RECRUITMENT AND RETENTION OF INDIGENOUS STUDENTS IN A BACCALAUREATE NURSING PROGRAM

by

Nadine Denice Rimmer

JOANN MANTY, DNP, Faculty Mentor and Chair

CHRISTY CIMINERI, DNP, Committee Member

CATHERINE KOCH, Preceptor

Patrick Robinson, PhD, Dean, School of Nursing and Health Sciences

A DNP Project Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Nursing Practice

For submission to The Journal of Professional Nursing

Capella University

February, 2017
Abstract

The Indigenous peoples of northern Alberta possess considerable challenges to their health and wellbeing. Research has shown that one strategy to improve the health of this population demographic is to increase the number of Indigenous registered nurses. The literature outlines the health disadvantages of the Indigenous people, the benefit of an increase in Indigenous nurses and the strategies that can be used to entice nursing students to baccalaureate programs and retain them until graduation. Using a phenomenological approach through interviews, the lived experience of Indigenous nursing students and graduates has been explored to reinforce existing literature based strategies and illuminate new strategies. Using these literature and interview based strategies will increase the percentage of Indigenous nursing students registering and graduating from a baccalaureate nursing program. The common literature based strategies include: access to an Indigenous counselor and Elder, navigation through financial assistance available to Indigenous students, help with time management, essay writing, and medication mathematics, identification of Indigenous role models within faculty, knowledgeable faculty in Indigenous ways of learning, more specific recruitment for nursing in high school.

*Keywords:* Indigenous nursing students, strategies, phenomenological study, baccalaureate nursing program.
Recruitment and Retention of Indigenous Students in a Baccalaureate Nursing Program

The health of the Indigenous people of Canada is an area of great concern. The Indigenous people of Canada have had long standing issues with health and wellbeing related to the difficulties with the social determinants of health and colonialism (Greenwood, Leeuw, Lindsay & Reading, 2015). Several documents state that one important strategy to improve the health of Indigenous people is to increase the number of Indigenous nurses working in healthcare (Allan & Smylie, 2015; Exner-Pirot & Butler; Truth Reconciliation Commission of Canada, 2015). The logical progression is to question current practices and determine how they can be changed to improve post-secondary education services. These changes will allow for the recruitment and retention of more Indigenous students into a baccalaureate nursing program.

The college reserves five seats for Indigenous students meeting the admission requirements for the baccalaureate nursing program. Based on the statistics, these seats are filled therefore, the focus has been primarily on retention of Indigenous students in order to assist them in the progression to graduation. During the three years of the project, strategies based on the literature and interviews have been implemented in a limited capacity, this project will be ongoing as it has the support of the college administration and has been identified as a priority for the Government of Canada (Royal Commission of Aboriginal Peoples, 1996; Exner-Pirot & Butler, 2015).

Students self-identified their heritage as Indigenous and gave their permission to be interviewed to explore the lived experience of being an Indigenous nursing student. Nine students were interviewed; these students were in their second and third year of the four-year
collaborative program. Three graduate nursing students agreed to be interviewed. The background of the Indigenous people, the college, and the health challenges of the Indigenous people requires discussion to fully understand the impact of increasing the numbers of Indigenous registered nurses. The issues of self-identification of Indigenous people needs to be understood as well as the current trends in reparation of damage through the truth and reconciliation commission. The literature related to the research question, the methods and most importantly the results of the interviews will be communicated in this document. These results will be discussed as they relate to the literature and then be utilized to improve the educational experience of Indigenous nursing students, thus enticing them and keeping them until they graduate. This will promote the overarching goal of improving the health of Indigenous people of Canada.

**Background**

To fully understand the population in this project, the term Indigenous and Aboriginal must be defined. In Canada, the word Aboriginal is used to encompass Indian, First Nation, Inuit and Metis people (Government of Canada, 1982). Using the simplest definition Metis people are individuals of mixed Indian and European heritage (Metis Nation of Alberta, 2013). The World Health Organization (2007) indicates the term Indigenous is related to seven separate aspects, most applicable being; formally recognized and having historical links to the pre-settlement society. A distinctive language, culture and non-dominance is also a requirement of the understanding of the term Indigenous (World Health Organization, 2007). This term gives this group of people the support in self-defining themselves to promote their individuality and uniqueness (Allan & Smylie, 2015). The terms Aboriginal and Indigenous are often used interchangeable in Canada however, in this document the accepted term Indigenous will be used.
Of all the populations in Canada the Indigenous people have the worst health outcomes (Royal College of Physicians and Surgeons of Canada, 2013; Health Canada 2012). Indigenous people exhibit higher incidence of chronic disease, tuberculosis, mental health issues including suicide, HIV/AIDS and as a result they live shorter lives in poor health (Canadian Nurses Association, 2012). Indirectly related to health, Indigenous people drop out of school more frequently than non-Indigenous people and the result is a three times higher unemployment rate (CNA, 2012). Living conditions for Indigenous people is an area of concern as it relates to health and well-being. Indigenous people live in crowded, unstable homes and often have food insecurity or access to clean water. In 2012, 121 Indigenous communities in Canada did not have the benefits of clean, running water (CNA, 2012). The understanding of the unique challenges facing this population in a first world country lays the foundation for the increased knowledge required to understand the importance of the project.

Colonialism is the major cause of the inequities and negative health outcomes of Indigenous people. The overwhelming effect of residential schools, removal of children, and structural racism have decreased the ability to function as community members, raise children or maintain employment (Allan & Smylie, 2015; CNA 2012; Greenwood et al., 2015). Some experts believe that the negative health impacts began with the disassociation and displacement from traditional lands, resulting in a decrease in self-reliance and a decline in overall health (Reading & Wien, 2009). The health and education of the Indigenous people needs to be examined at every opportunity with the lens of colonialism to truly understand the challenges and inequities that are associated with this population. The process and effects of colonization should be given significant consideration and that the reparation of harms that have occurred through colonization should be a priority when discussing Indigenous people. The World Health
Organization identifies colonization as a social determinant of health (Mowbray, 2007) and The Canadian Institute for Health Information (2016) also identify the effects of colonialism as contributing to the differences in health between Indigenous and non-Indigenous people of Canada. This constitutes a very basic background into a complex and multifaceted problem. Understanding the background will assist in comprehending why this project was undertaken.

Problem and knowledge triggers guide the nurse to think of issues that affect the operational or clinical effectiveness of their practice (Titler, Steelman, Budreau, & Buckwalter, 2001; Titler, 2010). The reflection that initiated the knowledge-focused trigger for this clinical problem was based on an interaction between an Indigenous Elder patient and her assigned Indigenous nursing student. The student and patient both had exceptional days and the student volunteered to teach her colleagues about Indigenous culture as it related to this situation. This positive outcome for the patient and the excellent learning opportunities experienced by the student lead to a discussion with the chairperson and other faculty members of the value of Indigenous nurses and the availability of five seats for Indigenous nursing students in the baccalaureate nursing program. Upon further informal discussion, very few faculty members were aware of the availability of these reserved seats for Indigenous nursing students. Therefore, the lack of knowledge relating to the availability of the five Indigenous nursing seats was a knowledge trigger related to new information.

Further investigation uncovered that the number of Indigenous nurses is inadequate to address the needs of the Indigenous population (Aboriginal Nurses Association of Canada, 2009). Self-identified registered nurses have been increasing since 1996, even with those increases Indigenous registered nurses make up only 2.9 percent of the total amount of Canadian registered nurses (Exner-Pirot & Butler, 2015). When this is compared to the Indigenous
Canadian population statistics of 4.3 percent it is obvious more Indigenous nurses are required to meet the population’s needs (Statistics Canada, 2011). The problem-focused triggers for this issue would relate to process improvement data. The access to the seats exists, however, the process of filling those seats is not measured in any meaningful way. There are generalized career fairs at schools with a high percentage of Indigenous students but the evidence-based process to recruit and retain the Indigenous nursing student was lacking. The financial impact was considered when it was discovered that Indigenous people are admitted to the hospital more frequently than non-Indigenous people, this has an impact to the publically funded health care system in Canada (Health Canada, 2003; Carriere, Bougie, Kohen, Rotermann, & Sanmartin, 2016). A report from the Canadian Association of the Schools of Nursing (CASN) in 2007 supplied benchmarking of the availability of nursing education seats for Indigenous students, the results were equally as dismal across the country. Many schools of nursing (32) did not even submit data (Gregory & Barsky, 2007). Once the triggers have been identified and a clinical issue has been formulated the next step is to determine if this is a need or a priority for the facility.

**Priority to the Organization**

The college is an organization that serves eleven Indigenous communities, five first nation and six Metis communities. As stated in the institutions annual report there are satellite campuses in four other Indigenous communities. The college is dedicated to the Indigenous students and this is evidenced by the college’s comprehensive institutional plan that states the college is responsible for regional stewardship and collaborates with Indigenous communities. This project increases in relevancy when the 2014 college’s Comprehensive Institutional Plan
identifies a drop in Indigenous student registration to only nine percent from the previous 11.4 percent.

There exists a difficulty with the accurate identification of Indigenous students’ numbers due to a reluctance to self-identify. Students are concerned about cultural insensitivity and a fear of the misuse of data (Franchetto, Pritchard & Bristow, 2014; Educational Policy Institute, 2008; Campbell, 2014). Although there was only one participant that did not self-identify to the college, there should be consideration to the rationale for those who do not wish to self-identify.

**PICOT Question**

The PICOT format of question development increases the chances of success that the best evidence to guide practice will be found (Stillwell, Fineout-Overholt, Melnyk & Williamson, 2010). This clinical issue is broken down as the following:

**p– population.** The population of interest will be baccalaureate nursing students with Indigenous heritage. Indigenous is the preferred term but other known terms to describe this population are Metis, Inuit, Native, Aboriginal, Indian First Peoples, or First Nation. In the simplest definition Metis people are individuals of mixed Indian and European heritage (Metis Nation of Alberta, 2013).

**i -issue of interest.** The issue of interest is evidence based strategies for recruiting and retaining enough Indigenous nursing students to fill the five baccalaureate nursing seats dedicated to students with this heritage.

**c-comparison.** The current recruitment and retention strategy related to registration rates compared to having a more evidenced based strategy resulting in all five seats filled by Indigenous nursing students and the percentage of Indigenous nursing students graduating equals
the percentage of Indigenous population of the college. So using the college wide data this number is currently nine percent.

**o-outcomes.** The desired outcome of this project is to have a strategy to recruit and retain Indigenous students to fill the five seats in the college’s baccalaureate nursing program and graduate the accepted percentage of these nursing students. The acceptable number or Indigenous graduates should be reflective of the Indigenous population of the college. A report will be given to the college administration and the chairperson of the nursing department outlining strategies to recruit and promote success in the nursing program for Indigenous students.

**t-timelines.** This project will be complete in three years but the strategies will be ongoing.

**Clinical Question**

How can Indigenous nursing students (P) be recruited and retained (I) to fill five existing seats in a baccalaureate nursing program and graduating the same percentage of Indigenous nursing students as compared to the percentage of Indigenous students in the college, using evidence based strategies (O). This project will conclude in three years (T) however, the maintenance of the strategies and collection of data for evaluation purposes will be ongoing.

**Literature Review**

The clinical question will serve as a guide for the scholar to develop a more rigorous, critical review of the literature. The clinical question will direct the researcher to seek out certain types of evidence to best answer the inquiry (Fineout-Overholt & Johnston, 2005). In quantitative studies that explore harm, best therapy randomized clinical trials are the gold standard and subsequently the strongest rating in evidence hierarchy. For different types of questions that deal with human responses and the manner in which people process and cope with
challenges the qualitative study is better suited to address these research needs (Grace & Powers, 2009). The question of recruitment and retentions strategies for Indigenous nursing students in a baccalaureate nursing program will examine the lived experience of Indigenous nursing students and Indigenous nursing graduates to determine what they believe will assist with the recruitment and retention of future Indigenous nursing students. This is a multifaceted problem with many underlying issues and cultural considerations. The majority of research on this issue is qualitative in nature. The leveling of evidence used for this initial literature review is a combination of Fineout-Overholt and Johnston’s (2005) hierarchy of evidence for decision-making around meaning and Melnyk and Fineout-Overholt (2011) appraisal guide for qualitative evidence. Articles were randomly selected from the collection of articles previously acquired from CINAHL, PubMed, and links from websites of interest.

**Synthesis of Findings**

The review of literature and the synthesis of the finding as it applies to the capstone project are indicated in the following themes. The themes of influence of the success and struggles of the Indigenous student in a baccalaureate nursing program were examined, comparing the findings in the participant interviews to the existing literature. The articles were chosen to demonstrate a variety of the types of literature the currently turns up upon an article search of the database. The literature review on Indigenous recruitment and retention in nursing education (Smith, Gold, McAlister & Sullivan-Bentz, 2011) was an excellent article to start the preliminary review. As the project evolved more comprehensive documents were released such as the influential reports from the Truth and Reconciliation Commission of Canada (2015) and The Conference Board of Canada (Exner-Pirot & Butler, 2015), both reports reinforcing the need for more Indigenous health care workers.
Background

The statistics stated by Smith et al. (2011) clearly indicate the need for Indigenous nurses and these statistics are repeated in several different articles. The effect of the lack of a suitable number of Indigenous nurses on the health of Indigenous people is mentioned in this article and presents again in the literature in the articles of Arnault-Pelletier, Brown, Desjarlais, and McBeth (2006) and Gregory, Pijl-Zieber, Barsky, and Daniels, (2008), the Truth and Reconciliation Commission of Canada, (2015) and Exner-Pirot and Butler, (2015). The effect of the nurse’s ability to communicate in a culturally sensitive way and the effect of Indigenous people with diabetes is discussed by Quine, Hadjistavropoulos and Alberts (2012), in this article these authors summarize the need for Indigenous nurses to improve the health of Indigenous Canadians.

The issues facing data procurement on aspects of the health Indigenous people relate to the reluctance to self-disclose heritage and the appalling statistics surrounding Indigenous high school graduation rates are also discussed by Smith et al. (2011). The ability of the Indigenous nurse to bring the knowledge of culture and language to the Indigenous patient, assists other nurses in understanding clients and more importantly the relationships and practices of the community. These nurses will also stay in the north and have a positive impact on recruitment and therefore affect the health of the community with concurrent economic opportunities for the Indigenous population (Arnault-Pelletier et al., 2006; Exner-Pirot & Butler, 2015). Quine et al. (2012) state that non Indigenous nurses demonstrate discriminatory behaviours and attitudes and it is also felt that non Indigenous nurses are dismissive of health concerns and show a disregard for personal circumstances. These behaviours limit the possibility for therapeutic interaction and resulting in substandard care through decreased communication. An Indigenous nurse may
decrease these perceptions and connect on a deeper level improving the health status of Indigenous people with diabetes and other diagnoses.

**Recruitment**

Several of the articles indicated strategies for recruitment of Indigenous students into nursing programs. As mentioned previously there are many barriers to the Indigenous student meeting the requirements for acceptance into nursing school. The dropout rate for Indigenous secondary students is high (Brascoupe & Waters, 2009). Indigenous students often lack the prerequisite math and sciences, and are inadequately prepared for university life (Pijl-Zieber & Hagen, 2011). Students may not have the proper guidance or confidence to access resources regarding information about post-secondary education, the importance of mentors and role models often affect the ability of the student to access the admission information. The lack of knowledge of nursing as a career choice also contributes to the Indigenous student failing to apply to nursing school (Smith et al., 2011; Best & Stuart, 2014).

Gregory et al. (2008) identify that day camps were made available for elementary and junior high students to become more aware of health professions, accompanied by the distribution of culturally relevant recruitment materials. Indigenous youth require encouragement and advice from guidance counselors to acquire the appropriate courses for admission to nursing school.

**Retention**

Retention strategies are listed in the articles chosen for review. Assisting with the transition to university, social and cultural needs, financial needs, academic environment characteristics, and community partnerships are all strategies for keeping Indigenous students in nursing school once they are accepted (Arnault-Pelletier et al., 2006; Best & Stuart, 2016;
Transition to university programs provides support and advocacy including assistance in helping the student adjust to campus life. These strategies include contact between educators and support staff if student problems are identified and having regular student progress meeting so that an Indigenous student’s progress is closely monitored (Arnault-Pelletier et al., 2006; Best & Stuart, 2016). Providing group activities and areas to congregate so that the sense of isolation the Indigenous students are more apt to feel is decreased (Smith et al., 2011; Best & Stuart, 2014). Social and cultural needs are met when the values of the Indigenous student are recognized and administrators and faculty understand that Indigenous values may be in conflict with the educational system. An Indigenous support person would assist in the mentorship and culturally relevant supports, such as connecting students with other student and elders. Elders are known to promote a culturally sensitive educational experience (Anonson, Desjarlais, Nixon, Whiteman & Bird, 2008; Educational Policy Institute, 2008).

Financial needs such as navigating scholarship applications, housing acquisitions, childcare, and access to computers should be addressed in any list of strategies. The financial needs of students and the financial needs of programs to assist Indigenous students need to be considered when procuring funding from sources. Liaising with Indigenous communities to obtain funding and grants for nursing students will enhance the community and develop a sense of participation in the future retention (Gregory et al., 2008; Best & Stuart, 2014).

To enhance the retention of Indigenous student a culturally sensitive classroom that reflects the values and learning styles of the Indigenous student and a culturally relevant curricula need to be considered when devising strategies for retention (Gregory et al., 2008; Best & Stuart, 2014). A culturally sensitive faculty member in the classroom will also contribute to the retention of Indigenous students. A rigid teaching style will contribute to the further
alienation of the Indigenous student (Smith et al., 2011). The balancing act is to provide culturally relevant education without the perception of favoritism. Ultimately, faculty that attempt to form trusting relationships with their students promote success (Green, 2016).

Indigenous students thrive in a cooperative, circular learning environment as opposed to a competitive learning environment. The Indigenous student will be successful if given a few helpful strategies that will promote the completion of nursing education (Begoray & Banister, 2008; Morrissette, & Gadbois, 2006).

The literature was examined and the three common themes were discovered, background information on the Indigenous people, recruitment and retention of Indigenous nursing students. The literature could be further broken down into strategies, and challenges in obtaining and keeping an Indigenous nursing student until graduation. These themes are a good fit for the clinical question. The literature search has provided the information that justifies the extent of the problem and leads the scholar to more precise and appropriate articles and studies. Following a literature search the current state of what is happening must be compared to the ideal or desired state. This is the preliminary steps to implementing strategies to achieve the desired state. The knowledge of the desired state and strategies to attaining this desired state can be found in further literature review and stakeholder input.

**Rationale**

Preliminary interventions were developed after a review of the literature, the focus of the literature was on Canadian content however some American and Australian information was appropriate and integrated into the guidance for the project. Several theorists were examined and Leininger’s cultural care theory and Neuman were beneficial when caring for the Indigenous student and promoting their success. Some generic interventions were initiated based on
literature however the bulk of the interventions were based on participant interviews to ensure fitness and efficacy.

One of the primary reasons for the existence of Leininger’s (McFarland, 2014) cultural care theory of diversity and universality was to offset the low number of cultural groups accessing health care services. This can be transposed to the diverse group of students (Indigenous) not accessing or staying engaged with the academic world of nursing. Using her culture care modes of action the nurse educator can concentrate on the student being successful by supporting, assisting and facilitating during their educational experience. This can be done by cultural care patterning which will allow them to change any counterproductive patterns that would decrease their opportunity for success but respecting Indigenous values (Lawson, 2014; Leininger, 1988)

As educators there is a need to preserve the five interacting variables so the student will be able to resist the multiple stressors associated with nursing school (Neuman & Fawcett, 2011). Ethnicity can be linked to sociocultural variable, year of nursing education would relate to developmental variables, empowerment and resiliency would relate to psychological variables. Through some of the interventions it is believed that the reaction to the stressor would be less traumatic and the flexible line of defense would be strengthened (Pines et al., 2011). Nursing educator interventions such as identification and interventions with students at risk of failing would provide an example of secondary prevention, prevention of repetitive actions that are not conducive to success and an establishment of Indigenous support groups would constitute tertiary prevention.

Nurses are required to have an advanced level of cultural; sensitivity, knowledge and skill (Begoray & Banister, 2007). It should be expected that nurse educators have a more highly
developed sense of cultural intelligence given the increased diversity in nursing education and for the purposes of this project specifically the Indigenous student. The goal of this project is to put into place strategies that will enhance the cultural care patterning and to strengthen the lines of defence for the Indigenous nursing student.

**Specific Aims**

The purpose of this project is to promote the recruitment and retention of Indigenous students in a baccalaureate nursing program. It is well documented in Canada and abroad that the presence of Indigenous health care workers improves the health outcomes of Indigenous people. As indicated previously in this document this is the fastest growing demographic and the population has poorer health outcomes and is hospitalized at a higher rate than non-Indigenous persons. An increase in registered nurses will also improve the social determinants of health in the Indigenous population by increasing education and income. Indigenous nurses exist as positive role models for other members of the community. This report will be provided to the college at varying levels of administration to serve as a guide for improving the post-secondary educational environment of Indigenous baccalaureate nursing students, potential and enrolled. Ideally, the research can be translated to other faculties to promote the college as an educational institution of choice for Indigenous people of the region and surrounding municipalities.

**Method**

Phenomenological approach was chosen for the method of acquiring and examining the data as it provided the most culturally sensitive way to study the lived experience of the Indigenous student in a baccalaureate nursing program (Smith, Flowers & Larkin, 2009). The uniqueness of each Indigenous student mirrors the inability to fit phenomenology into a rule
book, a set of procedures or an interpretive schema, thus making it the method of choice (Van Manen, 2014) The lived experience is linked to knowledge transfer in the Indigenous people and the lived experience is critical in developing trust with the Indigenous nursing student (Pijl-Zeiber & Hagan, 2011; Green, 2016; Douglas, 2013). After the method was selected the process to recruit participants was initiated.

Prior to the interviews commencing Institutional Review Board approval, as well as research ethics approval from the college was obtained. It is important to understand that Indigenous people feel they have been the subject of many research initiatives and in keeping with their right to self-determination they incorporate the principles of ownership, control, access and possession of information gathered in their communities (First Nations Information Governance Committee, 2007; Campbell, 2014). In order to promote the trust relationship the purpose and intent of information sharing was confirmed with the students and their permission was granted to the principle interviewer, the right to withdraw at any time was emphasized multiple times (Castellano, 2004.) Students were made aware of the study and all students filled out intent to participate form and those students that were First Nation, Inuit, Metis (FNIM) and currently enrolled in the baccalaureate nursing program that had agreed to participate were contacted. All students completed the form to ensure anonymity. The researcher approached graduated students and those that wished to participate were given consent forms. The students were given the numbers for counseling due to the potential risk for vicarious trauma related to the historical impact from colonialism and residential schools. For this study nine undergraduate students and three students that had graduated from the program consented to be interviewed. The interviews were done in the principle researcher’s office for convenience. The interviewees agreed that this venue was acceptable. Each interview lasted one half to one hour and was
recorded with audiotape. Initially general information was collected regarding their demographics. The questions then consisted of open ended questions that examined their lived experience regarding application and acceptance into nursing school, orientation, success and challenges in the nursing program. They were given the opportunity to discuss their lived experience of being an Indigenous student in a baccalaureate nursing program. Students were interviewed prior to entering fourth year as the program in a collaborative program and the students become university students for their final year although they continue to attend classes at the college. This was done to avoid the need to seek additional research ethics approval from the university.

The graduates were given slightly different prompts with the lived experience being the catalyst for influence and guidance for future Indigenous nurses. The tapes were then transcribed and thematic coding was completed. Once the thematic coding was completed the strategies were developed and compared to the literature.

Results

The general demographics of the students consisted of the following information. Of the participant group all were female with one exception, nine students were Metis and three were first nations. All students except one disclosed their status upon registration. Four students did not disclose their age but the average age of the remaining students was 25.3 years. Four of the interviewees were in the third year of the baccalaureate program, five were second year and three interviewees had completed the program, there was a total of nine students currently enrolled in the program and three graduate nurses currently working in their chosen profession.
Six participants felt connected to their Indigenous heritage, three students felt somewhat connected and three students did not feel connected to their heritage. One student was told by a parent not to tell anyone she was Indigenous.

When applying for nursing school only one person had difficulty with the criminal record check. Indigenous adults account for one quarter of the admissions to correctional services (Statistics Canada, 2016). When discussing the experience of applying and being accepted to the nursing program, of the students currently in the program only three students felt prepared for university by their high school education, four students had previous post-secondary education and five needed upgrading. Six of the students had acquired funding or partial funding through scholarships and three did not have scholarships and had to work to raise money for education costs.

One student had to leave her community to complete high school because the school did not teach math and science. She identifies her year at a local high school as a difficult one with a lack of support from the teachers. She stated that even though she had top marks in her home community high school, she was made to feel “stupid” and because she had to work so hard on her academics she was unable to participate in extracurricular activities. Fortunately, there were other students from her community attending the same high school so she did not feel so isolated. One student had a 90-minute, one way, bus ride in order to get school.

The students chose this college based upon the decreased tuition cost when compared to other universities. The students preferred the smaller size and felt it made it more personal and less intimidating. The students felt that the nursing school has a reputation for quality nursing graduates and one student liked that it was farther from home.
When students discussed the process of college orientation and their experience, the students shared their stories of the first day, one student was unsure if they actually attended orientation, four students stated they felt welcomed and included, two students stated they weren’t aware of the services available for Indigenous students. They discussed being nervous and scared and felt that a mixer with all levels of nursing students in attendance would be helpful and it would provide an avenue to get to know everyone’s background.

The supports that students identified and assisted them with their success are family, specifically parents, aunts, grandmothers and siblings. One student stated her family was supportive of the educational pursuits but her siblings were not supportive. Friends and instructors were named as support and role models. In turn, the graduates felt they were role models for young kids in their communities and for other Indigenous nursing students. Two of the students identified they were the first people in their family to go to university. One participant identified that she was not only a role model in her community for going to school but for holding down a good job. She also stated that there are people in the community who may not want you to succeed. A graduate nurse identified that she is a role model for Indigenous nurses and feels a special desire to help Indigenous nurses who are training, however she states that she is not an Indigenous nurse until someone knows she is Indigenous.

Students discussed some of the challenges of nursing school with the themes of organization and paper writing as some of the most frequently experienced challenges. The strategies to improve the nursing program mention added supports for these challenges.

After the students shared their lived experience of being a nursing student they were asked what they believed would improve the baccalaureate nursing program. Improvements that would encourage Indigenous students to enroll in this college and strategies that would improve
the chances for successfully completing this rigorous and difficult program were discussed. Five students indicated that there needed to be better marketing of the nursing program. Suggestions ranged from targeting younger students “such as grade eight” and ensuring that career fairs occurred in the outlying areas, these areas are dominated by Indigenous communities. Another student identified that a more comprehensive marketing of the nursing program would allow future students the opportunity to “give kids a better idea of what nursing is about.” Three students felt a bridging program would assist students to integrate into the nursing academic community with ease and would be of benefit and one student identified that an increase in distance learning would decrease the amount of time required of the student to be away from their community. Great thought would be required when choosing the courses offered by distance. One student stated that independent learning required for a portion of the medication mathematics was not conducive to success. This is congruent to what is known about mathematics and science knowledge transfer for Indigenous students (Educational Policy Institute, 2008; Best & Stuart, 2014; Pijl-Zieber & Hagen, 2011).

To retain students in the baccalaureate-nursing program several suggestions were put forward that are in keeping with strategies identified in the literature. Four students thought an elder in residence would be helpful, those that did not strongly identify with their heritage felt that it would be nice just to have someone to talk to about their struggles. Three students suggested an Indigenous counselor to assist with the navigation of scholarships, funding and finances, this was a recurrent theme as a barrier to application and success in the nursing program. Two students felt a package that outlined available funding for studies, services provided by the college and other Indigenous support groups or social functions would be of benefit to the Indigenous student. This would decrease stress, isolation and anxiety that
accompanies the financial burdens and social isolation accompanying immersion in an academic environment. Other strategies identified during the interviews include; pairing a senior and junior nursing student to assist with navigation within the program, different structure to some courses to improve flow of knowledge, paper writing, time management support, Indigenous studies as an elective choice. One student identified approachable and encouraging faculty, two students suggested the increased visibility of Indigenous symbols to make the campus more welcoming and more like home. As a conclusion the students were asked if they felt it was important to have Indigenous nurses available to provide or assist with the care of Indigenous patients. In school the Indigenous students may be the only one in their class with knowledge of Indigenous people so often they are asked about Indigenous nursing or rural nursing.

The need for an increased amount of Indigenous nursing in healthcare is echoed in the participant’s comments during the interviews. Two of the graduate nurses identified that they connect more easily with Indigenous patients, they felt that they had more credibility than “some random person telling them what to do.” One graduate felt that she was more sensitive and less dismissive and had an increase in the level of respect shown to Elders. She also felt that Indigenous nurses were more collegial and open with other Indigenous nurses. A student felt that she had to work harder than her counterparts as there was a “stigma”. She felt it was easier to form a trusting relationship with an Indigenous patient. There was a belief that “Indigenous nurses are more culturally aware so they’ll improve the health of Indigenous people.” One student gave an example of her lived experience with an Indigenous versus a non-Indigenous nurse,

“We had a white nurse come from the city to work in the healthcare center the Elders and other people were unwelcoming. You hear over and over, these doctors and these nurses
don’t know us and things like that. When my auntie came back from the city things changed, the Elders and other younger generations were seeing her, getting immunizations done, having their medications checked and she told them they had to go in to town to see the doctor they would go, she had more influence on getting people better.”

Two students identified that they would like to work in an Indigenous community in the future. One student is currently working in her home community.

One participant’s reflection on the issue of Indigenous nurses caring for Indigenous patients is indicative of the philosophy at the college, “I think the Elders might like an Indigenous nurse but if everybody is good to everybody it will be O.K.” Once the results of the interviews were reviewed and thematically coded the strategies and interventions for recruitment and retention were altered to ensure fit for the local environment.

**Strategies and Interventions**

Based on the literature and the interviews the following strategies have been implemented over the three years of the project. Although all five seats reserved are filled, the college needs to be diligent to ensure that this trend continues. Dissemination of information to potential students in high schools occurred. Brochures were handed out to schools and when invited the principal researcher would speak about the nursing program and supports for Indigenous nursing students. Established and accepted registered nurses provided information to outlying areas and brochures were placed in the local friendship centre. Career fairs are a popular venue to interface with Indigenous students as they are often transported from outlying Indigenous communities. Often Indigenous baccalaureate nursing students will participate in the fairs acting as effective role models for the program. The researcher has had an opportunity to speak with a senior high
school class in an extreme northern isolated Indigenous community about the nursing program and the graduates that have been successful from their particular community. This trip was educational for the researcher in order to understand some of the challenges of the nursing students coming from this community.

Strategies for retention are the pedagogy of inquiry based learning, role modeling, mentoring, social events and specialized spaces to decrease isolation and increase comfort with the college environment. The inquiry based learning (IBL) format of the baccalaureate nursing program supports Indigenous education and values. The IBL format is initiated by a case study or story of a patient and the group must work together to gain knowledge and plan care for the patient and family or community. In the IBL format students work together, sharing knowledge is mandatory, and working together to support one another’s learning is required. In group norms, values such as respect, professionalism (not showing anger) and honesty are incorporated, it is a collegial and noncompetitive learning environment. There are specific scenarios that address the health disparities and decreased health determinants associates with the Indigenous people of Canada. The college has used the knowledge and heritage of faculty to develop a scenario relating to the challenges of Indigenous baccalaureate nursing students. There is an ongoing research project to develop multilevel and interdisciplinary involvement in resolving a health issue in a scenario related to the Indigenous client in long term, continuing care. The inclusion of these scenarios will contribute to increased knowledge of the Indigenous patient and subsequently increase cultural sensitivity that can be transposed to the learning environment.

In laboratory practice a skill is demonstrated and when the students are comfortable, they practice the required psychomotor skills. Students are required to work together to support one
another and provide professional feedback on performance. This format is in keeping with Indigenous ways of knowing and learning (Lowe & Crow, 2009; Pijl-Zeiber & Hagen, 2011).

At the college there are two Indigenous nursing faculty. The two faculty members have identified and presented themselves to the nursing students to serve as Indigenous nursing student supports and mentors. As the students identify Indigenous faculty they have increased interface and often seek out those instructors to discuss issues and general conversation. The support for this project is evidence of the commitment by the college and the nursing department through funding and human services support.

The two Indigenous faculty co-presented a lunch and learn session discussing strategies for teaching Indigenous nursing students based on the knowledge from literature and interviews. This session was offered in September 2014 and September 2016. The presentation was not offered in 2015 as the faculty had not changed from the previous year. The staff were engaged and verbalized positive feedback for the presenters.

A business case was presented to senior management for an Indigenous counselor. This position has been filled but the incumbent is currently on maternity leave and has not been replaced. Discussions have commenced on the ability to provide the support of an Elder to the Indigenous students and consultation with Indigenous groups will assist in the appointment to this position. However due to the economic downturn, the schedules of the Elders and the natural disaster this initiative has been stalled.

Aboriginal days are held yearly in March to celebrate the Indigenous students, acknowledge the deep connection with the college and the generosity of the local bands. It is also an opportunity for all college staff, faculty and students to learn about the Indigenous culture through crafts, events, food and guest speakers. The tea and bannock is always a welcome treat
for everyone. There is an Indigenous study space that makes use of local artists and pertinent service information in order to communicate effectively with Indigenous students. The room has computers, fridges and a designated, welcoming space for Indigenous students to meet in hopes of mitigating the isolation and loneliness felt by students that need to leave their communities to further their education. Indigenous nursing student day is celebrated, this celebration was initiated and lead by the two Indigenous faculty. Social media was used to extend the invitation, unfortunately it was poorly attended.

The student multiyear mixer that was recommended in the interviews was in the initial planning phase when the disaster occurred. The resultant damage and required repairs delayed the faculty entering the college and preparing for the coming academic year. However, a multicultural mixer was recently held with two Indigenous students assisting with the organization and execution of the event. The event was well attended and appreciated.

The knowledge of this project has permeated the communication channels within the college. A recent initiative has allowed the author to disseminate relevant information to other disciplines and a steering group is current being assembled to discuss the strategies identified in both the literature and through the interview process. This group will utilize the information and apply it to a broader population including all Indigenous students enrolled in the college and the potential for making this college the obvious educational choice for Indigenous students of the region.

**Discussion**

The results of the interviews are required to be examined in relationship to the literature and interpret and applied to the hypothesis (APA, 2010). The results of this project are reflective of the lived experience of the Indigenous student in a baccalaureate nursing program and the
existing literature. The literature review completed in the background portion of this document support the findings of the interviews.

There is a slight increase of two to three percent in the graduation rate of the Indigenous students since the beginning of the project and the comparison of graduate nursing students that are non- Indigenous related to Indigenous students is as expected. The topics of self-disclosure, knowledge, experiences in nursing school, role models, and supports will all feature heavily as the improvements to nursing programs. This information has been utilized to devise strategies that will enhance the recruitment and retention of nursing students at the college. The limitations and go forward initiatives will be examined in reference to the findings in the interviews and literature and will be compared to the implemented strategies.

The issue of self-disclosure can negatively affect the statistics regarding Indigenous people (Franchetto et al., 2014; Educational Policy Institute, 2008). The National Household Survey (Statistics Canada, 2011) states that the percentage of Indigenous people in Canada is now at 4.3% of the total of Canada’s population, this is an increase 0.5% since the survey in 2006. There is a concern of non -response bias with these statistics and the self-identification of Indigenous people (Statistics Canada, 2011). Of the participants only one student had not self-identified to the college. The rationale given for self-identifying is to ensure eligibility of scholarships. Indigenous people often do not self-identify until they are recognized as Indigenous. This is reflected in the participant’s indication that she was told by her mother not to tell anyone she was Indigenous. One participant identified that she does not consider herself Indigenous until someone identifies her as Indigenous. The relatively small amount of Indigenous students were particularly troublesome when trying to acquire graduation rates of Indigenous students from the collaborative university. The concern was that such a small
number would allow for identification of the participants thus compromising their anonymity. After review from research ethics and information protection the numbers were released and are now able to be used for this study.

Students identified financial stressors as a potential barrier to success. Of the current students interviewed five students received scholarships, one student had a sports scholarship and one student was sponsored by the band. Four students identified that they worked during nursing school. One student stated that, “financial stress was not conducive to learning.”

Morrisette and Gadbois (2007) identify financial demands as source of stress for the adult student, band sponsorship can result in late payments that delay the purchase of books and may require the student to have an instructor sign forms to continue payments. This practice is humiliating and not conducive to success, the discrimination while job hunting and lack of employment options also contribute to financial stress. Funding issues are mentioned frequently in the literature (Martin & Kipling, 2006; Anonson et al., 2008; Cech, Metz, Babcock & Smith, 2011). One student recommended that packages be mailed out to Indigenous students so they are aware of the financial opportunities in terms of scholarships that are available to Indigenous students. The college provides a downloadable awards book with Indigenous awards listed and Indigenous career awards posters are interspersed throughout the college billboards. Once funding is secured the focus of the student shifts to the academic success.

Several students identified that they required bridging courses or upgrading to be admitted to the program (Gregory & Barsky, 2007; Exner-Pirot & Butler, 2015). This indicates a lack of appropriate education to ensure recruitment and retention of Indigenous students. The two way knowledge transfer used in education can be problematic for Indigenous students. It is paternalistic and does not consider the depth of information that exists within the Indigenous
student (Morissette & Gadbois, 2006). The influence exists with the instructor-student relationship that can be reminiscent of colonialism unless proper care is given to the establishment of the trust relationship (Estey, Kmetic & Reading, 2008; Green, 2016; Pijl-Zeiber & Hagen, 2011). It is important that students are treated more as partners than subjects. The nursing faculty needs to be responsive to Indigenous ways of learning such as the narrative, planning, watching, doing and sharing. Pijl-Zeiber and Hagen (2011) state that knowledge is socially constructed so the issues related to a society will also affect their ability to internalize information into knowledge. Therefore the issues with residential schools and the impact on Indigenous society needs to be considered by educators concerned with the success of Indigenous post-secondary students (Morissette, & Gadbois, 2006). Aspects of this manner of learning are reflective of the inquiry-based learning but many instructors do not understand the subtleties that are associated with this valued method of pedagogy. An in-service was given to the faculty on Indigenous ways of knowing and the application to the nursing program. It was perceived as being helpful and informative.

One student shared that her experience relocating to the city to further her education was unpleasant by the lack of value and respect she was shown by her high school teacher. One graduate identified that she felt faculty were kind to everyone. Not only are the faculty important to the success of the Indigenous nursing student but other role models are imperative to the balance of family and school.

Role models such as family member, faculty and the presence of Elders is considered to be a positive influence on the educational life of an Indigenous student. In the interviews participants identify family members primarily as their role model. One student felt she was smarter than her sister so she could be successful in nursing school. The students stated that their
families were supportive, and could be considered role models, however, one student stated that she had no real role models.

The purpose of Elders in an Indigenous student’s life has been documented. Greenwood et al. (2015) identify Elders as providing a process to restoration of health, by increasing the understanding of historical roots and assisting the Indigenous person in relearning how to make relatives in the absence of families. This can be crucial to decreasing isolation in the Indigenous student. Recommendations from students in other programs include contact with community members with similar problems and cultural traditions (Curran, Solberg, LeFort, Fleet & Hollett, 2008; Cech et al., 2011). The ability to secure an Elder in residence has been a challenge experienced by other universities. The availability of Elders is decreasing and the demands on their time has increased. Coupled with an economic downturn it is difficult to secure an Elder in residence.

The students identify support and role models as family members and faculty. Many interviewees had role models in their family that they looked up to, family members that were wise, nurses or knowledgeable of how the land would promote health and wellness. When a student is required to leave their community they often find the social supports of their community absent and there is a feeling of not being whole (Green, 2016). The students lived experience gives insight into the challenges facing the Indigenous baccalaureate nursing student, this allows for better strategies to promote recruitment and retention.

This project is strengthened by the lived experience of the student. This experience allows the college to look at literature through local and expert eyes of the student. This will allow for a more specific set of strategies that have come from the most relevant source, the current baccalaureate students and recent graduates. The other benefit of this project is the venue
for the Indigenous nursing student to have a voice and become an active participant in the self
determination that is the stepping stone to overcoming the social determinant of colonialism.
This project gives value to the story and visions of the Indigenous nursing students.

**Interpretation**

A review of table 1 indicates a slight increase of two to three percent in the amount of
Indigenous nursing students graduating from the baccalaureate nursing program, from the
beginning of this project in 2013. It is expected to increase in 2017 to 19 percent if all
Indigenous students complete the degree requirements. This is a significant increase and
hopefully the strategies were an influencing factor. As indicated previously the issues
surrounding the Indigenous student success is multifaceted and complex however, the strategies
confer an atmosphere of acceptance and understanding that are difficult to quantify. The trends
look encouraging and will require continue monitoring so that this project is sustained and the
overarching goals of increased enrollment, graduation with the subsequent improvements in
Indigenous health and the social determinants of health are achieved.

**Limitations**

The limitations of this work exist primarily by the population aspect of the research
question. There is a very low number of Indigenous baccalaureate nursing students. It would be
beneficial if this cohort could be extended to include; other levels of nursing such as licensed
practical nurse and health care aide, since they are equally as important in promoting the general
health and social determinants of health related to the Indigenous population. The other
limitation was the specific environment from which the students were selected, to broaden the
results, Indigenous students from other baccalaureate schools of nursing would be helpful to see
if the local results could be transcribed to a larger population. In their fourth year of the program
the participants become formal students of another university since it is a collaborative baccalaureate nursing program. The acquisition of data from both organizations was difficult since the small numbers raised privacy concerns.

As discussed previously there is a reluctance to self-identify, this makes statistical fact finding difficult and often inaccurate. This discussion of limitations gives a forward focus to this project as once the story has been told it is imperative to the trust relationship that the information is used to promote the recruitment and retention of students.

During the course of this project the downturn of the Canadian economy impacted strategies negatively due to the lack of provincial funding for a public educational institute. During the spring of 2016 a natural disaster evacuated the city for a month and educational institutions did not open until late August. This affected strategies and funding, requiring some strategies to be repeated and decreased opportunities to complete other strategies.

**Conclusion**

Given the health disparities of the Indigenous population of Canada and the relevant research of the benefits of Indigenous nurses caring for this group of individuals, the importance of recruiting and retaining Indigenous nursing students becomes paramount to the health of a vulnerable section of the population. It has been identified that the number of Indigenous health care workers are inadequate and the Indigenous population has identified this aspect as one of the methods to reconcile previous harm from colonial influence (Exner-Pirot & Butler, 2015; Allan & Smylie, 2015; CAN, 2012; Greenwood et al., 2015). The literature gives suggestions on methods for increasing access and relevancy for nursing programs however, it is in keeping with the Indigenous ways of knowledge transfer to build a relationship and then ask Indigenous people what they believe is the best practice for their people (Pijl-Zieber & Hagen, 2011).
Understanding this aspect of Indigenous ways a phenomenological approach was taken and current and graduate baccalaureate students were interviewed and their suggestions were the basis for strategies that were attempted to be implemented. The strategies such as increased marketing to outlying areas, role modeling, identification of Indigenous faculty and the need for an Indigenous counselor and available Elders were all identified by students as elements that would contribute to their retention (Smith et al., 2011; Brascope & Waters, 2009; Best & Stuart, 2016; Anonson et al., 2008; Educational Policy Institute, 2008; Anonson, Huard, Kristoff, Wilson & Walker, 2014; Gregory et al., 2008; Pijl-Zieber & Hagen, 2011; Green, 2016).

These strategies were implemented or partially implemented. The education of faculty regarding Indigenous knowledge transfer and cultural implications for pedagogy was undertaken and assisting students with navigation of supports such as scholarships, and the location of an Indigenous friendly study area were provided on an as needed basis. There was a slight increase in the number of Indigenous graduates but that number will hopefully continue to rise when the strategies are adopted on a college wide basis. The benefits of this project are difficult to measure but small improvements will contribute to the pervasive attitude that this is a college that cares about the Indigenous baccalaureate nursing student, has a basic understanding of the struggles needed to succeed and is trying to do everything possible to ensure the acquisition and graduation of the maximum number of Indigenous baccalaureate nursing students.
References


Lawson, T. G. (2014). Systems Model. In M.R. Alligood (Eds.), *Nursing theorists; and their
work (8th ed.), (pp. 281-302). St Louis, MO: Elsevier.


(Eds.), *Nursing theorists; and their work (8th ed.), (pp. 281-302) St Louis, MO: Elsevier.

Health/Lippincott, Williams & Wilkins.


www.aadnc.gc.ca/eng/1100100014597/1100100014637#chp5


pd/prof/index.


Table 1

*Number of Indigenous Students in a Baccalaureate Nursing Program*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>0/25</td>
<td>4/26</td>
<td>1/29</td>
<td>1/25</td>
<td>1/24</td>
<td>1/21</td>
<td>1/18</td>
<td>1/18</td>
<td>2/24</td>
<td>2/26</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>15</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>
APPENDIX A. STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University’s Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of plagiarism are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person’s ideas, including another learner’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University’s Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA Publication Manual.
Leamer name and date

Nadine Rimmer

Mentor     Dr. Joann Manty, Capella University

December 8, 2016