

# **Improving Indigenous Student Learning Outcomes: A Conceptual Framework**

Larry Steeves and Sheila Carr-Stewart

In the twenty-first century, there is an on-going commitment to foster Indigenous students' right to be in a school that recognizes their language, culture, and values. The research reviewed in this chapter documents the relationship between these goals and improved student learning outcomes. It is international in scope, with particular emphasis in New Zealand, America, and Canada. A conceptual framework is used to organize this research and the key policy issues related to addressing opportunities for utilizing Indigenous language and culture to improve Indigenous student learning. This framework includes language and cultural, programming, parent and community engagement, student engagement and retention, classrooms and culturally relevant pedagogy, effective schools, the role of assessment, and retention/support to teachers and school administrators.

Dr. Marie Battiste (2013) referenced language and culture in relation to fundamental human rights and the inherent right of a child to their "cultural identity, language and values" as essential for Indigenous students (pp. 29-30). Similarly, the *Report of the National Panel on First Nations Elementary and Secondary Education for Students on Reserve* (2012) argued reform "must be based on a child's right to their culture, language and identity, and to a quality education that is appropriate to their needs" (Executive Summary, p. vii). William G. Demmert (2001, p. 8) argued that "available research on the influences of Native language and cultural programs on academic performance is growing in both volume and importance" (2001, p. 8, see also Demmert, 2011). Hermes (2007, p. 54) reflected seven years of ethnographic research at Ojibwe schools in Minnesota and Wisconsin and suggested a shift from culture based curriculum to teaching culture through the Ojibwe language. Walton, Favaro, and Goddard (2009), reported on feedback from Prince Edward Island Mi'kmaq parents that found that "The inclusion of Mi'kmaq culture and language was the most frequent suggestion made by parents" (p. 55). The increase and importance of research on language, culture and values for Aboriginal students is, in part, a result of the issues that have faced Indigenous peoples: residential schools, poorly funded schools, legal prohibition of their language and cultural practices, and the failure to provide quality education with their own culture, language, and being.

Now, in the twenty-first century, there is an on-going commitment to foster Indigenous students' right to be in a school that recognizes their language, cultural, and values. Research is increasingly documenting the relationship between these goals and improved student learning outcomes. This paper and the research contained within it support this claim. The literature review that in

## ***Honoring Our Teachers***

this chapter is international in scope, with particular emphasis in New Zealand, America, and Canada. Demmert (2001) in *Improving Academic Performance among Native American Students: A Review of the Research Literature* brought these claims to the forefront. In Saskatchewan, Canada, Merasty, Bouvier, and Hoiium (2013) prepared *The Joint Task Force on Improving Education and Employment Outcomes* in Saskatchewan following their involvement in meetings and presentations around the province. Their conclusions also reinforced the importance of attention to language and cultural issues if students are to experience school success. Other researchers such as Perso (2012), Silburn, Nutton, McKenzie, and Landrigan (2011), and Raham (2010; 2009) provided an enhanced sense of the literature related to Indigenous education and improving student learning outcomes. Research in these and other works demonstrated findings that consistently identify effective practices and policy directions for improved Indigenous student learning outcomes.

### **A Conceptual Framework**

Conceptual frameworks provide a sense from which to construct a reality. The framework outlined below represents the authors' perceptions regarding key policy issues related to addressing opportunities for improving language and culture for Indigenous student learning:

- Language and Cultural Programming
- Parent and Community Engagement
- Student Engagement and Retention
- Classrooms and Culturally Relevant Pedagogy
- Effective Schools
- Role of Assessment
- Retention/Support to Teachers/Administrators

The research findings and best practice along with the conceptual framework give focus to language and culture, youth, parent and community engagement.

### **Language and Cultural Programming**

Goulet (2001) in a study of two teachers in northern Saskatchewan Indigenous communities commented that they “incorporated culture and language and Aboriginal and community norms and values into their teaching. They did so in a way that developed more equitable power relationships and dealt with the impact of colonization” (p. 79). Reflecting on Goulet’s findings, Steeves (2009) commented that her “research makes explicit the relationship between ethnocentric curriculum, assimilation and colonization, and the need for a greater focus on Aboriginal language and culture” (p. 46). Other research focused directly on improved student learning outcomes. Guevremont and Kohen (2012), using data from the 2001 *Canadian Aboriginal Peoples Survey* indicated that “One of the intriguing findings of the current study was that even after controlling for child and family factors, speaking an Aboriginal language was associated with positive

school outcomes for young children” (p. 15). Similarly, in a presentation at the Improving the Educational outcomes of Aboriginal People Living Off-Reserve, held in Saskatoon, Bernard (2010), Executive Director, Mi’kmaw School Division, reported that early findings suggested that students in its language immersion program performed “at par or above when compared to students who were not speakers of the Mi’kmaw language” ( p. 45).

Not all research findings support claims of improved learning outcomes. Brade, Duncan and Sokal (2003), working with a sample of 636 individuals, ages 30 to 49, drawn from the 1991 Aboriginal People’s Survey, concluded that cultural involvement and Aboriginal teachers as role models were not related to improved educational achievement. They found that “with the exception of liking what was taught about Aboriginal people in school, number of schools attended, and facility with an Aboriginal language, the factors hypothesized related to level of education were not supported” (p. 246). Takayama (2008) found similar results when exploring non-traditional school types such as charter schools and Hawaiian language and culture based schools. This “preliminary research shows that, in general, there are no academic losses in Hawaiian-focused charters and Hawaiian language immersion schools for students of Hawaiian and non-Hawaiian ethnicities” (p. 271). Nevertheless, part of the issue surrounding the complexity and inconsistency of the literature relates to the differing objectives that characterize this body of literature. Demmert (2001) provided some clarity regarding this diversity in a major review of literature related to Indigenous student achievement. He identified key factors affecting student learning and suggested that research focus on two interrelated issues:

- (1) the struggles of a growing number of Native American communities to maintain or strengthen their traditional languages and cultural heritages and
- (2) the relationship between strengthening traditional Native identities and improving educational outcomes for Native children. (pp. 8-9)

Demmert (2001) first identified the destructive impact of forced assimilations and colonization upon Indigenous peoples and the compelling need for North American Indigenous communities to engage in an enhanced focus on language and culture. Secondly, a greater consideration of his second priority, the relationship between traditional Native identities and the improvement of student learning outcomes, shows that these factors are clearly interrelated. There is no question that a keen interest in improved student achievement issue exists in most Canadian jurisdictions, whether within First Nations or provincial systems of education.

There is, however, additional research that supports language and culture as a means of supporting Indigenous student learning outcomes. Dr. Willard Sakiestewa Gilbert, then President of the National Indian Education Association, spoke to the importance of cultural education when addressing a 2008 hearing of the United States Congress House of Representatives, Committee on Education

## *Honoring Our Teachers*

and Labor, Congressional Subcommittee on Early Childhood, Elementary and Secondary Education, “Current research demonstrates that cultural education can be successfully integrated in the classroom in a manner that would provide Native students with instruction in the core subject areas based on cultural values and beliefs” (p. 13). Gilbert also referenced research conducted at Northern Arizona University regarding increased integration of native language, culture and traditions in Bureau of Indian Affairs (BIA) elementary schools. This research “revealed increased student mastery of science and math concepts, deeper levels of student engagement in science and math and increased student achievement in math and science” (p. 13; see also Gilbert, 2011).

In a study in Canada, Gunn, Pomahac, Good Striker, and Tailfeathers (2010), reviewed 16 selected projects from the Alberta Initiative for School Improvement (AISI). They concluded that “nearly half of the projects placed an emphasis on cultural awareness. By educating teachers, staff, and non-Aboriginal students about FNMI (First Nations, Métis, Inuit) cultures, history, and language, it was reported that FNMI students received better instruction as well as experienced an enhanced sense of belonging” (p. 335).

Rosier and Holm (1980) conducted a study with Navajo students in a fulltime Navajo language school. The study explored the effect of bilingual instruction with Rock Point Community School students who learned to read in Navajo and who were then introduced to English in grade two. Their results on standardized achievement tests were compared to other students from Rock Point and other Navajo schools who learned to read using English as a Foreign Language (EFL).

Navajo students who had been initially taught to read in Navajo seem, by the third grade, to read better in English than Navajo students who had been taught to read in English only.... Navajo students who had been initially taught arithmetic in Navajo seem, by the fourth grade, to [be] better in arithmetic...despite the slower pace of arithmetic instruction in the bilingual program. (p. 28, see also Reyhner, 1990)

Stiles (1997) found similar results in a comparison of four Indigenous language programs including the Cree Way in Quebec, the Hualapai in Arizona, Te Kohanga (Māori) in New Zealand, and the Pūnana Leo (Hawaiian) in Hawaii. She identified a number of positive outcomes including decreased drop-out rates, increased sense of culture and identity, and improved assessment. The value of early years’ programming, as well as the importance of home and community support, was also demonstrated. Similar results regarding the role of Indigenous culture outside the school setting were found in other studies. A study of 196 fifth grade American Indian children located in the Midwest, conducted by Whitbeck, Hoyt, Stubben, and LaFromboise (2001) showed that traditional culture in the home positively influenced student achievement. Similarly, Coggins, Williams and Radin (1996), in research with 19 northern Michigan Ojibwa families, found that mothers’ American Indian values had a positive effect on their children’s

school academic and social performance.

Louis and Taylor (2001) studied an Inuit village in northern Quebec whose students were Inuktitut speakers. Their “findings point to the importance of baseline Inuktitut proficiency as a foundation for the critical transition to second-language education” (p. 133). Another study by Wright, Taylor, and Macarthur (2000) found similar results; children, who initially entered English or French instruction, rather than Inuktitut, suffered a slower rate of second-language acquisition. Wright and Taylor (1995) also identified a relationship between early Indigenous language instruction and personal and collective self-esteem.

An important dimension of any discussion of language and cultural programming relates to the development and use of cultural competencies. Alaska has invested significant resources in the development and implementation of standards for culturally relevant schools intended for use by state educational jurisdictions (Ray Barnhardt, personal communication, June, 2013). Similarly, the Department of Diné Education, Navajo Nation, recently adopted a set of Diné Cultural Standards that are intended for use within schools within their territory (Andrew Tah, personal communication, January, 2014). The Saskatoon Public School Division (2008) started a major initiative to develop a culturally responsive school division. The school division’s *Final Report* provided an overview of the research and implementation work conducted by this school system. In summary, it is clear that language and culture play an important role in supporting improved educational success of Indigenous students. As Demmert (2001) indicated “congruency between the school environment and the language and culture of the community is critical to the success of formal learning” (p. 9).

### **Parent and Community Engagement**

Based on our review of the research and our experience as teachers and administrators, maintaining effective parental and community engagement is always challenging. For example, a First Nations school administrator shared a story regarding the establishment of their band controlled school, indicating that when the school was first operating in a series of smaller buildings located within the community, excellent parent and community involvement existed. However, following the establishment of a new attractive school building located on the edge of the community this strong sense of support dissipated. The First Nations School administrator speculated the potential reasons for the change but had no clear answer. What was clear was that a barrier between the school and the parents and community had emerged.

One reason might be the previous experiences of Indigenous peoples with schooling. Steeves, Furata, Carr-Stewart and Ingleton (2015) stated that:

As regards educational services, Canada followed a policy of assimilation, using children’s education as a vital component of this strategy. Children were removed from their homes and put in residential schools to destroy a culture, language and way of life that was considered inferior. In an age of Empire, and the accompanying racism that char-

## *Honoring Our Teachers*

acterized this era, First Nations people were to become like Europeans, leaving their previous way of life behind. Children would be key to ensuring this better future; therefore it was necessary to break the link between parents, community and children. Despite attempts by First Nations communities to resist, the Canadian government had set a clear direction of assimilation and control. (p. 5)

First Nations negotiated treaties with the British Crown in order to secure benefits from the Crown for the use of their land. Skills for adult training (post secondary) and elementary/secondary education were included in the treaty negotiations. Steeves, Carr-Stewart and Pinay (2013) suggested “The Chiefs and Headmen in agreeing to treat with the Crown sought to share their lands with the newcomers in exchange for services which would enable them to maintain their own ways and learn the skills of the newcomers” (p. 5).

Some suggested that schools continue to be instruments of assimilation and control. Freidel (1999), reporting on parent frustration with administrative/parent relations in an elementary school in Edmonton, Alberta, commented, “Perhaps low levels of parental involvement are a response to the cultural occupation that exists in public schools today” (p. 153). In research related to Inuit parental engagement in one Nunavut community, Berger (2009) identified frustrations from both parents and schools regarding the level and type of parental engagement. He concluded that if “people feel that the schools are lacking something, and especially if the lack results in a devaluing, ignoring, and assaulting of Inuit identity and culture, it should be expected that community support will not be optimal” (p. 89). Deyhle’s (2009) work with Navajo parents and students in southeastern Utah certainly reinforce these findings. She found that the schools attended by Navajo students were dominated by a perspective that she termed ‘manifest manners’, a metaphor for dominance by the dominant white, Mormon community. One example relates to the importance of family. Notwithstanding its importance in Navajo culture, “choosing to be with one’s families over careers was described as a tragic flaw and laziness” (p. xii).

Research also identified schools that managed to surmount these concerns. In case study research related to successful Aboriginal schools in Canada, entitled *Sharing Our Success: Ten Case Studies in Aboriginal Schooling*, Bell et al. (2004) indicated that strong educational partnerships with parents were important for reinforcing a sense of community ownership and pride in the school and the encouragement of solid learning expectations.” Similarly, Leveque (1994), in a study of Native American students in Barstow, California, found that parent involvement was an important element influencing improved student learning. Melnechnko and Horsman (1998) also found similar outcomes: “Several times students talked about the support and encouragement their immediate and extended families gave them that helped influence their success at school” (pp. 9-10).

Kushman and Barnhardt’s (2001) research in relation to community and parental influences involved a cross-case analysis of seven rural Alaska Native

communities. The abstract of their research findings serves as an excellent summary of how effective parent/community/school relations are constructed:

First, reform efforts in small communities require an inside-out approach in which educators must first develop trusting relationships with community members, and then work with the community to design educational programs around the local place, language, and culture. Second, parents and teachers need to expand their conceptions of parent roles beyond the notion of parents supporting the school to include roles in which parents are active participants in school life and decisions. Third, school and district leaders must move from top-down to shared leadership so that the ownership for school reform is embedded in the community rather than with school personnel who constantly come and go. Finally, educators and educational reformers must recognize that education in rural Alaska has a larger purpose than teaching academic skills and knowledge. (Kushman & Barnhardt, 2001, p. 1)

### **Student Engagement and Retention**

Raham (2010) argued the need to improve Indigenous secondary school graduation rates in Canada, indicating that the “high school graduation rate for the aboriginal lags 28% below the national average” (p. 4). Bishop, Berryman, Cavanagh and Teddy (2009) referenced the New Zealand experience and stated “the overall academic achievement level of Maori students is low; their rate of suspension from school is three times higher; they are over-represented in special education programmes for behavioural issues” (p. 734) as examples of some of the issues faced within New Zealand.

Indigenous educators have referenced their personal schooling experience and the need to ‘park themselves at the door’ when they entered the school. They experienced schooling as a negative, assimilative process that, whether deliberate or not, rejected their traditional values and culture. Battiste (2013) shared her experience, commenting, “I tried to stay under the radar of the teacher, not to be noticed or labeled dumb. Little is there I care to remember” (p. 17, see also Weenie, 2000). Deyhle (2009) reported on Navajo youth who “adopted strategies of resistance against school officials who demanded Indian youth judge themselves against their white peers; to act differently, look different, or have different life goals were signs of failure, of being a ‘blanket’ Indian” (p. xii). Deyhle indicated that one strategy for resistance was simply dropping out of school; in some cases, Navajo students actively resisted the pressure to conform and found themselves identified as problem students. Kirkness (2013), a Western Canadian Indigenous educator, commented on this tendency when discussing the implications on being a non-status Indian, which included being unable to attend a residential school; “I know that I would have been one of the push-outs who dared to speak her mind, which was not tolerated in those schools” (p. 17).

However, research supports the importance of language and culture in supporting student engagement. Deyhle (1995), based on decades of research with

## *Honoring Our Teachers*

Navajo youth, concluded that students who were grounded in their traditional tribal culture were also more academically successful. Similarly, Okagaki, Helling and Bingham (2009) questioned 67 American Indian undergraduate students concerning educational and ethnic beliefs as well as familial support for education. They found that “Belief in one’s bicultural efficacy was positively correlated with American Indian students’ ratings of academic identity and belief in the instrumental importance of school” (p. 157).

Some research has explored the conflicting pressures that parents and community placed on students. Deyhle (2009) for example, documented the importance placed on successful school completion, both at the secondary and post-secondary. However, she also observed that the desire of community to see students achieve success in the white, western world while simultaneously expecting adherence to traditional tribal values placed conflicting expectations on students. Similarly, Jackson and Smith (2001), while examining post-secondary transition experiences of 22 Navajo students, found that family connections, both positive and negative, had an important influence on their post-secondary transition experiences. Jackson, Smith, and Hill (2003) commented that despite support from family and community, “Native Americans raised on a reservation often face the difficulty of leaving a place of spiritual and cultural significance. Making a commitment to pursue a college degree can be seen as selling out to a different culture and way of life (p. 560). Raham (2009) also referenced this issue, commenting that “The evidence is conflicted on the degree to which family expectations and culture influence Aboriginal children’s perseverance and success in school” (p. 29). Steeves (2009) indicated that “These influences ranged from positive support and encouragement to family pressure to stay close to home. Clear messages of home support were considered helpful; mixed messages were not” (p. 52).

Raham (2009) indicated that social and economic factors, poverty and health related issues, high mobility in urban areas, and long distances and seasonal activities in rural areas are contributing factors to poor graduation rates. Grissmer and Flanagan (2006) documented the role that poverty has on student learning outcomes. Similarly, the research findings of Lemstra and Neudorf (2008) conducted for the Saskatoon Health Region, reinforce the role of poverty. Steeves (2009) concluded that “There can be little doubt that the debilitating effects of poverty weigh hugely on Indigenous student achievement” (p. 53). He referenced Demmert’s (2001) research indicating that it “outlines the important role played by language and culture, as well as poverty, resiliency, identity, sense of self and self-esteem, goal-setting and student motivation, communication styles, and language and cognitive skills as important characteristics that affect Native American student achievement” (p. 53). Raham (2009) identified a number of within school factors that impact on student retention: lack of supportive relationships; increasing skills gap; poor instructional and support services; perceived irrelevance of school; truancy, conflict and poor behaviour; and uninvolved parents.

Given these findings, what strategies exist to help address this unfortunate state of affairs? Raham (2009) began her discussion of student engagement and

retention with a reference to Royal and Rossi (1997) emphasizing the importance of relationship and community to student academic success and retention. Bishop, Berryman, Cavanagh and Teddy (2009) commenced research regarding the challenges faced by Māori secondary school students “by talking with them (and other participants in their education: families, principals and teachers) of what is involved in limiting and/or improving Māori students’ educational achievement” (p. 735). They found that “the most common discursive positions taken by Māori students, their families and their school principals was that which placed classroom caring and learning relationships at the centre of educational achievement” (pp. 735-736).

Gwen Keith, founding Executive Director of the Mother Teresa Middle School, Regina, Saskatchewan, also prioritized the importance of caring relationships. She shared an anecdote of a parent at the recent Grade 8 graduation thanking the teachers for the amount of personal time that teachers and mentors spent with her child. Keith also identified a faith based school culture, high academic expectations, small class sizes, mentorship, close family relationships, extended learning time, teacher support, and evidence based decision making involving both students and staff as other important factors in supporting student success at Mother Teresa. (personal communication, June 2014). Keith further indicated that in-school supports, such as monitoring attendance, introducing native language and culture, personalized learning, homework and tutoring clubs, buddy systems, the presence of aboriginal staff, elder programs, and home outreach all had positive effects on student outcomes (personal communication, June 2014).

In summary, it appears that a number of strategies exist that can actively support improved student engagement and retention. But, from an educator’s perspective, it is not surprising that the importance of relationship, caring and connection was dominant in the literature. As a colleague recently commented, good teaching has always meant meeting the needs of kids, including a caring relationship and whatever else students require to experience success.

### **Classrooms and Culturally Relevant Pedagogy**

During presentations to the Canadian Senate Committee on Aboriginal Peoples in 2010 and 2014, Steeves reinforced the critical role of teachers working in classrooms with students. Reflecting on his comments during the 2010 presentation, Steeves (Parliament of Canada, 2014) stated:

Fundamentally, what can we do to provide stability for that action to occur successfully? Nothing has changed from my point of view. We’re currently doing this in Saskatchewan with New Zealanders who have identified Te Kotahitanga, probably the only large scale reform we have been able to find that actually produces student learning gains. It is all about that issue. Culture and language are very important, but in the end it is about the teacher working with students in classrooms, and teachers understanding and appreciating culture and language is part of that; it is critical to success. (p. 2)

## *Honoring Our Teachers*

These comments capture the essence of the most important aspect of improving Indigenous student learning – the nature of the relationship between teachers and students within the classroom. Chell, Steeves and Sackney (2009, pp. 17-23) discussed the important role that effective schools had on student achievement, further suggesting that “researchers have shown that teachers can have a powerful impact on students even if the school doesn’t” (p. 23). They delineated research supporting this comment (Brophy & Good, 1986; Leithwood, Day, Sammons, Harris & Hopkins, 2006; Marzano, 2001, 2007; Mitchell & Sackney, 2009; Nye, Konstantopoulos & Hedges, 2004; Wright, Horn & Sanders, 1997), outlining some of the key factors related to classroom instruction that improved student achievement. Most readers will be very aware of the research surrounding effective instruction suffice it to say that these issues are vital if improved student learning is to occur. However, the body of research related to effective instruction is insufficient. If Indigenous students are to be effectively served, the research needs to expand to include a focus on culturally relevant pedagogy. For example, Perso (2012) commented that while “classroom teachers cannot be expected to attend to every strategy that works” (p. 84), nevertheless, “educators must become more bi-cultural, that is, we must better understand the belief systems and values of the primary culture of each of our students” (p. 84).

Demmert and Towner indicated that culturally based programs have six critical elements:

- Recognition and use of Native languages;
- Pedagogy that stresses traditional cultural characteristics and adult-child interactions;
- Teaching strategies that are congruent with traditional culture and contemporary ways of knowing and learning (opportunities to observe, practice and demonstrate skills);
- Curriculum based on traditional culture that recognizes the importance of Native spirituality and uses visual arts, legends, oral histories of the community;
- Strong Native community participation, including parents, elders and others in the planning and operation of the school; and,
- Knowledge and use of the social and political mores of the community. (2003, pp. 9-10)

Reinforcing these conclusions, Raham (2009) suggested that a synthesis of the literature identified the following common elements: appropriate curriculum and resources; First Nation language programs and teaching resources; a positive school culture, emphasizing respect and relationships; Elder programs, traditional celebrations, and cultural enrichment provided through affiliations with Aboriginal cultural centers and organizations; employment of Aboriginal staff; professional development for teachers related to cultural proficiency; effective strategies for communication with parents and dealing with attendance/lateness;

formal and informal structures for Aboriginal involvement in decision making; and varied assessment practices.

Notwithstanding these comments regarding successful practices related to culturally based pedagogy, Raham (2009) also referenced research by August, Goldenburg and Ruela (2006) “who conclude[d] the majority of CBE studies, while furnishing plausible claims for success, lack the ability to prove direct causality for achievement” (p. 27). One typical example is Kanu (2007). While reporting optimistic findings regarding the integration of Indigenous perspectives and improved Indigenous student achievement in a western Canadian high school, she stated that “microlevel classroom variables such as culturally responsive curriculum and pedagogy alone cannot provide a functional and effective agenda in reversing achievement trends among Aboriginal students” (p. 38). She goes on to reference issues such as improving attendance, emphasizing the need to “explore the relationships between micro- and macro-level variables affecting schooling and the realization that meaningful and lasting intervention requires a systematic, holistic, and comprehensive approach” (p. 38).

As is apparent from earlier references in this paper, one factor that consistently appeared related to relationship. For example, Freed and Samson (2004), studying rural schools in western Alaska, reported on the importance of effective school/student and school/community relationships. Lipka et al. (2005), conducting ethnographic research with Yup'ik communities in Alaska, stated that they “identified several possible factors common to successful teachers and students. First and foremost was the long-term positive relationship between teachers and students that contributed to a classroom environment in which trust and mutuality were constructed over time” (p. 382). Lewthwaite and McMillan (2010) investigating learning success among Nunavut Inuit middle years students, referenced cultural contributors, and also that students “placed importance on teachers who cared not only for them as people, but also for their performance as learners” (p. 140).

MacIver (2012), reporting on data collected from 10 at risk youth in a Canadian urban centre, indicated that “9 out of 10 study participants identified various aspects of building relationships with their teachers as a significant influence in remaining engaged in school” (p. 159). She stated that “One participant spoke of ‘bonding with her teacher’” while another “perceived that building a relationship between a teacher and student was important as it governed their ongoing working relationship and consequently the student’s success” (p. 159). Perhaps the best example of the successful utilization of a culturally based pedagogy relates to a New Zealand secondary program, Te Kōtahitanga, which is based on a culturally relevant pedagogy of relationship (Bishop, Berryman, Wearmouth, Peter, & Clapham, 2012). Bishop and Berryman (2010) further indicated:

Te Kōtahitanga is a research and professional development project that aims to support teachers to raise the achievement of New Zealand’s indigenous Māori students in public/mainstream classrooms. An *Effective Teaching Profile*, developed from the voices of Māori students, their

## *Honoring Our Teachers*

families, principals and some of their teachers, provides direction and focus for both the classroom pedagogy and the professional development. (p. 173)

Bishop, Berryman, Wearmouth, Peter and Clapham (2012), reporting on the findings from focus group interviews conducted with engaged and non-engaged Māori secondary students, parents, teachers and school administrators, stated:

The students unanimously identified that it was the quality of in-class relationships and interactions they had with their teachers that were the main determinants of their educational achievement. In their narratives, students went on to suggest ways that teachers could create a context for learning in which Māori students' educational achievement could improve by changing the ways teachers relate to and interacted with Māori students in their classrooms. In other words, according to Māori students, what was needed to improve Māori students' achievement was for teachers to develop and adopt a relationship-based pedagogy in their classrooms. It was apparent to them that teachers must relate to and interact with Māori students in a manner different from the common practice if a change in Māori students' achievement was to occur. (p. 696)

They further reported that while teachers had positive intentions, most “identified what they saw as Māori students' deficiencies as being the main reason for their low achievement” (pp. 695-696). This was in contrast to the views of students, parents, school administrators and a minority of teachers. The findings of the focus group and interview research led the development of the Te Kōtahitanga program, which emphasized a culturally based pedagogy of relationship. Te Kōtahitanga reinforced the importance of what were termed agentic positioning by teachers and the need to reject deficit theorizing, in effect the belief by teachers and other that, due to social and economic pressures, Māori students were unable to experience academic success. In effect, teachers and others effectively concluded that there was no point in trying to engage Māori students – their efforts would be in vain. Based on research by Steeves, Furuta, Carr-Stewart and Ingleton (in press), it would appear that these assumptions, whether by teachers or others, are incorrect. Deficit theorizing only provides a rationale for failure to support students in their learning; it does not build towards success. Te Kōtahitanga appeared to be the only large scale reform effort with Indigenous students that actually demonstrated improved student learning outcomes (Bishop et al., 2009; Bishop et al., 2012).

In summarizing the impact of Te Kōtahitanga, a statement by Ray Barnhardt (personal communication, June, 2013), an Alaska academic, seemed to capture the reasons for Te Kōtahitanga's success: “You know it has taken 40 years but it is all these pieces. The cultural standard, the models, the school curriculum that is different, the process for assessing teacher performance; those things all go

together.” Te Kotahitanga shows evidence of accomplishing this herculean task. It provides a ‘road map’ to others who are seeking ways to address the challenge of improving Indigenous student learning outcomes.

### **Effective Schools**

Over the past year, the authors were fortunate to spend time interviewing school administrators in a number of exemplar schools located on or near the Navajo Nation. Three were secondary schools and two were elementary; additionally, one was a charter school, two were Bureau of Indian Education (BIE) grant schools, and two were public schools (public school divisions operate on Navajo territory). Despite the nature of the schools, a consistent pattern emerged of an effective school with high academic expectations, close working relationships with students, a focus on strong teaching staff, attention to cultural and language programming and an emphasis on evidence based decision. One individual, Donna Manuelito, a principal of a large secondary school in a major community, was also interviewed for this study. While she is committed to the issues referred to above, her initial comment was:

I really think that it comes to understanding the kids. Where they are coming from? I grew up here. I am from this community. I have background—when I got my first Masters it was in cultural bilingual education. My second Masters was in educational leadership. Our current enrollment – we have 99 percent Native Americans, so we have to look at that background. (personal communication, February 2014)

These conclusions were reinforced in other studies of effective schools. Munns, O’Rourke and Bodkin-Andrews (2013) investigated the conditions for success of Aboriginal students of four schools, using a mixed methods approach. Their research identified the following themes as critical for success: strong community relationship; Aboriginal cultural spaces; Aboriginal people involved in the work of schools; Aboriginal perspectives and values prioritized and embedded in school and classroom curriculum; focus on quality teaching from an Aboriginal perspective; a shift from a wellbeing community mindset to one focused on a learning community mindset; targeted support for Aboriginal students; and relationships between teachers and students work. Munns, O’Rourke and Bodkin-Andrews acknowledged that “conditions of school success for Aboriginal learners are complex equations”, further stating that “schools can make a difference for Aboriginal students and the article offers future directions for school communities to consider as they work on their own approaches to enhance social and academic outcomes” (p. 10).

A local example of an exemplar school is St Mary High School, Prince Albert Separate Catholic School Division. Stelmach (2010) in her research identified two major themes: “We recognize in every child the face of Christ” and “It’s a kick in policy, not a kick out policy” (p. 33). With respect to the first major theme, three key reasons for Indigenous student success in St. Mary were identified:

## *Honoring Our Teachers*

an affirming school culture; a supportive and responsive school environment; and the on-going establishment of meaningful relationships with students and parents. The 'kick in' policy was also manifested in three ways: expecting high achievement for all students; balanced structure and flexibility; and managing barriers through academic and non-academic support.

Raham's (2009) research supported these results, including the identification of a secure and welcoming school climate, curriculum and programs grounded in Aboriginal culture, involvement of parents and community, multiple programs and supports for students and families, high expectations for students and staff, and the linking of assessment to instructional and planning decisions as key to school success. A number of other studies spoke to the challenges involved in creating successful school environments. Raham also commented on the critical role of the principal, suggesting that "The role of the principal is highly complex, requiring a blend of leadership and management skills, a deep knowledge of curriculum and instruction, and a commitment to educational success for all students" (p. 44). Hohepa and Robson (2008) also referenced the principal's role, particularly from the perspective of Māori leadership, suggesting that "Māori principals...have additional duties and accountabilities linked to educational achievement and well-being of their Māori students enjoying success as Māori" (p. 36).

Others explored the complexities involved in ensuring successful school programs. McNaughton and Mei Kuin Lai (2009) referenced a three stage model of school change, while Fenimore-Smith (2009), reported on the development of a reserve based charter school, indicating that the research findings "foregrounds the complexity of factors affecting both the development of a culturally grounded charter school and the achievement of students attending the school" (p. 1). She further commented that, given the situation of the school within the reserve, "it would seem that development of a culturally relevant academic program would be relatively easy. This proved not to be the case. That is not to say there were no successes; however, a number of factors conspired to confound the process" (p. 5).

Similar experiences are reported by Baydala et al. (2009) who found minimal gains in student outcomes in a newly founded Alberta charter school. Goddard and Foster (2002) discussed the experiences of two First Nations schools in northern Alberta that chose to join the provincial system. In both cases, "there was a tendency in both schools to support the status quo.... We found a striking dissonance between this experience and that which might be considered useful and appropriate in a northern community" (p. 16). In short, some schools have experienced success in supporting Indigenous students' learning outcomes. But this is a highly complex endeavour, with no guarantee of success; dedication, leadership and a whole range of critical interventions are necessary for success.

### **The Role of Assessment**

In a recent meeting, Dr. Shauneen Pete, Executive Lead, Indigenization, University of Regina was questioned regarding her opinion of the role for assessment

within schools. Her answer encapsulated the current research; while she indicated concern regarding the inappropriate use of standardized and culturally inappropriate assessment measures, she was equally clear that an important role existed for the appropriate use of assessment information (personal communication, May, 2014). Dr. Pete is not alone in her comments. Over the years, the writers have heard numerous educators address the issue of assessment in similar ways. In one case, an Indigenous Director of Education for a Saskatchewan tribal council stated that assessment information was vital if the system was to be able to respond effectively to the need to improve student learning outcomes (Don Pinay, personal communication, 2006). In another, Bishop, Berryman, Wearmouth, Peter and Clapham (2012) made clear the commitment to an evidence based approach in their description of the Te Kotahitanga program. Recently, Gwen Keith reinforced the importance of using data and evidence based decision making to guide their work within the school (personal communication, June 2014). From a similar perspective, Richards, Hove, and Afolabi (2008), while discussing the Kelowna Accord, commented that “‘Governments pursue goals that are measured’ is an old maxim of public policy” (p. 2). To quote another public sector maxim, ‘what gets measured gets done.’ Raham (2009) captured this sentiment when she stated that “improving schools and systems gather performance information and use it to assist in gap analysis, improvement planning, and resource allocation” (p. 9). Other Canadian research supports these conclusions. In case study research involving 20 exemplar Indigenous schools across Canada, Bell et al. (2004) and Fulford, Daigle, Stevenson, Tolley and Wade (2007) both found assessment practices were used for a variety of purposes. Bell et al. (2004) also found that “some schools utilized the data collected to set annual improvement goals, to set budgets, allocate resources, and determine staffing requirements... assessment data was utilized as the basis for strategic planning, designed to improve long-term success” (p. 310). They commented that “The availability of standardized data is an invaluable tool for schools in communicating their specific needs to educational authorities, governing bodies, parents and the public” (p. 310).

Both Bell et al. (2004) and Fulford et al. (2007) supported the appropriate use of assessment practices. However, recognizing the need for culturally appropriate measures, They also recommended the development of “holistic measures appropriate to Aboriginal programs; and that this data similarly be publicly available and incorporated into annual growth plans” (p. 324). Bell’s (Bell et al., 2004) final comments regarding ‘holistic measures appropriate to aboriginal Programs’ speaks to the second issue raised by both Dr. Pete and the research literature – concerns about the inappropriate use of standardized and culturally inappropriate assessment measures. For example, the Canadian Council of Learning (CCL) (2007) suggested the need for a more holistic approach to Indigenous assessment, commenting that, “there is no broadly accepted framework for measuring how First Nations, Inuit and Métis learners are doing across the full spectrum of lifelong learning” (p. 29). In 2009, the CCL published research addressing this concern, with the Holistic Lifelong Learning Measurement Framework based on the “underlying structure of the First Nations, Inuit and Métis Holistic Lifelong

## ***Honoring Our Teachers***

Learning Models that were first published in 2007 by the Canadian Council of Learning (CCL)” (p. 4).

Issues related to inappropriate use of standardized and culturally inappropriate measures received widespread attention within the published research literature. McCarty (2009) commented that:

Evidence from Native American contexts shows little or no post-NCLB gap reduction and/or illusory gains. These studies also suggest that high-stakes testing can lead to score manipulation, test administration improprieties, teaching to the test, the de-skilling of students and teachers through prescriptive reading routines, and the elimination of low-stakes subject matter, including Native language and culture instruction. (p. 20)

Nelson-Barber and Trumbull (2007), referencing recent federal American government initiatives such as NCLB, indicated “there is little evidence that these promises of higher standards of effectiveness in the classroom and greater teacher accountability are translating into more equitable opportunities for Indigenous children” (p. 132, see also Nelson-Barber this volume). They further suggested that a likely outcome of NCLB may be a move by educators “further away from culturally congruent curriculum, instruction, and assessment rather than increasing their use – despite all the evidence of their value” (p. 134).

Another issue reported in the literature relates to culturally inappropriate assessment measures. Nelson-Barber and Trumbull (2007) indicated that “it is clear that research on new approaches to assessment design and use that consider the role of culture in learning and assessment are needed” (p. 142). From an Australian perspective, Klenowski (2009), while acknowledging that differences in performance may be not be due to test bias alone but also “because of Indigenous students’ differing access to learning, different social, cultural contexts or real differences in their attainment” (p. 85), goes on to state that the “intention of culture-fair assessment is to design assessments so that no one particular culture has an advantage over another” (p. 85).

In closing, it seems appropriate to reference Dr. Pete’s initial comments regarding assessment. While an important role exists for the assessment information, it must be balanced by concern regarding the inappropriate use of standardized and culturally inappropriate assessment measures. Clearly, more work remains to be done.

### **Retention/Support to Teachers/Administrators**

A principal from the Northern Lights School Division (NLS) captured the essence of the need for teacher retention and engagement:

I think, when you have teachers, particularly in the North, who have built relationships with their students, with their parents, with their communities, I think you have a much better learning environment for students.

## *Improving Indigenous Student Learning Outcomes*

There is an element of trust. Students probably, may not get involved in behaviors that will challenge the authority of those teachers and of course if you have teachers who are in a continual process of improvement, then over a course of several numbers of years they are going to continually improve their instruction and as such improve achievement in their classrooms. (personal communication, August, 2012)

This comment, drawn from a focus group/interview study of teacher retention and support conducted for the NLSJ by Steeves, Carr-Stewart, and Furuta (2013), was reinforced by another statement from a young teacher.

You leave and then the next year another person is there that doesn't really fully know what they are doing and then the next year someone else is there. I think that it reflects on their behavior, their level of trust and their defiance as well. It is really important to kind of have reasons or ways to make us want to stay for longer. (personal communication, November, 2012)

Leithwood, Day, Sammons, Harris, and Hopkins (2006) stated that “classroom factors explain more than one-third of the variation in pupil achievement” (p. 4). Wright, Horn and Sanders (1997) indicated that “The most important factor affecting student learning is the teacher.... Effective teachers appear to be effective with students of all achievement levels, regardless of the level of heterogeneity in their classrooms” (p. 63).

An Alaskan study (Adams, 2010), that investigated the benefits of mentoring programs for new teachers working in isolated Alaskan Indigenous communities, made clear the importance of both support to new teachers and the relationship between student achievement and teacher experience. Adams (2010) indicated that:

Results show that although mentoring new teachers did not bring the students' standardized scores of new teachers up to the same level as students in veteran classes, they are much closer than expected based on past research...Thus, mentoring shows promising results to start closing the achievement gap typically seen between the students of new and veteran teachers. (p. 1)

This claim is supported by NLSJ school administrators. For example, one principal commented that “It takes you about 3 years after they graduate to get a teacher that is proficient—that is classroom proficient... Oft times when they get proficient they want to move” (personal communication, August, 2012). Another administrator summed up the issue with the statement “That is part of recruitment too I think. Keeping the people there. There is more growth in our literacy and numeracy goals when we retain them” (personal communication, August, 2012). Steeves, Carr-Stewart and Furuta (2013) stated that “These com-

## *Honoring Our Teachers*

ments reinforce research findings regarding the relationship between length of teacher tenure and student achievement. It will be difficult, if not impossible, to meaningfully improve student achievement in the absence of well trained, experienced teachers” (p. 8).

Raham (2009) reinforced the importance of initial teacher preparation, teacher induction and mentoring, professional development and supports and resources. Teachers and administrators from the NLSA (Steeves, Carr-Stewart & Furuta, 2013) also referenced these issues, suggesting the need for recruitment from culturally similar institutions; from local programs and universities; and for improved orientation, mentoring and support programs for new teachers. For example, one individual stated that:

I think they need to know a lot about community. They need some strong orientation in terms of—just basic understandings about Aboriginal people for instance. The social, historical, economic things. They don’t have that proper history. They are coming in with a different world view, a different set of expectations.... They need to have some sense of the languages to be able to communicate with elders and community people for example. If they are just sticking around in their teacherages doing nothing after school you are not really actively interested in the community in which you are working.

Another teacher who emphasized the need for culturally appropriate instructional strategies stated that:

Something that struck me I think what would have been nice if there had been some mandatory PD [Professional Development] in terms of how to teach in different context. Teaching First Nations students, A, and B just the different life up here and how that works. I think it would make us more successful in the classroom and make learning more successful for the students. (Steeves, Carr-Stewart, & Futura, 2013, pp. 20-21)

When interviewed for this study, Dr. Joe Martin also emphasized these factors, commenting that “I tried to keep my salary scale the same or better than any other school district. I tried to provide some other kinds of incentives like free cable TV, free internet access, a very nice carport, a nice backyard with grass as a way to attract quality teachers” (personal communication, November, 2013).

Bases upon the literature and focus group/interview results, Steeves, Carr-Stewart and Furuta (2013) provided a number of recommendations. Some of the most critical are outlined below:

- Consider issues related to recruitment and retention within the context of improved student achievement.
- Explore a variety of ‘hygiene’ issues related to teacher recruitment and retention.

## *Improving Indigenous Student Learning Outcomes*

- Lobby provincial government agencies to increase the number of NORTEP [Northern Teacher Education Program] – and more generally TEP [Teacher Education Program] seats – and provide funding for the training of high school teachers.
- Consider a variety of strategies to improve the recruitment of teachers.
- Consider strategies to improve induction/orientation programs.
- Consider the development of more substantial teacher induction programs that provide university credit. (pp. 21-25)

Given the critical contribution that teachers make to student learning, the incremental investment required to encourage an optimal learning environment for Aboriginal students is a wise investment. If teachers are to demonstrate the technical skills, cultural knowledge and student relationships required for the successful improvement of Indigenous student learning outcomes, then consideration of improved teacher retention and engagement strategies is necessary.

### **Conclusion**

Attempting to ensure a positive future for youth has long been an important goal for Indigenous communities. Documents relating to the negotiations of the Numbered Treaties (1871-1921) indicated that much time was spent on discussing education. In reference to education it was clear from both the Crown representatives and the First Nations Chiefs and Headmen that western education was not intended to supplant traditional Indigenous educational practices. Education of First Nations students would ensure they received the knowledge of their parents and communities, as well as western education to enable them to grow and prosper (Morris, 1990/1881). In 1972, the National Indian Brotherhood demanded that First Nations children be able to survive and have:

Pride [which] encourages us to recognize and use our talents, as well as to master the skills needed to make a living. Understanding to our fellowmen will enable us to meet other Canadians on an equal footing, respecting cultural differences while pooling resources for the common good. Living in harmony with nature will insure preservation of the balance between man and his environment which is necessary for the future of our planet, as well as for fostering the climate in which Indian Wisdom has always flourished. (NIB, 1972, p. 1)

For the National Indian Brotherhood this would ensure that First Nations students had the “preparation for total living” and “as a means of enabling us to participate fully in our own social, economic, political and educational advancement” (p. 3). Research supports these aspirations: if Indigenous students, and their communities, are to build towards a positive future, attention must be paid to traditional culture, language and values. As the factors identified within this conceptual framework suggest, attention to best practices within both western

## *Honoring Our Teachers*

and traditional models of education are required if Indigenous students are to experience success. And like every child, this success is not only deserved but vitally important for the future of the broader society. A failure to consider the clear direction provided by this research will not only impair the future of young Indigenous students but will also diminish the broader society in which these young people reside. A moral and practical commitment to ensuring these young people are treated equitably will enhance both their futures and that of the wider society. Fairness and practicality demands no less.

### **References**

- Adams, B. L. (2010, May). *Connecting mentoring to student achievement in Alaska: Results and policy implications*. Paper presented at the Annual Meeting of the American Educational Research Association, University of Florida, Gainesville.
- August, D., Goldenburg, C. & Rueda, R. (2006). Native American children and youth: Culture, language and literacy. *Journal of American Indian Education, 45*(3), 24-37.
- Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit*. Saskatoon, Canada: Purich.
- Baydala, L., Rasmussen, C., Bisanz, J., Kennedy, M., Weigum, N., Worrell, S., & Charchun, J. (2009). Evaluating success: Mother Earth's Children's charter school longitudinal study. *Canadian Journal of Native Education, 32*(2), 78-92.
- Bell, D., Anderson, K., Fortin, T., Ottoman, J., Rose, S., Simard, L., et al. (2004). *Sharing our success: Ten case studies in Aboriginal schooling*. Kelowna, BC: Society for the Advancement of Excellence in Education.
- Berger, P. (2009). Inuit language, culture, and parental engagement in schooling in one Nunavut community. *Canadian Journal of Native Education, 32*(1), 73-89.
- Bernard, E. (2010). *Mi'Kaw self governance in education*. Paper presented to the Colloquium on Improving Educational Outcomes of Aboriginal People Living Off-Reserve. Saskatoon, SK.
- Bishop, R. & Berryman, M. (2010). Te Kotahitanga: culturally responsive professional development for teachers. *Teacher Development, 14*(2), 173-187.
- Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2009). Te Kotahitanga: Addressing educational disparities facing Maori students. *Teaching and Teacher Education, 25*, 734-742.
- Bishop, R., Berryman, M., Wearmouth, J., Peter, M., & Clapham, S. (2012). Professional development, changes in teacher practice and improvements in Indigenous students' educational performance: A case study from New Zealand. *Teaching and Teacher Education, 30*, 1-12.
- Brade, C. R., Duncan, K. A., & Sokal, L. (2003). The path to education in a Canadian Aboriginal context. *Canadian Journal of Native Education, 27*(2), 235-248.

- Brophy, J., & Good, T. (1986). Teacher behaviour and student achievement. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 328-375). New York: Macmillan.
- Canadian Council on Learning. (2007). *State of learning in Canada: No time for complacency*. Ottawa, ON: Author. Retrieved from: <http://www.ccl-cca.ca>
- Canadian Council on Learning. (2009). *The state of Aboriginal learning in Canada: A holistic approach to measuring success*. Ottawa, ON: Author. Retrieved from [http://www.ccl-cca.ca/pdfs/StateAboriginalLearning/SAL-FINALReport\\_EN.PDF](http://www.ccl-cca.ca/pdfs/StateAboriginalLearning/SAL-FINALReport_EN.PDF)
- Chell, J., Steeves, L., & Sackney, L. (2009). Community and within-school influences that interrelate with student achievement: A review of the literature. In R. Dolmage & Wanda Lyons (Eds.), *Improving student achievement: A literature review* (pp. 5-38). (A Report for the Saskatchewan Ministry of Education). Regina, SK: Saskatchewan Instructional Development & Research Unit (SIDRU).
- Coggins, K., Williams, E., & Radin, N. (1996). *The traditional tribal values of Ojibwa parents and the school performance of their children: An exploratory study*. Ann Arbor, MI: University of Michigan. (ERIC Document Reproduction Service No. ED400116).
- Demmert, W. G. (2001). *Improving academic performance among Native American Students: A review of the research literature*. Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools. (ERIC Document Reproduction Service No. ED463917)
- Demmert, W. G. (2011). What is culture-based education? Understanding pedagogy and curriculum. In J. Reyhner, W. S. Gilbert & L. Lockard (Eds.), *Honoring our heritage: Culturally appropriate approaches for teaching indigenous students* (pp. 1-9). Flagstaff, AZ: Northern Arizona University. Retrieved from <http://jan.ucc.nau.edu/~jar/HOH/HOH-1.pdf>
- Demmert, W. G., & Towner, J. C. (2003). *A review of the research literature on the influences of culturally based education on the academic performance of Native American students*. Portland, OR: Northwest Regional Educational Laboratory. Retrieved from <http://educationnorthwest.org/sites/default/files/cbe.pdf>
- Deyhle, D. (1995). Navajo youth and Anglo racism: Cultural integrity and resistance. *Harvard Educational Review*, 65(3), 403-444.
- Deyhle, D. (2009). *Reflections in place: Connected lives of Navajo women*. Tucson, AZ: University of Arizona Press.
- Fenimore-Smith, J. K. (2009). The power of place: Creating an Indigenous charter school. *Journal of American Indian Education*, 48(2), 1-15.
- Freed, C. D., & Samson, M. (2004). Native Alaskan dropouts in Western Alaska: Systemic failure in Native Alaskan schools. *Journal of American Indian Education*, 43(2), 33-44.
- Friedel, T. L. (1999). The role of Aboriginal parents in public education: Barriers to change in an urban setting. *Canadian Journal of Native Education*, 23(2), 139-157.

## *Honoring Our Teachers*

- Fulford, G., Daigle, J. M., Stevenson, B., Tolley, C., & Wade, T. (2007). *Sharing our success: More case studies in Aboriginal schooling*. Kelowna, BC: Society for the Advancement in Excellence.
- Gilbert, W.W. (2008). On challenges facing Bureau of Indian Education schools in improving student achievement. Testimony before the U.S. Congress House of Representatives, Committee on Education and Labor Congressional Subcommittee on Early Childhood Elementary and Secondary Education. Rayburn Office Building, Washington, DC. Sept. 9, 2008. p. 4.
- Gilbert, W. S. (2011). Developing culturally based science curriculum for Native American classrooms. In J. Reyhner, W. Sakiestewa Gilbert, & L. Lockard (Eds.), *Honoring our heritage: Culturally appropriate approaches for teaching Indigenous students* (pp. 43-56). Flagstaff, AZ: Northern Arizona University.
- Goddard, J. T., & Foster, R. Y. (2002). Adapting to diversity: Where cultures collide—educational issues in Northern Alberta. *Canadian Journal of Education*, 27(2), 1-20.
- Goulet, L. (2001). Two teachers of aboriginal students: Effective practice in socio-historical realities. *Canadian Journal of Native Education*, 25(1), 68-89.
- Grissmer, D., & Flanagan, A. (2006). *Improving the achievement of Tennessee students. Analysis of the National Assessment of Education Progress*. Santa Monica, CA: Rand.
- Guevremont, A., & Kohen, D. E. (2012). Knowledge of an Aboriginal language and school outcomes for children and adults. *International Journal of Bilingual Education and Bilingualism*, 15(1), 1-27.
- Gunn, T. M., Pomahac, G., Good Striker, E., & Tailfeathers, J. (2010). First Nations, Métis and Inuit education: The Alberta initiative for school improvement approach to improve Indigenous education in Alberta. *Journal of Educational Change*, 12, 323-345.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- Hermes, M. (2007). Moving toward the language: Reflections on teaching in an Indigenous-immersion school. *Journal of American Indian Education*, 46(3), 54-68.
- Hohepa, M. K., & Robson, V. (2008). Maori and educational leadership: Tu Rangatira. *ALTERNative*, 2, 20-36.
- Jackson, A. P., & Smith, S. A. (2001). Postsecondary transitions among Navajo Indians. *Journal of American Indian Education*, 40(2), 28-47.
- Kanu, Y. (2007). Increasing school success among Aboriginal students: Culturally responsive curriculum or macrostructural variables affecting schooling? *Diaspora, Indigenous, and Minority Education*, 1(1), 21-41.
- Kirkness, V. J. (2013). *Creating space: My life and work in Indigenous education*. Manitoba, MB: University of Manitoba Press.
- Klenowski, V. (2009). Australian Indigenous students: Addressing equity issues in assessment. *Teaching Education*, 20(1), 77-93.
- Kushman, J. W., & Barnhardt, R. (2001). Reforming education from the inside-

## *Improving Indigenous Student Learning Outcomes*

- out: A study of community engagement and educational reform in rural Alaska. *Journal of Research in Rural Education*, 17(1), 12-26.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Seven strong claims about successful school leadership*. Nottingham, UK: National College for School Leadership.
- Lemstra, M., & Neudorf, C. (2008). *Health disparity in Saskatoon: Analysis to intervention*. Saskatoon, SK: Saskatoon Health Region.
- Leveque, D. M. (1994). *Cultural and parental influences on achievement among Native American students in Barstow Unified School District*. Paper presented at the National Meeting of the Comparative and International Educational Society, San Diego, CA. (ERIC Document Reproduction Service No. ED382416)
- Lewthwaite, B., & McMillan, B. (2010). "She can bother me, and that's because she cares": What Inuit students say about teaching and learning. *Canadian Journal of Education*, 33(1), 140-175.
- Lipka, J., Hogan, M. P., Webster, J. P., Yanez, E., Adams, B., Clark, S., & Lacy, D. (2005). Math in a cultural context: Two case studies of a successful culturally based math project. *Anthropology and Education Quarterly*, 36(4), 367-385.
- Louis, W., & Taylor, D. M. (2001). When the survival of a language is at stake: The Future of Inuttitut in Arctic Quebec. *Journal of Language and Social Psychology*, 20(1 & 2), 111-142.
- MacIver, M. (2012). Aboriginal students' perspectives on the factors influencing high school completion. *Multicultural Perspectives*, 14(3), 156-162.
- Marzano, R. J. (2001). *Classroom instruction that works: Research strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J. (2007). *The art and science of teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McCarty, T. L. (2009). The impact of high-stakes accountability policies on Native American learners: Evidence from research. *Teaching Education*, 20(1), 7-29.
- McNaughton, S., & Kuin Lai, M. (2009). A model of school change for culturally and linguistically diverse students in New Zealand: A summary and evidence from systematic replication. *Teaching Education*, 20(1), 55-75.
- Melnechenko, L., & Horsman, H. (1998). *Factors that contribute to Aboriginal students' success in school in grades six to nine*. Paper prepared for Saskatchewan Education, Regina, SK.
- Merasty, G., Bouvier, R., & Hoium, D. (2013). *The Joint Task Force on Improving Education and Employment Outcomes in Saskatchewan*. Saskatoon, SK: Saskatchewan Educational Leadership Unit.
- Morris, A. (1991/1880). *The treaties of Canada and the Indians of Manitoba and the North West Territories, including the negotiations on which they were based, and other information relating thereto*. Calgary, AB: Fifth House Ltd.

## *Honoring Our Teachers*

- Munns, G., O'Rourke, V., & Bodkin-Andrews, G. (2013). Seeding success: Schools that work for Aboriginal students. *The Australian Journal of Indigenous Education*, 42, 1-11.
- National Indian Brotherhood. (1972). *Indian control of Indian education*. Ottawa, ON: Author.
- National Panel on First Nation Elementary and Secondary Education. (2012). *Nurturing the learning spirit of First Nation students: The report of the National Panel on First Nation Elementary and Secondary Education for Students on Reserve*. Ottawa, ON: National Panel on First Nation Elementary and Secondary Education. Retrieved from: <http://www.afn.ca/uploads/files/education2/national-panel.pdf>
- Nelson-Barber, S., & Trumbull, E. (2007). Making assessment practices valid for Indigenous American students. *Journal of American Indian Education*, 46(3), 132-143.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analyses*, 26(3), 237-257.
- Okagaki, L., Helling, M. K., & Bingham, G. E. (2009). American Indian college students' ethnic identity and beliefs. *Journal of College Student Development*, 50(2), 157-176
- Parliament of Canada (2014). *The Senate standing committee on Aboriginal peoples: Evidence*. Retrieved from <http://www.parl.gc.ca/content/sen/committee/412%5CAPP/51327-E.HTM>
- Perso, T. F. (2012). *Cultural responsiveness and school education: With particular focus on Australia's first peoples: A review and synthesis of the literature*. Darwin, Northern Territory, Australia: Menzies School of Health Research.
- Raham, H. (2009). *Best practices in Aboriginal education: A literature review and analysis for policy directions*. Prepared for the Office of the Federal Interlocutor, Indian and Northern Affairs.
- Raham, H. (2010). *Policy levers for improving outcomes for off-reserve students*. Paper presented to the Colloquium on Improving Educational Outcomes of Aboriginal People Living Off-Reserve. Saskatoon, SK.
- Reyhner, J.A. (1990). A description of the Rock Point Community School bilingual program. In J. Reyhner (Ed.), *Effective language education practices & Native language survival* (pp. 95-106). Choctaw, OK: Native American Language Issues.
- Richards, J., Hove, J., & Afolabi, K. (2008). *Explaining the Aboriginal-non-Aboriginal gap in student performance in B.C. schools*. Paper presented to the Annual Meeting of the Canadian Economics Association. University of British Columbia, Vancouver, BC.
- Rosier, P., & Holm, W. (1980). *The Rock Point experience: A longitudinal study of a Navajo school program (Saad Naaki Bee Na 'nitin)*. Bilingual education series 8, papers in applied linguistics. Washington DC: Center for Applied Linguistics. (ERIC Document Reproduction Service No. ED195363).
- Royal, M., & Rossi, R. (1997). *Schools as communities*, ERIC Digest. <http://>

- eric.uoregon.edu/publications/digests/digest111.html)
- Saskatoon Public School Division (2008). *Developing a culturally responsive school division final report*. Retrieved from <http://www.education.gov.sk.ca/culturally-responsive->
- Silburn, S. R., Nutton, G. D., McKenzie J. W., & Landrigan, M. (2011). *Early years English language acquisition and instructional approaches for Aboriginal students with home languages other than English: A systematic review of the Australian and international literature*. Darwin, Northern Territory, Australia: Menzies School of Health Research.
- Steeves, L. (2009). First Nations, Métis, and Inuit children and student achievement: A review of the literature. In R. Dolmage & Wanda Lyons (Eds.), *Improving student achievement: A literature review* (pp. 38-61). (A Report for the Saskatchewan Ministry of Education). Regina, SK: Saskatchewan Instructional Development & Research Unit (SIDRU).
- Steeves, L., Carr-Stewart, S., & Furuta, S. (2013). *Challenges and opportunities: Teacher recruitment and retention in Northern Saskatchewan*. Unpublished manuscript.
- Steeves, L., Carr-Stewart, S., & Pinay, D. (2013). The Kokum connection: Reclaiming First Nation education (pp. 65-76). In J. Reyhner, J. Martin, L. Lockard, & W. S. Gilbert (Eds.), *Honoring our children: Culturally appropriate approaches for teaching Indigenous students* (pp. 53-64). Flagstaff, AZ: Northern Arizona University.
- Steeves, L., Furuta, S., Carr-Stewart, S., & Ingleton, T. (2015). The case for culture and language. In J. Reyhner, J. Martin, L. Lockard & W.S. Gilbert (Eds.), *Honoring our elders* (pp. 1-24). Flagstaff, AZ: Northern Arizona University.
- Stelmach, B. (with Bullin, C., Hardie, R., Pearce, J., & Rohr, B.). (2010). *Prince Albert Roman Catholic Separate School Division #6 Aboriginal student achievement project: Final report*. Saskatoon, SK: Saskatchewan Educational Leadership Unit (SELU).
- Stiles, D. B. (1997). Four successful Indigenous language programs. In J. Reyhner (Ed.), *Teaching Indigenous languages* (pp. 248-262). Flagstaff, AZ: Northern Arizona University. (ERIC Document Reproduction Service No. ED415079).
- Takayama, B. (2008). Academic achievement across school types in Hawaii: Outcomes for Hawaiian and non-Hawaiian students in conventional public schools, Western-focused charters, and Hawaiian language and culture-based schools. *Hulili, 5*. Honolulu, HI: Kamehameha Schools, Research and Evaluation Division.
- Walton, F., Favaro, B., & Goddard, T. (2009). *Promoting educational success for Mi'kmaq learners on Prince Edward Island*. Retrieved from [http://www.mcpei.ca/files/Promoting\\_Educational\\_Success\\_Final\\_Report.pdf](http://www.mcpei.ca/files/Promoting_Educational_Success_Final_Report.pdf)
- Weenie, A. (2000). Post-colonial recovering and healing. In J. Reyhner, J. Martin, L. Lockard, & W.S. Gilbert (Eds.), *Learn in beauty: Indigenous education for a new century* (pp.65-70). Flagstaff, AZ: Northern Arizona University.

## ***Honoring Our Teachers***

Retrieved from <http://jan.ucc.nau.edu/~jar/LIB/LIB6.html>

- Whitbeck, L. B., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2001). Traditional culture and academic success among American Indian children in the upper Midwest. *Journal of American Indian Education, 40*(2), 48-60.
- Wright, S. P., Horn, S. P., & Sanders, W. L. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education, 11*, 57-67.
- Wright, S., & Taylor, D. (1995). Identity and the language of the classroom: Investigating the impact of heritage versus second language instruction on personal and collective self-esteem. *Journal of Educational Psychology, 87*(2), 241-52.
- Wright, S., Taylor, D. & Macarthur, J. (2000). Subtractive bilingualism and the survival of the Inuit language: Heritage versus second-language education. *Journal of Educational Psychology, 92*(1), 63-84.