to change how they think about and act towards Indigenous peoples (e.g., Indigenous course requirements for students)</p> <p>Centring of dialogue and collaboration which opens up space for Indigenous intellectual traditions</p> <p>Indigenous-led Indigenization processes</p> | <p>The integrity of Indigenous knowledge and community participation is protected but there is a global knowledge exchange. If dual institutions exist, they relate through a treaty to serve community and students collectively (e.g., embedded faculties of Indigenous studies where Indigenous programs are in charge of their own governance such as budgets, curricular and scholarly standards</p> <p>Supports resurgence of Indigenous culture, language, politics, knowledge, connection to the land and on-the-land skills enabling the relearning of knowledge, traditions and skills lost through historical colonial policy and practices</p> <p>Support for on-the-land and community-based research and learning which decentres the</p> |

| Vision of Indigenization | Indigenous inclusion | Reconciliation Indigenization | Decolonial Indigenization |
|--------------------------|----------------------|--|--|
| | | Power sharing and transformation of decision-making processes Reintegration of Indigenous peoples, faculty, staff and students into policymaking that affects them and Canadian peers | academy as the primary site of knowledge production and dissemination Research rebuilds the capacity of Indigenous intellectual institutions Respects how Indigenous communities evaluate knowledge and how knowledge is interpreted |

Many post-secondary institutions in Canada are putting initiatives into place to indigenize their institutions. For example, the Association of Canadian Deans of Education (2010) developed an *Accord on Indigenous Education* to create culturally responsive learning environments and to further Indigenization at the post-secondary level. However, Indigenization is a long-term process which is still fraught with many challenges. De Leeuw, Greenwood and Lindsay (2013) have stated that efforts actioned with good intentions within “structurally limited decolonization” (p.385) but which avoid fundamental shifts in power can mask ongoing harms and injustices of colonial practices. Consequently, initiatives, policies and practices must be subjected to ongoing critical examination so that good intentions are not undermined.

Challenges to Indigenization which have been identified include a lack of basic knowledge and understanding about Indigenous history including the history of colonization, lack of understanding of Indigenous culture and current realities and lack of cultural competency. These challenges hamper efforts to work constructively with cultural difference in ways that lead to mutual respect, collaboration and co-creation.

Another challenge is the lack of consciousness of how the culture in post-secondary institutions is dominated by Western paradigms, approaches, standards and behaviours and the power differentials inherent with this privilege. Indigenization efforts are often relegated to a small group of Indigenous individuals without the full participation or leadership of Indigenous people and outside of permanent structures and decision-making processes of the institution. This often results in additional, unsustainable workloads for Indigenous faculty and staff. Resources at the post-secondary level are also increasingly strained and stakeholders in existing programs and interests within post-secondary institutions are reluctant to devote resources to promote Indigenization (Paquette & Fallon, 2014). Indigenization is multi-faceted and its complexity is also often underestimated. It requires changes not only at a more practical and visible level, but also a deep examination of the academy's culture and long-term commitment to learning and growth for continuous improvement. Post-secondary institutions must also build new capacities, new structures and new indicators of progress to advance enduring change utilizing skilled, transdisciplinary change agents (Bopp et al., n.d.; De Leeuw et al., 2013; Ottman, 2013; Pidgeon, 2016).

Chapter 3: Literature Review

There is a vast and growing quantity of literature in the area of flexible learning at post-secondary education institutions, which includes the three aspects of focus in this research: alternative admissions policies and practices; flexible timelines; and alternative assessments. The literature around flexible learning is largely organized according to two broad categories: (a) documents that focus on defining flexible learning and (b) literature that provides examples of how flexible learning is being implemented (Tucker & Morris, 2011). Much of the research on delivery and outcomes involve the use of technology in the delivery of flexible learning (Ling & Arger, 2002) and most of the literature has been produced by Australia, the United Kingdom and Europe.

Some literature has been published with respect to increasing access to post-secondary education for Indigenous students, including alternative admissions policies and practices and Indigenous forms of assessment. However, very little research or literature is available with respect to flexible timelines in relation to Indigenous post-secondary students. Where literature is available on these three focus areas, they have been included in the respective topic sections.

Relevant literature for this review was identified using two primary avenues. First, journal databases were searched under key terms such as flexible learning, e-learning, alternative admissions, flexible timelines, alternative assessment, Indigenous post-secondary admission, Indigenous concepts of time and Indigenous approaches to assessment. Second, the Internet was searched using Google and Google Scholar for journal articles, grey literature and other relevant documents using similar search terms.

This literature review provides some key concepts and highlights in the field of flexible learning that can serve as a foundation for the research. The first section of the literature review provides an overview of definitions associated with flexible learning, drivers propelling the growth in flexible learning, as well as the challenges associated with implementing flexible learning. Subsequent sections of the literature review look at the three aspects of flexible learning of particular interest to this research: alternative admissions approaches, flexible timelines and alternative assessment.

Flexible Learning

Flexible learning is an approach to learning which gives students more freedom in how, what, when and where they learn. The use of flexible learning approaches has been growing in universities. This section outlines approaches to flexible learning, drivers associated with the increased use of flexible learning approaches, flexible learning pedagogy, the benefits and challenges to flexible learning.

Approaches to flexible learning. Although there are commonly accepted dimensions involved in flexible learning, there is neither a universally accepted definition of what is meant by flexible learning nor agreement on how it should be implemented at the student/teacher level (Ling & Arger, 2002; Palmer, 2011; Tucker & Morris, 2011 & 2012). Sometimes, views of flexibility differ or are not aligned, even by different levels of management within the same institution (Mason et al., 2009; Palmer, 2011). However, Palmer (2011) and Tucker and Morris (2011, 2012) offer a model of flexible learning based on the work of Nikolova and Collis (1998) and Collis and Moonen (2004) that

discusses five basic categories of flexibility that can be further divided into 19 dimensions:

Aspects of time

1. Time and date at which module starts and finishes
2. Periods of time students are able to participate
3. Pace of learning
4. Time when assessment occurs
5. Sequence in which topics are covered

Aspects of content

6. Choice of topics covered
7. Amount of learning activities expected to be completed
8. Level of difficulty of module content
9. Assessment standards

Aspects of access/entry requirements

10. Pre-requisites for module participation

Aspects of instructional approach/design

11. Social organization of learning (group or individual)
12. Times available for support
13. Choice of who decides what modes of flexible learning are available
14. Language for communication

Aspects of delivery

15. Time and place where support is available
16. Methods of obtaining support

17. Types of support available

18. Places for studying

19. Delivery channels (i.e., lectures, tutorials, Internet, podcasts).

Increasingly, universities are offering flexible options and blended approaches to learning with some courses fully or partially offered online and others following the more traditional face-to-face model. There are a wide range of approaches being utilized in Australia (Ling & Arger, 2002) and there is continued growth in the model (Collis & Moonen, 2011). Characteristics of flexible learning include collaboration with peers and/or practitioners in the field; provision of resources; context-sensitive learning experiences; a greater emphasis on generic skills (e.g., thinking, meta-cognitive skills, problem solving); and a shift of the instructor's role from the source of knowledge to a facilitator for the students' learning processes throughout their learning journey (Chen, 2003).

Drivers for flexible learning. The literature identifies several factors driving the increase in flexible learning. Decreases in government funding and government policies are resulting in the commercialization and commoditization of higher education, providing an impetus for post-secondary institutions to find new sources of revenues by developing niche markets with local and overseas students and by providing education to groups that have not usually participated in higher education. These types of policies include those aimed at achieving economic progress and competitiveness by increasing workforce skills, policies meant to increase accountability for public funding of higher education or those which promote flexible education (Deakin University, n.d.;

Directorate-General for Education, Youth, Sport and Culture (European Commission) & Eurydice (European Education and Culture Executive Agency, 2011; 2011; Mason et al., 2009; Ling & Arger, 2002; Natale, Libertella, Sora & Ulin, 2007; Walsh, 2009;).

Additional factors include a need to respond to overcrowded or limited on-campus facilities; facilitating equity by enabling the participation of traditionally under-represented groups in post-secondary education; becoming more efficient, especially with respect to the capacity to provide post-secondary education; and exploiting new knowledge technologies which enable mass education, usually at a distance. Finally, the trend towards the globalization and internationalization of higher education, of meeting the needs of employers and industries by boosting the supply of graduates in particular occupational groups or professions and the accommodation of “just-in-time” learning needed in a quickly changing society are helping to fuel the increase in flexible learning.

Growth in higher education is expanding rapidly and the number of students enrolled in universities has already exceeded projections of 120 million worldwide in 2020 with an annual average growth rate of 5.1% between 1991 and 2004. In many countries, youth and young adults have driven this growth but in countries such as Canada, New Zealand and the United Kingdom, a significant number of mature students have also entered the post-secondary system. Open universities, distance learning and flexible learning have played an important role in the increased uptake in post-secondary education (Walsh, 2009).

The implications of these drivers for post-secondary institutions are an increasingly diverse student body; increased development costs; shifts in the way intellectual property is usually handled; shifts in the pedagogy required in flexible

learning with diverse student bodies; a modification of policies and administrative processes to support flexible approaches to learning; the importance of providing support to faculty for developing flexibility in their courses; and the challenge of having some forms of flexible learning recognized by other countries.

Flexible learning pedagogy. The pedagogies for flexible learning are continuing to be developed but are based on:

- Learner centred principles;
- Encouraging independent learning and approaches where students have an active, constructive role in the design and delivery of their learning process, which often leads them to being partners in the development of learning experiences; and
- Applying the most appropriate and effective learning and teaching and technological approaches (e-learning or blended approaches, experiential and problem-based learning) to promote and enhance the learning experience (Deakin University, n.d.; Feenberg, 1999 as cited in Ling & Arger, 2002; Outram, 2011).

The Internet becomes a “cognitive tool” for investigating and representing knowledge (Reeves, 1997) and web-based instruction can enhance the transfer of knowledge and skills by emphasizing tasks where the student can develop a direct relationship with the subject matter such as engaging in practical activities like the analysis of relationships rather than memorization of facts (Khan, 1997 as cited in Reeves, 1997). Further, Natale, Libertella, Sora and Ulin (2007) state that although conceptual abstraction can be a challenge in online learning, learning can be achieved through newly developed techniques or technologies which support mentoring and interactions between learners

(e.g., cameras, chats and conferencing) and processes to enable “real-time interactions” (p. 28).

De Boer and Collis (2005) demonstrated that a systematic approach to assisting instructors to identify, implement and manage flexibility options through a course management system (CMS), sometimes known as a virtual learning environment, is possible. CMSs are web-based database-driven systems that enable or support learning. Flexibility in planning and logistics of the course do not require much change in course pedagogy and can be offered with support for instructors on how to manage the different options chosen by students. However, offering flexibility based on student-centred contributions and experiences, such as making assignments relevant to work experiences, requires a change in course pedagogy with instructors rethinking the types of activities, assignments and assessments that are available through the course.

Resources required for delivery of flexible learning. Providing choice and flexibility to students is perceived as being costly and labour intensive at the development stage (Atkinson, Fluker, Ngo, Dracup & McCormick, 2009; Gervedink Nijhuis, 2005 as cited in Collis & Moonen, 2011; Ling & Arger, 2002; Outram, 2011). The Web-Based Education Commission (2000, as cited in Ling & Arger, 2002) found that developing online courses can require from 66 percent to 500 percent longer than creating traditional courses. Natale et al. (2007) found that it took approximately the same amount of time to develop a course as it did to instruct one (80 hours) and Lazurus (2003, as cited in Natale et al., 2007) established that on average it took about five to seven hours per week in a 14-week online course to communicate with and grade 20 students.

In England, the Higher Education Funding Council of England (HEFCE) provided funding to eight universities to pilot flexible learning through the Flexible Learning Pathfinders project. These institutions piloted a range of deliveries, including two-year accelerated Honours degrees, work-based degrees, foundation degrees and Master's degrees using a range of flexible methods such as acceleration, deceleration, new learning technologies and distance and blended learning. The cost of accelerated two-year programs in England was potentially between 71% and 74% of an equivalent three-year degree. However, realizing these cost savings requires universities to consider changes in institutional procedures, processes and perceptions which are generally more aligned with the structure and familiarity of a three-year degree (Outram, 2011).

The majority of the eight universities in England in the Flexible Learning Pathfinders project were concerned about the ability to sustain these initiatives beyond the pilot period. Without government funding, financial sustainability would require universities to attract larger numbers of new students who would not have pursued a three-year program. Additionally they would have to charge more per year so that the full cost of delivering a three-year program in a shorter timeframe could be recouped. As well, institutions would need to undergo transformative change to implement the values and practices necessary to make flexible learning flourish on a larger scale. This meant that flexible learning options remained at a relatively small scale (Outram, 2011).

Flexible delivery requires an investment in technology and infrastructure and costs associated with student interactions, administration and records systems. The systems used can be more or less costly with small scale, multimedia-intensive approaches being the most expensive. Substantial economies of scale exist when courses

are offered for class sizes of up to several hundred students, but the economic advantages taper off beyond this (Bell et al., 2001; Ling & Arger, 2002; Outram, 2011; Roberts, 2001; SQW Ltd & Taylor Nelson Sofres, 2006; Walsh, 2009).

Benefits of flexible learning. Ling and Arger's (2002) study found that flexible delivery did offer choice to students and faculty and enhanced the participation of students from rural areas. They describe several other studies that demonstrate the additional benefits that can be gained by students in flexible learning environments such as computer competency with Web-based courses (Clarke, 1998, as cited in Ling & Arger, 2002); improved critical thinking skills and creativity (Ryan, Carlton and Ali, 1999, as cited in Ling & Arger, 2002); improved higher order thinking skills and online team building and collaboration (Ribbons, 1998, as cited in Ling & Arger, 2002) and learning which becomes more self-directed with students developing better lifelong learning skills (Bilge, 1999, as cited in Ling & Arger, 2002). However, Ward (1998, as cited by Ling & Arger, 2002) found that students' concepts of traditional higher education also influenced how they used the internet, with some students using the internet as a source of materials rather than exploring subject matter. Consequently, not all students experience the extra benefits described in the other studies.

Barriers to implementation. The lack of understanding of pedagogy associated with flexible learning and how these approaches can maximize learning avenues for students can be a barrier (Roberts, 2001; Simons, 2002; Walsh, 2009). For example, some science faculty are reluctant to teach laboratory work online or at a distance

(Ferguson, 1998 as cited in Ling & Arger, 2002). Further, courses must be modularized to enable a flexible pathway for content and assessment. Scalability is an issue along with the impracticality of offering this approach in a way that works equally well for a large number of students (Chen, 2003).

Faculty require support services to design flexible learning options and instruction, but these resources are often cut or reorganized, especially in times of fiscal restraint (Atkinson et al., 2009; Collis & Moonen, 2011; Outram, 2012; Palmer, 2011; SQW Ltd. & Taylor Nelson Sofres, 2006). Support to instructors needs to be improved and available to them throughout course design and delivery. Assisting instructors to find the balance between scalability, manageability, student centredness and responsiveness remains a challenge in practice (De Boer and Collis, 2005). Ling and Arger (2002) found that although students and teachers appreciated flexibility, some students were expecting more flexibility than available whereas others desired more contact from teachers. Teachers found that flexible provision involved more work.

Issues related to intellectual property and copyrights can also be a challenge (Atkinson et al., 2009; Natale et al., 2007). Professors who develop a course sometimes tire of teaching it after three years which has prompted some universities to remove the course from faculty ownership or to build and teach courses collectively. This ensures that a course can continue to be offered by other faculty or sessional instructors, even if a faculty member is on sabbatical or the number of course sections needed increases.

Flexible learning is sometimes viewed as providing limited opportunities for students to collaborate and to develop a learning community (Chen, 2003). Beckett (1998) argues that students' learning experiences are holistic and involve both the mind

and the body. He views online learning as potentially being “disembodied” and involving a highly individualistic educational ideology, which focuses only on the mind and thereby lacks opportunities for gaining “socio-culturally significant information” (Delivering Visual Literacy section, para. 1).

Accelerated degrees from English universities were also not always recognized by European institutions or employers or in other countries as being equivalent to three-year degrees. Despite the fact that the accelerated programs covered the same amount of material and students were found to achieve the same or better results, some employers remained skeptical that the same amount of material was covered in the programs. Employers and institutions outside of England also had concerns that accelerated programs are not easily recognizable or comparable with other programs across Europe, making assessment of equivalence challenging (Outram, 2011).

Despite the barriers, Collis and Moonen (2011) affirmed that flexibility was just as relevant in 2010 as it was in 2001, but there has been a shift from an emphasis on global campuses (where the university maintains quality control, but programs and learning are increasingly available via network technology rather than a physical campus) to enhancing the flexibility of learning spaces and student supports as they use these learning spaces. This shift has been made both to maximize the learning opportunities available and for economic reasons. Technological advances such as Web 2.0 tools and applications, mobile technologies, Wi-Fi networks, different forms of group and individual work-support systems and digital environments can be personalized to simultaneously support learning, work and private activities. This has changed how

learners and instructors communicate and share outside of formal educational institutions (Collis & Moonen, 2011).

The context and nature of demand for post-secondary education is changing. Flexible learning is being shaped by this context but in turn, it is also influencing the context and delivery of post-secondary education. There is a great variety in how the different aspects of flexible learning are being implemented. The remainder of this literature review focuses on how universities are implementing alternative admissions policies and practices, flexible timelines and flexible assessment with information on how these relate to Indigenous students where available.

Alternative Admissions Policies and Practices

Alcorn and Levine (1998) identify that in Canada, as in the United States and Australia, efforts have been made over the past decades to increase access to university studies for Indigenous people. For example, university access programs were introduced in Manitoba in the 1970s. These programs were originally intended for Indigenous people but also extended to visible minorities and the inner-city poor, other groups who were excluded from post-secondary education.

Access programs for Indigenous learners generally fall into two categories: general access for entry into the regular student body and specific access to certain program such as medicine and law. The programs support previously excluded students to gain access to a specific diploma or degree and share a common set of practices and principles. They emphasize a shift away from the traditional practice of insisting on entrance requirements to a clear definition and insistence on exit requirements, i.e.,

students may be admitted without meeting all the pre-requisite entrance requirements but must fulfill the same requirements as other students and graduate from the diploma or degree-granting institution with the same credentials as other graduates. This is part of a “second chance” approach, premised on the basic belief that everyone has the right to try to succeed on more than one occasion and that failures are not final, providing both the individual and the education system an opportunity to rectify errors. The approach recognizes that post-secondary institutions also have some responsibility for student success.

Typically, active outreach efforts are implemented in high schools and students’ communities to recruit prospective students. Students apply to the program and after an initial screening process, the most suitable applicants are brought to the university for an orientation to the program and the institution. Students who are seen to have the motivation and ability to succeed with available program supports are recommended for acceptance and program directors select from this list based on the number of available seats. Students must still be admitted to the college or university and consequently, admission to the institution is entirely at the discretion of that institution. According to Alcorn and Levine (1998), the majority of students enter through the mature student category, which provides entrance for students over 21 years of age who may not have the usual high school diplomas or have been away from the education system for a period. This pattern may have shifted since it has been 20 years since their paper was published and Indigenous demographics have changed substantially during this period. The challenge with the selection process is that it requires difficult and subjective judgments, there is no formula for assured success and a number of students who fall

between the legal school leaving age and the mature student age are unserved. However, the system has proven itself to be effective over the years as determined by retention and graduation rates of students entering post-secondary education through this approach, and by tracking their career and community contributions after graduation (Alcorn & Levine, 1998).

Other initiatives such as financial assistance programs, distance education and off-campus programs also facilitate equality of access. The programs also adhere to the principle of equality of condition by providing supports to students who are motivated but facing financial and other challenges so that they can succeed (Alcorn & Levine, 1998).

Wright et al. (2008) identified that other post-secondary institutions in Canada have implemented similar and different types of policies and initiatives to increase Indigenous enrolment:

- The University of British Columbia has an Indigenous Admissions policy which considers educational history, work experience, educational goals and other achievements that indicate an ability to succeed at university. Students who do not meet the minimum admission grade required by faculties and schools are considered under this policy on an individual basis, with input from the First Nations House of Learning (Holmes, 2006);
- The Nova Scotia Community College (NSCC) sets aside one seat in each program to be filled by the first applicant from an under-represented group that meets the eligibility requirements;

- Both the University of British Columbia and the University of Alberta offer programs to increase Indigenous enrolment in legal studies. The law schools in both institutions consider factors other than LSAT and university marks in making admissions decisions about Indigenous students. Once admitted, Indigenous students take the same required courses, are evaluated and graduate based on the same criteria as other law students;
- Faculties of medicine at universities across Canada have implemented various admissions policies and supports for Indigenous applicants, such as reserving a number of seats for Indigenous students; having a special application stream for Indigenous students who may not be competitive in the regular application pool but meet all minimum requirements; waiving the Medical College Admission Test (MCAT) requirements; bypassing the screening process so that all Indigenous applicants are invited for an interview, pre-interview preparation workshops and flexibility in admissions processes (Indigenous Physicians Association of Canada and the Association of Faculties of Medicine of Canada, 2008).

A recent study on access, mobility and persistence in the British Columbia post-secondary system (McKeown et al., 2018) found that institutions which did have Indigenous admissions policies had a range of policies including:

- a) Setting aside a number of seats in certain programs and reserving these for Indigenous students;
- b) Offering priority registration to Indigenous students;
- c) Having staff dedicated to Indigenous recruitment;

- d) Making information on bursaries, scholarships and awards available for Indigenous students through their institutional website;
- e) Offering specific programming and services for Indigenous students;
- f) Having an Indigenous advisory body which was involved in any decisions impacting Indigenous education;
- g) Having Indigenous students' applications reviewed individually by specific committees in terms of grades and/or cultural knowledge and life experience as potential substitutes for admission requirements;
- h) Considering Indigenous applicants who met admission criteria but did not possess competitive grade averages;
- i) Offering assistance to applicants to create an individualized curriculum plan if they did not meet the admission requirements for their program.

Examples of these policies in practice were offered by participants in the study who comprised representatives from post-secondary institutions in British Columbia involved in admissions and/or student services and Indigenous programming/services/education. These examples included the use of an Indigenous portfolio where students articulated their traditional and lived experiences which could be transferred over as credit; allowing students' previous life experiences, cultural knowledge and educational background to be considered as prerequisites for acceptance into the institution; offering domestic tuition rates to American Indigenous students residing in territories adjacent to the Canadian border in one institution or for all American Indigenous at another institution; and having a later semester start date at a particular campus to accommodate hunting season which was important to Indigenous families living in the surrounding rural communities and

who were largely living at a subsistence level. In the last case, the semester was not compressed and lasted longer than the usual end semester dates in other institutions, but still ended in time for students to transfer to other institutions with the usual fall start dates if they chose to (McKeown et al., 2018). Pidgeon (2016) suggested similar measures to increase post-secondary accessibility to Indigenous students generally.

Other alternative admissions approaches. In the United States, universities are considering and implementing different initiatives to increase the diversity of their student bodies as part of affirmative action initiatives. Most of these approaches are not specifically aimed at Indigenous people in the United States, but this group would be one of the target groups for these initiatives. These approaches include:

- a) Selected American universities have implemented tuition waivers and scholarships for Native Americans (Centennial School District 12, 2021);
- b) Making standardized tests such as the Scholastic Assessment Test (SAT) or American College Testing Assessment (ACT) optional (Schmitt et al., 2009);
- c) Eliminating the requirement for SAT subject tests (formerly known as SAT II exams) and covering tuition and fees for undergraduates whose families earn less than \$60,000 per year (Keller & Hoover, 2009).

American universities are also looking at initiatives that begin working with minority students in the high school grades or earlier to prepare them for successful admissions and completion of a college or university education. Bial & Rodriguez (2007) identified several programs in the United States that target support for minority, Native American or low-income students who are achieving high academic grades by

providing connections, support or a pool of qualified applicants for colleges and universities:

- a) A Better Chance identifies students in grades six to eleven with strong academic and leadership potential. They are placed in one of 200 selected schools, supported through the college admission process and tuition waivers from affiliated universities;
- b) QuestLeadership works with junior or senior high students during summer camps that focus on science and leadership. Forty students are selected as Quest Scholars and receive support and guidance for five years after the program, including the college admissions process and scholarships by colleges for some students;
- c) The Posse Foundation is a youth leadership development and college access and diversity program. With the assistance of school staff and community-based youth workers, the Foundation identifies public high school seniors in major urban centres who are student leaders. The Foundation develops partnerships with selected colleges and universities that agree to sponsor the program by providing full tuition scholarships for Posse scholars as well as providing support to these scholars once they are on campus in collaboration with the Posse Foundation. The Foundation also has a career program to facilitate transition to the workforce. Posse Foundation Scholars graduate from university at a rate of more than 90 percent;
- d) Bridging and transitional year programs to academically prepare students for university. These may include other supports such as bimonthly meetings,

counselling with the program director, tutoring services, scholarships for tuition, residence and a meal plan. In some cases, students can obtain credits towards their undergraduate degrees.

Other developments in the United States include measuring psychosocial factors and non-cognitive variables as a means of predicting college success and outcomes and placing less emphasis on standardized cognitive ability tests and high school GPAs. Through meta-analysis and large-scale studies, Robbins et al. (2004) and Robbins, Allen, Casillas, Peterson and Le (2006) confirmed that psychosocial factors contributed to predicting college outcomes over and beyond socio economic status, standardized achievement test scores and high school GPAs. These psychosocial factors included achievement motivation, academic goals, institutional commitment, perceived social support, social involvement, academic self-efficacy, general self-concept, academic related skills and contextual influences (institutional selectivity, financial support and institutional size). The scores from these tools can be used in conjunction with academic achievement records to provide admission officers with a more complete picture of the applicant. These tools include:

- a) The Sternberg Triarchic Abilities Test (STAT) and the Rainbow Test which look at analytical, practical and creative intelligences which predict success in college and life (Sternberg, 2004 and 2009);
- b) The Wisdom, Intelligence and Creativity Synthesized (WICS) Test which is an extension of the Sternberg test. The WICS Test was developed by Sternberg on the concept that people may be academically and practically intelligent, but unwise, i.e., lacking the ability to apply intelligence, creativity and knowledge for

the common good by balancing intrapersonal, interpersonal and extra-personal interests over the long and short terms through the infusion of positive ethical values. Adopting this test resulted in admitting applicants who were more qualified, but in a broader way (Sternberg, 2009);

- c) Sedlacek's Non-Cognitive Questionnaire (NCQ) which is widely used as part of admissions processes by universities and scholarship foundations. Sedlacek's views are that although admissions officers are very experienced at selecting the best white males for college, they have little experience selecting potentially successful "non-traditional" students. When non-traditional students are evaluated by the same measures as the majority white male population, issues of equity in evaluation arise. The NCQ considers cultural, environmental and social differences which can be more accurate predictors of persistence and success for students from diverse backgrounds (Bial & Rodriguez, 2007; Noonan, Sedlacek & Veerasamy, 2005; Thomas, Kuncel & Credé, 2007);
- d) The Bial Dale College Adaptability Index (BDI) is designed to identify non-traditional students who excel in a competitive college environment because of their ambition and perseverance but who do not score well in standard assessment tests. The tool aims to isolate the non-cognitive traits that are intuitively identified by the Posse Foundation's staff during its selection process. These traits are leadership and initiative, communication, quality of thinking and negotiation and collaboration skills. Studies to test the tool found that it was successful in predicting three critical outcomes in college: persistence, leadership and the ability to access available resources (Bial & Rodriguez, 2007).

In England, interviews were seen as being important to selecting students who would be successful in accelerated university programs to identify those who could cope with the intensive pace. For students participating in other types of flexible learning programs (e.g., an extended degree program where completion of an undergraduate degree was undertaken part-time, or a work-based program where a work term was included as part of the program), systems to support recognition and accreditation of prior learning were central. Examples of these include:

- Transparent and accessible guidance and processes to assist students with accreditation of prior learning;
- Developing a range of guidance materials for students, staff and employers;
- Working with employers to look at how in-company training could be recognized and accredited and having employers recognize the validity of prior learning;
- Annual review of prior learning systems and guidance to ensure up-to-date and effective policies (Outram, 2011).

Overall, alternative admissions practices have included support during the school years for underrepresented groups of students, bridging and transition year programs, flexible admissions policies, recognition of prior learning and approaches which consider non-cognitive traits important for completion of university education.

Flexible Course Timelines

With respect to flexible course timelines, the literature identifies two main approaches to implementing flexible timelines: flexible entry and/or exit points and flexible pace (accelerated or decelerated). Not as much research has been published on

flexible timelines compared to the other two aspects of flexible learning being investigated.

Flexible Entry and Exit Points. In terms of flexible entry and exit points, one approach at the University of Twente in the Netherlands has been for instructors to provide at least basic information on courses, their content and activities at least two weeks prior to the official start of a course in their online course environments so that students can begin their own planning activities before the course actually begins. Additionally, some instructors use the course management system to extend course dates or offer flexibility in terms of submission dates (De Boer & Collis, 2005). In a study conducted by Cragg (1994, as cited in Ling & Arger, 2002), she found that nurses enrolled in a baccalaureate program saw time shifting or the ability to participate in learning activities at a time convenient for the learner, to be a major advantage of a computer-mediated conference course.

Flexible pace. Somewhat more work has been done in the area of flexible pace. For example, in 2008, Deakin University in Australia implemented a trimester system for its engineering programs which theoretically would have enabled students to complete their undergraduate degrees more quickly. However, in practice, only four courses in the Engineering department were available during the third trimester in 2010 and then only in off-campus mode. With other programs, students who have a “good academic record” may enroll for more than a full-time course load (usually four courses per semester), whereas others can pursue part-time studies to accommodate work, family or other

commitments. Part-time studies extends the usual period for an undergraduate degree with the university setting a maximum time period by which a program must be completed. Options for varying pace within a semester are limited with lecture timetables and due dates for assessments being fixed. Consequently, if students opt to study at a different pace, they might be ahead or behind key dates or miss key learning activities that follow a set class timetable (Palmer, 2011). One disadvantage of flexible pace was that it was seen to decrease motivation and increase procrastination since there is a tendency to defer studies (Bell, Cockburn, McKenzie & Vargo, 2001).

Outram (2011) completed a final evaluation of the Flexible Learning Pathfinder projects in England. Sixty seven percent of students enrolled in an accelerated program were mature students compared to 34% for three-year students. Forty seven percent of accelerated program students were between the ages of 21 and 30, compared to 32% of three-year students. Finally, 47% of two-year students were ethnic minorities, compared to 32% of three-year students.

Students who complete an accelerated program undertake the same amount of study and are expected to achieve the same standard of work compared to a conventional three-year program. Often, those in accelerated programs outperform their peers enrolled in three-year programs and their learning is not “superficial” or less reflective than those in the three-year program. However, during the completion of their accelerated programs, students do encounter inflexibility in curriculum choices, lack of opportunities to vary their pace and “fixed” program administration, such as student records systems that could not support various timeframes associated with flexible learning (Outram, 2011).

Indigenous people and flexible timelines. No specific research has been published on Indigenous concepts of time and how these could relate to and be expressed in post-secondary settings with respect to flexible timelines or other aspects of university life. However, literature exists on how Indigenous concepts of time are different than Western notions. Hall (1983), Mitchell (1984) and Struthers and Peden-McAlpine (2005) have described how Western concepts of time are linear and treat time as a continuum divided into past, present and future. Time is objectified and externalized and hence it can be controlled, managed, wasted, spent or saved. In contrast, Indigenous concepts of time are rhythmic and spatial processes “calling on places and movement toward the here and now, ebbing and flowing, rather than a chronological now” (Struthers & Peden-McAlpine, p. 1271).

Hall (1983) further identifies that concepts of time among cultures can be organized into M-time (monochromic) and P-time (polychromic) orientations with Indigenous cultures belonging to the latter. Orientations to time impact relationships, interactions and organization of daily life. M-time cultures emphasize adherence to time commitments (deadlines and schedules), whereas P-time cultures are more flexible in their time commitments and are highly involved with people and human relationships.

Flexible timelines can make it easier for students to participate in university studies and for Indigenous students, they may be more compatible with Indigenous concepts of time. However, implementation of flexible course timelines in universities can be hampered by organizational structures and processes that are aligned with more traditional timeframes for course deliveries.

Alternative Assessment Practices

Alternative assessment concepts and approaches. The terms measurement, evaluation, assessment and testing are often used interchangeably and have resulted in some confusion about alternative assessment (Berry, 2008; Reeves, 2000). Berry (2008) defines assessment as “conscious and systematic activities used by teachers and students for gathering information, analysing and interpreting it, drawing inferences, making wise decisions, and taking appropriate actions in the service of improving teaching and learning” (p. 6). She clarifies that measurement involves “any procedure that allows us to attach numbers to characteristics of people, objects, etc. according to a set rule” and that test refers to “any systematic procedure for sampling behaviour, skills, knowledge, etc. (p. 7). Reeves (2000) further identifies that although the terms assessment and evaluation are often used interchangeably, assessment focuses on measuring student learning and other aspects such as aptitude or motivation, whereas evaluation focuses on determining the worth and effectiveness of educational programs and products.

Various, but similar, definitions of alternative assessment exist. Berry (2008) defines alternative assessment as “any method that differs from conventional paper-and-pencil tests, most particularly objective tests” (p. 82). Maclellan (2004) states that alternative assessment is characterized as being an alternative to standardized, norm-referenced, multiple choice testing. It is sometimes referred to as authentic assessment, performance assessment, performance-based assessment or productive assessment, although each of these are concerned with a unique focus. For example, authentic assessment is normally interpreted as an approach to alternative assessment which

involves students in real-world tasks. Alternative assessment can be used in conjunction with tests or independently (Berry, 2008).

Assessment in the broadest sense has a long history in the Eastern and Western worlds primarily for selection purposes. In parts of Asia, performance examinations have been used for selecting government officials. In the Western world, assessment replaced a system of patronage and nomination during the development of an industrialist capitalist economy during the nineteenth century. It was thought that a standardized examination system would allow skilled people to be selected from various social and cultural backgrounds. The introduction of assessment into education was originally to ensure fairness. Since this type of formal assessment has an impact on individual's academic options and career, it is labelled a high-stakes assessment system.

Concerns with traditional and high-stakes assessment. High-stakes assessment has faced serious criticism by supporters of alternative assessment. Many have questioned the trustworthiness of exams, including the possibility of arithmetic and marking errors, the misinterpretation of candidates' performances and the possibility of bias built into the exams and also in the preparation process. This results in favouritism towards learners from mainstream or privileged backgrounds, or those with particular learning preferences and styles (Berry, 2008; Craddock & Mathias, 2009; Harlen, 2007; Kohn, 2010).

One criticism is that traditional assessments focus on a narrow range of the learner's cognitive abilities and do not consider other important areas such as achievement, attitude or other non-cognitive attributes. This is also true of online

learning environments where traditional assessments are unlikely to show the complex outcomes of student-centred online learning environments which are very different from dominant teacher-centred instructional paradigms (Reeves, 2000).

Other critics state that students are often “taught to the test” where rote learning is often required or the main pedagogy. This type of learning is difficult to retain over time, places great pressure on teachers and students, reduces the quality of teaching, influences students’ approaches to learning, and dampens their initiative and creativity.

Instructional practices may focus on the retention of knowledge rather than on reasoning and thinking skills if the examination targets knowledge retention (Berry, 2008).

Equity considerations in assessment. Crossouard (2010) advocates for looking beyond the technical, procedural and cognitive aspects of assessment, stating that assessment can be viewed in a more complex way as being a part of generative social practice which is situated, relational and involves identity formation processes “through participation in communities of practice, activity systems or discursive formations.” Consequently, social and power relations are present and thus, “critical engagement with the norms of the ‘hidden curriculum’” are necessary for a more diverse student body (p. 255). Similarly, Klenowski (2014) states that although there is a place for testing for summative purposes, alternative assessment practices should be included for improved learning outcomes for Indigenous students in Australia and that assessment data should not be used for other purposes such as tracking, streaming, diagnostic purposes or planning in schools. Fairness in assessment requires instructors to consider the social contexts of assessment and conditions that precede an assessment such as access and

resources of students. Students from different cultures, backgrounds and social circumstances bring different qualities and experiences to the classroom and treating students “all the same” (p. 449) demonstrates a limited understanding of the concept of validity. Instructors should ensure that the assessments they design are suitable for the purpose and that they enhance teaching and learning (Gipps, 1994 as cited in Klenowski, 2014).

Approaches to Assessment. Berry (2008) outlines three main approaches to assessment which have been influenced by different learning concepts and paradigms:

- *Assessment of Learning (AoL)* – which is associated with behaviourist views of learning and seeks to determine whether learners have met set requirements. The learner’s performance is compared to predetermined learning targets and places a major focus on the product of learning. Formal tests and examinations are in line with this philosophy of assessment.
- *Assessment for Learning (AfL)* – which is associated with constructivist views of learning. More emphasis is placed on the process of learning. This type of assessment seeks to understand how the learner learns and what the learner can or cannot do in an effort to help the learner learn. Most forms of alternative assessments, such as portfolios, projects or learning journals lend themselves to this approach to assessment.
- *Assessment as Learning (AaL)* – is associated with cognitive approaches to learning and metacognition. AaL seeks to enable learners to become autonomous learners. Learners are aware of what is required and expected of

them so they can monitor and assess their own learning during the learning process. The learner plays an active role in assessment and with the information gained through assessment, they can regulate their learning to meet set goals.

Similarly, others have viewed assessments as being for formative purposes to improve learning, teaching and to foster life-long learning, or for summative purposes to grade achievement for academic progression or certification (Harlen, 2007; Craddock & Mathias, 2009). The need to enhance assessment in online learning environments is also being driven by industry requirements that graduates and employees possess higher level outcomes such as problem-solving skills and an attitude of lifelong learning, and not just knowledge and skills that are decontextualized and disconnected from real life applications (Reeves, 2000). Overall, alternative assessment is characterized by three distinguishing features:

- 1) It is situated in the classroom with teachers making decisions on the measures to be used;
- 2) It is based on a constructivist view of learning where the student, the text and the context all impact learning outcomes;
- 3) It is predicated on the perspective that learning processes are just as important, if not more important, than the results of learning (Janisch, Liu & Akrofi, 2007).

Alternative assessment strategies. In broad terms, alternative assessment strategies include product-based (e.g., research papers or reports) and performance-based

(e.g., presentations, demonstrations) assessments. Several types of alternative assessment strategies exist:

- *Self and peer assessment* – which require students to reflect on their own learning and identify their strategies to improve it. Through this approach, students can develop metacognitive abilities including monitoring their own learning, developing the skill to evaluate their own and their peers' work and making decisions on how to improve their work;
- *Portfolios* – a purposeful and integrated collection of student work which demonstrates effort, proficiency or progress. These can include a range of work such as writing samples, lab reports or reflective journal paragraphs.
- *Learning journals* – which are a personal and unstructured form of reflective writing undertaken by the student;
- *Concept maps* – graphical representations of students' understandings of the relationships between and among important concepts encountered during the learning process. These can also serve as a meta-learning strategy that can help students learn how to learn;
- *Learning contracts* – which are written agreements between the student and the teacher concerning what the student will learn and how this will be assessed;
- *Projects* – which usually require learners to complete an enquiry process in groups or by themselves on a selected topic which would involve research, analysis, and the organization and presentation of results;
- *Exhibitions* – products of an in-depth study of a topic;

- *Interview/questioning* – where teachers use interviews to obtain information from the student about their perceptions, opinions, understandings and the learning process;
- *Questioning* – which at the lower level, is used so that students can recall facts or knowledge which have pre-defined answers but at the higher end, requires students to make use of their own knowledge to actively develop an answer (Berry, 2008).

Benefits of alternative assessment. Proponents of alternative assessment strategies view that these approaches to assessment stimulate students' abilities to create and apply a wide range of knowledge. This promotes higher level thinking and problem-solving skills; motivates students to take responsibility for their learning; provides opportunities for them to reflect on their learning; and enables them to make plans for their learning needs. It also moves them beyond memorization and basic skill development (Berry, 2008; Craddock & Mathias, 2009; Maclellan, 2004). Craddock and Mathias' (2009) study supports some of these perspectives. Given a choice of assessment options, university students reported that formative assessments were less stressful and had a greater impact on facilitating knowledge development and understanding. They also felt that the options better suited their various styles of learning and favourably viewed having assessment options. Assessment activities are also part of the classroom environment and ongoing practices, providing specific feedback to instructors so they can modify their teaching and influence student learning immediately (Janisch et al., 2007).

Through a review and analysis of self-, peer- and co-assessment, Dochy, Segers and Sluijsmans (1999) identified eight positive effects of these assessment methods on students, with students reporting:

- 1) Increased confidence in their ability to perform increased;
- 2) Increased awareness of the quality of their work;
- 3) Enhanced reflection on their own behaviour and/or performance;
- 4) Increased performance on assessment and increased quality of the learning output;
- 5) Developing effective approaches to learning;
- 6) Increased responsibility for their learning;
- 7) Increased satisfaction;
- 8) Improved learning environments.

Challenges in alternative assessment. Others are not as convinced about the suitability of alternative assessment to higher learning environments. Maclellan (2004) reflects that as much as higher education wishes to focus on the diagnosis and support of student learning in assessment, assessment continues to be a high stakes enterprise because of various external factors. There continues to be an environment of fiscal accountability with governments interested in outcomes, learning about assessment and publicizing successes. Preparing graduates for employment and participation in society requires benchmarks through which student entry, progress, qualification and graduation are recorded. Assessment is the primary means through which these types of information are collected.

Some have stated that definitions of alternative assessments must become more precise to include the type of intellectual skill being assessed (e.g., explanation or problem-solving). As well, different stakeholder groups may have differing understandings and approaches to assessment (Baker, 2010; Hargreaves, Earl & Schmidt, 2002).

The validity and reliability of alternate assessment is identified as problematic by other authors. Construct validity refers to the extent to which an assessment instrument measures what it is supposed to and drives accurate inferences from the instrument or the resulting score (Harlen, 2007; Maclellan, 2004). Reliability refers to the extent that the results are consistent or accurate for a particular application.

Because alternative assessment involves complex processes and products, allows for student choice and produces a wide range of different products, variables may be used in making judgements about outcomes for particular tasks or aspects of learning that are not relevant. Further, some forms of alternative assessment, such as performance, can vary in terms of the underlying cognitive processes they reveal. The lack of clear and comprehensive task specification for successful performance is a source of invalidity and difficulty for alternative assessment. In practice, increasing reliability often decreases validity. For example, attempts to increase validity by widening the range of material covered in an assessment (e.g., including more open-ended responses where more judgment is needed in marking), will result in a reduction in reliability as a result of human judgment (Hargreaves et al., 2002; Harlen, 2007; Maclellan, 2004). Further, in schools, other concerns exist regarding whether alternative assessments developed in different locations provide comparable information about student accomplishments and

whether the alternative assessment processes vary in quality. As well, instructors' expectations and judgment may be affected by race and ethnicity whereby potential bias is a risk (Baker, 2010). Although these concerns have been identified for school systems, they could also apply to post-secondary settings.

Gipps (1994, as cited in Buhagiar, 2007) offers an alternative concept of quality assessment that distances itself from the traditional concepts of reliability and validity.

Gipps views that trustworthy assessment includes:

- 1) *Credibility* – which is obtained through regular ongoing assessment in the classroom and the inclusion of parents in the conversation at schools;
- 2) *Transferability* – which requires the assessor to specify the context in which a particular achievement is demonstrated so that others can determine whether this is transferable to other settings;
- 3) *Dependability* – which allows the assessment process to be open to scrutiny and subject to an audit process of quality control;
- 4) *Authenticity* – which depends on the extent to which relevant constructs are fairly and adequately covered by the assessment.

Another challenge associated with alternative assessment is that instructors for classroom or online courses may require special training and technical assistance to develop and implement alternative assessment, especially since instructor knowledge and skill in the design and use of alternative assessment can impact performance in alternative assessment. In online courses, alignment is necessary between learning objectives, content, instructional design (in particular tasks in which students will be engaged), instructor expertise, available technology and assessment strategies.

Disadvantaged students can be disproportionately affected if their instructors lack the experience in teaching and assessing complex tasks since they may have been less exposed to compensatory experiences at home. This applies to alternative assessment not just in post-secondary education settings, but also in schools (Baker, 2010; Hargreaves et al., 2002; Reeves, 2010). Institutional challenges may also exist because the implementation of alternative assessment can be costly in terms of time, resources, professional development and consulting support for instructors (Hargreaves et al., 2002).

Indigenous assessment practices. With respect to Indigenous people in Canada, Pidgeon (2008) observes that the Canadian educational system perpetuates and models the goals and values of Western epistemology and devalues Indigenous epistemologies or habitus (perspectives and inherent beliefs), which are based on the concept that one must understand one's relationship to the world, grounded in one's own geographic location and culture. Consequently, Indigenous ways of knowing, as exemplified by oral tradition and storytelling, are often devalued and the micro- and macro-structures of education such as curriculum, pedagogy and policy hamper the outcomes of Indigenous students. Pidgeon asserts that students' cultural integrity and epistemologies must be respected if Indigenous students are to be retained and be successful in educational institutions. Pidgeon's assertions also have implications for educational assessment. If Indigenous students' knowledge and ways of knowing are to be effectively assessed then assessment methods must also incorporate Indigenous epistemologies and approaches.

Indigenous concepts and applications in assessment are similar to approaches in alternative assessment. Other Indigenous and non-Indigenous academics in Canada have

provided examples of how Indigenous concepts and principles can be applied to assessment. Stonechild and McGowan (2009) advocate for authentic assessment which measures learning that is relevant and meaningful to a student's life experience. They state that Elders and education experts saw the need to incorporate Indigenous spiritual elements into learning and assessment because, from an Indigenous perspective, student motivation to learn is internal and thus a spiritual component. In Indigenous concepts, an individual's performance is tied to relationships with the Circle. Hence, holistic assessment might include participation, change in attitude, demonstration of maturity, ability to cooperate, problem solve and demonstrate a sense of spiritual direction in life. Stonechild and McGowan further tested circular versus linear rubrics in secondary social studies classes in a First Nation community as well as in urban mainstream schools. They also found that students, adults and teachers surveyed in both Indigenous and urban mainstream schools were supportive of holistic assessment approaches which included developmental, physical, emotional and mental aspects of a student. Respondents viewed that holistic assessment approaches would offer several benefits such as producing more Indigenous secondary graduates, providing more remedial information to the system, and being more relevant to teachers, students, parents and systems by offering richer information about a student's learning. Improved assessment would also unearth students' hidden potential, build confidence, result in more well-rounded individuals, validate Indigenous culture, improve policies and programs and provide information for better institutional services for Indigenous students.

Louie, Pratt, Hanson and Ottmann (2017) identify how questions on the University Student Ratings of Instruction (USRI) at the University of Calgary create

expectations of what comprises a “good” education and do not consider whether instruction supports diverse ways of accessing learning or is culturally appropriate. They state that if institutions can normalize Indigenous methods, the status quo of using Western perspective and methods of education as the default can be dismantled. In this way, Indigenous students can become accustomed to having their ways of knowing respected and non-Indigenous students can get used to recognizing, respecting and applying other epistemologies. Louie et al. (2017) provide an example of how to apply the Indigenous principle of negotiation in assessment in university classes through collaboratively assigning grades with students. Students are provided with extensive formative feedback on written assignments. A final grade is withheld until students are given the opportunity to negotiate the merits of their assignment. This process provides students with the opportunity to experience rigor and academic excellence outside of the Western standard. The outcome of the negotiation, the grade, is actually the least important aspect in this pedagogical approach. Reflection on formative feedback on the part of students promotes critical thinking, deep reflection and Indigenization. It relinquishes the instructor’s authoritative power thereby demonstrating the Indigenous democratic value of negotiation and reducing the adversarial components of assessment.

Similarly, at the University of Victoria, Sanford, Williams, Hopper and McGregor (2012) apply Lil’wat principles for learning and teaching to assessment. They identify that in contrast to Euro-American-centric/neoliberal concepts of knowledge and learning where teachers evaluate student learning, Indigenous concepts are used in context to promote and diagnose learning. These instructors apply the Lil’wat principles of *Celhcelh* and *A7xekcal* to assessment. *Celhcelh* suggests that each person is responsible

for his or her own learning, for finding and taking advantage of opportunities to learn and for being open to learn. *A7sckcal* enables learners to develop their own gifts and passions in a holistic, respectful and balanced manner so that they value their own expertise and consider how it can help the entire community rather than just themselves. In some curriculum courses at the University of Victoria that traditionally relied on exams and papers requiring students to read, remember and recall textbook-based material, instructors shifted their assignments to a contract-based grading system. If a series of mandatory assignments (engaging in discussions, annotating scholarly work, completing personal blogs on course experiences and participating in field experiences) were completed to a professional level, students would receive a B+ grade. All assignments had detailed criteria and examples from previous assignments completed by students. To achieve an A grade, students had to complete a proposal template for an extension assignment that would contribute to learning of peers and themselves. This shift created an expanded curriculum where students proposed assignments and negotiated parameters with the instructor based on course materials. Students then worked on these assignments investing in their own passions (*Celhcelh*) and created something that would benefit their peers in current and future classes (*A7xekcal*). Ideas for extensions drew from a wide range of experiences such as curriculum resources, YouTube videos on course content, piloted assessment strategies in local schools, field trips, inquiry projects and workshops. Even when assignments were passed, students indicated they intended on editing them based on instructor feedback before uploading them to their electronic portfolios.

This chapter provided a review of the literature on flexible learning with particular attention to flexible admissions policies and approaches, flexible timelines and

alternative assessment. Where available, Indigenous approaches in these areas have also been included. In the next chapter, I describe the methodology used to answer my research questions:

- 1) What successful approaches and strategies is UNB implementing in the areas of alternative admissions, flexible timelines and assessment in comparison to First Nation University and initiatives outlined in the literature to further flexible learning for Indigenous students?
- 2) What potential improvements can UNB consider in light of successful strategies being implemented by other universities?

Chapter 4: Methodology

This research employed a qualitative approach to identifying practices employed by FNU and UNB in the areas of admissions, flexible course timelines, alternative assessment practices, the critical factors for their successful implementation at these universities and the potential improvements UNB could implement to its approach and implementation in these three areas. The approach adopted is the pragmatic, utilization focused evaluation approach advocated by Michael Quinn Patton (1997, 2002). Patton advances that a study can be undertaken without placing it within a specific theoretical framework and states that in “real-world practice, methods can be separated from the epistemology out of which they have emerged” (2002, p. 136). In this way, research questions can be explored with a focus on six key questions:

- Who is the research for?
- What do we need to find out?
- Why do we want to find that out?
- When will the findings be needed?
- Where should we gather the information?
- How will the results be used?

Using this approach, researchers, and most commonly evaluators, acknowledge and utilize both quantitative and qualitative paradigms with neither paradigm being intrinsically better. Even though the paradigmatic differences between the two approaches are quite fundamental, these paradigms represent alternatives that can be chosen with both containing options for primary stakeholders and information users. Methodological issues consequently become issues of strategy, rather than morals.

Evaluators use a large repertoire of available research methods and techniques on a variety of problems, starting from a research design that will yield relevant, rigorous, understandable and useful results that are valid, reliable and believable. The evaluator works with intended users to include any and all data that will help to shed light on the research/evaluation questions taking into consideration the constraints of resources and time. This approach recognizes that various methods are appropriate for different situations and purposes (Cresswell, 2009; Patton, 1997).

This research employed a qualitative approach because it yielded the type of nuanced information and rich data that provides a better understanding of the landscape and dynamics which influence aspects of flexible learning at the university level as these pertain to Indigenous students. Secondly, it was a more feasible approach given the resources available to conduct the study.

Cresswell (2009) and McMillan (2012) identify a number of characteristics of qualitative research. First, research is carried out as it occurs in a natural setting in specific contexts. The researcher is also central to data collection and collects data directly from multiple sources such as interviews, focus groups, documents and observation. The research is process oriented and focuses on why and how behaviours occur and the design evolves as the research progresses. Narratives provide in-depth information and understandings of contexts and behaviours with the focus of the data being on participants' understanding and meanings. Data analysis involves inductive analysis where generalizations are formed from the analysis and synthesis of the data. Meanings are socially constructed with knowledge being based on social interactions and experiences with others. The researcher's interpretation cannot be separated from the

researcher's own background and contexts and readers or participants may have their own interpretations, yielding multiple views of the issue. The research attempts to develop a complex, holistic picture of the issue being studied involving multiple perspectives and various factors involved in a situation.

A qualitative approach enabled me to gather information on successful examples and practices currently being used by the University of New Brunswick and First Nations University with respect to flexible learning with Indigenous students. Through qualitative data analysis, emergent themes common to their implementation were identified. As well, the qualitative nature of the information provided a more complete picture of factors influencing flexible learning with Indigenous students. This type of analysis will be useful for the University of New Brunswick or other educational institutions seeking to implement flexible learning approaches with Indigenous students.

Aspects of this research also employed limited participatory approaches in the form of consultation with UNB and MWC. Participatory approaches to research were initially developed because of concerns related to pragmatism, equity and power relations between researchers and subjects in a research process (Cornwall & Jewkes, 1995). In the case of this research, consultation with UNB ensured that the research focus and recommendations would be useful to the institution. Specifically, UNB's input was sought regarding the research questions as well as which post-secondary institutions could be included as part of this study. Consultation with selected faculty and administration members from the institution were also sought for the interpretation of data with respect to the institution, how it approaches flexible learning and Indigenous students in a way that is similar or different to other similar post-secondary institutions in

Canada and potential improvements to its approaches. This increased the likelihood that any recommendations resulting from this research can be practically applied in the institution's context. It also considers institutional priorities and perspectives. This participatory approach is consistent with Patton's utilization-focused evaluations described earlier (1997, 2002).

Selection of Universities

As the institution primarily interested in this research, the University of New Brunswick was one of the sites for investigation. First Nations University was selected as the second site as it is a First Nations-controlled university-college which serves both First Nation and non-First Nation university students. As a First Nations-controlled institution, First Nations University is committed to providing post-secondary education in an environment which affirms First Nation traditions, languages and values. First Nations University is a federated college of the University of Regina. Following is a brief profile of these institutions.

University of New Brunswick. The University of New Brunswick is the oldest English language university in Canada and is located in Fredericton. It was established in 1785 through a petition by seven men to Thomas Carleton who was the Governor and Commander in Chief of the Province of New Brunswick during that time. The petition was to establish a school of Liberal Arts and Sciences to educate the sons of Loyalists as American educational institutions would only be proponents of values and principles contrary to the British Constitution. The Loyalists presenting the petition argued that an

academy of Liberal Arts and Sciences would yield public benefits and conveniences. By 1829, the academy evolved into King's College and in 1859, the act creating the secular, provincial University of New Brunswick was passed. Over the next century and into the 20th century, the University expanded and a second campus was established in Saint John (University of New Brunswick, n.d. a and n.d. b).

In October 2020, the University of New Brunswick had an enrollment of 7,313 full-time undergraduate students and 1,028 full-time graduate students. Part-time enrollment amounted to 578 undergraduate students and 523 graduate students (Association of Atlantic Universities, 2020).

In recent years and in response to the TRC's Calls to Action, UNB established a Truth and Reconciliation Task Force in 2016 and several initiatives to further Indigenization of the institution including a *TRC Strategic Action Plan* (2018). The first two priorities of the *TRC Strategic Action Plan* were to establish an Indigenous Advisory Council and the Piluwitahasuwin (Assistant Vice-President, Indigenous Engagement). Piluwitahasuwin was hired in fall 2018 to assist with implementation of the Plan. Piluwitahasuwin reports to the President's Office. Additional priorities of the *TRC Strategic Action Plan* are to make Indigenous presence more visible in UNB's physical spaces, expand Indigenous content in curriculum and research activities, increase recruitment of Indigenous students, faculty and staff, remove barriers to access for prospective Indigenous students, improve Indigenous student advising, promote experiential education to Indigenous students and First Nation communities, develop an emerging leaders program for young and potential Indigenous leaders and expand the MWC to become a university-wide centre to extend the impact of MWC's work and the

work of Indigenization. In 2018, plans were to develop details for these priorities with an Indigenous Advisory Council. Since then, an Elders Council was established which provides guidance on education matters related to reconciliation and Indigenization (e.g., treaty curriculum, cultural programming, language, indigenizing space). The Elders council is brought together by Kcicihtuwinut (Knowledge Carrier-in-Residence) and Nikanahpat (MWC Director). UNB has also published *Piluwitahasuwawsuwakon and Your Course* (2018a), a guide to assist faculty and instructors to provide an inclusive and welcoming learning environment for Indigenous students.

The work of reconciliation is identified in the previous President's 2017 *Building a Brighter Future – A Conversation on the State of the University* presentation (Campbell, 2017). The university's current strategic plan, *UNB Toward 2030* (2020), includes an overarching commitment to piluwitahasuwawsuwakon, which means "allowing your thinking to change so that action will follow in a good way toward truth" (p. 3). The plan includes two specific Indigenous-related key actions which are to increase recognition and support for Indigenous research methods and embrace Indigenous knowledges. Other key actions are also relevant for Indigenous peoples and other diverse groups, such as providing every student with an opportunity for experiential learning; creating more inclusive learning environments; supporting the holistic and transformational development of students in all learning environments; increasing the participation of under-represented groups in leadership roles across UNB; further developing a human resource strategy that enables our people to realize their full potential; and, fostering a culture of support, recognition and celebration. Equity and diversity were also identified as strategic priorities for the university in the past. UNB

has an *Institutional Equity, Diversity, Inclusion Action plan, 2017-2019* to address identified gaps in the representation of individuals from the four designated groups (women, Indigenous peoples, persons with disabilities, and members of visible minorities) among its Canada Research Chairs. Recruitment of students from under-represented groups, including Indigenous students, was identified as a strategic priority in the university's 2011-2016 Strategic Plan. An organizational review of the institution's recruitment in 2014 emphasized international student recruitment to address shrinking first year enrollments (Deloitte, 2014). UNB's strategic plan also includes a key action to "provide faculty support in fostering the development of innovative learning and teaching pedagogies" (p. 3).

Both faculty and sessional instructors have collective agreements with the university which protect academic freedom, including the right to choose teaching methods, and intellectual property rights for materials and work created by an individual (University of New Brunswick, 2016a and 2016b) which impact aspects of flexible learning delivery and alternative assessment.

First Nations University. First Nations University of Canada (FNU) is one of three federated colleges of the University of Regina (the other two being Campion and Luther colleges). As a federated college, FNU is legally and financially independent but is academically integrated with the University of Regina and must adhere to University of Regina Senate By-Laws for academic standards (University of Regina, 1977). FNU was established in 1976 through a federation agreement between the University of Regina and the Federation of Sovereign Indigenous Nations (formerly the Federation of

Saskatchewan Indian Nations) which represents 74 First Nations in the province. The agreement established the Saskatchewan Indian Federated College as an independently administered university college with a mission to serve the academic, cultural and spiritual needs of First Nations students. The name of the institution was officially changed to First Nations University of Canada in 2003. The university offers programs and services on three campuses – Regina, Saskatoon and Prince Albert (Northern Campus) (First Nations University, 2020). As a federated college, FNU students are considered to be students of the University of Regina, have access to services and amenities of the university and are granted degrees from the University of Regina (University of Regina, 1977). FNU must abide by regulations established by the University of Regina Senate. It has been a member of the Association of Universities and Colleges of Canada (AUCC) since 1994 (First Nations University, 2020).

The University of Regina maintains enrollment statistics for the main institution as well as for its three federated colleges (see Table 2).

Table 2 - Enrollment Statistics for University of Regina, September 2020

| Institution | Undergraduate Enrollment | | | Graduate Enrollment | | |
|-----------------|--------------------------|------------------|--------------|---------------------|------------------|--------------|
| | <i>Full-time</i> | <i>Part-time</i> | <i>Total</i> | <i>Full-time</i> | <i>Part-time</i> | <i>Total</i> |
| Campion College | 698 | 104 | 802 | | | |
| FN Univ. | 1,104 | 176 | 1,280 | | | |
| Luther College | 586 | 105 | 691 | | | |
| U. of Regina | 9,702 | 2,093 | 11,795 | 1,078 | 1,018 | 2,096 |
| Total | 12,090 | 2,478 | 14,568 | 1,078 | 1,018 | 2,096 |

In September 2020, FNU had student enrollments of 1,104 full-time and 176 part-time undergraduate students. FNU also offers some graduate level programs in collaboration with the University of Regina but enrollment levels for these students are not specified for FNU. Rather, they are included in the University of Regina's graduate enrollment statistics which were 1,078 full-time and 1,018 part-time graduate students in September 2020. Overall, the University of Regina has 14,568 full-time and part-time undergraduate students and 2,096 full-time and part-time graduate students (University of Regina, 2020).

FNU has a strategic plan and collective agreements for its faculty and sessional instructors. The strategic plan has goals related to four areas: a) teaching and learning (including objectives related to enhancing the use of Indigenous methodologies and content in the classroom, strengthening Indigenous programming and services and supporting Indigenous research); b) student success (focused on improving student engagement and community building, retention and student services; c) collaboration (within FNU, with the University of Regina and its federated colleges and with external partners such as Indigenous organization, institutions and all levels of government; and d) communication (student recruitment, marketing, internal and external communications (First Nations University, 2019). The collective agreements for faculty and sessional instructors contain several clauses in the policy statement about Academic Freedom which identify that First Nations traditional methods and protocols for research, dissemination of knowledge and instruction are equally as valid as non-Indigenous approaches and that faculty and instructional staff have the right to choose methods which may be consistent with First Nations and non-First Nations approaches. An

additional clause requires them to respect the intellectual property of First Nations peoples and communities (University of Regina Faculty Association, 2017 and 2018). FNU has an Elders Council which supports FNU's faculty, students, staff and First Nations in the revival and reinstitution of First Nation spirituality, knowledge, culture, traditions. They also act as advisors regarding Indigenous knowledge, spiritual practices and protocols as these aspects stabilize First Nations society (First Nations University, 2020a).

As the university with which FNU has its federated relationship, the University of Regina (2020a) also has a strategic plan, *All Our Relations -kahkiyaw kiwâhkômâkaninawak Strategic Plan 2020 -2025*. Indigenous ways of knowing and being are one of the values articulated in the plan. Under the first strategic focus area, Discovery, one of the objectives is excellence in teaching and research including a “commitment to discovering new knowledge through two-eyed seeing, that is the co-learning of Indigenous and western worldview, and through the alignment of research and teaching” (p. 6).

The second strategic focus area is Truth and Reconciliation. The first objective in this focus area includes improving supports for Indigenous students, faculty and staff. The second objective is to provide educational opportunities and experiences across Saskatchewan through strengthened relationships and collaboration with Indigenous communities, organizations, the federated colleges including FNU and flexible learning. Finally, the third objective is to incorporate Indigenous ways of knowing into teaching and research. This objective is actioned through ensuring that students, staff and faculty know about the Truth and Reconciliation Commissions *Calls to Action (2015)*, treaties

and Indigenous history, Indigenous ways of knowing, the Royal Commission on Aboriginal Peoples and the UN Declaration of the Right of Indigenous Peoples and the role they can play in reconciliation. Actions also include support and training for meaningful integration of Indigenous ways of knowing into courses and community outreach; community based and reciprocal research with Indigenous communities; and professional development for units and faculties to indigenize and decolonize pedagogy curricula, policies, procedures and processes. Broadened and reciprocal relationships with Indigenous communities as one of the university's stakeholders, and the creation of equitable, diverse and inclusive environments are identified as objectives for other key focus areas.

University of Regina's strategic plan also contains specific actions related to flexible learning. One of the actions identified under the objective of Excellence in Teaching and Research under the Discovery strategic priority is the enhancement of "supportive technologies for research and teaching." Under the second objective of Student Success, actions are to "strengthen on- and off-campus supports for enhancements to teaching..." and "evaluate distance and distributed learning opportunities and technologies to enhance flexible learning options for students" (p. 6). This third objective is repeated as an objective in the second strategic focus area of Truth and Reconciliation.

The University of Regina also has an Indigenous Advisory Circle (IAC) comprised of Indigenous staff and faculty volunteers from the University of Regina and its three federated colleges. The IAC provides guidance to the University of Regina's Office of the President. The IAC receives a modest budget from the Office of the

President to further short-term Indigenization projects. The fund supplements funding from core department/faculty/unit funding for Indigenization. Projects receiving funding must align with at least one of the IAC's priority actions areas — governance and administration, academic Indigenization, indigenous research, student support and community engagement. The maximum amount of funds granted for any project is \$3,000 (Indigenous Advisory Circle, 2017; University of Regina, n.d.).

The university has an Executive Lead – Indigenization position which reports to the President. It has published *100 ways to Indigenize and Decolonize Academic Programs and Courses* (Pete, n.d.) as a resource for staff, faculty and instructors. The University has also published other documents related to the TRC's Calls to Action – *Peyak aski kikawinaw — Together We are Stronger*, the university's statement of commitment in response to the TRC and an accompanying guide to implementing the TRC's Calls to Action at the university (University of Regina, 2018 and 2018a).

The University of Regina's collective agreement for full-time and part-time academic faculty protects academic freedom and intellectual property of faculty. However, there is no mention of the protection of Indigenous knowledge or research approaches (University of Regina Faculty Association, 2017a).

Data Collection

Patton (2002) identifies that snowball sampling is an appropriate method for identifying information-rich key informants. In this method, respondents are asked to assist researchers in identifying other potential respondents. Snowball sampling was used to identify key informants for this research. Internet research on the universities was

undertaken to identify key individuals responsible for admissions, academics and Indigenous initiatives at the institutions. At each institution, initial inquiries were made with at least the Registrar's Office, the Vice President Academic and the Director(s) for Indigenous initiatives who were identified through Internet research. Initial inquiries were made via telephone and/or email to secure interviews and/or to identify additional key respondents at the institution. Additional potential respondents were identified via these initial contacts.

Potential respondents were provided with a letter of information about the research, a consent form and semi-structured interview questionnaire(s) prior to the interview (please see Appendix B for the questionnaires). Key informants completed the interview mostly through in-person or telephone interviews. However, a couple of respondents provided their responses by completing the questionnaires electronically and returning them via email. In these cases, further information or clarifications were requested via email and/or telephone if required. In-person interviews were recorded with the permission of the key informant; verbatim notes were typed for telephone interviews as these were being conducted. The names and positions of individuals were not identified to maintain confidentiality. In total, 20 individuals were approached but nine agreed to be interviewed. Of these nine respondents, four were Indigenous and five were non-Indigenous. Four individuals worked only in administrative/coordination roles whereas the remainder held both teaching and administrative positions.

Secondary research on both universities was also completed through online research of information related to both universities, such as strategic plans, student enrollment, collective agreements for faculty and sessional staff, information related to

university admissions, flexible learning options and Indigenization. This online research was undertaken to obtain historical and contextual information for each university and also served as a source of data. The process of using and navigating the websites also provided information on the experience of looking for information relevant to a prospective Indigenous student applying to the university.

Data Analysis and Interpretation

Data from the interviews and other, secondary sources of information, such as institutional policies and documents, were analyzed using qualitative data analysis procedures consistent with those described by several researchers (Cresswell, 2009; Elliott, 2018; Hays & Singh, 2012; Lichtman, 2011; Maguire & Delahunt, 2017; McMillan, 2012; Patton, 2002). Data was initially themed or indexed using a priori themes corresponding to the questions on the interview guides on alternative admissions, flexible timelines and alternative assessment. Major themes for each topic included existing practices or initiatives and their development history, barriers or challenges, supporting factors, and impacts of practices or initiatives. A second layer of analysis was completed for each of these themes to yield emergent sub-themes (e.g., policy, funding, future developments).

A process of data interpretation was undertaken to look for patterns and relationships by examining historical or current developments, policies or practices occurring at both universities or differing between universities. A synthesis of the data analysis of primary and secondary research was undertaken to shed insight on the research questions being investigated.

As identified by Patton (2002), triangulation of data occurred by comparing the perspectives of respondents from both institutions on their responses to research questions. Interview findings were corroborated by comparing data from the interviews with data and documents from institutional sources or the literature review.

A final layer of data analysis was undertaken to identify similarities, differences, potential improvements to practices being implemented or other considerations for the University of New Brunswick and the MWC in comparison to initiatives at First Nations University and the literature. The results of the data interpretation are included in the Discussion chapter of this thesis.

Data Collection Process and Research Limitations

The data collection process for this thesis was challenging in terms of both locating the appropriate individuals to approach on university websites and securing interviews. Initially, the research was to look at initiatives in alternative admissions, flexible timelines and alternative assessment at UNB and four additional Canadian universities which were most comparable in size and nature to UNB. Approaches were made to individuals at three additional universities (including the University of Regina, First Nations University, and a third institution). In total, 20 individuals were approached and only nine individuals agreed to complete an interview, with seven of these individuals belonging to UNB. All the individuals approached for interviews had responsibilities related to the areas of investigation. In some cases, individuals replied to phone calls or emails but were unwilling to take part in the research as they did not feel they could offer any useful information. Two of these individuals referred me to others

who they felt could provide better information. A quarter of the individuals approached did not reply at all to a phone call or email. The lack of response from other institutions and the level of effort needed to undertake data collection required a rethinking of the proposed methodology and the research was refocused on UNB, FNU and the University of Regina since individuals at these institutions had responded.

The unbalanced volume of data available from the two institutions who participated in the research and the absence of data from other universities is one of the limitations of this research. Data from additional institutions and a broader range of respondents would provide better insight into key factors and challenges across universities with respect to innovative initiatives in alternative admissions, flexible timelines and alternative assessment.

The scope of the research requested by MWC was also quite broad. Consequently, only a broad overview of the literature and a general investigation into the areas of interest were possible within the scope of this research. Further research into each area would be required to obtain a better understanding of factors involved in providing innovative approaches related to alternative admissions, flexible timelines and alternative assessment.

The research would have benefitted from greater involvement of Indigenous faculty and peoples through all stages of the process to respect the process of Indigenous collaboration and *piluwitahasuwawsuwakon*. While I was able to obtain some input from Indigenous faculty or staff, practical considerations prevented me from being able to obtain as much input as I would have liked from these groups of individuals and from Indigenous students. Consequently, the discussion and recommendations put forward in

this thesis offer a beginning point and a vehicle for further collaborative discussions between UNB and its Indigenous Councils, faculty and staff on how to improve flexible learning for Indigenous students.

Chapter 5: Findings

Findings contained in this chapter are organized according to the three main topic areas of alternative admissions, flexible timelines and alternative assessments. General information is provided about initiatives at each university as well as specific information about initiatives aimed at Indigenous students. Data is compiled from interviews completed for the research as well as online secondary research on the universities' websites. More data from the University of New Brunswick is available as more interviews could be completed at this institution compared to the University of Regina and First Nations University.

Alternative Admissions

First Nations University and the University of Regina.

Websites. The University of Regina website provides easily visible links to First Nations University and admissions processes for prospective students researching information in these areas or applying for admissions online. The webpage on programs also provides information on flexible learning options at the university and its federated colleges.

In the Current Students section of the website, there is also a clearly visible link for Indigenous students which leads to information about the Indigenous Student Centre, its support and cultural programs or special events. Examples of support programs for new students include a Student Orientation Program, which provides a one-day orientation to the university, its campus and connection with Elders and new and returning students, and the nitôncipâmin omâ Student Success Program (also known as

the OMA Program) which provides academic support such as priority access to tutors, tailored review sessions for courses, study skills, information on scholarships and bursaries and sessions related to career and employment experience. The Student Success Program is facilitated by a Student Success Facilitator who has access to the students' grades and monitors their progress. Other programs offered through the Centre include cultural, leadership, career or employment related programs and programs of special interest, such as *safeTalk* (a suicide prevention workshop) and an Aboriginal Coaching Module. There are also avenues to register online for programs and events. The website encourages students to self-identify as Indigenous students so that the Centre, the University of Regina and federated colleges can provide them with relevant programs and services.

The First Nations University website provides information on the application and admissions process and the required process through the University of Regina via several access points on its website. It also provides information on student support services, including Elder programs and supports.

Application processes. Respondents indicated that students applying to First Nations University follow the application process for the University of Regina. Generally, students applying to undergraduate programs at the University of Regina must submit an online application form, an application fee of \$100 and provide supporting documents such as high school transcripts. Several admissions processes exist for other categories of students.

Mature students who have been out of school for more than two years and are at least 21 years of age may apply by submitting the Application for Undergraduate Program Admission form, a \$100 application fee, high school transcripts if the individual has attended high school within the last five years, any available transcripts from post-secondary institutions and a personal statement outlining their goals. Individual faculties may set additional criteria. For example, the Faculty of Arts requires that students have completed no more than 15 credit hours at a post-secondary institution whereas the Faculty of Education requires no more than 24 credit hours at a post-secondary institution. Other faculties such as the Faculty of Business, Engineering and Applied Sciences or Nursing require students to gain entry through another Faculty and to complete pre-requisite courses successfully before transferring into these faculties (University of Regina, 2021).

Individuals who have completed home-based learning may apply to selected Faculties at the University of Regina. They must complete the Application to Undergraduate Program Admission form, submit the \$100 application fee, complete a Home Based Learner Profile which identifies them as a home based learner. They must also provide evidence of successful completion at specified standards of the SAT and of courses at the high school, post-secondary, approved advanced placement courses or subject SATs (University of Regina, 2021).

Respondents stated that the University of Regina, and consequently First Nations University which is a federated college, does not have any alternative admissions processes for Indigenous students with the exception of a deferral plan for application fees to a later date if students are applying for post-secondary education funds through

their bands. However, the Saskatchewan Collaborative Bachelor of Science in Nursing (SCBScN) has designated 53 out of the 354 first year seats for Indigenous students who meet the admission requirements and self-declare as an Indigenous person. The program is offered in collaboration with Saskatchewan Polytechnic (Saskatchewan Polytechnic and University of Regina, 2021).

IATEC Program. Through the Centre for Continuing Education (CCE), the University of Regina offers an eight-month Indigenous Access and Transition Education Certificate (IATEC) program. The program runs from September through to the following April each year. It prepares students for post-secondary education by focusing on students' current skills, abilities and student support while they are earning transferable university credits. The program is open to Indigenous, non-Indigenous and mature students and they progress through the program as a cohort. It includes First Nations teachings and perspectives to support personal and emotional growth. Courses offered include Mathematics I and II; Reading and Writing 1; Introduction to English - Critical Reading and Writing I; Introduction to Indigenous Higher Learning; Introduction to Traditional Self-Healing; a choice between an introductory course on Indigenous Studies or on Indigenous Health Studies; and a choice between a course in Human Biology or Introductory Chemistry. The biology course is an introductory level course with human examples and is not intended for students majoring in biology. The chemistry course serves as an equivalent to high school biology and chemistry courses). (First Nations University, 2021).

Respondents stated that the IATEC program was developed because of a gap that resulted after the Northern Health Sciences Program ended. This health program was funded by the provincial government and was designed to transition individuals into nursing. Key individuals at First Nations University undertook some research to learn from this initiative as well as transition programs for African Americans in the United States. The majority of individuals attending the health transition program were mature students who could be admitted without high school diplomas if they obtained an Adult Basic Education qualification. However, the courses in the Adult Basic Education program were not always what was needed for various degree programs. Consequently, First Nations University created a transition program which focused on mathematics, sciences, courses to prepare students for university life (e.g., financial literacy, study skills, etc.) and self-healing so that students could focus on their personal situations (e.g., intergenerational trauma from residential schools or situations they were facing at home or in the community as many students are single parents). The courses are grounded in Indigenous knowledge; Elders and ceremony are integrated into the program.

The IATEC courses offer students “quick successes” as courses are usually offered sequentially. However, a course can also be offered in different ways if it is community based, depending on what the community needs. The program gives students a chance to build confidence and provides them with a short-term credential that gives them a boost to transfer into faculties and programs such as Nursing or Education. It also offers them a university certificate upon completion if they opt to pursue employment or other forms of education as it provides skills such as literacy and post-secondary readiness. Statistics on certificate graduates indicate that the program offers them more

access to post-secondary education, better transition outcomes and greater employment success. As an example, one graduate was working in the university library and became interested in pursuing a library science degree.

The program faces funding challenges as it operates with a limited budget. However, the program is seen as being very important to respondents for increased post-secondary access for Indigenous people.

University of New Brunswick.

Website. The University of New Brunswick website provides information for prospective students on admissions processes and an option to apply online. It also provides easily located information on student support services. Information on flexible and online learning options are available on the College of Extended Learning's website which is accessed through a link on the Academics section of the university website. However, information specifically for Indigenous students or access to the webpage of the MWC in Fredericton are absent or more difficult to find. For example, a link to the MWC can only be located by conducting a search for the Mi'kmaq-Wolastoqey Centre, requiring prior knowledge of the Centre. News announcements related to Indigenous events or initiatives occasionally include a link to the MWC website. Once on the MWC website, the site contains easily located links to academic, support, cultural and career or employment related programs available to Indigenous students. Information on Indigenous access options for the nursing and law programs are found by searching through these respective faculty websites. The Faculty of Nursing includes this information in a section for newly accepted nursing students rather than in the admissions

section. Indigenous admission information is located in the Faculty of Law's admission information through links to further webpages.

Application Processes. Similar to First Nations University, the University of New Brunswick offers a University Preparation Program through the College of Extended Learning (College of Extended Learning, n.d.). The program is an online, non-credit preparation program to help individuals set and reach their university admission goals and to develop study skills. The program offers academic advising to assist students to pick courses and establish their short- and long-term academic goals; high school-equivalent courses required for admissions to several degree programs; initial support to help individuals navigate the university system and find information; and orientation guidance and support. The program targets mature students and those who have a General Education Diploma (GED) who require upgrading to gain admissions into university or college courses and was developed as a result of gap in programming for this group. Previously, the community colleges offered a range of upgrading courses but these were reduced as a result of funding cutbacks. With GED courses, post-secondary institutions have no way to assess the curriculum for a particular subject matter. The courses offered through this program are accepted as high school equivalent courses and facilitate admissions into post-secondary programs. The first course was offered a few years ago and the College currently offers four courses (university preparation courses in biology, chemistry, physics and English, which is equivalent to English 12(2) offered in New Brunswick high schools).

Usually, the Office of the Registrar handles regular undergraduate admissions for students who have received a high school diploma (graduate admissions are administered

through the School of Graduate Studies). Admissions criteria for degree programs are established by faculties and approved by the Senate. The General Education Diploma (GED) is not recognized for admissions as faculties require specific courses for admissions. The goal of the Office of the Registrar is to process admissions as efficiently as possible and provide a decision to the student.

Faculties review applications from mature students who are at least 21 years of age and have been away from studies for five years or more. Preferably, mature students accompany their application with a letter which identifies why they wish to pursue the degree program and attend the University of New Brunswick. This is perceived as being more relevant than reviewing high school transcripts that were obtained five or more years ago as the student may have gained work or other relevant experience in that time. Admission is usually granted if an individual successfully completes specified courses at the university on a part-time basis although individuals with a high school diploma, an adult high school diploma or high school equivalency certificates (GED) may be exempt from this requirement. If specific courses are required by a faculty, evidence of successful completion of these courses through the Department of Post-Secondary Education and Training or the New Brunswick Community College is acceptable. Those who have attended post-secondary institutions but have been away from formal education for at least five years must demonstrate their ability to complete university level courses. In certain cases, qualifying course work is not required before admission into the degree program (University of New Brunswick, 2021).

Individuals who did not attend a public school (e.g., those who are home-schooled or attended a private school that does not follow the curriculum in public schools can

apply by submitting a completed admission application form, the application fee and a letter identifying that the student was home schooled accompanied by a transcript of Grade 11 and 12 courses with the course outline, syllabus, evaluation approach and criteria, and a list of resource materials for each course. For courses requiring specific grades in particular courses, applicants must also submit evidence that they have achieved certain scores on subject SATs, the Grade 12 Adult High School Certification Provincial exam for subjects or courses in an approved Advanced Placement course (University of New Brunswick, 2021).

An option exists on application forms to self-identify as an Indigenous student. However, it has been a challenge to capture this data as it is not mandatory. Students are informed that self-identification will not affect their applications, but they will be informed of programs and supports available to Indigenous students. This information would be passed on to the Mi'kmaq-Wolastoqey Centre. This practice is standard for most institutions to capture data.

The University of New Brunswick's (2020) Strategic Plan *UNB Toward 2030* has a strategic objective to “grow the student population to 15,000, including domestic, international, undergraduate, graduate, online and professional learners” (p. 9). However, nothing specific is in place for Indigenous students. Even so, the University of New Brunswick has alternative admissions processes for Indigenous students in the faculties of Law and Nursing as well as through the Bridging Year Program offered by the Mi'kmaq-Wolastoqey Centre.

Bridging Year Program. The Bridging Year Program was developed through the efforts of an Advisory Committee comprised of Directors of Education from First Nation communities, the Director of the Mi'kmaq-Wolastoqey Centre and an individual from the Registrar's Office. The eight-month Bridging Year program is designed for individuals interested in pursuing post-secondary education who do not have the appropriate pre-requisites for entering degree programs. For example, they may have Level 3 high school courses instead of the Level 1 or 2 courses required for admittance into degree programs. The program offers a combination of mathematics, English, high school and first-year university courses in the faculty of interest to the student. Instructors are encouraged to include cultural components in all courses. Courses are mostly offered on the Fredericton campus. Upon successful completion of the Bridging Year and obtaining the required GPA, students are accepted into the degree program. Students receive degree credits for the university level courses they successfully complete.

The application process for the Bridging Year involves more than reviewing high school grades and courses. Personal and academic letters of recommendation are required as part of the application process. Students are interviewed so that the Bridging Year Coordinator can gauge their level of interest and readiness to pursue university studies and to be part of the university community, the types of support they have in place or still need (e.g., funding or other types of support) and their educational plans. A plan is developed for each student to maximize their chances of success in the program. Cultural and social support is also available and students are encouraged to participate in cultural activities.

As students proceed through the Bridging Year, the Mi'kmaq-Wolastoqey Centre assists them when they face challenges (e.g., family or community challenges, lack of housing, etc.). Other services at the university may become involved if needed, such as Residence or Student Support Services. One respondent explained the value of the Bridging Year program for some Indigenous students:

...How do we get more First Nation students in university? At the secondary level there are some major barriers with reference to graduating from high schools. And if they graduate the majority are at Level 3 which means that at the university level, we have to be more flexible in terms of criteria on whether student will be approved for entry. Knowing that background, the university has to be more flexible in terms of how they accept students. I believe that all students, if they are given the opportunity, can handle the work here with the right cultural and social supports. They may have had difficulties at high school but they might not have had the proper supports for various reasons – they didn't have sufficient resources, didn't establish culturally-based counselling services and so on. They end up with Level 3 and they want to go to university. We have to ensure they get that opportunity.

This perspective was echoed by another respondent:

It's important that students have a place like this where they can apply for university where it's not so overwhelming to go to university as a whole – there are many different changes going on for them. It's important to have an option at

MWC. Lots of students do go through the regular application process, but it's good to have this option.

The Bridging Year program was initiated in 1984 as a result of advocacy by First Nation Education Directors for more First Nation students to attend university. Many Indigenous students experienced problems at high school and the public education system did not provide adequate support so they graduated without having the prerequisites for admission into university and were not prepared for post-secondary education. The Bridging Year was instituted as a way to assist students to transition to post-secondary education. Internal institutional approvals were required to begin and deliver the program. Since its inception, the Bridging Year has gone through adjustments with more courses being offered to keep up with changing prerequisite requirements for admissions.

No formal, written university guidelines exist about the Bridging Year program. For example, the practice has been that students require an average GPA of at least 2.0 to transfer into a degree program upon completion of the Bridging Year but no formal policy or guideline exists on this. Currently, the admission process is supported by the Registrar's office but the Mi'kmaq-Wolastoqey Centre handles applications directly. Students may apply for the Bridging Year program through the Registrar's Office but most students apply directly through the Mi'kmaq-Wolastoqey Centre. When applications are submitted to the Registrar's Office, all student documentation is sent to the Mi'kmaq-Wolastoqey Centre for processing.

Possible future developments for the Bridging Year Program. The Bridging Year program is on hold in 2021 as the Mi'kmaq-Wolastoqey Centre is reviewing the program

and looking into different models of delivery. The Centre will be meeting with Elders, community leaders, education directors and staff, past students of the program and UNB faculty and student support workers. Communities have requested community-based courses. A combination of course delivery in the communities with time on campus may be explored along with avenues to include land-based education as part of the cultural components of the program.

Currently, new Directors or staff involved in the Bridging Year learn about the Bridging Year through talking with previous Directors and staff who were involved with the Bridging Year. As a result of inquiries about the Program for this thesis, discussions were initiated in fall 2018 between the Mi'kmaq-Wolastoqey Centre and the Registrar's Office about formalizing the program. Any formal policy would need to follow the usual procedures and be approved by the University's Senate. Having a formal policy in place would ensure that future Directors at the Mi'kmaq-Wolastoqey Centre would have ready access to the background and guidelines for the Bridging Year Program.

Faculty of Nursing. Nursing schools in Canada are accredited through the Canadian Association of Schools of Nursing and are evaluated every two or five years. In 2007, the Faculty of Nursing at the University of New Brunswick was reviewed and informed that it had insufficient Indigenous content in its program and no active recruitment of Indigenous students. Faculty leadership at the time embraced the opportunity to make improvements and a committee was established which included a former nursing graduate who was Indigenous. A contract position was created to target recruiting with funding through Health Canada's Aboriginal Health Human Resources

Initiative (AAHRI) and subsequently through funding from the New Brunswick Department of Post-Secondary Education, Training and Labour and other initiatives. Currently, the contract position is funded entirely by the faculty and was recently established as a faculty position. Additionally, policies and new courses on Indigenous health were established as part of overall efforts to increase the numbers of Indigenous nursing students.

The Nursing Faculty has three undergraduate admissions avenues for Indigenous students. First, Indigenous students with a GPA of 3.0 or higher can apply through the regular admissions route with other students. Fifty-six seats are available for Indigenous and non-Indigenous students through this stream and students with the highest GPAs will gain entry into the program. It can be easier or harder for Indigenous students to be admitted depending on the applying cohort's average GPA. Usually, a couple of Indigenous students gain admissions through this stream. Second, the Faculty has a few seats designated for Indigenous students who have a GPA of at least 3.0. In 2016, five seats were designated. The minimum GPA requirement is established at this value as those with lower GPAs usually struggle in the program. Third, the Faculty of Nursing collaborates with the Mi'kmaq-Wolastoqey Centre's Bridging Year Program. This enables interested students to increase their GPA to at least 3.0. Students are able to take the courses they require for admission and if they obtain a GPA of 3.0 they are guaranteed admission to the Nursing program. As well, an Indigenous health course was created which is open to Indigenous and non-Indigenous nursing students in all years and is compulsory for Bridging Year students who plan to pursue nursing and those accepted into the program via a designated seat. The course enables Bridging Year and current

Indigenous students to develop peer relationships, build support networks, see role models of senior students in nursing and build a relationship with an Indigenous instructor. It also allows senior year students to demonstrate leadership. As a result of the TRC *Calls to Action*, this course is now mandatory for all nursing students enrolled in the four-year Bachelor of Nursing program and increasing numbers of non-Indigenous students are taking this course. Historically, approximately 10 to 14 Indigenous students are admitted annually into the Nursing Faculty through the three streams of admissions.

Faculty of Law. The Faculty of Law discussed and approved admissions practices and policies aimed at Indigenous students in the 1995/1996 academic year as part of the faculty's ongoing commitment to diversity and inclusion as well as to improve Indigenous people's access to legal education and the legal profession. The policies and practices were first developed by the Admissions Committee and subsequently approved by the Law Faculty Council.

Students who apply under the Indigenous category are assessed separately from those who apply under other discretionary categories intended to promote diversity and inclusion. With these individuals, the Admissions Committee also focuses on the applicant's connection to an Indigenous community and the potential contribution he or she can make to that community. These practices are similar to alternative policies and practices for other discretionary categories such as mature students. For example, students who do not have three years or the equivalent of post-secondary education can demonstrate experience, maturity and outstanding qualities that indicate their ability to successfully complete legal studies.

All applicants are required to write the LSAT test. However, the Admissions Committee is sensitive to the informal advice provided by the Law School Admissions Council regarding cultural bias in the standard LSAT test and reviews the scores of Indigenous students in context with other indicators of academic success. Applicants are also required to submit a minimum of two reference letters in support of their application and connection to their community.

Applicants are assessed on the likelihood of success in completing the program. The Law Faculty does not have any designated seats for Indigenous students. However, a critical element for Indigenous applicants is the existence of preferred admissions and close attention to these files by the Admissions Committee.

Challenges associated with alternative admissions initiatives. Initially, there was some resistance to instituting the Bridging Year Program and alternative admissions initiatives in the Faculty of Nursing at UNB as some individuals in faculties and the university administration did not see the need for a special program for Indigenous students. Faculty members had to be educated about the importance of equity in initiatives. Further education is also taking place about the Truth and Reconciliation Commission and the *Calls to Action*. As one respondent described:

A challenge is having to go through all the different avenues to make changes and explaining the need for it. Things take a long time to change at the university.

The process can sometimes take many steps to introduce or change something. In some instances with the Bridging Year Program, faculties are also very particular on technical issues which hamper program implementation (e.g., the wording on a form),

require additional clarifications or take a long time to send the necessary approvals for a student.

Respondents also identified that better statistics on the Bridging Year in a useful format would be beneficial to implementing the program. There is still strong demand for the program but often, a quarter of applicants cannot pursue the program because they are not able to obtain funding support. Communities support post-secondary studies for their members through the Post-Secondary Student Support Program administered by Indigenous Services Canada. Funding through this program is very limited and transition or part-time programs are not eligible. Some students will enroll in the Bridging Year Program with the assistance of a student loan.

Limited funding was identified as a challenge by FNU with respect to its IATEC program and similar limitations were expressed by the Faculty of Law at UNB. The work of the IATEC program is seen as critical but it operates with a very tight budget. At UNB, faculties have to accomplish more with less funding and less government support. The Law Faculty's ability to attract Indigenous students is hampered by competition from other law schools where dedicated scholarship support and enhanced academic support programs exist (e.g., Dalhousie University has government support to implement its Black and Mi'kmaq initiatives). The Faculty of Law offsets this with flexibility. Indigenous applicants entering the Law Faculty at the University of New Brunswick are provided with the opportunity to attend the Native Law Centre program at the University of Saskatchewan during the summer months prior to attending law classes. This enables them to take a reduced course load during the first year which eases their transition to the study of law. The program in Saskatchewan includes a property law course for which

students receive credit instead of having to take the first-year property law course at University of New Brunswick. Second- and third-year students are also offered opportunities to participate in exchange programs, internships or Letter of Permission studies at law faculties in other universities to further their interest in Indigenous law and studies. Letters of Permission enable students who would like to attend a course at another institution that is not one of the University of New Brunswick's existing partners to take a pre-approved course from the institution and transfer the credit back to their UNB degree.

Respondents at UNB identified that it was important to establish policies related to some of the initiatives taking place so that these would move forward regardless of leadership priorities, consistency of individuals related to initiatives and other factors. In the Nursing faculty these changes include designated seats, Indigenous orientation initiatives prior to community placements, mandatory courses on Indigenous health and curriculum changes to include concepts such as cultural competence and cultural safety.

Increasing admission of Indigenous students also requires UNB to ensure that proper support services are in place for this population. A final challenge identified by some respondents at UNB is that change at the university requires many steps and justifications. Consequently, innovations or modifications move forward at a slow pace. Some changes, such as the development and institution of new programs, must also be approved by the Maritime Provinces Higher Education Council (MPHEC). This approval process is also lengthy. For example, obtaining approvals for a new First Nations Governance Certificate program required five years as several approvals and modifications to the proposal were required.

Supporting factors. Respondents at UNB identified several factors as being important to implementing alternative admissions initiatives. This included respected champions who would advocate for Indigenous students and build relationships with various parties. With both the Bridging Year Program and alternative admissions initiatives at the Faculty of Nursing, these champions were Indigenous individuals. Leadership support is required within the faculty from the Dean or other individuals or committees involved with admissions as well as from the university administration overall from individuals such as the President, the Vice-Presidents and the Registrar. Broad faculty support also helps the institution and implementation of alternative admissions initiatives. The Truth and Reconciliation Commission's *Calls to Action* also provides a national framework to support initiatives.

Strong support from the First Nation Education Directors was also cited as being necessary for the Bridging Year as they refer students to the program. Additionally, support for Indigenous initiatives is needed from the Mi'kmaq-Wolastoqey Centre, instructors and the First Nation communities themselves.

Impacts of alternative admissions initiatives. The IATEC program at FNU has provided more access to post-secondary education for Indigenous students. Individuals have transitioned well into post-secondary programs and have greater employment success as they are better able to get jobs with their certificates. It has also generated more interest in furthering studies among graduates (e.g., pursuing a library science degree after working at the library upon completion of the IATEC program).

The Bridging Year at UNB has resulted in more First Nation students being accepted into faculties and degree programs and there is still demand for the program. Increased student success is being seen but “success” has not yet been clearly defined. To date, success has been seen largely through anecdotal evidence with students identifying that they have a greater feeling of belonging and appreciate the approach which includes Indigenous ways of knowing. Students who began their journey in the Bridging Year have also graduated from various degree programs and are contributing to their communities and to the long-term goal of self-determination for Indigenous peoples.

Indigenous admissions initiatives at UNB Nursing have yielded higher enrollment rates of Indigenous students. Between 1990 and 2007, the nursing program graduated nine Indigenous students over the 17-year period. Between 2008 and 2016, there were 27 Indigenous graduates in an eight-year period. There were also 28 Indigenous students enrolled in various years of the nursing degree program at the time of data collection. Respondents in the Faculty of Law identified that as a result of alternative admissions processes, Indigenous students contribute to more diversity and inclusiveness in the Faculty of Law.

Mindsets on campus are changing overall, especially since the Truth and Reconciliation Commission published its *Calls to Action*. There has been less resistance to incorporating initiatives aimed at making the university more accessible to Indigenous students, including Indigenous pedagogy in classrooms and meeting the needs of First Nations students and communities. Some Indigenous nursing students have been at the top of the class and there have been high rates of graduation. Respondents stated that as faculty members observe these results, attitudes are shifting and they are becoming allies.

With increasing openness at the university to Indigenous students, staff and initiatives, better relationships are being built between the Mi'kmaq-Wolastoqey Centre, Indigenous staff in various faculties and others on campus. As well, communities have reported to staff and faculty that they feel more welcomed at the university. The institution is more interested in Indigenous culture overall and more Indigenous-related events are being made available to the public through the university. This has had an impact on students as more people understand the history and background of Indigenous peoples and students are finding it easier to gain a sense of belonging at the institution.

Flexible Timelines

First Nations University. As a federated college, First Nations University adheres to the standards and regulations established by the University of Regina. This requires that a credit course offer 39 virtual or classroom contact hours. Courses with a laboratory component require additional hours. First Nations University has the flexibility to offer these hours in a variety of ways involving different durations for community-based courses. Courses offered on campuses adhere to the same academic schedules as courses offered throughout the university. This is because of classroom availability and to enable access for students from other federated colleges or the university wishing to attend these courses. However, First Nations University also has a mandate to teach in Indigenous communities. The 39 contact hours for courses can be offered in different ways such as within compressed timelines of one or two weeks or only on evenings or Saturdays for individuals who work.

A fair number of courses are also offered via distance, video conferencing, at three different campuses or in partnership with regional or First Nation colleges. First Nations University works closely with the Flexible Learning department at the University of Regina to offer courses online, over the summer, during evenings or weekends. This flexible approach in community-based courses has been in place since 1976 and is part of First Nations University's mandate to be responsive to northern communities and students' work and family circumstances. First Nations University has a fair amount of latitude in how it offers courses as long as it adheres to the academic standards and requirements established by the University of Regina. As one respondent explained:

First Nations University is a federated college. Its academic policies and practices are regulated by the University of Regina. There is a fair amount of flexibility as long as we adhere to the standards of the University of Regina. Credit courses require 39 contact real [classroom] or virtual hours – in a week, month, two years. It doesn't matter.

Agreements with communities are signed by the University of Regina and the institution is supportive of a community-based approach to post-secondary education. Communities also support their students by often paying for tuition for these programs. First Nations University also has the support of the Federation of Sovereign Indian Nations which helped to found the university. The federal and provincial governments are also supportive of FNU's community-based approach with the federal government providing funding for the institution. FNU is one of only two post-secondary institutions that are federally funded (the other being the Royal Military College). This arrangement has not posed any impediments as long as reports on programming are provided.

Flexible learning and flexibility of timelines has provided access to post-secondary education for thousands of Indigenous people. In the words of a respondent:

The interest in flexible learning corresponds to First Nations University's founding mission – to serve First Nation students and communities and to maximize accessibility. Especially with First Nation and Métis students, the goal is to be responsive to communities....Flexibility has enabled accessibility to post-secondary education for hundreds and thousands of people who would otherwise not have access.... We are now getting close to 4000 alumni.

Access to post-secondary education has long been a challenge for Indigenous people in the province, especially those coming from more remote northern communities. Flexible learning has also provided access to people who are employed in the community or have many ties in the community. Offering education through distance technologies or in their communities has enabled these individuals to obtain certificates and degrees.

University of New Brunswick. The University of New Brunswick offers flexible timelines through initiatives offered by the College of Extended Learning which offers courses delivered at different times (e.g., evenings, weekends). It also offers “open-entry courses” from various faculties which allow learners to progress through the course at their own pace. Open-entry courses can be pursued by UNB undergraduate and graduate students, mature students, program applicants, visiting students, and non-degree students. For full-time students, enrollment for fall courses must take place by October 1st and enrollment for winter courses must take place by February 1st. Students have six months

to complete the course from the time of registration (College of Extended Learning, n.d. b).

The Mi'kmaq-Wolastoqey Centre offers the Wabanaki Bachelor of Education which is a four-year program in elementary education enriched in Wabanaki languages, cultures, knowledges, histories and worldviews. The undergraduate degree program is comprised of 138 credit-hours that includes teaching pedagogy, content for instruction and an 18-week practicum. The practicum may be completed entirely at a public school, or half of the practicum can be completed at a public school with the remaining half completed at a Mi'kmaq or Wolastoqey community school. An option to obtain a Wabanaki Language Certificate is also embedded within the program. This certificate is comprised of four language courses (Mi'kmaq or Wolastoqey language) and a course on language teaching. The program was launched in 2020. Completion of the program qualifies graduates for a New Brunswick Teacher's Certificate 4.

Students are enrolled full-time and move through the program as a cohort of 30 – 35 students. Students take courses in the Fall, Winter and Summer terms. Instructional methods involve a hybrid of live virtual classes and land-based methods. Virtual classes are held in the evenings and if required, in-person classes are held on weekends. A four-day land-based gathering takes place at the start of the program to create a cohesive cohort of students and to begin instruction related to two courses – a) Wabanaki Worldviews and b) Aspects of Mi'kmaq and Wolastoqey Culture. Another land-based course takes place at the end of the program. Larger block courses are also broken down into individual courses so that students can still obtain credit for portions of the course if

there were interruptions in study, rather than having to make up an entire 12 credit hour course.

The structure better accommodates students who are working full-time and courses are grouped so that the program can be completed in four years. Additionally, should a student's studies be interrupted, the course(s) would again be available in two years with the next cohort. Anticipated impacts of the new Wabanaki Bachelor of Education format are that students can complete the program more easily to obtain their Bachelor of Arts or Education degrees. This would meet the need for more First Nation teachers in Indigenous communities as well as in the public school system.

The precursor to the Wabanaki Bachelor of Education program was the First Nation Teacher Education Program (FNTEP) which offered more flexibility in completion timelines and was unique in the timeline options being explored at the university. The Program began in the 1970s as a result of the need for First Nation teachers in First Nation schools and the public education system. It was offered again later as these teachers started to retire and new teachers were needed. Most First Nation teachers in the Maritimes have graduated from this program and many teaching assistants were able to obtain education degrees through community-based FNTEP programs. Prior to the delivery of the Wabanaki Bachelor of Education program, the FNTEP program was offered again as high school graduates were interested in the program. Technology options to facilitate learners in communities, more Indigenous content and Indigenous instructors were also incorporated into the program. Students in the FNTEP program could take a longer time to complete their degree (e.g., five or six years instead of a usual 11-month B. ED program) because of the part-time nature of the course. However, if

students faced an interruption in their studies, courses became unavailable when others had moved on making it difficult for them to complete the program.

As mentioned earlier, the Mi'kmaq-Wolastoqey Centre is also reviewing the Bridging Year program and exploring community-based formats for delivering the Bridging Year program. In part, the review is being undertaken so identify methods which will better meet the needs of students and offer more flexibility with respect to timelines and formats.

Funding was cited as a challenge in offering flexible timelines for Indigenous students. With flexible timelines, students often take a program in a part-time format. However, post-secondary funding support from existing programs such as the Post-Secondary Student Support Program mentioned earlier may not support part-time enrollment in programs, depending on regional or local program guidelines implemented by First Nations in light of limited available funds. As an example of the impact that limited funding has, the Bachelor of Education program usually runs over 10 months and is completed over three terms. Students would have previously completed a bachelor's degree in any field. These courses could also be offered through FNTEP. Some communities could only provide funding for two terms making it difficult for students to complete the program. Funding cuts generally also impact the Faculty of Education's ability to offer courses overall and courses in flexible formats. The faculty previously had 42 full-time faculty members but at the time of this writing it only has 29 faculty members. Although some funding may be available to implement initiatives related to the Truth and Reconciliation Commission's (2015) *Calls to Action*, funding is being

reduced at the same time by the provincial government as it is taking measures to reduce deficits.

However, funding availability and flexibility is in the process of changing as federal and provincial governments act on the Truth and Reconciliation Commission's *Calls to Action*. The federal government committed additional investments of \$320 million over five years beginning in 2019/2020 for the Post-Secondary Student Support Program (PSSSP) and University and College Entrance Preparation Program (UCEPP). This includes new funding to make post-secondary education funding available for Inuit and Métis students. In collaboration with national Indigenous organizations, the federal government is also revising national program guidelines, results frameworks and developing integrated First Nations regional post-secondary education models towards the devolution of First Nations programming in this area. The resulting frameworks may offer more flexibility and options for First Nation communities to better support post-secondary students, including part-time students (Indigenous Services Canada, 2020; Indigenous Services Canada, 2020a; Indigenous Services Canada, 2020b).

Another challenge identified in delivering flexible timeline formats is that students may end up being out of synchronization with the rest of their cohorts. This may happen because of family or other reasons. If only a small number of students require certain courses, it makes it financially difficult to offer these courses. For courses delivered in a flexible format, the College of Extended Learning is involved and it may not approve delivery of courses if costs cannot be recovered. In some cases, courses are offered anyway as the university feels an ethical obligation to ensure that students can complete their program, especially if they are only missing one course to graduate. In

other cases, accommodations are made by having the student complete the course through a project-based or individual study format with individualized supervision and assessment.

Alternative Assessment

First Nations University. First Nations University adheres to the regulations and academic standards established by the University of Regina in terms of assessment, but Indigenous knowledge and epistemology are valued equally to Western pedagogy and epistemology at First Nations University and courses may be assessed differently as they are based on traditional Indigenous knowledge and epistemology. Often courses are experiential, hands-on, land-based and involve ceremonies. Indigenous Elders are often involved in teaching courses (e.g., biology courses include curriculum on traditional medicines and students harvest medicines; English courses include a written as well as an oral component taught by an Elder to incorporate Indigenous oral traditions). As many traditional knowledge elements as possible are incorporated into courses. These aspects affirm the identity of many Indigenous students who have often not been exposed to aspects of their cultures and ceremonies. University of Regina is supportive of incorporating culture and cultural camps for students at First Nations University.

Elders are often reluctant to assign a numerical grade so some course grades may be based on participation with students receiving a pass/fail grade. The Indigenous approaches used by Elders are sometimes difficult to quantify. As one respondent identified, “What grade does one put on interaction with an elder?” However, there are limitations to assigning pass/fail grades. University of Regina regulations stipulate that

75% of work used to determine student grades must be able to be reassessed by an independent examiner. Any deviations from established practices must be approved by the Dean (University of Regina, 2021). First Nations University abides by this regulation.

Other faculties at the University of Regina also use alternative assessment formats. In the Faculty of Fine Arts or in the Journalism program, portfolios are submitted as part of the student assessment process. In Education, students produce journals.

The University of Regina promotes excellence in teaching and learning through its Centre for Teaching and Learning which offered a University Teaching Certificate Program and Summer Institute. These programs are typically aimed at faculty, instructors and post-doctoral fellows who are interested in teaching. The Certificate program ran over a 12-week period and used a combination of in-person and web-based teaching methods. The program covered topics such as facilitation skills, evidence-based learning, assessment strategies, providing effective feedback, inclusive teaching strategies, strategies on how to indigenize curriculum and how to write a teaching philosophy. The activities of the Centre are currently under review and programs have been suspended. The Centre offers a number of resources on its website on areas such as remote teaching, alternative assessment, active learning, hybrid and online delivery and during the pandemic, its focus has been to support instructors with teaching remotely. It has also developed a separate website devoted to remote teaching (Centre for Teaching and Learning, n.d. and n.d.a.).

University of New Brunswick. The University of New Brunswick does not have a policy or regulation on alternative assessment (University of New Brunswick, 2021a). However, different faculties have different kinds of assessments or grading practices. Instructors who employ alternative assessment approaches do so at their own discretion. “Piluwitahasuwawakon and Your Course,” the guide for faculty and instructors to create inclusive environments for Indigenous students, also encourages them to consider alternate forms of assessment. However, ultimately only two kinds of notation are permitted on student transcripts — letter grades and CR/NCR (pass/fail).

Examples of flexible assessment at the University of New Brunswick include those being practiced by Renaissance College or by selected professors in other faculties, by faculty and instructors in Education and instructors teaching out of the Mi’kmaq-Wolastoqey Centre. As an example, some courses involve projects to benefit or involve Indigenous communities, such as organizing an Elders’ day which involves a feast for Elders and profiles of local Elders. Students prepare a summary about their contributions to the project and they are graded based on their input. Instructors attend the community event to observe what students have organized. One professor in Education allowed an Indigenous student to design and create regalia which she wore while delivering a presentation on it for which she was graded. In other courses, students learn about mathematics through projects involving ethno-mathematics, such as learning about geometry or other aspects of mathematics through the construction of a sweatlodge. Other forms of assessment include having students prepare brochures to educate non-Indigenous people about Indigenous history and rights. Some respondents include many different assessment approaches in courses. For example, quizzes, completion of

assignments or modules online, participation and facilitation of class discussions or presentations. However, a letter grade is required for transcripts.

Some respondents reported that more accommodation is needed for Indigenous students as they have different ways of learning and have to use knowledge translation to express themselves or to convey what they have learned. Instructors also provided students who need it with more time to complete assignments, more practice to gain skills or have them write tests in a separate office to minimize distractions if they are registered with the university's Accessibility Centre. Some instructors are also open to providing accommodation to students, even if they are not registered with this Centre.

Respondents identified that further work has to be done to incorporate Indigenous ways of learning with Western approaches to learning. Culturally based assessments for Indigenous students were seen to be more responsive and reflective of what students have learned and wish to do with this knowledge, such as how it would benefit their communities or future endeavours.

Professional development for instructors interested in alternative assessment is available through the university's Centre for Enhanced Teaching and Learning which offers various sessions on interactive discussions, student feedback or strategies to develop student metacognition which are promoted campus wide. The Centre's mandate is to support instructors and faculties to develop an excellent teaching and learning culture at the university, to deliver excellent courses and curricula and to assist instructors to learn about instructional media and technology that can be used in courses (Centre for Enhanced Teaching and Learning, n.d.). Other practices to support flexible assessment by instructors are modelling, team teaching and planning where instructors teach in pairs

and one professor who is more familiar with flexible assessment guides the second professor in implementing this approach.

Respondents indicated that instructors and faculty members in the Faculty of Education undergraduate courses are all using alternative forms of assessment and courses do not involve exams. As a faculty, Education is more likely to subscribe to alternative assessment as faculty and staff are more aware of the benefits of alternative assessment. However, in other faculties, instructors may be primarily interested in research or may not have had as much opportunity to learn about successful practices for teaching as their domains are in areas outside of education.

The challenges of implementing alternative assessment include resistance by both instructors and students who are accustomed to more traditional forms of assessments.

As one respondent explained:

The biggest barrier is the attitude of instructors and students. They are very used to doing things in one way. Students will say, 'What do you mean – we can choose how to do this? Tell me how to do it. What do I have to do to get 90?' If you have them decide or demonstrate that they are successful at meeting criteria and have talked through the criteria, this is an important part of metacognition – thinking about your thinking. It demonstrates what I have learned.

Faculty members have academic freedom in how they teach their courses and alternative assessment approaches cannot be mandated because of the structure of collective agreements. If a whole faculty wishes to pursue this approach, a consensus has to be reached among faculty on this matter. Students sometimes also want to be told what to do and how to obtain good marks. Faculty using alternative assessment need to explain

the rationale and benefits for using this approach, including the importance of metacognition and demonstrating learnings. Students often have to be encouraged to take risks in how they undertake their work. Another challenge is that students also require a grade if they wish to pursue graduate studies or take other courses. Having different grading criteria and marking rubrics are important so that students are aware of where they are on the continuum of grades.

Respondents stated that support from university leadership such as the President, the Vice President (Academic), the Registrar's Office and Deans is important for implementing alternative assessment practices. The impact of alternative assessment was identified as greater student success. Instructors have the opportunity to get to know their students quite well as feedback is provided and students can explain their work providing an opportunity for dialogue.

The Findings chapter summarized the data gathered from key informants, university websites and other information available online about the universities and the three areas of investigation. The next chapter will discuss these findings in the context of the research questions, identifying successful approaches being used at UNB in comparison to those utilized at FNU and the literature. It also proposes recommendations for improvements in the context of Indigenization of universities and improving outcomes for Indigenous students.

Chapter 6: Discussion

This research sought to explore the following questions:

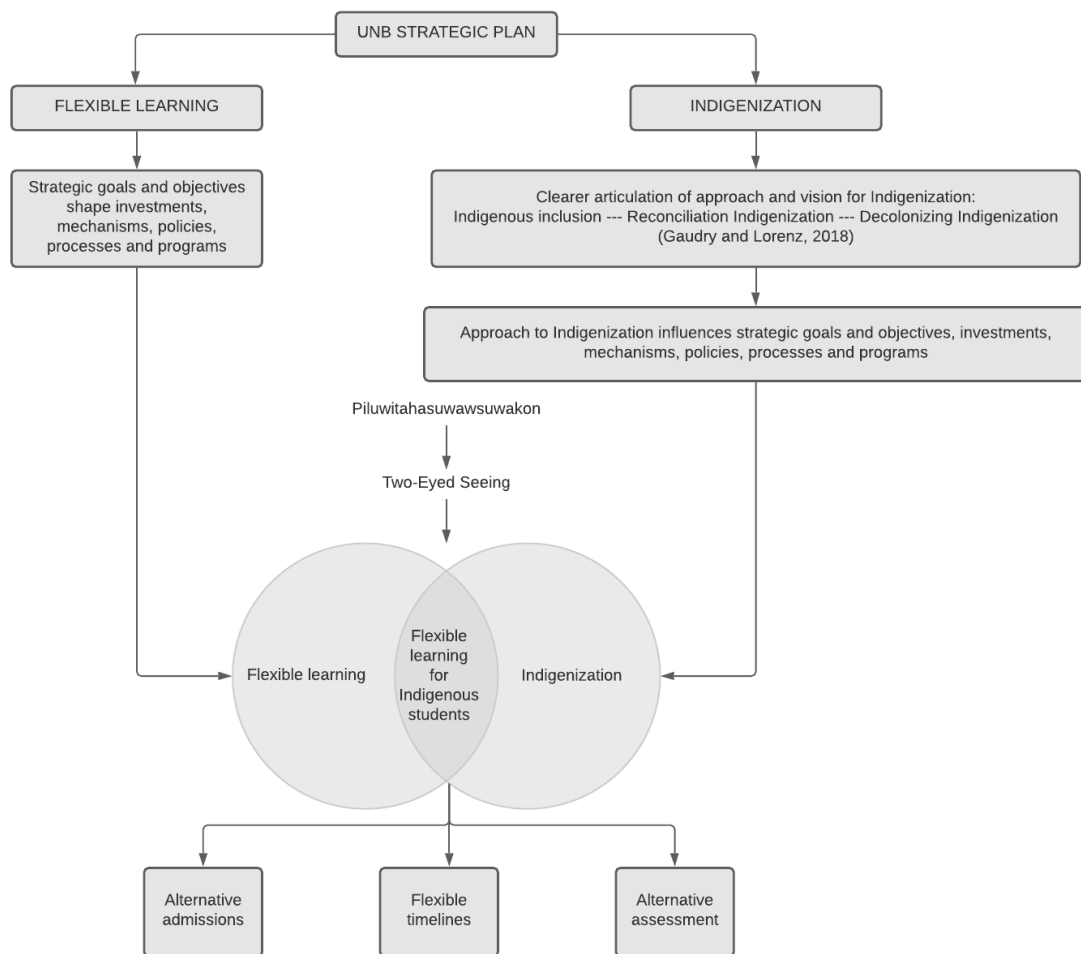
- 1) What successful approaches and strategies is UNB implementing in the areas of alternative admissions, flexible timelines and alternative assessment in comparison to First Nation University and initiatives outlined in the literature to further flexible learning for Indigenous students?
- 2) What potential improvements can UNB consider in light of successful strategies being implemented by other universities?

While the focus of this research is on three particular aspects of flexible learning for Indigenous students (alternative admissions, flexible timelines and alternative assessment), the development and implementation of flexible learning is influenced by the overall leadership and strategic direction of an institution. Indeed, an important theme emerging from the data and from the literature review was the impact of leadership support for initiatives and how structures and processes at universities support or hamper efforts to implement flexible options. A university's approach to Indigenization is also relevant to the experience and outcomes for Indigenous students and faculty. With respect to Indigenization, Gaudry and Lorenz's (2018) spectrum of three visions of Indigenization provides a framework by which universities can clarify their vision and approach to Indigenization. The development of flexible learning for Indigenous students is influenced both by a university's strategic approaches to flexible learning and by its approach to Indigenization.

The first portion of the discussion further elaborates on the intersection between UNB's strategic directions for flexible learning and Indigenization as these relate to

flexible learning for Indigenous students. The remainder of the chapter focuses on alternative admissions, flexible timelines and alternative assessment for Indigenous students at UNB. In undertaking this discussion, UNB’s approach is compared with that of FNU, the University of Regina as the university with which FNU is federated and practices found in the literature. Figure 3 provides a schematic for this discussion.

Figure 3 - UNB's strategic plan's impact on flexible learning for Indigenous students



Clarifying UNB's vision for Indigenization

The strategic plans of both UNB and FNU identify the development of innovative learning and teaching pedagogies as actions. However, they do not specifically mention flexible learning. A key action in UNB's strategic plan is to "provide faculty support in fostering the development of innovative learning and teaching pedagogies." FNU's strategic plan aims to "enhance pedagogical practices for academic programs and delivery options" but it does not specifically identify actions related to flexible learning. A caveat to these observations is that internal documents may contain additional details related to flexible learning which are not available in the public versions of the strategic plans on the universities' respective websites. In contrast, the University of Regina's strategic plan (2020a) contains specific actions related to flexible learning such as enhancing "supportive technologies for research and teaching" and evaluating "distance and distributed learning opportunities and technologies to enhance flexible learning options for students" (p. 6). This provides clearer direction with respect to the development of flexible learning at the institution. Flexible learning strategic goals and objectives impact investments, policies, processes and mechanisms at the respective universities for achieving these objectives. These, in turn, shape program delivery models. FNU's flexible learning delivery is also influenced by the University of Regina's approach to flexible learning since the two institutions collaborate on the delivery of distance learning which rely on technology.

All three universities have made a commitment to Indigenization. An institution's approach to Indigenization impacts its goals and objectives in this area and subsequently, its investments, mechanisms, policies, processes and programs. Both FNU and UNB

respondents identified that support from university leadership is important to furthering efforts in Indigenization and making institutions receptive to Indigenous scholars and students which impacts the recruitment, retention and success of Indigenous students and faculty.

Using Gaudry and Lorenz's (2018) spectrum of Indigenization visions, FNU is implementing a decolonial Indigenization approach. This is evidenced through the incorporation of the First Nations worldview in its strategic plan in various aspects. For example, the vision and strategic goals and objectives are viewed as cyclical rather than linear processes. The Seven Sacred Teachings upheld by many First Nations are the foundational values for the institution and Indigenous knowledge and pedagogies are given prominence. The university's collective agreements for faculty and sessional instructors also state that First Nations traditional methods and protocols for research, dissemination of knowledge and instruction are equally as valid as non-Indigenous approaches and instructors have the option to choose methods which may be consistent with either First Nations or non-First Nations approaches. An additional clause addresses respect for the intellectual property of First Nations peoples and communities (University of Regina Faculty Association, 2017 and 2018). FNU also has administrative autonomy in a federated relationship with the University of Regina.

The University of Regina defines Indigenization as:

The transformation of the existing academy by including Indigenous knowledges, voices, critiques, scholars, students and materials as well as establishment of physical and epistemic spaces that facilitate the ethical stewardship of a plurality of Indigenous knowledges and practices so thoroughly as to constitute an essential

element of the university. It is not limited to Indigenous people, but encompasses all students and faculty, for the benefit of our academic integrity and our social viability (p. 1, Pete, n.d.)

The university's website page on Indigenization refers to the transformation of academic programs to recentre Indigenous content, epistemology and pedagogy through decolonization of academic programs. The University's Indigenous Advisory Circle (IAC) supports the university in its work of Indigenization, and the university provides some funding support to faculty to Indigenize their courses through the Indigenization Fund administered by the IAC (University of Regina, n.d.). According to Gaudry and Lorenz's (2018) spectrum, this too is a decolonizing approach to Indigenization — Indigenous knowledge is protected and knowledge production at the academy will be transformed by its inclusion. The University of Regina also works with FNU in a federated relationship which respects FNU as an independent institution.

UNB has made a commitment to *piluwitahasuwawsuwakon* — “allowing our thinking to change so that action will follow in a good way toward truth.” In its strategic plan, actions are also to increase recognition and support for Indigenous research methods and to embrace Indigenous knowledge. UNB has implemented many of the examples provided in Gaudry and Lorenz's (2018) concept of Reconciliation Indigenization, such as the inclusion of university-wide Indigenous-specific goals in its strategic plans; establishment of an Elders Council; availability of KAIROS Blanket Exercises for faculty, students and staff to raise awareness of Indigenous history (pending pandemic public health advisories); land and territory acknowledgements; and, an intention to establish an Indigenous Advisory Council. It has also implemented aspects

of Gaudry and Lorenz's (2018) concept of Decolonizing Indigenization. For example, First Nations cultures have become more visible on campus through conferences on treaties and campus powwows hosted by MWC and MWC's approach to the Wabanaki Bachelor of Education includes land-based components which support connection to the land and the resurgence of Indigenous approaches to learning. Other faculties are also implementing various initiatives to a greater or lesser extent. As an example, UNB's forestry faculty has also instituted initiatives to bring Indigenous knowledge into all aspects of the faculty such as its physical space, curriculum content, pedagogies and its engagement with Indigenous knowledge and knowledge keepers. The faculty's Truth and Reconciliation Working Group (TRWG) was formally established in 2016 to take leadership on Indigenization in the faculty (University of New Brunswick, n.d. c). As an institution and to encourage further university-wide work in reconciliation and/or decolonization, UNB would benefit from a clearer articulation of its vision for Indigenization. This would provide faculties with clearer direction for the Indigenization approaches they develop to further Indigenization as part of the institution. It would also shape the university's strategic goals and objectives in Indigenization, its investments, mechanisms, policies, processes and programs in this area. De Leeuw, Greenwood and Lindsay (2013) identify that post-secondary institutions should engage in an ongoing critical examination of its initiatives, policies and practices so that they continue to reflect the intentions of Indigenization efforts. In articulating its vision, UNB would implement its commitment to *piluwitahasuwawsuwakon* by working in partnership with the institution's Indigenous Advisory Committee, the Council of Elders and First Nation communities.

Recommendation 1:

UNB develop a clearer articulation of its university-wide approach to Indigenization in collaboration with the institutions Indigenous Advisory Committee, the Council of Elders and First Nations communities to provide practical guidance to faculties and departments.

Mechanisms for furthering Indigenization at UNB

First Nations University has an Elders Council which supports FNU's faculty, staff, students and First Nations by advising on and promoting the revival and reinstitution of Indigenous knowledge, spiritual practices and protocols. The University of Regina has an Indigenous Advisory Circle that provides guidance to the University of Regina's Office of the President. It also ensures that faculty and staff have the supports they need to respectfully engage with Indigenous knowledges, communities and Elders/knowledge keepers as they progress on Indigenizing their work and support for Indigenizing their courses. The University of Regina has an Indigenous Lead for Indigenization who is accountable to the President for university-wide Indigenization efforts and the university has published several statements and resources to further Indigenization work with faculties, Deans and faculty members.

Currently, there are some mechanisms which guide and further the work of Indigenization at UNB. The position of Piluwitahasuwin, Assistant Vice-President of Indigenous Engagement, plays a central role in university-wide work of reconciliation. The university's Truth and Reconciliation (TRC) Task Force was formed in 2016 to

advise, assist and carry-out work related to decolonizing and Indigenizing content and curriculum, policies, processes and physical space. The group is comprised of faculty and staff from different units across both the Fredericton and Saint John campuses who are mostly non-Indigenous. The Council of Elders is brought together by Kcicihtuwinut (Knowledge Carrier-in-Residence) and Nikanahtpat (MWC Director) to provide cultural guidance on matters related to reconciliation and Indigenization and in particular curriculum, cultural programming, MWC's language conference and the Indigenization of space. Individual faculties, such as forestry, may also have committees or working groups furthering Indigenization work.

UNB's TRC Action Plan (2018) identifies that an Indigenous Advisory Council would be established to support the university's work in reconciliation. The plan also identifies additional areas where reconciliation work needs to occur, such as the recruitment of Indigenous students, faculty and staff; removing barriers for prospective students; improving approaches for Indigenous student advising; experiential learning; develop an emerging Indigenous Leaders program and developing MWC to be a university-wide centre. An Indigenous Advisory Council would provide another mechanism by which UNB can further its reconciliation work, as was envisioned in UNB's TRC Action Plan. To my knowledge, the formation of this Council has not yet taken place. However, an Elders Council was established. Further discussion should take place on the terms of reference for these two Councils and how they would complement each other. For example, an Indigenous Advisory Council could include Indigenous faculty and staff, Elders as well as individuals from First Nation communities and organization with expertise on the action areas of the TRC Action Plan, such as

increasing employment of Indigenous staff and faculty, Indigenous student recruitment and transitions to post-secondary school, capacity building needs in First Nation communities, etc. If the Indigenous Advisory Council provides support to the President's Office, Piluwitahasuwin would also be able to rely on their guidance for university-wide Indigenization initiatives. The Indigenous Advisory Council could also work collaboratively with the TRC Task Force and play a role in monitoring progress on Indigenization. The collaborative work between the Indigenous Advisory Council and the TRC Task Force would be a tangible implementation of the *piluwitahasuwawsuwakon* and a Two-Eyed Seeing approach. *Two-Eyed Seeing*, or *Etuaptmumk* in Mi'kmaq, is a guiding principle which was brought forward by Mi'kmaw Elder Albert Marshall in 2004 and refers to learning through the strengths of Indigenous knowledges and ways of knowing from one eye, the strengths of Western knowledges and ways of knowing with the other eye, and using both for the benefit of all peoples (Bartlett, Marshall and Marshall, 2012). The principle is central to Cape Breton University's Integrative Science Program and is being applied in other sectors such as Indigenous health, mental health and natural resource management.

Recommendation 2:

UNB move forward with establishing an Indigenous Advisory Council to guide university-wide Indigenization efforts as planned in its TRC Action Plan. In developing the terms of reference for the Indigenous Advisory Council, attention should be paid to how the work of the Indigenous Advisory Council would

complement the guidance provided by the Elders Council and the work of the university's TRC Task Force.

Collective Agreements. Collective agreements at FNU for faculty and instructors include clauses which validate Indigenous knowledge, pedagogy and intellectual property. There is no requirement for faculty to use Indigenous pedagogy and instructors continue to have a choice in the approaches they employ. However, Indigenous knowledge and pedagogy is equally valued to western pedagogy and approaches.

UNB could consider including similar clauses in its collective agreements and academic standards to validate Indigenous knowledge, pedagogy and intellectual property. This would be in line with the strategic actions in UNB's strategic plan, *Toward 2030* (2020) of "embracing Indigenous knowledges" (p. 6) and "increasing recognition and support for Indigenous research methods" (p. 5). Including these types of clauses would require discussions and negotiations with the bargaining units for faculty and instructors as well as adjustments to the academic regulations by the Senate. This would not mandate faculty to use these approaches. Academic freedom, a central concept to academia, would be protected. However, it would affirm that Indigenous approaches are equally important and complement western approaches. It would also enhance an environment where *Two-Eyed Seeing* can be nurtured.

The Faculty Collective Agreement at UNB (University of New Brunswick, 2016a) stipulates the following with respect to the appointment of new faculty:

In evaluating a candidate for appointment at a proposed rank, the criteria shall be the nature of the academic duties to be performed, the quality and

character of the degrees held, and the record of, and/or potential for, performance of the candidate in dissemination of knowledge, in research, scholarly or creative work, in professional activity and in university or public service. The evaluation shall be objectively made on sound academic grounds in relation to the appropriate standard of the University for the appointment at the proposed rank (Article 22B.14, Collective Agreement between the University of New Brunswick and the Association of University of New Brunswick Teachers, 2016 – 2020, p. 40).

Criteria for promotion of faculty are also in part based on academic and research achievements using criteria in western concepts of education. Similarly, the criteria for the appointment of contract instructional staff considers western, academic qualifications. Consequently, Indigenous knowledge holders and Elders who may not hold western academic qualifications but have earned their standing through Indigenous forms of qualification will face systemic barriers when it comes to being appointed as faculty or instructional staff. This would apply to various disciplines and not just Indigenous culture and language as Indigenous knowledge is found in all spheres of life.

Addressing challenges to recruiting and promoting Indigenous faculty and instructional staff would likely have an impact on alternative admissions, flexible timelines and alternative assessment. In the case of alternative admissions and flexible timelines, Indigenous instructors are more likely to be familiar with the situational contexts and cultures of Indigenous students and communities. They could provide input on strategies to further positive outcomes for Indigenous

students in these two areas both with respect to their own teaching but also by bringing awareness to other non-Indigenous staff and faculty. Especially with respect to instruction and alternative assessment, Indigenous instructors may also be more inclined to adjust conventional approaches to incorporate Indigenous ways of teaching, learning and assessing students thereby increasing the use of Indigenous epistemology and pedagogy at the university. Other universities in Canada, such as Trent University, have addressed this by reviewing faculty appointment and promotion criteria to enable Indigenous knowledge holders and Elders to contribute more fully to the university teaching and research environment (Newhouse, 2012).

Recommendation 3:

UNB consider including clauses in faculty and sessional instructor collective agreements to affirm Indigenous knowledge, pedagogy and intellectual property.

The intersection of Flexible Learning and Indigenization at UNB

Flexible learning for Indigenous students is guided by the intersection of a university's strategic priorities in both flexible learning and Indigenization. Palmer (2011) and Tucker and Morris (2011, 2012) offer a model of flexible learning with five basic categories of flexibility (aspects of time, aspects of content, access/entry requirements, instructional approach/design, aspects of delivery) which are further separated into 19 dimensions. These five categories of flexibility are employed in course deliveries at FNU, the University of Regina and UNB. Courses in all three institutions

are delivered at different times, in different locations (different campuses or in communities) or online. UNB also has open-entry courses offered through the College of Extended Learning where learners progress through the course at their own pace.

In considering flexible learning for Indigenous students, a university's approach to Indigenization would also factor into the design and delivery of flexible learning for this group. FNU offers flexible learning through deliveries in different locations such as different campus locations or in communities, and online through the University of Regina's Centre for Continuing Education. One of the University of Regina's strategic actions appears in both the Discovery (encompassing teaching and research) and the Truth and Reconciliation focus areas. This action is to "evaluate distance and distributed learning opportunities and technologies to enhance flexible learning options." Both the University of Regina's and UNB's strategic actions include engaging with Indigenous knowledges.

Further development and enhancement of flexible learning for Indigenous students at UNB could take place through *piluwitahasuwawsuwakon* and applying the guiding principle of *Etuaptmumk* (Two-Eyed Seeing). Members of the TRC Task Force could play a critical role in the development and delivery of flexible learning for Indigenous students at UNB. The Task Force's members include Deans, faculty members, staff members from various UNB departments such as the Registrar's office and the Harriet Irving Library. The Task Force also includes representatives from the Centre for Enhanced Teaching and Learning (CETL) and the College of Extended Learning (CEL), two departments who play an essential role in the development of flexible learning and in supporting faculty to deliver flexible learning options.

Piluwitahasuwin, the Council of Elders, MWC, Indigenous faculty and First Nation communities could provide Indigenous perspectives and pedagogy in the conversation on flexible learning for Indigenous students. For example, since a strategic action in Indigenization for the university is to embrace Indigenous knowledges, how can faculty members and instructors better incorporate Indigenous knowledge and approaches into curriculum and assessment methods? In designing and delivering courses, what types of support would be appropriate for Indigenous students and how would they obtain these? Would support focus just on academic advising, or also other forms of support such as flexible tutoring and mentoring options, a virtual space for Indigenous learners, or emotional and spiritual support to take into consideration Indigenous holistic approaches and worldviews? Conversations and discovery could also occur on how Indigenous pedagogy can be included into lectures or online delivery. UNB's resource, *Piluwitahasuwawsuwakon and Your Course*, is an excellent foundation document which could be enhanced to include additional information and tips. The resource could also be made available on CETL's website for easier access. An additional resource UNB may wish to explore or make available to faculty is *Pulling Together — A Guide for Indigenization of Post-secondary Institutions* (Antoine, Mason, Mason, Palahicky & Rodriguez de France, 2018). Schiffman (1995), Dyson (2003), McAnany (2009) and Oppenheimer (2010) have also proposed considerations for visual dialect and the design of online interfaces for Indigenous and culturally diverse learners.

Recommendation 4:

UNB further develop flexible learning options for Indigenous students through applying the process of *piluwitahasuwawsuwakon* which would involve members of the TRC Task Force, Piluwitahasuwin, MWC, Elders and members of Indigenous communities or organizations.

Recommendation 5:

Include *Piluwitahasuwawsuwakon and Your Course* as a resource on the CETL website for easier access by faculty looking for avenues to improve their instructional methods.

This discussion so far has focused on the overall institutional environment and strategic direction for implementing flexible learning and Indigenization. The next portions of the discussion will focus on the three specific aspects of flexible learning being investigated.

Alternative Admissions

In the literature review, most initiatives being undertaken by universities in flexible learning were in the area of alternative admissions. In keeping with this trend, UNB and FNU both offer several different avenues to apply to their academic programs. Both UNB and FNU offer a transition year program for students. Upon completion of this program, students then apply to programs using the usual application process. Other

alternative admission approaches at both the University of Regina and UNB are similar and offer avenues for mature students or those who have completed home-based learning.

At UNB, agreements have been made between the Bridging Year program, various faculties and the Registrar's Office to assure Indigenous students a place in degree programs if they successfully complete the Bridging Year Program and obtain the necessary GPA. UNB also has initiatives for alternative admissions for Indigenous students into the Nursing and Law faculties. Overall, UNB currently appears to have more alternative routes to admissions for Indigenous students than First Nation University or the University of Regina. However, this conclusion is arrived at keeping in mind that if additional interviews at the University of Regina could have been obtained, these may have identified additional avenues not publicly advertised on the university's website.

The Bridging and Transition Year programs have yielded good results with respect to furthering post-secondary education for Indigenous students. The transition year initiatives at both institutions, UNB's Bridging Year and faculty-specific initiatives in law and nursing are similar to programs offered by other universities across the country and in the United States as identified through the literature review.

As noted in the literature review, various psychosocial tests are also being used at institutions during the admissions process to predict post-secondary education success in the United States. These approaches have not been used by either FNU or UNB or in Canada generally. However, the alternative application processes at FNU and UNB do consider factors other than a student's GPA. Given that these approaches already yield good results, it would likely not be worthwhile to pursue these options in Canada as

investments to implement them may not yield sufficient returns. Further investigation and a Return on Investment (ROI) analysis would yield more definitive answers on the value of pursuing more systematic psychosocial testing within the Canadian context.

Several opportunities exist to increase admissions of Indigenous students at universities, including UNB. First, as noted earlier in this thesis, the Indigenous population in New Brunswick and Canada is young and growing rapidly.

Second, Indigenous communities are moving towards increased self-determination and self-governance. The legal duty to consult Indigenous peoples and a number of federal legislative acts and initiatives will require Indigenous communities to have more governance and technical capacity in areas such as:

- a) Natural resources management and lands management (First Nations Land Management Act, S.C. 1999, c. 24; the United Nations Declaration on the Rights of Indigenous Peoples Act, S.C. 2021, c. 14);
- b) Child welfare (An Act respect First Nations, Inuit and Métis children, youth and families, S.C. 2019, c. 24);
- c) Education (the 2019 Education Transformation policy framework for First Nations Elementary and Secondary Education which strengthens First Nations control over education through Regional Education Agreements) (Indigenous Services Canada, 2019);
- d) Health (health transformation and the co-development of distinctions-based Indigenous health legislation between Indigenous Services Canada and Indigenous partners (Indigenous Services Canada, 2020c and 2021);

- e) Public administration, taxation and finance (First Nations Fiscal and Statistical Management Act, S.C. 2005, c. 9; First Nations Fiscal Management Act S.C. 2005, c. 9; First Nations Financial Transparency Act, SC 2013, c 7).

First Nations communities and organizations will need Indigenous people with post-secondary qualifications to work in these areas.

Third, the federal government has committed additional investments of \$320 million over five years beginning in 2019/2020 for the Post-Secondary Student Support Program (PSSSP) and University and College Entrance Preparation Program (UCEPP) for First Nations (Indigenous Services Canada, 2018). There is also \$125.5 million over 10 years beginning in 2019/2020 and \$21.8 million ongoing for a new post-secondary education strategy for Inuit (Indigenous Services Canada, 2021a). Furthermore, the federal government has committed \$362 million over 10 years, beginning in 2019/2020 and \$40 million ongoing for a new Métis Nation post-secondary education strategy (Indigenous Services Canada, 2021d). The federal government is also developing post-secondary education models which move towards increased regional control by Indigenous communities (Indigenous Services Canada, 2020a and b). In the past, access to post-secondary education for Indigenous students was hampered by limited funding. These recent program developments mean that more Indigenous students will be able to attend post-secondary institutions.

Fourth, flexible and online learning means that UNB can offer post-secondary education not only to Indigenous students in New Brunswick or Atlantic Canada, but also to those living in other provinces or territories in Canada. This increases the number of

potential Indigenous students considerably. Conversely, it also increases the competition that UNB faces with other universities across the country offering online learning.

The growth potential for Indigenous students at universities is demonstrated in the University of Regina's enrollment of Indigenous students. The university asks students to voluntarily self-declare as First Nations, Métis and Inuit status on admissions applications and data has been collected since the Fall 2003 term. Between Fall 2010 – Fall 2020, the percentage growth of Indigenous students attending the University of Regina was 141.1% from 1,019 students in Fall 2010 to 2,457 students in Fall 2020 (University of Regina, 2020b). While the numbers and increases may not be as large for UNB as there are smaller Indigenous populations in Atlantic Canada compared to Saskatchewan, growth potential still exists.

Increasing educational outcomes of Indigenous high school students. A good quality education will lead to improved preparedness and participation of Indigenous and other students. The context and factors affecting Indigenous education are complex and beyond the scope of this thesis. However, as a post-secondary education institution, UNB has the ability to influence the quality of education for Indigenous students through its education degree programs, research and the Wabanaki Bachelor of Education program. Especially at this time when Indigenous education is under review and initiatives are taking place to enhance Indigenous education in schools both in the public school system and in Indigenous communities, it would be important for UNB to stay informed on these initiatives as well as to participate in venues to improve the quality of education and the transition process for Indigenous students.

Initiatives and collaborations like those undertaken by American universities (e.g., A Better Chance, The Quest Scholars Program and the Posse Foundation's initiatives) to prepare students in the middle and high school levels would also be worth exploring further. Indeed, UNB has already undertaken some initiatives in the area of STEM careers and summer science camp programs in Indigenous communities. However, more tailored approaches for Indigenous students beyond STEM careers could yield beneficial results for Indigenous youth. Other considerations to further these initiatives would also have to be explored such as funding support from provincial or federal education funding initiatives, collaboration with existing Indigenous or other organizations to design and implement programs, etc.

Recommendation 6:

UNB explore avenues to prepare Indigenous students in Indigenous communities and public schools for post-secondary participation and success.

Indigenous recruitment at UNB. A notable difference in UNB's website compared to the websites of the University of Regina and FNU is that information that might be of interest to prospective Indigenous students and stakeholders is difficult to locate. The University of Regina handles admissions for FNU. The University of Regina's website provides a menu tab for Indigenous students on its Home and Admissions pages with links to information on Indigenous admissions and initiatives, services or programs for Indigenous students. This is absent from UNB's website. Initiatives at UNB such as the creation of UNB's Piluwitahasuwin (Assistant VP of

Indigenous Engagement) position, TRC Strategic Plan, the MWC and its work, the Indigenous Nursing Initiative or admissions processes for Indigenous applicants to the Law Faculty are buried and require active investigation into layers of the website as well as advanced knowledge of these areas on the part of a prospective student. Given that reconciliation is a strategic initiative for the institution and there is growth potential for Indigenous student applications, more prominent exposure of these initiatives could serve to build relationships with Indigenous communities and attract Indigenous students from Atlantic Canada and other parts of Canada. Indigenous visibility on UNB's website can convey the message that Indigenous students are an integral and important part of UNB. Not too far away, Ontario is home to 22.4% of Canada's Indigenous population according to the 2016 Census (Statistics Canada, 2016b).

UNB also implements recruitment initiatives and one of its strategic targets is to increase its student population to 15,000. Prospective students are able to meet with a recruiter or attend a virtual event to obtain more information about the university. MWC has a recruiter for Indigenous students. Including the Indigenous Recruiter and Indigenous recruitment into the main Recruitment webpage could yield additional interest and admissions for Indigenous students from other parts of Canada, especially from neighbouring Atlantic provinces, Quebec and Ontario. A recruitment strategy for Indigenous students also needs to take into consideration unique Indigenous trends in the transition to post-secondary education. For example, a study on Indigenous transition to post-secondary education in Ontario found that 79% of respondents were over the age of 25 years and more than 60% had accessed post-secondary studies through a bridging

program or as mature students (Restoule, Mashford-Pringle, Chacaby, Smillie & Brunette, 2013).

Recommendation 7:

UNB make information on Indigenous admissions, initiatives, programs and services more prominent on its website to facilitate relationship building with Indigenous communities and organizations, and to enhance Indigenous recruitment efforts.

Recommendation 8:

UNB include Indigenous recruitment information in its “*Meet with a recruiter*” and “*Attend a virtual event*” webpages.

UNB Statistics on Indigenous Students. Respondents from UNB identified that the Bridging Year program could benefit from better statistics. Improved data collection and statistics for the Bridging Year program with respect to demand, success rates and impacts would be important to provide evidence on the success and impact of the program. Data would educate faculties and Indigenous communities on the benefits of the program so that they will enhance their collaboration with the Bridging Year program and continue supporting and partnering with the program. Ongoing data collection on successes and potential improvements to the program from the perspective of current or former students would also provide information to enhance the program.

Recommendation 9:

MWC implement a systematic approach to obtain and maintain statistics and data on uptake, success, potential improvements and impacts of the Bridging Year.

Tracking and reviewing statistical information regularly on Indigenous enrollment at UNB as the University of Regina does would provide data on whether Indigenous recruitment efforts are succeeding. However, efforts must also be in place to ensure that data is accurate. Restoule et al. (2013) found that there was a need for universities to be very clear about the use of information on Indigenous self-identification. Universities use this information to provide Indigenous students with information on programs and services such as scholarships, student support services or other programs and it **does** not have any impact on admissions. However, some students did not declare their Indigenous identity because of distrust of government and institutions, resulting in inaccurate data on Indigenous enrollment. Nevertheless, tracking Indigenous enrollment at UNB would provide information on where students are coming from, demographics and enrollment numbers to refine Indigenous recruitment strategies.

Recommendation 10:

UNB regularly track and review statistics on Indigenous enrollment so that it can monitor progress on Indigenous recruitment efforts and refine Indigenous recruitment strategies.

Flexible Timelines

Flexible learning and flexible timelines are relevant to today's students who are more diversified (e.g., students from different geographic, international or remote locations, adults who work, etc.). Flexible timelines are also compatible with Indigenous and polychronic concepts of time which favour flexibility in scheduling. People from polychronic cultures also favour strong relationships, consequently opportunities to build community in online deliveries would be beneficial. Some work has been done to identify best practices and innovative approaches to designing online interfaces for Indigenous learners in Australia. The principles for culturally inclusive design for this group could also be explored for Indigenous peoples in Canada (Dyson, 2002; Dyson, 2003; McLoughlin and Oliver, 2000).

Flexible timelines are available with selected courses at both FNU and UNB. Flexibility is offered in terms of when students can take courses (e.g., early morning, evenings, weekends) and pace of the course. Other aspects of flexible learning could be further explored (e.g., pace of learning, time, location and place support, types of support available). The timeframe for the delivery of community-based courses is flexible at FNU, as long as the required hours of instruction are completed. Further investigation into the specifics of how FNU delivers community-based approaches would be beneficial to confirm and compare approaches between the two institutions. The approaches used at both institutions are in line with the main flexible timeline approaches described in the literature – flexible entry and exit points, and accelerated or decelerated pace of learning.

The challenges described by UNB in delivering flexible timeline options are similar to those identified through the literature review. These include financial

sustainability of programs, difficulty for students to receive tuition support for part-time studies, government funding cuts which have impacted the number of faculty and consequently the capacity to deliver courses in alternate formats and the synchronization of courses with cohorts of students.

To ensure that flexible learning at UNB meets the needs of Indigenous learners, their cultures and situations, it would be beneficial for the institution to continue to meet with Indigenous communities and learners to ensure that developments will meet their needs. Flexible learning may be an avenue to make progress in Indigenization, especially if Indigenous concepts of time and community-building are taken into account in the design and development of programs (e.g., flexible pace, building a community of learners online or in-person). As identified earlier in the discussion, members of UNB's Task Force, Indigenous staff and faculty at UNB, Elders and First Nations communities could discuss improvements and new delivery options for Indigenous students. Some courses offered specifically to Indigenous cohorts could offer further flexibility in timelines. Other courses available to the general student population may also benefit from increased flexibility which could be useful not just for Indigenous students, but also for other students.

Recommendation 11:

UNB continue to explore flexible timelines and pace in online and in-person course delivery for Indigenous students through *piluwitahasuwawsuwakon* involving UNB TRC Task Force members and Indigenous faculty, staff, Elders and communities.

Alternative assessment

Alternative assessment approaches at both UNB and FNU are implemented by selected instructors but there are no university policies or requirements related to using alternative assessment even though it has additional learning benefits for all students. Both institutions adhere to the academic standards approved by the UNB and University of Regina Senates respectively. Academic regulations at UNB stipulate that the method of assessment is up to the instructor. Both UNB and FNU offer professional development opportunities for faculty and instructional staff to improve instruction methods, presentations and approaches.

Respondents at UNB indicated that there is still resistance on the part of instructors and students about the use of alternate assessment generally. Although alternative assessment cannot be mandated and may not be appropriate in various courses, the inclusion of language or clauses in the regulations about alternative assessment may encourage faculty and instructors to consider this approach. Currently, the regulations only identify more traditional forms of assessment such as tests and exams. Leadership messaging and support for using alternative assessment generally would also create an environment where its adoption can be cultivated. Formally incorporating recognition and understanding of Indigenous forms of assessment at UNB would be in alignment with the institution's strategic action of embracing Indigenous knowledges (University of New Brunswick, 2020).

Recommendation 12:

UNB include a clause in its academic regulations to affirm that alternative forms of assessment are acceptable and valid.

Ongoing professional development opportunities to learn about alternative assessment and Indigenous approaches to assessment are also required so that faculty and instructors can enhance their knowledge and skills in this field. The Centre for Enhanced Teaching and Learning (CETL) at UNB currently offers some resources online about alternative assessment with examples of how to apply it. These resources include the a) *Variety in Assignment and Assessment Methods*, b) *Which Type of Feedback is Effective When* and c) *Academic Integrity and Assessments* documents (Centre for Enhanced Teaching and Learning, n.d.a, n.d.b and n.d.c). It also offers a virtual learning session on alternative assessment.

Stonechild and McGowan (2009), Louie et al. (2017) and Sanford et al. (2012) provided examples of how Indigenous concepts of assessment are used at universities, such as applying Indigenous principles in the process of assessment. Faculty and instructors at UNB also provided examples of how they apply Indigenous concepts of assessment, with one of these examples incorporating the holistic concept of contribution to the community. Stonechild and McGowan (2013) identify that in Indigenous thought, an individual's performance is tied to relationships in the Circle hence holistic assessment might include aspects such as participation, changes in attitude, ability to cooperate or problem solve. Louie et al. (2017) identified that if institutions can normalize Indigenous and holistic assessment methods, Indigenous students will have their ways of knowing

validated and non-Indigenous students can recognize, respect and apply other epistemologies. This could also prepare all students to better contribute to the organizations they work with in the future, or to society as citizens. Preparing students to better participate in society is linked to UNB's vision of providing "students the critical thinking, empathy and skills to solve societal problems" (p. 4), and its strategic action of supporting "the holistic and transformational development of students in all learning environments" (Priority - Transformative education for the future) (p. 6, University of New Brunswick, 2020). Indigenous faculty and the Elders Council at UNB can provide expertise to CETL in developing an additional resource on alternative assessment using holistic, Indigenous concepts of assessment.

Recommendation 13:

CETL develop a resource for faculty and instructors on holistic assessment approaches in collaboration with Indigenous faculty and Elders.

This thesis sought to answer questions about successful approaches to flexible learning for Indigenous students at UNB and FNU as well as opportunities for improvements at UNB, with particular attention to alternative admissions, flexible timelines and alternative assessment. Flexible learning for Indigenous students occurs at the intersection between institutional flexible learning initiatives and Indigenization. Both occur within complex external and internal institutional contexts. Flexible learning at universities is increasing as an avenue to boost revenue generation in response to decreased government funding

support, but also as a response to the globalization and internationalization of higher education and the demand for qualified workers by employers. These workers are increasingly diverse.

Indigenization is a longer term and complex process which will require ongoing effort and commitment on the part of universities in collaboration with Indigenous peoples to examine structures, policies and processes. More inclusive post-secondary environments for Indigenous peoples also means that non-Indigenous students and faculty can learn and benefit from Indigenous knowledges and worldviews which have long been submerged because of our shared history of colonization. From the personal to the institutional and societal levels in Canada, reconciliation with Indigenous peoples and how it can be actioned is still being explored.

The three aspects of post-secondary education discussed in this thesis – alternative admissions, flexible timelines and alternative assessment – are some avenues of making post-secondary education more accessible, relevant and inclusive for Indigenous students who form a growing group of potential students. More information is available on alternative admissions at First Nations University and the University of New Brunswick compared to initiatives in flexible timelines and alternative assessment. This pattern is also found in the literature. Efforts in the areas of flexible timelines and alternative assessment with respect to Indigenous students or for the general student body are emerging.

Investments and efforts in flexible learning and Indigenization are linked to universities' strategic plans and their approaches to Indigenization. For both flexible

learning and Indigenization, strategic leadership is required to ensure that mechanisms, policies, processes and programs support initiatives in these areas. Further innovation in these two areas will result in more widespread implementation and acceptance of these concepts among different institutions and faculties. UNB is already heavily invested in developing flexible learning approaches and has made commitments to Indigenization. Thirteen recommendations for UNB have been identified as avenues to enhance flexible learning for Indigenous students.

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Appendix A – TRC Calls to Action Related to Post-Secondary Education

Call to Action 10:

We call on the federal government to draft new Aboriginal education legislation with the full participation and informed consent of Aboriginal peoples. The new legislation would include a commitment to sufficient funding and would incorporate the following principles:

- i. Providing sufficient funding to close identified educational achievement gaps within one generation.
- ii. Improving education attainment levels and success rates.
- iii. Developing culturally appropriate curricula.
- iv. Protecting the right to Aboriginal languages, including the teaching of Aboriginal languages as credit courses.
- v. Enabling parental and community responsibility, control, and accountability, similar to what parents enjoy in public school systems.
- vi. Enabling parents to fully participate in the education of their children.
- vii. Respecting and honouring Treaty relationships.

Call to Action 11:

We call upon the federal government to provide adequate funding to end the backlog of First Nations students seeking a post-secondary education.

Call to Action 16:

We call upon post-secondary institutions to create university and college degree and diploma programs in Aboriginal languages.

Call to Action 24:

We call upon medical and nursing schools in Canada to require all students to take a course dealing with Aboriginal health issues, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, and Indigenous teachings and practices. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism.

Call to Action 28:

We call upon law schools in Canada to require all law students to take a course in Aboriginal people and the law, which includes the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and antiracism.

Call to Action 62(ii):

We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to:

- ii. Provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms.

Call to Action 65:

We call upon the federal government, through the Social Sciences and Humanities Research Council, and in collaboration with Aboriginal peoples, post-secondary institutions and educators, and the National Centre for Truth and Reconciliation and its partner institutions, to establish a national research program with multi-year funding to advance understanding of reconciliation. (TRC, 2015, pp. 2-8)

Appendix B – Questionnaires

Implementing Alternative Admissions, Flexible Timelines and Alternative Assessment in Aboriginal Post-Secondary Education at Canadian Universities

Semi-Structured Questionnaire – Admissions

1. What type of innovative policies or practices are being implemented at your university in alternative admissions that benefit Aboriginal students? As an example, these could be different ways of assessing an applicant's suitability for entrance or completion of a university degree program other than the regular admissions process or policies that aim to diversity student enrollment, etc.
2. How did the interest in these policies or practices develop?
3. What was involved in developing and implementing these innovations?
4. What types of barriers or challenges were encountered in the developing these innovations?
5. What types of factors supported the development or implementation of these innovations?
6. What are the impacts of implementing these innovations?
7. Do you have any documents, statistics or materials that you can share with me on your university's innovations in admissions?
8. Are there additional individuals I should be interviewing on this topic in your university?
9. Is there any other information you would like to share on this topic?

Thank you for your participation in this interview.

**Implementing Alternative Admissions, Flexible Timelines and Alternative
Assessment in Aboriginal Post-Secondary Education at Canadian Universities**

Semi-Structured Questionnaire – Flexible Timelines

1. What type of innovative policies or practices are being implemented at your university with respect to flexible course timelines that benefit Aboriginal students? As an example, these might be flexible entry or exit points to a degree program or course, a flexible pace for a course or an accelerated or slower pace for completion of a degree.
2. How did the interest in these policies or practices develop?
3. What was involved in developing and implementing these innovations?
4. What types of barriers or challenges were encountered in the developing these innovations?
5. What types of factors supported the development or implementation of these innovations?
6. What are the impacts of implementing these innovations?
7. Do you have any documents, statistics or materials that you can share with me on your university's innovations in admissions?
8. Are there additional individuals I should be interviewing on this topic in your university?
9. Is there any other information you would like to share on this topic?

Thank you for your participation in this interview.

**Implementing Alternative Admissions, Flexible Timelines and Alternative
Assessment in Aboriginal Post-Secondary Education at Canadian Universities**

Semi-Structured Questionnaire – Alternative Assessment

1. With respect to innovative policies or practices in alternative assessment, these are different approaches of assessing student learning, aptitude or achievement beyond traditional methods which usually involve written or objective tests. What type of innovative policies or practices are being implemented at your university with respect to alternative assessment that benefit Aboriginal students?
2. How did the interest in these policies or practices develop?
3. What was involved in developing and implementing these innovations?
4. What types of barriers or challenges were encountered in the developing these innovations?
5. What types of factors supported the development or implementation of these innovations?
6. What are the impacts of implementing these innovations?
7. Do you have any documents, statistics or materials that you can share with me on your university's innovations in admissions?
8. Are there additional individuals I should be interviewing on this topic in your university?
9. Is there any other information you would like to share on this topic?

Thank you for your participation in this interview.

Curriculum Vitae

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University of New Brunswick, Fredericton, NB, Canada, 2008 – 2021, Master of
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Publications: None

Conference Presentations: None