

CONCEPTUALIZING TEACHERS' PERCEPTIONS  
OF ABORIGINAL STUDENT ACHIEVEMENT:  
AN EXPLORATORY STUDY

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By

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## ABSTRACT

The primary purpose of this study was to explore teachers' perceptions of Aboriginal student achievement in six Saskatchewan public community schools in urban, rural, and Northern settings. Three of the schools were elementary schools, and three were high schools. Data for the study were obtained by means of teacher semi-structured interviews, and a teacher survey designed expressly for this research. The research opportunity sought to "explore in the context of selected Saskatchewan community schools, teachers' perceptions of Aboriginal achievement, the unique and contextualized features that govern Aboriginal learning, and the efforts of teachers to enhance Aboriginal student learning."

Historically, Aboriginal student achievement has been viewed through a deficit lens. To gain a positive perspective of this phenomenon, a constructivist paradigm, a social justice theory of change governed by an ethos of appreciative inquiry were employed using a Mixed Methods Research design. Specifically, a two phase exploratory methodology where a qualitative phase followed by a quantitative one was used to best inform the research perspective. A multi-case study approach for each school and division was deemed the most effective means of exploring teacher conceptualizations of the manner and conditions under which Aboriginal students best learn.

A total of nine teachers were interviewed and 28 responded to the teacher survey instrument. Member checks of the interview data were undertaken and statistical data using both Excel for Windows as well as SPSS statistical programs were employed for survey data analysis. Owing to the small survey sample, the author advises that caution be used when considering the survey results. However, it is hoped that refinement of the survey tool and its use in later research will prove to be of benefit in understanding the phenomenon of Aboriginal student achievement. A

peer data analysis panel was convened to thematically analyse the four open-ended questions contained in the survey.

Findings for this study indicated teachers valued the work of collaborative teams, supportive school learning environments, differentiated instruction, assessment for learning, professional development, and culturally responsive instruction and curriculum and school/division alignment to enhance Aboriginal student achievement. The study found that perceptions of Aboriginal and non-Aboriginal teachers differed where Aboriginal student achievement was concerned. As well, participants felt that heightened Aboriginal student achievement could be fashioned by determined student engagement in their academic work. Finally, participants believed that parent and community engagement in schools and the academic life of their children would also enhance Aboriginal student learning outcomes.

It is hoped that this study will serve as a point of initiation for more research into the phenomenon on a wider basis in order to generate greater understanding of the means by which Aboriginal students may flourish within public schools in Saskatchewan and potentially elsewhere.

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"Not everything that counts can be counted, and not everything that can be counted counts."  
(Sign hanging in Einstein's office at Princeton)

## CHAPTER ONE THE NATURE OF ABORIGINAL STUDENT ACHIEVEMENT

The provincial government of Saskatchewan has committed to improving achievement for all learners in the province (Government of Saskatchewan, 2010; 2008). Improving student achievement rests at the core of the Saskatchewan Continuous Improvement framework. In the main, while progress towards this goal has occurred and is reflected in such documents as the Program for International Student Assessment (PISA), results for Aboriginal children and youth have fallen behind those of their non-Aboriginal counterparts. Data released in the *2010 Saskatchewan Education Indicators* show that in many disciplines, achievement disparities continue to widen rather than close. This circumstance exists in spite of the considerable efforts of teachers, administrators, schools, and school divisions to reduce these academic disparities.

This academic phenomenon has existed for some time and continues to do so despite the volume of understanding that exists about improving student achievement (Fullan, 2009, 2007, 2006, 2005; Hargreaves, 2009; Hattie, 2009; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004; Levin, 2009; Seashore Louis, Leithwood, Wahlstrom, & Anderson, 2010). The degree to which this achievement disparity contributes to social and economic disparities between Aboriginal and non-Aboriginal peoples beyond schooling is manifest. Cappon (2008) observed that the short term educational costs are small when compared to the long term social and economic costs of maintaining the status quo where improving Aboriginal student learning outcomes is concerned. Recognizing Aboriginal student achievement requires immediate consideration and purposeful action to reverse current trends is paramount.

In order to understand the attributes that affect Aboriginal student achievement, it is essential to explore the demographic context of the matter, examine the educational data to illustrate educational outcome disparities, and investigate possible responses to the issue. By so doing, it may be possible to set an educational course that is understanding of the achievement differences and responsive to them.

### **Theoretical Framework for the Study**

This study employed a constructivist paradigm viewed through a social justice lens and governed by a spirit of appreciative inquiry. It is held that a constructivist paradigm will lead the study towards an understanding that Aboriginal student achievement in general remains highly contextualized, and therefore, there exist no grand formulae that shall address inequities and disparities in all contexts at all times. Constructivism enables a dialogic foundation to educational research that considers participants views and describes them in a specific context and explores the meaning people hold for the [issues] under consideration (Cresewill, 2002, p. 49). Furthermore, a social justice lens provides a framework in which policy, planned initiatives, and distribution of resources can mitigate social transformation and redress social inequities for marginalized groups within wider society (Mertens, 2007). Finally, within an ethos of appreciative inquiry the study will seek to determine the means by which teachers in select community schools in the Province of Saskatchewan examine what is “best” (Cooperrider & Whitney, 2005, p.7) in their respective schools, divisions, and communities, and practice that looks to enhance Aboriginal student achievement.

Specifically, respecting the relational nature of Indigenous methodologies (Henderson, Battiste, & Bouvier, (in press); Denizin & Lincoln, 2008; Justice, 2004; Kovach, 2005; 2010; Wilson, 2008) the constructivist ethos that Cottrell Pearce, Pelletier, Cunningham, and Rohr (2010) contended has much alignment with Indigenous ways of knowledge . Also, in keeping



with Indigenous decolonizing methodologies, I utilized an appreciative inquiry approach to my questioning techniques. The reasons for this appreciative approach are two-fold. One, if it is recognized that historical matters relating to Aboriginal peoples have been approached in a deficit, problematic way I believe it is incumbent upon researchers to be sensitive to this “problematization” effect. (See the Davin Report, 1878.) Hattie (2009) noted:

What seems ... important is that students have a positive view of their own racial group, and that educators do not engage in the language of deficit theorizing. Accepting that students come to school with different cultural heritages and that they can be allowed and encouraged to have a positive image of their own ... cultural heritage is an acknowledgement of the importance of culture and can show students that they are accepted and welcomed into the learning environment. Further, so much discussion is about the tails or gaps ... but such language is misleading as there are many gaps in achievement for students of all ethnicities, both above and below the mean of achievement” (pp.57 – 58).

However, honouring this contention will prove difficult as the notion of “education gaps” is replete in the literature that explores Aboriginal student achievement. As well, at the beginning of my research, I initially used such “gap discourse” to frame my own understandings.

Therefore, from time to time in this study, the deficit discourse of “achievement gaps” will appear, in the context of citing other literary sources, or directly quoting research participants.

Two, my prior experience as a facilitator for appreciative inquiry at a school and district level has favourably predisposed me to the effectiveness of the notion of building from strengths rather than from deficits. Cooperrider and Whitney (2005) saw such building in terms of “(appreciative inquiry) involving the systemic discovery of what gives life to an organization or

community when it is most effective and most capable in economic, ecological, and human terms” (p. 7). To this end, I view building on the strength of educational practices that have been shown to have merit where transforming schools and school systems to effectively fashion more equitable learning outcomes for Aboriginal learners is concerned.

Improving student achievement results rests at the core of the Saskatchewan Continuous Improvement Framework (CIF). For the most part, while progress towards this goal has occurred, results for Aboriginal children and youth have fallen behind those of their non-Aboriginal counterparts. Closer scrutiny of the data indicates that achievement disparities between Aboriginal and non-Aboriginal students in Saskatchewan have existed and have remained relatively constant, for some time. While writing about similar achievement data in Ontario, Cherubini, Hodson, Manley-Casimir, and Muir (2010) noted:

When reviewing the traditional benchmarks of academic achievement, some tracked for well over a decade, one is struck by the small increments of advancement that suggest more than just an inability or unwillingness to be academically successful” (p. 331).

Similarly, Friesen and Krauth (2009) followed three cohorts of Aboriginal grade 4 students in British Columbia (1999, 2000, 2001) to their completion of grade 7 and determined that achievement differences evident on Foundation Skills Testing in Grade 4 “continue to widen between grade 4 and grade 7”. Similar widening trends are evident in Saskatchewan (Government of Saskatchewan, 2008a; 2010). Such evidence suggests that interventions possible at earlier grades may not be occurring on a scale that would see a shrinking rather than a widening of achievement inequities, or it may indicate that the terms of what should count when measuring student achievement is not being “counted.” This chronicled lack of progress might suggest that “not everything that is being counted, counts.”

Sharpe, Arsenault, Lapointe, and Cowan (2009) have projected that if Aboriginal educational attainment and labour market outcome levels by 2026 reach those levels attained by non-Aboriginals in 2001, then cumulative income increases would reach \$410 billion relative to the status quo, tax revenues would accrue a cumulative increase of \$39 billion relative to the status quo, and government expenditures would decline cumulatively by some \$77 billion over the same period. Such projected benefits being fostered by a very modest closure of existing achievement levels give pause to wonder what the benefits might be if the disparities were addressed in a more significant fashion during this same time period.

Howe (2011) noted that while closing the Aboriginal education gap is the most significant economic challenge facing Saskatchewan, it also remains the province's greatest economic opportunity. Howe's research clinically detailed how enhanced educational attainment has financially benefitted Aboriginal people, but also contributed to the wider Saskatchewan and Canadian economy as well:

The improvement in the educational qualifications of Saskatchewan's Aboriginal population ... will cause a boom which will be structurally different. The closing of the Aboriginal education gap will shift the labour supply curve to the right. For the first time, Saskatchewan's economy will experience a made-in-Saskatchewan boom. That will be different from previous booms in a number of ways. For example it is reasonable to expect that it will have greater permanence than previous booms (p.48).

It is suggested here that an immediate investment in social capital will result in a long term boon in human capital. The economic case for enhancing Aboriginal student achievement is a compelling one indeed.

## **An Aboriginal Perspective of Achievement**

The Canadian Council on Learning's *Summary Report on Learning in Canada, 2007* asserts that measurement instruments tend to focus upon the cognitive learning domain that fails to reflect the holistic view of learning held by First Nations, Métis, and Inuit people. Such instruments also fail to report on experiential and traditional learning that occurs outside of formal schooling and which again is integral to the holistic tenets of indigenous learning (p.4). However, the belief that mainstream education and Aboriginal views of education are not held to be incompatible or mutually exclusive:

Strong cultural values, First Nations identity in students, and mainstream academic and technical education are not incompatible or contradictory, but in fact the former enhances one's capacity to deal with and master the latter. With a solid grounding in one's own culture and positive identity, students become much higher achievers in all areas of education and life (Assembly of First Nations, 1988 as cited in Saskatchewan Learning, 2001, p. 2).

Given this perceived compatibility it is also held that educators frame instruction and assessment in such a way that Aboriginal academic achievement is at least equal to that of non-Aboriginals. To do this, base line data is critical so that interventional and supplemental instruction may raise achievement standards for Aboriginal children and youth. Where this study is concerned, achievement shall refer to progress in the acquisition of competencies that students attain for high student achievement. Within the province of Saskatchewan, raising achievement levels for all students is central to the mandate of schools and school divisions and it should be kept in mind that notions of achievement are cultural constructs and not value neutral (Berger, Epp, & Moller, 2006; Castagno & Brayboy, 2008; Hickling-Hudson & Alquist, 2003; Kanu, 2005; Steeves, Carr-Stewart, & Pinay, 2012).

## **An Overview of Aboriginal Educational Demographic Trends**

In 2009-10, the total number of self-declared Aboriginal students attending Saskatchewan provincial schools was 17.0% of the entire school population (Government of Saskatchewan, 2010, p. 54). Given changing demographics with respect to the Aboriginal population as a whole, this percentage is likely to continue to grow for the foreseeable future (Liben, 2009). Of note is the fact that as the Aboriginal student population has grown, so too has the percentage of Aboriginal teachers and administrators. In 2009-10, 6.6% of the teaching force consisted of self-declared Aboriginal teachers up from 6.1% in 2006-2007, and 5.3% of administration were self-declared Aboriginals up from 5.0 % in 2006-07 (Government of Saskatchewan, 2010, p. 54) These numbers are encouraging given the expressed intention of implementing Aboriginal content in the educational curriculum as these educators will have critical leadership roles to play in leading these initiatives.

While the population of Saskatchewan as a whole ages, the demographic reality of the Aboriginal population within the province is growing and remains much younger than its non-Aboriginal counterpart (Liben, 2009). Indeed, with respect to the school age population in particular, Aboriginal populations are increasing dramatically relative to the non-Aboriginal populace. Nearly 49 % of the total Aboriginal population rests between 0 and 19 years of age compared to just 30% for non-Aboriginal people (Government of Saskatchewan, 2008a, p. 8). This statistic alone has monumental implications for education in the province for the immediate and foreseeable future. Given that achievement rates, grade to grade transition, and graduation rates for Aboriginal students remain well behind those of their non-Aboriginal counterparts it moves the educational community to strive to implement appropriate measures to address these educational disparities.

## **Student Achievement Indicators**

The Saskatchewan Ministry of Education has identified five key indicators of student achievement (Government of Saskatchewan, 2010a). These include: (1) performance in large scale assessments; (2) student transition rates; (3) final classroom marks; (4) credit attainment and; (5) persistence to complete Grade 12. A close examination of these components paints an unsettling portrait of the current state of Aboriginal achievement relative to the rest of the school population.

## **Large Scale Assessments**

Large scale assessments tend to measure only cognitive performance for a very narrow set of learning indicators and could be said to be incompatible with Aboriginal student learning styles and ways of knowing. The fact that such educational data continues to underscore Aboriginal learning disparities with respect to mainstream students is educationally unsound and culturally unfair. Indeed, such assessments place diverse learners at a disadvantage and throw all students into an “educational melting pot” that fails to recognize diverse learning styles. Perhaps it is time for the provincial government to rethink how Aboriginal students are being measured and stay the policy of using so much summative assessment to demonstrate learning. Instead, honouring Aboriginal students’ ways of knowing and learning may present more accurate assessment results. Certainly such a tack would venerate the understanding that students “learn at different rates and in different ways.”

With respect to large scale assessments where writing, was concerned, Aboriginal percentages were significantly lower than those of non-Aboriginal students in all aspects for Grades 5, 8, and 11 results (Government of Saskatchewan, 2010, pp. 45). On average, Aboriginal students performed lower with respect to attaining “adequacy and above and proficiency” for quality of writing product and demonstration of writing process. These results also demonstrated

that achievement levels varied from geographic region to region (Government of Saskatchewan, 2010, p.45).

Similar results held for mathematics with respect to attaining “adequacy and above and proficiency” for mathematics content, integrated application, calculator, computation and estimation for Grades 5, 8, and 11. Once again Northern students had the lowest proportion of students performing “adequately and above” on the assessments. Finally, where reading was concerned, with respect to overall reading comprehension, explicit comprehension, implicit comprehension, critical comprehension, and reader response, Aboriginal students were outperformed by non-Aboriginal students in all categories. Again, Northern students had the lowest proportion of students performing “adequately and above” in the province. These achievement results have remained fairly static for decades and while some progress appears to be made Aboriginal students’ achievement gains still fall behind those of their non-Aboriginal counterparts.

### **Student Transition Rates**

Early education programs in Saskatchewan have witnessed an impressive expansion in the last decade moving from 89 programs enrolling 682 students in 2002-03 to 212 programs enrolling 3511 students in 2009-10 (Government of Saskatchewan, 2010, p. 75). As well, the introduction of an early childhood instrument (EDI) has afforded the province the opportunity to assess and monitor how:

Providing opportunities early is the most effective means of addressing children’s developmental needs. Prevention and early intervention have important benefits later in life ...[including]... improved educational attainment and performance, increased employment opportunities, improved social skills, reduced involvement in the criminal justice system and better health” (Government of Saskatchewan, 2010, p. 74).

To this end, such early assessment and interventions where necessary should lead to long term benefit for all students. A careful scrutiny of the provincial school transition data indicates that retention rates and grade to grade transition rates are lower for self-declared Aboriginal students than for any other demographic group (Government of Saskatchewan, 2010, pp. 74-90). In particular, primary student transition rates demonstrate that more Aboriginal students fail to successfully transition to later grades and this trend continues into the intermediate and high school grades as well. When 2006-2009-10 transition rates from Grade 7 to Grade 8 to Grade 9 and to Grade 10 are examined, 93.4% of Aboriginal students successfully transitioned to Grade 8, 3.1% continued in Grade 8 and a further 3.4% left the system. By contrast, 86.2% of Aboriginal students transitioned successfully to Grade 9, 7.2% continued in Grade 8 and 6.6% left the system.

Transition rates from Grade 9 to Grade 10 are similarly disparate. The percentage of Aboriginal students completing the transition to Grade 10 was 79.0%; 15.1% continued in previous grades; and 6.2% had left the system. By contrast, 91.2% of total students successfully made the transition to Grade 10; 5.3% continued in previous grades; and 3.5% had left the system. In the North, 75.8% of Aboriginal students made successful transitions to Grade 10 and 15.9% continued in previous grades. A further 5.9% left the system (Government of Saskatchewan, 2010, p. 81).

These troublesome statistics clearly indicate that gaining core competencies for Aboriginal children and youth create circumstances where disproportionately high percentages fall behind or leave the system relative to the non-Aboriginal student population. The trends to grade retention and dropping out of school emerge well before students enter the high school phase of their



schooling. When the records for classroom marks and graduation rates are examined, the trends are equally troubling.

### **Final Classroom Marks**

In all subjects including Language Arts 30 A and B, Science 10, Mathematics 30, B, and C, English Language Arts 20, Biology 20, and Mathematics 20 on average, Aboriginal students fared worse than their non-Aboriginal counterparts. Detailed explanations and analysis of these results are available in the Saskatchewan Ministry of Education (2010) and require no further analysis here. Suffice to say that the data demonstrates that achievement disparities exist, have existed and will probably continue to exist without a substantial change in education achievement results reporting. Hope for such may appear to lie in the Saskatchewan Achievement Initiative introduced in 2012.

While results in the AFL reporting measures illustrate disparities in Aboriginal and non-Aboriginal student achievement for selected courses in Grade 12, it must be remembered that the Aboriginal student population has already been “sorted” by means of student drop-out rates and retention rates in prior grades. Furthermore, when achievement data is disaggregated by geographic location, the results in the North for Aboriginal students and in particular for male Aboriginal students are the lowest in the province. Rates are somewhat better for Urban Aboriginal students and the best results were recorded by Rural Aboriginal students. These results are in keeping with overall provincial school achievement results (Government of Saskatchewan, 2010, p. 41).

### **Credit Attainment Rates**

Saskatchewan graduation requirements for the Provincial system dictate that a student complete 24 graduation course credits from Grade 10 to Grade 12. On average, Saskatchewan students earned 7.9 credits per year for the school year 2010-2011 (Government of

Saskatchewan, 2011, p. 7). For self-identified Aboriginal students the average credit completion per year in 2009-2010 was 5.8 credits. Rural students had the highest average at 8.0 credits per year and urban students attained 7.6 credits per year. In the North, the average credit attainment for students was 4.8 credits during 2009-10 (Government of Saskatchewan, 2010 p. 91). These figures demonstrate a flat-lining or decline since 2007-08 for the same educational data (Government of Saskatchewan, 2008a pp. 97-98). It becomes evident that as Aboriginal students make gains, their non-Aboriginal counterparts make gains at an accelerated pace. This pace of gain has implications for the education system in terms of scheduling enough courses to accommodate the additional students in the system. This in turn places additional strain on lower grades experiencing similar backlogs of students (See Transitions Rates data). When the graduation rate data are examined with respect to persistence to complete Grade 12, a similar picture emerges for many Aboriginal students in the system.

### **Persistence to Complete**

In 2007-2008, 74.1% of Grade 12 students eligible to graduate within three years of entering Grade 10 did so. This figure is consistent with trends observed over the last ten years in the province. For the same year, 32.5% of Aboriginal students or fewer than one in three graduated in the same time frame. For Northern students the figure was 30% of students graduating on time (Government of Saskatchewan, 2010, pp. 85-86). Such figures while consistent with other data explored in this section, remains of critical concern. On the other hand, Aboriginal students who persist for up to five years after their cohort graduates are attaining a rate of 52.5% successful completion demonstrating that graduation rates do increase given extra time. The range of rates for the total non-Aboriginal provincial school population experiencing similar delays in graduating was 82% successfully completing Grade 12. Ultimately, 41.1% of Aboriginals aged

25 to 54 do not hold a graduation certificate compared to 15.4% of non-Aboriginals (Government of Saskatchewan, 2008a, p. 19).

### **Key Indicators Affecting Student Achievement**

Five key indicators affecting student achievement identified by the Saskatchewan Ministry of Education include: (1) demographic trends; (2) expenditures on education; (3) class size; (4) educator ratios and; (5) teacher experience (Government of Saskatchewan, 2008a). An examination of these key components proves worthy of analysis to see how working in concert with the achievement data, complementary patterns of circumstance may contribute to the student achievement differences.

### **Expenditures on Education**

In Saskatchewan, data recognized for grant purposes for the 2008-2009 school year show that expenditures on education on a per pupil basis were highest for Francophone students under the Fransaskois educational authority at \$18,778. Next, students residing in the North received \$11,955 per pupil. Rural and urban students received \$10,084 per pupil and students residing in Saskatoon/Regina received \$9,199 per pupil. The provincial schools in Saskatchewan receive a base rate of \$105,200 for elementary schools and \$240 per pupil over an enrolment of 200 students; secondary schools receive a base rate of \$125,000 and \$80 per student for every student over 400; K-12 schools receive a base rate of \$127,000 and the same breakdown as the previous two configurations by grade. For the 2012 and 2013 school years, these formerly dedicated funds are no longer line items and the spending has become discretionary (Real Renewal n.d.). Given the economies of scale possible for the two urban centres of Regina and Saskatoon, their respective rates as the lowest in the province make sense. So, too, does the higher spending for Francophone students and students in the North given their relative geographic dispersion over wide areas. However, discounting the rates for all segments of the

student population, rates were higher in 2005, adjusted for amalgamation in 2006, and adjusted upwards for rural and urban students and students in Saskatoon and Regina and for Francophone students in 2006-2007. Only in the North were rates lower in 2006-2007 than they had been in 2005 (Government of Saskatchewan, 2008a, p. 128). This circumstance seems curious given the lower achievement levels for students in this region. Community school expenditures are higher given additional grants to the schools.

### **Average Class Size**

Average class size is determined by the number of students in a classroom relative to the number of teachers assigned to instruct those students. In 2009-10, the average class size in Saskatchewan for all grades was 20.8 (Government of Saskatchewan, 2010, p. 117). Over the last 16 years, class sizes have shrunk from 22.0 in 1996-97 to 20.7 in 2007-08 (Government of Saskatchewan, 2008a, p. 72). Rural students had the best ratio in 2009-10 at 18.7. These figures reflect the fact that student enrolment has generally declined over this time period although recent statistics point to increases in urban and some rural and northern districts. However, it should be noted that with the exception of kindergarten classes, class sizes in urban areas rose by nearly two students from 2007-08 to 2009-10 (Government of Saskatchewan, 2010, p. 117). First Nations schools were not included in this data. Expenditures per student are significantly lower in the federally funded band schools (Bell, 2005) and this may also account for the Aboriginal increases in provincial school enrolments. Had the federal data been included with the provincial, it is apparent that class sizes would be higher than those reported in the data.

### **Teacher Experience**

The average years of teaching experience in Saskatchewan provincial schools in 2009-10 was 14.7 years. The matter of teacher experience and their location within urban, rural, and northern school districts proves illuminating when exploring Aboriginal and non-Aboriginal student

achievement. While the percentage of male and female teachers remains consistent across the three regions, and the average experience in years of service of teachers also remains consistent in urban rural and northern areas, one statistic is widely different and that relates to the percentage of teachers with under five years of teaching experience. In urban locations currently 19% of their teaching force has five or fewer years of experience. Rural locales have 20% of their teaching force with five or fewer years' experience. The North, however, has 36% of its teaching force with five or fewer years' experience (Government of Saskatchewan, 2008a, p. 145). Similar data for the last two years was not available in the Saskatchewan Educators Report. While these figures in no way denigrate the hard work being done by teaching staff, the fact that so many teachers in the North may be inexperienced and culturally new to their teaching environment relative to their urban and rural counterparts student achievement may be affected.

### **Achievement Outcomes and Diminished Life Opportunities**

In a statistical analysis undertaken for Statistics Canada, Bougie (2003) examined the results from the *International Adult Literacy Skills Survey* (IALSS). The profile of off-reserve First Nations and Métis living in urban Saskatchewan is illustrative of the long term effects of lower achievement outcomes in the language arts experienced by Aboriginal students in the education system. It should be noted that the report recognizes that the IALSS does not measure or reflect “the multiple literacies that are part of First Nations’ and Métis cultures” (p.4). However, the scores do reflect “the relative importance of people’s literacy skills such as those measured by IALLS in order to successfully navigate the demands of life in an urban context” (p.4). A benchmark of Level 3 performance indicates the minimum level of literacy required to manage in a knowledge – and information-based society. Findings showed that 70% of First Nations participants 16 years of age and older and 56% of Métis participants scored below Level 3 in Saskatchewan. By contrast, 37% of non-Aboriginal adults performed below Level 3 (Bougie,

2003). These results tend to mirror those experienced by Aboriginal students relative to their non-Aboriginal counterparts within the school system. Certainly a significant discrepancy is evident in the IALLS survey and such a discrepancy leads to more limited life chances.

### **The Economic Prospects of Disadvantage**

An individual holding less than a high school certificate earned \$18,288 in Saskatchewan in 2001. By contrast a certificated high school graduate earned \$21,780 per year on average in the province. Those post high school cohorts with trades certificates, college diplomas or university degrees earned considerably higher wages at \$28,755, \$27,742, and \$40,279 respectively (Statistics Canada, 2001). Given the lower graduation rates of Aboriginal students in the province, it would appear that in terms of earning power, their prospects are severally limited. When Canadian median income for Aboriginal people is examined, it reveals that in 2006, \$18,962 per annum is the median while for that of non-Aboriginals the median income is \$27,097 per annum (Wilson & Macdonald, 2010, p. 8). The lower socio-economic status of Canada's Aboriginal population relative to the rest of the population is a matter of record. Given the analysis of educational data provided earlier in this chapter, it is safe to say that such a state of disadvantage is predictable but preventable with appropriate actions taken at the policy, operations, and capacity building levels within school systems. Failure to do so will reify existing circumstances. Quite simply the iniquities of the status quo need to be addressed.

Howe (2006) has proffered that the path out of poverty for First Nations peoples may reside in one taken by Eastern European immigrants taken at the turn of the last century. Howe noted that demographically the similarities between the circumstances in which the immigrants found themselves are strikingly similar to those that face First Nations peoples at this juncture. Characterized by "a large rapidly growing economically marginalized population" (p. 2), the immigrants transformed their circumstances to become part of the cultural mainstream of the

province. This transformation was made possible by means of “education and entrepreneurship.” Howe asks three fundamental questions of the prospects facing First Nations peoples: How was the path followed? Why was the path followed and will the path be followed again (p. 2)? The fact that Aboriginal people in Saskatchewan are seeking education in ever increasing numbers and availing themselves of opportunities to engage in entrepreneurial enterprises suggests that “Saskatchewan will experience the same social transformation in the 21<sup>st</sup> Century that it experienced in the 20<sup>th</sup>” (Howe, 2006, p. 13).

### **Aboriginal Labour Market and Employment Trends**

One of the myths that pervades public perception of Aboriginal employment and earning power is the belief that because many Aboriginal people and communities are located in more remote regions of the province of Saskatchewan, it is logical that their employment prospects are more limited and therefore, their earning power is limited as well (Wilson & Macdonald, 2010). However, a careful scrutiny of data appears to indicate other forces may be at work and that, “Not only has the legacy of colonialism left Aboriginal peoples disproportionately ranked among the poorest of Canadians, ... disturbing levels of income inequality persist as well” (Wilson & Macdonald, p.3).

Wilson and Macdonald’s research shows that regardless of where Aboriginal people may live in Canada, their income remains lower than that of non-Aboriginal Canadians. In fact, non-Aboriginal people working on urban reserves earn 34% more than Aboriginal people working on those same urban reserves and non-Aboriginal people working on rural reserves make 88% more than Aboriginal people (p. 4). When educational attainment factors are measured in, the picture remains the same except where Aboriginal women who have earned post-secondary degrees are concerned as they have virtually closed wage inequities with Aboriginal men and have higher

wages than non-Aboriginal women with similar degree certifications (p. 4). This may explain why Aboriginal women are attaining more university degrees than Aboriginal men.

During the economic downturn of 2008 and 2009, Aboriginal unemployment rates rose faster than those of non-Aboriginal workers of comparable social demographic standing (Statistics Canada, 2010). Among Aboriginal people aged 15 and over, unemployment rates rose 3.5% to 13.9% in 2009. Among non-Aboriginal workers of the same age, unemployment rates rose by 2.1% to 8.1% overall. Economic sector-by-sector examination reveals similar or even wider disparities in employment outcomes for Aboriginal workers when compared to their non-Aboriginal counterparts with respect to construction and manufacturing. The greatest disparities in unemployment rates occurred in the 15 to 24 year old demographic that saw off-reserve Aboriginal youth suffer a 6.8% decline in employment in 2009. By contrast, employment fell 4.2 % for non-Aboriginal youth of the same ages. The only sector where a positive difference was noted in 2009 was in the health care sector where Aboriginal employment outstripped non-Aboriginal employment by 2% with a 12% increase compared to a 10% increase among non-Aboriginal workers (Statistics Canada, 2010).

### **Incidence of Child Poverty**

Although Canada committed to ending child poverty by the year 2000 (Standing Order of the House of Commons, 1989, November, as cited in Novick, 2011, p. 2) data show that Canada as a nation actually has accelerating levels of child poverty than those that existed in 1989 when the House of Commons unanimously passed Standing Order 81. In Saskatchewan in particular such is the case where Aboriginal children are concerned. In 2006, 51% of Aboriginal children under the age of six were in a low income family compared to 18% of non-Aboriginal children under



the age of six. Saskatchewan's data was the second largest proportion of Aboriginal children under the age of six in the country (Government of Saskatchewan, 2010, p.18).

The percentage of Aboriginal people receiving social assistance in the form of welfare in Canada is staggering in relation to the rest of the population. Nearly 42% of Aboriginals living on reserve receive welfare payments from the federal government. For Métis, 23.5% of the population receive welfare assistance and off-reserve 22.1% First Nations receive welfare. Non-Aboriginals by contrast experience significantly lower rates at 8.1% of the total population receiving welfare assistance (*Report of the Royal Commission on Aboriginal Peoples*, 1996, p.8). These percentages in no small way help to explain the low median incomes retained by Aboriginal people. While the data is 17 years old, it remains representative and if the numbers hold today, the actual spending power of welfare recipients has declined relative to the cost of living in that time span. In most cases, the receipt of welfare is “institutional” rather than “transitional” (Payne, DeVol, & Smith, 2002).

### **Aboriginal Health Issues**

After European contact, Aboriginal peoples were ravaged by a variety of diseases for which they had no immunity. Such diseases included small pox, whooping cough, venereal disease, influenza, bubonic plague, measles, and yellow fever (Helin, 2007, p. 97). This exposure and attendant epidemics made a major contribution to the rapid decline of Aboriginal populations in North America from an estimated 4.2 million in 1492 to 2.54 million in 2002 (Ellwood, 2003, p.15). To place the population decimation in perspective, if one were to take the population of North America today at approximately 300 million, the corresponding loss of population would be some 280 million people (Helin, 2007, p. 98).

Within Canada, an examination of Aboriginal health issues shows the incidence of certain medical conditions such as diabetes and giardiasis run three times and one and a half times

higher amongst the Aboriginal population than the national average (Helin, 2007). These medical conditions are rooted in poor diet, and contaminated water respectively. Reserves in particular are more likely to face issues of contaminated water than the rest of the country which explains the exposure to giardiasis although it remains ironic that in a country that contains the world's largest supply of fresh water that "beaver fever" should be prevalent in any circumstance. Statistics Canada (2007, b) reported in 2001 that one in three Inuit living in the Arctic reported that their water was contaminated (p. 2). The incidence of diabetes among Aboriginal people has been described as epidemic, but again given low income levels, poor diet and diabetes are a manifestation of persistent low health outcomes for Aboriginal people.

An especially disturbing aspect of Aboriginal health issues relates to that of suicide rates for Aboriginals. Rates for the general Aboriginal population were 3.5 times greater than the national average. Aboriginal youth were at highest risk with rates six times higher than the national average (Chenier, 1995). Furthermore, the report estimated that "up to 25% of accidental deaths among Aboriginal people [were] unreported suicides" (p. 2). The roots of such staggering rates are varied, but certainly instances of depression aided and abetted by poverty, substance abuse, despair, and "cultural stress" remain significant contributing factors. To reverse these circumstances will take incredible effort and will. The best opportunity may remain through improving life chances by means of education.

Such an understanding may align with the belief forwarded by Ogbu (1982) that achievement inequities cannot be seen in purely educational terms without considering the macro-effects of institutionalized poverty and disadvantage from which many Aboriginal learners come to school every day. Ogbu's (1993) "secondary caste-like minorities" included those groups who as a result of a "contact situation" have been involuntarily and permanently incorporated into a

dominant colonial society, endure employment and status ceilings, and who frame their social and economic disadvantage in terms of long-lasting institutional discrimination (pp.298-299). Ogbu included “Indians” within this stratified group and went on to state that as a coping mechanism, such “castes” may oppose the dominant colonial group. In educational terms, they may “resist achievement in school if they perceive the school as representing dominant cultural values” (Ledlow as cited in Kanu, 2007, p. 25).

Helin and Snow (2010) argued that while there are countless variables that determine Aboriginal well-being, education is “arguably the most important” (p.7). Furthermore, Arundel (2009) asserted that “people with higher education are healthier than people with less education” (p.7). When one considers the escalating costs of health care in Canada and weighs it against the cost of education, it appears that the lower cost of educational investment would reduce long term health costs. In their study, Sharpe, Arsenault, Lapointe, and Cowan (2009) projected that by 2026, if Aboriginal achievement rates meet those of non-Aboriginals in 2006, the total savings to Canadian government would be 14 billion dollars, government tax revenues would increase by an estimated 39 billion dollars, and cumulative personal incomes would increase by some 401 billion dollars. Certainly these figures while estimates, underscore four critical understandings: (1) by raising Aboriginal educational outcomes modestly (to 2006) levels attained by non-Aboriginals by 2026, significant advantages accrue to government in savings and increased revenues; (2) higher educational attainment leads to a healthier population; (3) Aboriginal populations are more at risk educationally and in terms of health than non-Aboriginal populations; (4) the relationship between educational attainment and health is salient. To address the health issue, it becomes critical to address the achievement issue first.

It appears that to a major degree, government is placing the travois before the horse in regard to educational policy. Perhaps the priority of federal government intentions with respect to changing their focus and addressing the ravages of poverty that are in part fuelled by low educational attainment are best illustrated by the rejection of “the UN Human Rights Council recommendation for the development of a national strategy to eliminate poverty” (Canada, 2009, as cited in Arundel, 2009). Current federal Aboriginal education policies in particular are sheathed in parsimony, witness the two percent funding cap put in place in and retrenchment while the construction of new jails and prisons has become ascendant. In short the need to address Aboriginal educational achievement disparities currently evident cries from the social margins in this country.

Aboriginal women are confronted with a dichotomous circumstance where having children is concerned. Statistics Canada (2007a) has observed that while Aboriginal women have more education than do Aboriginal men, their wage earning power is less. Furthermore, Aboriginal women remain primary care givers for young children and, have on average one more child in their lifetime than do non-Aboriginal women. Citing the need to provide care to children has been the number one reason for Aboriginal females dropping out of school. Finally, Aboriginal women are more than two times likely to be lone parents than non-Aboriginal females and lone-parent families tend to be larger than those of non-Aboriginals (p. 1). These factors appear to coalesce into bleak prospects for both the women and their children given the “feminization and juvenilization of poverty” (Adams, 1991, p. 121) that is occurring across North America.

### **Aboriginal Gangs**

A major “health” issue affecting Aboriginal communities relates more to community health than individual well-being. It rests with the proliferation of Aboriginal gangs. While this is a phenomenon which is normally associated with larger urban centres and sometimes spectacular

violence as witnessed in the Lower Mainland in British Columbia in recent times, the fact remains that even in remote communities, Aboriginal gangs are spreading (Carr-Stewart & Northwest, 2009). The reasons for this scattering of gang activity is primarily economic and rooted in the drug and property crime trade. However, the lure of gangs and the recruitment of members, some as young as ages 6 and 7 are many fold. Carr-Stewart and Northwest (2009) reported that “youth at risk of joining gangs tend to be from groups that suffer from greatest levels of inequality and social disadvantage”. Certainly Aboriginal communities are proving to be fertile ground for gang recruitment and the adverse effects on communities many already disadvantaged are immense. Given the analysis of educational and demographic data provided earlier, it may be safe to say that such a state of disadvantage is predictable but preventable with appropriate interventions undertaken in a timely fashion within the school system. To a great extent, a chicken and egg scenario unfolds around this issue as Aboriginal school drop-outs may be attracted to gangs and gangs attract Aboriginal school drop-outs. Failure to address this phenomenon will reify existing circumstances.

### **Aboriginal Housing**

Arundel (2009) reported that Aboriginal people were four times more likely than other Canadians to live in over-crowded housing and three times as likely to live in housing in need of major repairs (p. 13). Recent developments in Attawapiskat Reserve in Northern Ontario and the Crown First Nations Gathering in Ottawa have underscored the need for major reform in the manner in which First Nations and Ottawa and the provinces interact on matters of relating to Aboriginal well-being and future prospects for such in the Canadian Confederation. Educational opportunities and actualization of Aboriginal access to enhanced mainstream economic prospects has been identified as key to substantive reform (Howe, 2011). At a time when relationships between Ottawa and Canada’s Aboriginal population appeared to be at a low ebb (see

Attawapiskat), reason for optimism embedded in a spirit of reform and renewal has been greeted with guarded enthusiasm (Smith, 2012). Certainly, such optimism has been observed before relative to the Kelowna Accord in 2006, but the promise of the agreement was ostensibly abandoned by Prime Minister Harper's government (CBC News Online, 2006, November). In the six year interim, educational and economic outlooks for Aboriginal people in Canada have not advanced in the manner envisioned or deserved by the accord.

### **Research Opportunity**

Improving student achievement rests at the core of the Saskatchewan Continuous Improvement Framework. Graduation trends show that on average, 75.5% of students entering Grade 10 successfully complete secondary school transition within 3 years (Government of Saskatchewan, 2010, p. 88). This data also reveal that, graduation rates for Aboriginal and northern students are lower where three year rates are concerned (Government of Saskatchewan, 2010). While such results are cause for concern, examination of cohort data indicate that achievement disparities between Aboriginal and non-Aboriginal students have existed and have remained relatively constant as evinced by the education data. The graduation rates are merely the last manifestation in what appears to be a predictable outcome of Aboriginal student achievement.

The central research opportunity for this study will be to explore in the context of selected Saskatchewan community schools, teachers' perceptions of Aboriginal student achievement.

Five central research questions based upon the research opportunity were posed to guide the study. Within the context of selected community schools in Saskatchewan:

### **Research Questions**

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?

2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?
3. How do teachers conceptualize effective instructional and assessment practices with Aboriginal student learning?
4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?
5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

### **Significance of the Study**

In 2006, the Federal Government of Canada under then Prime Minister Paul Martin acknowledged that an “unacceptable gap existed between what ought to be the hopeful promise of youth and the experience of aboriginal adulthood...” (Martin, 2006). While efforts to address the achievement disparities between Aboriginal and non-Aboriginal students are underway across Canada, these achievement disparities still persist and in some circumstances are widening rather than closing. If as Martin asserted, Canada is to actualize its promise as a country “that is the envy of the world” (2006) then as a nation we face a moral imperative to address and redress these circumstances. In short, addressing the achievement gap will require an effort of monumental proportions if Canada in general and Saskatchewan in particular is to assume its place as a country where “equality of opportunity” is “the foundation on which our society is built” (Martin, 2006).

### **Assumptions**

Underlying this study was the assumption that provincial community schools in Saskatchewan can engender a learning culture that is conducive to Aboriginal student achievement and is conducive to building a community of learners and building community in

the broader sense. It was assumed that the holistic approach to education of the community school setting would actualize the optimum educational and community building experiences that would help address student achievement disparities. It was also assumed that the interview and survey questions would illicit responses that might shed new light on the nature of Aboriginal student achievement. Furthermore, it was assumed that community school teachers would possess the capacity to offer insights about the nature of Aboriginal student achievement.

### **Delimitations**

Because this study was restricted to data recorded within six community schools in Saskatchewan, its scope was limited to selected teachers within those schools. Furthermore, the study remained limited to aspects of student achievement disparities within the context of the six schools selected for the study.

### **Limitations**

The researcher understands the following limitations inherent in the interview and survey method chosen for this study:

1. Interview and survey questions would be open to interpretation by the respondents;
2. Observations made by the researcher would be subject to observer bias;
3. Respondent honesty in answering either interview or survey questions would be critical to the study's validity as a piece of educational research. However, the honesty of respondents could not be verified by the researcher;
4. Participants could opt out of the study as they chose;
5. The manner in which questions were framed by the researcher could influence the manner in which participants might answer.
6. The educational data under scrutiny is data limited to the Saskatchewan Education Indicators Report (2008a & 2010).



7. The degree to which community school teachers in Saskatchewan are representative of the whole Saskatchewan teaching population is unknown.

## **Definitions**

In the interests of clarity where the interpretation of this study is concerned, the following terms have been defined: (a) Aboriginal student and (b) achievement.

Aboriginal student has been defined as any student in Saskatchewan who has self-declared for purposes of schooling to be of First Nations, Métis, or Inuit ancestry and who is enrolled in the provincial school system.

Achievement has been defined as normative and summative intellectual, social, physical, and psychological attainment of students for specific learning outcomes within the Saskatchewan provincial K – 12 school system. In this study the influence of culture on student achievement bears considerable weight.

## **Organization of the Dissertation**

This dissertation has been organized into six chapters. The first chapter furnishes an educational context for student achievement gaps within the Provincial school system in Saskatchewan, the research problem, and the significance of the research. Relevant and related definitions, delimitations and limitations are also provided.

Chapter two contains a review of the literature germane to achievement, attendant life gaps and undertakings and processes deemed to be addressing and mitigating achievement disparities for Aboriginal students. Chapter two also provides insight into factors that have helped fashion the development of the research instrument used in data collection.

The epistemological and ontological positioning of the research design which advanced data collection and analysis are reported in the third chapter. Additionally, ethical considerations and data concerning the demographics of the participants is discussed.

The fourth chapter describes the qualitative findings for the study at all six locations where data was collected.

Chapter five analyses and interprets the quantitative data for each of the locales in which data was collected and then links the data of the two phases.

Chapter six contains the implications, conclusions and recommendations for further study from the research.

We are a métis civilization.

What we are today has been inspired as much by four centuries of life with indigenous civilizations as by four centuries of immigration. Today we are the outcome of that experience. As have Métis people, Canadians in general have been heavily influenced and shaped by First Nations. We still are. We increasingly are. This influencing, this shaping is deep within us (Saul, 2008, p.1).

## CHAPTER TWO REVIEW OF THE LITERATURE

The matter of Aboriginal achievement is gaining world-wide attention in those jurisdictions such as Australia, New Zealand, the United States and Canada where significant populations of Indigenous peoples reside and where these peoples were colonized and subjected to forceful cultural assimilation at the hands of their European colonizers (Cherubini, 2010; Haig-Brown, 1989; Hickling-Hudson, 2003; Smith, 2005; Kanu, 2007; Lincoln & Guba, 2005; 2009; Smith, 2005). Such colonization resulted in collective and individual untold suffering and the loss of Indigenous language, culture, and history. Recently, efforts to de-colonize have been underway for the last three decades with variable effects. The educational implications within the context of the de-colonization efforts are profound and continue to evolve over time. Within Canada and specifically the province of Saskatchewan, vigorous programs are being implemented to endeavour to institute educational reform that reflects Indigenous ways of knowing and being. A *Time for Significant Leadership* (2008), *Teaching Treaties* (2008), and renewal of Indigenous language programs are examples of some of the current initiatives. A major focus upon Indigenous language, culture and history in combination with significant school reform it is hoped will effect marked improvement in learning outcomes for Aboriginal students and mitigate practices and policies that have persistently negatively impacted and pervaded achievement results for Aboriginal students.

This review of the literature will explore the context in which student achievement disparities between Aboriginal and non-Aboriginal students exist within the province of Saskatchewan. It

does so with an eye to conceptualizing teacher perceptions of the Aboriginal achievement, the manifestations of the achievement across different regions of Saskatchewan, and the means by which such achievement disparities may be successfully addressed. The review will begin with an historical overview of the roots of Aboriginal student achievement gaps and then unfold in the context of community schools, but it will expand the exploration to include examination of data which the Ministry of Education has identified as indicators of achievement and indicators that impact achievement. It will then move to investigate how teacher effectiveness, community and parental engagement, student membership, communications processes, and curricular initiatives may interact and coalesce to bring about positive change where Aboriginal student achievement disparities are concerned.

It will then go on to investigate how the interactions of school/community connections and home educational culture coalesce to support positive learning outcomes for Aboriginal learners. Furthermore, it will explore how responsive school programs and supports including, school mission, vision and goals for learning, teacher professional and instructional practice may contribute to positive Aboriginal achievement levels. Finally this study will explore how a culturally affirming school climate including student membership, environment for learning, and teacher assessment may lend themselves to contributing to positive learning outcomes for Aboriginal students. These constructs provide the foundational tenets for the Conceptual Framework developed at the end of this literature review.

### **The Roots of Cultural Alienation and Aboriginal Student Achievement: A Brief Historical Overview**

John Ralston Saul's book, *A Fair Country Telling Truths about Canada*, brings clearly into focus a central theme of this literature review. While his words strike a resonant chord, the fact remains that while, yes, the reciprocal influence of an immigrant and Indigenous culture has and

does exist in this country, events and circumstances have not always placed the two cultures on an equal footing. Certainly, early in the history of the meeting of these two cultures there was a heavy reliance on Indigenous knowledge and skills by the European newcomers to survive in an often hostile land. However, as time lapsed and the immigrant culture became more established and secure, a decided Euro-centric culture began to dominate and the once equal partnership began to fade (Saul, 2008; Helin, 2007).

As nation building and industrialization took route in the middle of the nineteenth century, Canada was emerging as a partially independent nation. Concurrently, the treatment of Aboriginal people took on a patronizing and paternalistic tone. (See Section 91.24 of the *British North America Act, 1867*, and the *Indian Act, 1876*). Efforts turned to more overt assimilation as the Davin Report of 1879, subtitled *Report on Industrial Schools for Indians and Half-breeds*, led to the implementation of residential schools and near cultural extinction as Indigenous children and youth were placed in schools that immersed them in European language, culture, and values at the expense of their native culture and values and the loss of their familial ties. The short and long term inter-generational consequences (Cherubini et al., 2010; Cherubini, 2009; Haig-Brown, 1999; Helin, 2007; Hickling-Hudson, 2005; 2006; 2003; St. Denis, 2010) of this educational approach contributed greatly to the cultural, linguistic and historical dissonance amongst many Aboriginal peoples.

Ogbu's (1982) cultural discontinuity theory seems to be in play whereby, some Aboriginal people as "involuntary caste like minorities" have framed their cultural identity in opposition to the dominant Euro-centric majority. Academic achievement is viewed as "white" and thus to be shunned and rejected. Therefore, the academic plateaus that pervade Aboriginal student achievement are achieved and maintained. Lower achievement levels are not merely a result of

cultural differences between the home and school, but rather are much more deeply rooted in a complex set of “historical and structural” factors that must be examined in order to fully understand and ultimately address the phenomenon. The matter of unresolved trauma associated with the intergenerational effects of the residential school system it would appear contribute to these historical factors and exacerbate Aboriginal parent reluctance to engage with their children’s schools.

While the specific provisions for each of the treaties reads differently, each made for the provision of a school on reserve, a teacher and the promise of an educational program that would be equal to that experienced by European children in provincial and denominational schools. However, after the issuance of the Davin Report in 1879, it was determined that Canada’s first peoples were “problematic” perhaps because of the perceived “failure” of day schools on reserve. Davin (1879) placed the “problem” in terms of “the influence of the wigwam was stronger than the day schools” (p. 1). Assimilation rather than cross-cultural education became the government tact. The federal government in Ottawa contracted out the operational control of the industrial schools to a number of religious denominations including Catholic, Anglican, Methodist and Presbyterian. The instruction in these schools featured only half-day academic lessons and half-day instruction in practical, Euro-centric activities such as farming for males and domestic chores for female students.

The discrepancy between the hours of schooling in residential school and the five hours spent by students in the public school resulted in the inability of most students to transfer into the public school if they had chosen to continue their education after grade eight. In most cases, continuation was not encouraged and was considered inappropriate and unnecessary for Native

people. The governments and the missionaries had decided that Native people should be farmers or farmers' wives, not scholars (Haig-Brown, 1989, p. 61).

Certainly the fact that residential schools were offering only half the academic instruction being afforded non-Aboriginals may have historically contributed greatly to current achievement disparities pervading public education systems across Canada. The long term consequences of this educating and cultural reshaping perhaps became the roots of not only unequal achievement, but also sowed the seeds of the inter-generational cultural flux still being addressed today (Cappon, 2008; Cherubini et al., 2010; Helin, 2007). The legacy of this colonial chapter in the history of Canada at present continues to unfold. Ironically, the best hope for moving forward may rest with the present educational system (Silver et al., 2002).

### **Painful Legacies and Aboriginal Parental Reticence**

The current federal government under Stephen Harper offered a formal apology for the mistreatment of Aboriginals in residential schools, "We recognize now that, in separating children from their families, we undermined the ability of many to adequately parent their own children and sowed the seeds for generations to follow" (Harper, 2008). With the issuance of this formal apology, the Prime Minister of Canada and the federal government formally undertook the long overdue recognition of the maltreatment of Aboriginal children and young people while they were forced to attend residential schools in Canada. The Aboriginal experience with respect to education in Canada has too often been a painful one leaving behind a legacy of mistrust, fear, and marginalization (St. Denis, 2010). A manifestation of those terrible experiences may be witnessed in Aboriginal parents' avoidance of the schools where their children and grandchildren are concerned (Berger et al., 2006; Kanu, 2005; St. Denis, 2010)

The author believed that re-engaging Aboriginal parents to support their children's educational endeavours may go a great way towards true reconciliation. One of the means to

affect such reconciliation would be to actively inculcate Aboriginal parents into the school culture where their children and grandchildren now attend schools. Such a reintroduction however, should be built upon foundations that give voice and action to Aboriginal parents and community within the educational system. As part of the rebuilding and renewal process, schools have a unique opportunity to reach out to Aboriginal peoples and communities (Martel, 2008), to deconstruct the painful legacies of the Residential schools' experience and forge a new relationship that embraces the understandings of the Aboriginal treaty signees that saw "education as the new buffalo" which placed Aboriginal education on an equal footing with that of the mainstream population. Ermine's (2000) notion of an ethical space" a Cree-adapted conceptualization of a sphere in which Aboriginal and non-Aboriginal can encounter one another, exchange the very best that each worldview has to offer in order to forge or reframe mutual cultural acceptance and benefit in an atmosphere of respect and trust may provide the means by which this educational renewal is possible.

### **Reframing Aboriginal Education: A Provincial Context**

Hargreaves (2009) explored change prospects in terms of a "fourth way" that "brings together government policy with professional involvement and public engagement around an inspiring social and educational mission" (p. 13). This vision of change has significant application for the current state of Aboriginal education in Saskatchewan. It identified three major attributes that are currently at work in the province to bring about substantive change. The *Time for Significant Leadership* (ATFSL) is a document (2008c) from the Ministry of Education in Saskatchewan that lays out a blueprint where learning for Aboriginal students in the province is concerned. It identifies four critical areas in which the vision for Aboriginal education should lead. These include:

1. Equitable outcomes for FN/M learners;



2. All learners have the knowledge of the unique context of FN/M peoples;
3. Data collection and reporting on measures outlined in the ministry's FN/M education policy framework; and
4. Shared management and governance in the provincial education system in partnership with FN/M peoples (Government of Saskatchewan, 2008c, p.7).

To reach Hargreaves's concept of compelling and lofty goals, school boards, school divisions, schools, administrators, teachers, students, parents, and communities will have to act interdependently as teams, rather than disparately as groups (Dufour, 2009). A careful examination of each attribute serves to place in context the changes underway in the Province to bolster Aboriginal student achievement.

### **Equitable Outcomes for First Nations Métis Learners and Teacher Professional and Instructional Practice**

The nature and legacy of unequal learning outcomes for Aboriginal students outlined in Chapter One of this dissertation need not be repeated here. However, steps being taken to address achievement disparities within Saskatchewan and in other jurisdictions within Canada and abroad are worthy of some exploration in order to place in context the form and nature of initiatives to improve learning outcomes. In a study involving seven school districts within British Columbia, Canada, Richards, Hove, and Afolabi (2008) found that "collaboration between [school] district personnel, and local Aboriginal communities is a prerequisite to improved academic outcomes" (p. 14). In addition, the researchers also determined that government policy alone did not translate into improved learning outcomes, but when they worked synergistically with classroom teachers and administrators actively pursuing improvement, then positive results were discernible. Glaze, Mattingly, and Levin (2012) reported:

increasing Aboriginal representation on school councils and committees, collaborating with Aboriginal students' families, Elders, community agencies where policies, celebrations, and daily routines to reflect Aboriginal customs and worldviews as well as taking part in Aboriginal community activities by school administrators (p.108) are tangible undertakings to forge relational trust with Aboriginal families and communities.

### **Attributes of Student Attachment to School and its Implications for Aboriginal Students**

Swarich (2006) in a mixed methods study explored student, teacher, and administrator perspectives regarding student attachment to school. She found that factors including “belongingness, self-esteem, friendships, teacher relationships, valuing school, involvement, and security ” contributed to student feelings of attachment to school (pp. 1-8) where attachment consisted of “ student ownership, bonding and connectedness associated with the school and prominent figures” within it (p. 7). The degree to which Aboriginal students feel attached to school is compounded by the cultural disassociation that many of them may feel where schooling is concerned. However, Blum, McNeely, and Rinehart (as cited in Swarich, 2006, p. 1) noted that student attachment may occur “independent of race, ethnicity, family structure and poverty status”... It would seem that inculcating school environments that foster the attachment of Aboriginal students hold the prospect of potential higher student learning outcomes and positive student dispositions to school.

Research has shown that possibly the greatest factor contributing to student success resides with the classroom teacher (Leithwood & Jantzi, 1999, 2005; Marzano, 2003; Reeves, 2000). Given the complexity of the myriad of issues confounding achievement disparities there remains no magic formula for addressing such, but the role of the classroom teacher remains fundamental in terms of professional and instructional practice to advance the learning of her students. Three areas that may hold promise for this research include incorporating culturally appropriate

(holistic) pedagogy into classroom instruction, culturally responsive curriculum, and facilitating a culturally affirming school climate for Aboriginal learners (Castagno & Brayboy, 2008). Similarly, Glaze et al. (2012) urged teachers “to build on the strong oral culture” of Aboriginal students by incorporating students’ “background knowledge and experiences” into their learning. Specifically, inviting “Elders into the classroom to share worldviews and perspectives” would be of benefit to Aboriginal students. Displaying Aboriginal art, music, and the like in an integrated curriculum would afford students opportunities to read Aboriginal literature and experience other aspects of their culture. Employing the use of talking circles, creating awareness of and appreciation for contributions Aboriginal people have made to Canadian society, and providing “non-Aboriginal students opportunities to learn about the history and culture of Aboriginal” school peers would also be beneficial in supporting Aboriginal student learning (p. 109). By so doing, it is believed that Aboriginal students should respond positively to classroom learning environments and become attached to them and the people in them.

In his study of 90/90/90 Schools (90% poverty, 90% minority culture and 90% high achievement), Reeves (2000) identified five characteristics of high achieving schools. These included: (1) a focus on academic achievement; (2) clear curriculum choices; (3) frequent assessment of student progress and multiple opportunities for improvement; (4) an emphasis on nonfiction writing; and (5) collaborative scoring of student works. The study found that these five attributes enabled 90/90/90 schools to attain and maintain high achievement levels despite serving students who came from low socio-economic households, and who were of a minority culture. Furthermore, Lewis and Sugai (1999) offered that where expectations are concerned, the need for schools to have in place high expectations for student behaviour and conduct and clear and consistent consequences for inappropriate behaviour have a positive effect on student

learning. The active teaching and reinforcement of those expectations and the making clear to students as well as parents was critical to weaving behavioural expectations into the cultural fabric of a school. In short then, it would appear having “a laser like focus on achievement” (Reeves, 2000, p. 186) should also extend to behaviour expectations as well.

Reeve’s research appears to be in accord with Marzano (2003) who asserted that despite research to the contrary, students from low socio-economic status (SES) could attain high achievement and that their SES backgrounds did not prevent them from doing so. This element of success was found in the delivery of school wide reading and vocabulary enrichment programs and the development of a student’s “crystallized intelligence” (p. 135).

A refrain often heard from teachers is that low SES backgrounds prohibit students from learning in school. However, Marzano’s research would indicate to the contrary. Fan and Chen (2001) found that home environment accounted for only 10.89% of the variance in a student’s achievement (p. 128). Marzano also contended that home environment is three dimensional in construct consisting of: (1) communication about school, (2) supervision, and (3) parental expectations and parenting styles (p. 128). A deeper exploration of these constructs proves useful.

### **Communication with Parents about School**

Fundamental aspects remain central to communication about school according to Marzano (2003). Underlying these tenets is the belief that communication regarding school is a two way undertaking. If voice is truly being given to parents then schools need to activate those opportunities. First, schools can do so by engaging in frequent discussions with parents concerning the school’s work. Given Aboriginal parents’ reticence about the nature of schooling, it remains critical to engender school environments that build trust and regard for parental input (Bryk & Schneider, 2002; Furman, 1999; Robinson, 2012). Second, parents can

encourage their children where their school work is concerned (Fan & Chen, 2001; Lee & Bowen, 2006; Nakagawa, 2000). And third, parents can be encouraged to provide resources to support their children's learning. These foundations appear to be aligned with the expressed intentions of the *Canadian Council on Learning Report*, (2007) which recognized the primacy of incorporating the holistic lifelong learning model for redefining how success is measured for First Nations, Métis, and Inuit students.

Communicating with parents requires a two way dialogue. In the past, schools often spoke to parents about their respective programs leaving little room for parental input in turn (Fullan, 1999). However, given the critical role that both schools and parents play in the healthy development of children and youth, (AhNee-Benham & Napier, 2002; Brien and Stelmach, 2009; Fan & Chen 2001; Fullan 2002; Government of Saskatchewan, 2008; Government of Saskatchewan, 2009; Henderson & Mapp, 2002; Jeynes 2003; Lee & Bowen, 2006; Leithwood 2009; 2005; Marzano 2003; Stoll et al., 2002; Pushor 2007; Richards et. al. 2008;) such reporting to as opposed to communicating with did not allow for the synergistic discourse that built trusting relationships between home and school (Bryk & Schnieder, 2002). This approach to communication seemed to magnify the distrust already engendered by the residential school experience where Aboriginal parents were concerned (Baptiste, 2005; Bell, 2004; St. Denis, 2010). Thus parental perceptions about school became jaded and sometimes adversarial.

### **Parenting Style and Parental Expectations for Student Achievement**

While there have been volumes of research concerning parental involvement in schools and improved learning outcomes for students, (Fan & Chen, 2001; Jeynes, 2003; Lee & Bowen, 2006;). With the exception of Jeynes meta-analysis, these studies have been essentially “mainstream” in tone and content. The matter of Aboriginal parental involvement in school in many instances has assumed the tenor of schools and school systems attempting to “fix”

perceived problems. Prins and Toso's (2008) study of parental involvement in United States schools observed that educators and policy makers tended to assume a monolithic "white middle class" (p. 555) orientation of how parents should interact with schools where the Parent Education Profile (PEP) was concerned. Nakagawa's (2000) analysis of parental involvement saw educators as parental gate-keepers who determined by their practice which parents participated in the life of schools which in turn reproduced rather than reduced inequalities in education. Brien and Stelmach (2009) asserted that "... as Nakagawa argued, because parent involvement policy is primarily aimed at improving the educational performances of ethnic minority and poor children, these parents are viewed through a deficit lens (p. 5). Silver et al. (2002) recorded that parents of Aboriginal students did encourage their children to do well in school but also noted that participants in their research cited the need for teachers to become aware of cultural differences and learn about Aboriginal culture. Similar sentiments have been expressed by Agbo (2007) and Berger et al., (2006). Neckoway, Brownlee, and Castellan (2007) contended that traditional Aboriginal parenting practices while not universal, in a general sense can be described as "shared parenting." As such Aboriginal parenting practices remain culturally different from mainstream parenting that tends to focus more strictly on the role of the mother as primary care-giver and do not take into consideration the role played by extended family or community in child raising. Furthermore:

historical contexts such as colonization, residential schools, and their lingering affects, racism, poverty, high rates of suicide, high rates of child welfare involvement, school dropout rates ...have destroyed relationships than many Aboriginal families have tried to develop with their children" (p. 71).

Marzano (2003) asserted that high expectations of parents when communicated to students “are associated with enhanced achievement” (p. 129). In a meta-analysis, Jeynes (2003) reported that “parental style and expectations” had greater impact on student achievement than attendance and participation in school events. Furthermore, the analysis found that this tenet applied across racial and ethnic lines. By contrast, Mattingly, Prislun, McKenzie, Rodriguez, and Kayzar (2002) in an analysis of 41 K-12 parent involvement programs “found little empirical support for the widespread claim that parent involvement programs are an effective means of improving student achievement or changing parent, teacher, and student behaviour” (p. 549). Leithwood (2009) also noted that sometimes teachers of economically disadvantaged and culturally diverse students place less emphasis on academic goals displaced by teachers’ concerns for the physical and emotional well-being of those same students. He also felt that academic success was the most powerful solution to the conditions adversely affecting these students (p. 89). Marzano (2003) also asserted that it is not possible for the school system to change the income, education, or occupation of adults in the home, but it is possible to impact the atmosphere in the home (p. 128). Leithwood and Jantzi (1999) discussed this home influence in terms of a home educational culture and noted that as an indicator of student success, positive home educational cultures had a greater impact on learning than did SES alone.

Regardless of the conflicting evidence, it remains critical that building healthy parental relationships be a focus of community schools and a cornerstone to improving learning outcomes for Aboriginal learners. Ultimately, parental support for schools and teachers may lead to positive student disposition about education and such attitudes can support student learning (Fan & Chen, 2001; Jeynes, 2003; Lee & Bowen, 2006; Leithwood, 2009; 2006). Meaningful dialogue can lead to greater understanding between home and school about respective roles in

the academic and total well-being of students (Agbo, 2007; Thompson, 2008). Schools that address such communication were described by Levin (2009) in terms of a “willing[ness] to build support by engaging in real dialogue with all the parties whose understanding is vital.... this means principals, teachers, support staff, students, parents and community groups” (p. 266). Provincial community schools in Saskatchewan have as part of their governance mandate a provision that entitles Aboriginal representation on school community councils for children of bands attending a particular school.

### **All Learners Have Knowledge of the Unique Context of Aboriginal Learners**

Kanu (2005) found that “curriculum and learning have to be culturally relevant for all students, not only students from the dominant cultures” (p. 54). Similar sentiments have been echoed by Henderson, et al., (in press), Castagno and Brayboy (2008); Cherubini (2009) and (2008), Glaze et al., (2012), Kanu (2007), and Silver et al., (2002), The concept of cultural incongruence between curriculum and Aboriginal student achievement however, is being addressed in a serious and purposeful way by the mandatory teaching of Treaty Education in the province:

... it is important for all students to learn about the cultures and history of Aboriginal peoples. Students must have a learning environment in which they are comfortable, be taught in a manner that builds upon their backgrounds and learning styles, see their world reflected in subject matter and content, and feel part of a learning community.

(Government of Saskatchewan, 2008a, p. 5)

The teaching of treaty rights which has implications for Aboriginal and non-Aboriginal students alike is gaining ascendance in Saskatchewan schools. In a joint undertaking, the Office of the Treaty Commissioner (OTC) the Ministry of Education, and the Federation of Saskatchewan Indian Nations (FSIN) has taken on the required teaching of Treaty Education



Grades K-12 in the province. The expressed belief that “we are all beneficiaries of treaties” (Government of Saskatchewan, 2008b, p.1) underscores the importance of placing education into culture (Bapttiste, 2005, p. 9). Such recognition of treaties also affirms the view held by the Royal Commission on Aboriginal Peoples, Volume 2 (1996).

Had it not been for treaties, wars might well have replaced the treaty council. Or the territory might have been absorbed by the union to the south. Canada would have been a very different place if treaty making with the Indian nations had been replaced by the waging of war. (p. 15)

Certainly our nation’s history may have been quite different had the treaties not been negotiated and the fact that they were is indicative of the notion that their place in history is equally as important as the compact signed by the Fathers of Confederation that brought the Dominion into being. As well, there appears to be a recognition that negotiation of treaties honours the precedent set by the tenets of the compact ethos of Confederation itself.

Initial results of efforts to monitor the teaching of treaties (Rohr & Keegan, 2009) appear to indicate that the percentage of students who indicated they remembered studying treaties in Grade 7 saw a 177% increase in 2008 over those who indicated such in 2007. Similarly, Grade 7 students that did not remember studying treaties at all saw a 58% decrease in 2008 over the previous year’s results. When it is considered that the 2008 data represented the provincial population of Grade 7 students whereas the 2007 cohort was a representative sample, it appears that Grade 7 students in Saskatchewan are experiencing more learning opportunities with respect to treaty education (Rohr & Keegan, 2009, p. 56).

The revival of Aboriginal languages as integral curricular components in Saskatchewan schools is another aspect of government policy that has come to life in support of Aboriginal

learning. Furthermore, relevant content reflecting Aboriginal perspectives with respect to social studies curriculum is being implemented province-wide. But perhaps the most significant aspect of these curricular initiatives rests with the degree of cooperation and collaboration by individual people of Aboriginal descent, Aboriginal communities, and Aboriginal researchers in partnerships both formal and informal. It would appear that the government is listening and Aboriginal voices are being heard both in the development and assessment of curriculum.

However, Feinberg (as cited in Dimmick and Walker, 2002) cautioned:

Learning through culture is to be distinguished from simply learning about cultures other than one's own. It is a concept that recognizes that there are distinctive ways in which cultures constitute both the process and the product of thinking and that these in turn become distinctive elements of learning. It is important not to confuse the fact that there may be culturally different ways of learning and culturally different things to learn. (p. 146)

Failure to recognize this element may turn well-meaning curriculum initiatives into mere distractions rather than authentic means to engender tolerance, understanding, and respect of other cultures (Dimmick & Walker, 2002, p. 418). To date, it appears the Teaching of Treaties initiative has been mindful to distinguish learning through as opposed to merely learning about culture.

### **Shared Governance, Decision-Making and Professional Involvement**

Schools and school divisions have critical roles to play in advancing Aboriginal educational objectives. The realms of leadership and the development of learning organizations and learning communities will be vital to this cause. Fullan (2005, 2006, 2009), Fullan, Hill, and Crevola (2006); Hargreaves (2009), and Levin (2009) have advanced that school divisions have important roles to play with respect to policy implementation, mission, leadership, teacher

support and community engagement to improve student achievement and build and sustain division transformation. Fullan (2009) conceptualized six fundamental undertakings in his Theory of Action for System Change. These included: “direction and sector engagement; capacity building with a focus on results; supportive infrastructure and leadership; managing the distracters; continuous evaluation and inquiry; and two-way communication” (p. 278). These tasks appear to be aligned with the principles and guidelines of the First Nations and Métis Education Provincial Advisory Committee (FNMEPAC) which identify Aboriginal world view, accountability, communication, quality and authenticity, equitable opportunity and respect where cultural affirmation, shared-decision making, core curriculum actualization and life-long learning are concerned ( The Learning Community in Aboriginal Education, 2005, pp. 2-3). Such systemic alignment may serve as a catalyst for meaningful change. To affect this change, committee structures that incorporate active involvement where schools speak, but also listen and act upon issues of concern from diverse stakeholders may be breaking important ground and extending the dialogue beyond merely ‘saving a seat at the table’ (Martel, 2008).

In its Summary Report on Learning in Canada, (2007) The Canadian Council on Learning stated that the “two ways of knowing” will foster the necessary conditions for nurturing healthy sustainable communities (p. 3). Such a view of education in the context of community development is powerful and may provide the vehicle for both educational reform and healthy community development. Leithwood, Aitken, and Jantzi, (as cited in Saskatchewan Learning, 2007) noted forming community relationships that are highly responsive, formal partnerships was central to facilitating community engagement with schools. Schools and community that engage in reciprocal, flexible, and predictable relationships can have a positive impact upon student achievement (Fullan, 1999). Research findings show that active and effective

school/community interaction not only engenders positive outcomes for student success (Chadwick, 2005; Fullan, 2000; Henderson & Mapp, 2002; Levin, 2009; Martel, 2008; Phillips, 2006; Raham, 2010; Thompson, 2008) but they also demonstrate healthy community development as well. In general, school and community initiatives thrive or fail on their ability to engage their constituents in purposeful dialogue and action (Levin, 2009). Furthermore, Fullan (2000) has suggested that schools have been “permeated” by the wider community and that it is wise to embrace this opportunity rather than put up barriers to it in order to take advantage of new insights and skills afforded by engaging these constituents.

Where Aboriginal learners are concerned because past experiences in not having parent and community involvement were disastrous, new relationships of this order should be welcomed. *The Learning Community in Aboriginal Education* (2005) document supports these tenets. “Parents and community, active in *shared decision-making* add new capacity to the life of the school” (p. 3). The task remains then to re-engage members of Aboriginal communities to support their children’s education in meaningful and authentic ways. Transformational leadership governed by shared decision-making may be a means to achieve this re-engagement (AhNee-Benham & Napier, 2002; Government of Saskatchewan, 2008c; 2009; Stoll, Bolland, & Collarbone, 2002). Indeed, convincing Aboriginal communities that schools are vastly different places geared to preparing “their children for their children’s future, rather than for their own past” (Stoll et al., 2002, p. 60) remains critical to this re-engagement process. The importance of strong community connections supporting improvement of Aboriginal student learning outcomes within the context of the holistic view of education held by Aboriginal people is well documented (Canadian Council on Learning, 2007; 2009; Silver et al. 2002; Steeves et al. 2012;

Volante, 2007). Such involvement extends to shared governance and engaging with schools to actively promote and facilitate curriculum and extended learning opportunities.

### **Communities of Otherness**

Furman (1998) conceptualized non-valuational “communities of otherness” (p.317) where schools and the wider world meet. By so engaging, she asserted that opportunities for authentic engagement on equal footing where both school and community meet establishes ground for reframing relationships. Furman believes that as social beings, people seek community, but that the values and fabric which communities possess as underpinnings must be free of the hegemonic core that fosters sameness and the dominance of a (usually Eurocentric bias) which makes little or no allowance for giving voice to other narratives. In short, she cautioned that these hidden dominant foundations undermined the exalting otherness and the narrative of difference. Therein lies the paradox because too often in schools, community embraces shared values that foster sameness and a reaffirmation of homogeneity.

With respect to community in school, Furman’s communities of otherness may in fact contain the “ethical space” alluded to by Ermine (2000) where cultures can meet, redefine their relationships and forge new understandings about one another. The cultural meeting place(s) should engender atmospheres of trust and security where all voices can be heard and the push and pull of competing values and aspirations can be defined, addressed, and where necessary resolved.

### **Early Childhood Education**

Research and experience demonstrate that high quality early childhood education in the first years of life represent a positive investment in a child’s development. The benefits range from increased school success and improved cognitive functioning to fewer failed

grades and lower rates of juvenile crime. (Government of Saskatchewan, *Better Beginnings, Better Futures*, 2008, p.1)

Since 2001-02, the number of spaces for children ages 3 and 4 entering prekindergarten in Saskatchewan has increased by 64 % (Government of Saskatchewan, 2010). Similarly, funding for those spaces has grown threefold from \$3.8 million to \$9.6 million. Such increases are indicative of the commitment to early childhood education. Indeed, the document, *Better Beginnings, Better Futures* (2008) holds hope for all children enrolling in such a program and particularly those students who may be classified as “vulnerable” where vulnerable refers to student physical, emotional/spiritual, intellectual or social frailties. It is estimated that nearly 25% of Canadian preschoolers experienced vulnerability (Willms, as cited in Government of Saskatchewan, 2010, *Better Beginnings Better Futures*, p. 2). When one considers that nearly 25% of Saskatchewan school cohorts fail to graduate, this vulnerability may account in part for that percentage. Furthermore, given the mandate of the preschool program, there exists an important opportunity to advance the rate of success of Aboriginal learners for a host of reasons. These include: (1) a developmentally appropriate educational program; (2) meaningful family engagement; (3) active parent/community council, community partnerships and shared ownership; (4) integrated health, social services and educational supports; and (5) cultural responsiveness (p. 3). These attributes appear to align with Marzano’s (2003) research with respect to parental and community support for schooling and they also align with the “holistic” tenets of Aboriginal learning supported by the Canadian Council on Learning (2007). Preston, Cottrell, Pelletier, and Pearce (2012) observed:

Quality Aboriginal early childhood education: (a) privileges Aboriginal pedagogy, (b) promotes Indigenous languages and culture, (c) is adequately staffed by qualified

Aboriginal educators, (d) empowers Aboriginal parents and communities, and (e) in the case of kindergarten services, provides a full-day timetable. (p.9)

Given these understandings about the need for early childhood education across and within cultural contexts, the future prospects for Aboriginal early education would appear to be brighter in the province. However, given the cancellation of all-day kindergarten by the Saskatoon Public and Catholic School Divisions and the restructured community schools funding formula in light of provincial government funding shortfalls under the new fiscal framework, the reason for optimism may be premature.

Owing to the changing demographics with respect to First Nations populations within Saskatchewan (Liben, 2009) the need for early childhood education that is culturally responsive and reflects Aboriginal worldviews becomes critical. Murphy (as cited in Leithwood, 2009) conceptualized the issue in terms of it being easier to successfully intervene where learning problems are concerned in a pre-school setting than it is to make similar interventions in Grade 9. Indeed, the data (Government of Saskatchewan, 2010) would suggest that Grade 10 becomes a watershed for unsuccessful transitions of Aboriginal students attempting to move to Grade 11. Opportunities for parents and community members to be actively involved in pre-schooling, allows children to see their parents and community members as educational role models with a direct interest in their education (Berger et al., 2006). Furthermore, parents are afforded the opportunity to refine parenting skills to assist them in educating their child. This reciprocal relationship helps to build the critical capacity conceptualized by Fullan (2005) and Sackney and Mitchell (2002) in actualizing learning communities. In addition, participation by members of Aboriginal communities such as Elders, helps to teach all children about aspects of Aboriginal life which will lead to greater understanding and acceptance of cultural diversity. While it would

be unfair to say all Aboriginal children are vulnerable, given the exploration of achievement contexts and diminished life opportunities earlier in this research, certainly many of them would be considered at-risk. Prekindergarten in no small way is critical to potentially avert more costly interventions later in life for many of these children (*Better Beginnings, Better Futures*, pp.4-5).

### **Community Schools**

As prekindergarten programs have grown in Saskatchewan, so too have community schools and their focus on the development and support of the whole child and youth and of the communities in which they live. Thompson (2008) and Phillips (2006) reported that nearly 50% of students enrolled in Community Schools in Saskatchewan are of Aboriginal ancestry. Thompson described these schools as places that support basic student needs, emphasize the learning program, sponsor out of school programs, engage family and community involvement, offer integrated services from a range of human service agents, and are community development orientated. Such an inclusive and far-reaching array of programs and supports aligns itself closely with the fundamental tenets of Aboriginal holistic views of education with respect to the healthy development of the individual and the community:

“It engages and develops all aspects of the individual (emotional, physical, spiritual and intellectual) and the community, and stresses the interconnectedness of all life under the Creator” (Canadian Council on Learning, 2007, p. 5). Learning is a life-long process that begins before birth and continues through old age. Knowledge is passed down through the generations. Learning is also experiential and is rooted in “ceremonies, storytelling, observation, and imitation”. It is also tied to language that expresses Aboriginal communities’ worldviews while at the same time it serves to extend cultural permanence and connectedness. Ceremonies, dreams and vision quests are integral spiritual components. Learning also incorporates community living with parents, Elders, and family playing critical roles in the educational



journey. Finally, Aboriginal learning strives to merge both traditional and Western knowledge so that the learner experiences the best of both world views (Canadian Council on Learning, 2009).

## **The Totality of the Educational Program in Community Schools**

### **Support for Basic Needs**

The provision of essential needs such as food and clothing may be central components of community schools, but many provide additional support to students in terms of access to medical and dental care, behavioural counselling, mental health counselling, addictions services and even child care support (Tymchak, 2001). Research indicates that when children are fed, they have the capacity to learn as opposed to when they are hungry. Furthermore, some food programs in schools involve students in the preparation of snacks and lunches as well as in the selection of menus and in the clean-up thereafter. In this way students play an active role in making healthy choices about what they eat, but students also learn important life skills where diet, budgeting, and safe preparation of food is concerned. It should be noted too that the provision of basic needs extends beyond food programs to include school supplies, and clothing, where need dictates such student support.

### **The Environment for Learning and Student Membership**

It has already been established that where students are concerned, active engagement in sharply focused student achievement goals has a positive impact on learning (Reeves, 2000). Clearly defined academic goals established by means of assessment for learning has a positive impact. Student accountability for their learning allows students to actively engage it. Whelage, Rutter, Smith, Lesko, and Fernandez (1990) defined engagement as “the psychological investment required to comprehend and master knowledge and skills explicitly taught in school” (p. 177). Willims, Freisen, and Milton (2009) conceptualized engagement in terms of three main

types. These included: social engagement consisting of participation in school life; a sense of belonging; academic engagement including attendance; and finally intellectual engagement including higher order thinking skills to increase understanding, solve complex problems and construct new knowledge that contribute to “a serious emotional and cognitive investment in learning” ( Willms et al., 2009, p.43). Ironically the researchers also found that student intellectual engagement was much lower than the other attributes of engagement and diminished as formal schooling progressed until it leveled out in Grade 9, yet it remains the most vital to enhancing student achievement.

Critical to student learning and mastery, the community school weaves a complex tapestry of emotional/spiritual, intellectual, social and physical elements together to create optimum learning environments for students (Battiste, (2005), Bell (2004), Cappon (2008) CLC (2007; 2009), Fulford (2007), Government of Saskatchewan (2009; 2008a; 2008c), Leithwood (2009), and Thompson (2008). While not yet the case in Saskatchewan, sadly in some jurisdictions in the United States, large scale test scores drive funding to the extent that low scores result in funding being removed for poor academic performance. Such parsimony leaves disadvantaged students even more at-risk and it is unlikely that being financially punished for achievement levels produces better academic results (Thompson, 2008; Dufour et al. 2004).

### **The Student Achievement Initiative and Aboriginal Student Achievement**

While the government of Saskatchewan should be commended on many of the initiatives to raise the profile of Aboriginal education and achievement in the province, witness the proliferation of community schools, the introduction of Treaty Education and the framework for shared governance and decision-making with Aboriginal peoples via the *Time for Significant Leadership* (2008) undertaking. Within this vein of optimism and under the auspices of the Student Achievement Initiative, the Assessment for Learning Testing Program (AFL) has

undergone recent, significant transformation (Government of Saskatchewan, 2012). While the initiative has been undertaken out of a “government and stakeholders” concern with Saskatchewan students’ performance on the Pan-Canadian Assessment Program (PCAP) and the Programme of International Student Assessment (PISA) (Government of Saskatchewan, 2012).

By the provincial government’s own admission:

- the AFL did not provide parents or students with individual student results;
- divisional results were only publically shared if school divisions chose to do so;
- the schedule of the AFL did not support improvement and results were insufficiently frequent, comparable, or consistent;
- the assessments did not measure student improvement over time because they were not designed for accountability purposes and results were not comparable from year to year and school division to school division;
- assessment information provided to school divisions made interpretation complicated and comparison difficult. (Government of Saskatchewan, 2012, p. 2-3)

The new assessment format will feature pre-kindergarten and kindergarten student readiness assessment that should assist schools, primary teachers, and parents with useful data to help all students make successful transitions to Grade 1. Furthermore, literacy and numeracy assessments of students in Grades 1 to 3 should provide useful assessment for learning information to schools, teachers, and parents to help plan and implement the learning program for all students in the province, regardless of their location. Finally, student and teacher learning environment surveys to be administered to students in Grades 4 to 12 and their teachers should provide data that will prove useful for educational planning purposes as (Government of Saskatchewan, 2012).

At a time when the value of teachers differentiating instruction and utilizing *formative* [italics added] assessment for learning strategies to afford equitable learning opportunities, the Student Achievement Initiative has a powerful role to play as long as the data it provides is used for the purposes in which it was intended and not for narrow government accountability agendas.

Perhaps Seashore Louis, et al. (2010) have summed the issue of large scale standardized testing and its shortcomings as data that assesses and informs learning in the purest sense when they observed:

While information about achievement is obviously critical for schools, it has almost nothing to say about the causes of such achievement or the strategies that might be useful for improving achievement levels. Furthermore, for data of this sort, schools rely mainly on results from large-scale national or state [provincial] testing programs. Most of these programs focus only on a narrow band of objectives in the formal curriculum; they have unknown levels of reliability at the school level; they are cross-sectional in nature; and the results they yield become available to schools only after lengthy time delays (p. 182).

### **The Learning Program: Home School Connections**

The learning program encompasses four foundational constructs to support student academic success. These include: high expectations for all students; implementing a challenging curriculum for students; proactively responding to students who are struggling by providing them with appropriate interventions that are monitored for effect; and providing academic specific interventions to support student learning where reading and mathematics skill acquisition is concerned (Thompson, 2008, p. 18). Thompson also observed, however, that in some cases, schools recruit parents and community members as “school agents” who act to serve the academic interest at the expense of the community development and in no small way undermine the potential and unknown assets that community groups may have to offer in the more holistic

development of the students (p. 22). These philosophical differences need to be addressed by school and community so that there is an understanding that these differences do not lead to philosophical schisms between the school and the community. As Agbo (2007), Berger et al. (2006) Bell (2004), Castagno and Brayboy (2008), Cherubini et al. (2010) Glaze et al.(2012), Klienfeld (1995), Raham (2009), and Richards (2008) noted that strong home/school connections remained critical factors in promoting Aboriginal student success at school.

Epstien (as cited in Thompson, 2008) conceptualized a framework that described six types of family involvement. These consisted of parenting, communicating, volunteering, learning at home, decision-making and, collaborating with community. In no small way these positive school family constructs buttress the philosophical tenets of community schools in Saskatchewan. The degree to which they interact and coalesce to support the healthy intellectual, social, physical, and psychological health of young people is worthy of scrutiny. It should be noted that as part of their respective engagement with parents, some community schools offer parenting classes as a means of developing those supportive home environments where schools and schooling are valued. These classes build both parental capacity and school and community capacity as well and it is suggested assist in fostering positive home educational cultures described by Leithwood and Jantzi (1999; 2006).

### **Out of School Activities: Extended Learning Opportunities**

Out of school activities whether formalized intra and extracurricular programs have been linked with academic success and improved student conduct (Thompson, 2008). Certainly the opportunities for adult mentoring and student attachment are generated by such activities (Best, 1992; Marzano 2003; Noddings 1992; Whelage et al.1990). While the interaction of adults and students in these activities may afford both parties learning opportunities, perhaps of more importance, the opportunity to engage one another in non-formal classroom activities will be of

equal benefit. Little (2009) offered that after school programs are ones with strong connections to schools and to families. Such programs support student success, facilitate smooth grade-to-grade transitions, reinforce school taught concepts, improve school culture and community image and assist mentors and staff to support in school learning. An important indicator of student success in school refers to the degree to which they may become ‘attached’ to an adult mentor connected with school (Pearce, 1996; Zwarych, 2006). Such mentors would include coaches, sponsors, supervisors, and related personnel working with students outside of regular school hours. By so engaging students, individual and group capacity are developed, critical components for both healthy school and community development (Little, 2009).

### **School and Community Connections**

Community involvement in schools takes many forms, both formal and informal. Thompson (2008) has identified ten avenues by which school and community can connect although by no means is her list complete. Formal structures such as school community councils (SCC) provide a vehicle for active community involvement in decision-making where the school is concerned. Business partnerships in conjunction with apprenticeship programs for students are another example of a more formalized school community connection. And where community schools are concerned, the close work and partnerships entered into with a variety of human services agencies such as mental health counsellors, occupational therapists, and health care specialists serve as a means to establish close, formal ties with the wider community. However, less formal community connections also serve to bond the community with the school and provide students with opportunities to extend their learning. Little (2009) reported that extended learning opportunities (ELO’s) including community schools have been effective “in addressing the problems of underperforming students and more broadly, narrowing the learning gap” (p. 3). Furthermore, the ELO’s are seen not as “add-ons” but integral to supporting and enriching the

regular school day curriculum. With respect to Aboriginal communities, the invitation to Elders to speak to all students about Indigenous culture and ways of being can enable the preservation of Aboriginal traditions. Sparks (2000) stated that “[b]ringing Elders into the classroom promotes respect for their wisdom and provides positive role models for (Aboriginal) students” (p. 263). Aboriginal artists and writers to discuss their craft and Aboriginal entrepreneurs and professionals to describe their professions to students engenders positive school community relationships. Leithwood (as cited in Thompson, 2008) has noted that the “[l]ong-term resolution of issues of Aboriginal cultures in mainstream education must capitalize on Aboriginal community participation structures to develop a place for Indigenous knowledge to reside in and shape public education” (p. 24). The key to such Aboriginal community participation may rest in Furman’s (1998) non-valuational “communities of otherness” thriving within Ermine’s “ethical space” (2000). Undoubtedly, schools adopting holistic approaches to supporting both children and families may fashion those positive community relationships that are critical to educating children and building community (Thompson, 2008, p. 24).

### **Community Development**

Community development rests at the core of the *Report on Learning in Canada* (2007).

Over the last four decades, the importance of Aboriginal learning to community well-being has become a critical issue as First Nations, Inuit, and Métis people continue to experience poorer health and higher rates of unemployment, incarceration, and youth suicide than non-Aboriginal people (p. 3).

Certainly community schools and their provision of integrated services and attention to basic student needs play a critical role in building community support for educational partnerships both formal and informal. However, the degree to which schools themselves may build community is open to interpretation.

## **Barriers to Community/School Development**

Fullan (1999) contended that schools that imbue a collaborative culture are more favourably disposed to extending that cultural ethos to the wider community in which the school resides. Again, recognizing that communities and schools engage in two way dialogue and shared decision-making to determine and define that student achievement and community development can function hand in hand for the mutual benefit of school and community alike. Collaborative cultures develop over time and must be nurtured by all parties in the spirit of reciprocal benefit. Anything less is paying lip service to the effort and alliances entered into in good faith may deteriorate and fail.

With respect to the provision of integrated services, Thompson (2008) noted that “other partners (health, social services, justice etc.) aren’t pulling their weight and that ultimately responsibility for meeting children’s social and health needs as well as their educational needs falls to the education system” (p. 25). It has been the researcher’s personal experience that budgeting issues where other agencies are concerned sometimes limit their ability to carry out their mandate. Certainly available physical space in schools where agency contact can occur may be problematic. (The author points to the experience of his former school district in British Columbia where declining enrolments and the subsequent excess capacity in schools enabled Strong Start, pre-school Centres to open in elementary schools across the District.) However, the matter of dedicating budgets specifically targeted for integrated services would alleviate some of the funding pressures that mitigate against the provision of integrated services to students.

Student transience is problematic for the provision of educational and integrated services. Among Aboriginal students, moving from school to school tends to be higher than among non-Aboriginal students. Chung (2002) found that economically disadvantaged families looking for affordable housing in urban areas in the United States frequently moved and thus uprooted their



children from school to do so. Given the lower income and institutionalized poverty of many Aboriginal families, the frequent changing of neighbourhoods and schools negatively impacts the learning of many Aboriginal students. Therefore, it is “appropriate for schools to be concerned with housing and similar community issues because these community factors strongly influence students’ performance in school” (Thompson, 2008, p. 26). The degree to which teachers may be able to help positively is unknown. Certainly teachers have made it known that their job requires so much energy with respect to improving achievement that the time required for community development does not remain available to them (Thompson, 2008). However, Chadwick (2005) has noted that the inability of schools and school leaders in particular to devote time to engage community may have adverse effects on student achievement.

Currently, community schools in Saskatchewan are designated by formula and funded accordingly (Thompson, 2008; Phillips, 2006). Therefore, not all schools meet the criteria to in fact be community schools. This formulaic approach coupled with problems of access to community support services, especially in the North present significant obstacles to be overcome.

### **Reporting and Tracking Positive Learning Outcomes for Aboriginal Students**

Presently in Saskatchewan public schools, student achievement data is available and reported in a variety of forms; however, the annual Education Indicators Report is perhaps the most comprehensive compilation of student data available to the public within the province. Data are aggregated and disaggregated according to gender, grade, ethnicity and geographic region for a range of student information relating to academic achievement, demographics, transition, and graduation rates (Government of Saskatchewan, 2008a). Other jurisdictions, most notably British Columbia have in place annual reports to offer to the public concerning Aboriginal achievement data, individual school district learning outcomes as well as those for individual schools (How

Are We Doing? Aboriginal Performance Data and District Data Summaries). Such information provides detailed aggregation and disaggregation of data for a full range of educational performance indicators. Assessment for learning data in its many forms continues to gain ascendance in the Continuous Improvement Framework (CIF) provincially and in the context of the school based Learning Improvement Plans (LIP).

All SDs [school divisions] are using a combination of, standardized achievement tests (i.e., *Canadian Achievement Tests 3 & 4*), diagnostic and assessment instruments (e.g., *The Alberta Diagnostic Reading Assessment Program, Reading Assessment District, Development Reading Assessment, The Story Box Reading Program Assessment Kit*, and *Key Math*) and benchmarking systems (e.g., *Fountas & Pinnell Benchmark Assessment System*), to demonstrate improved student outcomes. Locally developed common assessments, benchmarks, and Provincial Core Indicator information on secondary level marks, and persistence to complete grade twelve are also being used to set baselines and to track improved outcomes. All SDs have established baselines and the majority have established general targets for all students to meet or exceed a national norm, provincial standard of adequacy, or percentage achieving at a particular level on a benchmarking system or school level goal. (Government of Saskatchewan, 2009, p. 4)

As Stiggins (2005) has observed, assessment *for* learning [italics added] provides teachers with a means to assist students to track and measure their path towards their own achievement goals rather than simply being a means to “sort” students and in too many cases instil a pathos of defeat and futility. The need to utilize formative assessment data in a purposeful and appreciative way so that student successes and not deficits can be scrutinized for commonalities and positive trends remains critical to addressing the Aboriginal student achievement gap piece.

Hattie (2009) found that formative assessment proved to be the third most efficacious contributor to improved student achievement in a ranking of 133 contributors to student achievement.

Furthermore, Leithwood (2009) noted, “It now seems clear ... that academic success is the most powerful solution to many of the conditions adversely affecting the life chances of [disadvantaged] students” (p. 89). If this is indeed the case then assessment and teacher instructional and professional practice remain critical to advancing positive learning outcomes for all learners and especially for Aboriginal students.

### **Equity and Equitable Learning Outcomes**

Inherent in the notion of equity is fairness or justice. School systems incorporate a range of undertakings to ensure learning opportunities for all students are indeed “equitable”.

Expressions of this systemic fairness include consideration of student learning needs (special education and learning assistance to name two such programs). Education systems that are attuned to the learning needs of all their students intervene and respond in a timely and appropriate manner (Buffum et al., 2012; Dufour et al., 2004). “The very best systems intervene at the level of the individual student developing processes and structures within schools that are able to identify whenever a student is starting to fall behind, and then intervening to improve that child’s performance” (Barber & Mourshed, 2007, p. 34)

Similarly, schools should be compelled to provide equitable opportunities where Aboriginal student achievement may be concerned. It behoves educational systems to respond to the needs of its learners whose worldviews are unique relative to the Euro-centric “Western worldviews” innate to mainstream education. Barber and Mourshed (2007) also stated, “The best systems have produced approaches to ensure that the school can compensate for the disadvantages resulting from the student’s home environment” (p. 34).

Teachers establishing clear and consistent expectations for student learning also has positive effects on how and what is learned by students:

They (teachers) start by setting clear and high expectations for what individual students should know, understand, and be able to do. Then they closely monitor the performance of schools against these expectations and develop effective mechanisms for intervening when these expectations are not met (Barber & Mourshed, 2007, p. 35).

In this regard, the imperative for schools to assess not only student progress but also their own progress toward addressing achievement disparities is paramount. “In general, the level of monitoring and intervention in the best-performing systems is inversely proportional to the capacity of individual teachers and the schools to improve themselves” (p. 35). Perhaps, in too many instances involving Aboriginal learners, successful assessment and intervention appears not to take root. It is suggested, therefore, that this reflective re-evaluation rests at the core of teacher instructional and professional practice.

Stronge (2002) noted that teachers form a triad with parents and school support programs to assess and monitor student progress. Because classroom teachers and parents have the greatest contact with the student, such collaboration is essential for student academic well-being. Furthermore, Stronge offered that successful teachers instruct in ways that can challenge their students and where required “adapt ... to meet the needs of other students who ... need the material presented differently” (p. 57). Given the experiential ethos of Aboriginal learning, such adaptation beyond the needs of mainstream students may be of benefit to the Aboriginal learner in the classroom. “Students of teachers who receive specialized training in working with a broad range of students, including culturally diverse students ... perform (on average) more than one full grade level above their peers” (Stronge, 2002, pp. 57-58). It would appear that matching

instructional practice to student learning needs may have profound implications for the learning prospects of Aboriginal learners. It should be noted that such teachers are in the main experienced themselves. Barber and Mourshed (2007) have also noted that teachers with three years' experience or less are placed in instructional settings that disproportionately hold students from disadvantaged socio-economic backgrounds. When one considers that teachers in Northern Saskatchewan have on average three years of teaching experience and that students from the North continue to achieve well below their Rural and Urban counterparts, the systemic challenges of narrowing achievement disparities are apparent.

### **From Despair to Hope**

Walker (2006) and Sergiovanni (2005) have proffered the belief that perhaps the greatest contribution leaders can make is to provide hope for the enterprise they lead. Where Aboriginal achievement gaps are concerned, it has perhaps been too easy to despair and resign to the harsh realities of the status quo. Such a mindset however, has served only to exacerbate the situation. At the outset of this review of the literature, it was contended that Aboriginal achievement gaps were predictable and preventable when the data was given careful scrutiny in light of possible interventions and teaching and learning strategies. The author would suggest that given the concerted and purposeful actions of government, the educational community, parents, communities-at-large and educational researchers; there exists real optimism that achievement disparities can be addressed. The current momentum can be translated into positive results for Aboriginal students that will enable them to live and thrive in "both worlds."

### **Conceptual Framework**

The following conceptual framework has emerged from the literature and as such served as a lens through which the research will unfold. Inherent in and originating from the four foundational spheres of Home Educational Culture, Culturally Affirming School Climate, School

Community Connections and Development and Responsive School Programs and Supports that support equitable learning outcomes for Aboriginal learners originate and reside in the nine perceptual fields:

- 1. Parental Support and Involvement** encompassing the works of AhNee-Benham and Napier (2002), Bell (2004), Brien & Stelmach (2009); Castagno and Brayboy (2008), Demmert (2001) Fan and Chen (2001); Henderson and Mapp (2002, Jeynes (2003), Kanu (2007), Lawson (2003), Lee and Bowen(2006), Leithwood (2009), Leithwood and Jantzi (2005), Marzano (2003), Nakagawa (2000), Government of Saskatchewan (2008c), Little (2009) Stoll et al. (2002);
- 2. School Climate** encompassing the works of Bell (2004); Castagno and Brayboy (2008); Demmert (2001); Fulford (2007), Henderson and Mapp (2002), Kanu, (2007), Klienfield (1985), Leithwood, (2009), (Phillips, 2006), Silver et al.(2002), Thompson, (2008);
- 3. Student Membership** AEPAC (2005), Battiste, (2005), Bell, (2004), Best (1989), Cappon (2008) CCL (2007; 2009), (Demmert, 2001), Government of Saskatchewan (2008a; 2008c; 2009; 2010), Henderson and Mapp, (2002), Kanu, (2007), Leithwood (2009), Noddings (1992), Richards, Hove, and Afolabi (2009), Stiggins (2005), Starrat (1991);
- 4. Instructional Practice:** Bell (2004); Castagno and Brayboy (2008), Demmert (2001), Fulford (2007), Hickling-Hudson and Alhquist (2003), Hilberg and Tharpe, (2002), Kanu (2005), Kleinfeld (1995), Seashore Louis et al., (2010), Silver et al. (2002), Steeves et al. (2012), Stiggins (2005), Stonechild (2009) Volante, (2007);

- 5. Assessment:** Barber and Mourshed (2007), Buffum et al. (2012), Dufour et al. (2005), Government of Saskatchewan (2008c; 2009; 2010), Hattie (2009), Hargraeves (2009), Levin (2009), Marzano (2003), Reeves (2000), Stiggins (2005), Stronge (2002),
- 6. Community Involvement:** Bell (2004), Berger et al. (2006); Brien and Stelmach (2009), Lee and Bowen (2006), Chadwick (2004), Demmert (2001), Ermine (2000; 2009), Fan & Chen (2001), Furman (1999), Fullan (2000 & 2009)), Fulford, (2007), Government of Saskatchewan, (2008; 2008c), Jeynes, (2003), Kanu (2005), Kleinfeld, (1985), Kovachs (2006); Leithwood (2009), Levin (2009), Little (2009); Government of Saskatchewan, (2008c), Marzano (2003), Nakagawa (2000), Phillips (2006), Ermine (2009; 2000), Richards et al. (2008), Silver, et al. (2002), Steeves et al.(2012), St. Denis (2010), Thompson (2008);
- 7. Professional Practice:** Barber and Mourshed (2007); Battiste (2005) Bell (2004); Buffum et al. (2012); Dufour et al. (2004); Fulford (2007); Fullan (2005) Liethwood & Jantzi, (2000; 2005)Government of Saskatchewan (2008a, 2009), Glaze et al. (2012); Robinson (2012);
- 8. Instructional Practice:** Barber and Mourshed (2007); Battiste (2005); Bell (2004); Buffum et al. (2012); Castagano & Brayboy (2008); ; CLC (2007; 2009); Demmert (2001), Dufour et al. (2004); Glaze et al. (2012), Hilberg and Tharpe (2002), Kanu (2005& 2007); Leithwood (2009), Marzano (2003), Reeves (2000), Robinson et. al. (2012); Silver, et al. (2002), St. Denis (2010), Stiggins (2005), Stronge (2002);
- 9. Mission, Vision, Goals for Learning:** Bryk and Schneider (2002), Fullan (2000; 2001; 2005; 2006; 2009), Fullan, Hill, and Crevola (2006), (Furman 1999), Government of Saskatchewan (2009; 2008; 2005), Hargreaves (2009); Henderson and Mapp (2002);

Levin (2009); Phillips (2006); Preston et al. (2012); Raham (2009), Thompson (2008);

All of these conceptual components relate back to and tease out the responses to the five original research questions.

Conceived as a cluster of spheres in deference to Ermine's (2000) conceptualization of ethical space the spheres of support for fashioning equitable learning outcomes for Aboriginal learners denote the relational nature of Aboriginal worldviews. Each sphere while distinct is closely associated with the other spherical supports working in concert to promote equitable learning outcomes for Aboriginal learners as set out in the Canadian Council on Learning (2007; 2009) and in the Government of Saskatchewan (2008a) documents. Inherent in the conceptual framework is the overriding notion of community/family/school connections as vital to actualizing the vision of equitable learning outcomes.

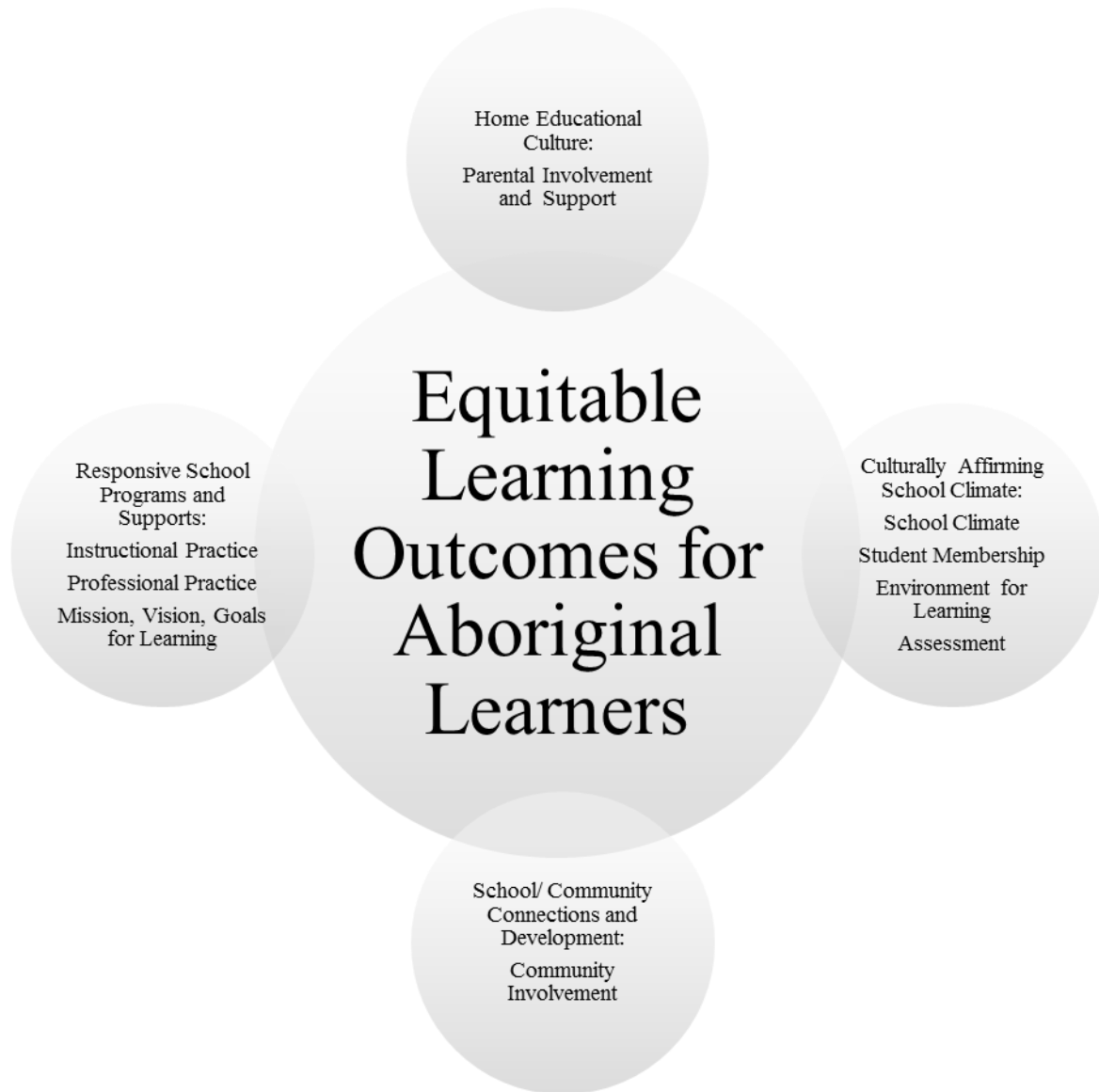
The spheres of Responsive School Programs and Supports and Culturally Affirming School Climate remain constructs largely under the control of teaching and school staffs. By this I mean that individual teachers and teacher collectives have considerable influence to determine how these constructs are actualized in their schools. Generally speaking, Fullan (2001) would assert that schools that have internal collaborative cultures are more easily predisposed to have externally collaborative cultures as well. It seems logical to say that the former serves as a precursor to the latter given that authentic collaborative processes become ingrained into the cultural fabric of a school and it would not be possible to do the latter without the former being in place.

While the fields of School/Community Connections and Home Educational Culture remain somewhat outside the school's ability to direct, they do not remain outside the school's ability to influence in a positive fashion. It is perhaps this attribute of influencing by means of enacting or



becoming that underscores the relational quality of home and community involvement and engagement in schools. Certainly the concept of ethical space envisioned by Ermine (2000) would be brought into being and the dialogue and action required of such capacity building would be of great benefit in helping fashion equitable learning outcomes for Aboriginal learners, indeed all learners. See Figure 2.1.

Figure 2.1 Engendering Equitable Learning Outcomes for Aboriginal Learners



## **Conclusion**

Chapter Two of this study examined the relevant literature relating to Aboriginal student achievement. The author developed and presented a conceptual framework and provided the rationale for his conceptualization. Chapter Three will outline the methodology that will be used for this exploratory study. An overview of mixed methods research and a rationale for the choice of such will be provided. The process by which the qualitative and quantitative data shall be mixed will also be explained.

Over and over, people who have come to our communities to get information, go away and write up and interpret and when we see it, we don't recognize it. Which person? Which family? Which village was involved in developing the materials? We prefer our own way of learning (John as cited in Western Canadian Protocol Framework for Collaboration in Basic Education, 2000, p. 12)

### CHAPTER THREE RESEARCH METHODS

Methodological matters pertaining to research design, participants, data collection and analysis, and accuracy and dependability are discussed in this chapter. It will begin by examining the appropriateness of employing a mixed methods design and then move to an explanation of the particular aspects of that research paradigm that will be employed in this study. Finally, it will provide an overview of the format for the qualitative interviews and quantitative survey that will be utilized in the study and link these research tools back to the conceptual framework developed in Chapter Two and to the research questions framed in Chapter One of this research.

This study investigated teachers' perceptions of Aboriginal student achievement in six provincial community schools in the Province of Saskatchewan, Canada. Lower achievement levels for Aboriginal students have in part translated into lifelong disparities and disadvantage for Aboriginal peoples in Canada in general (Battiste, 2005; Cappon, 2008; Cherubini et al., 2010; Sharpe et al., 2002). Current exigencies suggest that much time has been lost in the quest to address raising Aboriginal achievement, despite rhetoric at the highest political level (Harper, 2008; Martin, 2006). Clearly the matter needs immediate and purposeful attention and action. While studies exist in this country relating to the phenomenon of Aboriginal student achievement (Bell, 2004; Cherubini, 2009; Cherubini et al., 2010; Richards, 2008; Richards, Hove & Afolabi, 2008; Richards & Vinning, 2004; Friesen & Krauth, 2009; Fulford, 2007; Kanu, 2005; 2007;

Leithwood, 2009; Silver et al., 2002) research remains in a formative stage with respect to the constructs related to defining and understanding the phenomenon.

While the literature review in Chapter Two explored the general nature and outcomes of Aboriginal student achievement, the complexity of the phenomenon is such that an exploration of a more specific nature conducted within the context of schools themselves with front line educators is warranted. To conduct this exploration, the researcher determined that selected community schools in the province Saskatchewan would provide appropriate venues for the research because such schools held large populations of Aboriginal students and the schools also afforded these students holistic, culturally responsive, and educationally valuable supports. Therefore, the research for this study will be conducted within a total of six provincial community schools in Northern, Rural, and Urban Saskatchewan. It incorporated a mixed methods research design to collect data, utilizing a multi-case study approach. The replication of interview and survey research procedures at all research sites was either found to be contradictory or confirmational. In either case, it was hoped that the results shed new light on the phenomenon of Aboriginal student achievement and contribute to improved outcomes for Aboriginal students.

### **Mixed Methods Research Defined**

Martin (1990) contended that because researchers were making greater efforts to improve the quality of research in order to better understand organizational behaviour, discussions concerning research methodologies naturally followed from these research quests. The discussions, sometimes adversarial and acrimonious about which methods were technically sound or epistemologically pure, initially focused on the qualitative-quantitative debate, but as mixed methods research emerged, this approach came under fire from both camps. While the debate concerning whether mixed methods research is a legitimate investigative process appears to be

waning (Creswell & Plano Clark, 2007), arguments about its efficacy remain and flare from time to time (Howe, 2004; Howe, 2009).

Maxey (2003) asserted that because social science has proven to be dynamic and changing, so too should be approaches to studying social phenomena. He observed that clinging vainly to rigid paradigms served only to confound matters, and resulted in “a greater diversity in research methods in education and a further departure from formalism” (p. 51). Greene and Caracelli (2003) in a similar vein have noted that new research paradigms have evolved over time, and they cite the emergence of feminism and critical theory as examples of how new paradigms invite new thinking about methodology and research. Within this context of change, it is ironic to consider that those who favour a qualitative, interpretivist, paradigm and who rail against those who adopt a quantitative, neoclassical, approach may do so largely because they reject the quest for “one truth” ascribed to the post-positivist camp (Lincoln and Guba, 2005). Ultimately, opportunities to find common ground or to forge new paradigms may have been lost in the posturing. The need to accommodate both confirmatory and exploratory methods in the conduct of research becomes paramount. *Confirmatory* in this context refers to quantitative research methods and instruments used to establish correlational relationships between and among variables while *exploratory* refers to qualitative methods and research methods designed to develop or discover theoretical underpinnings of a particular phenomenon. (Creswell, 2007).

Greene (2008) Greene and Caracelli (2003), Tashakkori and Teddlie (2003) contended that while paradigms vary significantly from one another in theoretical aspect, such differences do not extend to research methods. In other words research paradigm choices are not intertwined with research procedures and therefore should not be dictated to by worldviews. Scientific license should allow for original and inspired methodologies that are not bound to one particular

paradigm. Because there are differences between worldviews, social scientists see those differences purposefully to produce knowledge (confirm) or generate theory (explore). The priority to which either worldview is given will be determined by one's "ontological and epistemological assumptions" (Hammersly, 2005, p. 1), and such assumptions will colour decisions about what data to use. However, "both kinds of data can be of value" and metaphysical differences should be overcome and treated as "no more than working hypotheses" (Hammersly, 2005, p. 2). Furthermore, Johnson and Onwuegbuzie (2004) asserted that mixed methods research employs the "pragmatic method" to induct the emergence of patterns in research, deduce theories or hypotheses, and abduct explanations for the results of research (p. 17). Such pragmatism is foundational to the "pragmatists" who place themselves in this paradigmatic company. Johnson and Onwuegbuzie (2004) defined paradigm in terms of:

a set of beliefs, values, and assumptions that a community of researchers has in common regarding the nature and conduct of research.... In short, as we use the term, a research paradigm refers to a research culture. We [believe] that there is now a trilogy of major research paradigms: qualitative research, quantitative research, and mixed methods research. (p. 24)

The author places himself firmly in this pragmatist camp also.

### **The Egalitarian Foundations of Mixed Methods Research**

Collins and O'Cathain (2009) articulated the importance of defining what constitutes mixed methods research. Creswell and Plano Clark (2007) define such methodology in terms of the combination of quantitative and qualitative approaches to afford a greater understanding of research problems, to offset the inherent shortcomings of qualitative or quantitative studies on their own, to provide richer evidence for a study, to answer questions that cannot be answered within the confines of a single research medium, to encourage research collaboration, to employ

multiple worldviews, and to take advantage of its practical nature to address research problems (pp. 8-10). While Creswell, Plano Clark, Gutmann, and Hanson (2003) saw mixed methods research thus:

A mixed methods study involves the collection of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research. (p. 212)

Given the broad spectrum of definitions and their utility, the use of mixed methodologies appears to have come into wider use as a research medium. In short, by definition, mixed methods research is inclusive, collaborative, practical, and multifaceted with respect to worldviews, and given this research operational context, the foundational research tenets of mixed methods research remains democratic.

Greene and Carracelli (2003) noted that researchers must have an understanding of their own metaphysical foundations so that a study can be of value, but that pragmatism's interests in finding "what works" abandon strict adherence to metaphysical assumptions in order to augment the understanding of a phenomena (p. 103). Johnson and Onwuegbuzie (2004) contended that pragmatism is itself a philosophical position and provides a means to move forward when the paradigmatic antagonisms bog down the research process. In advocating mixed methods research as the "third research paradigm in educational research" (p.14), they also noted that both quantitative and qualitative research "are important and useful" and therefore mixed methods has the potential to maximize their respective utility and minimize their inherent weaknesses.



With respect to research purpose, I place myself squarely in the pragmatic, mixed methods paradigm for this study. Prior teaching and administrative experience in settings with high Aboriginal student populations where their achievement levels rested below those of their non-Aboriginal counterparts has led me on a lengthy quest to try to understand how these disparities may be ameliorated. To this end, my preoccupation with “what works” (Greene & Carricelli; 2003) and with illuminating this phenomenon with an eye to better understanding it so that redress may be possible, motivates my inquiry. The purpose of this research was to attempt to conceptualize teachers’ perceptions of Aboriginal student achievement in order to discover dynamics which may address these learning outcome disparities and may lead to more equitable learning outcomes for Aboriginal learners in the future.

### **Ensuring Quality in Mixed Methods Research Design**

Given the multiplicity of paradigms, methods, and ontological and epistemological positions relative to the research debate, it is prudent to examine the relative strengths of qualitative and quantitative research to expand upon the paradigmatic antagonisms that have coloured the ongoing debate about research efficacy and “truth.” Such an enquiry needed to focus upon mixed methods research in terms of design. Collins and O’Cathain (2009) observed that typologies legitimate mixed methods research and furnish structure to design. They also offered that the design itself can consist of mixing qualitative and quantitative methods across different stages of the study. Creswell and Plano Clark (2007) identified four design categories into which mixed methods research can be attached: 1) triangulation; 2) embedded; 3) explanatory; and 4) exploratory. Deciding which of these four designs to use necessitates determining the study’s variants, timing, weighting, and mixing (Creswell & Plano Clark 2007, p. 85).

This study incorporated an exploratory sequential design as described by Creswell and Plano Clark (2007). Such a design will use a sequential timing where a qualitative exploration will be

followed by a quantitative survey guided by the analysis of the qualitative phase and subsequent analysis (Creswell & Plano Clark, 2007). The study will be weighted in favour of qualitative methods and data between the two phases shall be “mixed” by means of qualitative analysis where data shall be presented in an integrated interface (See Appendix P). Creswell et al. (2003) opined that a sound exploratory design should utilize a title that indicates the research will be exploratory in nature, employing both qualitative and quantitative methods. To this end, the title of this study, “Conceptualizing Teacher Perceptions of Aboriginal Student Achievement: An Exploratory Study” has been chosen in order to indicate that it will indeed employ a mixed methods approach under an exploratory auspices.

Figure 3.1 illustrates the design of an exploratory study with respect to variants, timing, weighting, and mixing of data.

**Figure 3.1: The Exploratory Mixed Methods Design**

<b>Design Type</b>	<b>Variants</b>	<b>Timing</b>	<b>Weighting</b>	<b>Mixing</b>	<b>Notation</b>
Exploratory	Instrument development Taxonomy development	Sequential: Qualitative followed by quantitative	Usually qualitative	Connect the data between the two phases	QUAL →quan

Source: Creswell and Plano Clark (2007, p. 85)

### **Enriching Deliberative Discourse through Sampling**

This study employed both purposive sampling of nine teachers, six high school and three elementary from six provincial community schools in Saskatchewan from three distinct locales in the province. The sample included teachers from Northern, Rural, and Urban community schools. Kemper, Stringfield, and Teddlie (2003) asserted that any research question would require both representative and purposive sampling techniques to adequately explore its complexity. They go on to further indicate that scholarly issues may drive other aspects of research, but “sampling issues are inherently practical” (p. 273). Opportunities are extended to

the mixed methods researcher to use both purposive sampling (normally associated with qualitative methods) and representative sampling (normally associated with quantitative methods) Mertens (2003). This research has undertaken an exploratory design and thus began with a purposive sample of teachers who, it was hoped, may provide sufficient insight to undertake a quantitative survey later in the study that will employ a randomized but representative sample from the larger population of teachers from which the purposive sample was originally drawn (Creswell & Plano Clark, 2007, pp. 75-79).

### **Methodological Design of the Study**

This section of the study is devoted to describing the methodology used to conduct the research of conceptualizing teachers' perceptions of Aboriginal student achievement that exists between Aboriginal and non-Aboriginal students. By extending this central research opportunity into five foundational research questions, and by exploring the questions within the context of six selected community school sites in Saskatchewan, data were gathered for the study.

A conceptualization process of determining how students learn and ultimately achieve was undertaken in the literature review. Principally, the works of Agbo (2007), Barber and Mourshed (2007), Battiste (2005), Bell (2004), Berger et al. (2006), Brien and Stelmach, (2009), Demmert (2001), Dufour et al., (2004), Fullan (1999) Fan & Chen (2001); Jeynes (2003), Fulford (2007), Fullan (2002); Government of Saskatchewan, (2008; 2008a; 2009; 2010), Hattie, (2009) Hilberg and Tharpe (2002), Kanu ( 2005;2007), Lee and Bowen, (2006), Leithwood (2009), Leithwood and Jantzi (1999), Marzano (2003), Pushor (2007); Phillips (2006), Reeves (2000), Richards et. al. (2008), Stronge (2002); Silver et al. ( 2002), Thompson (2008) were scrutinized to gain an understanding of successful means to support Aboriginal student achievement from a classroom, home, school, community, and student point of view. An

original framework of nine distinct domains relative to student achievement emerged from the literature. These domains included: (1) learning environment; (2) student membership; (3) teacher professional practice; (4) assessment strategies; (5) mission, vision and goals for learning; (6) parental involvement and support; (7) community involvement in schools; (8) school climate; and (9) instructional practice were deemed critical to the student achievement process. The researcher then undertook to frame potential questions for an interview instrument that would be used to begin the data collection process. The researcher also wanted to frame the questions in such a manner that the five research questions of the study could be probed in sufficient depth.

One issue of concern for the researcher was the notion of reciprocity identified by Kovachs (2010). Certainly the degree to which Aboriginal communities and individuals were exploited in so much research that served the purposes of the research, but made secondary if at all the needs of those being researched has created a circumstance where research with Indigenous peoples needs to be of mutual benefit and respect reflecting a synergistic relationship where both researcher and those being researched can find mutual benefit and gain from the research. In no small way such an approach to this study is reflected in its appreciative bent and has guided my thinking to this juncture and beyond. It is my intention to continue to hold in this same regard those who remain the focus of this research and those it is hoped stand to gain the most by it.

### **Site Selection**

Provincial community schools in Saskatchewan were selected as the medium in which teacher perceptions of Aboriginal student achievement could be explored because they embody the tenets of First Nations holistic approaches to education. Schools are designated community schools based in part upon the number of at-risk students who attend them. Furthermore, the Aboriginal student population of community schools in Saskatchewan is nearly 50% on average

(Thompson, 2008; Phillips, 2006). It was felt by the researcher that given the population demographics and the degree of student support, designated community schools would provide a rich environment for the study. Owing to the researcher's contention that student achievement disparities begin in elementary school, but are starkly evident in high school achievement and transition statistics (Government of Saskatchewan, 2010; 2008a) both elementary and high school sites would be included in the study. Six schools, two in the North, two in Rural regions, and two Urban sites were chosen to conduct the research. This decision was rooted in the belief that achievement disparities even among Aboriginal students from different demographic regions appeared evident in the data examined in Chapter One (Government of Saskatchewan, 2010; 2008a).

### **Sampling**

Gesler, Smith, and Washburn (as cited in Kemper, Stringfield, and Teddlie, 2003) condensed guidelines identified by Curtis, Gesler, Smith, and Washburn (2000) into six key considerations with respect to sampling in mixed methods research. The list of considerations enumerated below provides a litmus test governing sampling in such research. They noted, sampling should derive from the conceptual framework, should produce sufficient data pertaining to the phenomena being studied, should make possible inferences and explanations about the data, should be ethical, and should be feasible.

1. The sampling strategy should stem logically from the conceptual framework as well as from the research questions.
2. The sample should be able to generate a thorough database on the type of phenomena under study.
3. The sample should at least allow the possibility of drawing clear inferences from the data; the sample should allow for credible explanations.

4. The sample strategy must be ethical.
5. The sampling should be feasible.
6. The sampling plan should allow the research team to transfer/generalize the conclusions of the study to other settings or populations.

While the Saskatchewan provincial community school remains the unit of study in this research, individual teachers from those settings will be the source of qualitative interview data. For means of sampling convenience, the researcher interviewed nine teachers, six secondary and three elementary to provide the qualitative data which when coded and analyzed provided the basis for the framing of the teacher surveys. The researcher then offered to survey all the teaching staff members of the schools in order to gauge and then conceptualize teacher perceptions of Aboriginal student achievement. The researcher believes this rationale has been satisfied by the sampling methods employed for this research. I also believe that the sampling technique is indeed ethical satisfying item 4. In addition, the qualitative sample size and the teacher survey size I believe are indeed feasible. The researcher believes that item 6 has not been satisfied to the extent that transferability of the conclusions would be dubious given the small sample size of the survey. (See Data Analysis later in this chapter.)

While Creswell and Plano Clark (2007) have observed that “researchers must make decisions about the relative size of two samples and whether one sample is a subset or the other and whether the participants should be completely different for the two samples,” (p. 185) it is believed that for the purposes of this study drawing both samples from the same group of community school teachers will be the best course for this study. The rationale for such rests in the belief that the smaller purposive sample of teachers may be representative of the larger teacher sample to be employed in the teacher survey.

## **Teacher Interviews**

The qualitative component of the research design employed semi-structured, open-ended interviews to focus upon building a better understanding of the experiences of teachers with respect to Aboriginal student achievement gaps. Fontana and Frey (2005) noted that “[e]xploratory interviews are designed to establish familiarity with a topic ...; the interviewer can be very directive (or the opposite), but the questions are usually unstructured or open-ended (p. 704).” While Morse and Richard (2002) asserted that within the context of a case study, the use of “open-ended questions ... prepared in advance, along with prepared probes constituted semi-structured interviews. The interviews for this study were conducted within the context of multi-case studies employing small samples. Stake (2005) noted that multiple cases may be concurrently studied in order to “investigate a phenomenon .... Individual cases in the collection may or may not be known in advance to manifest some common characteristic” (pp. 445-446). Multiple sites were investigated in this study and while the unit of study, Saskatchewan provincial community schools may have some common attributes, it was anticipated that each school would embody characteristics unique to its respective demographic context. In this way, it was anticipated that the phenomenon under study would be scrutinised in sufficient breadth and depth.

## **Framing the Research Questions**

Onwuegbuzie and Leech (2006) noted that in all the research material written regarding mixed methods research, little attention has been given to the matter of framing questions in mixed methods research. They contended that research questions remain “vitally important because they, in large part dictate the type of research design used, the sample size and sampling scheme... type of instruments administered as well as the data analysis techniques...used” (p. 475). To this end, my research questions met the criteria elucidated by Onwuegbuzie and Leech

to be mindful of the exploratory research design incorporated in this study as well as to be cognizant of how they are derived from the sample size and data analysis techniques to be utilized when data gathering begins.

The research questions solicited teacher perceptions of the phenomenon of Aboriginal student achievement. Utilizing data from the Assessment for Learning (AFL) provincial results and other relevant educational data from the Education Indicators Report (Government of Saskatchewan, 2008a; 2010), in the province of Saskatchewan, the semi-structured interview questions probed teachers' perceptions of the phenomenon of Aboriginal student achievement in sufficient detail to facilitate the construction of a quantitative survey which was offered to the full staffs in the respective community schools in which individual teachers were interviewed during the qualitative phase. By "linking" (Creswell & Plano Clark, 2007) the data in a complementary (Johnson & Onwuegbuzie, 2004) fashion from the two phases, substantive insight into the phenomenon of Aboriginal student achievement that extend beyond using only qualitative or quantitative methods on their own, was brought to light (Hammersly, 2005).

To review then, the five research questions to be explored in this study included:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?
2. By what perceived means do teachers see their role in addressing the achievement disparities in their respective schools?
3. How do teachers conceptualize effective teaching and assessment practices with Aboriginal student learning?
4. How do teachers know when that their instructional practice is both effective and successful where Aboriginal student achievement is concerned?



5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

All five questions were addressed by means of the teacher interview instrument developed for the study. The questionnaire is presented below.

### **Teacher Interview Questionnaire**

1. In your opinion, does a significant gap in terms of Aboriginal and non-Aboriginal achievement exist in this school? Please comment.
2. What do you see as the major causes of this achievement gap? Explain.
3. How does this school's specific goals to improve Aboriginal student achievement affect your teaching? Please explain.
4. How does the collaborative practice of staff work to improve Aboriginal achievement? Can you provide examples?
5. How do staff and parents share in decision making in this school to improve Aboriginal student achievement? What does it feel like when the sharing is successful?
6. How does staff reflective practice about Aboriginal student achievement in this school assist you in your efforts to improve learning outcomes for Aboriginal learners?
7. Can you describe school programs in place to support Aboriginal students with their learning? How do you use these programs to assist your teaching practice?
8. Are your instructional strategies geared toward improving Aboriginal achievement? Please comment. How do you know when you are being successful?
9. How are Aboriginal parents actively involved in the life of this school? How do their efforts make a difference in the learning of Aboriginal students?

10. In your opinion, do Aboriginal parents have high expectations for student learning to support student achievement? Explain.
11. Are Aboriginal students engaged in their learning in this school? Please explain.  
What does it look like when they are successful?
12. Is the wider community aware of the school's plans to improve Aboriginal student achievement? In your opinion, does the community support them? How so?
13. What strengths do Aboriginal students bring to their learning in this school? Please explain.
14. Do you have any further comments you would like to make in regard to Aboriginal student achievement?

### **Linking the Interview Questions to the Research Questions and the Conceptual Framework**

Question 1 of the teacher interview is geared toward soliciting teacher views with respect to the context of Aboriginal student achievement within their school. The question speaks to question one of the research questions, and stems from the spheres of Responsive School Programs and Supports and Culturally Affirming School Climate in the Conceptual Framework and is referenced to teacher instructional practice, professional practice, an environment for learning, assessment, and school climate. Question 2 of the teacher interviews is designed with an eye to gaining an understanding of teacher perceptions of the antecedent circumstances of the current achievement gap. It has been framed with question one of the research questions in mind and originates with respect to Home Educational Culture, School Community Connections and Development, Culturally Affirming School Climate, and Responsive School Programs and Supports. Specifically it is referenced to the domains of parental involvement and support, school climate, student membership, environment for learning, community involvement,

professional practice, and mission/vision, and goals for learning. Question 3 of the teacher survey speaks to planning to address the achievement gap and relates to question two of the research questions. It is referenced to the conceptual framework with respect to the sphere of Responsive School Programs and Supports and to the domain of mission, vision, and goals for learning. With respect to question 3 of the teacher interview survey, Fullan (1999) Hargreaves, (2008) Levin (2009), Dufour et al. (2005) stress the importance of schools and school divisions to have in place clearly articulated mission and vision statements so that all members of the school community are aware and compelled by these foundational tenets to improve learning outcomes for students.

Questions 4, 6, 7, and 8 speak to the Saskatchewan Continuous Improvement Framework (CIF) and the need to ameliorate Aboriginal student learning outcome disparities. They address questions four and five of the research questions and are referenced with respect to the conceptual fields of Responsive School Programs and Supports and to the domains of instructional practice, professional practice, and assessment. The works of Marzano (2003), Reeves (2000), Dufour et al. (2004), Barber and Mourshed (2007), Government of Saskatchewan (2009; 2008a) Stiggins (2005), (Leithwood (2009), and Stronge (2002) are the primary sources from the literature review concerned with these questions.

Questions 5, 9, and 12 of the teacher survey dealt with the shared decision making opportunities and school governance where student achievement disparities are concerned. The questions are intended to address question four of the research questions. Furman (1999) and Ermine (2000) asserted that schools can develop the capacity to be places where students and communities of different cultures can interact, reframe their relationships and form new understandings and thus new non-valuational “communities of otherness” (Furman p.317). In

addition, the notion of collaborative practice and collaboration inherent in the works of Agbo (2007), Berger et al. (2006), Chadwick (2004), Ermine (2000; 2009), Fullan (2000), Levin (2009), and) Leithwood (2009), Phillips (2006), Pushor (2007), and Thompson (2008) reference the questions with respect to the literature review.

Questions 10, 11, and 13 from the teacher interview questions related to question two of the research questions and deal with the conceptual fields of Home Educational Culture and Culturally Affirming School Climate and the domains of parental involvement and support and student membership and environment for learning respectively. They are referenced with respect to questions one and two of the research questions and to the literature review where the writings of, Battiste (2005), Bell (2004), Jeynes (2003), Marzano (2003), Thompson (2008), and Whelage et al. (1990).

### **Data Collection: Exploratory Sequential Mixed Methods**

Employing an exploratory sequential mixed methods design, this study developed in two distinct stages. The first stage involved conducting semi-structured interviews with nine school teachers in six community schools located in Northern, rural, and urban school divisions in Saskatchewan, Canada. The second stage involved the development and administration of a teacher survey instrument (TPAA Inventory) to quantitatively measure teachers' perceptions of Aboriginal student achievement within those same schools. The third stage consisted of mixing the data in an integrated data interface for both quantitative and qualitative data. Because the research design was exploratory in nature, qualitative data was weighted more heavily than quantitative.

### **Data Analysis of Semi-Structured Teacher Interviews**

Data analysis began once data started to be collected. Because this research design incorporated an opening qualitative phase with the conducting of semi-structured interviews of

teachers from Saskatchewan provincial community schools, data was recorded and coded numerically for each response from the interviews. New variables were coded for analysis. A codebook enumerating the variables and their definition was developed. In order to validate qualitative data from the interviews, digitally recorded text were transcribed and checked for accuracy by means of member checks (Creswell, 2007; Creswell & Plano Clark, 2007; Miller & Crabtree, 2002). Lincoln and Guba (1985) offered that the validity of qualitative data can be enhanced when a study's participants are afforded the opportunity to check for researcher understanding where analytic categories, interpretations, and conclusions are concerned. By sharing interview transcripts to check for accuracy and integrity, the researcher and research participants will engage in an authentic and rigorous process that will lend credibility and accuracy where the findings may be concerned. In order to bring into being research transferability, thick description will be utilized to "[allow] the reader to enter the research context" (Thomas & Brubaker, 2007, p. 260). Finally, by engaging in a process of inquiry audit whereby my field notes, research journal, and coding scheme, validity of the research findings will be enhanced (Thomas & Brubaker, 2007). Such inquiry auditing will occur both during the research as well as after its completion.

### **Teacher Survey Instrument Development**

As I explored the literature, a series of questions relating to the research opportunity and the nine domains in which they could be categorized emerged. By means of brainstorming, editing and revising, and locating the questions in the literature itself, a tentative list of potential questions came to light. It should be noted, however, that the respective sources for the questions were not literally addressing the Aboriginal achievement phenomenon, but were in fact inspiration for the adaptation presented here. To this extent, it would be difficult for the reader to go to the literature and find literally extant, the questions found on this survey instrument.

Data from the teacher interviews were triangulated with the literature and the list of potential survey questions to embed them in both theory and teacher perception and experience.

Furthermore, the questions are referenced with respect to relevant literature in the field.

The teachers' survey instrument encapsulated emergent themes relative to the nine domains elucidated in the conceptual framework developed in Chapter Two of this study. The survey instrument also included demographic data regarding the ethnicity, gender, number of years of teaching experience of the participants, school configuration, current teaching assignment and location where their respective teacher training occurred. A five point Likert scale was employed to petition participant responses. The scale ranged from: (1) strongly disagree; (2) disagree; (4) agree; (5) strongly agree; and (3) hold no opinion.

### **Establishing Reliability for the Teacher Survey Instrument**

The teacher survey instrument was designed with the aim of utilizing descriptive statistics for analytical purposes. Onwuegbuzie and Leetch (2006) have noted that the use of statistical tests should correspond to the nature of the research questions. With respect to this study, measures of central tendency (means) as well as measures of variability (standard deviations) were employed for data analysis purposes (p. 487). The reliability of the survey instrument was analysed by means of Cronbach's alpha method, used to establish the internal consistency of how responses on one item correlated to similar responses on corresponding items. Alpha coefficients of .7 or higher are deemed to be strong when using Cronbach's alpha (Fielding, 2010).

## **Survey Questions by Domain Relative to the Conceptual Framework and Research Questions**

### **Teacher Instructional Practice**

Questions 4, 6, 19, 30, 32, 35, and 45 spoke to question three of the research questions concerning teacher instructional practice. With respect to the literature review, these questions are rooted in the following works:

4. Employing cultural knowledge in teaching (Bell, 2004; Castagno & Brayboy, 2008; , Fulford, 2007; Kanu, 2005; Leithwood, 2009; Silver et al. 2002)
6. Employing Aboriginal worldviews to enhance instruction (Demmert, 2001; Kanu, 2007; 2005; Castagno & Brayboy, 2008; Phillips, 2006; Silver et al. 2002)
19. Student awareness of teacher expectations for learning, (Hattie, 2009; Marzano, 2003; Reeves,2000)
30. Teaching practices and student engagement (Bell, 2004; Demmert, 2001; Fulford, 2007)
32. Culturally responsive instruction ((Bell, 2004; Demmert, 2001; Fulford, 2007; Hilberg & Tharpe, 2002; Kanu, 2005)
35. Holistic teaching practices (Bell, 2005; Castagno & Brayboy, 2008; Demmert, 2001; Fulford, 2007; Hilberg & Tharpe,2005; Kleinfeld, 1995; Kanu, 2005)
45. Employing culturally responsive curriculum resources (Bell 2005; Castagno & Brayboy, 2008; Demmert, 2001; Henderson et al. 2006; Kanu, 2005; 2007; Silver et al. 2002).

### **Teacher Professional Practice**

Questions 3, 18, 33, and 36 relate to the domain of teacher professional practice with respect to professional development, professional learning communities, and teacher collaboration.

3. Seek help of PLC to improve instruction (Buffum et al. 2012; Fullan, Dufour et al. 2005;
18. Employ professional development to expand teaching practice (Buffum et al., 2012; Dufour et al., 2005; Henderson & Mapp, 2002)
33. Teacher collaborative practice (Barber & Mourshed, 2007; Castagno & Brayboy 2008; Dufour et al. 2005; Leithwood, 2009)
36. Responsive school supports for students (Buffum et al. 2012; Barber & Mourshed, 2007; Castagano & Brayboy 2008; Dufour et al., 2005; Leithwood, 2009)

### **Aboriginal Student Achievement Contexts**

Questions 10, 13, 28, 37, and 42 of the TPAAI survey relate to historical, socio-economic, and cultural contexts of Aboriginal student learning. The questions stem from the research of, Battiste, (2005); Cappon (2008), Canadian Council on Learning, (2007; 2009), Cherubini et al. (2010), Hickling-Hudson and Alquist (2003), Haig-Brown (1989), Helin (2007); St. Denis (2010) and the policy directions of the Government of Saskatchewan (2008a; 2009). They are referenced to the Conceptual Framework with respect to antecedent and contextual issues that may affect Aboriginal student achievement.

10. Social inequities affecting Aboriginal achievement (Arundel & Associates, 2009; Hickling-Hudson & Alquist, 2003; Helin, 2007; Howe, 2011; Silver et al., 2002; Sharpe et. al., 2009);
13. Economic disadvantage affecting Aboriginal achievement (Arundel & Associates, 2009; Kanu, 2005; Leithwood, 2009; Silver et al. 2002; Sharpe et. al., 2009);
28. Historical issues affecting Aboriginal achievement (Cappon, 2007; Haig-Brown, 1989; Helin, 2007; Cherubini et al, 2010; Rae, 2008)



37. Inter-generational affects on Aboriginal learning (Battiste, 2005; Cherubini et al. 2010; Haig-Brown, 1987; Cappon, 2008; Silver et al. 2002; St. Denis,2010);
42. Achievement Gaps (Cherubini et al, 2010; Cappon, 2008; Howe 2011; Richards, 2008; Richards, et al. 2008; Raham, 2010).

### **Mission, Vision, and Goals (Alignment)**

Questions 21, 23, 24, 27, 41, and 47 of the teacher survey are referenced to question two of the research questions and to the domains of mission, vision, and goals for learning where the Conceptual Framework is concerned. The bracketed references indicate the literature sources from which the questions were framed.

20. School services such as meal programs (Bryk & Schneider, 2002; Government of Saskatchewan, 2009; 2005; Phillips, 2006; Raham, 2009; Thompson, 2008);
21. School supports for dealing with learning challenges (Marzano, 2003; Barbour, 2 Dufour et al., 2005; Government of Saskatchewan, 2008c; Buffum et al., 2012);
23. Teacher learning goals and school learning improvement plans (Hargreaves, 2009; Fullan, 2009; Levin, 2009; Government of Saskatchewan, 2006);
24. School learning improvement plans and the continuous improvement framework (Hargreaves, 2009; Fullan, 2009; Levin, 2009; Government of Saskatchewan, 2008);
27. Culturally Responsive Curriculum (Demmert, 2001; Henderson et al. in press; Battiste, 2005; Castagno & Brayboy, 2008; Kanu, 2005; 2007; Klienfeld, 1985);
41. Improving Aboriginal achievement (Gouvernement of Saskatchewan, 2008c; 2010);
47. Student transitions (Henderson & Mapp, 2002; Government of Saskatchewan, 2008; 2010).

## **Community Involvement**

Questions 12, 14, 20, 25, 40, 43, 44, and 46 speak to question two of the research questions. They are referenced with respect to the Conceptual Framework to the sphere of School Community Connections and Development and anchored in the domain of community involvement. Specifically, the numbered questions below pertain to extended learning opportunities in the community, shared governance, community support for school programs and after school programs.

12. Wider community offering extended learning opportunities (Berger et al., 2006; Government of Saskatchewan, 2008c; Henderson & Mapp, 2002; Leithwood, 2009; Little, 2009; Richards et al., 2008)
14. Community and shared governance (Agbo, 2007; Bryk & Schnieder, 2002; Ermine, 1996; Furman, 1999; Demmert, 2001; Government of Saskatchewan, 2008c; Henderson & Mapp, 2002; 2004; Pushor, 2007; Richards et al. 2008; Thompson, 2008);
20. School Services (Bryk & Schneider, 2002; Government of Saskatchewan, 2009; 2005; Phillips, 2006; Raham, 2010; Thompson, 2008);
25. Community support for school programs (Bell, 2004; Fulford, 2007; Kovachs, 2006; Leithwood, 2009; Phillips, 2006; Richards et al., 2008; Thompson, 2008);
40. Collaboration with Aboriginal communities to improve achievement (Thompson, 2008; Government of Saskatchewan, 2009, 2005; Extended learning opportunities in community (Demmert, 2001; Henderson & Mapp, 2002; Kanu, 2005; Little, 2009; Silver et al., 2002);

- 43. Opportunities to extend student learning in the community (; Bell, 2004; Cappon, 2008; Fulford, 2007; Government of Saskatchewan ,2005; 2009; Little, 2009; Phillips, 2006; Thompson, 2008);
- 44. Early childhood education programs (Demmert, 2001; Preston et al., 2012;);
- 46. After school programs (Bryk & Schneider, 2002; Government of Saskatchewan, 2009; 2005; Little, 2009; Phillips, 2006; Thompson, 2008).

### **Assessment**

Questions 5, 9, 15, 29, and 39 and 1 (OER) address questions three and four of the research questions and incorporate the work of Barber and Mourshed (2007), Government of Saskatchewan Aboriginal Education Provincial Advisory Committee (2005), and the Canadian Council on Learning (2007; 2009) Marzano (2003), Reeves (2000), Stronge (2002), and Stiggins (2005), . They relate to the sphere of Responsive School Programs and Culturally Affirming School Climate and are founded in the domain of assessment. The questions numerated below correspond to the survey questions dealing with assessment.

- 5. Use of large scale assessment data: ( Castagno & Brayboy, 2008; Government of Saskatchewan, 2012; Hickling-Hudson & Alquist, 2003; Leithwood et al. 2004; Stiggins, 2005);
- 9. Assessment for learning to inform student progress: (Buffum et. al, 2012; Dufour et al. 2004; Hattie, 2009; Marzano, 2003; Reeves, 2000; Stiggins, 2005);
- 15. Assessment aligns with goals to improve student achievement: Fullan, 2009; Hargraeves, 2009; Levin, 2009; Stiggins, 2005);
- 29. Assessment criteria: (Leithwood, 2009; Marzano, 2003; Stiggins, 2005);
- 39. Assessment leading to interventions: (Buffum et. al, 2012; Barber & Mourshed, 2007; Dufour et. al. 2005);

## **Parent Involvement**

Questions 2, 7, 17, 22, and 34 are referenced to Parental Involvement and the Home Educational Culture of the Conceptual Framework and relate to the domain of parental involvement and support. The questions enumerated below pertain to the survey questions dealing with parental involvement from the survey (Aboriginal Education Provincial Advisory Committee 2005; Agbo 2007; Berger et al. 2006; Jeynes 2003; Bowan and Lee 2006; Government of Saskatchewan 2008; Leithwood & Jantzi, 2006; Pushor 2007):

2. Parental expectations to support student learning: (Bowan & Lee, 2006; Demmert, 2001; Fan & Chen, 2001; Government of Saskatchewan, 2008c; Hattie, 2009; Henderson & Mapp, 2002; Jeynes, 2003; Leithwood, 2009; Marzano, 2003; Nakagawa, 2000);
7. Shared governance: (Brien & Stelmach, 2009; Castagano & Brayboy, 2008; Demmert, 2001; Government of Saskatchewan, 2010; 2008c; Leithwood, 2009; Nakagawa, 2000; Richards et al. 2008);
17. Parental engagement in life of school: (Agbo, 2007; Brien & Stelmach; 2009; Demmert, 2001; Fan & Chen; 2001; Government of Saskatchewan, 2008c; Henderson & Mapp, 2002; Lee & Bowan, 2002; Little, 2009; Nakagawa, 2000; Pushor, 2007);
22. Communication with Parents (Agbo, 2007; Berger et al. 2006; Brien & Stelmach, 2009; Silver et al. 2002);
34. Parent/teacher interviews (Brien & Stelmach; 2009; Demmert, 2001; Fan & Chen; 2001; Government of Saskatchewan, 2008c; Lee & Bowan, 2002; Marzano, 2003; Nakagawa, 2000; Henderson & Mapp, 2002; Pushor, 2007);

## **Aboriginal Student Membership**

Questions 1, 8, 11, 16, 26, 27, 31, and 38 speak to questions two and five of the research questions and deal with the construct of student attachment and engagement in school. They draw from the sphere of Culturally Affirming School Climate and to the domain of environment for learning relating to student membership where the Conceptual Framework is concerned.

1. Aboriginal student cultural affirmation (Bell, 2004; Castagno & Brayboy, 2008; Fulford, 2007; Kanu, 2005; Leithwood, 2009);
8. Feelings of safety in school (Castagno & Brayboy, 2008; Kanu, 2005);
11. Recognizing Aboriginal student achievement in the classroom (Bell, 2004; Castagno & Brayboy, 2008; Fulford, 2007; Silver et al., 2002);
16. Feelings of belonging to school (Demmert, 2001; Henderson & Mapp, 2002; Kanu, 2005; Silver et al. 2002);
26. Aboriginal student engagement in school (Bell, 2004; Fulford, 2007; Kovachs, 2006; Thompson, 2008);
27. Culturally responsive curriculum (Canadian Council on Learning, 2007; 2009);
31. Study Habits of Aboriginal students (Bell, 2005; Fulford, 2007; Berger, 2006);
38. Attendance of Aboriginal students (Berger et al. 2006; Demmert, 2001;; Henderson & Mapp, 2002; Kanu, 2007; Klienfeld, 1995; Silver et al., 2002);

## **Teacher Survey Instrument and the Conceptual Framework**

With respect to the conceptual framework, and the nine perceptual fields which emanate Climate; Student Membership; Environment for Learning; and Assessment. The School/Home/Community sphere embodies the domains: Community Involvement and Parental Involvement and Support. Responsive Programs and Supports pertain to Instructional Practice; Mission, Vision, and Goals for Learning; and Professional Practice. Home Educational Culture pertains

to the Parental Involvement and Support domain. While the teacher survey questions remained in a formative state it was anticipated that the teacher interviews and feedback from members of the academy would spawn new or alternative questions as well. As such they provided a well spring for framing the teacher survey instrument as the research unfolded.

### **Criteria for Survey Questions**

Four essential criteria framed the terms of reference for the TPAAI teacher survey:

1. Did the survey items draw from and relate to the research questions for the research?
2. Did the survey items fall within the domains and conceptual fields as evinced by the conceptual framework?
3. Did the survey items relate to the literature review and comments from the teacher interviews?
4. Could the survey items be worded in an aspect consistent with appreciative inquiry?

Using these criteria to test the item design and wording, the TPAAI was shaped over four different drafts.

Nine survey domains emerged in the TPAAI Instrument. These included:

- a. Teacher demographics relating to participant gender, ethnicity, teaching experience, institution where the participant received teacher training, whether they had had any course exposure to Aboriginal studies at the university level, their current teaching assignment, school configuration, and regional location of participant schools;
- b. Teacher instructional practice relating to responsive curriculum, instruction strategies, expectations for students;
- c. Parent Involvement relating to expectations, shared decision making, collaboration with teachers, attendance at school functions;

- d. Teacher professional practice relating to professional development, internal collaboration with colleagues, collaboration with extended Aboriginal community;
- e. Student membership relating to learning environment, attachment, school climate, study habits, academic engagement, culturally responsive curriculum, and safety;
- f. Assessment relating to the provincial AFL, consistency, reporting to parents, criteria, and leading to academic interventions;
- g. Achievement contexts relating to historical and socio-economic circumstances;
- h. Alignment relating to teacher, school, and division mission, vision, and goals for Aboriginal student learning.

On October 24, 2011, Letters of request (Appendix M) were sent to six members of the academy at the University of Saskatchewan to preview and provide feedback upon draft four of the TPAAI. Specifically, they were asked to comment upon four key areas of the survey itself.

- 1. Content – Is the level of language appropriate?
  - i. Are items difficult to understand?
  - ii. Do items reflect a personal bias?
- 2. Format – Is the spacing/font easy to read?
  - i. Is the survey too long or too short?
- 3. Instructions – Are the instructions clear?
- 4. Domains – Are the items aligned with the domains?
  - i. Are there too many domains and should they be condensed?

Upon receiving feedback from the survey preview, adjustments were made to wording, specifically to ensure clarity and to reflect cultural sensitivity where Aboriginal students were concerned. Furthermore, it was determined that the survey items should not be ordered into domain groupings as this arrangement may lead to participant bias where their respective responses were concerned.

### **Data Analysis Panel for TPAAI Anecdotal Comments**

While Noonan (2002) has noted that, "... interpretation panels are always purposively selected from participants within a study...." (p. 92), the process I employed was different in the aspect that the panel members were graduate student peers from the Department of Educational Administration. In order to check my own understandings of the qualitative data included in the anecdotal comments on the TPAAI survey instrument and the quantitative data gleaned from the survey instrument, I invited prospective panel members to participate in the peer data analysis panel process (See Appendix T) and then convened the panel to undertake a group analysis of the data with an eye to discovering new insights which I may have missed in my initial scrutiny and which may have provided important insight to Chapter Five where the data from the interviews and surveys would be linked (Creswell, 2005).

### **Process for the Data Analysis Panel**

Anecdotal comments from the TPAAI survey were colour coded and placed into a data matrix (See Appendix T). Working in pairs for 20 minutes, the panel members were assigned colour coded statements from the teacher survey and asked to outline and code the anecdotes on the survey matrix (See Appendix T). Data panel participants were then asked to trade with another panelist to review codes and debrief with the other group as outlined. The process was repeated until each panelist had had the opportunity to meet with each of the other panelists to review codes, categories, and themes identified in their respective analysis of the anecdotal comments from the TPAAI surveys. Each panelist had the opportunity to report out at the end of the session and the notes they had taken during the process were collected and further analyzed to see what codes, categories and themes had emerged as a result of the data panel process. The results of the process have been incorporated into Chapter Five.



## **Integrating Qualitative and Quantitative Findings of the Research**

In this exploratory mixed methods research study, data collection and analysis developed over two distinct stages, a qualitative teacher semi-structured interview stage followed by the development and implementation of a quantitative survey phase in which a larger sample of the teachers from the six community schools involved in the interview stage were surveyed to contextualize their respective perceptions of Aboriginal student achievement. Data from the former stage informed the creation of the survey for the latter stage. The survey questions were grounded in both the data and from the theoretical underpinnings of the literature review in Chapter II and the data derived from the semi-structured interviews discussed in Chapter Four. The intent of the survey phase was to elaborate and expound upon the perceptions of the teachers initially interviewed in stage one. It was held that data from stage two would potentially be both confirmatory and divergent, but ultimately linking the data would allow for both data sets to establish talking points where both data types could mutually inform and enlighten each other (Bryman, 2007).

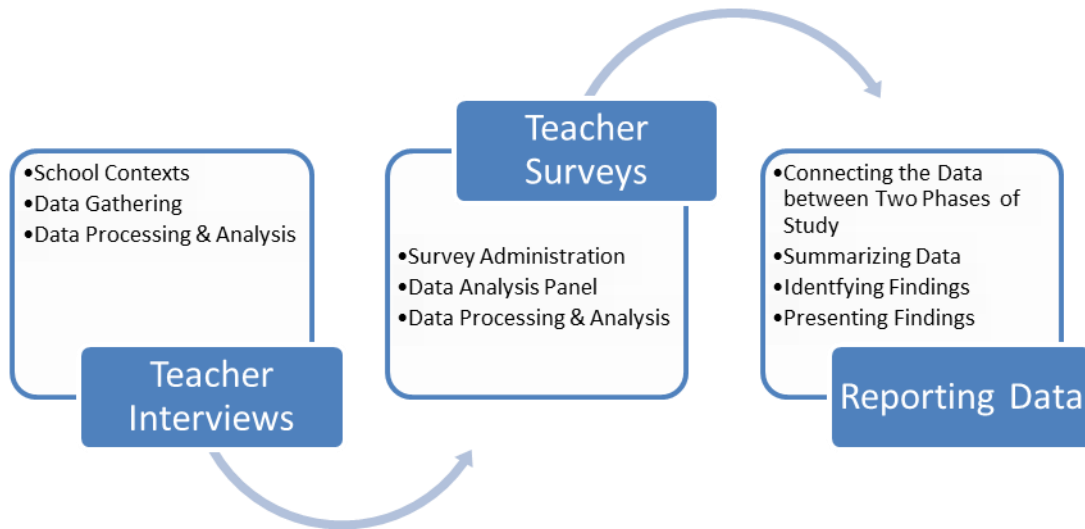
### **Presentation of Data**

This exploratory mixed methods study was conducted to conceptualize teacher perceptions of Aboriginal student achievement in six provincial community schools in Saskatchewan, Canada. Two schools, one elementary and one secondary in the North, two in Rural Saskatchewan, and two located in Urban centres were the subject of this multi-case study. Chapters IV and V report on the results of the data from the teacher interviews that led to the development of the teacher survey instrument. Teacher survey data is reported in Chapter Four. Direct quotations from the teacher interview transcripts are also presented in Chapter Four and Five. Data from the TPAA Inventory is reported in Chapter Five and data from both sources having been examined

sequentially will be linked in Chapter Five by means of an integrated data interface and differences and commonalities between the two data sets will reported.

A diagram representing the flow of data presented in Chapters Four and Five is presented below:

**Figure 3.2: Illustrating How Data Will Be Presented**



In our system of education, knowledge is earned. One learns to listen, like a human being who has the gift to hear what is said. We don't put knowledge in a person's head or hand. We give directions, not answers. We don't trap people into thinking answers are given from the outside. Answers come from the inside. ( Fineday,as cited in Western Canadian Protocol for Collaboration in Basic Education p. 7)

#### CHAPTER FOUR PRESENTATION OF INTERVIEW DATAA

This exploratory study was conducted to conceptualize teacher perceptions of Aboriginal student achievement in six provincial community schools in Saskatchewan, Canada. Two schools, one elementary and one secondary in the North, two in Rural Saskatchewan, and two located in Urban centres were the subject of this multi-case study. Chapter Four and Chapter Five report on the results of the data from the teacher interviews that led to the development of the teacher survey instrument. Teacher survey data will be reported in chapter IV. Data from both sources have been examined sequentially and differences and commonalities between the two data sets are reported.

##### **School Contexts**

Although each participating school in this study was a public community school located within the province of Saskatchewan, Canada, the schools themselves reflected the local contextualization of their respective circumstances. School one was a Catholic elementary school located within an urban centre in Saskatchewan shall be identified as (UES). School two which shall be named urban high school (UHS) is located within an urban centre in Saskatchewan. School three is a rural community high school (RHS) located within a rural setting in Saskatchewan. School four was a rural community Pre-K to 12 school located in rural Saskatchewan which shall be named rural elementary/high school (REHS). School five is a northern community high school which shall be named (NHS) and school six is a northern elementary school which shall be named (NES). All six of the schools were selected for this

research because they were Saskatchewan provincial community schools located within three distinct geographic regions of the province, northern, rural, and urban. As outlined in Chapter Three, schools had to meet several essential criteria to be chosen for inclusion in this study. They had to be provincially funded community schools located in the province of Saskatchewan, Canada and they had to be located in a rural, northern, or urban setting.

Permission from the Behavioural Ethics Board to conduct my research was granted on December 1, 2010. (See Appendix U). Upon receipt of ethics approval, letters requesting permission to conduct educational research within the selected school divisions were sent to the Director of Education or the appropriate divisional contact in December of 2010. (See Appendix A). Additional information regarding my research methodology or process was sent to the Division and to the school principal in order to advance the research process. School principals were contacted by phone and by email to establish times where I could meet with school staffs to explain my research request, and I was extremely pleased to note that the principals themselves had taken time to talk to their respective staffs prior to my arrival. In all research locations, I was treated warmly and staff appeared interested and willing to assist in my research.

### **Qualitative Data: Teacher Interviews**

Interviews took place between February and May\* of 2011. All interviews were conducted on school sites with the exception of one that was conducted off school property. Data analysis began as soon as qualitative interview data began to be collected. Open-ended qualitative questions from the teacher survey were included with the interview data.

Interviews were recorded on a Sony ICD PX820 Digital Recorder. The individual interviews were uploaded onto an Extensa 56020Z laptop computer and manually transcribed. I had decided based upon prior experience that the richness of the recorded text would best be captured by me, the interviewer rather than by a paid transcriber. Although this process was more time

consuming, in the end I felt that my familiarity with the interview text was more thorough than had I done otherwise.

### **Description of School One**

School One was a Roman Catholic elementary school with a student population of 282 students 124 (44%) of whom were self-declared Aboriginal students. Twenty-five teaching staff including a principal and vice principal were on staff as well as 23 support staff including educational assistants, a community school coordinator, an Elder, a home school liaison worker, custodians, a nutrition assistant, and a speech therapist. Daily routines and behavioural expectations for students were clearly in place and were reinforced in a positive and affirming manner. I was impressed by the ethic of care that seemed to permeate the actions of staff and it appeared that such care was detected by the students moving about the school prior to the beginning of the school day.

As I entered the school for the first time, I was struck by the number of adults, teachers, teacher aides, and other staff who were present in the corridors of the school, greeting parents and children as they moved about the school. I was impressed by the culturally responsive displays and art that adorned the walls and floor space of the school. I encountered students who smiled at me in acknowledgement and several who asked me if I needed assistance in finding my way to the staff meeting where I had been invited by the school principal to talk about my research. Prior to the meeting beginning, I had the opportunity to talk to a number of staff who were also waiting for the staff meeting to begin. They were polite and welcoming and seemed genuinely pleased that I was coming to talk to them that morning. During my presentation, staff were attentive and asked meaningful and appropriate questions about potentially participating in the research and although I was hoping for at least one interview participant from the school,

three teachers expressed interest and two eventually were interviewed for the qualitative component of my research design.

### School One Programs

The school itself first opened in 1953, was rebuilt after a fire in 1977, and became a community school in 2001. A number of community partnerships including an integrated services team consisting of members of the regional health authority: a community capacity builder; a mental health counsellor; a nurse; an occupational therapist; a speech and language pathologist; and an assistant speech and language assistant that provides health programming for students ages three to eight and their families are featured by the school. An array of after school programs for school students that offer open gym, computers, arts, and crafts, board games, and youth nights are available to the student body. In addition, web access to a variety of games and learning activities are offered by the school for its students. School One also offers Pre-Kindergarten and band.

### Extended Learning Opportunities

Beginning in 2013, the school in conjunction with the Saskatoon Boys and Girls Club began offering both a before and after school program with a range of activities to engage students in joint community/school extended learning opportunities.

Cree language instruction is available to students and a home and school liaison worker is on site as well. An Elder is also located on site to offer culturally responsive support to students and staff. A meal program for students is available on an as needs basis and a nutritionist.

### **Description of School Two**

The physical structure of site two was an impressive one. The school's imposing architectural facades belied the warmth and caring extended to its students within. The school

has a long and storied history and at the time of writing was undergoing a major renovation. A community high school with a student population of 584 (35% of whom were self-declared Aboriginals) and offers grades 9-12 and is located within an urban setting.

#### School Schedules to Enhance Student Academic Performance, Attendance, and Inspire a Sense of Student Belonging

An alternate timetable where students take only two courses per quarter semester, for a period of ten weeks were offered to students. Such a timetable it was felt afforded students greater opportunities to connect with staff and develop a sense of belonging to the school. Regular attendance was stressed by the school given that days missed were critical in a ten week course cycle. Examinations and reporting at the end of each cycle were outlined to students. A transitions programme for grade 9 students entering high school also provided opportunities for students to connect with staff. This program allowed students to be taught a number of academics for academic upgrading, for career learning, and for community connections, and provided students with a wide range of learning opportunities in small intimate settings.

#### Expectations for Student Academic Performance and Behaviour

School Two had very clear expectations for student academic performance and for student behaviour outlined in its student handbook. Academic performance was outlined in terms of student ownership for achievement. Quite simply, it was the school's belief that grades were not given but rather earned and that learning outcomes were the result of regular attendance, quarterly academic effort and final exam marks.

#### Supports for Student Needs

Attention to the basic needs of students was apparent in the breadth and scope of programs and supports at Site Two. The school took a very concerted holistic approach to student needs. Student supports and programs were designed to attend to the physical, social, emotional, and

intellectual needs of students at the school. Community sponsored breakfast and nutrition programs were available in the morning and afternoon respectively. These programs were available to all students. Furthermore, active community involvement was apparent with such supports as child daycare, offered to students who were parents of infants and toddlers. A prenatal program was also available to expectant mothers who may have been at-risk of not having a healthy pregnancy outcome. A Student and Kids Centre where students could form supportive relationships, attain counselling and life support skills, and obtain advice and support for healthy life styles and gain referral to outside agencies was also available to students. The teacher interviewed for this research noted:

As a teacher, it is ultimately your responsibility to get to know each of your students as an individual as a person whether they are First Nations or not. Whatever works best for them needs to be employed. Do they need emotional support? Are they hungry? Did they listen to Mom and Dad fighting the night before? Without becoming an armchair social worker, you need to be aware of those things. You need to be supportive and help them get to the point where they can learn. I think that is our job as a teacher.

### Community Involvement

School Two demonstrated evidence of extensive community involvement to support student learning. The school maintained no fewer than 26 community partnerships that helped to deliver student nutrition programs available at the school, to involvement with collegiate academies to enhance student learning, to engaging in multi-disciplinary school/community teams to provide support for a range of student needs. A community policing initiative was also under way in the school. Other community/school programs included an onsite mental health and addictions counsellor, a Gay Straight Alliance group, drop in counselling support for young offenders or



youth at-risk, a Youth Worker providing services to Young Offenders, a public health nurse, a social worker, and a stay in school program focused on keeping Aboriginal students in school to complete their graduation requirements.

### Student Supports: Academic and Transitions

A transitions programme for grade 9 students entering high school also provided opportunities for students to connect with staff. This program allowed students to be enrolled in a number of academies for academic upgrading, for career learning, and for community connections as well as it provided students with a wide range of learning opportunities in small intimate settings. Staff at the school seemed attuned to the diverse needs of the student population they served and their efforts to hold students in absolute regard for who they were (Noddings, 1992) provided a learning environment that was responsive to students. This care and regard for students was apparent in the commentary of the teacher interviewed for this research.

I have never had a student or a parent say, “I never should have come here.” Usually they say I am so glad I came here or I am so glad my child is there. We do have students who go on after Grade 9, after the nurturing. We do cluck over them, but we also teach them to take responsibility for their learning. Some go on to other collegiates, but they needed that (initial) extra support. Those who stay do so because they realize how open and accepting the school is (UHS Teacher).

### Culturally Responsive Supports

School Two offered a stay in school program that focused primarily on the needs of Aboriginal students to stay in school and complete their graduation requirements. A Traditional Knowledge Keeper also worked at the school presenting all students with opportunities to learn

about and experience Aboriginal culture and ceremony. The urban high school teacher who was interviewed for this research related to me how administrative support made the funding for this position possible despite budgetary limitations:

“My administrators are very supportive when I come up with crazy ideas. I work with a traditional knowledge keeper and we (the school) was having difficulty funding the position. I spoke with my principal and said this person has a relationship with our kids. How can we keep him? I was told to make the arrangements and the school would pay for it. If he has an existing relationship with our kids we’ll figure it out. No questions asked. On the strength of my conviction about the knowledge keeper, we’ll make it work. That’s pretty amazing to have that kind of support” (UHS Teacher).

### **Description of School Three**

School Three was a rural community high school with a school population of 299 (63% of whom were self-declared Aboriginal students) featuring grades 8 to 12. On the day of my visit to speak to staff at their weekly staff meeting, it was cold with blowing snow. However, the warmth and courtesy with which I was met when I stepped inside the school provided a rich contrast to the inclement weather outside. At the staff meeting where I outlined my research, the staff appeared interested and committed to helping me advance the research project. No fewer than four staff volunteered to participate in the interview process. This was the highest total of any school participating in the research process.

The school featured an extensive array of learning supports to augment student learning and learning opportunities. It was apparent that there was broad community involvement in the school with respect to its daycare program, student services provision in the form of collaborative teams consisting of school-based and division personnel, parents, and outside agencies and agents for students with diverse learning needs. A school counsellor who worked

with families and students experiencing behavioural, emotional, or familial distress was available in the school and offered counselling on an individual or group basis, depending on emergent circumstances. Activities such as a cooking club, open gym nights, and movie nights were available to students and the wider community on a weekly basis. A Community School Coordinator who worked with parents, community agencies, and organizations to offer supports and programs for all students attending the school was housed in the school as well. An offsite satellite program for students at-risk was offered in the local healing centre. This program too functioned with the collaboration of school, division, ministry, and community support.

### **Description of School Four**

School four was a rural community school with a student population of 477 students, 65 % of whom were Aboriginal in grades Pre-K to 12. I was given a tour of the school which featured a broad range of student programs and supports both from the school and the wider community including the Aboriginal community. Although some of the supports were targeted for the Aboriginal student population, most were in place to enhance learning opportunities for all students who attended the school and for the wider community which it served.

### **Student Supports: Academic and Transitions**

School counsellors who worked as a member of a multidisciplinary team to support and enhance student engagement in learning and where necessary adapt or individualize instruction were available on staff of the school. Career counselling services were also available to students to assist them with their post-secondary educational and career planning in order to help students make smooth transitions to future schooling or to the world of work.

### School Supports: Basic Needs

The school provided a daily healthy snack to all students free of charge every day that the school was in session. In general, the snacks consisted of a variety of wholesome food items such as fresh fruit, cereal, dairy, and vegetables. In addition, an emergency lunch service was provided to students who required such on an individual basis. These lunches were served from the Community Room located in the school and were intended to assist students to get through the school day should they arrive at school without a lunch. Regular use of this service by students would precipitate a phone call home to apprise and assist parents or guardians of the circumstance.

### Childcare, Early Childhood Education Programs

A daycare which served both students and the wider community operated Monday to Friday, 8:00 am to 5:00 pm. This student and community access reflected a change from previous years where the service had only been extended to young parents under the age of 22. The childcare service operated on the regular school calendar. In addition to childcare, a Pre-K program for children between the ages of three and five was available at the school.

### School Calendar

Site Four operated on a standard five block timetable which also included two recess periods for students, a fifty minute lunch hour, as well as a fifteen minute YAC block in the afternoon each day. Period two was an extended time slot broken up by morning recess. Such a structure facilitated extended learning time for elementary students in language arts and math afforded extended lab opportunities for high school students. The school day began at 8:55 am and dismissed at 3:25 pm.

### After School Programs

A rich offering of after school programs for students was available at the school operating under the direction of a student leadership group. Some of the programs included but were not limited to basketball, quilting, cooking, badminton, marathon running, art, golf, guitar, skating, floor hockey, video magic, drama, and jewelry making. The programs were free to students and owing to the high number of students who bussed to school each day, transportation home after the activities was also provided. In addition, after school extracurricular activities for competitive inter-school sports such as senior boys and girls volleyball and basketball, and were also offered to students of a more competitive bent.

### Culturally Responsive Supports

Culturally responsive programs included an Elders program, and a First Nations Liaison Worker. The school also featured a Community School Coordinator. An extensive array of after school athletics was available to students as well as an environmental club, and student leadership club.

### **Description of School Five**

School Five was a community high school in Northern Saskatchewan with a population of 454 students (approximately 70% of whom were self-declared Aboriginals). As with other participating schools in this research the students and staff were found to be most hospitable. Students were polite and inquired whether they could help me when I entered the building in search of the office to introduce myself to the school's administration and explain my research to them. School walls and ceilings were adorned with samples of student work and art work, much of which reflected the unique culture of the area, including Aboriginal culture. The office staff was friendly and ready to assist me in any way possible. The principal gave up his time to

inquire about my research and share administrative stories about the nature of schools and schooling in this locale. Travel constraints did not afford me the opportunity to speak directly with the staff at the school but the principal agreed to pass on my research information to staff and take the names of interested staff to participate in the interview phase of my research. One staff member agreed to be interviewed as part of the qualitative phase of this research. The interview took place at the school in May of 2011.

During this research, the school was undergoing a major upgrade in terms of facilities that would afford students a new course programs and learning opportunities. At the time of this writing, the school offered a myriad of programs to support and enrich student learning. These programs included a dual track for regular academic programs as well as a complete program French Immersion. In total, there were 18 teaching staff, an on staff Elder, nine tutors, 11 support staff including a social worker, four student support workers, a recreation coordinator, three nutrition workers, a community coordinator, a secretary, and a library clerk. The school also had an active SCC that included representation from the Aboriginal community. Recognition of student success was a regular feature of school newsletters and staff interactions with students seemed to be positive and affirming.

#### After School Programs

Open gym night activities were offered free of charge to students and members of the general public from 7:00 to 9:00 pm Monday to Thursday and featured sports such as volleyball, floor hockey, three on three basketball, badminton, and weight lifting. Karate was also offered on Sunday afternoons. In addition, cooking classes, cheerleading club, yearbook club, and a variety of extra-curricular sports such as volleyball, basketball, soccer, and cross country running were available as well.

## Responsive Student Supports

Linkage with an online Northern Saskatchewan learning network was available at the school and students could access the program offerings as part of their respective academic program. Cree language courses were available to students as well as Native Studies. A transitions program for grade 7 students who were potentially at-risk academically eased the transition from elementary school to high school. A career and work explorations program prepared students to make successful transitions from high school to post-secondary training and the world of work. Part of this program included job placement and shadowing that gave students real time hands-on experience in careers of interest to them. The school also held a homeroom period that was intended more to facilitate and enhance students' sense of belonging as opposed to handling only administrative functions.

We have done a big school-wide survey that asked students how do you think we are doing (about two years ago) and we have changed the way we do some things because of the student responses. We instituted a grade 10, 11, and 12 homeroom that did not exist before because we found in the survey that students said unless you were a cheerleader or on a team that you did not feel a part of the school. One way we thought we could do this was to put in place the homeroom structure. This year I have a grade 10 homeroom and I will have them (the same students) next year in grade 11 and then in grade 12. They will always have me. There is an identification with a group. This seemed to be one of the things that kids did not have. They did not identify with school because they did not have a jacket that said (name of school) cheerleaders on it. They were not a part of that, so what are you a part of? Now I have some kids who are a part of my homeroom group. The younger grades, the 7's, 8's, and 9's spend more time with one teacher. The grade

9's start and end the day with the same teacher, so there is a good morning and a good-bye aspect to the day. (NHS Teacher)

Affordable and nutritious lunches and a breakfast cart offered students low cost meals and snacks by means of tickets purchased at the school. The school server maintained this service which was available to students in the morning and at lunch time.

### **Description of School Six**

School six was a community school with a population of 230 students (85% of whom were self-declared Aboriginal students) located in northern Saskatchewan. It featured 17 teaching staff and eleven paraprofessional staff including a community school coordinator, a recreation coordinator, a secretary, a social worker, an Elder, a teacher assistant for the Pre-K class, two tutors and a custodian. One was struck by the rich displays of student work and art work which covered the walls of the school. An extensive photo gallery of First Nations Elders adorned the feature wall in the school's commons area. Student displays and culturally responsive displays were featured prominently on hallway walls and in the classrooms. The vibrant energy that was evident when I walked through the door made the school come alive. Students were friendly and helpful directing me to the office and asking if they could be of further assistance. The school had a teaching staff of 18 including the principal and vice-principal backed by 11 support staff including a community school coordinator, a recreation coordinator, a secretary, a social worker, an Elder, a teacher assistant for the Pre-k class two tutors, and a custodian.

The school's administration was most helpful to me. On the first day I arrived at the school, the principal was away at a meeting, but the vice-principal took the time to listen the nature of my request regarding teacher interviews and staff participation in the survey that was to later follow. I was not able to speak to the staff as they were in class teaching, but the vice-principal promised that she would inform staff and poll them for interest in participating in the interview



phase of my research. Upon my second visit to the school in early May, 2011, a teacher volunteer for the interview phase had been arranged and the interview subsequently took place at the school. I was especially pleased because the teacher was prepared to give up her lunch hour for the interview and given her busy schedule this accommodation for me was greatly appreciated.

### Culturally Responsive Programs

In addition to programs such as Cree language instruction, the school also had an Elder and nutritionist, a school community coordinator, and a recreational coordinator on site. The local Aboriginal community has been instrumental in developing the Gift of Language and Culture which features a host of resources dedicated to developing Native language skills and enhance awareness and understanding of Indigenous knowledge. The website for this program is rich with resources and activities available to anyone interested in accessing them. The teacher interviewed for this phase of the research noted that several non- Aboriginal members of staff had begun to learn the Cree language so that they could enhance their instruction to all their students.

### After School Programs

There was an ambitious range of extra-curricular activities was offered by the school. Soccer, guitar, choir, student leadership, outdoor club, computer club, cross country running, and homework club to name a few were featured by the school. To maximize student participation, the school funded a taxi program so that students who lived some distance from the school could still participate in after school activities. In addition, evening programs including kids and teen nights, adult floor hockey, and volleyball, community cooking classes, community/family events, Taekwondoe/Tai Chi, and karate, all of which were sponsored by staff and community

volunteers were available at the school. In addition, a snack and milk program as well as an emergency lunch program were offered by the school. A school Elders' supper jointly sponsored by the local arts council was held three times a year.

### Environment for Learning

One was struck by the rich displays of student work and art work that covered the walls of the school. An extensive photo gallery of First Nations Elders adorned the feature walls of the school's common's area. Student displays and culturally responsive displays were featured prominently on hallway walls and in classrooms. The vibrant energy that was evident when I walked through the door made the school come alive. Students were helpful and friendly directing me to the office and asking me if they could be of further service.

While the programs and services offered by the six schools in the study had many similarities, it must be noted that the manner in which these student supports were delivered was highly contextualized. In this sense, no two community schools in this study could be considered the same. The local school community flavour of each site made it unique in its own right and underscored the view that there exist no magic formulas for enhancing Aboriginal educational outcomes can be put in place across schools, divisions, and certainly the province.

### **Emerging Themes in the Teacher Interview Data**

As data analysis unfolded with respect to the teacher interview data, several themes with respect to the initial research questions became evident. An examination of each of these themes and their relevance to the research with respect to the research questions and literature review provided the foundation for the teacher survey questions which arose from the interviews themselves. An overview of these emergent themes proves useful in order to demonstrate how the survey questions came to light.

## **Parent Involvement and Shared Decision-Making**

Recent inquiry concerning Aboriginal students in a variety of educational jurisdictions has further reinforced the importance of positive connections between parents or guardians and school staff as a critical factor in improving educational outcomes for Aboriginal students (Bell, 2004; Berger et al., 2006; Demmert, 2001; Fulford, 2007; Government of Saskatchewan, 2008a; Silver et al., 2002). Many interview participants discussed Aboriginal parent involvement in terms of supporting school and classroom initiatives, but most felt they were making a strong effort to establish meaningful contact with the parents and guardians of Aboriginal students.

Usually, the involvement was on an individual basis and the teachers felt it depended on the parent and their past educational experiences.

We are well aware of these past experiences. Most parents who come to the school are very interested in their children's progress. They have had positive educational experiences themselves. Unfortunately, often the parents we need to see are ones that are difficult to reach. They don't tend to come to the school for any reason. They still want their kids to do well, but they are just not as involved. As for the school trying to get more parents involved, in the past we have held dinners, or open houses where we have served food, and held get to know the teachers meetings. These efforts have been somewhat successful, where kids have wanted to get their parents in. (RHS Teacher #4)

Such a perception tends to confirm the research literature on Aboriginal parental involvement or lack thereof (Agbo, 2007; Berger et al. 2006; Kanu, 2005; Martel, 2008; Silver et al. 2002).

Other teachers cited the role of the School Community Council as an avenue to providing a forum for parent/school shared decision making although most interview participants were not active themselves in this process. Interview responses were also divided as to the efficacy of the SCC governance structure in promoting parental involvement. Similar sentiments were shared

across school configurations and among teachers interviewed regardless of their location in rural, urban, or Northern settings. Teachers appeared to be aware of the purpose of the SCC's, an awareness that extended to the understanding that the mandated councils reflected the cultural representation of the Aboriginal student population. There was not complete agreement about whether the SCC's were being successful in encouraging Aboriginal parents to engage in school affairs, however:

The School Community Council will be the closest that you will get (to shared decision-making). But, I can guarantee that there are not too many FN parents on the SCC. Why? A lot of FN parents do not like to be in the schools. This kicks back to the residential school system. Some do not even like being in the building. There can be a lot of resentment of FN parents to the school system because it is like the criminal system, it is full of FN people. (RHS Teacher #1)

We have an SCC, the same as all other schools do. Although I do not sit on the council, I think we face the same issues as other schools of getting First Nations parents involved in this kind of committee work. We just had an open house for our students coming next fall, and yes, we do have trouble getting First Nations parents out to the school. There is a possibility that some of that is cultural. It's possible it's a bad time of the year. We do post all kinds of information. For my students in particular, I send newsletters and notes home, just like the elementary schools do because we work really hard at communicating with parents. We invite them into the building wherever and whenever we can. It works. We have a lot of parental involvement in my program. (UHS Teacher)

We have a school community council (SCC). I have never gone to a meeting so I could not tell you, but we do get a lot of feedback from that group as well as some guidance

from them. We have events in our school such as to honour the year of the Métis. I was on a committee to plan what we would do. Family wide, you could come in with your kids. Sometimes I think, we get more feedback when the parents come in for events like this. We planned this but we did not have any parental involvement, and then we asked for them to come in and that is when we got their input. I find that when we have parent teacher conferences that is when you get a lot of feedback from parents. I always ask parents what do you think that I could do better? As a teacher what would you like to see me do for your child, and I get feedback that way. But I am not involved with the SCC so really can't comment on that. Sorry. Teachers that do sit on the committee do report back to staff. At our last staff meeting, they reported back to us about issues the staff wished to raise with the SCC. We get an update. The SCC does tie in with LIP (Learning Improvement Plan). (UES Teacher)

We have the school SCC and because the school SCC is supposed to reflect the make-up of the community, a number of its members are Aboriginal. Our staff member on the SCC is an Aboriginal parent. Because we are small, we can fulfill all kinds of roles. It is open to staff to attend any meeting (of the SCC) especially if the staff member is going to talk about a school trip they might be planning. The teacher is encouraged to go to the meeting in case there are questions. (NHS Teacher)

Outside the formal structures of the School Community Councils, the degree of parental involvement was seen largely in terms of support for individual child learning or supporting school events such as sports, performing arts, and the like. Having said that, teachers interviewed appeared to believe that all manner of parental involvement in the life of the school did make a positive difference to their children's learning and pride in their belonging to the

school community (Bell, 2004; Castagno & Brayboy, 2008; Fulford, 2007; Phillips, 2006; Thompson, 2008).

Some parents are involved and yes, definitely I would say their involvement makes a difference in their child's learning. I can tell who is working at home and talking about behaviour and checking with me and signing those day planners every day at home. I send messages home every day from my class. I know who is taking part and who has checked out. It is a pretty good indication when the day planner goes missing every third day and "I don't know where it is and I don't know when my mom will find it". The support isn't there. You can tell. (RES Teacher)

Aboriginal parents are involved in the life of this school usually only when there are special occasions. If their son is playing football, they will come and watch the game. If their child is involved in an activity, then they will come to the school and participate that way. As for being directly involved in the school during the daytime, during courses, no. Outside of parent teacher interviews, no. They do not volunteer during school time. No one does really. (RHS Teacher #4)

While some teacher interview commentary pertains to what Lawson (2003) deemed as "school centric" activities, for the most part, teachers seemed to be positive about the formal work of the SCC in facilitating active school/parent communication and decision-making. The degree to which these parents structures were enhancing meaningful dialogue to the extent that "saving a seat is not enough" (Martel, 2008) remains a question of how the structures and processes of the councils themselves evolve and in no small way how teachers perceive the SCC's may be contributing to enhanced Aboriginal student achievement. However, while shared decision making between Aboriginal families and communities was seen as important and

something to be valued to the efforts of teachers interviewed, in general, teacher perceptions of Aboriginal parental involvement tended to focus on their course or grade specific needs and not on a school-wide basis.

### **Approaching Ethical Space**

The following sentiments were echoed by an interview participant who felt that schools remained essentially Euro-centric in nature and this denied opportunities for cross-cultural learning akin to those envisioned by Ermine (2000) and his conceptualization of ethical space. What seems important here is the perception held by the interview participant that if given the opportunity, such relationship building could take hold in order to reduce or break the hold of Euro-centric only pedagogy and benefit “otherness”.

For anyone who has done any reading or research, they have an understanding that First Nations learning styles are an oral tradition. As far as culture, our schools are a Euro-centric focused educational system. I do not think that we are open or tolerant of different learning styles and traditions. And not just First Nations culture, but all cultures for that matter. I think this is a shame because we are not honouring some of the other styles and ways of learning such as the oral tradition and other learning styles. My own reading and research, presenting, and teaching by incorporating other cultures, such as the Circle (have proven to be effective for me). It seems like a simple thing, but a lot of us as children have not been exposed to other cultures. It is something I employ in my teaching. To make an adaptation to teach to a different learning style is possible. But many of us as teachers are unaware. No one has explained it to them and so they have not been exposed to them. If they were aware, it could make a big difference for their students. (UHS Teacher)

## **Parental Expectations**

The work of Demmert (2001), Fan and Chen (2001), Henderson and Mapp (2002) Jeynes (2003) Lee and Bowan (2006) Leithwood (2009), Marzano (2003), and Nakagawa (2000) addressed the importance of parents holding high expectations for student learning as being integral to improving student achievement. With respect to Aboriginal parental expectations for their children's learning, some of the interview participants noted what may be described as a cultural divide. All participants believed that Aboriginal parents had expectations for their children's learning, but also felt that Aboriginal parental expectations in some respects differed from mainstream parents. This understanding remains consistent with Nakagawa (2000) and Lee and Bowan's (2006) contention that non-mainstream parenting may be seen from a deficit orientation and that just as student achievement needs to be "fixed" so too do non-mainstream approaches to supporting their children's education.

Generally, if you look at the area (of parental involvement) non-Aboriginal parents seem to have higher expectations for the academic learning of their children.... I would say the expectations (for Aboriginal parents) are different, less academic. It's not that they are not valued but their expectations are different. Lots of parents want to know is my kid behaving. Is my kid nice? Is my kid smart? This question kind of leads to the academic side. From society's norm, they are different, but they just are not based upon academics. Parents just want to know, is my kid good? Parents aren't asking can they read or can they write. (NES Teacher)

Another teacher offered a similar observation in response to whether Aboriginal parents held high expectations for their children's learning. Such commentary may be consistent with Prins and Toso's (2008) observation that non-mainstream parents hold different views about how they



support their children's education that do not necessarily align with those of schools. The degree to which more alignment in this regard would be beneficial or not remains unclear, but certainly the matter of parental expectations for Aboriginal student learning appears to be a matter of cultural difference with mainstream thinking in this regard. This circumstance upholds Ogbu's (1982) cultural discontinuity theory.

Some Aboriginal parents are concerned. Another teacher explained:

I would say that FN parents have higher expectations for their children's behaviour than their learning. They are less concerned with academic marks. Certainly they want their kids to be successful, but they want to know if they are respectful and kind. Do they attend class? They ask these questions before they ask why a "62" instead of an "84"?

They are more process than product. (RHS Teacher #1)

Further, another teacher felt that while Aboriginal parents held high expectations for the learning of their children, they also believed that in an important aspect, Aboriginal students were expected to "find their own path."

I do not want to pigeon hole this, but if you are familiar with First Nations history and culture, it is really on the onus of the individual to do well. So, a little bit of that plays a part as to whether there is parent involvement or not. The individual will find their path. I have heard that from some parents when I have made phone calls home. Parents will say, "You have to find your own path." And yes, they are right, but is there a way we can encourage that together? There is not so much the idea that you have to succeed, that we are going to push you toward that and you have to do it. It is not perceived like that.

(RHS Teacher #4)

Another teacher saw the matter of parental expectations being rooted in fateful past educational experience that had spawned a feeling of learned helplessness that was being extended to their children's or grandchildren's present education. Berger et al.'s (2006) contention that, gaining parental support for attendance and punctuality remains difficult as it is seen as imposed upon Indigenous people as part of assimilating them may affect perceptions of parental support.

Again, I think the value of education is not stressed or believed in as much in a non-Aboriginal family. I think for the Aboriginal families there is a lot of learned helplessness. Why bother if things are not going to change anyway. There is a feeling of a lack of self-worth. Worthlessness. Prejudice. It stems from how they are being treated, not necessarily from educators because in a community school, we try so hard to be inclusive, to make a welcoming, loving place. But, I think the real world is different, and I think a lot of these families see that and feel that every day. We are still an institution and I think that feeling is still directed at the school or any school. (UES Teacher)

Still a fourth teacher saw this matter differently than some of the other teachers interviewed in that she perceived Aboriginal parents as holding the same expectations for their children's learning as non-Aboriginal parents although it was recognized that "educational barriers against them" made such support more difficult. Certainly, Lee and Bowen (2006), Fan and Chen (2001), Nakagawa (2000), Prins and Toso (2008) have stated that unequal access to schools and school resources for non-mainstream parents may appear to limit their support for their children's schooling.

Absolutely they do (have expectations for their children's learning). They hold the same expectation as any aware parent would have. They want their children to do well. They want to support them as much as they can. It is difficult for them because of the barriers against them. I certainly don't feel their standards are lower. (UHS Teacher)

### **Teacher Expectations**

Marzano (2003) Reeves (2000) and Lewis and Sugai (1999) hold that high expectations for student learning help to engender what Shouse (1996) termed academic press. Teachers interviewed perceived for the most part that holding realistic expectations for their students was important for attaining student achievement. Their degree of agreement was higher in terms of their responses than many other items in the teacher interview questions. This is perhaps due to the fact that in the realm of setting expectations for Aboriginal students, teachers felt they had a stronger degree of control over what those expectations should look like.

When I have a parent interview, I ask parents to bring their children with them so that I can explain how my classroom works. Then I say to the student, okay, explain how this classroom works. The kids will tell them how it works in here. Then I don't have to. That's the student's job. I phone all my grade 9 parents at the beginning of the year because it will be their first year in the school and have encountered me (I am a different cat) for the first time. I phone them and let them know how I operate – doing my job, doing your (the student's) job and what happens if you do not do your job. (RHS #3).

Such a disposition of teachers, however, may tend to gloss over the fact that supports to do the student's job may be not be in place and therefore, the student's job does not get done.

### **Collaborative Work of Teachers**

None of the teachers interviewed however believed that Aboriginal students could not learn. Learning and achievement success could be attained by all their students to the degree that such

learning could be possible. With respect to adapting curricula or instruction, collaborative effort among the parents, school, and teacher were seen to be important ways to facilitate student learning.

Collaboratively ... when kids have an identified need, when we see that they are struggling, then we refer them to our student services and they will actively seek the student's background, what the student's needs are, if testing is required and attaining parental consent (to do the testing). They try to involve the parents more, but they also have a lot on their plate (student services). When the results of the assessments come back then student services tells us what adaptations may be needed to make the student more successful. Sometimes the recommendations are common sense matters like the student cannot hear well. Can you place them near the front of the room or use the microphone system? (RHS Teacher #4)

Offering students extended learning time (Leithwood, 2009) was identified as a means to helping students succeed academically. It was noted that teachers volunteered extra time in the morning, at lunch and after school to provide additional assistance to students.

We have teachers who volunteer their time in the morning, at noon, and after school to work with kids. As for official programs I would say that ... A few years ago we had a movement toward inclusive education. Now I am finding that without the modified program, students with greater needs are struggling even harder in classes because they are not comfortable. If you are in a class where everyone is in the same group, then you are more comfortable asking for help. I don't like the word "streaming" but in some cases, students required modification to get them through. (RHS #3)

While this observation does not do so directly, it does speak to the circumstance that Aboriginal students find themselves disproportionately placed in modified or adapted courses.

### **Community Involvement**

Little (2009) noted the importance the role “extended learning opportunities” could play in reinforcing formal learning in the school. The involvement of the wider community, including the wider Aboriginal community was a matter of some difference for the teachers interviewed. Often, the notion of community involvement was limited to the formal community structures linked to the provision of programs at the respective schools.

As well, we have after school programs, but the agency does not belong to our school division, but it does take place within our school. (Name of program) They provide transportation home for the children so that if they come to school on a bus as many of our children do, they would have a ride home (after the program was finished). If the parent did could not provide a ride home, this is another way students can participate in after school programs and activities (RES Teacher).

However, there appeared to be unanimity among interviewees that undertakings such as Elders’ programs, daycare, and parenting classes were making a positive impact among all students attending the schools and not limited to only Aboriginal students. Furthermore, the involvement of Elders and other members of the Aboriginal community served to create a school ethos that “[was] not about teachers and administrators inviting people to their place, but about creating a place that is owned as much by students, parents, and other community members as it is by staff and administrators” (Pushor & Ruitenberg, 2005, p.1)

The Elders in the school are especially important because they do not just come in and tell stories to the students. If you have students who are not behaving, they come to the Elders’ room because it is part of First Nations culture to respect their Elders and so the

Elders will talk to them (the students) and say, “Why are you not respecting your teachers, or what’s going on?” The student sometimes feels more comfortable talking to an Elder. The Elder is not allowed to discipline them, so why would you not want to go in there and talk to them. Don’t get me wrong, they can make recommendations, but that is not why they are here at all. They are here primarily to make cultural connections and talk to those kids. (RES Teacher).

Certainly schools that reflect attributes important in Aboriginal students’ lives are culturally affirming and this affirming climate promotes a positive learning environment for FNMI students (Battiste, 2005; Bell, 2004; Castagno & Brayboy, 2008; CLC, 2007; 2009; Fulford, 2007; Kanu, 2005; Richards et al., 2008; Silver et al., 2002).

Similar school/community building was seen to be positive for both the school and the wider Aboriginal community:

When we have had Aboriginal people come to the school from the community, I think that has been a really good thing. We have a parenting class, but I don’t know if the person who runs it is an Elder or not. She teaches the students about respect and things like that. The program has been beneficial to the students to learn from their Elders and other people from the community. We have a daycare for teenage moms at the school, but other members of the community can use it as well. First Nations parents are involved with this and they attend meetings about the daycare. (RHS Teacher#2)

If the early childhood care and education programs honour Aboriginal childcare and pedagogy (Preston et al. 2012) they can only benefit school/community relationships as well.

### **Aboriginal Student Learning Preferences and Teacher Instructional Practice**

The need to actively engage students in their learning was the source of thoughtful reflection for interview participants. Experiential learning and learning outdoors were seen to be ways in

which to foster Aboriginal student engagement in learning. I personally witnessed the end product (diagrams and three dimensional representations displayed in the hallway of the school) of a biology learning activity undertaken by a class of students taught by the teacher being interviewed. Certainly the teacher believed that simple text book learning was out-dated and that a more multifaceted approach was called for to engage Aboriginal, indeed all students in their learning.

Old fashioned teaching strategies have to go. Read and answer questions. Open up your book to page 424. Read about worms. We caught worms that we fished with. We caught fish. We ate fish. When we caught the fish and killed them, we had a great discussion about humane treatment of animals. We knocked those perch over the head ten times some of them. We learned everything about fish. We studied where to catch them. We went out for three days and caught them. We cooked them and we dissected them. We pulled them apart and studied them. While they know perch very well, we extrapolated that and applied it to all that they learned. They did not understand what a spleen was or a liver was, but now that they understand what it is in a fish; they can apply it to different things. I loved the question, “What would that do in us?” Probably the same thing. I can’t cut open a human being for you, but I can cut open a fish. We just don’t have a swim bladder. They never would have thought about that before. It’s pretty cool. (RHS Teacher #1)

These comments echo those of the Urban High School teacher who earlier commented about the effectiveness of experiential learning for Aboriginal students. Certainly her perceptions are being echoed in the plethora of literature emerging about inquiry learning and 21<sup>st</sup> century competencies (Bellanca & Brandt, 2010; Marzano & Heflebower, 2012). In addition, this

commentary also underscores the criticality of honouring Aboriginal and mainstream pedagogy as explored in the Government of Saskatchewan (2008b).

Where Learning Improvement Plans were concerned, this interview participant noted that opportunities for collaborative planning and practice flowed from the LIP planning and implementation process.

Yes, it is called LIP. We have a goal to improve the teaching of FN/Métis culture. This plan is incorporated into my lessons. The goal not only is to teach cultural teachings but to raise Aboriginal and Métis achievement as well. We brainstorm to discuss how we can do this as well as to how we can bring more FN/Métis parents into the school. We want the ones who are here to feel more included. This is something we brainstorm as a whole staff. (UES Teacher)

Some teacher's interviewed saw instructional practice/strategies in terms of agreements by staff to undertake particular tasks with respect to enhancing Aboriginal student achievement. In one case, the teacher divulged that the staff had committed to Teaching Treaties in the school and in order to make instruction more culturally relevant to Aboriginal students but also to expose non-Aboriginal students to Cree language as well, individual staff had endeavoured to take Cree language courses. Such an initiative was over and above the fact that the school had also hired a Cree language instructor for the fall. Such commitment while exemplary has been rare in the researcher's practical or theoretical pursuits where Aboriginal student achievement was concerned.

We have the mandate whether it is coming from the province or the division, but we hold ourselves accountable to teach the Treaties. We try to use Aboriginal content wherever we can. The non-Cree speaking teachers have, a lot of us, gone on to take Cree language



classes so that we at least have an understanding of it. It is an expectation that we do Treaties in the classroom (NES Teacher).

Still another teacher interviewed saw the instructional component in terms of differentiating instruction so that the diverse learning needs of her students could be addressed in her classroom. By so doing, the self-esteem of hands on learners in particular would be raised. Such sentiments align with the findings of Castagno and Brayboy (2008), Demmert (2001), Hilberg and Tharpe (2002), Kanu (2007), Klienfeld (1995), Leithwood (2009), and Silver et al., (2002) and who have explored teaching practices effective for Aboriginal students' learning and determined that cooperative learning, experiential learning, increasing wait time between questions and student answers, and allowing students time opportunities for self-exploration and inquiry to be culturally responsive. All teachers interviewed were asked about learning activities that elicited positive responses from Aboriginal students who they taught. Interview participants spoke of holistic learning styles, experiential learning, responsive curriculum, and learning environments as being effective for stimulating Aboriginal student interest and the interests of non-Aboriginal students as well.

In my experience, my overall generalization (I'm not sure if that is appropriate) my FN students tend to be very creative, very artistic, very visual. As far as art goes, being able to observe, they can sit back and watch things and learn from watching through body language and expression. They are more attuned to their surroundings. I find they flourish when they are outside. They do incredibly well when they are out of the building. Again, this ties back to a cultural connection with your feet on the ground, the real ground. They are alive when they are outside, so as much as possible, we try to get them outside the building. (UHS Teacher)

Another teacher saw learning styles in terms of students being more enthused about learning if it did not entail writing tasks. The opportunity to demonstrate or tell verbally were tasks Aboriginal students tended to favour. Also the ability to overcome shyness and therefore reluctance to participate were seen as important to engaging Aboriginal students in academic activities.

While I do not like to lump students together, I see many strengths (among Aboriginal students) where storytelling and hands on learning is concerned. If they do not have to write something down, I stand a lot better chance of them performing the task than if I say you must write it down or if they have to colour it. If they can tell me or show me in some other way, then good. Especially the storytelling. Some of the students are shy about looking at you. They are not good at making eye contact. It's a cultural thing. Sometimes I say don't look at me. Look at the wall above my head or beyond the rest of the class. (RES Teacher)

Yet another interview participant observed that her students seem to learn in much the same fashion regardless of their ancestry. Leithwood (2009) also noted that culturally responsive instruction was appropriate for all students.

Students are all pretty much the same. I have had some absolutely brilliant Aboriginal students. I have had students who were punctual. They had their homework done. They paid attention. They asked for help when they did not understand. They don't learn differently than my other students do. Not in math anyway. Or in chemistry either. They had a huge commitment and a great work ethic. They were proud of what they were doing. Others did not care. (RHS Teacher #3)

The need to differentiate instruction was also seen to be critical to fostering exciting learning opportunities for students who favoured a variety of learning styles.

Differentiated instruction where you are trying to include all different ways of learning and all types of learners like visual learners, auditory learners, and hands on learners (is important). You always try to put in something for the hands on learner, because we are all hands on learners no matter what background we come from. The more you do something, the more you are going to remember something. We try to make sure that we do all kinds of different lessons, musical, artistic, all those different kinds of areas in which kids excel. Everyone is good at something. We try to find those areas where students' strengths lie, and include a bit of everything so everyone feels they are achieving. (RES Teacher)

Again, honouring Aboriginal pedagogy by means of differentiating instruction provides Aboriginal students with a culturally responsive learning environment that plays to their learning strengths promotes their achievement. This perception was alluded to by nearly all teachers who were interviewed.

### **Teacher Professional Practice**

Accounts of teacher collaborative professional practice extended from giving in-service to their respective PLC's to serving as mentors or mentees within their schools and divisionally as well:

Over the years, these are educational issues that have interested me, so I have jumped in beyond the school, and I have met so many wonderful young teachers here and elsewhere in the province who just inspire you with their efforts. If you weren't inspired to change your own practice when you see those kinds of things then you really need to go find yourself a technician's job. You just want to put a bolt through a nut, there are places for

you (but not in the classroom). I am what is called the “elder teacher”. I am on a division-wide mentoring program for first and second year teachers. So many of the relationships that I have been able to form with young teachers has come through that.... I have my own group of (mentees) who are sprinkled across the division because it was thought that perhaps young teachers might wish to talk to someone other than a direct colleague, someone who was removed from the situation. I am the go to “elder” and was asked to be on the committee by our superintendent who is Aboriginal. He called me up and told me I was a respected elder in the Northern educational community. I said thank you but noted that in my culture being called an elder is not necessarily a compliment. ... We had a big laugh over that. Now he calls me the master teacher. It is cultural. (NHS Teacher)

This teacher’s perception finds anchor in the research of Buffum et al. (2012), Dufour et al. (2005), Fullan, (1999), and Hattie (2009).

The work of the school PLC and the manner in which such collaborative undertakings were evolving to improve learning outcomes came to light during teacher interviews. One interview participant saw the PLC as a work in progress, but the school staff as a whole was learning together:

It is coming. PLC’s in our school and community never took off as they were intended. When we initiated them, it was a grumble session. People got together and complained about students. It was never about students. In the last year, maybe two, we have tried to do some professional development within so that we have got everybody on board. This year we have chosen to focus on Guided Writing, the writing process where everyone was trained. Two years ago we did making words. We came up with ideas to drive

student achievement. We do diebels or deibels as we call it here. We do the deibels and then we do the probes and now our PLC's are focussed on the students, where they are at and where they need to go. It is difficult when you are the first or second rung and because I am a Kindergarten teacher, I talk with the Pre-K teacher, but not all of our kids attended Pre-K here so it is difficult to talk to them about their progress, but it is still good. We are doing more transitioning from class to class. We are brainstorming. The Grade 6 teachers are asking for materials to help with grade 6 stuff. The collaboration is good. Why we were having PLC meetings, at first, people did not get why we were having them.... The fact that you need to know where each child is and where they need to go is important. We have curriculum guides and some people do not even crack them open. You need to know where your students are and where they are going and if you do not know, you have to have the confidence to ask. We are getting to that point where people are starting to take risks and are beginning to ask because we have been scared before. (NES Teacher)

Striving to improve instructional practice was an area identified by teachers interviewed as being central to enhancing the learning of all their students. Efforts to do so extended to the collaborative practice of teaching with and for mentors be they from the school itself or possibly from the division office.

Not so much within our school, but we have consultants in the division who come to our school who help us team teach and plan for improving instruction. They work out of division office. We are a focus school for both reading and math. My room falls in both. They (the consultants) check in with us and see where we want to go with it (team teaching). For instance in reading, as a focus school, we are doing the Fountas and

Pinnell Assessment. The teachers involved in this go from grades 1 to 8, but the teachers involved in my section go from grades 1 to 4. It is really intensive. We meet twice a month to learn a variety of teaching techniques that are designed to help all children. Every time the consultant comes, she models a lesson for us and we practice one for her which she watches. She watches the lesson and takes notes and then gives us feedback on how we could strengthen the lesson we demonstrated. She makes constructive comments. We meet after school as well on those days that she is here. We plan for her next visit and talk about the lesson we observed and presented to her. We have the opportunity to observe other teachers in the school if we wish to and she observes us teaching in our own classroom. I find this (collaborative) approach is valuable, but others in my group may not. (RES Teacher)

The matter of collaborative team teaching with catalyst teachers leading the process and teachers following through with the initiative was found to be empowering as one interview participant noted:

We have a literacy/numeracy team. They team teach language instruction and math instruction. It seems to be working quite well. We have a homework club, and like group teaching. Guided Reading. We have two catalyst teachers. Some teachers are receptive to team teaching and some are reluctant, but the principal is really pushing this. The commitment is there. I feel I have a voice in terms of moving the school in this direction. We needed to make some decisions to do something and then commit to it whatever it was. (NES Teacher)

Still another teacher who had trained to be a Treaty Catalyst teacher related her experiences as also being fulfilling and helpful in raising Aboriginal achievement both within her school and in the division in general.

With the high percentage of First Nations students in my school and in my program, that is in the forefront for me. I have really made it a point to educate myself first of all about the history and then the effect of residential schools. I am a Treaty Catalyst Teacher for the school division as well. I work to train other teachers about the treaties, residential schools and the unfulfilled promises. I guess I just have a passion for helping my students be the best that they can be in a way that is best for them. I have done four full days of training (to be a Catalyst teacher) through the Treaty Commissioner's Office. I spent time with Elders and learning about the resources available to teachers. I got further training to go out and work with teachers in the division to go out and use the resources, to make use of the resources from the OTC such as the Treaty Kit. My first mandate is to work within my own school, and I have done training with my staff, but I have also done two presentations in my son's kindergarten classroom (he attends a 'middle class' school). This is amazing. Working with the little guys is not my forte, but they are so enthusiastic, willing to learn and open to anything. And that is exciting to see His teacher was also open to having me in her classroom. I taught the lesson and that was neat to do.

I am available to work in any school that is interested in having me present to staff, showing them how to use the kits. I have been to some schools where the Treaty Kit has not be signed out in over a year. That's a pretty good indication that this (the training) needs to happen. People see it (Treaty Education) as an add-on. They see Treaty

Education as one more thing they have to do in addition to basic education in their subject area. That is incorrect. If you don't understand the significance of the treaties and how they impact every person whether you are a First Nations person or not. It can be taught in every subject area, and it should be but it is not. Teachers are maybe hesitant because they do not feel knowledgeable enough maybe because they have not had enough time to go through the resources and perhaps because they may not have someone on their staff who is passionate about treaties or maybe on the day the kit showed up they had 80 other things to attend to as that happens on a daily basis. I do not blame any one thing as a reason. It's just that teachers have a lot on their plates. I don't think I'm special but I do think I am unique because I am so passionate about it (teaching treaties) not being a First Nations person myself. (UHS Teacher)

While the passion of this teacher for cross-cultural understanding and teaching was extraordinary, it is strongly rooted in the assertion that “we are all treaty people” (Government of Saskatchewan, 2008b).

The collaborative practice of staff with respect to assessment and the work of the school PLC to raise student achievement was a source of changing the school culture and removing the element of fear in so doing. The presence of “veteran staff” and their support for change was energizing and rewarding.

On Fridays, we are getting an hour to devote to PLC group. The support staff take the children to do team building and physical activity. The grade 3 and 4 teachers have started levelling some kids in math. They have like groups to teach and that is a result of the work of the PLC. They came up with that initiative. I know I am not stating anything specific about Aboriginal students and non, but because our student population is so high,



this just carries. Seeing it is amazing. There is a greater appetite for the PLC, but there is also some resistance because it is a risk and we have a lot of new staff and you know when new staff come into a building, they do not wish to appear that they do not know anything. It is very scary to invite someone into your room to team teach, very scary to say, I don't know how to do that. You have the veterans trying to make the rookies feel that it's okay. I have been teaching for 15 years and I still don't know how to do that. It is exciting so see the children making progress. (NES Teacher)

The changing culture of schools from balkanized encampments to collaborative teams of practice (Dufour et al., 2004; Dufour, 2009) is personified here and underscores the benefits of this transformation to improve student learning.

The work of the PLC as a structure to facilitate collaborative staff practice within grade groupings but across school wide groupings as well was noted by several teachers interviewed for the research. The work and planning of the PLC invokes staff reflection with respect to the LIP and makes the document come alive.

We have a PLC in the school and we meet in terms of level groupings (primary, intermediate etc.) but also as a whole staff. Planning goes across grade groupings and school-wide groupings. Teaching Treaties in grade 7 is totally different than teaching Treaties to grade two, but as a whole we will acknowledge its importance and then work in smaller groups. (Participant shows me the LIP for the school and for her classroom.) This is an ongoing process that we revisit throughout the school year. We will look at it in June and discuss what went well, what could we improve upon, and we build upon that. (UES Teacher)

The Urban Elementary Teacher saw this issue in terms of individualizing student instruction

and collaborative planning to meet diverse learning needs.

Issues inhibiting collaborative teacher/parent endeavour were identified by one interview participant in the context of students needing enrichment while tending to the needs of other students less gifted.

At our school parents seem less involved if their child is needing enrichment, there is not as much formal collaboration. I may say, yes we are working together, if we are looking to push a child ahead in reading because I do not want to ignore students who are working above grade level, but it is difficult to plan for this, and not everyone does placement in this way. Some classes are more homogenous where the gap is not that huge. The gap is huge in my class this year and I cannot group the students all together. It would be impossible to accommodate all the different learning needs if I did not attend to the needs of all my students both those who struggle and those who are able to push ahead. I have students reading at a grade 2 level and some reading at a grade 10. You can't keep those kids together. There is no way you could hit every child every day if you kept them all together. (RES Teacher)

Yet another teacher related an anecdote of how culturally relevant teaching approaches helped create “ah ha moments” for Aboriginal students. Furthermore, such student epiphanies were reinforcement for the teacher that her efforts were being received as effective teaching.

Yes, I have to say that they (Aboriginal students) are (engaged in their learning). I find that they are more engaged if you can make the learning more hands on. When the learning activity is more hands on then the kids tend to be more engaged. It (learning) has a lot more of a social aspect to it. ... If they are in social situations where they can

work cooperatively then they do much better than they might on the individual tasks.

(RHS Teacher #4)

I find I do a lot more hands on activities and a lot more vocal or visual activities and less written for FN students. Also, I try to find the cultural relevancy in the curriculum materials when I bring it to them and if it is not working, then I switch it around so that it becomes culturally relevant. I might change a person in a story, or change where this person is shopping or change the name of a character because there might be confusion about if it is a boy or a girl so I will say how about we call her Kenisha, and the students will say oh, okay. I know that that is working because the light bulbs come on with the students and you just know in their faces that they are getting it and they are understanding the content. When you can make the material culturally relevant then the students are more interested in learning. They then learn quicker and understand the material better. They feel good about themselves. They will say I got this. Then I know I am doing a good job too. (UE Teacher)

### **Student Membership: Culturally Responsive School Programs and Services**

The school possessing a culturally responsive climate for Aboriginal students was an area of commentary for most of the interviewees. Programs held appeal for Aboriginal students because they affirmed them and their culture by being relevant and of interest to the students.

Rural Elementary Teacher #1 shared:

Another whole aspect of something I missed, ensuring that First Nations students fit in at the school. Having things (cultural artifacts) around the school. Yes, you belong here. This is not just a Euro-centric school. We have First Nations art. You fit here. A lot of the elementary students have things from nature in their classrooms. We are teaching the treaties so we have a number of units for that. The high school has a First Nations art

unit. We have a tipi in our central square and Elders that can be accessed at school. I can't believe I forgot all of this. We do not have a (First Nations) language program at the school, but we do have a cultural program that occasionally runs. I don't know if it is currently running, but I have been here for a long time so I can't remember, but when I first came, and we had a four day school week, there was culture every Friday. They took classes all day including language and beading. They went on field trips and did all kinds of stuff. The program was run by our school liaison. I believe that some of the buses from the First Nations reserves brought students who wanted to take the program. [The program is no longer offered in this format because the school division went back to a five day school week.] (RES Teacher)

The recognition by teaching staff that culturally affirming school environments have a positive impact on Aboriginal student achievement as identified by the research, (Agbo, 2007; Bell, 2004; Castagno & Brayboy, 2008; Demmert, 2001; Fulford, 2007; Government of Saskatchewan, 2008b; 2008c; Glaze et al., 2012; Hilberg & Tharpe, 2002; Phillips, 2006; Thompson, 2008).

Teachers interviewed noted that they felt transformations undertaken by schools and school divisions were bringing down barriers to Aboriginal achievement while at the same time diminishing cultural divides experienced by all students:

I think our school is doing a very good job, but the learning curve is steep. I have been here for 13 or 14 years and community schools have evolved quite a bit over that time. The history of that change and the way kids are now more accepting of each other is important. Welcome to 2011. The attitudes that the kids cannot succeed because they come from different cultural backgrounds are gone, or almost gone. Classrooms are a lot

more open where kids are interacting with each other regardless of who they are. A huge change in the years I have been teaching. It has taken years to do (make kids feel they belong), but staff buy into it quickly. It used to be that First Nations kids took Native studies, and non-First Nations kids took social studies. For the last three years, everyone has to take Native studies and things have changed. For the first year, we had kids say, “Why do we have to take this?” Now, times are changing and things are getting better, becoming more positive. A lot of those barriers First Nations people had to face are coming down. The biggest one I saw was with the feeder schools but then they are going through their own learning curve. Division-wide they are looking at offering language programs for First Nations and those old barriers are becoming even fewer. It is difficult though to find fluent speakers of Native languages who are also teachers in Saskatchewan, especially in the public school system. (RHS # 4)

One participant noted that having Elders in the school was important not only for students of Aboriginal ancestry but also those who are not. Such cross-cultural experiences remain enlightening for all students:

I gave the example of teaching the Circle going back to our Euro-centric schools, we give three choices, but with First Nations students always give four choices. You do an A, B, C, and D to refer back to the four quadrants of the Circle. Just about anything you teach can be taught that way. Using oral tradition is something I employ – folklores and legends bringing Elders into the classroom First Nations and non. We bring in our librarian who is non-First Nations and she will read African Legends and other resources about which she is so passionate and she will read them to my students. If I tried to read them, my students might tune out but with her they listen attentively. Because she is an

older woman, they respect her. Exposing them to Elders First Nations and non-alike is important, especially for teenagers (RHS #4).

Framing Aboriginal student learning in the metaphor of the circle and its four quadrants would indicate that strictly envisioning learning as a linear, Euro-centric activity is undergoing a transformation in the case of teachers not of Aboriginal descent.

Some teachers in one of the schools participating in the research were noted to be learning Cree language as a means to facilitate a welcoming school climate that respected Aboriginal language and culture as a means to cultivate Aboriginal students, sense of belonging to the school:

We try to use Aboriginal content wherever we can. The non-Cree speaking teachers have, a lot of us, have gone on to take Cree language classes so that we at least have an understanding of it. It is an expectation that we do Treaties in the classroom. When it comes to language and culture, we have hired a Cree teacher, new this year so the children receive Cree instruction. (NES)

### **Student Membership: Safe, Caring School Climate**

Effective school literature abounds with references to the criticality of schools featuring safe, caring, school climates where students may thrive in an atmosphere of security and concern for the well-being of all its members (Best, 1989; Takanishi, 1993; Whelage et.al 1990). The need to forge positive relationships between teachers and students to promote student membership within the school setting remains essential for student attachment and belonging to school (Zwarych, 2004; Pearce, 1996):

One staff member interviewed spoke of the school's Youth Advisory Committee and how the school staff acted as a parent during the advisory period:

“You witnessed it here, the YAC (Youth Advisory Committee). Each teacher is like a

parent here. We touch base with the kids during advisory time. It is a crew of kids that you are expected to follow throughout high school and their high school career. They may have all kinds of different learning needs but we try to help them along. It is only our third year doing this. We have the same kids for three years. As new kids move in we add those to the groups. The first year we did it, the teachers actually picked the students they wanted so they could have a closer connection with them, and it actually turned out to be a great mix for everyone. Now if only the kids in the hallways would come to their YAC class, it could be better. Usually during this time, I feed kids who need it. (RHS Teacher #4)

This same staff member went on to iterate that building caring relationships between adults and students had as a positive spin-off the effect of creating an environment where students learned to care about one another too. While it was also noted that the process had been slow to evolve, student relationships in the school were seen to be positive and accepting of diversity. Ultimately this teacher also saw this positive student interaction as a catalyst to bringing down barriers to Aboriginal students experiencing affirmative learning outcomes and the establishing of relational trust (Bryk & Schnieder, 2002).

Aboriginal student generosity and compassion were seen as general attributes that stood them in good stead in the school community. Their individual and collective acts of kindness were responsive to the ethic of care (Noddings, 1992) and positive role modelling they received from staff at the school. Castagno and Brayboy (2008) observed that with respect to role-modeling, culturally alike teachers may be able to foster strong, positive relationships with their students and thus positively influence student effort and achievement:

Their (Aboriginal students) humour and their compassion. Their generosity. They always want to share. They always want to share with everyone. If a student is absent, they will say we better put that away for the absent student. I have one little First Nations fellow who is so kind. If someone is hurt on the playground, he will be the first one to say how can I help? Even though he is not a strong academic student if he gets a concept he will ask can I help so and so? As with First Nations people we like to do tricksters. At this age I like to give my students a sense of optimism. Culturally we are teasing but in a fun way. That's what I am like and I guess my kids are becoming like that. We have a lot of First Nations staff so we spread it around. We have eight First Nations staff off the top of my head that I can think of. They are good role models for the students.

(UES)

Another interview participant saw adults in schools removing “barriers” to enhance the educational experience of Aboriginal learners and have them actively engage their school work:

I think that when the teacher and any other adult working with a student do whatever is necessary to bring the students to the point where the barriers are gone, First Nations students are easily as engaged as other students and as motivated and willing to learn as other students. As long as the barriers are in place then getting students engaged is a daunting task. It is difficult for some to see school as a priority. The social and economic disparities faced by some of our First Nations students make school a hardship.

(UHS Teacher)

Such dispositions recognize that schools cannot by themselves “fix” the out of school circumstances that adversely affect achievement for some Aboriginal students and that the effort to do so will need to be a total societal one. Certainly countries such as Canada are fond of



espousing the doctrine that how you care for your citizens most in need is a measure of your integrity and ethics as a society as a whole.

While some participants identified the value of positive role-modeling as being critical to Aboriginal student educational prospects (Castagno & Brayboy, 2008; Hickling-Hudson & Alquist, 2003; Kanu, 2007; Leithwood, 2009), these sentiments also align with Ogbu's (1982) "secondary cultural discontinuity and schooling" postulation. The value of positive role modeling to overcome such barriers it is suggested may be addressed by role-modeling on a school wide basis. One interview participant saw this matter in terms of her role as a teacher, a woman, and a First Nations person:

At this age I like to give my students a sense of optimism. Culturally we are teasing but in a fun way. That's what I am like and I guess my kids are becoming like that. We have a lot of First Nations staff so we spread it around. We have eight FN staff off the top of my head that I can think of. They are good role models for the students. I relate my own experiences to my kids all the time. This is what I did. This is how I grew up. This is how I am now. I reiterate that I am a First Nations woman. I model my healthy lifestyle and talk about my husband who is a loving person and a non-abusive person, and my faith and how I believe in God and how I have put him into my life. This all weaves together to make me the person I am. I show this to my students too in how I dress and how I act. The car I drive, this is what you can do too. I am not just this role model for my FN students, but for everybody. (UES)

The understanding that having positive role models for Aboriginal students plays a large part in their decision to stay in school and actively engage their learning (Phillips, 2006; Thompson, 2008).

## **Community Involvement and Extended Learning Opportunities**

Students having opportunities to extend their learning in the wider community in which they live has been identified by researchers as having a beneficial effect upon student learning in a general sense and with specific reference to Aboriginal learners (Agbo, 2007; Berger et al., 2006; CCL, 2007; CCL, 2009; Demmert, 2001; Government of Saskatchewan, 2008b; Henderson & Mapp, 2002; Martel, 2008; Silver, 2002). Such community connections with schools assumes a reciprocity where the community becomes active in the school and the school becomes active in the community.

One interviewee described the initial difficulties of starting the SCC, but that community commitment was there and the committee got off the ground:

When our school community council (SCC) first got going, it was hard for them to get people (to join). It is still hard to get people but those who are committed are keepers. They want to stay. They see the importance of it (the SCC), to try to help out to keep students involved in school. I think the division too has made great strides. For instance, it used to be that you had to get special permission to go to the career fair, but now it is the expectation that all grade 9's go regardless of what school they attend. I am not sure that people have been shouting from the roof tops, but community support is there. (RHS #4).

Student connection to the community and Aboriginal students' connections to cultural traditions can be a tremendous learning opportunity for all students (Castagno & Brayboy, 2008; Demmert, 2001; Henderson et al., in press). Aboriginal student willingness to share their experiences with the class as a whole helps to create a positive learning environment. Similarly, student visitations to the community also affords them the opportunity to learn about service and social responsibility (Henderson & Mapp, 2002, Chadwick, 2004):

Those Aboriginal students who have connections to their traditions are also bringing those experiences with them into the classroom and share them with the other kids. “I was on a trap line.” “I skinned a rabbit.” “I smoked some meat.” “Would you like some smoked meat?” “I will bring you some smoked meat.” Aboriginal students are bringing these experiences with them. Non-Aboriginal students can’t bring those experiences with them and so too Aboriginal students who have not been exposed to these traditions. We learn these things together. There is still quite a gap between the number of Aboriginal students who have had the opportunity to experience cultural traditions and those who have not. I take my students to the health centre to work with the Elders. We make crafts, but we also attempt to achieve the goal of long term care because many of the Elders are quite ill and unable to communicate. Those who can however, will often say to my students, “When I was a kid ... When I was little ... We made those contacts. We do not do a year end trip in kindergarten. Instead we go to the health centre every month. We try to connect to the community in this way. Not all the patients at the health centre are Aboriginal, but most of them are “Northerners” and they bring that experience (to our visits). (NES Teacher)

### **Teacher Assessment Practices**

Just as teachers were favourably disposed to differentiating instruction to foster equitable learning opportunities for Aboriginal learners, they also recognized that such instruction should be commensurate with compatible assessment practices (Castagno & Brayboy, 2008; Demmert, 2001; Marzano, 2003; Stiggins, 2005; Stonechild & MacGowan, 2009). One interviewee discussed assessment in terms of self-assessing as a lesson progressed and making determinations to teach or reteach as concepts became clear or muddled to the class. Such

assessment relied upon reading students' body language as they worked through concepts in class.

When they are struggling to learn something, we need to take the time to explain things to them again. Sometimes you just have to go back and re-teach either individually or in groups. Okay so you did not get this, but let's go through it again. Let's talk it through so that you will understand. We have the patience and we will make the time to go over things again. This is important for them to know. They will be more apt to raise their hand and ask a question. Instead of feeling I won't get help anyway. Or I feel stupid asking this question. There are no stupid questions. You are struggling? Let's try this. This involves a lot of noticing. A lot of it too I find in their faces or their body language. I know if they are getting it or not. (UES Teacher)

Another teacher interviewed discussed the holistic learning style of one of her top students who also happened to be Aboriginal. The need to see the "big picture" was central to how he learned (Castagno & Brayboy; 2008) and her understanding of that need made a difference to how she perceived he was progressing in her course:

I have one student who is almost the poster boy for how traditionally it was believed that Aboriginal students will learn more waiting to see the whole picture before they respond, not jumping in with partial responses. "I know this little bit now and now this little bit so I am going to put up my hand." My best English 11 student is a boy who has been raised in a fairly traditional home and he is a big picture man. At first I wondered about his progress and then I started getting his assignments and then I went, "Wow" because he is a big picture man. So, you might find that some students are that way, waiting to see

what it all means regarding the concept that they are learning. Other kids put up their hand for the little bit they know. So, it might look different. (NHS Teacher)

While teachers believed that in class assessment practices were essential to framing the instructional program for their students, one teacher interviewed noted that the AFL played a large role in school-wide planning to improve achievement outcomes despite the fact that doing so was troublesome but also recognized that the AFL results played a large role in how the school was being assessed:

Our whole PD is based on Assessment for Learning.... The AFL really strongly affects what we do here. I have trouble with that but it is how we are being assessed. (NES Teacher)

### **Teacher Professional Practice**

Fullan (1999) has noted that schools that learn to collaborate place themselves in a better position to act collaboratively outside the school with the communities they serve as well.

Aligning efforts among teachers, schools, the division and the ministry was seen as integral to supporting and facilitating all students' learning. Specifically with respect to Aboriginal student learning, interviewees noted a number of instances where schools and school divisions worked with other agencies to facilitate cross-cultural learning experiences that will be of benefit to all students (Government of Saskatchewan, 2008c):

I hope the OTC has the continuity that it has had. Certainly the Catalyst Teacher Training that I received has been a great benefit for me; it is something that I always believed. It lit a fire under me to talk openly about it and make myself more aware. I think that was really good for me. The school division is training all the Treaty Catalyst Teachers. I think our Director has a strong passion too. He has been very supportive of cultural responsiveness in the division and that has made a big difference for us as a

division. He is laying the groundwork for all of us. That leadership is important. (UHS Teacher)

Another teacher noted that having regular conversations with colleagues and peers remained critical to raise awareness about learning challenges and successes for the school's students. Such collaborative effort was seen as positive for enhancing student learning but also for building collaborative school culture both from within and into the wider community as a whole.

It is key. It is absolutely key because a student who I am teaching, I may not have the understanding of why that student is not achieving (as another member of staff may have). Someone else who may know the student better can provide me with some insight so that this student isn't a marked student. Another teacher may have more understanding of how that student learns best. We have those conversations all the time, on a monthly basis in our school. We sit down and we name every student in the school and we ask, "How is this kid doing?" We have it on Google Docs now so it is not always a face to face conversation. We talk about how kids are achieving and we know. We do not just shut our classroom doors and teach in a vacuum. We know this conversation has to happen for kids to do better. It is part of our learning improvement plan (LIP). We actually started this (process) before we had things like local improvement plans and professional working groups. (These conversations absolutely fit into that process. Part of our LIP is to improve Aboriginal achievement and parental contact in our school. Once we talk about how kids are doing then we get that information to parents to see what role they can play in helping us to help their kid achieve. (UES)

Other teachers interviewed were more skeptical about initiatives to align efforts to further Aboriginal students' sense of belonging at the divisional and school level. The skepticism was

rooted in what the interviewee saw as a lack of progress by a divisional committee established to look into and develop strategies to ameliorate Aboriginal students not feeling welcome in school:

There is a whole thing in the division right now when a survey was taken about how FN kids feel about being in our schools. There was a committee set up to try to make FN kids feel more welcome. I can't tell you one thing that that committee has done. I know they have met a whole bunch of times and I know that they have talked, but I don't see how it has made a lick of difference in this school or made a difference to FN kids. (RHS #1)

Teacher perceptions about Aboriginal achievement spanned a gamut of learning contexts. While matters of societal inequities were cited as possible contributors to achievement disparities, interview participants also saw Aboriginal student awareness of their respective culture, language, and history as being contributors to achieving positive learning outcomes for Aboriginal learners. All of the teachers interviewed agreed that achievement disparities existed between Aboriginal and non-Aboriginal students within their classrooms and schools, but they also provided keen insight as to major contributing factors. The attributes of Aboriginal achievement, however, was an issue of some difference among those teachers interviewed.

Some respondents saw the matter in terms of a lack of opportunity for students to learn concepts missed in earlier grades. This issue of missed concepts mitigated against Aboriginal student success where transition to high school was concerned. Having said this, however, it was apparent from interview commentary that school staffs worked collaboratively to address those missed concepts that may have been working against Aboriginal student success:

Collaboratively ... when kids have an identified need, when we see that they are struggling, then we refer them to our student services and they will actively seek the student's background, what the student's needs are, if testing is required and attaining

parental consent (to do the testing). They try to involve the parents more, but they also have a lot on their plate (student services). When the results of the assessments come back then student services tells us what adaptations may be needed to make the student more successful. Sometimes the recommendations are common sense matters like the student cannot hear well. Can you place them near the front of the room or use the mic system? (RHS#3)

It should be noted that formal transitional programs existed in the high schools participating in this study to help ease student transitions from elementary school to high school, but the matter of concerns appeared to arise for older Aboriginal students who may have been making the transition in a later grade such as Grade 10:

When we get kids in grade 10, they come from our feeder (Band) schools and I notice that students have gaps in their skill levels or in that social setting aspect. Our students transfer from Band Schools in their grade 10 year (for the most part). (RHS Teacher #4)

If one considers the funding inequities evident between public and band schools, (First Nations Education Council, 2009) the degree of equality in terms of educational experience of students places them at-risk academically when they enter public school systems if they are missing or have not mastered concepts that are integral to their learning. Owing to the 2% cap placed on First Nations education funding since 1996, accumulated shortfalls for band school funding relative to public school funding will have reached 2.042 billion dollars in 2010-2011 with an annual shortfall reaching 304 million dollars (First Nations Education Council, 2009).

When that public system is making pronouncements about eliminating achievement gaps, but many Aboriginal students are arriving in that system in the graduate program sometimes void of



important skills, those well-intended goals of educational parity become increasingly more difficult to attain:

Because it (control of education) has to do with federal and provincial (governments) so if the band schools were required to meet provincial expectations then I think First Nations students would not struggle as much. There needs to be a better transitioning phase from band schools to public schools. Right now it is not good. It could be better.... In my job when students come in from First Nations schools we spend a great deal of time programming them to see if they should be in alternate, modified, or regular programs. They seem to be quite a bit behind in skills. It's frustrating. (RHS # 2)

By contrast, elementary school teachers interviewed for this study believed that structures conducive to the smooth transitioning of Aboriginal students such as grade alike groupings and collaborative planning time to work on a range of instructional issues within the school was helping to promote Aboriginal success:

We have planned collaboration time with our grade alike. I will meet with the grade 3 teacher and we will discuss what we have done or been doing to improve learning for Aboriginal students. We do have time for planned collaboration and it is up to the teachers to plan what they wish to collaborate about. With my partner, we have collaborated about Aboriginal content and how we want to present it. On a common dismissal day we may choose to do planning as well. Last month we had a PLC meeting and I and two colleagues presented Tipi Teachings to the whole staff. (UES)

Facilitating smooth grade to grade transitions for Aboriginal students among elementary school teachers interviewed revealed some unique teacher strategies that prove promising. One interview participant who was a primary teacher talked about the need to make home visits with

potential and current students in order to share literacy resources with parents, Aboriginal and non-Aboriginal alike so that smooth transitions into schooling could be affected.

So, that program has started with our families. Then we collaborate as kindergarten and pre-K. They have family days once a month and I go down and meet the families when I can although I teach full time. I go and meet the families and talk with them so they see the overlap of where their child is this year and where they are going next year in kindergarten. The families get to know us.... So starting in June as my kids are done on the 17<sup>th</sup>, I am going the next week to start in home interviews with the families of all my next year students, so that I can see how their kids learn how they see their kids and how they perceive what their kids' education will be like. We can work more closely together and I can have the whole summer to plan for those kids. If I wait until August, you know how it is ... it is sink or swim and mostly it seems like you are sinking all the time. I have two months to prepare. So, that's where I am trying to go.

Once a month next year, I will have mornings off. It has been tricky the past two years because I am back at school in the summer, but I do target family visits. Some of the families are Aboriginal and some are not, but for children who I know have low literacy, children with low involvement, children who need that little bit of extra, I take a back pack into their home. My backpacks are more literacy rather than theme oriented. Mine are books and games that go with those books. I will sit down with those children and their families at their home and go through the back pack with them. This coming year we have this opportunity once a month while in the past it has only been possible once every two months so visits were made on a priority basis. Next year I will have ten opportunities. These are kids who are already in my class and the pre-K kids I know

about because of my collaboration with the pre-K teacher and I know which families benefited most from her visits. So the next year when they are in my class I can see which kids may need a bit more support. Those are the kids I go and see. (NES)

Ultimately, it was apparent that school and school division efforts to facilitate smooth transitions for Aboriginal students were in place. It was also evident that these transitional undertakings required a great deal of coordination and collaboration to be put into place. Given the increasing use of local education agreements between public and Band schools, it is hoped that some of the issues identified by high school teachers interviewed for this research may be ameliorated as well.

### **Aboriginal Student Achievement Contexts**

The matter of deeper societal and cultural issues negatively affecting Aboriginal student achievement (Arundel, 2009; Battiste, 2005; Sharpe et al., 2009) was addressed by interview participants. While issues relating to attainment and mastery of skills between educational systems were identified as important, some teachers saw Aboriginal student achievement in terms of wider societal and cultural issues:

I think it is a complicated issue. I don't see it (Aboriginal student achievement) as strictly an educational issue. I think that is part of the reason why there is a gap in the first place. I don't think societal issues and cultural issues have been addressed where First Nations are concerned. It has been affecting First Nations families for a long time and that is why there is a gap and continues to be a gap. (UHS Teacher).

Another teacher interviewed for the research saw the matter of Aboriginal student values about school being framed in terms of a learned helplessness, the result of generations of Aboriginal families being told they were of little value and enduring the prejudices of

mainstream society until they began to believe themselves that they were of little value (Cherubini et al., 2010).

Again, I think the value of education is not stressed or believed in as much in an Aboriginal family. I think for the Aboriginal families there is a lot of learned helplessness. Why bother if things are not going to change anyway. There is a feeling of a lack of self-worth. Worthlessness. Prejudice. It stems from how they are being treated, not necessarily from educators because in a community school, we try so hard to be inclusive, to make a welcoming, loving place. But, I think the real world is different and I think a lot of these families see that and feel that every day. We are still an institution and I think that feeling is still directed at the school or any school. When you are told so often that you are worthless, and what you have is of non-value, you believe it. We know this from the testimony of abused women who have been told for so long that they are crap. After a while, you start to believe it. You are just going to be a welfare Mom anyway or you are just going to be a thief anyway so why go to school? Or why value education when you are told what you are going to be. (UHS)

### **School Divisions' and Schools' Missions, Visions, and Goals to Support Aboriginal Achievement**

Efforts to articulate Aboriginal student achievement within school divisions and schools were evident. Each school division in the study and each school participating in the research had statements and program enumeration and descriptions that reflected their desire and intention to provide equitable learning opportunities for all their students. From the personal observations and interviews with teachers at their respective school sites, it was evident that teachers were optimistic and were supporting the “compelling” mission vision, and goals (Hargreaves, 2009) to enhance and make more equitable learning opportunities for Aboriginal students.

We are pretty fortunate being a community school in that we get extra resources such as EA's (educational assistants). We have special community school programs to try to keep kids interested (in school), after school programs and noon hour programs. We also have a meal program from the community school room (RHS Teacher #4).

Another teacher articulated school efforts in terms of helping all students, especially those who may be at-risk, but by engaging in effective teaching and program delivery, First Nations students would be beneficiaries.

You know there is nothing direct that we say to improve FN students learning. We do have a whole bunch of programs to help at-risk kids. Traditionally that tends to be more of our FN population. Do we have something specific where we ask, "How do we help our FN kids? No. Not per se. We look at how we can help all kids. So we have Elders come into the school. Does this benefit FN kids? Sure it does, but it also benefits all of the other students as well. In programs like mine, I have ten FN kids and three non-FN kids. So my weighting is heavily towards FN education. We have the (name of program) and this program is mostly FN kids. We have programs to intervene and close learning gaps. We adapt to what students may have to learn, but it is not specific to FN students. It is specific to good teaching. Period. Do they benefit? Sure they do, but so do the non-FN kids. (RHS #1)

Having in place testing to assess student learning and then plan and implement interventions was seen to be of help to students who may have learning challenges and require additional support. Clear protocols and processes were in place at the school to facilitate course adaptations and modifications to boost student achievement (Buffum et al. 2012; Dufour et al., 2005; Mooreshed & Barbour, 2007).

We have the homework program for 8's and 9's, but it has not been implemented this semester for 10 to 12. A computer generated list of kids who would need help would be given to the teacher in charge of the program and they would pull out the kids and give them help with assignments they needed to catch up. They would be pulled from non-academic classes. There are two of us pulling grade 8's and 9's from class when we are able to. I know the grade 9 math teacher believes it is helping his class get caught up. We have a tutorial room and we meet as a support team and at grade a like meetings. If we have students who are failing a number of classes then we meet with teachers and decide which classes the students will drop and plan what we will do to support the student. Our referral process has teachers contact parents and then if there are further concerns, the student can be referred to the student support team. We will run some assessments, talk to parents and see where they want to go. (RHS #2)

Another interview participant saw provincial curricular initiatives such as Treaty Education as being essential to offering culturally responsive programs (Castagno & Brayboy, 2008) which not only were of benefit to Aboriginal learners but for all students and even staff. Matters of staff resistance were identified, but the teacher in question also saw teacher workload as potentially being a factor in "opting out":

People see it (Treaty Education) as an add-on. They see Treaty Education as one more thing they have to do in addition to basic education in their subject area. That is incorrect. If you don't understand the significance of the treaties and how they impact every person whether you are a First Nations person or not is important. It can be taught in every subject area, and it should be but it is not. Teachers are maybe hesitant because they do not feel knowledgeable enough maybe because they have not had enough time to

go through the resources and perhaps because they may not have someone on their staff who is passionate about treaties or maybe on the day the kit showed up they had 80 other things to attend to as that happens on a daily basis. I do not blame any one thing as a reason. It's just that teachers have a lot on their plates. I don't think I'm special, but I do think I am unique because I am so passionate about it (teaching treaties) not being a First Nations person myself. I do think I am the exception rather than the rule. I feel in my heart and my gut that it is the right thing to do. That is why I have embraced it. (UHS Teacher)

Collaborative planning within the school and with the wider school community to heighten Aboriginal student achievement was also seen to be important. Fullan, (2000) saw such collaboration on the part of staff to be a pre-requisite to involving wider community collaboration as well:

As I said, every year as a staff we brainstorm as to how we can be more inclusive, be more welcoming, and raise achievement levels for Aboriginal learners. As a staff we brainstorm a lot of things and from there we will say okay, what can we change or what can we do now? Then we plan social and extracurricular things for them. Then we break into groups and look at how we can do these things in our classroom as well as in the whole school. We go from the school community and break it down into the classroom community. We do this a lot. It is really a big initiative in our school. (UES Teacher)

One interview participant saw the matter of supporting Aboriginal student learning in terms individual student need and not as something required because the student may have been of Aboriginal ancestry. Such a position I believe underscores the intrinsic motivation that teachers

possess where wanting to extend equitable opportunities to students in need is concerned:

Extra work is done there (in order to raise student grade levels). We have a literacy and numeracy program in place in the school division. We have a literacy instructor who does not have a regular classroom but she coordinates working sessions with kids in the RTI (Response to Intervention) Program. For students not reading at grade level, they work on levelled readings to raise their reading skills, and then if students still struggle there is an intervention component. These programs are not directed to Aboriginal kids and are available to all students who need the additional support, but because of our student population (demographics), probably 70% of the students would be Aboriginal and 30% not. There are perceptions that perhaps we need to place Aboriginal kids in a “special” class but this is not the case. It is not because they are Aboriginal; it is because they need the additional support. Your letter talked about “perceptions” and I just want to make it clear that public perception may be different than the perceptions of those who work in schools. (NHS Teacher)

The matter of non-Aboriginal teachers being hesitant about teaching Aboriginal curricular content and Aboriginal students was raised by one interviewee who noted that there appears to be an assumption that all Aboriginal children are “deep” into their respective cultures when some are not. Ultimately, this participant felt that teachers should have to bear responsibility for Aboriginal student achievement disparities instead of being quick to blame the student:

You hear teachers say, “I am not capable of teaching FN content. I am afraid. What if I offend? We will stock our library with boxes and boxes of FN authors and then inevitably someone says I can’t read that, I do not have a FN’s voice, but you do teach Shakespeare and you are not from England and you do teach Chinese literature and haiku



poems, but you are not from Asia. I really wish people would stop saying you have to be FN to teach FN children. I am very successful teaching FN students.... They will take everything you have to give them and they are grateful for it. They are kids with specific learning needs.... Cultural or not, some are deep into FN culture and some do not know any more about it than you do. So teach the student. Don't teach culture. That is the job of the community and the Elders. Teach the student. Teach knowledge. I really think a lot of the disparities are a teaching issue. It is not good teaching and while some of my colleagues might tie me up by my toenails for saying this, really if teachers were better teachers, we would not have those gaps. It is too easy to blame the student instead of taking responsibility as the teacher. (RHS Teacher #1)

This teacher's perception teacher culpability was not that of the majority of interview participants but it is noteworthy because it speaks to the need of schools and teachers to change how they teach rather than trying to make Aboriginal students change how they learn:

For anyone who has done any reading or research, they have an understanding that First Nations learning styles are an oral tradition. As far as culture, our schools are a Euro-centric focused educational system. I do not think that we are open or tolerant of different learning styles and traditions. And not just First Nations culture, but all cultures for that matter. I think this is a shame because we are not honouring some of the other styles and ways of learning, the oral tradition and other learning styles, through my own reading and research, presenting and teaching by incorporating other cultures, such as the Circle. It seems like a simple thing, but a lot of us as children have not been exposed to other cultures. It is something I employ in my teaching. To make an adaptation to teach to a different learning style is possible. But many of us as teachers are unaware. No one

has explained it to them and so they have not been exposed to them. If they were aware, it could make a big difference for their students. (UHS)

The aspect of post-service professional development and assuming responsibility for one's own learning and professional growth underscores the task that lies ahead in so far as transforming pedagogy to adapt to Aboriginal student learning strengths as opposed to making these same students adjust to mainstream teaching styles (Battiste, 2005; Bell, 2004; Castagno & Brayboy, 2008; Kanu, 2005).

### **Concluding Remarks**

A total of nine semi-structured interviews with teachers in six community schools located in three regionally disparate geographic locations within the Province of Saskatchewan, Canada were conducted for stage one of the research for this study. The results of the interviews revealed that teachers perceived matters relating to instructional practice of teachers, professional practice of teachers, creating powerful learning environments to engender student membership, Aboriginal parental and community involvement, Teachers knowledge and understanding of the uniqueness of their respective working environments also enabled them to raise matters of concern where the achievement of Aboriginal students was concerned. While the local contextualization of Aboriginal student achievement was apparent, so too was the emergence of perceptions convergent with those of their teaching counterparts from distant and distinct schools and school divisions. Such convergence was happily noted because while it is duly noted that Aboriginal student achievement is highly contextual, parallels from other situations would suggest that measures of commonality and transferability may be possible from one jurisdiction to the next.

In all locales in which the research unfolded, teachers interviewed seemed for the most part to value collaborative work they undertook with their colleagues and with the division.

However, some participants also identified that elements of teacher resistance persisted and this resistance was seen to be holding up progress where student achievement in general was concerned.

Setting up structures and applying practices that supported Aboriginal student transitions within and from without their schools was an area of ambivalence for most teachers. At the elementary level, Aboriginal student transitional matters were seen to be alleviated with the establishment of cross grade transitioning. At the high school level, concerns about Aboriginal students transferring from band operated schools to provincial ones remained of concern because high school interview participants perceived that many Aboriginal students were making the transition without the requisite skills required to complete the graduate program. As such, supports believed to be necessary to lessen the impact of Aboriginal transitional trauma were seen to be taxed at the school and division level. Hattie's (2009) finding that student mobility (transcience) as being the least effective indicator of student achievement is noteworthy here as frequently, Aboriginal students must leave their home communities to undertake graduate requirements.

The need for assessment of learning to be timely so that it could drive differentiated instruction was also an issue teachers identified as important. Certainly, the degree to which these two undertakings could facilitate improved Aboriginal learning outcomes was held by many interview participants. On the other hand, few interview participants identified the AFL or large scale standardized test data as being critical to their efforts to improve learning outcomes for Aboriginal students. Such educational data was seen more as a school or divisional initiative that did not reflect their individual practice. Indeed, one could argue that large scale assessment data remains an anathema to classroom based assessment and differentiated instructional

practice.

The presence of community school programs that tended holistically to the needs of all students were areas of high praise that teachers appeared to value. In general, teachers interviewed saw Elders visitations, meals programs and cultural programs for Aboriginal students as being effective and helping to promote healthy development for their recipients. The belief that these programs were bringing down barriers to Aboriginal student engagement and achievement was manifest.

While teachers interviewed also recognized the value of Aboriginal parent and community involvement in school, generally teachers' perceptions of such involvement in their respective context were seen to be areas that could experience expansion and growth. Many applicants felt that parental and community support while espoused did not necessarily translate into tangible action where these matters were concerned. Interviewee sentiment in these matters appears in the theoretical underpinnings of this research (Agbo, 2007; Berger et al. 2007; Cheubini et al. 2010; Silver et al. 2002). However, participant perceptions in some respects ran contrary to significant government policy directives regarding building relationships that lead to reconciliation in the matter of residential schools (Horsman, 2010).

Teachers interviewed for this study for the most part felt there was a degree of alignment, within their schools with respect to improving student achievement. Some participants pointed out that they may not have specific goals for Aboriginal student achievement, but rather, for all students in general. While it is noble to talk of all students, given the degree of the disparities evident in Other participants identified specific school goals but were unsure if divisional or provincial directions were guiding some of the undertakings to promote Aboriginal student achievement.

As a final and perhaps telling observation, the sense of optimism that pervaded the teacher interviews ... that circumstances were changing for the better where Aboriginal student achievement was concerned was clear. Perhaps this belief in making a positive difference for students would be the catalyst that would ultimately bring about substantive and lasting change for Aboriginal achievement. Certainly without optimism, hope and belief, no lasting nor sustainable change is possible.

Chapter Four described the school sites where qualitative data in the form of semi-structured teacher interviews were recorded in phase one of data collection. Editorial commentary about the data and anchoring the data in the literature review from Chapter Two was also undertaken. Chapter Five will present the quantitative survey data, and again anchor the data in the literature and then it will link the qualitative and quantitative data via an integrated data interface. The results of a peer interpretation panel that reviewed the open-ended responses from the teacher survey will also be presented.

If schools are going to respond to the needs of aboriginal students, then teachers have to know something about the culture, history, and social situations of Aboriginal students (Little Bear, 2009, p. 16.)

## CHAPTER FIVE DESCRIPTION OF TEACHER PERCEPTIONS OF ABORIGINAL STUDENT ACHIEVEMENT SURVEY RESULTS

Chapter Five entails an overview of the results of the Teacher Perceptions of Aboriginal Achievement Inventory (TPAAI) developed in chapter three of this study. At each of the six school sites included in the study, identical procedures for completion of the TPAAI were followed. See Appendix J. In addition, the results of the demographic data completed as part of the TPAAI are reported and the data for participant responses are also presented. A data interface of survey closed responses and open-ended responses are provided and the results of the peer interpretation panel are also presented.

### **Procedures**

Upon receipt of permission to conduct this research from the Behavioural Research Ethics Board on November 30, 2010 letters requesting to conduct research in the school divisions selected for the research were sent to the respective directors on December 7, 2010. Permission from all districts concerned was attained by March of 2011. This left ample time for completion and administration of the survey instrument (Appendix I) which would occur after the interview phase was completed. (A Behavioural Research Ethics Board Study Renewal Form was completed in October of 2011 and 2012.)

All the school sites that had participated in the teacher interview phase of the research were included in the survey phase of data collection as well. Email groups were formed for each site and the teaching staffs were emailed blind copies of a letter outlining the nature of the research, a consent form to participate in the study, the directions to the TPAAI url and instructions for the completion of the survey were provided (See Appendix H, J, and K). The inventory results were

analyzed by means of SPSS statistical computer software and Microsoft Excel 2010 as detailed in chapter three of this research.

### **Teacher Survey Instrument**

As the literature was explored and the interview data was coded, categorized, and thematically organized, potential questions for the survey phase of the research began to come to emerge. Drafts of potential questions and the domains theoretically conceived in the conceptual framework and linked to interview data were constructed over four months of brainstorming, editing and revising. The respective literary, and interview data sources were cradles of inspiration for the questions, but the questions themselves do not literally exist extant in the literature or the interview data itself. The formative questions presented for the proposal defence of this research and offered to the Behavioural Ethics Board underwent significant revision and transformation before they became the basis for the Teacher Perceptions of Aboriginal Achievement Inventory (TPAAI), but they remained in essence the well spring for framing the inventory.

Several criteria served as the basis for survey item inclusion:

1. The survey item should relate to the initial research questions;
2. Items must be structured in an appreciative fashion;
3. Items must be referenced to the literature review, as well as to the interview data;
4. Items should be referenced to programs that existed in all the schools participating in the research.

In total, some six drafts of the TPAAI were crafted. Questions were eliminated or revised based upon the criteria presented above. The final draft of the questions was presented to five members of the academy and one fellow doctoral student for their consideration and feedback (Appendix G). Reviewers were asked to comment upon the following areas of the survey:

1. Content – Is the level of language appropriate?  
Are items difficult to understand?  
Do items reflect a personal bias?
2. Format – Is the spacing/font easy to read?  
Is the survey too long or too short?
3. Instructions – Are the instructions clear?
4. Domains – Are the questions identified aligned with the domains? See Table 5.1.  
Are there too many domains and should they be condensed?

### **Survey Revisions**

All items that were worded in a fashion not consistent with appreciative inquiry (Cooperider & Whitney, 2003) were reworded to meet such criteria or they were removed altogether. For example, questions that contained statements such as “my Aboriginal students” would be included in this set of revisions and were reworded to read, “Aboriginal students”. Similarly, items that referred to more than one item were split into two items were removed altogether to avoid ambiguity. In total, four questions were removed altogether and 17 were reworded.

Refinements to the Demographics section included making the third demographic item pertaining to teaching experience be a fill in the blank statement because it was determined that it was too difficult to offer the many multiple choice responses needed to cover all contingencies. Items pertaining to where one’s teacher training occurred and the degree of course experience relative to First Nations Studies while in university were also added because given changes to teacher education program requirements since 1998, it was believed there may be a difference in responses for those participants who had completed teacher training prior to that date than those who had completed their teacher training afterward.

Reviewers were of the opinion that the categorizing of my domains seemed logical but that changes may be forthcoming once I began doing statistical analysis of the survey data. It was



also felt that instructions were clear and that the length of the survey was neither too long nor too short.

Table 5.1 presents an enumeration of survey items by domain and by number for the TPAAI.

**Table 5.1 Survey Questions by Domain and Number**

<b>Domain</b>	<b>Item Numbers</b>
A. Teacher Demographics	
B. Teacher Instructional Practice (Responsive Curriculum, Instruction, Expectations)	4, 6, 19, 30, 32, 35, 45
C. Parent Involvement (Supervision, Expectations Collaboration, Parent Night Attendance)	2, 7, 17, 22, 34
D. Teacher Professional Practice (PLC, Professional Development, Collaboration, Planning)	3, 18, 33, 36
E. Student Membership (Learning Environment, Attachment, School Climate, Attendance, Study Habits, Engagement, Culturally Responsive Curriculum,	1, 8, 11, 16, 26, 27, 31, 38
F. Assessment (AFL, Consistency, Reporting to Parents, Criteria, Leading to Interventions,	5, 9, 15, 29, 39
G. Achievement Contexts (SES, Residential Schools, History,	10, 13, 28, 37, 42
H. Community Involvement (Opportunities to Extend Learning, Programs, Services, SCC,	12, 14, 20, 25, 40, 43, 44, 46
I. Alignment (Teacher, School, Division – Mission, Goals)	21, 23, 24, 27, 41, 47

### **Administration of the Survey**

The TPAAI was administered electronically by means of the SurveyTracker (2010) program. Participants were sent a blind copy emailed by me on November 16, 2011 with details about the survey and how to access the url to complete it. Attached to the email was an explanatory letter (See Appendix H) outlining the nature of the research and a consent form (See Appendices I and J) to participate in the survey. Participants were requested to complete the survey online

originally by November 30, 2011; this deadline was extended to December 2<sup>nd</sup> and ultimately to December 9<sup>th</sup> to accommodate busy teacher schedules and to attempt to maximize survey participation. Emails to potential participants were sent to inform them of the extensions and school based administrators also agreed to remind their respective staffs about the research and the opportunity to complete the surveys. Participants were able to complete the survey at any time of their choosing in the hope that busy schedules could be accommodated as well. While the survey link was left open beyond the date of December 9<sup>th</sup>, only one participant completed the survey after that date.

### **Survey Demographic Data Analysis**

Data analysis of the survey data began in February of 2012. During the first stage of research, schools had been assigned fictitious names to mask identities for example Rural High School and individual teachers had been assigned numbers such as Rural High School #1 and so on. For the purposes of the survey, while participants had survey numbers, they did not have names. However, participants were required to indicate the geographic region in which their school division was located so participant responses could be disaggregated by division.

### **Sampling**

**Table 5.2: Demographics: Participants in the Study by School Configuration**

	Interviews	TPAAI Survey
High School	N=6	N=20
Elementary School	N=3	N=8
<b>Totals</b>	<b>N=9</b>	<b>N=28</b>

**Table 5.2.1: Demographics, Gender, Survey**

Male n =	Percent of Sample	Female n =	Percent of Sample	Total Sample
7	25	21	75	28

**Table 5.2.2: Demographics: Ethnicity, Survey**

Aboriginal n =	Percent of Sample	Non-Aboriginal	Percent of Sample	Total Sample
9	32	19	68	28

**Table 5.2.3: Demographics: School Configuration\***

\*Owing to the sample size and the need to keep participants anonymous, a decision not to include this demographic data was made in order to protect the identity of some participants.

**Table 5.2.4: Current Teaching Assignment**

Assignment (n = 28)	Frequency	Percent
Classroom Teacher	21	75.0%
Learning Support Teacher	6	21.4%
Other	2	7.1%

**Table 5.2.5: Years Teaching Experience Expressed as a Percentage of Sample**

Teaching Experience in Years Survey

Years	Survey	Total (%)
First Year	1	4
1.5	1	4
2 Years	2	7
3 Years	2	7
4 Years	1	4
5 Years	4	16
10 Years	1	4
11 Years	3	11
25 Years	1	4
28 Years	1	4
39 Years	1	4
<b>Total</b>	<b>28</b>	<b>100%</b>

The largest group was in the 5 years of experience. Overall, the average years of teaching experience for survey participants was 10.6 years.

**Table 5.2.6: Regional Location of School for Survey Participants**

<b>Regional Location of School (n = 28)</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulation</b>
Northern	14	50%	50%
Urban	6	21.4%	21.4%
Rural	8	28.6%	28.6%

**Table 5.2.7: Course Exposure to Native Studies from Canadian Universities**

<b>Course Exposure (n = 28)</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulation</b>
I have not completed any credit courses in Native Studies.	8	28.6%	28.6%
I have completed 1 to 3 credits in Native Studies.	10	35.7%	35.7%
I have 4 or more credits in Native Studies.	10	35.7%	35.7%

**Table 5.2.8: Year Received Teacher Training**

<b>Year Received Teacher Training</b>	<b>Frequency N=28</b>	<b>Percent of Sample</b>
1972	1	3.6
1973	1	3.6
1987	2	7.2
1989	1	3.6
1990	1	3.6
1991	1	3.6
1994	1	3.6
1995	2	7.2
1997	1	3.6
1998	1	3.6
2001	1	3.6
2002	1	3.6
2003	2	7.2
2005	2	7.2
2006	2	7.2
2007	3	10.7
2008	2	7.2
2009	1	3.6
2010	1	3.6
2011	1	3.6
No Response	0	0

**Table 5.2.9: Institution(s) where Teacher Training was Received**

Name of Institution(s)	Number of Attendees (n = 28)
University of Saskatchewan	9
University of Regina	6
University of Toronto	1
Brandon University	1
Universities of Regina and Saskatchewan	1
Universities of Regina, Saskatchewan and Brandon	1
University of Alberta	2
SUNTEP	1
NORTEP	4

**Results for the TPAA Inventory**

Results for the TPAA Inventory (Appendix K) expressed as means, standard deviations and percent agreeing by item are presented below in Table 5.3.

**Table 5.3: Survey Participant Responses to TPAA Expressed as Means, Standard Deviations, and Percent Agreeing or Strongly Agreeing with Survey Item**

Choose one of the five responses that best describes your perception of the statements below by marking the bracket of your choice.	Mean	Standard Deviation	Percent Agreeing or Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	3.14	0.93	79%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	2.93	0.97	57%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	3.18	0.61	89%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	3.32	0.61	93%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	2.92	1.18	50%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	3.43	0.74	93%
7. Aboriginal parents share in decision-making in this school.	3.04	0.96	64%
8. Aboriginal students feel safe in this school.	3.54	0.64	93%
9. I regularly employ assessment for learning to	3.61	0.63	93%

inform students of their respective progress towards their learning goals.			
10. Societal inequities adversely affect Aboriginal student achievement.	3.36	0.68	89%
11. Aboriginal student success is recognized and celebrated in my classroom.	3.43	0.74	86%
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	3.25	0.70	86%
13. Economic disadvantage adversely affects Aboriginal student achievement.	3.43	0.84	79%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	3.25	1.11	57%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	3.36	0.62	93%
16. Aboriginal students feel they belong at this school.	3.54	0.64	93%
17. Aboriginal parents are actively engaged in the life of this school.	2.46	0.92	32%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	3.25	0.52	96%
19. Aboriginal students are aware of my expectations for their learning.	3.50	0.58	96%
20. School services such as a meals program are helping to improve Aboriginal achievement.	3.61	0.50	100%
21. This school has supports in place to deal with Aboriginal learning challenges.	3.32	0.55	93%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	3.43	0.69	89%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	3.39	0.63	93%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	3.61	0.69	89%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	3.50	0.75	86%
26. Aboriginal students are actively engaged in their learning in my classroom.	3.36	0.78	82%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	3.32	1.02	68%
28. Historical issues adversely affect Aboriginal student achievement.	3.43	0.84	86%
29. I use the same criteria to assess all students.	2.86	0.85	57%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	3.18	0.98	61%

31. Aboriginal students have good study habits.	2.89	1.07	39%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	3.25	0.65	89%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	3.32	0.52	93%
34. Parent- teacher interviews are well attended by Aboriginal parents.	2.50	0.96	39%
35. I employ holistic teaching practices which engage Aboriginal students.	3.29	0.76	89%
36. This school does a good job of attending to the learning needs of Aboriginal students.	3.11	0.63	86%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	3.64	0.87	75%
38. Aboriginal students in my class rarely miss school.	2.14	0.93	21%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.	3.29	0.66	89%
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	2.79	1.03	50%
41. Aboriginal achievement is improving in this school.	3.25	0.89	79%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	2.39	1.29	21%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	3.11	1.29	75%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	3.86	0.80	75%
45. I employ culturally responsive curriculum resources in my teaching.	3.29	0.46	100%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	3.61	0.79	82%
47. Aboriginal students make smooth grade to grade transitions.	2.75	1.32	21%

### **Participant Responses with Respect to TPAAI Items by Category**

In a general sense, survey participants appeared to have greater unanimity of agreement where items that allowed them some measure of control or direct involvement were concerned. Items relating to instructional practice, professional practice, aligning school/divisional efforts to improve Aboriginal student achievement, creating positive learning environments for student learning, school programs and services to support Aboriginal student achievement, and the

historical and socio-economic contexts of Aboriginal achievement had greater evidence of participant agreement. Items relating to Aboriginal parent involvement and community involvement demonstrated a greater divergence of agreement where the TPAAI was concerned. An examination of the preliminary findings of the survey with respect to the domains conceptualized in chapter two proves instructional to determine where items of convergence and divergence lay. (See Appendix L Cumulative Report and Frequency Table for TPAA Inventory for a detailed report.)

### **Assessment**

Teacher survey participants expressed a diversity of viewpoints with respect the benefits of data from large scale standardized student assessments as embodied by statement 5, “Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.” With a mean of 2.93 and a standard deviation of 1.18, only 50 percent of survey participants agreed or strongly agreed with the statement. A further 14 percent indicated they did not know if AFL data was of use to them in planning to improve Aboriginal student achievement. Similarly, where item 29 was concerned with a mean of 2.86 and a standard deviation of 0.85, 57 percent of survey participants agreed that, “I use the same criteria to assess all students. On the other hand, items 9, 15, and 39 had relatively large means and small standard deviations (See Table 5.7). The items garnered greater degrees of agreement from all of the participants indicating perhaps that teacher led assessment was having a positive impact upon Aboriginal student learning outcomes.

Where the large scale standardized assessments such as the AFL were concerned, the relative utility of these assessment results used in divisional and school planning, were of lesser value to classroom teachers to plan and implement their respective instruction. Whether the data from such came too late to provide meaningful and timely feedback to students currently receiving



their instruction is unclear. (The data while collected in the spring is not available until the next fall when students have advanced to other grade levels or have potentially moved to other jurisdictions.) However, given the understandings research has provided about the need for assessment for learning to guide instructional practice, it is possible that the timeliness of the availability of this data may play a part in the nature of teacher survey responses. Furthermore, the fact that teachers indicated that they employed different assessment expectations for their students would seem to indicate that the same teachers were in fact using assessment for learning to differentiate instruction and therefore seek different assessment strategies and expectations to chart student achievement, including Aboriginal students.

### **Aboriginal Community Involvement**

The importance of strong community connections supporting improvement of Aboriginal student learning outcomes within the context of the holistic view of education held by Aboriginal people is well documented (Steeves et al. 2012; Volante, 2007; Silver et al. 2002; Canadian Council on Learning, 2007; 2009). Such involvement extends to shared governance, and engaging with schools to actively promote and facilitate curriculum and extended learning opportunities. With respect to Aboriginal community sharing in decision-making as part of the mandate of SCC's statement 14, "By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement." saw a diverse range of participant responses. The mean of 3.25 had a standard deviation of 1.11 indicating perhaps that while there may have been some agreement with the statement, the larger standard deviation would appear to indicate that there were more outliers for item 14. While 57 percent of the respondents agreed or strongly agreed with the statement, 25 percent disagreed or strongly disagreed and a further 18 percent did not know if SCC's allowed for shared decision-making between schools and Aboriginal communities. Furthermore, item 40, "I actively

collaborate with Aboriginal communities to improve Aboriginal student achievement” attained a mean of 2.79 with a standard deviation of 1.03 indicating again that there was a more diverse set of participant perceptions for this item. Only 50% of survey participants agreed or strongly agreed with this item while 43% of respondents disagreed or strongly disagreed with the statement and a further 7% did not know. Item 43, “I offer opportunities for Aboriginal students to extend their learning in the community” saw a mean of 3.11 with a standard deviation of 1.29, again indicating a wider diversity where teacher perceptions were concerned. Fifty percent of participants agreed or strongly agreed with the statement while a further 43% disagreed or strongly disagreed and 7% did not know. There was a stronger degree of accord with items 44 and 46 where 75% and 82% of respondents agreed or strongly agreed respectively with the items. Item 44 had a mean of 3.86 and a standard deviation of 0.80 while item 46 had a mean of 3.61 and a mean of 0.79.

Teachers interviewed for the qualitative section of this research for the most part did not express a detailed understanding of the importance of shared governance placed upon the SCC’s by the provincial government at least where policy was concerned. Similar sentiments appeared to be echoed by the quantitative survey component of this research. This may indicate that a greater degree of awareness currently does not exist about the shared governance component of the SCC so that teachers understand that the SCC is not merely a fundraising arm of the school but carries out important governance functions as well.

### **Aboriginal Parent Involvement**

As with community involvement, active parent engagement and collaboration remain paramount where achieving improved learning outcomes for Aboriginal students is concerned. Again, the strong connection between Aboriginal student achievement and parental involvement in schools supporting school initiatives to do such has been well documented (Bell, 2004; Brien

& Stelmach, 2009; Ermine, 2009; 2000; Leithwood, 2009; Phillips, 2006; Richards et al., 2008; Steeves et al., 2012; St. Denis, 2010; Thompson, 2009;). However, teachers completing the TPAA Inventory were less in agreement with item 2, “Parents of Aboriginal students support my high expectations for their child’s learning at school”, where a mean of 2.93 and a standard deviation of 0.97 saw 57% of survey participants agree or strongly agree with the statement. Such perceptions would seem to indicate that the respondents while prepared to recognize parents supported their expectations for learning such recognition was not a ringing endorsement. Item 7 of the survey, “Aboriginal parents share in decision-making in this school” achieved a mean of 3.04 and a standard deviation of 0.96. Sixty-four percent of participants Agreed or strongly agreed with the statement while 35% disagreed or strongly disagreed with the item. With respect to item 17, “Aboriginal parents are actively engaged in the life of this school”, a mean of 2.46 and a standard deviation of 0.92 had a result of 32% of respondents agree while 61% disagreed or strongly disagreed and a further 7% did not know. Eighty-nine percent of respondents agreed with item 22, “I provide Aboriginal parents with regular, on-going updates on their child’s progress towards their learning goals.” With a mean of 3.43 and a standard deviation of 0.69, respondents were generally in strong accord with the item. Where Aboriginal parent attendance at parent nights, item 34, was concerned, a mean of 2.50 with a standard deviation of 0.96 saw 39% of respondents to the survey agree or strongly agree with the statement and 54% disagree or strongly disagree and 7% did not know.

These results for teacher perceptions of Aboriginal parent involvement in school would seem to indicate that teachers feel that Aboriginal parents are not involved in the life of the school to the degree envisioned by initiatives undertaken by the Ministry of Education of Saskatchewan

(2005; 2009). Aboriginal parent involvement in school scored the lowest in terms of percentage of agreement of all items on the teacher survey.

### **Student Membership**

Where matters of responsive curriculum to invoke student membership were concerned with respect to item 27 from the TPAAI survey, there was a lack of unanimity among respondents to the statement, “Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.” A mean of 3.32 and a standard deviation of 1.02 were recorded where 67% of survey participants agreed or strongly agreed with the statement, 22% of respondents disagreed or strongly disagreed while a further 11 percent did not know if Treaty Education was helping to improve Aboriginal student achievement . Item 31, “Aboriginal students have good study habits”, achieved a mean of 2.89 and a standard deviation of 1.07. Only 39% of respondents agreed or strongly agreed with the statement whereas 46% disagreed and 15% did not know. A mere 21% of respondents agreed with item 38 which had a mean of only 2.14 and a standard deviation of 0.93. By contrast, items 1, 8, 11, 16, and 26 saw a greater unanimity of positive responses with respect to student membership as reflected in their means and standard deviations and percent of respondents agreeing or strongly agreeing with the statements.

In general, it would appear that teachers held more positive perceptions about Aboriginal student membership in relation to items on the survey that allowed them a greater degree of control such as student cultural affirmation, student safety, student belongingness, student engagement in their learning, and Aboriginal student achievement improving in the school were concerned. While the matter of culturally responsive curriculum was perceived positively, its large standard deviation indicated that there was less unanimity among respondents than the

aforementioned aspects. By contrast, teacher perceptions of Aboriginal student attendance and study habits were less positive.

### **Teacher Professional Practice**

Items on the teacher survey showing consistent positive responses fell within a variety of categories from the survey itself. Teacher professional practice including items 3, 18, 33, and 36 all showed a high level of commitment to professional development and collaborative practice through the work of PLC's. Means above 3.10 and standard deviations below .65 as well as agreement percentages averaging 91% for the four items would indicate that teachers believed they were working purposefully to develop and expand their capacity to respond to Aboriginal student instructional needs.

Whether this high degree of accord where professional practice was concerned was due in part to teacher perceptions that in matters such as professional development and the work of their respective PLC's lay within their power to control can only be speculated. However, given the degree to which they may feel they have less control in matters pertaining to parent involvement, community engagement, and student membership could explain the divergence of opinions held by teachers where these domains were concerned.

### **Teacher Instructional Practice**

Where teacher instructional practice was concerned, items 4, 6, 19, 30, 32, 35, and 45 from the teacher survey saw the most positive response rates. Item 4, "I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students" achieved a mean of 3.32 and a standard deviation of 0.61. While 93% of respondents agreed or strongly agreed with the statement, 7% disagreed with the item. Item 6, "I employ Aboriginal world views to enhance my instructional practice for Aboriginal students" attained a mean of 3.43 and a standard deviation of 0.74. Ninety-three percent of respondents agreed or strongly agreed with the item

while 7% disagreed. Item 19, "Aboriginal students are aware of my expectations for their learning" saw a mean of 3.50 and a standard deviation of 0.58 with 97% of respondents agreeing or strongly agreeing with the statement and 3% did not know. Item 32, "Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students" realized a mean of 3.25 and a standard deviation of 0.65. Eighty-nine percent of respondents agreed or strongly agreed with the item while 11% percent disagreed. Item 35, "I employ holistic teaching practices which engage Aboriginal students" saw item 45, "I employ culturally responsive curriculum resources in my teaching." By contrast, item 30 saw a mean of 3.18 and a standard deviation of 0.98. The percent of teachers agreeing or strongly agreeing with the statement,

"When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning", was 61%.

These results would appear to support teacher perceptions that they were engaging in instructional practices that were aiding and abetting positive achievement results for Aboriginal students in their classrooms. In particular, teachers perceived that they were engaging in culturally responsive and holistic teaching practices that would serve to align with Aboriginal ways of knowing and with Aboriginal world views. Such an instructional approach would serve to make teaching relevant and affirming to Aboriginal students while exposing non-Aboriginal students to these responsive practices as well. Again, given the degree of control teachers have over these aspects of their work lives, their positive dispositions seem understandable. The frequency tables for items relating to teacher instructional practice enumerated in Appendix L illustrate in tabular form the survey results for these items.

### **Achievement Contexts**

Teachers expressed a depth of understanding about the historical, and socio-economic, contexts that affect Aboriginal student learning and in some cases affect the circumstances under

which many Aboriginal students come to school every day. Such understandings are not surprising also given that the settings of community schools and the programs they offer are intended to address student learning in a holistic fashion. Nonetheless, survey respondents perceived positively that many Aboriginal students face learning challenges that may interfere with and negatively affect their learning at school. Item 10, “Societal inequities adversely affect Aboriginal student achievement,” and Item 13, “Economic disadvantage adversely affects Aboriginal student achievement.” found a 90% and 78% agree or strongly agree respectively. Item 28, “Historical issues adversely affect Aboriginal student achievement;” 81% of survey respondents agreed or strongly agreed with the item, and item 37.

### **School/Division/Ministry Alignment**

With respect to school/school division and ministry alignment, (items 21, 23, 24, 27, 41, and 47 ) survey respondents perceived in the main that there existed a relatively great deal of alignment among their schools, their school divisions and the ministry of education where improving achievement outcomes for Aboriginal students was concerned. The cumulative report for these items is found in Appendix L.

Item 21, relating to schools having supports in place to deal with Aboriginal student learning challenges found 96.4% of respondents agreed or strongly agreed with the statement. The item had a mean of 4.29 and a standard deviation of 0.6587. This item had the strongest levels of agreement of all the Item 23 found that teacher learning goals for Aboriginal students and school LIPs were well aligned with a mean of 4.25 and a standard deviation of 0.7005. A clear 96.4% of respondents agreed or strongly agreed with the statement. Item 24 concerning the alignment of school LIPs and divisional CIFs showed 89.3% of respondent’s agreed or strongly agreed with the item. The item had a mean of 4.36 and a standard deviation of 0.7801.

By contrast, item 25 relating to culturally responsive curriculum such as Treaty Education showed agreement or strong agreement with the statement at 67.8% with a mean of 3.79 with a standard deviation of 0.1.2280. Possibly this item had a weaker percentage of agreement because the curriculum is relatively new and when longitudinal data is attained, perceptions may change and be more in agreement. At the point of this writing however, such beliefs on the researcher's part are purely speculative. Item 41 pertaining to improving Aboriginal student achievement found 78.6% of respondents agreed or strongly agreed with the statement. The item had a mean of 3.82 and a standard deviation of 0.9449. Lastly, with respect to the phenomena of alignment, item 47 found only 21.4% of respondents perceived that Aboriginal students made smooth grade to grade transitions. The item had a mean of 2.54 and a standard deviation of 0.9816. These perceptions concur with the literature and data relating to Aboriginal student transitions that show student mobility and transience mitigates against their making smooth grade-to-grade transitions. Interestingly, teachers' perceptions of alignment to improve Aboriginal student achievement were most positive pertaining to issues over which they had the most control such as their learning goals, school supports, and school LIPs.

### **Reliability of Survey Items, Scale: All Variables**

A Cronbach's Alpha reliability coefficient of .864 was attained on the 47 closed responses for the teacher survey instrument. Field (2009) noted that coefficients of between .7 and .8 are desirable, but that the coefficient will increase relative to the number of items on a given survey. Furthermore, Field noted that a one-time administration of a survey can further inflate Cronbach's Alpha and that therefore, caution should be exercised when interpreting the results for the survey under such circumstances. Six items, Question 4, Question 6, Question 10 Question 12 and Question 37 attained small or negative values relative to *Corrected Item – Total Correlation*, but the degree to which these items would affect the Cronbach's Alpha if the Item is



*Deleted* was very small, ranging from .865 to .866. (See Appendix M: Results of the Cronbach's Alpha for a full report.)

**Table 5.4: Items Attaining Small or Negative Values and their Affect on Cronbach's Alpha if Deleted.**

Survey Item	Corrected Item – Total Correlation	Cronbach's Alpha If Item Deleted
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for aboriginal students.	-.028	.866
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	0.15	.866
10. Societal inequities adversely affect Aboriginal student achievement.	0.52	.865
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	0.74	.865
37. Inter-generation effects such as the residential school experience adversely affect Aboriginal student achievement.	-0.25	.868

### Statistical Significance

The survey participants were teachers from six provincial community schools in Saskatchewan residing in three distinct geographic regions of the province urban, rural, and northern. Of the original 139 possible participants, 28 (21.87%) agreed to complete the survey, 11 did not consent and 100 chose not to participate, but did not respond to the survey request. The low sample total was cause for concern given that sample size plays a major role in rejecting or accepting the null hypothesis (Utts, 2005). However, Cohen (2003) offered that  $\alpha = .05$ , a sample size of 28 is necessary (p. 434). It was decided that again given the small sample size, t-Tests comparing two independent sample means would be appropriate for tests of significance.

### The Results of t-Tests Comparing Two Independent Sample Means

The results of t-Tests  $p < 0.05$  comparing two independent sample means for all 47 survey items by means of Training Technologies Inc.( 2011) were undertaken for:

- Aboriginal and non-Aboriginal teachers;
- teachers who had attained Native Studies credits and those that had not;
- male and female teachers;
- teachers with high levels and low levels of teaching experience;
- classroom teachers and non-classroom teachers; and
- teachers from Urban and Rural jurisdictions and teachers from a Northern jurisdiction.

Hypothesis testing found that for some survey items, significant differences were found and therefore the null hypothesis for these items was rejected.

Table 5.5 below indicated that for items 1, 4, 9, 10, 18, 22, 43, and 45, significant differences were found between the means of Aboriginal and non-Aboriginal teachers. (See Appendix N.)

**Table 5.5: t-Test Comparing Two Independent Sample Means, Aboriginal and Non-Aboriginal Teachers for TPAI Inventory (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	I am a non-Aboriginal person.	19	4.37	0.995	87.4%	53%
	I am an Aboriginal person.	9	3.00*	1.500	60%	22%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	I am a non-Aboriginal person.	19	3.96	0.780	79.0%	15.9%
	I am an Aboriginal person.	9	4.89*	0.333	97.8%	88.9%
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	I am a non-Aboriginal person.	19	3.47	0.697	69.4%	42%
	I am an Aboriginal person.	9	3.89*	0.333	77.8%	89%
10. Societal inequities adversely affect Aboriginal student achievement.	I am a non-Aboriginal person.	19	4.00	0.882	80%	26.3%
	I am an Aboriginal person.	9	4.56*	0.527	91.2%	55.6%

18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	I am a non-Aboriginal person.	19	3.11	0.459	62.2%	16%
	I am an Aboriginal person.	9	3.56*	0.527	71.2%	56%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	I am a non-Aboriginal person.	19	3.26	0.734	65.2%	26%
	I am an Aboriginal person.	9	3.78*	0.441	75.6%	78%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	I am a non-Aboriginal person.	19	2.89	0.809	57.8%	11%
	I am an Aboriginal person.	9	3.56*	0.527	71.2%	56%
45. I employ culturally responsive curriculum resources in my teaching.	I am a non-Aboriginal person.	19	3.11	0.315	62.2%	11%
	I am an Aboriginal person.	9	3.67*	0.500	73.4%	67%

\*Denotes significant difference. (See Appendix N: t-Test Comparing Two Sample Means, Aboriginal and Non-Aboriginal Teachers for TPAA Inventory for a full report.)

The items listed in Table 5.13 remain crucial because they directly relate to important areas where research indicates that school and teacher practice need to focus to enhance learning outcomes for Aboriginal students. Item 1 relates directly to cultural inclusiveness with respect to student membership in the school setting. In fact only 22% of teachers of Aboriginal ancestry strongly believed their school culturally affirms Aboriginal students while 56% of non-Aboriginal teachers strongly believed their school is culturally affirming Aboriginal students, then this suggests that more dialogue between the two teacher groups would be beneficial in order to facilitate further understanding about what may constitute student cultural affirmation. Since such affirmation has been identified as imperative for Aboriginal students to connect with their respective schools (Bell, 2004; Castagno & Brayboy, 2008; Kanu, 2005; Leithwood, 2009; Richards et al., 2008; Silver, 2002), it may be necessary to undertake additional work in the area of school climate and culture to promote and enhance Aboriginal student cultural affirmation.

## **Teachers of Aboriginal and Non-Aboriginal Descent**

The matter of employing Aboriginal worldviews and culturally responsive curriculum to make learning relevant for Aboriginal learners has also been identified as being essential to improving Aboriginal student achievement (Berger et al., 2006 ; Demmert, 1999; Kanu, 2005; Silver et al., 2002). Questions 4 and 45 contained within Table 5.10 would indicate that Aboriginal teachers more strongly agree that they incorporate Aboriginal worldviews and culturally responsive curriculum into their teaching practice than do their non-Aboriginal teaching counterparts. This result is not necessarily surprising given the respective comfort levels of each teacher group in relation to the incorporation of such curricula. However, if the Treaty Teachings for instance as an example of culturally responsive curriculum is to take permanent and inclusive root in the Saskatchewan public education realm then perhaps a more concerted and coordinated in-service of all teachers will need to continue and expand to affect such.

With respect to assessment practices, items 9, 15, and 22 revealed that significant differences existed in teacher responses between Aboriginal and non-Aboriginal teachers. Specifically for item 9, 89% of Aboriginal teachers believed that they regularly employed assessment for learning to inform students of their respective progress towards their learning goals. By contrast, 42% of non-Aboriginal teachers strongly believed they employed assessment for learning for similar purposes. Given the importance assessment for learning plays with respect to differentiating instruction (Bell, 2004; CLC, 2007; 2009; Demmert, 2001; Kanu, 2005; Marzano, 2003; Reeves, 2000; Silver, 2002; Stiggins, 2005), these results are disconcerting. Where item 15 was concerned, 89% of Aboriginal respondents strongly agree that their assessment practices were aligned with efforts to improve Aboriginal student achievement. Twenty-one percent of non-Aboriginal teachers were similarly disposed for item 15. Again, if

assessment practices do indeed support improved learning outcomes, then this aspect of teaching practice will require greater consistency and uniformity where all teachers are concerned.

Finally, item 18 revealed surprising results given the understandings that exist about keeping parents informed about their child or children's achievement. A full 89% of Aboriginal teachers strongly agreed that they provided the parents of Aboriginal students with regular, on-going updates on the progress of their child towards their respective learning goals. On the other hand, only 26% of non-Aboriginal teachers strongly agreed with the statement. Given the negative perceptions held about Aboriginal parent involvement expressed with items 2 and 17, it would appear that non-Aboriginal teachers may be missing important opportunities to communicate and collaborate with Aboriginal parents to improve learning outcomes for Aboriginal students.

Perhaps the most interesting area of Aboriginal and non-Aboriginal teacher divergence with respect to the TPAA Inventory are concerned rests with approaches to professional development to improve Aboriginal student achievement. Item 18 from the survey found that 56% of Aboriginal teachers strongly agreed that their professional development was expanding their instructional practice to improve Aboriginal student achievement. Only 16% of non-Aboriginal teachers strongly agreed that their professional development was expanding their instructional practice to the same degree. It is suggested here that if teachers do not believe professional development will improve one's practice then teachers will not engage it in a manner that will bring positive results (Seashore Louis et al., 2010). Either non-Aboriginal teachers may perceive that professional development opportunities that may positively impact learning outcomes for Aboriginal students are not being offered or they may not be accessing those that are in fact offered.

Lastly, with respect to item 43 of the survey, concerning offering opportunities for Aboriginal students to extend their learning in the community, 56% of Aboriginal teacher respondents strongly agreed that they did so, while only 11% of non-Aboriginal teacher respondents strongly agreed that they offered such opportunities to their students. Given the negative perception with respect to item 40 and active community collaboration, the results are not surprising; however, given the importance placed on the role of community in educating Aboriginal students (Canadian Council on Learning, 2007; 2009; Silver et al. 2002; Steeves et al., 2012; Volante, 2007), it would appear that enhanced community engagement by all teachers may see positive results in achievement for Aboriginal students but also a transformation in terms of how schools and communities engage one another.

Table 5.6 examined sample means for Urban/Rural and Northern survey participants. Only one item was found to be significantly different where the two groups were concerned. (See Appendix P).

**Table 5.6: t-Test Comparing Two Independent Sample Means, Participant Teachers in Urban and Rural Schools or Participant Teachers in a Northern School for TPAA Inventory (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Urban and Rural	14	3.79	0.975	75.8%	21.4%
	Northern	14	4.50*	0.519	90%	50%

Item 6 of the TPAA Inventory showed there was a significant difference between the responses of teachers teaching in Rural and Urban schools than with those responses of their Northern counterparts. The results for Table 5.14 appear to indicate that teachers teaching in Urban and Rural communities were less inclined to incorporate Aboriginal world views to

enhance instructional opportunities for Aboriginal students than were teachers teaching in Northern jurisdictions. The reasons for this remain purely speculative, but potentially it may rest with the fact that the Northern school division has greater overall numbers of Aboriginal students within their respective school populations and the Aboriginal communities also reside in closer proximity to the schools themselves. (See Appendix O: t-Test Comparing Two Sample Means, Participant Teaches in Urban and Rural Schools or Participant Teaches in a Northern School for TPAA Inventory for a full report.)

Table 5.7 examined two sample means for survey participants who had Native Studies credits or did not have Native Studies credits. Two items were found to be statistically significantly different. (See Appendix P)

**Table 5.7: t-Test Comparing Two Independent Sample Means, Participant has Native Studies Credits on No Native Studies Credits for TPAA Inventory (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Native Studies Credits 1 or more I have not completed any credit courses in Native Studies.	20	3.70	1.46	74%	40%
		8	4.50*	0.53	90%	50%
34. Parent-teacher interviews are well attended by Aboriginal parents	Native Studies Credits 1 or more I have not completed any credit courses in Native Studies.	20	2.95	2.03	59%	0%
		8	2.25*	2.25	45%	0%

Items 1 and 34 in Table 5.15 demonstrated a significant difference in the responses of teachers indicating credits in Native Studies and those not on the TPAA Inventory. With respect to item 1, it would appear that teachers without Native Studies credits perceived that their respective schools culturally affirmed Aboriginal students while those with such an academic background were less inclined to believe their respective schools offered a culturally affirming climate. The difference might be attributed to the fact that the former sample because of its lack

of background is of the belief that school efforts to culturally affirm Aboriginal students are being met with success. By contrast, those teachers who have an academic background in Native studies perceived that school efforts to culturally affirm Aboriginal students are not successful. It would seem that a constructive dialogue between the two groups within their schools and their divisions would be required to gain some accord concerning what efforts may or may not be culturally affirming to students. One way in which accord might be reached is to develop an assessment rubric that would measure agreed upon criteria that would measure Aboriginal student affirmation on a school wide basis to be administered as a self-test. Such an assessment would serve not only as a measurement to be scored, but also as a conversation starter for school staffs to seriously consider what culturally affirms Aboriginal students.

Item 34, concerning Aboriginal parent attendance at parent teacher interviews may be explained in terms of a greater degree of understanding by teachers with the academic background of Native Studies as to the context, historical or otherwise that may mitigate against high rates of Aboriginal parental attendance at parent teacher interviews. Their respective attendance levels may be higher because there is a greater understanding of the need to actively cultivate parental involvement in parent teacher interviews. Perhaps there remains a critical need for teachers with such understandings to share them with all staff to enhance active cultivation of “relational trust” that may result in higher Aboriginal parental involvement in parent teacher interviews. (See Appendix P: t-Test Comparing Two Sample Means, Participant has Native Studies Credits on No Native Studies Credits for TPAA Inventory for a full report.)

Table 5.6 examined two sample means for classroom and non-classroom teachers. Only one item was found to be statistically significantly different for this t-Test.



**Table 5.8: t-Test Comparing Two Independent Sample Means, Classroom Teachers and non- Classroom Teachers for TPAА (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Classroom Teacher	21	3.86	0.910	77.2%	23.8%
	Not a Classroom Teacher	6	4.67*	0.516	93.4%	67%

Item 37 concerning Aboriginal student achievement contexts showed a significant difference between classroom teachers and those teachers serving in a support role such as counsellors and learning assistance teachers. Non-classroom support teachers perceived more strongly that inter-generational effects such as the residential school experience would adversely affect Aboriginal student achievement while classroom teachers were of the opposite point of view. Such a result is not surprising to the extent that generally, support teachers are more experienced than their classroom counterparts and they also tend to have a background in achievement indicators and factors leading to student success. In examining the demographic data further, on this survey, non-classroom teachers averaged 17.5 years teaching experience, two were of Aboriginal decent, and five were female, and one was male. These demographic factors may help explain the significant difference with classroom teachers where Aboriginal achievement contexts are concerned, but they also would seem to indicate that there is a need for more dialogue with their classroom counterparts about the role that historical circumstances might play in affecting Aboriginal student achievement in a general context. (See Appendix Q: t-Test Comparing Two Sample Means, Classroom Teachers and non- Classroom Teachers for TPAА Inventory for a full report.)

Table 5.9 examined two sample means for survey participants with high and low teaching experience. A total of five items were found to be of statistical significance for this test.

**Table 5.9: t-Test Comparing Two Independent Sample Means, Participants have High or Low Teaching Experience for TPAA Inventory (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Teaching Experience Low	17	3.76	0.970	75.2%	17.6%
	Teaching Experience High	11	4.45*	0.522	89%	45.4%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Teaching Experience Low	17	4.06	0.899	81.2%	29.4%
	Teaching Experience High	11	4.64*	0.505	92.8%	63.6%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Teaching Experience Low	17	3.41	1.372	68.2%	29.4%
	Teaching Experience High	11	4.36*	0.674	87.2%	45.4%
29. I use the same criteria to assess all students.	Teaching Experience Low	17	3.71	1.213	74.2%	29.4%
	Teaching Experience High	11	2.82*	0.982	56.4%	0%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Teaching Experience Low	17	3.12	1.111	62.4%	11.7%
	Teaching Experience High	11	4.27*	0.905	85.4%	0%

Table 5.9 found five items from the TPAA Inventory showing significant differences in perception between teachers with high teaching experience (more than 10 years) and those with low teaching experience (ten years or less) with respect to Aboriginal student achievement. Specifically, items 12, 15, 27, 29, and 30 showed significant differences with respect to teacher perceptions of Aboriginal community involvement, assessment, culturally responsive curriculum, and culturally responsive teaching practices.

Item 12 indicated a significant disconnect in terms of more experienced teachers holding that Aboriginal communities offer opportunities for students to extend their learning in the wider Aboriginal community. This result is perhaps not surprising given that teachers with greater experience may be more inclined to involve Aboriginal communities in their children's learning.

Certainly the literature supports community involvement as being central to Aboriginal student success. Item 15 investigated teacher perceptions of how their assessment practices were aligned to improve Aboriginal achievement. Again, more experienced teachers indicated that they believed their assessment practices were aligned to improve Aboriginal student achievement more so than their less experienced counterparts. Similarly, where item 29 was concerned, more experienced teachers were of the belief that they differentiated assessment while their younger counterparts used the same criteria to assess all students. With respect to culturally responsive curriculum, item 27, more experienced teachers believed that such curriculum was helping to improve Aboriginal student achievement. Finally, more experienced teachers also believed that culturally responsive teaching practices would more fully engage Aboriginal students in their learning than did their less experienced colleagues. As with the other items from Table 5.17 an opportunity for staff mentoring of less experienced staff would appear to be presenting itself. (See Appendix S: t-Test Comparing Two Sample Means, Teachers with Teaching Experience and Teachers with High Teaching Experience for TPAA Inventory for a full report.)

**Table 5.10: t-Test Comparing Two Independent Sample Means, Participants are Male or Female for TPAA Inventory (Selected Items)  $p < 0.05$**

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
22. I provide Aboriginal parents with regular, ongoing updates as to their child's progress towards their respective learning goals.	Male	7	3.57	0.787	71.4%	0%
	Female	21	4.48*	0.750	89.6%	57.1%

While only item 22 from the survey found a significant difference in the perception of male and female teachers, this outcome remains puzzling in that it deals with the area of assessment of Aboriginal student achievement and the reporting of such to Aboriginal parents. Ongoing

communication with parents about their child’s progress reinforces “relational trust”. This result appears to indicate that male teachers have potentially given up performing a practice that is essential to all students’ learning. Not to engage in ongoing communication flies in the face of research that clearly underscores the importance of engaging parents in the progress of their children in school. Historically, the act of deliberately excluding Aboriginal parents in the schooling of their children in no small way contributed to the Residential school legacy. The need for deliberate and ongoing professional development to address this issue should be high on the list of PLC agendas if the formative results of this research holds in a wider sample of teachers. (See Appendix R: t-Test Comparing Two Sample Means, Male or Female Teachers for TPAA Inventory for a full report.)

### **Linking the Data Sources for the Study**

To facilitate the linking of the qualitative and quantitative data collected for this research the survey questions, percentage of respondents agreeing or strongly agreeing with the 47 Likert scale survey items and anecdotal qualitative data taken from the semi-structured interviews discussed in Chapter Four as well as comments from the four open ended responses included on the survey instrument are presented in tabular form. The data are arranged by domain and are illustrated in an integrated data interface.

### **Qualitative and Quantitative Data Interface by Domain**

**Table 5. 11.1: Teacher Instructional Practice**

<b>Survey Questions by Groups:</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	93%	#14. I Incorporate Aboriginal world views within the subject area and provide additional supports such as time, instruction, and interventions.
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	93%	#12. I invite the school Elder into my classroom when relevant. I try to make the lessons relevant to their lives. Fundamental differences in core cultural values. Our school system still rewards and values individual competition. From my experience, in the majority of

		cases, Aboriginal students don't see the point in trying to "outdo" their peers. RHS#1
11. Aboriginal student success is recognized and celebrated in my classroom.	86%	# 15. They enjoy school. They attend on a regular basis. They're connected positively to myself and their peers.
19. Aboriginal students are aware of my expectations for their learning.	96%	#4. Clear expectations - break down of assignments. Tips and tricks are always shared and past student work is offered as models and guidelines.
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	61%	#21. Not all teachers are celebrating Aboriginal culture nor relating to Aboriginal culture in their classrooms. We were on a track of educating teachers in our school division, but that was cut with the new director, the A Time for Significant Learning program initiative of having one school goal being related to the ATFSL initiative. This is unfortunate as even though they may say teachers are actually doing it anyways...it is not occurring as it should be unless people are held accountable.
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	89%	#18. I think our school has come a long way in Aboriginal education, since I attended there. We now have culture camps, Treaty education, and Native studies. We still have a long way to go, but I think we have made huge progress in the last 5 years.
35. I employ holistic teaching practices which engage Aboriginal students.	89%	#14. Provide a variety of teaching strategies to engage students. Provide a variety of teaching strategies to engage students.
45. I employ culturally responsive curriculum resources in my teaching.	100%	#16. Culturally relevant stories and books are read with students, posters of FNIM people are displayed. The Cree is alphabet displayed, Cree color words and numbers, Cree 'value' posters are displayed and discussed in relation to Christian values. I share my upbringing as an Aboriginal woman with my students and try to make lessons culturally relevant, and respectful.

**Table 5. 11.2: Parental Involvement in School**

<b>Survey Questions by Groups: Parent Involvement in School</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	57%	#5. It's frustrating to not see parental support and unrealistic expectations for teachers to just let the kids 'slide' through. I want them to learn, not squeak through. They need self-confidence and a sense of purpose to drive their academic achievement. #25. Family expectations play an important role in students' achievement. For some of our Aboriginal students, they are the first in their extended family to graduate from high school. For others, their families expect college or university education. Generally, if you look at the area (of parental involvement) non-Aboriginal parents seem to have higher expectations for the academic learning of their children... I would say the expectations (for Aboriginal parents) are different, less academic. It's not that they are not valued but their expectations are different. Lots of parents want to know is my kid behaving. Is my kid nice? Is my kid

		smart? This question kind of leads to the academic side. From society's norm, they are different, but they just are not based upon academics. Parents just want to know, is my kid good? Parents aren't asking can they read or can they write (NES Teacher)?"
7. Aboriginal parents share in decision-making in this school.	64%	<p>The School Community Council will be the closest that you will get (to shared decision-making). But, I can guarantee that there are not too many FN parents on the SCC. Why? A lot of FN parents do not like to be in the schools. This kicks back to the residential school system. Some do not even like being in the building. There can be a lot of resentment of FN parents to the school system because it is like the criminal system, it is full of FN people (RHS Teacher #1).</p> <p>Yes, I would say that parents are involved. We have a SCC. There are meetings held with parents to let them know how their child is doing. We have parent interview nights twice a year. We encourage teachers to call parents if there are issues and then we set up formal meetings to brainstorm how we can help students. We have a student support team and the teacher would be part of that meeting. I do a lot of meetings in my role as support teacher. For instance I have an upcoming meeting about a student who is on a personal learning plan. We are meeting with her mom to discuss her progress. We do a lot of that and I am not always involved. Sometimes teachers just do their own meetings, but she is on my caseload. We will make a plan about where we want to go and how we will support that. It is not always successful, but we try. RHS#2</p>
17. Aboriginal parents are actively engaged in the life of this school.	32%	<p>. Aboriginal parents putting their nose in and pushing their child, I don't see a lot of that. They will support them and say good job. They will support them with their clothing and their food, but anything beyond that is up to the child. It is what I see. RHS #4</p> <p>With high school it is different. Kids do not want their parents hanging around. I do not want to pigeon hole this, but if you are familiar with First Nations history and culture, it is really on the onus of the individual to do well. So, there is a little bit of that plays a part as to whether there is parent involvement or not. The individual will find their path. I have heard that from some parents when I have made phone calls home. Parents will say, you have to find your own path. And yes, they are right, but is there a way we can encourage that together? There is not so much the idea that you have to succeed, that we are going to push you toward that and you have to do it. It is not perceived like that. (RHS #4)</p> <p>We have an SCC, the same as all other schools do. Although I do not sit on the council, I think we face the same issues as other schools of getting First Nations parents involved in this kind of committee work. We just had an open house for our students coming next fall, and yes, we do have trouble getting First Nations parents out to the school. There is a possibility that some of that is cultural. It's possible it's a bad time of the year. We do</p>

		post all kinds of information. For my students in particular, I send newsletters and notes home, just like the elementary schools do because we work really hard at communicating with parents. We invite them into the building wherever and whenever we can. It works. We have a lot of parental involvement in my program (UHS Teacher).
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	89%	#3. I assess in a variety of ways that benefit all students in a universal classroom. Feedback is frequent and done in a variety of manners - primarily oral feedback and interviews. Progress check ins. Rubrics and expectations are always discussed before an assignment and students are always given hard copies. They are also posted on line for parents who choose to access them.
34. Parent-teacher interviews are well attended by Aboriginal parents.	39%	Most parents who come to the school are very interested in their children's progress. They have had positive educational experiences themselves. Unfortunately, often the parents we need to see are ones that are difficult to reach. They don't tend to come to the school for any reason. They still want their kids to do well, but they are just not as involved. As for the school trying to get more parents involved, in the past we have held dinners, or open houses where we have served food, and held get to know the teachers meetings. These efforts have been somewhat successful .... (RHS #4) We have parent interview nights twice a year. We encourage teachers to call parents if there are issues and then we set up formal meetings to brainstorm how we can help students. We have a student support team and the teacher would be part of that meeting. (RHS #2)

**Table 5. 11.3: Assessment**

<b>Survey Questions by Domains: Assessment</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	50%	#14. I don't think having separate assessment for Aboriginal students is doing them any justice. I assess based on curriculum outcomes that all students should be able to achieve. The only time that I assess differently is if the student is ESL.
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	93%	#1. Using rubrics enables students to understand evaluation. All tests and exams are pre-tested and re-written for upgrade, very few quizzes, tests and exams, more continuous evaluation. #27. One on one coaching and explanation of assessment practices allow each student to engage in the assessment process.
15. My assessment practices align with efforts to improve Aboriginal student achievement.	93%	# 14. My assessment practices help improve Aboriginal student achievement by recognizing different learning styles and by giving varied assessment strategies throughout the year. I also recognize that aboriginal students who have English as a second language, may be unable to communicate fully their knowledge by writing alone.
29. I use the same criteria to	57%	#22. Assessment practices are adjusted according to each

assess all students.		<p>student, not their culture.</p> <p>#16. I don't think having separate assessment of Aboriginal students is doing them any justice. I assess based on curriculum outcomes that all students should be able to achieve. The only time that I assess differently is if the student is ESL.</p> <p>#28. My assessment practices help both non-aboriginal and aboriginal alike.</p>
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.	89%	<p>#15. I adapt instruction to meet individuals' needs. I continuously monitor learning to ensure adaptations are being made and continue to adapt as often as needed. The assessment (WJ3) is an assessment that can be used by the division to build a student learning profile but it is not a psychological assessment in itself. It gives us a background to see where students are with reading and writing. It is used also to help diagnose learning disabilities. I do not diagnose myself but the assessment results would be used by the educational psychologist. The assessment may tell us that a student is at a grade 4 level in grade 10 and this will tell us that the student is going to have a hard time with the work. There is something going on there. (RHS #3)</p>

**Table 5.11.4: Student Membership**

<b>Survey Questions by Domain: Student Membership</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
1. Aboriginal students are culturally affirmed in this school.	79%	<p>#1. I read Aboriginal/First Nations stories to the children.</p> <p>#12. Culturally relevant stories and books are read with students, posters of FNIM people are displayed, Cree alphabet displayed, Cree color words and numbers, Cree 'value' posters displayed and discussed in relation to Christian values, etc. -share my upbringing as an Aboriginal woman with my students -try to make lesson culturally relevant, with respect and positivity emphasized</p>
8. Aboriginal students feel safe in this school.	93%	<p>#8. The manner in which Aboriginal students interact with both other students and staff show confidence which translates to success.</p> <p>When they feel comfortable approaching me for help, they come and ask questions and don't feel intimidated.</p>
11. Aboriginal student success is recognized and celebrated in my classroom.	86%	<p>#12. I have found that Aboriginal students do not want to be singled out for any reason. But, I do find that that our Aboriginal students are very culturally aware and do celebrate 'it' on a daily basis. Possibly this is why I am bothered by it being separated, as it is the norm for our school. I can only speak for what is going on in my classes, and being Aboriginal helps make that connection with Aboriginal students. As for what may happen in other classes, I only hear from students what they say or might feel. And unfortunately not all teachers are celebrating Aboriginal culture nor relating to Aboriginal culture in their classrooms .... This is unfortunate as even though they may say teachers are actually doing it anyways...it is not occurring as it should be unless people are held accountable.</p>



16. Aboriginal students feel they belong at this school.	93%	#5. They attend. They take ownership of catching up on work they have missed. They talk in class and share their views. They sit wherever and there is a mingling of students. #. I ask students for input when planning classroom activities. This gives them a sense of control and being valued as learners in the school environment. Another indicator is when students feel comfortable in accompanying their family to school for various events or functions. The younger grades, the 7's, 8's, and 9's spend more time with one teacher. The grade 9's start and end the day with the same teacher, so there is a good morning and a good-bye aspect to the day (NHS Teacher).
26. Aboriginal students are actively engaged in their learning in my classroom.	82%	#4. We do a lot of hands on learning. Provide plenty of examples. Relate to Aboriginal experiences and culture. Provide a welcoming learning environment. I feel students are being successful when they are engaged with the activity going on in the class.
31. Aboriginal students have good study habits.	39%	#28 I do the same as I would for any other student. I allow students to interact and share; modify when students need; add some need extra time because doing homework does not exist at home for some students, so more time is needed at school.
38. Aboriginal students in my class rarely miss school.	21%	#17. When attendance is lacking, I try to make sure the students get caught up with material missed so they have a better chance at success.
41. Aboriginal achievement is improving in this school.	79%	#5. I have limited experience in teaching Aboriginal students; however, I do believe that our school is on the right track. We have implemented many changes and new programs that, from the latest data, seem to be having a positive impact on student achievement. Students are provided with up-to-date assessments on their progression. Students are offered extra time (after school) to gain a deeper understanding of concepts not understood or if extra help is needed. Furthermore, students are given opportunities for differentiated assessment to show their learning.

**Table 5.11.5: Community Involvement**

<b>Survey Questions by Domain: Community Involvement</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	86%	#1. I have our Elder come into the classroom to help educate students.
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	57%	The SCC works at this. It reflects the population of the community. Our teacher reps is Aboriginal (on the SCC). Staff may attend the meetings too. (NHS#1)
20. School services such as a meals program are helping to	100%	We are pretty fortunate being a community school in that we get extra resources such as EA's (educational

improve Aboriginal achievement.		assistants). We have special community school programs to try to keep kids interested (in school), after school programs and noon hour programs. We also have a meal program from the community school room. (RHS #4)
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	86%	We look at how we can help all kids. So we have Elders come into the school. Does this benefit FN kids? Sure it does, but it also benefits all of the other students as well. (RHS #1) I think we have the mandate to keep each other accountable by teaching treaties and have training in Cree language. We have a Cree teacher. We have an IMED Committee and we have cultural days and Elders supper. (NES #1)
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	50%	#As a beginning teacher, I also think there should be information on how to be culturally sensitive and appropriate when dealing with members of Aboriginal communities. It is critical that there be more Aboriginal awareness in education, but not just cultural but also social and historical. #1. Incorporate Aboriginal content into all teaching areas 2. Teach about racism and stereotyping 3. Have elders to teach about knowledge related to the curriculum I am teaching
43. I offer opportunities for Aboriginal students to extend their learning in the community.	75%	#6. When possible, I bring in Aboriginal guest speakers. #9. Incorporate Aboriginal Worldviews within the subject area Provide additional supports such as time, instruction, and interventions.
46. After school programs offered by this school are helping to improve Aboriginal achievement.	82%	We have a literacy/ numeracy team. They team teach language instruction and math instruction. It seems to be working quite well. Homework club, like group teaching Guided Reading. We have two catalyst teachers. Some are receptive and some are reluctant. The principal is really pushing this. The commitment is there. I have a voice. (NES#1)

**Table 5.11.6: Achievement Contexts.**

<b>Survey Questions by Domain: Achievement Contexts</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
10. Societal inequities adversely affect Aboriginal student achievement.	89%	#8. I believe that schools have the responsibility, and the honour, to assist Aboriginal students in reaching their potential. Canadian educational institutions have been very much involved in creating the current inequities and barriers. It is now time to collectively work to acknowledge the past, positively influence today and change the outcomes of tomorrow. Educators need to acknowledge and incorporate Aboriginal knowledge and ways of knowledge. Lip service is not enough.
13. Economic disadvantage adversely affects Aboriginal student achievement.	79%	Lots of my FN students do not have that opportunity because they may not have computers in the home or they have computers but they are not internet accessible. That creates a learning gap. (RHS #1)
28. Historical issues adversely affect Aboriginal student	86%	#25. Family values are extremely important among the First Nations; it is often difficult for young people to leave

achievement.		<p>their home community to go further their education.</p> <p>Aboriginal Parent Expectations: Some do. You bet. Most of those I talk to want their young people to succeed. They want them in school and working because they want them to be different. They want them to be successful. Possibly it is because maybe they were not as successful as they could have been themselves. They want success for their children. Any that I have spoken to have wanted more for their children. (RHS#3)</p> <p>#27. I have taught Native Studies 30 in the past and was disappointed to see that a curriculum and good resources were not available. As a beginning teacher, I also think there should be information on how to be culturally sensitive and appropriate when dealing with members of Aboriginal communities.</p>
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	75%	<p>#27. It is critical that there be more Aboriginal awareness in education, not just cultural but also social and historical.</p> <p>#9. I think Aboriginal Achievement is all relative. I was successful in school both academically and athletically not because teachers assessed me separately or differently but because my family and I value education. You are always going to have students and families that are going to achieve greatness because that is what they want. Some students need to leave school for years before they realize that they need an education which is why there are so many adult ed students.</p>
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	21%	<p>#20. I am pleased that more light is being shed on the fact that as educators we need to be working on addressing the gap in achievement.</p> <p>#6. I believe that schools have the responsibility, and the honour, to assist Aboriginal students in reaching their potential. Canadian educational institutions have been very much involved in creating the current inequities and barriers. It is now time to collectively work to acknowledge the past, positively influence today and change the outcomes of tomorrow. Educators need to acknowledge and incorporate Aboriginal knowledge and ways of knowledge.</p> <p>Lip service is not enough..</p>

**Table 5.11.7: Alignment**

<b>Survey Questions by Domain: Alignment</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
21. This school has supports in place to deal with Aboriginal student learning problems.	93%	<p>#2. It is very difficult for me to answer the questions in this survey because I cannot group the whole aboriginal culture together into a group, I do not even look at them that way. I teach to all of the people in my class and I do not stereotype them because of their culture. I include text and teaching resources that affirm all cultures and it depends on each family and their own circumstances as to how they deal with the support of their child. It would be wrong for me to say 'they' do not attend regularly or 'they' do not have high expectations for their children, because just like people from every culture some do and some do</p>

		<p>not.</p> <p>This is my first year here and there are lots of support teams but they just do not work together. There are so many supports but they do not know how to work together. I have one troubled child and I meet with four different committees and there is no use for that. We should be meeting as one committee. I am meeting four different times with four different people and it is not a team. You are hearing different messages from each team so we need to collaborate more. You could do a lot of wonderful things here at the school if you had more collaboration. That is failing here and that is why some of our kids are falling off the hinges at times. I think the school is aware of this. (UES #1)</p>
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	93%	<p>We meet on a regular basis. We have grade alike meetings. It's just not Aboriginal students but every student. We look at kids who are failing and then we come up with a plan. We have a referral process that teachers have to go through. If they want to make a divisional referral, they need to go through the student support process to do this. We have a tutorial room where students may be sent if they are withdrawn from a class (to make room on their schedule). They go in to Tutorial. We try to do it out of a non-academic class because for high school it depends on which ones (classes) they are failing and which ones we can save. Right now for grade 8's and 9's, they have elective classes in first and second periods and we will pull them in to the student support room and get them caught up on their homework. We have a school improvement plan. I can't speak to everything that is in it although the principal can. (UE#1)</p>
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	89%	<p>Right now we are so focused on language arts which is also Board driven. That's another problem with achievement gaps. Schools will implement Board driven goals. Also the lack of education assistants or teacher assistants, and it did not help when the government pulled the funding on Special Education, in the area of education assistants. Their ultimate goal was to increase funding for literacy programs but that funding has not come through. So who suffers again? It is these borderline children who have fallen beyond the borders now. They are lacking support. (UE #1)</p>
41. Aboriginal achievement is improving in this school.	79%	<p>How can I put this? The social part, openness, hands on learning (I think works better) with all students, not just Aboriginal students. I really don't see a separation that they bring anything different than their non-Native counterparts. Every student is different, but I would say the biggest thing would be the hands on. (RHS#4) #24. I feel that our school attempts to meet the students' needs, but often misses the mark. They adapt the instructional strategies, but not completely change the instruction, which I feel is often needed.</p>
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	75%	<p>They get (access) to computers, but they have held a crayon before and they know what colouring is. Yet some of our kids have never had a colouring book before. I give colouring books at Christmas as a present and I get kids</p>

		<p>who say, “I don’t know what this is for.” You get other kids who go, “Wow!” for different reasons. Some are excited about it and others are like, “Why would I want that? I have never had one before.” I don’t know that that is an Aboriginal or non-Aboriginal situation either.</p> <p>NES#1</p> <p>I think as a Kindergarten teacher the problem is preparedness for school. . . . we have a pre-K program housed within our building. The pre-K program starts off with home visits and parental involvement. The teacher and assistant go out into the home once a month and take a backpack in and work with families. The assistant has taken added responsibility this year because our student numbers are up and they are playing political games and are making the teacher stay in the school more so the assistant is taking on a bigger role. She is not a teacher but she has taught play school and she learned how to do the work as a teacher. So, that program has started with our families. Then we collaborate as kindergarten and pre-K. They have family days once a month and I go down and meet the families when I can although I teach full time. I go and meet the families and talk with them so they see the overlap of where their child is this year and where they are going next year in kindergarten. (NES#1)</p>
47. Aboriginal students make smooth grade to grade transitions.	21%	<p>I have found though while I have been at this school that the FN parents do not seem to be as transient as I expected them to be. I have three Aboriginal families that live outside this school’s boundaries, but they are still bringing their kids to this school. I have two sets of parents who lived close to another school who bring their children here. I asked them why and they said we want stability in their schooling. I thought that was a wonderful new perspective from Aboriginal families. The parents are paying their own transportation costs to get their kids to school. It tells me two things. They like the school community and they like what is going on in the classroom. It’s nice to see that level of support and it is nice to celebrate that with the child. The stability is really going to help them academically in the long run. (UE #1)</p>

**Table 5.11.8: Teacher Professional Practice**

<b>Survey Questions by Domain</b>	<b>Percent Agreement on Survey</b>	<b>Participant Commentary: Interviews, Open-ended survey questions, Data Analysis Panel</b>
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	89%	#14. Our school division has put in place various strategies such as Project CRISS: Creating Independence Through Student Owned Strategies, set the expectation that all teachers from grade 6 to 12 take the training, that all teacher-librarians become CRISS master teachers who partner with another teacher or teachers in their school(s) so that students can learn the various strategies for achievement as they move from class to class and grade to grade and then on into the world. If they transfer schools, the same strategies are being employed. Research shows improvement in achievement in academics and attendance

		and a reduction in classroom management needs. I believe that were all teachers to embrace the initiative whole heartedly there would be a door opening to understanding of expectations from class to class, to success and accomplishment, and to solid lifelong applicable skills for all children's futures.
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	96%	#8. I have found that the First Nations students that I have worked with are very open and honest with their feelings and will let me know if I have done something wrong. It is up to me to listen and act on their feedback. Personally I have made it a priority for me to understand what works best (from an instructional point of view) for all of my students. I have worked with English as an Additional Language students, some Asian and African students who have had some of the same kinds of issues to deal with. With the high percentage of First Nations students in my school and in my program, that is in the forefront for me. I have really made it a point to educate myself first of all about the history and then the effect of residential schools. I am a Treaty Catalyst Teacher for the school division as well. I work to train other teachers about the treaties, residential schools and the unfulfilled promises. I guess I just have a passion for helping my students be the best that they can be in a way that is best for them. (UHS #1)
21. This school has supports in place to deal with Aboriginal learning challenges.	93%	Division-wide they are looking at offering language programs for First Nations and those old barriers are becoming even fewer. It is difficult though to find fluent speakers of Native languages who are also teachers in Saskatchewan, especially in the public school system. (RHS #4)
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	93%	We meet on a regular basis. We have grade alike meetings. It's just not Aboriginal students but every student. We look at kids who are failing and then we come up with a plan. We have a referral process that teachers have to go through. If they want to make a divisional referral, they need to go through the student support process to do this. (RHS #2)
36. This school does a good job of attending to the learning needs of Aboriginal students.	86%	Two parents I have been working with for the last while have come to realize that school is going to be hard for their kids because of learning issues. Understanding comes with communication and that begins with the teachers we have because with this new referral process, teachers begin with contacting the parents and not support teachers first and it is better that way because people do not like it when I phone. They ask well why didn't the teacher phone first? The process seems to be working better. Parents seem to be willing to go further into the referral process. They want to help their kids. I work with a parent who as part of the process is in regular contact with teachers and is working with us to make things better for her child. This process helps some of the parents. You can't help all of them. You have to want to be helped. A lot of people avoid. When the division does an assessment, the parent is called in to review the student file. We always hope that the parents will accept the

		<p>programming suggestions, but it does not always happen. We respect that up to a point, but if the student continues to fail, then the division will step in and we will meet to intervene in the situation. We do not like to override parental wishes, but sometimes it is necessary. We have done it. I do not like doing it, but it is in the student's best interest that we do. We like to have the parent feel that they have had a choice in the matter. When you have students that fail for three years, it is just a waste of their time. But the division and this school try to respect the parents. They are the parents and we want them to be a part of the decision. (RHS # 2)</p> <p>#7 . I believe strongly in assessment for learning and allowing plenty of opportunity for risk free practice. This allows students to be free to make mistakes without fear of failure.</p>
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### **Results of the Peer Data Analysis Panel**

The peer interpretation panel consisting of four doctoral students convened on May 7, 2012 to code, categorize, and thematically arrange the long item responses from the TPAA Inventory. Animated discussions of assessment, parental involvement, and expectations for learning ensued as the panelists deliberated the survey respondents' reflections for items 48 and 49.

Open Ended Response Item 3: Beyond academic achievement, for example attendance, attachment, and positive peer interaction, how do you know when Aboriginal students are being successful in your class?

The codes identified by the interpretation panel for this item included: "need to change," "evaluation," "assessment for learning," "expectations," "test anxiety" "recognizing student strengths and weaknesses" "achievement gap," "differentiated assessment," and "criteria." Panel member Blue noted that it was expected of teachers that feedback to students needed to be frequent and ongoing in order to embed assessment for learning into classroom routines and practices.

Open Ended Response Item 4: Do you have any additional comments you would like to make concerning Aboriginal student achievement?

Panelists discerned a wide array of codes in relation to open ended response to this item. Among them included: “adapt instruction,” “differentiate instruction,” “incorporate Aboriginal content,” “cooperative learning,” “learning in community,” “student ownership,” “student choice,” “inclusion,” “student needs,” “achievement,” “learning environment,” “curricular outcomes,” “family values,” “assessment,” “community,” “parents,” “world view,” “delivery,” (instruction), “Aboriginal culture,” “teaching strategies,” “belonging,” “ownership,” and “relevance” among them.

Panelist Red noted that it is an expectation of teachers in Saskatchewan that “they differentiate instruction to appeal to a variety of learning styles to motivate students”. The fact that teacher survey respondents’ discussion of differentiating instruction was frequent in response to this item seemed to indicate that teachers were indeed incorporating such instructional practices into their regular instructional routines.

Panelist Black observed that there appeared to be a connection between teaching and learning in the community established by the fact that one respondent noted “facilitate having visiting Elders come to the school and be the in-school connection so students see us together.” This observation underscores the fundamental tenet of Aboriginal learning to the extent that it involves both Elders and the community. Again, the presence of Elders in the school not only benefits the students in a practical sense but it also helps make those community connections that remain so powerful where student learning is concerned.

Panelist Green added that culturally relevant material served to motivate Aboriginal students. Furthermore, such material helped to create a safe learning environment where students were more apt to engage in “risk free practice”. These observations underscored the importance of trust and relationship building that are essential for all student engagement in school. When the



trust is evident, Aboriginal students are more likely to purposefully engage their learning. Another point raised by the Green Panelist was the importance of family in the education of Aboriginal learners and the fact that too many are required to leave their families and home communities to pursue their public school educations. The research evidence is very clear that students changing schools often seriously disrupts the learning and smooth transitions of Aboriginal students from one educational setting to the next.

Finally, the interpretation panel was asked to place the categories and codes into larger themes. Owing to time constraints, it was determined that the group would complete this task together rather than individually and then as a group. The results of their findings were as follows:

- Theme One: Family/community support and engagement in Aboriginal student education;
- Data: Assessment, attendance and achievement informing instruction;
- Inclusion: Value all learners and teach to their strengths and talents, expectations rest with individuals not culture;
- Awareness: Teachers modelling, celebrating culture;
- Learning Environment: Welcoming, safe, positive, and trust building.

While the interpretation panel was not intended to confirm nor contradict the research findings of this study, it was nevertheless confirmatory in many ways. If the eight themes of teacher instructional practice, teacher professional practice, family and community involvement, assessment, student membership, alignment, and achievement contexts are considered, all of them emerged in the discussion and observations of the panel. However, the author's conception of parent and community involvement was to

change as a result of the panel and be addressed in the reconceptualization of the conceptual framework presented in Chapter Two. The understanding of “involvement” necessitated a connotation of “reciprocity” and not mere participation.

### **Concluding Comments**

Chapter Five of this study has examined the results of Teacher Perceptions of Aboriginal Achievement Inventory designed for this research. Presented in the chapter was the demographic data for the survey respondents and a table of the means standard deviations and percentages of respondents agreeing or strongly agreeing with the 47 items contained in the survey. A Cronbach’s alpha was conducted to determine reliability coefficients. Overall the reliability of the survey instrument was high. Eight items with lower coefficients were identified, but a decision was made to include the items for analysis because their reliability coefficients were still over .8. A Cronbach’s alpha was conducted to determine reliability coefficients for the TPAAI. Overall the reliability of the survey instrument was high attaining an alpha coefficient of .864.

Statistical significance for the survey data was also presented. In a general sense, significant differences were found in the perceptions of teachers with respect to their ethnic background, their respective regional locations, their teaching experience, whether teachers had attained credits in Native Studies at the university level or not, whether teachers were classroom teachers or not and by gender. What light these results may shed on Aboriginal student achievement must again be tempered by the small sample size of the survey. However, scrutiny of the results has value to the extent that it may lead to further research possibilities in the future.

The open ended response items were also presented in the chapter in the form of an integrated data interface with the close survey responses. Finally, the results of a peer

interpretation panel were presented. Results of the survey must be approached with caution as the sample size,  $N = 28$  reflected only 21.8% of the total number of eligible teacher respondents.

(See Appendix K.)

Chapter Six of this study will offer concluding thoughts on the research. The researcher will reflect on the study as a whole, review the research opportunity, the study's findings, and analysis of the research questions asked during the study. The conceptual framework originally offered in chapter two is reconceptualised. Suggestions for possible further research will also be presented.

Teachers of Aboriginal children encounter unique challenges in the Canadian educational system. ... Aboriginal teachers employed in schools are situated in the borderlands between languages and cultures, and have important choices to make as they prepare Aboriginal students to walk between two parallel yet very different worlds. The tensions experienced by these teachers are particularly acute as they feel a strong commitment to serving and protecting their students and Aboriginal communities (Cherubini, et al. 2009, pp. 355-356).

## CHAPTER SIX REFLECTIONS ON THE STUDY

In this chapter, the researcher reflects on the study as a whole. The chapter contains a review of the research opportunity, the study's findings, analysis of the research questions asked during the study and the conceptual framework originally offered in chapter two is reconceptualised. Possible implications for professional teacher practice and for future research are also discussed in this chapter.

The contexts of Aboriginal student achievement were explored in Chapters One and Two of this study, The Context of Aboriginal Achievement and the Review of the Literature respectively. Attributes of the phenomenon under exploration were examined with respect to Aboriginal history and socio-economics, Aboriginal parent engagement in community schools in Saskatchewan provincial schools, Aboriginal community involvement in those schools, school, division, and provincial alignment to foster enhanced learning outcomes for Aboriginal students, teacher professional and instructional practice, and Aboriginal student membership in their respective educations. Chapters One and Two revealed nine conceptual fields that shaped the form and content of the teacher interview questions and the subsequent development of the survey instrument. These conceptual fields provided the foundation for the conceptual framework outlined in Chapter Two. They included:

1. Parental Involvement;
2. Student Membership;

3. Achievement Contexts;
4. Culturally Responsive Curriculum
5. Assessment;
6. Community Involvement;
7. Teacher Professional Practice;
8. Teacher Instructional Practice; and
9. Alignment.

The literature review and the conceptual fields contributing to the construct of teachers' conceptualizations of Aboriginal student achievement were explored in six provincial community schools in the province of Saskatchewan, Canada: two in the North of the province, two from urban centres and two within rural settings. Nine teacher interviews and a survey were administered to teaching staff within the six schools between November and December in 2011. The ethos of the six school sites were captured by means of thick description in order to portray their cultural uniqueness and how this ethos could possibly contribute to facilitating positive learning outcomes for Aboriginal students.

Teacher perceptions of Aboriginal student achievement were gained by means of individual teacher interviews (nine) and by a 51 item survey questionnaire that was developed by the researcher and administered to the teaching staffs of the six schools in which the original interviews were conducted. The survey was developed in part relative to the literature review in Chapter Two of the dissertation as well as from the findings and analysis of the individual teacher interviews contained in Chapter Four of this research.

Teacher interview data were transcribed from digital recordings and interviewer notes taken at each of the teacher interviews. Data were examined, analyzed, coded, and categorized into

themes that framed the development of the questionnaire in concert with themes emergent in the literature review. All data were presented within the context of the school sites chosen for the research and with respect to emergent themes from the analysis.

Data collected from the survey questionnaire were analyzed using SPSS professional software Survey Tracker software and Microsoft Excel. Results of the survey data should be treated with caution as the sample size of for the data was smaller than anticipated (N=28) and therefore, data analysis was limited to tests for descriptive statistics.

### **The Research Opportunity, Research Questions, and Conceptual Fields Revisited**

This study explored teachers' perceptions of Aboriginal student achievement gaps that exist between Aboriginal students and their non-Aboriginal peers within the context of six provincial community schools in Saskatchewan. The central research opportunity looked to explore the nature and form of Aboriginal student achievement. Five central research questions guided the inquiry:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?

In general, teachers perceived that achievement disparities existed between Aboriginal and non-Aboriginal students in their respective schools. However, teachers also demonstrated a firm understanding of many of the contextual factors that negatively impacted Aboriginal student achievement. Institutionalized poverty and low parental income levels and their debilitating effects on student learning were cited by a majority of the teachers interviewed for this research as being particularly burdensome for many Aboriginal students. Meal and snack programs offered at interviewees' respective schools were seen to address the matter of student hunger and therefore contribute to improved learning conditions. So too, daycare services and early childhood learning opportunities within the schools themselves were seen by teachers to be

helping prepare Aboriginal students for a smoother entry into kindergarten and provide support for students who were parents the opportunity to continue with their schooling.

2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?

Teachers saw their role as integral to fostering positive student outlooks toward school by making learning environments safe and welcoming. While there was some disagreement between Aboriginal and non-Aboriginal teacher perceptions about the degree to which Aboriginal students felt culturally affirmed at school, I see this area of disagreement as an opportunity for further dialogue and deliberation among teachers rather than as a point of cultural rupture that can never be addressed.

In many respects, teacher efforts to facilitate Aboriginal student learning led to reappraisals of how best to instruct and assess Aboriginal student progress. In the main, teachers for this research believed that they could tell when their instructional and assessment practices were being successful where Aboriginal students were concerned because the students seemed more invested and engaged in their learning. Some described these revelations as “aha” moments. Teachers commented that keeping students motivated was key to student learning and differentiating instruction to do so was identified as fundamental to providing that motivation.

3. How do teachers conceptualize effective instructional and assessment practices with respect to Aboriginal student learning?

Teachers were clear that they adjusted their instructional and assessment practices to suit the needs of all their students. The relationship between instruction and assessment for learning was widely understood and put into practice as evinced by the teachers interviewed and surveyed for this research. A point of difference noted in the quantitative survey data rested with the fact that

Aboriginal teachers were more strongly inclined to use assessment for learning to inform students of their progress towards their learning goals than were their non-Aboriginal counterparts. This is not to suggest that one group of teachers were using assessment for learning but only that Aboriginal teachers more strongly agreed with this sentiment. Perhaps because Aboriginal teachers perceived a cultural bias in the structure and form of large scale assessments, they felt that their assessment for learning practices more culturally responsively could assess Aboriginal student learning and inform their teaching practice as well.

4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?

Teachers perceived that they knew when their instructional practices were being successful when students were motivated to do well. Such motivation translated into student awareness and thinking about the best way for they themselves to learn. When these connections were made, students seemed more engaged in their learning which in turn translated into higher achievement and a greater satisfaction with their school experience. Aboriginal teachers were more strongly inclined to engage in professional development to improve their instructional practices to assist Aboriginal student learning than were their non-Aboriginal counterparts. Such active professional development may account for Aboriginal teachers involving parents and community more actively in Aboriginal children's education than their non-Aboriginal teaching colleagues. Differentiating instruction was noted by many who were interviewed and who completed the online survey as a means to promote Aboriginal student achievement. Instructionally, teachers expressed the belief that resources and materials that reflected Aboriginal culture and values held Aboriginal student interest and thus enhanced student engagement. Furthermore, incorporating traditional Aboriginal teachings such as talking circles and Tipi Teachings into their own



teaching repertoire proved valuable for teaching not only Aboriginal students but all students in general. Teachers also noted that differing learning styles from the mainstream played a part in Aboriginal students' learning, and that in some cases, perhaps not enough instructional practice played to these learning strengths. Affording Elders the opportunity to come to their classrooms to share Aboriginal oral history, and perspectives was also seen to abet mainstream instructional techniques.

5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

Hand in hand with differentiated instruction, authentic assessment was also seen to be an effective means to assess Aboriginal students. Some teachers spoke in terms of good teaching for some was good teaching for all. Understanding that student learning was contextualized led teachers to believe that assessment must be equally contextualized. To honour differentiating instruction also led to differentiating assessment. Teachers however, did not cite large scale assessments as a means to effectively assess FNMI students. Teachers did agree however, that such assessments while not providing them with useful data to assess student learning agreed that large scale assessments were used widely in framing school and divisional CIF plans. This disconnect appears in part at least to support the contention made in this research that the use of large scale assessment data by ministerial and divisional quarters was counterintuitive to teacher classroom practice. Teacher developed classroom assessment was far more useful to their teaching than were the large scale assessments. The large scale assessments for the most part placed Aboriginal students in deficit positions when in class achievement demonstrated that they were mastering concepts but not in a fashion that could be fairly measured by the large scale assessments themselves. Survey data for this research demonstrated that Aboriginal teachers

especially felt that their assessment practices aligned with efforts to improve Aboriginal student achievement and were employed to inform students of their progress towards their respective learning goals.

Taken individually, offering a culturally affirming learning environment, culturally responsive and differentiated approaches to instruction and assessment, Aboriginal parent and community engagement in schools, and authentic assessment, would not ameliorate achievement disparities where Aboriginal students are concerned. However, acting in concert, aligned in a compelling, interdependent, and mutually reciprocal manner it is possible that positive change could be visited upon perceived achievement disparities that in too many instances feature too prominently in provincial indicator reports. Given the understandings that educators possess about Aboriginal achievement, it remains a matter of frustration to instruct and assess one way and measure student achievement in another. It remains to be seen if the opportunity to enact substantive and transformational change upon the provincial education system can and will be undertaken for the benefit of Aboriginal learners and ultimately the wider society of Saskatchewan as a whole.

### **Implications of Findings Relative to the Conceptual Fields**

#### **Implications for Assessment**

By means of differentiating instruction and assessment, teachers believed that they could teach to Aboriginal students' learning strengths and thus more authentically assess what they knew about the curriculum without always resorting to pen and paper assessments. Such a tact built student self-confidence and self-esteem. However, there was also a recognition that because large scale assessments almost exclusively are limited to a narrow set of learning outcomes measured by pen and paper methodology. And, unfortunately, the results of these large scale assessments remain an important means by which student achievement is measured

and certainly reported. In short, teacher instructional and assessment efficacy rests juxtaposed to government accountability reporting. This dichotomy also seriously undermines, the efforts to attain provincial, divisional, and school alignment and its interdependent tenets and produces instead an oppositional binary that locks classroom practice and government accountability processes in a seemingly un-lockable adversarial assignation. As a consequence, large scale assessment results continually place Aboriginal students in deficit positions vis-a-vis achievement standards and reduces important conversations to matters of “eliminating educational gaps.” Such a condition has contributed largely to the achievement gap mythology and will continue to do so as long as it remains in place.

Whether the inclination to use assessment for learning rests with the seeming cultural bias reflected in too many large scale assessment tools is not known. However, significant differences between Aboriginal and non-Aboriginal teachers existed, albeit within the context of a small sample size. Nonetheless, the influence of culture on teacher assessment practice remains striking. Certainly the relevant literature is clear that how students are assessed is rooted in teachers’ own cultural biases to some extent. As was noted earlier in this research, we tend to teach students how we were taught and we assess in the same way.

### **Implications for Community Involvement**

Community involvement in the schools participating in the study appeared to be active and engaged. The schools themselves actively pursued the mandate of providing a “community hub” (Clandfield, 2010) as was evinced by the variety and number of programs which were made available to members of the community which the school served. The active presence of Elders and community members in the schools involved in this study and the breadth of programs being offered indicated a degree of collaborative reciprocity between the schools and the Aboriginal community(ies) they served. However, teacher interviews and survey results also seemed to

indicate that opportunities to engage Aboriginal communities to extend and reinforce the learning of Aboriginal students were perhaps being missed. Agbo (2004) has offered that meaningful community involvement in the context of Aboriginal education should entail an “integration into First Nations communities [by] teachers to retain a full grasp of the First Nations culture and the myriad of ways First Nations live their lives from day to day” (p. 30). All the schools participating appeared keenly aware of the reciprocal nature of their relationship to the outer communities and by this I mean that while the schools were beneficiaries of community support, they also consciously supported the community in kind. Because reciprocity is so fundamental to authentic relationship building, all manner of undertakings which build that kind of symbiotic capacity where community in community schools is concerned should be embraced and actively cultivated. Having said this, it is evident that more needs to be done about cultivating these school/community relationships. Furthermore, the two way communication required to enrich this dialogue should occur in settings that do not reflect power imbalances. For example, meetings could be held in Aboriginal communities instead of school division settings to facilitate an unfettered, honest dialogue among participants.

### **Implications for Teacher Professional Practice**

Active and vibrant professional learning communities appeared to operate in all the schools that participated in the research. Teachers interviewed in phase one of the research expressed support and advocacy for the opportunities to learn from each other to expand and refine their teaching repertoires and practices. Newer teaching staff, particularly in the North and Rural schools also appeared to want to assume greater leadership roles in transforming the educational culture of their respective schools perhaps because their newness to the profession and their enthusiasm had not been tempered by contrary experience where Aboriginal student achievement is concerned.

Implementing culturally responsive curriculum such as Treaty Education in Saskatchewan will take a continuing herculean effort on the part of teachers from all ages and experience. Castagno and Brayboy (2008) asserted that the acquisition of Aboriginal cultural awareness and knowledge of new teachers leaving teacher education programs is lacking and given the demographics of the vast majority of new teachers graduating from these programs (white, middle class women), the requisite cultural background has also not been evident as part of their upbringing. Furthermore, the favourable disposition of more experienced teachers to access and pursue such cultural awareness as part of their ongoing professional development, I believe was borne out by this research. Perhaps the most effective means to address this cultural disconnect may come by means of teachers “exploring the communities in which their students live, participating in community events, and collaborating with community members on projects within and outside of the school” (McCarty & Watahomigie as cited in Castagno and Brayboy, p. 947). An appetite to undertake such a course was demonstrated by most of the teachers interviewed by this research and they provided anecdotal evidence to support their contentions. Certainly the implementation of culturally responsive curriculum such as Treaty Education remains a positive step, but such initiatives are not an event, they remain an ongoing process that must be supported and nurtured with ongoing in-service at the public school level and enhanced pre-service at the level of the teacher colleges. Such processes as the Treaty catalyst teacher program and the program requirement that all teacher candidates in Saskatchewan complete a course in First Nations Studies serve as positive supports in this undertaking. Teacher pre-service opportunities to explore and incorporate available resources and training would also support new teacher efficacy.

## **Implications for School/Division/Ministry Alignment to Improve Aboriginal Student Achievement**

In all participating schools in this study, there appeared to be significant alignment among school mission vision, and goals and those of the respective school divisions in which they resided. Given the recent efforts of the Ministry of Education in Saskatchewan to align planning, assessment, governance, and the tracking of student results with respect to the Continuous Improvement Framework and Assessment for Learning components of provincial education initiatives, such alignment is encouraging. Certainly the shaping of more cooperative and collaborative school cultures for teachers by means of the implementation of professional learning communities remains central to these initiatives as well. Evidence of both long and short term planning on the part of teachers and staffs to engender positive and improved learning outcomes for Aboriginal students within their schools appeared at the forefront of teacher efforts.

It was noted in this study, however, that teacher confidence in their ability to make a difference appeared somewhat shaken by what they saw as a great deal of effort with minimal tangible effect in terms of large scale assessment achievement results themselves. Sadly, this frustration and loss of confidence ultimately could serve to undermine the good work they were undertaking to address Aboriginal student achievement disparities with respect to their in class assessment for learning and differentiating instruction. In a time when the drive for system accountability especially where large scale assessments such as the AFL are ascendant and philosophically juxtaposed to culturally diverse school populations, one need only view the issues inherent in the No Child Left Behind movement in the United States to see the pitfalls of large-scale accountability and the implementation of a curriculum that speaks to conformity and conventionality rather than diversity and richness. A scrutiny of test items on the AFL reveals a cultural homogeneity that belies the culturally diverse realities of school populations currently

resident in Saskatchewan. As well, the assessment for learning benefits of the AFL appear to be of limited utility when the data of such is not made available until the students who are tested are in the next grade. In short a dichotomous binary appears to be developing between the accountability flavour of the AFL and classroom teacher assessment for learning to guide student learning.

### **Implications for Aboriginal Parent Involvement**

In the matter of Aboriginal parent involvement in schools and sharing in decision-making in those same schools, teacher perceptions in general were less than favourable. These sentiments seem to align with teacher perceptions of student achievement. Certainly research literature is replete with commentary emphasizing active Aboriginal parental involvement in the school lives of their children. The degree to which circumstances that have inhibited such active involvement have been ameliorated will determine the degree to which parental engagement may come about and flourish in schools. Conversely, the degree to which school personnel have garnered the cultural competencies to nourish Aboriginal parent engagement will also play a significant role in framing the mutual reciprocity and relational trust required to change current realities to ones of promise and genuine collaboration. Schools need to be invitational to facilitate Aboriginal parental engagement, but recognition that the multitude of elements that currently influence and sometimes impede such may lay beyond the capacity of schools to deal with these challenges alone. The development of school staff expertise, the building of cross-cultural competencies, and the assistance of Aboriginal community members to build those competencies will be required to overcome the hurdles that currently impede the building of relational trust will usher in a truly collaborative era.

### **Implications for Teacher Instructional Practice**

All students need to be actively engaged in their learning. Teachers saw themselves entrusted with the vital task of optimally educating all their students. With particular respect to Aboriginal students, teachers perceived that this involved differentiating instruction and assessment practices. Engaging in professional and staff development was seen by teachers to be a means to more confidently teach Aboriginal students and do so in the knowledge that they were improving their own understandings in order to improve Aboriginal student learning. This facilitation of learning would be of benefit to all students in their classrooms, but that without culturally responsive school programs, assessment for learning and differentiated instruction supported by planned interventions, inclusionary school climates that foster Aboriginal student membership and engagement in school would not be forthcoming. Certainly in the context of a shift to student-focused learning where competencies rather than mere mastery of content lie at the centre of the learning program, opportunities will abound for Aboriginal students to explore learning that they find culturally relevant and personally fulfilling. As such, Aboriginal student engagement should be heightened and lead to enhanced learning and understanding.

### **Implications for Achievement Contexts**

The implications for achievement contexts are far too sweeping a topic to be covered here. However, it will require an enormous effort to remove the social and economic inequalities from which so many Aboriginal students come to school every day. In part, these disadvantaged circumstances may in themselves be improved with enhanced learning outcomes for Aboriginal students. As with the foundational tenets being offered by this research, the collaborative interdependent efforts of a range of agencies and agents including schools and school systems will be required to transform current realities into future prospects. In the meantime, if schools



and school systems can incorporate diverse measures of student success, then achievement disparities can be addressed.

### **Implications for Aboriginal Student Membership**

Aboriginal student membership in Saskatchewan provincial community schools tended to be highly contextualized. Teachers interviewed and surveyed believed that for the most part, Aboriginal students felt a sense of belonging in their respective schools. This sense of belonging they perceived was a result of many factors acting in concert. After school programs, cultural programs, the presence of Elders in the school, visibility of cultural artifacts, student advisement structures within the schools, teacher instructional and assessment practices, meals and snack programs, and cultural liaison workers, were identified as helping to promote student engagement in school and an investment in their learning. The continued evolution of these programs and offerings should prove beneficial to continuing to support Aboriginal student learning. Teachers also identified that fostering positive relationships with Aboriginal students and taking an interest in their lives outside of school also seemed to help where academic work was concerned, reinforcing the notion that student attachment to school and being affirmed on a personal level proves powerful and empowering to all students regardless of background.

### **Re-Conceptualization of the Conceptual Framework**

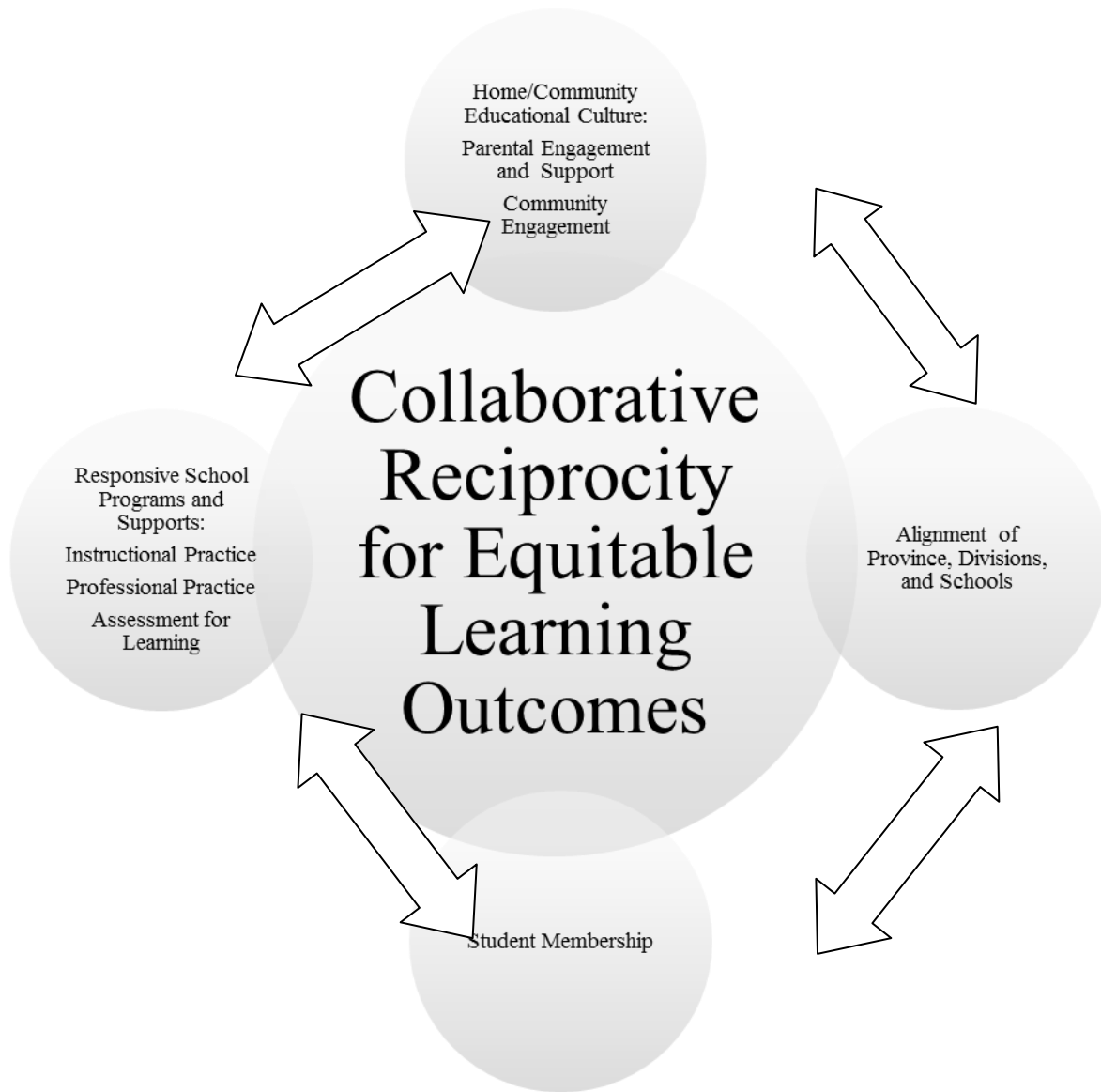
While much of the research into improving achievement outcomes for Aboriginal students in Canada and Saskatchewan in particular tends to be highly contextualized, there remain commonalities that allow for more universal conceptualizations that made this research possible. In the main, teachers' perceptions of Aboriginal student achievement supported the conceptual framework that shaped the course of this study. A re-conceptualization of the initial framework is presented here with six notable changes.

Student membership has come to encompass affirming school climate and learning environment to promote active student engagement. Responsive school programs and supports include teacher instructional and professional practice and assessment for learning. Parent and community educational culture have been joined and alignment of the province, school divisions, and schools have replaced but encompass mission, vision, values, and goals. Finally, the core of the concept map has been changed to reflect the notion of “collaborative reciprocity” between and among the important stakeholders including the province, school divisions, schools, teachers, administrators, Aboriginal students, parents, and communities. It is this fundamental tenet that the researcher believes is central in order to renew Aboriginal student achievement and see it in the light of an expanded conceptualization of what constitutes “improved achievement” (Canadian Council on Learning, 2007; 2009; Steeves et al., 2012). This includes embracing a revitalized and holistic approach to measurement renewal.

Within the context of this study, the researcher has reframed the conceptual framework to reflect the high degree of reciprocal engagement and collaboration required of all parties to affect higher levels of achievement desired by all. This collaboration includes alignment, but goes much deeper to include removing systemic cultural barriers that have inhibited rather than abetted achievement standards for Aboriginal students, particularly where large-scale assessments are concerned. See Figure 6.1

**Re-conceptualization of Conceptual Framework**

**Figure 6.1: Engendering Equitable Learning Outcomes for Aboriginal Learners**



### **Implications for Further Research**

While conceptualizing this study, I focused on further exploring and illuminating conditions and circumstances that promoted Aboriginal student achievement in the context of provincial community schools in Saskatchewan, Canada. Of primary interest was to understand how classroom teachers conceptualized those conditions that contributed positively to Aboriginal student achievement with respect to historical contexts, assessment (particularly assessment for learning) and instructional practice. In pursuing this course of research, it was apparent that in much prior research, Aboriginal student achievement had been placed in a deficit position, and this stigma seemed to have shaded Aboriginal student achievement permanently in terms of an “achievement gap.” Certainly such labels remain prominent in discourse concerning Aboriginal achievement levels.

It became apparent as the research unfolded that attempting to characterize Aboriginal student achievement in any universal aspect would be impossible because of the highly contextual and place-based nature of Aboriginal ways of knowing evident in the literature. Furthermore, it also became evident that purposeful attempts by classroom teachers both Aboriginal and non-Aboriginal were subsumed by government accountability standards that placed a lower value upon cultural teaching and learning than they did upon purely Eurocentric cognitive learning. As a consequence, large scale standardized test results continue to frame Aboriginal achievement in deficit terms and these results also undermine and frustrate the work of classroom teachers who pursue avenues to differentiate instruction and assessment in the interests of promoting positive learning outcomes for Aboriginal students.

Aboriginal and non-Aboriginal teacher perceptions of enhancing Aboriginal student achievement appear to remain rooted in culturally different contexts. However, rather than be

viewed through a deficit lens, this cultural divide should be embraced as an opportunity to promote greater cultural understanding rather than a problem that needs to be “fixed.” For too long, educators have tried the later approach and it has always ended in abject failure.

In light of these findings, the following suggestions for further study are offered:

A further study using the TPAA Inventory to survey a wider and larger sample of teachers with respect to Aboriginal student achievement would allow greater and more refined statistical analysis and would provide a rich source of data to expand the understanding of how teachers perceive such achievement originates.

The relationship between Aboriginal student transitions from band controlled schools to public schools in Saskatchewan to determine the degree to which such transitions are seamlessly completed could provide valuable insight into how to facilitate these transitions and enhance Aboriginal student success.

A study to explore how shared decision-making and governance by schools, Aboriginal parents, and communities is helping to improve Aboriginal student achievement in Saskatchewan should be undertaken.

Further research into the degree to which differentiated instruction and assessment for learning is positively affecting Aboriginal student achievement would be of benefit. By contrast, do large-scale test results stigmatize Aboriginal students and do the alleged benefits of such tests outweigh the negative portrayal of Aboriginal student learning outcomes?

A study to measure how Elders programs are helping to decolonize Saskatchewan public schools and improve Aboriginal student achievement would provide insight into promising practices to make schools and schooling more inclusive and culturally responsive.

Further research into how culturally responsive curriculum on a school, division, and provincial basis would furnish greater understanding into how these initiatives positively affect all student achievement.

A study to explore how the collaborative work of teachers by means of PLC's building capacity to improve Aboriginal student achievement would build upon the belief that collaborative teams and teacher empowerment can positively impact student achievement.

A longitudinal study focusing on how early education initiatives currently underway in the province of Saskatchewan may be improving Aboriginal student achievement over time would add understanding to the belief that early education initiatives serve to provide early and timely interventions for primary students at-risk.

Further research into how non-Aboriginal cultural competency affects teacher instructional practice where Aboriginal students are concerned would add to the understandings currently held that cultural competency positively influences Aboriginal student achievement.

It must be understood that while these implications for future study are offered in the spirit of advancing research, it is also important to understand that they are not offered as a panacea to frame educational practice as well. Caution must be exercised here because in no way are these implications to be interpreted in a pan-indigenous frame of reference. The author of this research reiterates that Aboriginal student achievement remains highly contextual and no "one size fits all" approach is possible nor is it desirable. To a great extent, the one size mythology paved the way for the worst practices that unfolded during residential schools and this research repudiates those practices in no uncertain terms. If there is a prescriptive element where this document is concerned, it lies with the belief that addressing Aboriginal student achievement disparities is deserving of the very best school systems, schools, and communities can offer in terms of

equitable funding, resourcing, and teaching to ameliorate the current state of affairs. Ultimately, Aboriginal achievement disparities will not be addressed by limiting the discourse to academics alone. Instead, a more holistic approach that venerates parent and community engagement, honours Aboriginal world views and pedagogy to fashion positive learning environments and imbues a culturally responsive systemic ethos, will be required to put in place sustainable and lasting transformation.

### **Concluding Remarks**

Teachers' perceptions of Aboriginal student achievement were multifaceted, spanning a range of pedagogical, relational, organizational, and cultural facets. The complex weave of interdependent considerations that may shape Aboriginal student success in Saskatchewan provincial community schools appears to be coalescing. However, much hangs in the balance. It remains clear that no one action by any of the partners in this educational undertaking must countermine the plans and actions of the other. Interdependent planning and action will be required to forge and sustain promising collaborative and mutually reciprocal educational practices currently evolving in the province in order to address educational inequalities that have in too many cases been the norm rather than the exception where Aboriginal student learning is concerned. In particular, Saskatchewan teachers continue to require opportunities to explore and understand promising practices to enhance Aboriginal student achievement either as part of their pre-service teacher training or as part of their on-going professional development and growth. Finally, and perhaps as a result of their experience gained in the preceding comment, those teachers that cling to a deficit orientation for Aboriginal student achievement can transform their perceptions of "fixing students" to teaching them how they may best learn and succeed.

These perceptions it is held align to a great extent with a larger pan Canadian educational view that Aboriginal students are in need of "fixing" as their achievement levels place them in a

deficit position. This circumstance combined with the Euro-centric linear approach to improving student achievement compounds the situation and may in large part play into the fixing of students as opposed to addressing pedagogy and assessment that do not honour Aboriginal ways of knowing and learning. Certainly the passage of time with this approach has generally not led to significant gains where Aboriginal achievement is concerned. Continued adherence to this approach it is held will continue to see only the modest incremental change that has been witnessed to this point in time.

This recognition it is offered underscored the belief that teachers, schools and school divisions could not change this circumstance alone and that whole community, parental and government support at all levels would be required to address the social and economic inequities that adversely affect too many Aboriginal children and youth if the data from Statistics Canada and elsewhere are to be believed. Such an educational and social coalition could actualize Ermine's (2000; 2009) conceptualization of ethical space and also bring into being the notion of mutual reciprocity that was visited in the reconceptualization of the conceptual framework presented earlier in this chapter.

Most teachers were clear that they adjusted their instructional and assessment practices to suit the needs of all their students. The relationship between instruction and assessment for learning was widely understood and put into practice as evinced by the teachers interviewed and surveyed for this research. A point of difference noted in the quantitative survey data rested with the fact that Aboriginal teachers were more strongly inclined to use assessment for learning to inform students of their progress towards their learning goals than were their non-Aboriginal counterparts. This is not to suggest that only one group of teachers were using assessment for learning but only that Aboriginal teachers more strongly agreed with this sentiment. Perhaps



because Aboriginal teachers perceived a cultural bias in the structure and form of large scale assessments, they felt that their assessment for learning practices were more culturally responsive and could assess Aboriginal student learning and inform their teaching practice as well. Whether this perception was indicative of the fact that Aboriginal teachers as Aboriginal students experience school differently than their non-Aboriginal counterparts or not remains purely speculative, but it does offer occasion to wonder if such is not the case. I believe it remains a significant talking point and may hold some insight into how Aboriginal teachers could take the lead in assisting their non-Aboriginal colleagues to greater understanding of Aboriginal students' learning strengths.

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## APPENDIX A

### LETTER SEEKING PERMISSION TO BEGIN RESEARCH IN SCHOOL DIVISION X

Date

Joseph V. Pearce  
514 Bronson Crescent  
Saskatoon SK,  
S7J 5E3

Mr. Ms.  
Director of Education  
School Division #  
Anywhere Sask

Dear Sir or Madame:

As a requirement for the completion of my Doctor of Philosophy Degree in Educational Administration, I am seeking your permission to conduct educational inquiry in School Division # X. The purpose of this inquiry is to explore teacher perceptions of the Aboriginal student achievement gap in community schools in the Province of Saskatchewan. The achievement gap between Aboriginal students and their non-Aboriginal counterparts is becoming the focus of much educational research.

In consultation with you, I would like to select at least one and possibly two community schools in SD #, one elementary and one high school to participate in my research. Upon deciding which schools will potentially participate, as a matter of courtesy, I will have you make initial contact with the school administration before I approach them with my research request.

Specifically, the central research problem for this study will be to explore in the context of selected Saskatchewan community schools teachers' perceptions of the achievement gap that exists between Aboriginal students and non-Aboriginal students in Saskatchewan provincial schools.

Five central research questions based upon the research problem are posed to guide the study. Within the context of selected community schools in Saskatchewan:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?

2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?
3. How do teachers conceptualize effective instructional and assessment practices with Aboriginal student learning?
4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?
5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

With the implementation of treaty education and other worthy initiatives to transform instruction to a more culturally sensitive and inclusive undertaking for all students, the need to understand the phenomenon of the achievement gap becomes critical. The inquiry will employ a mixed methods research paradigm which will unfold in two parts. The first part will consist of interviews with two community school teachers, one in an elementary and one in a high school setting. From these interviews and other like interviews in selected locations within Saskatchewan, the researcher intends to construct a survey instrument that will be subsequently administered to all teachers in both of the selected community schools within your school division.

The study will be conducted during February and May of 2011. Your school division's participation will be greatly appreciated. In recognition of ethics regulating research with human subjects, all information will remain confidential being reported only for research purposes. Potentially, participants may share information of a negative nature about their colleagues, administration, or school division. This disclosure could put the participant potentially at-risk if participant identities are discovered or the location where they work becomes known. Participants will be advised of this possibility during individual teacher interviews. However, given that there are 98 provincial community schools in the province and that the student population of these schools is approximately 50% Aboriginal, the chances that such recognition may be possible are very remote.

Your favourable consideration of this request would be most appreciated. If you have concerns or questions regarding this research proposal, I would be pleased to provide you with additional information. I can be reached at my office at (306) 966- 2895 or by email at [jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca). Again, I would like to thank you in advance for your help in advancing this research study.

Sincerely yours,

Joseph V. Pearce

APPENDIX B  
LETTER TO PRINCIPALS SEEKING PERMISSION TO  
CONDUCT RESEARCH IN THEIR SCHOOL

Date

Joseph V. Pearce  
514 Bronson Crescent  
Saskatoon SK,  
S7J 5E3

Mr. Ms.  
Principal X Community School  
School Division #  
Anywhere Sask

Dear Sir or Madame:

As a requirement for the completion of my Doctor of Philosophy Degree in Educational Administration, I am seeking your permission to conduct educational inquiry in School Division # X. The purpose of this inquiry is to explore teacher perceptions of the Aboriginal student achievement gap in community schools in the Province of Saskatchewan. The achievement gap between Aboriginal students and their non-Aboriginal counterparts is becoming the focus of much educational research.

Specifically, the central research problem for this study will be to explore in the context of selected Saskatchewan provincial community schools teachers' perceptions of the achievement gap that exists between Aboriginal students and non-Aboriginal students in Saskatchewan provincial schools.

Five central research questions based upon the research problem are posed to guide the study. Within the context of selected community schools in Saskatchewan:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?
2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?
3. How do teachers conceptualize effective instructional and assessment practices with Aboriginal student learning?

4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?
5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

The inquiry will employ a mixed methods research paradigm which will unfold in two parts. The first part will consist of interviews with two community school teachers, one in an elementary and one in a high school setting. From these interviews and other like interviews in selected locations within Saskatchewan, the researcher intends to construct a survey instrument that will be subsequently administered to all teachers in both of the selected community schools within your school division.

The study will be conducted during November and December of 2010. Your school division's participation will be greatly appreciated. In recognition of ethics regulating research with human subjects, all information will remain confidential being reported only for research purposes. Potentially, participants may share information of a negative nature about their colleagues, administration, or school division. This disclosure could put the participant potentially at-risk if participant identities are discovered or the location where they work becomes known. Participants will be advised of this possibility during individual teacher interviews. However, given that there are 98 provincial community schools in the province and that the student population of these schools is approximately 50% Aboriginal, the chances that such recognition may be possible are very remote.

Your favourable consideration of this request would be most appreciated. If you have concerns or questions regarding this research proposal, I would be pleased to provide you with additional information. I can be reached at my office at (306) 966- 2895 or by email at [jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca). Again, I would like to thank you in advance for your help in advancing this research study.

Sincerely yours,

Joseph V. Pearce

APPENDIX C  
LETTER SEEKING PERMISSION OF SCHOOL STAFF TO PARTICIPATE IN THE  
INTERVIEW PHASE OF THE RESEARCH

Date

Joseph V. Pearce  
514 Bronson Crescent  
Saskatoon SK,  
S7J 5E3

Mr. Ms.  
Community School X  
School Division #  
Anywhere, SK

Dear Sir or Madame:

As a requirement for the completion of my Doctor of Philosophy Degree in Educational Administration, I am seeking your permission to conduct educational inquiry in School X. The purpose of this inquiry is to explore teacher perceptions of the Aboriginal student achievement gap in community schools in the Province of Saskatchewan. The achievement gap between Aboriginal students and their non-Aboriginal counterparts is becoming the focus of a growing body of educational research.

Specifically, the central research problem for this study will be to explore in the context of selected Saskatchewan provincial community schools teachers' perceptions of the achievement gap that exists between Aboriginal students and non-Aboriginal students in Saskatchewan provincial schools.

Five central research questions based upon the research problem are posed to guide the study. Within the context of selected community schools in Saskatchewan:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?
2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?

3. How do teachers conceptualize effective instructional and assessment practices with Aboriginal student learning?
4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?
5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

The inquiry will employ a mixed methods research paradigm which will unfold in two parts. The first part will consist of interviews with four teachers in both an elementary and high school community setting. From these interviews and other like interviews in selected locations within Saskatchewan, the researcher intends to construct a survey instrument that will be subsequently administered to all teachers in both of the selected community schools within your school.

This letter requests your permission to participate in the *interview* phase of the research process. Your participation is strictly voluntary and you maintain the right to withdraw from the research at any time should you choose to do so. A transcript of your interview will be available for you to check for accuracy and understanding prior to the construction of the survey instrument. You will also be provided the opportunity to provide feedback on the survey instrument itself prior to its finalization.

The interviews will be conducted during November of 2010. Your participation will be greatly appreciated. In recognition of ethics regulating research with human subjects, all information will remain confidential being reported only for research purposes. Potentially, participants may share information of a negative nature about their colleagues, administration, or school division. This disclosure could put the participant potentially at-risk if participant identities are discovered or the location where they work becomes known. Participants will be advised of this possibility during individual teacher interviews. However, given that there are 98 provincial community schools in the province and that the student population of these schools is approximately 50% Aboriginal, the chances that such recognition may be possible are very remote.

Your favourable consideration of this request would be most appreciated. If you have concerns or questions regarding this research proposal, I would be pleased to provide you with additional information. I can be reached at my office at (306) 966- 2895 or by email at [jvpl18@mail.usask.ca](mailto:jvpl18@mail.usask.ca). Again, I would like to thank you in advance for your help in advancing this research study.

Sincerely yours,  
Joseph V. Pearce

APPENDIX D  
TEACHER INTERVIEW QUESTIONS

Teacher Interview Questionnaire:

1. In your opinion, does a significant gap in terms of Aboriginal and non-Aboriginal achievement exist in this school? Please comment.
2. If you agree that an achievement gap exists, what do you see as the major causes of this achievement gap? Explain.
3. Are your instructional strategies geared toward improving Aboriginal achievement? Please comment. How do you know when you are being successful?
4. How does this school's specific goals to improve Aboriginal student achievement affect your teaching? Please explain.
5. How does the collaborative practice of staff work to improve Aboriginal achievement? Can you provide examples?
6. How do staff and parents share in decision making in this school to improve Aboriginal student achievement? What does it feel like when the sharing is successful?
7. How does staff reflective practice about Aboriginal student achievement in this school assist you in your efforts to improve learning outcomes for Aboriginal learners?
8. Can you describe school programs in place to support Aboriginal students with their learning? How do you use these programs to assist your teaching practice?
9. How are Aboriginal parents actively involved in the life of this school? How do their efforts make a difference in the learning of Aboriginal students?
10. In your opinion, do Aboriginal parents have high expectations for student learning to support student achievement? Explain.
11. Are Aboriginal students engaged in their learning in this school? Please explain. What does it look like when they are successful?
12. Is the wider community aware of the school's plans to improve Aboriginal student achievement? In your opinion, does the community support them? How so?



13. What strengths do Aboriginal students bring to their learning in this school? Please explain.
14. Do you have any further comments you wish to make regarding Aboriginal student achievement?

APPENDIX E  
TEACHER CONSENT FORM FOR THE INTERVIEW PHASE OF THE RESEARCH STUDY

I have read, have had the research process explained to me, and agree to the terms of consent required for me to participate in the interview phase for the study:

Conceptualizing Teacher Perceptions of Aboriginal Student Achievement Gaps: An Exploratory Study being conducted by Joe Pearce (researcher).

I understand that my participation is not part of my regular duties required for my employment. It is an optional activity. I also understand that I will be informed of any new information that may affect my decision to participate or to continue to participate in the study.

I understand that the interview will take approximately 45 minutes to complete.

I understand that the data from this interview process will be used in part to frame a quantitative survey instrument to be used in the second phase of the study.

I understand that my participation in this study is strictly voluntary and that I may choose to withdraw from the process at any time. Any data pertaining to my partial participation shall be destroyed should I choose to withdraw from the research. Furthermore, I understand that my name will be kept confidential and data will be reported only for research purposes.

I understand that this research study has been approved by the University of Saskatchewan's Behavioural Research Ethics Board on December 1, 2010.

Participant's Name

Position

Address

Phone Number

Signature

Date

Contact Information

APPENDIX F  
LETTER REQUESTING PARTICIPATION TO REVIEW (PILOT) SURVEY INSTRUMENT  
FOR RESEARCH

October 24, 2011

Joe Pearce  
Room 3064  
Educational Administration  
College of Education,  
University of Saskatchewan,  
28 Campus Dr.,  
Saskatoon, SK. S7N 0X1

Dear:

As part of my dissertation research for my doctoral studies, I am constructing a survey instrument to conceptualize teachers' perceptions of Aboriginal student achievement. I am seeking your feedback on the instrument as it now stands in order to finalize it for administration this fall.

While your participation in this exercise is strictly voluntary, your advice and feedback would be greatly valued and appreciated.

I look forward to hearing from you concerning this request. Thank you in advance for your consideration of this matter.

Yours sincerely,

Joseph V Pearce

Joe Pearce

APPENDIX G  
LETTER PROVIDING INSTRUCTIONS FOR THE REVIEW OF THE  
SURVEY INSTRUMENT

October 24, 2011

Dear Dr.

Thank you for your willingness to assist me with this activity for my study, *Conceptualizing Teachers' Perceptions of Aboriginal Student Achievement Gaps: An Exploratory Study*. Your input and observations will be invaluable to me where improving this survey are concerned.

In part one of my exploratory mixed methods research design, I conducted teacher interviews in six provincial community schools in three separate school divisions in Saskatchewan, one in the North, one in a rural region, and one in an urban setting. Emergent categories that frame the survey domains included:

- A. Demographics
- B. Teacher Instructional Practice
- C. Parent Involvement
- D. Teacher Professional Practice
- E. Student Membership
- F. Assessment
- G. Achievement Gap Contexts
- H. Community Involvement
- I. Alignment

These survey domains do not appear in the survey instrument itself as I felt their inclusion would potentially mitigate respondent bias, but below is listed an enumeration of questions which correspond to the identified domains. I include this information because I am looking for feedback that the survey questions align with the survey domains.

See Table 1.1 below.

**Table 1.1 Survey Questions by Domain and Number**

Domain	Question Numbers
J. Teacher Demographics	
K. Teacher Instructional Practice (Responsive Curriculum, Instruction, Expectations)	4, 6, 14, 20, 33, 38, 49
L. Parent Involvement (Supervision, Expectations, Collaboration, Parent Night)	2, 7, 18, 32, 37

Attendance	
M. Teacher Professional Practice (PLC, Professional Development, Collaboration)	3, 19, 36, 39
N. Student Membership (Learning Environment, Attachment, School Climate, Attendance, Study Habits, Engagement, Culturally Responsive Curriculum,	1, 8, 11, 17, 28, 29, 35, 41, 44
O. Assessment (AFL, Consistency, Reporting to Parents, Criteria, Leading to Interventions,	9, 5, 16, 23, 31, 43, 45, 50
P. Achievement Gap Contexts	10, 13, 24, 30, 40, 42, 46
Q. Community Involvement (Opportunities to Extend Learning, Programs, Services, SCC,	12, 15, 47, 51,
R. Alignment (Teacher, School, Division – Mission, Goals)	22, 25, 26, 39, 48, 52, 53

In assessing the survey, would you please consider:

1. Content – Is the level of language appropriate?  
Are items difficult to understand?  
Do items reflect a personal bias?
2. Format – Is the spacing/font easy to read?  
Is the survey too long or too short?
3. Instructions – Are the instructions clear?
4. Domains – Are the questions identified in Table 1.1 aligned with the domains?  
Are there too many domains and should they be condensed?

Your feedback is very important to me. Please do not hesitate to offer any thoughts on how this survey could be improved. If possible, could you please return the survey with your comments to me in my office or electronically at [jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca) .

Thank you in advance for your assistance.

Sincerely,

Joe Pearce

APPENDIX H  
LETTER REQUESTING TEACHER PARTICIPATION IN THE SURVEY PHASE

Date

Joseph V. Pearce  
514 Bronson Crescent  
Saskatoon SK,  
S7J 5E3

Mr. Ms.  
Community School X  
Anywhere, SX

Dear Sir or Madame:

As a requirement for the completion of my Doctor of Philosophy Degree in Educational Administration, I am seeking your permission to participate in educational inquiry in School X. The purpose of this inquiry is to explore teacher perceptions of the Aboriginal student achievement gap in community schools in the Province of Saskatchewan. The achievement gap between Aboriginal students and their non-Aboriginal counterparts is becoming the focus of much educational research.

Specifically, the central research problem for this study will be to explore in the context of selected Saskatchewan community schools teachers' perceptions of the achievement gap that exists between Aboriginal students and non-Aboriginal students in Saskatchewan provincial schools.

Five central research questions based upon the research problem are posed to guide the study. Within the context of selected community schools in Saskatchewan:

1. What are teachers' perceptions of Aboriginal student achievement within their schools and in the wider social milieu?
2. How do teachers see their role in facilitating Aboriginal student achievement in their respective schools?
3. How do teachers conceptualize effective instructional and assessment practices with Aboriginal student learning?
4. How do teachers know when their instructional practice is both effective and successful where Aboriginal student achievement is concerned?

5. How do teachers know when their assessment practices are both effective and successful where Aboriginal student learning is concerned?

The inquiry will employ a mixed methods research paradigm which will unfold in two parts. The first part will consist of interviews with one teacher in an elementary community school setting. From this interview and other like interviews in selected locations within Saskatchewan, the researcher intends to construct a survey instrument that will be subsequently administered to all teachers who agree to participate in your school.

This letter requests your permission to participate in the *survey* phase of the research process. Your participation is strictly voluntary and you maintain the right to withdraw from the research at any time should you choose to do so. Potentially, participants may share information of a negative nature about their colleagues, administration, or school division. This disclosure could put the participant potentially at-risk if participant identities are discovered or the location where they work becomes known. Participants will be advised of this possibility during teacher surveys. However, given that there are 98 provincial community schools in the province and that the student population of these schools is approximately 50% Aboriginal, the chances that such recognition may be possible are very remote.

The survey will be conducted during November and December of 2011. Your participation will be greatly appreciated. In recognition of ethics regulating research with human subjects, all information will remain confidential being reported only for research purposes. Your favourable consideration of this request would be most appreciated. If you have concerns or questions regarding this research proposal, I would be pleased to provide you with additional information. I can be reached at my office at (306) 966- 2895 or by email at [jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca). Again, I would like to thank you in advance for your help in advancing this research study.

Sincerely yours,

Joseph V. Pearce

APPENDIX I  
TEACHER CONSENT FORM FOR THE SURVEY PHASE OF THE RESEARCH STUDY

I have read and agree to the terms of consent required for me to participate in the survey phase for the study: Conceptualizing Teacher Perceptions of Aboriginal Student Achievement: An Exploratory Study being conducted by Joe Pearce (researcher). By completing this consent form, I also submit that I have received a copy of this form and understand and agree to its intent.

I understand that my participation is not part of my regular duties required for my employment. It is an optional activity. I also understand that I will be informed of any new information that may affect my decision to participate or to continue to participate in the study.

I understand that the survey will take approximately 20 minutes to complete.

I understand that the data from this survey process will be used to inform the research findings of the study.

I understand that my participation in this study is strictly voluntary and that I may choose to withdraw from the process at any time. Any data pertaining to my partial participation shall be destroyed should I choose to withdraw from the research. My right to withdraw data from the study will apply until data has been pooled and the data analysis process has begun. After this it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw my data. Furthermore, I understand that my name will be kept confidential and data will be reported only for research purposes.

I have been advised as a participant that I may access the results of the study should I wish to do so by contacting the researcher by means of the contact information provided at the bottom of this form.

I have also been advised that any questions I may have regarding my rights as a participant may be addressed by contacting the Ethics office at the University of Saskatchewan at (306) 966-2084 and that if I reside outside of Saskatoon, I may call this number collect.

I understand that this research study has been approved by the University of Saskatchewan's Behavioural Research Ethics Board on December 1, 2010.

I **consent** to participate in the survey. [  ] I **do not consent** to participate in the survey. [  ]



Researcher Contact Information for Joe Pearce

Address: 514 Bronson Crescent

Saskatoon, SK

S7J 5E3

Ph. (H): (306) 373-2562

Ph. (W): (306) 966-2895

Email: [jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca).

APPENDIX J  
SURVEY INTRODUCTION AND CONSENT PROCESS

Dear: Ms. Mrs. or Mr.

**Survey Introduction and Consent Process**

Attached to this correspondence you will find a letter of request to participate in the survey process and a consent form for the same. After reading the letter of request and the consent form, should you wish **not** to participate, could you please return to my email address:

[jvp118@mail.usask.ca](mailto:jvp118@mail.usask.ca) the consent form marked **Do not consent**. Should you wish to participate, please return to the same email address the consent form marked **Do consent**. By so doing, you enable me to more accurately track participants for reporting purposes.

Following the instructions, you will find the link to complete the On-Line survey for the **Teachers Perceptions of Aboriginal Achievement Inventory**.

Please arrange to complete the survey by **December 2, 2011**. It should take about 20 minutes to complete the survey.

Here are the **step by step instructions** on how to complete the survey.

1. The Survey Link will take you to a web page with the *Department of Educational Administration University of Saskatchewan ONLINE SURVEY Teacher Perceptions of Aboriginal Achievement Inventory*.
2. Click on the *“NEXT” button to go survey*.
3. Complete the survey page by page by clicking on the appropriate bubble that corresponds with the answer (clicking **NEXT** at the bottom of each page will allow you to access the next page).
4. Note that if you have omitted an item, you will be prompted to complete it before proceeding to the next page.
5. At the final page, Click **“Submit” button** to submit the survey. (**WARNING**: You must click on SUBMIT in order to send your responses).
6. Note that when you click SUBMIT you will be taken to a webpage that says: ‘THANK YOU FOR YOUR ASSISTANCE AND COOPERATION IN COMPLETING THIS SURVEY!’.

That’s all it takes to complete the survey.

Here is the online **SURVEY LINK**:

**Teacher Perceptions of Aboriginal Achievement Inventory:**

Survey URL:

<http://eplus.usask.ca/surveys/htm/PearceTPAA1.htm>

If you have questions or concerns, please do not hesitate to contact me at the contact information provided in the letter of request to participate.

Sincerely,

Joe Pearce, Researcher

APPENDIX K  
TEACHER SURVEY INSTRUMENT

**Teacher Perceptions of Aboriginal Achievement Inventory**

*This questionnaire seeks to conceptualize teacher perceptions of Aboriginal student achievement in Saskatchewan provincial community schools.*

**A. Teacher Demographics**

*These background questions are essential to providing a means to complete certain statistical tests when all the surveys have been submitted. I remind you that all your information will be kept confidential and anonymous. The data will only be used for research purposes and aggregated for reporting purposes.*

Please click in the bubble that best applies to your response. In some items, you must type in your response.

My gender is:  Male  
 Female

Ethnic Background Information:  I am an Aboriginal person.  
 I am a non-Aboriginal person.

How many years experience do you have teaching? \_\_\_\_\_  
(Please type your number of years teaching experience in the space provided.)

Which school configuration best describes your school?

Pre-K to Grade 6     Pre-K to Grade 12     Pre-K to Grade 8     Grades 7 to 12     Grades 8 to 12     Grades 9 to 12

Current Teaching Assignment:  Classroom Teacher  
(Choose all that may apply)  Learning Support Teacher  
 Other

The regional location of my school is:  Northern  
 Urban  
 Rural

Teacher Training  
At what educational institution did you receive your teacher training? \_\_\_\_\_

What year did you receive your teacher undergraduate training? \_\_\_\_\_

Course Exposure:  I have NOT completed any credit courses in Native Studies.  
 I have 1 to 3 credits in Native Studies.  
 I have 4 or more credits in Native Studies.

## B. Teacher Perceptions of Aboriginal Achievement

Please answer all of the following. As you consider your responses, please think of your experiences while working with Aboriginal students, parents, and communities. All respondents will be kept anonymous.

Of the five responses, click in the bubble that best describes your perception of each statement below.

1. Aboriginal students are culturally affirmed in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
7. Aboriginal parents share in decision-making in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
8. Aboriginal students feel safe in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
10. Societal inequities adversely affect Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
11. Aboriginal student success is recognized and celebrated in my classroom	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>

12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
13. Economic disadvantage adversely affects Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
16. Aboriginal students feel they belong at this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
17. Aboriginal parents are actively engaged in the life of this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
19. Aboriginal students are aware of my expectations for their learning.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
20. School services such as a meals program are helping to improve Aboriginal achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
21. This school has supports in place to deal with Aboriginal learning challenges.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>

25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
26. Aboriginal students are actively engaged in their learning in my classroom.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
28. Historical issues adversely affect Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
29. I use the same criteria to assess all students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
31. Aboriginal students have good study habits.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
34. Parent- teacher interviews are well attended by Aboriginal parents.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
35. I employ holistic teaching practices which engage Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
36. This school does a good job of attending to the learning needs of Aboriginal students.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>

38. Aboriginal students in my class rarely miss school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
41. Aboriginal achievement is improving in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
43. I offer opportunities for Aboriginal students to extend their learning in the community.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
45. I employ culturally responsive curriculum resources in my teaching.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
46. After school programs offered by this school are helping to improve Aboriginal achievement.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>
47. Aboriginal students make smooth grade to grade transitions.	Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>	Do not know <input type="radio"/>



### C. Open-ended Responses

*Please feel free to respond to the open-ended questions and statements below.  
Your responses may be completed in point form. Full or partial responses are acceptable.*

1. How are your assessment practices helping to improve Aboriginal student achievement?

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2. Identify three things you do instructionally to improve Aboriginal student achievement.

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3. Beyond academic achievement, for example attendance, attachment, and positive peer interaction, how do you know when Aboriginal students are being successful in your class?

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4. Do you have any additional comments you would like to make concerning Aboriginal student achievement?

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***Thank you for your thoughtful participation and commentary!***

Please click the **SUBMIT** button to send your responses.

**APPENDIX L**  
**CUMULATIVE REPORT AND FREQUENCY TABLE FOR TPA A SURVEY INSTRUMENT**

my gender is:			
Response (n = 28)	Frequency	Percent	Cumulation
Male	7	25.0%	25.0%
Female	21	75.0%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 1.75	Variance 0.1944	
Median 2.00	Std. Dev. 0.4409		

Ethnic Background Information:			
Response (n = 28)	Frequency	Percent	Cumulation
I am an Aboriginal person.	9	32.1%	32.1%
I am a non-Aboriginal person.	19	67.9%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 1.68	Variance 0.2262	
Median 2.00	Std. Dev. 0.4756		

How many years experience do you have teaching? (Please type your number of years teaching experience in the space provided.)			
Response (n = 28)	Frequency	Percent	
5	4	14.3%	
25	1	3.6%	
7	2	7.1%	
16	3	10.7%	
39	1	3.6%	
11	3	10.7%	
2	2	7.1%	
3	2	7.1%	
8	1	3.6%	
4	1	3.6%	
10	1	3.6%	
9	2	7.1%	
17	1	3.6%	
22	1	3.6%	
1	1	3.6%	
1.5	1	3.6%	
28	1	3.6%	
No Response	0	0.0%	
Mode 5	Mean 10.66	Variance 82.2603	
Median 8.50	Std. Dev. 9.0697		

Which school configuration best describes your school?			
Response (n = 28)	Frequency	Percent	Cumulation
Pre-K to Grade 6	2	7.1%	7.1%
Pre-K to Grade 12	1	3.6%	10.7%
Pre-K to Grade 8	5	17.9%	28.6%
Grades 7 to 12	11	39.3%	67.9%
Grades 8 to 12	5	17.9%	85.7%
Grades 9 to 12	4	14.3%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.00	Variance 1.7778	
Median 4.00	Std. Dev. 1.3333		

Current Teaching Assignment: (Choose all that may apply)			
Response (n = 28)	Frequency	Percent	
Classroom Teacher	21	75.0%	
Learning Support Teacher	6	21.4%	
Other	2	7.1%	
No Response	0	0.0%	

The regional location of my school is:			
Response (n = 28)	Frequency	Percent	Cumulation
Northern	14	50.0%	50.0%
Urban	6	21.4%	71.4%
Rural	8	28.6%	100.0%
No Response	0	0.0%	100.0%
Mode 1	Mean 1.79	Variance 0.7672	
Median 1.50	Std. Dev. 0.8759		

**Cumulative Report**

What year did you receive your teacher undergraduate training?

Response (n = 28)	Frequency	Percent
2005	2	7.1%
1973	1	3.6%
1995	2	7.1%
2007	3	10.7%
1972	1	3.6%
1989	1	3.6%
1987	2	7.1%
2001	1	3.6%
2008	2	7.1%
2009	1	3.6%
1991	1	3.6%
2003	2	7.1%
1997	1	3.6%
2002	1	3.6%
2006	2	7.1%
1994	1	3.6%
2011	1	3.6%
2010	1	3.6%
1990	1	3.6%
1999	1	3.6%
No Response	0	0.0%
Mode 2007	Mean 1998.82	Variance 108.5966
Median 2002.50	Std. Dev. 10.4210	

Course Exposure:

Response (n = 28)	Frequency	Percent	Cumulation
I have NOT completed any credit courses in Native	8	28.6%	28.6%
I have 1 to 3 credits in Native Studies.	10	35.7%	64.3%
I have 4 or more credits in Native Studies.	10	35.7%	100.0%
No Response	0	0.0%	100.0%
Mode 2 (b)	Mean 2.07	Variance 0.6614	
Median 2.00	Std. Dev. 0.8133		

Aboriginal students are culturally affirmed in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	2	7.1%	7.1%
Disagree	4	14.3%	21.4%
Agree	10	35.7%	57.1%
Strongly Agree	12	42.9%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 3.93	Variance 1.6984	
Median 4.00	Std. Dev. 1.3032		

Parents of Aboriginal students support my high expectations for their child's learning at school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	8	28.6%	32.1%
Agree	14	50.0%	82.1%
Strongly Agree	2	7.1%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.29	Variance 1.1746	
Median 4.00	Std. Dev. 1.0838		

I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	17	60.7%	71.4%
Strongly Agree	8	28.6%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.07	Variance 0.7354	
Median 4.00	Std. Dev. 0.8576		

**Cumulative Report**

I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	15	53.6%	60.7%
Strongly Agree	11	39.3%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.25	Variance 0.6389	
Median 4.00	Std. Dev. 0.7993		

Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	3	10.7%	10.7%
Disagree	7	25.0%	35.7%
Agree	11	39.3%	75.0%
Strongly Agree	3	10.7%	85.7%
Do not know	4	14.3%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.14	Variance 1.5344	
Median 3.50	Std. Dev. 1.2387		

I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	14	50.0%	57.1%
Strongly Agree	10	35.7%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.14	Variance 0.7196	
Median 4.00	Std. Dev. 0.8483		

Aboriginal parents share in decision-making in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	6	21.4%	25.0%
Agree	15	53.6%	78.6%
Strongly Agree	3	10.7%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.46	Variance 1.1468	
Median 4.00	Std. Dev. 1.0709		

Aboriginal students feel safe in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	12	42.9%	46.4%
Strongly Agree	14	50.0%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.39	Variance 0.5437	
Median 4.50	Std. Dev. 0.7374		

I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	10	35.7%	39.3%
Strongly Agree	16	57.1%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.46	Variance 0.5542	
Median 5.00	Std. Dev. 0.7444		

Societal inequities adversely affect Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	15	53.6%	60.7%
Strongly Agree	10	35.7%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.18	Variance 0.6706	
Median 4.00	Std. Dev. 0.8189		

**Cumulative Report**

Aboriginal student success is recognized and celebrated in my classroom

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	11	39.3%	50.0%
Strongly Agree	13	46.4%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.21	Variance 0.9153	
Median 4.00	Std. Dev. 0.9567		

The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	16	57.1%	67.9%
Strongly Agree	8	28.6%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.04	Variance 0.7765	
Median 4.00	Std. Dev. 0.8812		

Economic disadvantage adversely affects Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	13	46.4%	57.1%
Strongly Agree	9	32.1%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.00	Variance 0.8889	
Median 4.00	Std. Dev. 0.9428		

By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	6	21.4%	25.0%
Agree	11	39.3%	64.3%
Strongly Agree	5	17.9%	82.1%
Do not know	5	17.9%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.46	Variance 1.2950	
Median 4.00	Std. Dev. 1.1380		

My assessment practices align with efforts to improve Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	14	50.0%	57.1%
Strongly Agree	12	42.9%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.29	Variance 0.6561	
Median 4.00	Std. Dev. 0.8100		

Aboriginal students feel they belong at this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	12	42.9%	46.4%
Strongly Agree	14	50.0%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.39	Variance 0.5437	
Median 4.50	Std. Dev. 0.7374		

Aboriginal parents are actively engaged in the life of this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	2	7.1%	7.1%
Disagree	15	53.6%	60.7%
Agree	9	32.1%	92.9%
Strongly Agree	0	0.0%	92.9%
Do not know	2	7.1%	100.0%
No Response	2	0.0%	100.0%
Mode 2	Mean 2.64	Variance 1.0529	
Median 2.00	Std. Dev. 1.0261		

**Cumulative Report**

**I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	19	67.9%	71.4%
Strongly Agree	8	28.6%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.21	Variance 0.3968	
Median 4.00	Std. Dev. 0.6299		

**Aboriginal students are aware of my expectations for their learning.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	15	53.6%	53.6%
Strongly Agree	12	42.9%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.39	Variance 0.3214	
Median 4.00	Std. Dev. 0.5669		

**School services such as a meals program are helping to improve Aboriginal achievement.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	11	39.3%	39.3%
Strongly Agree	17	60.7%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.61	Variance 0.2474	
Median 5.00	Std. Dev. 0.4974		

**This school has supports in place to deal with Aboriginal learning challenges.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	17	60.7%	64.3%
Strongly Agree	10	35.7%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.29	Variance 0.4339	
Median 4.00	Std. Dev. 0.6587		

**I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	13	46.4%	53.6%
Strongly Agree	12	42.9%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.25	Variance 0.7130	
Median 4.00	Std. Dev. 0.8444		

**My learning goals for Aboriginal students align with school Learning Improvement Plans.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	16	57.1%	60.7%
Strongly Agree	10	35.7%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.25	Variance 0.4907	
Median 4.00	Std. Dev. 0.7005		

**This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.**

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	11	39.3%	42.9%
Strongly Agree	14	50.0%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 4.36	Variance 0.6085	
Median 4.50	Std. Dev. 0.7801		

**Cumulative Report**

Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	15	53.6%	57.1%
Strongly Agree	9	32.1%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.14	Variance 0.5714	
Median 4.00	Std. Dev. 0.7559		

Aboriginal students are actively engaged in their learning in my classroom.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	14	50.0%	60.7%
Strongly Agree	9	32.1%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.04	Variance 0.8505	
Median 4.00	Std. Dev. 0.9222		

Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	5	17.9%	21.4%
Agree	9	32.1%	53.6%
Strongly Agree	10	35.7%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 5	Mean 3.79	Variance 1.5079	
Median 4.00	Std. Dev. 1.2280		

Historical issues adversely affect Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	13	46.4%	57.1%
Strongly Agree	9	32.1%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.00	Variance 0.8889	
Median 4.00	Std. Dev. 0.9428		

I use the same criteria to assess all students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	11	39.3%	39.3%
Agree	11	39.3%	78.6%
Strongly Agree	5	17.9%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 2 (b)	Mean 3.36	Variance 1.4233	
Median 4.00	Std. Dev. 1.1930		

When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	8	28.6%	28.6%
Agree	10	35.7%	64.3%
Strongly Agree	7	25.0%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.57	Variance 1.3651	
Median 4.00	Std. Dev. 1.1684		

Aboriginal students have good study habits.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	13	46.4%	46.4%
Agree	9	32.1%	78.6%
Strongly Agree	2	7.1%	85.7%
Do not know	4	14.3%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 3.00	Variance 1.1111	
Median 3.00	Std. Dev. 1.0541		

**Cumulative Report**

Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	3	10.7%	10.7%
Agree	15	53.6%	64.3%
Strongly Agree	10	35.7%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.14	Variance 0.7937	
Median 4.00	Std. Dev. 0.8909		

Teachers work collaboratively to raise Aboriginal student achievement in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	1	3.6%	7.1%
Agree	14	50.0%	57.1%
Strongly Agree	12	42.9%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.25	Variance 0.8611	
Median 4.00	Std. Dev. 0.9280		

Parent-teacher interviews are well attended by Aboriginal parents.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	3	10.7%	10.7%
Disagree	12	42.9%	53.6%
Agree	11	39.3%	92.9%
Strongly Agree	0	0.0%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 2.75	Variance 1.2315	
Median 2.00	Std. Dev. 1.1097		

I employ holistic teaching practices which engage Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	19	67.9%	75.0%
Strongly Agree	4	14.3%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.89	Variance 0.5437	
Median 4.00	Std. Dev. 0.7374		

This school does a good job of attending to the learning needs of Aboriginal students.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	4	14.3%	14.3%
Agree	17	60.7%	75.0%
Strongly Agree	7	25.0%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.96	Variance 0.8505	
Median 4.00	Std. Dev. 0.9222		

Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	2	7.1%	7.1%
Agree	11	39.3%	46.4%
Strongly Agree	10	35.7%	82.1%
Do not know	5	17.9%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.04	Variance 0.8505	
Median 4.00	Std. Dev. 0.9222		

Aboriginal students in my class rarely miss school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	6	21.4%	21.4%
Disagree	15	53.6%	75.0%
Agree	5	17.9%	92.9%
Strongly Agree	1	3.6%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 2.29	Variance 1.2487	
Median 2.00	Std. Dev. 1.1175		



**Cumulative Report**

My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	20	71.4%	75.0%
Strongly Agree	5	17.9%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.04	Variance 0.4061	
Median 4.00	Std. Dev. 0.6373		

I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	2	7.1%	7.1%
Disagree	10	35.7%	42.9%
Agree	10	35.7%	78.6%
Strongly Agree	4	14.3%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 2 (b)	Mean 3.14	Variance 1.6085	
Median 3.50	Std. Dev. 1.2683		

Aboriginal achievement is improving in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	2	7.1%	10.7%
Agree	17	60.7%	71.4%
Strongly Agree	5	17.9%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.82	Variance 0.8929	
Median 4.00	Std. Dev. 0.9449		

An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	7	25.0%	25.0%
Disagree	12	42.9%	67.9%
Agree	3	10.7%	78.6%
Strongly Agree	3	10.7%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 2.39	Variance 1.6548	
Median 2.00	Std. Dev. 1.2864		

I offer opportunities for Aboriginal students to extend their learning in the community.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	6	21.4%	21.4%
Agree	14	50.0%	71.4%
Strongly Agree	7	25.0%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.79	Variance 1.1376	
Median 4.00	Std. Dev. 1.0666		

Early childhood learning programs are helping to raise Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	11	39.3%	39.3%
Strongly Agree	10	35.7%	75.0%
Do not know	7	25.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.11	Variance 0.6177	
Median 4.00	Std. Dev. 0.7859		

I employ culturally responsive curriculum resources in my teaching.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	20	71.4%	71.4%
Strongly Agree	8	28.6%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.29	Variance 0.2116	
Median 4.00	Std. Dev. 0.4600		

**Cumulative Report**

My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	20	71.4%	75.0%
Strongly Agree	5	17.9%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.04	Variance 0.4061	
Median 4.00	Std. Dev. 0.6373		

I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	2	7.1%	7.1%
Disagree	10	35.7%	42.9%
Agree	10	35.7%	78.6%
Strongly Agree	4	14.3%	92.9%
Do not know	2	7.1%	100.0%
No Response	0	0.0%	100.0%
Mode 2 (b)	Mean 3.14	Variance 1.6085	
Median 3.50	Std. Dev. 1.2683		

Aboriginal achievement is improving in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	1	3.6%	3.6%
Disagree	2	7.1%	10.7%
Agree	17	60.7%	71.4%
Strongly Agree	5	17.9%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.82	Variance 0.8929	
Median 4.00	Std. Dev. 0.9449		

An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	7	25.0%	25.0%
Disagree	12	42.9%	67.9%
Agree	3	10.7%	78.6%
Strongly Agree	3	10.7%	89.3%
Do not know	3	10.7%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 2.39	Variance 1.6548	
Median 2.00	Std. Dev. 1.2864		

I offer opportunities for Aboriginal students to extend their learning in the community.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	6	21.4%	21.4%
Agree	14	50.0%	71.4%
Strongly Agree	7	25.0%	96.4%
Do not know	1	3.6%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 3.79	Variance 1.1376	
Median 4.00	Std. Dev. 1.0666		

Early childhood learning programs are helping to raise Aboriginal student achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	11	39.3%	39.3%
Strongly Agree	10	35.7%	75.0%
Do not know	7	25.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.11	Variance 0.6177	
Median 4.00	Std. Dev. 0.7859		

I employ culturally responsive curriculum resources in my teaching.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	0	0.0%	0.0%
Agree	20	71.4%	71.4%
Strongly Agree	8	28.6%	100.0%
Do not know	0	0.0%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.29	Variance 0.2116	
Median 4.00	Std. Dev. 0.4600		

**Cumulative Report**

After school programs offered by this school are helping to improve Aboriginal achievement.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	0	0.0%	0.0%
Disagree	1	3.6%	3.6%
Agree	13	46.4%	50.0%
Strongly Agree	10	35.7%	85.7%
Do not know	4	14.3%	100.0%
No Response	0	0.0%	100.0%
Mode 4	Mean 4.14	Variance 0.6455	
Median 4.00	Std. Dev. 0.8034		

Aboriginal students make smooth grade to grade transitions.

Response (n = 28)	Frequency	Percent	Cumulation
Strongly Disagree	3	10.7%	10.7%
Disagree	13	46.4%	57.1%
Agree	6	21.4%	78.6%
Strongly Agree	0	0.0%	78.6%
Do not know	6	21.4%	100.0%
No Response	0	0.0%	100.0%
Mode 2	Mean 2.54	Variance 0.9246	
Median 2.00	Std. Dev. 0.9616		

APPENDIX M  
RESULTS OF THE CRONBACH'S ALPHA

**Case Processing Summary**

		N	%
Cases	Valid	28	100.0
	Excluded <sup>a</sup>	0	.0
	Total	28	100.0

a. List wise deletion based on all variables in the procedure

**Reliability Statistics**

Cronbach's Alpha	N of Items
.864	47

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q10_S110.Aboriginalstudentsareculturallyaffirmedinthis	148.25	197.676	.257	.862
Q11_S111.ParentsofAboriginalstudentsupportmyhighexpect	148.46	193.369	.403	.859
Q12_S112.Iseekthehelpofmyprofessionallearningcommunity	148.21	199.878	.291	.862
Q13_S113.IemployAboriginalculturalknowledge toenhance my	148.07	205.402	-.028	.866
Q14_S114.Datafromprovincialstandardizedtestssuchasthe	148.46	184.851	.591	.854
Q15_S115.IemployAboriginalworldviewstoenhance myinstru	147.96	204.406	.015	.866
Q16_S116.Aboriginalparents share indecision making in this	148.36	197.942	.237	.863
Q17_S117.Aboriginalstudents feel safe in this school	147.86	200.201	.259	.862
Q18_S118.Iregularlyemploy assessment for learning to inform	147.79	196.471	.477	.859
Q19_S119.Societal inequities adversely affect Aboriginal stud	148.04	203.813	.052	.865
Q20_S120.Aboriginalstudentsuccess is recognized and celebra	147.96	201.147	.170	.863
Q21_S121.The wider Aboriginal community offers opportunities	148.14	203.312	.074	.865

Q22_S122.Economicdisadvant ageadverselyaffectsAboriginals	147.96	198.036	.278	.862
Q23_S123.BymeansoftheSchoo lCommunityCouncilthewider	148.14	189.386	.480	.857
Q24_S124.Myassessmentpracti cesalignwitheffortstoimprov	148.04	197.295	.435	.860
Q25_S125.Aboriginalstudentsf eeltheybelongatthisschool	147.86	200.201	.259	.862
Q26_S126.Aboriginalparentsar eactivelyengagedinthelife	148.93	193.772	.415	.859
Q27_S127.Iengageinprofession aldevelopmenttoexpandmyin	148.14	200.497	.308	.862
Q28_S128.Aboriginalstudentsa reawareofmyexpectationsfor	147.89	200.618	.265	.862
Q29_S129.Schoolservicessucha samealsprogramarehelping	147.79	199.656	.383	.861
Q30_S130.Thisschoolhassuppo rtsinplacetodealwithAbori	148.07	198.439	.424	.860
Q31_S131.IprovideAboriginalp arentswithregularongoing	147.96	201.813	.153	.864
Q32_S132.Mylearninggoalsfor Aboriginalstudentsalignwith	148.00	194.519	.591	.857
Q33_S133.ThisschoolsLearnin gImprovementPlantoimprove	147.79	197.360	.387	.860
Q34_S134.Programstosupport AboriginallearningsuchasanE	147.89	202.173	.121	.864
Q35_S135.Aboriginalstudentsa reactivelyengagedintheirle	148.04	193.813	.500	.858
Q36_S136.Culturallyresponsiv ecurriculumsuchasTreatyEduc	148.07	193.254	.387	.860
Q37_S137.Historicalissuesadve rselyaffectAboriginalstuden	147.96	199.221	.227	.863
Q38_S138.Iusethe same criteri at o assess all students	148.54	202.628	.080	.865
Q39_S139.WhenIemploycultu rallyresponsiveteachingpractic	148.21	193.063	.412	.859
Q40_S140.Aboriginalstudentsh avegoodstudyhabits	148.50	187.667	.564	.855
Q41_S141.Culturallyresponsiv einstructioncanleadtoimprov	148.14	197.386	.412	.860
Q42_S142.Teachersworkcollab orativelytoraiseAboriginalst	148.07	199.402	.263	.862
Q43_S143.Parentteacherintervi ewsarewellattendedbyAbor	148.89	194.173	.380	.860
Q44_S144.Iemployholisticteac hingpracticeswhichengageAb	148.11	193.803	.513	.858

Q45_S145.This schooldoesagoo djobofattendingtothelear	148.29	195.619	.527	.858
Q46_S146.Intergenerationaleff ectssuchastheresidentials	147.75	205.157	-.025	.868
Q47_S147.Aboriginalstudentsi nmyclassrarelymissschool	149.25	192.713	.453	.858
Q48_S148.Myassessmentpracti cesleadtopositiveinterventio	148.11	192.099	.698	.855
Q49_S149.Iactivelycollaborate withAboriginalcommunitiest	148.61	194.173	.350	.860
Q50_S150.Aboriginalachievem entisimprovinginthisschool	148.14	191.608	.525	.857
Q51_S151.Anachievementgapb etweenAboriginalandnonAbori g	149.00	190.889	.358	.861
Q52_S152.Iofferopportunitiesf orAboriginalstudentstoext	148.29	202.804	.083	.865
Q53_S153.Earlychildhoodlearn ingprogramsarehelpingtorai	147.54	202.702	.085	.865
Q54_S154.Iemployculturallyre sponsivecurriculumresources	148.11	198.914	.475	.860
Q55_S155.Afterschoolprogram sofferedbythisschoolarehel	147.79	196.545	.369	.860
Q56_S156.Aboriginalstudents makesmoothgradetogradetrans	148.64	189.720	.379	.860

APPENDIX N

TABLE 5.5: T-TEST COMPARING TWO INDEPENDENT SAMPLE MEANS, ABORIGINAL AND NON-ABORIGINAL TEACHERS FOR TPAI INVENTORY (ALL 47 ITEMS)  $P < 0.05$

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	I am a non-Aboriginal person.	19	4.37	0.995	87.4%	53%
	I am an Aboriginal person	9	3.00*	1.500	60.0%	22%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	I am a non-Aboriginal person.	19	3.21	0.918	64.2%	16.8%
	I am an Aboriginal person	9	3.44	1.142	68.6%	22.2%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	I am a non-Aboriginal person.	19	4.21	0.713	84.2%	21.4%
	I am an Aboriginal person	9	3.78	1.093	75.6%	22.2%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	I am a non-Aboriginal person.	19	3.96	0.780	79.0%	15.9%
	I am an Aboriginal person	9	4.89*	0.333	97.8%	88.9%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	I am a non-Aboriginal person.	19	3.11	0.875	62.2%	10.5%
	I am an Aboriginal person	9	3.22	0.500	64.4%	11.1%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	I am a non-Aboriginal person.	19	3.89	0.875	70.6%	15.8%
	I am an Aboriginal person	9	4.67*	0.500	66.6%	0%
7. Aboriginal parents share in decision-making in this school.	I am a non-Aboriginal person.	19	3.53	1.1.24	70.6%	15.8%
	I am an Aboriginal person	9	3.33	1.000	66.6%	0%
8. Aboriginal students feel safe in this school.	I am a non-Aboriginal person.	19	4.42	0.607	88.4%	47.4%
	I am an Aboriginal person	9	4.33	1.000	86.6%	55.6%
9. I regularly employ assessment for learning	I am a non-Aboriginal person.	19	4.26	0.806	85.2%	42.1%

to inform students of their respective progress towards their learning goals.	I am an Aboriginal person	9	4.89*	0.333	97.8%	88.9%
10. Societal inequities adversely affect Aboriginal student achievement.	I am a non-Aboriginal person.	19	4.00	0.882	80%	26.3%
	I am an Aboriginal person	9	4.56*	0.527	91.2%	55.6%
11. Aboriginal student success is recognized and celebrated in my classroom.	I am a non-Aboriginal person.	19	4.05	0.911	81%	31.6%
	I am an Aboriginal person	9	4.56	1.014	91.2%	77.8%
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	I am a non-Aboriginal person.	19	3.95	0.848	79%	21.1%
	I am an Aboriginal person	9	4.22	0.972	84.4%	44.4%
13. Economic disadvantage adversely affects Aboriginal student achievement.	I am a non-Aboriginal person.	19	3.84	0.898	76.8%	21.1%
	I am an Aboriginal person	9	4.33	1.000	86.6%	55.6%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	I am a non-Aboriginal person.	19	3.53	0.905	70.6%	10.5%
	I am an Aboriginal person	9	3.33	1.581	66.6%	33.3%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	I am a non-Aboriginal person.	19	4.11	0.658	82.2%	21.1%
	I am an Aboriginal person	9	4.67	1.000	93.4%	88.9%
16. Aboriginal students feel they belong at this school.	I am a non-Aboriginal person.	19	4.42	0.607	88.4%	47.3%
	I am an Aboriginal person	9	4.33	1.000	86.6%	55.6%
17. Aboriginal parents are actively engaged in the life of this school.	I am a non-Aboriginal person.	19	2.74	0.933	54.8%	0%
	I am an Aboriginal person	9	2.44	1.236	48.8%	0%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	I am a non-Aboriginal person.	19	4.05	0.621	81%	15.8%
	I am an Aboriginal person	9	4.56*	0.527	91.2%	55.6%
19. Aboriginal students are aware of my expectations for their learning.	I am a non-Aboriginal person.	19	4.21	0.535	84.2%	26.3%
	I am an Aboriginal person	9	4.78	0.441	95.6%	77.8%



20. School services such as a meals program are helping to improve Aboriginal achievement.	I am a non-Aboriginal person.	19	4.53	0.513	90.6%	52.6%
	I am an Aboriginal person	9	4.78	0.441	95.6%	77.8%
21. This school has supports in place to deal with Aboriginal learning challenges.	I am a non-Aboriginal person.	19	4.32	0.487	86.4%	31.6%
	I am an Aboriginal person	9	4.22	0.972	84.4%	44.4%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	I am a non-Aboriginal person.	19	4.00	0.882	80%	26.3%
	I am an Aboriginal person	9	4.78*	0.441	95.6%	77.8%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	I am a non-Aboriginal person.	19	4.21	0.535	84.2%	26.3%
	I am an Aboriginal person	9	4.33	1.000	86.6%	55.6%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	I am a non-Aboriginal person.	19	4.32	0.671	86.4%	42.1%
	I am an Aboriginal person	9	4.22	1.014	88.8%	66.7%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	I am a non-Aboriginal person.	19	4.05	0.621	81%	21.0%
	I am an Aboriginal person	9	4.33	1.000	86.6%	55.6%
26. Aboriginal students are actively engaged in their learning in my classroom.	I am a non-Aboriginal person.	19	3.84	0.834	76.8%	15.8%
	I am an Aboriginal person	9	4.44	1.014	88.8%	66.7%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	I am a non-Aboriginal person.	19	3.58	1.170	71.6%	21.0%
	I am an Aboriginal person	9	4.22	1.302	84.4%	66.7%
28. Historical issues adversely affect Aboriginal student achievement.	I am a non-Aboriginal person.	19	3.74	0.991	74.8%	21.0%
	I am an Aboriginal person	9	4.56*	0.527	91.2%	55.6%
29. I use the same criteria to assess all students.	I am a non-Aboriginal person.	19	3.37	1.165	67.4%	15.8%
	I am an Aboriginal person	9	3.33	1.323	66.6%	22.2%

30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	I am a non-Aboriginal person.	19	3.21	1.084	64.2%	10.5%
	I am an Aboriginal person	9	4.33*	1.000	86.6%	55.6%
31. Aboriginal students have good study habits.	I am a non-Aboriginal person.	19	2.74	0.872	54.8%	0%
	I am an Aboriginal person	9	3.56	1.236	71.2%	22.2%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	I am a non-Aboriginal person.	19	3.74	0.991	79%	26.3%
	I am an Aboriginal person	9	4.56*	0.527	91.2%	55.6%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	I am a non-Aboriginal person.	19	4.11	1.049	82.2%	36.8%
	I am an Aboriginal person	9	4.56	0.527	91.2%	55.6%
34. Parent- teacher interviews are well attended by Aboriginal parents.	I am a non-Aboriginal person.	19	2.84	1.119	56.8%	0%
	I am an Aboriginal person	9	2.56	1.130	51.2%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	I am a non-Aboriginal person.	19	3.68	0.749	73.6%	5.3%
	I am an Aboriginal person	9	4.33*	0.500	86.6%	33.3%
36. This school does a good job of attending to the learning needs of Aboriginal students.	I am a non-Aboriginal person.	19	4.05	0.621	81%	15.8%
	I am an Aboriginal person	9	3.78	1.394	75.6%	44.4%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	I am a non-Aboriginal person.	19	3.95	0.911	79%	31.6%
	I am an Aboriginal person	9	4.22	0.972	84.4%	44.4%
38. Aboriginal students in my class rarely miss school.	I am a non-Aboriginal person.	19	1.95	0.705	39%	0%
	I am an Aboriginal person	9	3.00	1.500	60%	11.1%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.	I am a non-Aboriginal person.	19	3.95	0.405	79%	5.3%
	I am an Aboriginal person	9	4.22	0.972	84.4%	44.4%

40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	I am a non-Aboriginal person.	19	2.84	1.119	56.8%	5.3%
	I am an Aboriginal person	9	3.78	1.394	75.6%	33.3%
41. Aboriginal achievement is improving in this school.	I am a non-Aboriginal person.	19	3.63	0.895	72.6%	5.3%
	I am an Aboriginal person	9	4.22	0.972	84.4%	44.4%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	I am a non-Aboriginal person.	19	2.47	1.124	49.4%	5.3%
	I am an Aboriginal person	9	2.22	1.642	44.4%	22.2%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	I am a non-Aboriginal person.	19	3.42	1.071	68.4%	10.5%
	I am an Aboriginal person	9	4.56*	0.527	91.2%	55.6%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	I am a non-Aboriginal person.	19	4.00	0.817	80%	31.6%
	I am an Aboriginal person	9	4.33	0.707	86.6%	44.4%
45. I employ culturally responsive curriculum resources in my teaching.	I am a non-Aboriginal person.	19	4.11	0.315	82.2%	10.5%
	I am an Aboriginal person	9	4.67*	0.500	93.4%	66.7%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	I am a non-Aboriginal person.	19	4.16	0.688	83.2%	31.6%
	I am an Aboriginal person	9	4.11	1.054	82.2%	44.4%
47. Aboriginal students make smooth grade to grade transitions.	I am a non-Aboriginal person.	19	2.47	0.905	49.4%	0%
	I am an Aboriginal person	9	2.67	1.118	53.4%	0%

APPENDIX O

TABLE 5.6: T-TEST COMPARING TWO INDEPENDENT SAMPLE MEANS, URBAN AND RURAL AND NORTHERN TEACHERS FOR TPAA INVENTORY (ALL 47 ITEMS)  $P < 0.05$

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Urban and Rural	14	4.00	1.359	80%	50%
	Northern	14	3.86	1.292	77.2%	35.7%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Urban and Rural	14	3.14	1.027	62.8%	0%
	Northern	14	3.43	1.158	68.6%	14.2%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Urban and Rural	14	3.79	1.051	75.8%	21.4%
	Northern	14	4.36	0.497	87.2%	35.7%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Urban and Rural	14	4.14	1.027	82.8%	42.8%
	Northern	14	4.36	0.497	87.2%	35.7%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Urban and Rural	14	3.07	1.207	61.4%	7.14%
	Northern	14	3.21	1.311	64.2%	14.2%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Urban and Rural	14	3.79	0.975	75.8%	21.4%
	Northern	14	4.50*	0.519	90%	50%
7. Aboriginal parents share in decision-making in this school.	Urban and Rural	14	3.64	0.929	72.8%	14.2%
	Northern	14	3.29	1.204	65.8%	7.14%
8. Aboriginal students feel safe in this school.	Urban and Rural	14	4.43	0.646	88.6%	50%
	Northern	14	4.36	0.842	87.2%	50%
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Urban and Rural	14	4.21	0.893	84.2%	42.8%
	Northern	14	4.71	0.469	94.2%	71.4%
10. Societal inequities adversely affect Aboriginal student achievement.	Urban and Rural	14	4.36	0.633	87.2%	42.8%
	Northern	14	4.00	0.961	80%	28.5%
11. Aboriginal student success is recognized and celebrated in my classroom.	Urban and Rural	14	4.00	1.038	80%	35.7%
	Northern	14	4.43	0.852	88.6%	57.1%

12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Urban and Rural	14	3.93	0.917	78.6%	21.4%
	Northern	14	4.14	0.865	82.8%	35.7%
13. Economic disadvantage adversely affects Aboriginal student achievement.	Urban and Rural	14	4.29	0.726	85.8%	42.8%
	Northern	14	3.71	1.069	74.2%	21.4%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Urban and Rural	14	3.14	1.167	62.8%	14.2%
	Northern	14	3.79	1.051	75.8%	21.4%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Urban and Rural	14	4.36	0.842	87.2%	50%
	Northern	14	4.21	0.802	87.2%	35.7%
16. Aboriginal students feel they belong at this school.	Urban and Rural	14	4.50	0.651	90%	51.1%
	Northern	14	4.29	0.825	85.8%	42.8%
17. Aboriginal parents are actively engaged in the life of this school.	Urban and Rural	14	2.79	1.051	55.8%	0%
	Northern	14	2.50	1.019	50%	0%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	Urban and Rural	14	4.14	0.770	82.8%	28.5%
	Northern	14	4.29	0.469	85.8%	28.5%
19. Aboriginal students are aware of my expectations for their learning.	Urban and Rural	14	4.36	0.633	82.7%	42.8%
	Northern	14	4.43	0.514	88.6%	42.8%
20. School services such as a meals program are helping to improve Aboriginal achievement.	Urban and Rural	14	4.57	0.514	91.4%	57.1%
	Northern	14	4.64	0.497	92.8%	64.2%
21. This school has supports in place to deal with Aboriginal learning challenges.	Urban and Rural	14	4.43	0.514	88.6%	42.8%
	Northern	14	4.14	0.770	82.8%	28.5%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Urban and Rural	14	4.36	0.929	87.2%	57.1%
	Northern	14	4.14	0.770	82.8%	28.5%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Urban and Rural	14	4.07	0.829	81.5%	28.5%
	Northern	14	4.43	0.514	88.6%	42.8%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Urban and Rural	14	4.07	0.917	81.5%	35.7%
	Northern	14	4.64	0.497	92.8%	64.2%
25. Programs to support Aboriginal learning such as an	Urban and Rural	14	4.14	0.865	82.5%	35.7%

Elders program are helping to improve Aboriginal achievement.	Northern	14	4.14	0.663	82.5%	28.5%
26. Aboriginal students are actively engaged in their learning in my classroom.	Urban and Rural	14	3.93	0.997	75.8%	28.5%
	Northern	14	4.14	0.865	82.5%	35.7%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Urban and Rural	14	3.79	1.311	75.8%	35.7%
	Northern	14	3.79	1.188	75.8%	35.7%
28. Historical issues adversely affect Aboriginal student achievement.	Urban and Rural	14	4.14	0.949	82.5%	42.8%
	Northern	14	3.86	0.949	77.2%	21.4%
29. I use the same criteria to assess all students.	Urban and Rural	14	3.00	1.240	60%	14.2%
	Northern	14	3.71	1.069	74.2%	21.4%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Urban and Rural	14	3.43	1.284	68.6%	28.5%
	Northern	14	3.71	1.069	74.2%	21.4%
31. Aboriginal students have good study habits.	Urban and Rural	14	3.07	0.997	61.4%	7.14%
	Northern	14	2.93	1.141	58.6%	7.14%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Urban and Rural	14	4.14	1.027	82.5%	42.8%
	Northern	14	4.14	0.770	82.5%	28.5%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Urban and Rural	14	4.21	0.802	84%	35.7%
	Northern	14	4.29	1.069	85.8%	50%
34. Parent- teacher interviews are well attended by Aboriginal parents.	Urban and Rural	14	2.71	1.139	54.2%	0%
	Northern	14	2.79	1.122	55.8%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	Urban and Rural	14	4.00	0.785	80%	21.4%
	Northern	14	3.79	0.699	75.8%	7.14%
36. This school does a good job of attending to the learning needs of Aboriginal students.	Urban and Rural	1	4.00	0.961	80%	28.5%
	Northern	14	3.93	0.917	78.6%	21.4%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Urban and Rural	14	4.21	0.893	84.2%	50%
	Northern	14	3.86	0.949	77.2%	21.4%
38. Aboriginal students in my class rarely miss school.	Urban and Rural	14	2.21	0.893	44.2%	0%
	Northern	14	2.36	1.336	47.2%	7.14%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts.	Urban and Rural	14	4.07	0.475	81.5%	14.2%
	Northern	14	4.00	0.785	80%	21.4%

APPENDIX P

5.7: T-TEST COMPARING TWO INDEPENDENT SAMPLE MEANS, TEACHERS WITH ONE OR MORE NATIVE STUDIES CREDITS OR NO NATIVE STUDIES CREDITS FOR TPAI INVENTORY (ALL 47 ITEMS) P < 0.05

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Native Studies Credits 1 or more	20	3.70	1.460	74%	40%
	I have not completed any credit courses in Native Studies.	8	4.50*	0.530	90%	50%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Native Studies Credits 1 or more	20	3.50	1.111	70%	10%
	I have not completed any credit courses in Native Studies.	8	2.75	0.881	55%	0%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Native Studies Credits 1 or more	20	4.00	0.562	80%	20%
	I have not completed any credit courses in Native Studies.	8	4.25	0.741	85%	50%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Native Studies Credits 1 or more	20	4.35	0.595	87%	45.0%
	I have not completed any credit courses in Native Studies.	8	4.00	0.640	80%	25%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Native Studies Credits 1 or more	20	3.15	1.160	63%	5.0%
	I have not completed any credit courses in Native Studies.	8	3.13	1.280	62.6%	12.5%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Native Studies Credits 1 or more	20	4.25	0.600	85%	40%
	I have not completed any credit courses in Native Studies.	8	3.88	0.640	77.6%	25%
7. Aboriginal parents share in decision-making in this school.	Native Studies Credits 1 or more	20	3.50	1.160	70%	5.0%
	I have not completed any credit courses in Native Studies.	8	3.38	1.280	67.6%	12.5%
8. Aboriginal students feel safe in this school.	Native Studies Credits 1 or more	20	4.30	0.692	86%	45.0%
	I have not completed any credit courses in Native Studies.	8	4.63	0.511	92.6%	62.5%

9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Native Studies Credits 1 or more	20	4.45	0.600	89%	55%
	I have not completed any credit courses in Native Studies.	8	4.50	0.641	90%	62.5%
10. Societal inequities adversely affect Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.25	0.555	85%	35%
	I have not completed any credit courses in Native Studies.	8	4.00	0.921	80%	37.5%
11. Aboriginal student success is recognized and celebrated in my classroom.	Native Studies Credits 1 or more	20	4.30	0.070	86%	55%
	I have not completed any credit courses in Native Studies.	8	4.00	0.833	80%	50%
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Native Studies Credits 1 or more	20	3.95	0.735	79%	30%
	I have not completed any credit courses in Native Studies.	8	4.25	0.461	85%	25%
13. Economic disadvantage adversely affects Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.05	0.833	81%	35%
	I have not completed any credit courses in Native Studies.	8	3.88	0.911	77.6%	25%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Native Studies Credits 1 or more	20	3.45	1.191	69%	20%
	I have not completed any credit courses in Native Studies.	8	3.50	0.991	70%	12.5%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.30	0.691	86%	50%
	I have not completed any credit courses in Native Studies.	8	4.25	0.462	85%	25%
16. Aboriginal students feel they belong at this school.	Native Studies Credits 1 or more	20	4.40	0.635	88%	55%
	I have not completed any credit courses in Native Studies.	8	4.38	0.511	87.6%	37.5%
17. Aboriginal parents are actively engaged in the life of this school.	Native Studies Credits 1 or more	20	2.60	0.631	52%	0%
	I have not completed any credit courses in Native Studies.	8	2.75	1.302	55%	0%
18. I engage in professional	Native Studies Credits 1 or more	20	4.20	0.675	84%	30%



development to expand my instructional practice to improve Aboriginal students' achievement.	I have not completed any credit courses in Native Studies.	8	4.25	0.461	85%	25%
19. Aboriginal students are aware of my expectations for their learning.	Native Studies Credits 1 or more	20	4.45	0.575	89%	45%
	I have not completed any credit courses in Native Studies.	8	4.25	0.461	85%	37.5%
20. School services such as a meals program are helping to improve Aboriginal achievement.	Native Studies Credits 1 or more	20	4.60	0.511	92%	60%
	I have not completed any credit courses in Native Studies.	8	4.63	0.511	92.6%	62.5%
21. This school has supports in place to deal with Aboriginal learning challenges.	Native Studies Credits 1 or more	20	4.25	0.510	85%	35%
	I have not completed any credit courses in Native Studies.	8	4.38	0.671	87.6%	37.5%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Native Studies Credits 1 or more	20	4.35	0.542	87%	50%
	I have not completed any credit courses in Native Studies.	8	4.00	0.511	80%	25%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Native Studies Credits 1 or more	20	4.25	0.571	85%	35%
	I have not completed any credit courses in Native Studies.	8	4.25	0.740	85%	37.5%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Native Studies Credits 1 or more	20	4.35	0.681	87%	50%
	I have not completed any credit courses in Native Studies.	8	4.38	0.700	87.6%	50%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	Native Studies Credits 1 or more	20	4.05	0.681	81%	30%
	I have not completed any credit courses in Native Studies.	8	4.38	0.700	87.6%	37.5%
26. Aboriginal students are actively engaged in their learning in my classroom.	Native Studies Credits 1 or more	20	4.10	0.810	82%	40%
	I have not completed any credit courses in Native Studies.	8	3.88	0.511	77.5%	12.5%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Native Studies Credits 1 or more	20	3.70	0.725	74%	35%
	I have not completed any credit courses in Native Studies.	8	4.00	0.911	80%	37.5%

28. Historical issues adversely affect Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.15	0.775	83%	35%
	I have not completed any credit courses in Native Studies.	8	3.63	1.301	72.6%	25%
29. I use the same criteria to assess all students.	Native Studies Credits 1 or more	20	3.40	0.775	68%	20%
	I have not completed any credit courses in Native Studies.	8	3.25	1.070	65%	12.5%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Native Studies Credits 1 or more	20	3.70	0.925	74%	30%
	I have not completed any credit courses in Native Studies.	8	3.25	1.061	65%	12.5%
31. Aboriginal students have good study habits.	Native Studies Credits 1 or more	20	3.05	0.821	61%	12.5%
	I have not completed any credit courses in Native Studies.	8	2.88	1.351	57.6%	12.5%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Native Studies Credits 1 or more	20	4.25	0.571	85%	35%
	I have not completed any credit courses in Native Studies.	8	3.88	0.831	77.6%	37.5%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Native Studies Credits 1 or more	20	4.30	0.715	86%	45%
	I have not completed any credit courses in Native Studies.	8	4.13	0.701	82.6%	37.5%
34. Parent- teacher interviews are well attended by Aboriginal parents.	Native Studies Credits 1 or more	20	2.40	1.380	44%	55%
	I have not completed any credit courses in Native Studies.	8	2.75	0.760	55%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	Native Studies Credits 1 or more	20	4.00	0.601	80%	15%
	I have not completed any credit courses in Native Studies.	8	3.63	1.380	72.6%	12.5%
36. This school does a good job of attending to the learning needs of Aboriginal students.	Native Studies Credits 1 or more	20	3.85	0.601	77%	25%
	I have not completed any credit courses in Native Studies.	8	4.25	1.061	85%	25%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.05	0.755	81%	30%
	I have not completed any credit courses in Native Studies.	8	4.00	0.990	80%	50%

38. Aboriginal students in my class rarely miss school.	Native Studies Credits 1 or more	20	2.40	1.450	48%	5.0%
	I have not completed any credit courses in Native Studies.	8	2.00	1.260	40%	0%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts	Native Studies Credits 1 or more	20	4.10	0.950	82%	20%
	I have not completed any credit courses in Native Studies.	8	3.88	0.640	77.6%	12.5%
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	Native Studies Credits 1 or more	20	3.35	1.120	67%	20%
	I have not completed any credit courses in Native Studies.	8	2.63*	0.910	52.6%	0%
41. Aboriginal achievement is improving in this school.	Native Studies Credits 1 or more	20	3.85	0.825	77%	20%
	I have not completed any credit courses in Native Studies.	8	3.75	0.880	75%	12.5%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	Native Studies Credits 1 or more	20	2.35	1.450	47%	15%
	I have not completed any credit courses in Native Studies.	8	2.50	1.060	50%	0%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	Native Studies Credits 1 or more	20	3.85	1.045	77%	25
	I have not completed any credit courses in Native Studies.	8	3.63	1.180	72.6%	25%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	Native Studies Credits 1 or more	20	4.20	0.785	84%	40%
	I have not completed any credit courses in Native Studies.	8	3.88	0.831	77.6%	25%
45. I employ culturally responsive curriculum resources in my teaching.	Native Studies Credits 1 or more	20	4.30	0.435	86%	30%
	I have not completed any credit courses in Native Studies.	8	4.25	0.460	85%	25%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	Native Studies Credits 1 or more	20	4.10	0.831	82%	35%
	I have not completed any credit courses in Native Studies.	8	4.25	0.702	85%	37.5%
47. Aboriginal students make smooth grade to grade transitions.	Native Studies Credits 1 or more	20	2.60	1.021	52%	0%
	I have not completed any credit courses in Native Studies.	8	2.38	0.742	47.6%	0%

APPENDIX Q

TABLE 5.8: T-TEST COMPARING TWO INDEPENDENT SAMPLE MEANS, CLASSROOM TEACHERS AND NON-CLASSROOM TEACHERS FOR TPAI INVENTORY (47 ITEMS)

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Classroom Teacher	22	3.90	1.300	78%	42.9%
	Not a Classroom Teacher	6 Missing 1	4.00	1.549	80%	50%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Classroom Teacher	22	3.29	1.056	65.8%	4.8%
	Not a Classroom Teacher	6 Missing 1	3.83	0.983	76.6%	16.7%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Classroom Teacher	22	4.00	0.949	80%	28.6%
	Not a Classroom Teacher	6 Missing 1	3.83	0.408	83.4%	16.7%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Classroom Teacher	21	4.19	0.873	83.8%	38.1%
	Not a Classroom Teacher	6 Missing 1	4.50	0.548	90%	50%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Classroom Teacher	21	3.19	1.250	63.8%	14.3%
	Not a Classroom Teacher	6 Missing 1	2.83	1.329	56.6%	0%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Classroom Teacher	21	4.10	0.889	82%	33.3%
	Not a Classroom Teacher	6 Missing 1	4.33	0.817	86.6%	50%
7. Aboriginal parents share in decision-making in this school.	Classroom Teacher	21	3.33	1.111	66.6%	9.5%
	Not a Classroom Teacher	6 Missing 1	3.50	1.225	70%	10.7%
8. Aboriginal students feel safe in this school.	Classroom Teacher	21	4.48	0.602	89.6%	52.4%
	Not a Classroom Teacher	6 Missing 1	3.83	0.983	76.6%	16.7%
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Classroom Teacher	21	4.57	0.598	91.4%	61.9%
	Not a Classroom Teacher	6 Missing 1	4.00	1.095	80%	33.3%

10. Societal inequities adversely affect Aboriginal student achievement.	Classroom Teacher	21	4.00	0.837	80%	23.8%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	1.211	86.6%	66.7%
11. Aboriginal student success is recognized and celebrated in my classroom.	Classroom Teacher	21	4.24	1.044	84.8%	52.3%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.00	0.633	80%	16.7%
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Classroom Teacher	21	3.90	0.944	78%	23.8%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	0.516	86.6%	33.3%
13. Economic disadvantage adversely affects Aboriginal student achievement.	Classroom Teacher	21	3.76	0.944	75.2%	19.0%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	1.211	86.6%	66.7%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Classroom Teacher	21	3.24	1.179	64.8%	14.3%
	<b>Not</b> a Classroom Teacher	6 Missing 1	3.67	1.033	73.4%	16.7%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Classroom Teacher	21	4.29	0.717	85.8%	38.1%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.17	1.169	83.4%	50%
16. Aboriginal students feel they belong at this school.	Classroom Teacher	21	4.38	0.805	87.6%	52.3%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	0.516	86.6%	33.3%
17. Aboriginal parents are actively engaged in the life of this school.	Classroom Teacher	21	2.62	0.973	52.4%	0%
	<b>Not</b> a Classroom Teacher	6 Missing 1	2.50	1.225	50%	0%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	Classroom Teacher	21	4.24	0.437	84.8%	23.8%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.00	1.095	80%	33.3%
19. Aboriginal students are aware of my expectations for their learning.	Classroom Teacher	21	4.33	0.577	86.6%	38.1%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	0.516	86.6%	33.3%
20. School services such as a meals program are helping to improve Aboriginal achievement.	Classroom Teacher	21	4.52	0.512	90.4%	52.4%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.83	0.408	96.6%	83.3%
21. This school has supports in place to deal with Aboriginal learning challenges.	Classroom Teacher	21	4.24	0.700	84.8%	33.3%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	0.516	86.6%	33.3%

22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Classroom Teacher	21	4.24	0.889	84.8%	42.9%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.17	0.753	83.4%	33.3%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Classroom Teacher	21	4.19	0.750	83.8%	33.3%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.17	0.408	83.4%	16.7%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Classroom Teacher	21	4.24	0.831	84.8%	42.9%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.50	0.548	90%	50%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	Classroom Teacher	21	4.05	0.805	81%	28.6%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.33	0.516	86.6%	33.3%
26. Aboriginal students are actively engaged in their learning in my classroom.	Classroom Teacher	21	4.00	0.894	80%	28.6%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.00	1.095	80%	33.3%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Classroom Teacher	21	3.76	1.221	75.2%	38.1%
	<b>Not a Classroom Teacher</b>	6 Missing 1	3.67	1.366	73.4%	16.7%
28. Historical issues adversely affect Aboriginal student achievement.	Classroom Teacher	21	3.76	0.944	75.2%	19.1%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.33	1.211	86.6%	66.7%
29. I use the same criteria to assess all students.	Classroom Teacher	21	3.24	1.300	64.8%	23.8%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.00	0.000	80%	0%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Classroom Teacher	21	3.33	1.111	66.6%	14.3%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.17	1.169	83.4%	50%
31. Aboriginal students have good study habits.	Classroom Teacher	21	3.10	0.995	62%	4.8%
	<b>Not a Classroom Teacher</b>	6 Missing 1	2.67	1.033	53.4%	0%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Classroom Teacher	21	4.00	0.949	80%	28.6%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.50	0.548	90%	50%

33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Classroom Teacher	21	4.14	1.014	82.8%	38.1%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.50	0.548	90%	50%
34. Parent- teacher interviews are well attended by Aboriginal parents.	Classroom Teacher	21	2.76	1.091	55.2%	0%
	<b>Not a Classroom Teacher</b>	6 Missing 1	2.83	1.329	56.6%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	Classroom Teacher	21	3.81	0.814	76.2%	14.3%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.00	0.000	80%	0%
36. This school does a good job of attending to the learning needs of Aboriginal students.	Classroom Teacher	21	4.10	0.831	82%	28.6%
	<b>Not a Classroom Teacher</b>	6 Missing 1	3.33	1.033	66.6%	0%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Classroom Teacher	21	3.86	0.910	77.2%	23.8%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.67*	0.516	93.4%	67%
38. Aboriginal students in my class rarely miss school.	Classroom Teacher	21	2.33	1.197	46.6%	4.7%
	<b>Not a Classroom Teacher</b>	6 Missing 1	1.83	0.408	36.6%	0%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts	Classroom Teacher	21	4.00	0.707	80%	19.0%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.00	0.000	80%	0%
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	Classroom Teacher	21	3.10	1.179	62%	9.5%
	<b>Not a Classroom Teacher</b>	6 Missing 1	3.50	1.643	70%	33.3%
41. Aboriginal achievement is improving in this school.	Classroom Teacher	21	3.90	0.831	78%	19.0%
	<b>Not a Classroom Teacher</b>	6 Missing 1	3.33	1.211	66.6%	0%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	Classroom Teacher	21	2.62	1.396	52.4%	14.3%
	<b>Not a Classroom Teacher</b>	6 Missing 1	2.00	1.095	50%	0%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	Classroom Teacher	21	3.71	1.102	74.2%	23.8%
	<b>Not a Classroom Teacher</b>	6 Missing 1	3.83	0.983	76.6%	4.8%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	Classroom Teacher	21	4.00	0.775	80%	28.6%
	<b>Not a Classroom Teacher</b>	6 Missing 1	4.50	0.548	90%	50%

45. I employ culturally responsive curriculum resources in my teaching.	Classroom Teacher	21	4.29	0.463	85.8%	28.6%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.17	0.408	83.4%	4.7%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	Classroom Teacher	21	4.05	0.865	81%	33.3%
	<b>Not</b> a Classroom Teacher	6 Missing 1	4.33	0.516	86.6%	33.3%
47. Aboriginal students make smooth grade to grade transitions.	Classroom Teacher	21	2.67	0.966	53.4%	0%
	<b>Not</b> a Classroom Teacher	6 Missing 1	2.50	1.225	50%	0%



APPENDIX R

TABLE 5.9: T-TEST COMPARING TWO INDEPENDENT SAMPLE MEANS, TEACHERS WITH LOW TEACHING EXPERIENCE AND TEACHERS WITH HIGH TEACHING EXPERIENCE FOR TPAI INVENTORY (47 ITEMS)

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Teaching Experience Low	17	3.82	1.286	35.7%	35.2%
	Teaching Experience High	11	4.09	1.375	54.5%	54.5%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Teaching Experience Low	17	3.12	1.166	62.4%	4.8%
	Teaching Experience High	11	3.55	0.934	71%	16.7%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Teaching Experience Low	17	4.00	0.866	80.0%	23.5%
	Teaching Experience High	11	4.18	0.874	83.6%	36.3%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Teaching Experience Low	17	4.12	0.928	82.5%	35.2%
	Teaching Experience High	11	4.45	0.522	91%	45.4%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Teaching Experience Low	17	2.76	1.091	55.2%	0.0%
	Teaching Experience High	11	3.73	1.272	74.6%	27.2%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Teaching Experience Low	17	4.06	0.966	81.2%	35.2%
	Teaching Experience High	11	4.27	0.647	85.2%	36.3%
7. Aboriginal parents share in decision-making in this school.	Teaching Experience Low	17	3.35	1.169	67.0%	11.7%
	Teaching Experience High	11	3.64	0.924	72.8%	9%
8. Aboriginal students feel safe in this school.	Teaching Experience Low	17	4.41	0.618	88.2%	47.0%
	Teaching Experience High	11	4.36	0.924	87.2%	54.5%
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Teaching Experience Low	17	4.35	0.862	85.0%	52.9%
	Teaching Experience High	11	4.64	0.503	92.8%	63.6%

10. Societal inequities adversely affect Aboriginal student achievement.	Teaching Experience Low	17	4.12	0.697	82.4%	23.5%
	Teaching Experience High	11	4.27	1.009	85.4%	54.5%
11. Aboriginal student success is recognized and celebrated in my classroom.	Teaching Experience Low	17	4.24	0.970	84.8%	47.0%
	Teaching Experience High	11	4.18	0.982	83.6%	45.4%
12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Teaching Experience Low	17	3.76	0.970	75.2%	17.6%
	Teaching Experience High	11	4.45*	0.522	89%	45.4%
13. Economic disadvantage adversely affects Aboriginal student achievement.	Teaching Experience Low	17	3.82	0.883	76.4%	17.6%
	Teaching Experience High	11	4.27	1.009	85.2%	45.4%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Teaching Experience Low	17	3.24	0.883	64.8%	11.7%
	Teaching Experience High	11	3.82	1.009	76.4%	45.4%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Teaching Experience Low	17	4.06	0.899	81.2%	29.4%
	Teaching Experience High	11	4.64*	0.505	92.8%	63.6%
16. Aboriginal students feel they belong at this school.	Teaching Experience Low	17	4.24	0.899	81.2 %	29.4%
	Teaching Experience High	11	4.64	0.505	92.8%	63.6%
17. Aboriginal parents are actively engaged in the life of this school.	Teaching Experience Low	17	2.59	1.004	51.8%	0%
	Teaching Experience High	11	2.73	1.104	54.6%	0%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	Teaching Experience Low	17	4.29	0.470	85.8%	29.4%
	Teaching Experience High	11	4.09	0.831	81.8%	27.2%
19. Aboriginal students are aware of my expectations for their learning.	Teaching Experience Low	17	4.35	0.606	87%	41.1%
	Teaching Experience High	11	4.45	0.522	89%	45.4%
20. School services such as a meals program are helping to improve Aboriginal achievement.	Teaching Experience Low	17	4.59	0.507	91.8%	58.8%
	Teaching Experience High	11	4.64	0.505	92.8%	63.6%

21. This school has supports in place to deal with Aboriginal learning challenges.	Teaching Experience Low	17	4.18	0.728	83.6%	29.4%
	Teaching Experience High	11	4.45	0.522	89%	45.4%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Teaching Experience Low	17	4.24	0.970	84.8%	47.0%
	Teaching Experience High	11	4.27	0.647	85.4%	36.3%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Teaching Experience Low	17	4.29	0.588	85.8%	35.2%
	Teaching Experience High	11	4.18	0.874	83.6%	36.3%
24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Teaching Experience Low	17	4.41	0.712	76.4%	52.9%
	Teaching Experience High	11	4.27	0.905	87.2%	45.4%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	Teaching Experience Low	17	4.12	0.697	82%	29.4%
	Teaching Experience High	11	4.18	0.874	83.6%	36.3%
26. Aboriginal students are actively engaged in their learning in my classroom.	Teaching Experience Low	17	3.82	1.015	76.4%	23.5%
	Teaching Experience High	11	4.36	0.674	89.2%	45.4%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Teaching Experience Low	17	3.41	1.372	68.2%	29.4%
	Teaching Experience High	11	4.36*	0.674	87.2%	45.4%
28. Historical issues adversely affect Aboriginal student achievement.	Teaching Experience Low	17	3.76	0.970	75.2%	17.6%
	Teaching Experience High	11	4.36	0.809	87.2%	54.5%
29. I use the same criteria to assess all students.	Teaching Experience Low	17	3.71	1.213	74.2%	29.4%
	Teaching Experience High	11	2.82*	0.982	56.4%	0%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Teaching Experience Low	17	3.12	1.111	62.4%	11.7%
	Teaching Experience High	11	4.27*	0.905	85.4%	0%
31. Aboriginal students have good study habits.	Teaching Experience Low	17	3.00	1.061	60%	11.7%
	Teaching Experience High	11	3.00	1.905	60%	18.1%

32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Teaching Experience Low	17	4.06	0.899	81.2%	29.4%
	Teaching Experience High	11	4.27	0.905	85.2%	45.4%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Teaching Experience Low	17	4.06	1.088	81.2%	35.2%
	Teaching Experience High	11	4.55	0.522	85.4%	54.5%
34. Parent- teacher interviews are well attended by Aboriginal parents.	Teaching Experience Low	17	2.65	1.115	53.0%	0%
	Teaching Experience High	11	2.91	1.136	58.2%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	Teaching Experience Low	17	3.82	0.809	76.4%	11.7%
	Teaching Experience High	11	4.00	0.633	80%	18.1%
36. This school does a good job of attending to the learning needs of Aboriginal students.	Teaching Experience Low	17	3.88	0.993	77.6%	23.5%
	Teaching Experience High	11	4.09	0.809	81.8%	27.2%
37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Teaching Experience Low	17	3.82	0.951	76.4%	23.5%
	Teaching Experience High	11	4.36	0.831	87.2%	54.6%
38. Aboriginal students in my class rarely miss school.	Teaching Experience Low	17	2.18	1.185	43.6%	0.58%
	Teaching Experience High	11	2.45	1.036	49%	0%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts	Teaching Experience Low	17	4.06	0.748	81.2%	23.5%
	Teaching Experience High	11	4.00	0.447	80%	0.90%
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	Teaching Experience Low	17	2.88	1.269	57.6%	0.58%
	Teaching Experience High	11	3.55	1.214	71%	0%
41. Aboriginal achievement is improving in this school.	Teaching Experience Low	17	3.71	1.160	74.1%	23.5%
	Teaching Experience High	11	4.00	0.447	80%	0.90%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	Teaching Experience Low	17	2.59	1.460	51.8%	17.6%
	Teaching Experience High	11	2.09	0.944	41.8%	0%

43. I offer opportunities for Aboriginal students to extend their learning in the community.	Teaching Experience Low	17	3.94	1.029	78.8%	29.4%
	Teaching Experience High	11	3.55	1.128	71%	18.1%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	Teaching Experience Low	17	3.88	0.761	77.6%	23.5%
	Teaching Experience High	11	4.45	0.688	89%	54.6%
45. I employ culturally responsive curriculum resources in my teaching.	Teaching Experience Low	17	4.24	0.437	84.8%	23.5%
	Teaching Experience High	11	4.36	0.505	87.2%	36.3%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	Teaching Experience Low	17	4.00	0.866	80%	29.4%
	Teaching Experience High	11	4.36	0.674	87.2%	45.4%
47. Aboriginal students make smooth grade to grade transitions.	Teaching Experience Low	17	2.47	1.007	49.4%	0%
	Teaching Experience High	11	2.64	0.924	52.8%	0%

APPENDIX S

Table 5.9: t-Test Comparing Two Independent Sample Means, Male and Female Teachers for TPAI Inventory (All 47 Items)  $p < 0.05$

Item	Filter	Count	Mean	Standard Deviation	Mean as a Percent of Possible Score	Percent Strongly Agreeing
1. Aboriginal students are culturally affirmed in this school.	Male	7	4.29	0.488	85.8%	28.5%
	Female	21	3.81	1.470	72.2%	47.6%
2. Parents of Aboriginal students support my high expectations for their child's learning at school.	Male	7	3.29	0.951	65.8%	10.6%
	Female	21	3.29	1.146	65.6%	9.5%
3. I seek the help of my professional learning community (PLC) to improve the achievement of Aboriginal students.	Male	7	3.86	0.900	77.2%	14.2%
	Female	21	4.14	0.854	82.8%	33.3%
4. I employ Aboriginal cultural knowledge to enhance my instructional practice for Aboriginal students.	Male	7	3.86	0.900	77.2%	14.2%
	Female	21	4.38	0.740	87.6%	47.6%
5. Data from provincial standardized tests such as the AFL are useful to me for planning to improve achievement for Aboriginal students.	Male	7	3.00	1.00	60%	0%
	Female	21	3.19	1.327	63.8%	14.2%
6. I employ Aboriginal world views to enhance my instructional practice for Aboriginal students.	Male	7	4.00	1.00	80%	14.2%
	Female	21	4.19	0.814	83.8%	38%
7. Aboriginal parents share in decision-making in this school.	Male	7	3.56	1.272	71.4%	14.2%
	Female	21	3.43	1.028	68.6%	9.52%
8. Aboriginal students feel safe in this school.	Male	7	4.57	0.535	91.4%	57.1%
	Female	21	4.33	0.796	86.6%	47.6%
9. I regularly employ assessment for learning to inform students of their respective progress towards their learning goals.	Male	7	4.29	0.756	85.5%	42.8%
	Female	21	4.52	0.750	90.4%	61.9%
10. Societal inequities adversely affect Aboriginal student achievement.	Male	7	4.29	0.488	85.8%	14.2%
	Female	21	4.14	0.910	82.8%	38%
11. Aboriginal student success is recognized and celebrated in my classroom.	Male	7	3.86	1.069	77.2%	14.2%
	Female	21	4.33	0.913	86.6%	52.3%

12. The wider Aboriginal community offers opportunities for Aboriginal students to extend their learning.	Male	7	4.00	0.577	80%	14.2
	Female	21	4.05	0.973	81%	33.3%
13. Economic disadvantage adversely affects Aboriginal student achievement.	Male	7	4.00	0.577	80%	14.2%
	Female	21	4.00	1.049	80%	38%
14. By means of the School Community Council, the wider Aboriginal community shares in decision-making to improve Aboriginal student achievement.	Male	7	4.00	0.577	80%	14.2%
	Female	21	3.29	1.231	65.8%	19%
15. My assessment practices align with efforts to improve Aboriginal student achievement.	Male	7	4.14	0.378	82.6%	14.2%
	Female	21	4.33	0.913	86.6%	52.3%
16. Aboriginal students feel they belong at this school.	Male	7	4.29	0.488	85.8%	28.5%
	Female	21	4.43	0.811	88.6%	57.1%
17. Aboriginal parents are actively engaged in the life of this school.	Male	7	2.71	0.951	54.2%	0%
	Female	21	2.62	1.071	52.4%	0%
18. I engage in professional development to expand my instructional practice to improve Aboriginal students' achievement.	Male	7	4.00	0.00	80%	0%
	Female	21	4.29	0.717	91.4%	38%
19. Aboriginal students are aware of my expectations for their learning.	Male	7	4.14	0.690	82.5%	28.5%
	Female	21	4.48	0.512	89.6%	47.6%
20. School services such as a meals program are helping to improve Aboriginal achievement.	Male	7	4.57	0.535	91.4%	57.1%
	Female	21	4.62	0.498	92.4%	61.9%
21. This school has supports in place to deal with Aboriginal learning challenges.	Male	7	4.29	0.488	85.8%	28.5%
	Female	21	4.29	0.717	85.8%	38%
22. I provide Aboriginal parents with regular, on-going updates on their child's progress towards their respective learning goals.	Male	7	3.57	0.787	71.4%	0%
	Female	21	4.48*	0.750	89.6%	57.1%
23. My learning goals for Aboriginal students align with school Learning Improvement Plans.	Male	7	4.00	0.577	80%	14.2%
	Female	21	4.33	0.730	86.6%	42.8%

24. This school's Learning Improvement Plan to improve Aboriginal achievement aligns with the division's Continuous Improvement Framework.	Male	7	4.29	0.756	85.8%	42.8%
	Female	21	4.38	0.805	87.6%	52.3%
25. Programs to support Aboriginal learning such as an Elders program are helping to improve Aboriginal achievement.	Male	7	4.00	0.817	80%	28.5%
	Female	21	4.19	0.750	83.8%	33.3%
26. Aboriginal students are actively engaged in their learning in my classroom.	Male	7	3.57	0.787	71.4%	0%
	Female	21	4.19	0.928	83.8%	42.8%
27. Culturally responsive curriculum such as Treaty Education is helping to improve Aboriginal student achievement.	Male	7	3.43	1.134	68.6%	14.2%
	Female	21	3.90	1.261	78%	42.8%
28. Historical issues adversely affect Aboriginal student achievement.	Male	7	3.71	0.951	74.2%	14.2%
	Female	21	4.10	0.944	82%	38%
29. I use the same criteria to assess all students.	Male	7	3.14	1.069	62.8%	0%
	Female	21	3.43	1.248	68.6%	23.8%
30. When I employ culturally responsive teaching practices, Aboriginal students become more engaged in their learning.	Male	7	3.29	1.113	65.8%	14.2%
	Female	21	3.67	1.197	23.4%	28.5%
31. Aboriginal students have good study habits.	Male	7	2.43	0.787	48.6%	0%
	Female	21	3.19	1.078	63.8%	9.52%
32. Culturally responsive instruction can lead to improved learning outcomes for Aboriginal students.	Male	7	4.00	1.00	80%	28.5%
	Female	21	4.19	0.873	83.8%	38%
33. Teachers work collaboratively to raise Aboriginal student achievement in this school.	Male	7	3.57	1.512	71.4%	28.5%
	Female	21	4.48	0.512	84.6%	47.6%
34. Parent- teacher interviews are well attended by Aboriginal parents.	Male	7	2.86	1.215	57.2%	0%
	Female	21	2.71	1.102	57.2%	0%
35. I employ holistic teaching practices which engage Aboriginal students.	Male	7	3.57	0.787	71.4%	0%
	Female	21	4.00	0.707	80%	18%
36. This school does a good job of attending to the learning needs of Aboriginal students.	Male	7	4.00	0.000	80%	0%
	Female	21	3.95	1.071	79%	33.3%



37. Inter-generational effects such as the residential school experience adversely affect Aboriginal student achievement.	Male	7	3.86	1.069	77.2%	28.5%
	Female	21	4.10	0.889	82%	38%
38. Aboriginal students in my class rarely miss school.	Male	7	2.00	0.577	40%	0%
	Female	21	2.38	1.244	47.6%	4.76%
39. My assessment practices lead to positive interventions when Aboriginal students encounter difficulty learning concepts	Male	7	3.86	0.378	77.2%	0%
	Female	21	4.10	0.700	82%	23.8%
40. I actively collaborate with Aboriginal communities to improve Aboriginal student achievement.	Male	7	2.86	1.069	57.2%	0%
	Female	21	3.24	1.338	54.2%	19%
41. Aboriginal achievement is improving in this school.	Male	7	3.71	0.488	74.2%	0%
	Female	21	3.86	1.062	77.2%	23.8%
42. An achievement gap between Aboriginal and non-Aboriginal students does not exist in this school.	Male	7	2.14	0.900	42.8%	0%
	Female	21	2.48	1.401	49.6%	14.2%
43. I offer opportunities for Aboriginal students to extend their learning in the community.	Male	7	3.29	1.254	65.8%	14.2%
	Female	21	3.95	0.973	79%	28.5%
44. Early childhood learning programs are helping to raise Aboriginal student achievement.	Male	7	3.57	0.787	71.4%	14.2%
	Female	21	4.29	0.717	85.8%	42.8%
45. I employ culturally responsive curriculum resources in my teaching.	Male	7	4.00	0.00	80%	0%
	Female	21	4.38	0.498	87.6%	38%
46. After school programs offered by this school are helping to improve Aboriginal achievement.	Male	7	4.00	0.577	80%	14.2%
	Female	21	4.19	0.873	83.8%	42.8%
47. Aboriginal students make smooth grade to grade transitions.	Male	7	2.29	0.951	45.8%	0%
	Female	21	2.62	0.973	52.4%	0%

APPENDIX T  
Instructions for Data Analysis Panel

	Group 1:	Group 2:	Group 3:	Group 4:
1. 20 minutes	Outline Anecdotes  Code Anecdotes	Outline Anecdotes  Code Anecdotes	Outline Anecdotes  Code Anecdotes	Outline Anecdotes  Code Anecdotes
2. 15 minutes	Trade with Group 4 Review Group 4 Codes Debrief with Group 4	Trade with Group 3 Review Group 3 Codes Debrief with Group 3	Trade with Group 2 Review Group 2 Codes Debrief with Group 2	Trade with Group 1 Review Group 1 Codes Debrief with Group 1
3. 20 minutes	Categorize Group 1 Codes	Categorize Group 2 Codes	Categorize Group 3 Codes	Categorize Group 4 Codes
4. 15 minutes	Trade with G Group 2 Review Group 2 Categories Debrief with Group 2	Trade with Group 1 Review Group 1 Categories Debrief with Group 2	Trade with Group 4 Review Group 4 Categories Debrief with Group 4	Trade with Group 3 Review Group 3 Categories Debrief with Group 3
5. 20 minutes	Identify Group 1 Themes	Identify Group 2 Themes	Identify Group 3 Themes	Identify Group 4 Themes
6. 20 minutes	Report out Discussion	Report Out Discussion	Report Out Discussion	Report Out Discussion
7. Closure				