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Our Stories about Teaching and Learning: A Pedagogy of Consequence for Yukon First Nation Settings

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Abstract

In this study, First Nation community members in Canada's Yukon Territory share their stories about teaching and learning, both in informal and formal settings, in an effort to identify practices that might serve teachers to be more responsive to their First Nation students. In all, 52 community members between the ages of 15 and 82 shared their stories and assisted in identifying eight categories of practice and thought associated with effective teaching practices for this First Nation. Based upon these categories of thought and practice, we present a pedagogical framework for teachers and, finally, illustrate how this profile and the stories about teaching and learning are being used for adjusting and improving teaching practice in this First Nation.

Introduction

More recent developments in Canada's Yukon Territory draw attention to how political changes have potential for accelerating practices in education that are responsive to Indigenous People's cultural knowledge systems and practices. In contrast to other provincial jurisdictions across Canada, treaties were historically never negotiated in the Yukon. Over the past three decades the Governments of both Canada and the Yukon have moved towards actualizing policy developments with YFNs (Yukon First Nations), called Self-Government Agreements (SGAs). SGAs, which are unique to the Yukon, are complex and wide-ranging, and include financial compensation, land, harvesting rights, heritage resources and operative governance structures in areas like education and justice. The SGAs have come to finalization within the last decade and set out the powers of the First Nation government to govern itself, its citizens and its land. Self-government agreements provide self-governing First Nations (SGFNs) with law-making authority in specific areas of First Nation jurisdiction, including education. With the establishment of SGFNs, each FN with the required co-operation of Yukon Education (YE), faces the challenge of reversing assimilation and regaining a sense of identity especially within the processes that influence the education of their children.

Typical of most Aboriginal peoples, YFNs presently participate in a school system that has been drawn from the dominant culture, in their case southern Canadian school system models. Because of this, school processes and practices such as decision-making in regards to the content of curricula, pedagogical practices and language of instruction have both intentionally and unintentionally for more than a century have denied the inclusion of those aspects of [YFN] culture that have value and are important to [YFN] children (Bishop & Glynn, 1999). Consistent with the tenor of SGAs to work towards education practice more responsive to the Yukon's 14 First Nations, "culture-based education" has been more recently

identified by YE and its Education Act as one of the foundational principles for school development in the Yukon. YE policy requires the activities of organizations in YFN communities to create, preserve, promote, and enhance their culture, including arts, heritage and language in classrooms (Yukon First Nation Education Advisory Committee, 2008). This policy is based upon the principle that culture in all its expression, provides a foundation for learning and growth, and that YE should support individuals, organizations and communities to promote, preserve and enhance their culture (Yukon First Nation Education Advisory Committee, 2008). The educational experiences should be reflected not only in the management and operation processes of the school but also in the curricula and programs implemented and pedagogies used in classrooms (Yukon First Nation Education Advisory Committee, 2008).

First Nations people make up about 25 percent of the total Yukon's population of approximately 42,000. There are 14 First Nations in the territory, the majority of which constitute the majority population in rural communities. With some exception, each First Nation community is a different language group. As examples, in the northern Yukon where this project is situated, Old Crow is the home of the Vuntut Gwitchin First Nation who speak Gwich'in and Dawson City is the home of the Tr'ondëk Hwëch'in First Nation who speak Han. Today, all YFN languages face extinction. YFN are in a situation currently seen as similar to that identified more recently in Aotearoa-New Zealand (where the first author conducts research in education). Within the New Zealand education system, the realization that Te Reo Māori (the language of Māori) was in the "last throes of language death" provided the impetus for Māori to prompt radical action to defend and validate their language and culture in an educational system that perennially was essentially designed to reproduce and perpetuate the aspirations of the status quo of Pakeha (white New Zealand) dominance (Smith, 1997). The developments that have occurred in Aotearoa-New Zealand since then appear to be resonating with current developments surfacing within the Yukon context among YFN, especially within the context of schooling. The perilous status of YFN languages and the recent development of SGAs are accentuating the imperative for broadening the cultural base of schools through the inclusion of resource and language materials appropriate for each YFN. More importantly, of concern is identifying and accommodating the culturally located pedagogical processes calling attention to the imperative to move beyond the *what* of classrooms to, more importantly, the *how* of classrooms. As Stairs (1995) asserts, in Aboriginal communities the formal learning processes of schools can often be radically different than the informal learning of home culture and that successful classrooms are likely to reflect these home practices.

In response to these current developments and an increasing call for school's to be responsive to YFN claims, this study attempts to determine what teaching practices are indicative of good practice and of learning consequence for YFN students. That is, it intends to identify culturally located and appropriate responsive pedagogy for teachers of YFN students. Although culture-based education may be rhetorically premised as the foundation of Yukon classrooms, what would classroom environments and teacher practices look like that are, indeed, reflective of YFN students' preferences? Based upon the formal and informal

learning experiences of YFN community members, what would culturally responsive teaching look like?

Theoretical Framework

This area of research is informed by two major categories of thought - culturally responsive teaching and critical pedagogy. Culturally responsive teaching is defined as using the cultural knowledge, prior experiences, frames of reference, and performance styles of students to make learning encounters more relevant to and effective for them (Gay, 2000; Stephens, 2003). As suggested by Gay (2000) culturally responsive teachers teach to and through the strength of their students. The underlying premise of culture-based education is that the educational experiences provided for children *should* reflect, validate, and promote their culture and language. These experiences should be reflected not only in the management and operation of schools but also in the curricula and programs implemented and pedagogies used. It assumes that students come to school with a whole set of practices, beliefs, skills, and understandings formed from their experience in their world, and that the role of the school is not to ignore or replace these understandings and skills, but to recognize the teaching practices and understandings within the cultural context and affirm these in formal classroom settings (Stephens, 2003; Watt-Cloutier, 2000; Wyatt, 1978-1979).

This advocacy for culturally responsive teaching has long been held in northern Canadian schools. As Stairs (1995) has asserted, northern students' lack of educational success can be attributed to, to a greater degree, the inability of northern schools to meet the learning needs of their Indigenous citizens through the experiences offered and pedagogies used in classrooms. She asserted that this failure includes not only resource and language materials appropriate for each context, but also, more importantly, the culturally located pedagogy that moves beyond the *what* of classrooms to the *how* of classrooms. Stairs identified in her ethnographic research that the formal learning of northern schools is radically different from the informal learning of home culture and that successful classrooms are likely to reflect these home practices. These claims have been advocated for but tragically ignored for decades in Indigenous settings (Barnhardt & Kawagley, 2010).

Culturally responsive teaching is commonly referred to as one form of critical pedagogy. Critical pedagogy is defined as an educational movement, guided by passion and principle, to help develop consciousness of freedom, recognize authoritarian tendencies, and connect this knowledge as a foundation for taking constructive action (Giroux, 2010). The primary intent of the YFN SGAs is a response to a critical awareness of the injustice of existing social orders, including education, that have historically and, arguably, continue to this day disenfranchise YFNs and this study's case, the classroom pedagogies perceived to influence students' learning. In response, critical theory, similar to the underlying premise of the SGAs, re-examines and, ultimately assists in the re-construction of practices in order to work towards a social order based upon a reconceptualization of what can and should be. Most evident within the critical theory writing is the emphasis on the idea of a growing 'consciousness' of one's condition amongst individuals, a 'conscientisation' as Freire (1970, 1998) refers, as the first step to constructive action in an educational practice of consequence

for students. It is this growing ‘consciousness’ that the authors would like to emphasize as important to the research presented herewith and, we feel, is most evident in the conversational data presented in this study..

Methodology

As purported by Bevan-Brown (1998), our overall aim of this research was motivated by our desire to better inform and benefit YFN students and their teachers to see the realization of YFN aspirations for education, especially because of the potential SGAs have in precipitating major changes in education, especially in classroom practices. Our central research question is: What teacher-specific and learning-environment characteristics and social interaction behaviors do members of a YFN community perceive contribute to learning success in both informal and formal contexts? The research itself was motivated and invited by a YFN Education Director familiar with the authors’ similar work in Nunavut (Lewthwaite et al., 2006, 2009, 2010, 2011). The methodology for the overall research project is informed by participatory action research (PAR), especially that conducted by the authors in Aboriginal communities of Nunavut. In this previous and ongoing research, the collective aspirations of each Aboriginal school community (i.e., its teachers, students, parents, administrators, and supporting elders) worked as researchers in collaboration with the authors to (a) identify common goals, (b) implement strategies for achieving these goals, (c) evaluate the effectiveness of efforts to achieve set goals, and, finally, (d) respond to the evaluations with further courses of action (Lewthwaite et al., 2006, 2009, 2010, 2011). Because this Yukon project, overall, endeavors to critically identify, challenge and, ultimately, provide direction for the patterns of action of local institutions might use in being response to locally identified goals, including the pedagogy in Aboriginal schools and their classrooms, it is emancipatory as well (Authors, 2012). Although the research is informed by the aspirations and processes typical of PAR, we are very aware that the guiding framework for the research was to be informed by the YFN’s Chief and Council who made it very clear to the researchers that our requirements as researchers was, first and foremost, to “not just listen, but ensure we hear[d] what the community was saying” (Chief, personal communication, May 2011). It was made apparent to the researchers that although there were ways in which we might have been accustomed to carrying out research, we “may need to change how we go about things to ensure we get the full story” (Education Director, personal communication, May 2011). As asserted by Smith (1999), the way in which we as researchers conducted our research needed to be informed by the custom of the very people for whom the research would serve and be centred upon their concerns.

Participants and Data Collection

Initiating the research required the researchers to follow through with a variety of measures to ensure the YFN community at large was aware of the research being undertaken and its intent and that its intent was consistent with their aspirations. As directed by the Chief and Council, the first author was expected to inform the YFN community of the research through a newsletter regularly distributed bi-monthly to the community. The first author was required to attend the monthly eldership meeting to describe the research intentions to eldership and

encourage suggestions as to how the research focus and procedures could best bring satisfactory outcomes for YFN students. At this meeting, what was most important to eldership was that “everyone who wanted should be allowed to say” and that simply choosing a few to participate was not acceptable. The YFN eldership demanded that the “opportunity to talk” (interviews) was made possible through multiple options including (1) individuals or group interviews with the researchers in homes or at the FN hall; (2) interviews over the phone; or (3) individuals or group interviews with eldership identified FN Research Assistants in homes or at the FN hall. These assertions for encouraged participation by the eldership council challenged the authors’ views of research protocols associated with ‘sampling’ and ‘saturation’. As well, if youth (those under 18) wanted to speak for themselves, they were allowed to speak and parent approval was not necessary to sanction their voice.

As researchers, we employed a variety of data sources to improve the confirmability and transferability in the findings (Bogdan & Biklen, 1998). These sources of data included (a) individual interviews with 17 YFN recent school-leavers, (b) individual interviews with 13 parents and grandparents, (c) group interviews with 14 parents and grandparents, (d) individual interviews with four teachers who previously had taught in the community, and (e) individual interviews with three teachers currently teaching in the community. In the semi-structured interviews, we asked questions that focused on individuals identifying (a) teaching and learning experiences they had had within informal contexts, such as in their homes or on the land, (b) teaching and learning experiences that people had had within more formal contexts, such as in school, and, in these experiences describing, (c) what their teachers (both informal and formal) did to help them to learn, (d) what was happening when they were learning best both in informal and informal settings, (e) what they would change about their teachers’ teaching to assist them in their learning, and (f) teachers of good consequence and the characteristics of these teachers, both in informal and informal settings. In all cases, the interviews were a chat (Bishop & Glynn, 1999) based upon the need for collaboration between researchers and researched to construct the final story as evidenced in the vignettes and themes to be presented in a subsequent section.

All of the 37 interviews involving 52 community members lasted between 20 minutes and two hours. All interviews were, where permitted, audio-recorded and transcribed. The transcriptions were verified as accurate by those interviewed. After the interview stage, the first author, again, reported to the eldership council. He described how any segments of the interviews that focused on teaching and learning practices would be highlighted and used as identifiers of effective teaching practices. It was suggested by the eldership that although identifying themes regarding teaching and learning practices was important, presenting each person’s story and the community’s story about teaching and learning was important. Abbreviating the stories was frowned upon, but understood as necessary for research purposes [such as the reporting in this paper]. As one elder stated, “our stories [about teaching and learning] are important. The stories help to tell what is important for us. For a long time our stories have not been heard”. Based upon this dialogue, it was decided the narratives, once abbreviated, would be compiled into a document to be used to guide the next

phase of the research (Authors, Under Review). That is, these stories could assist teachers in adjusting their practices in line with the identified effective teacher behaviors and the influence of these practices on student learning could be determined. The eldership endorsed these actions and asserted that the compilation had to include all participants who approved of their narrative inclusion and to ensure their anonymity if they so desired. Eldership also asserted that these narratives were “to be listened to” by the school’s teachers and Yukon Education.

Results and Discussion: Perceptions of Teaching Practices and Beliefs Influencing Teaching

Overall, we sought to make sense of the respondents’ personal stories about classroom learning and how these stories intersected (Glesne & Peshkin, 1992). We sought to understand learners’ and teachers’ behaviour from their own frames of reference. Within the experiences of the participants, we identified common themes associated with characteristics of teaching (Bogdan & Biklen, 1992). In identifying these themes, we isolated those elements of the conversation that spoke directly to what we interpreted as ‘observable’ behaviors. Since we were ultimately in our research attempting to determine what culturally responsive teaching ‘looked like’, we focused on teaching characteristics that were regarded as low-inference as opposed to high-inference behaviors (Murray, 1999); that is, specific and observable teacher behaviors that influence learning indirectly or directly help learners to learn. In all, 52 teacher behaviors were identified. Because the purpose of this research was to identify what participants identify as influences upon their learning and characteristics of effective teachers, both informal and formal, we have organized the themes from our data around these headings. Again, what we report primarily focuses on comments where consensus was evident among the participants. In each of the sections, we present two responses (as extended narratives as per request of the Council) that correspond with the theme category. It is noteworthy that these 16 responses are exemplars and do not capture all of the 52 low-inference behaviors that were mentioned.

Theme 1: Beliefs about students and their communities

Although there were 52 low-inference behaviors identified by the researchers in the 52 conversations, one high-inference (non-specific, non-observable) behavior was more prevalent than any other low-inference behavior. This behavior is regarded as a disposition of teachers that influences all other practices. As two respondents stated:

I don’t know if teachers know how much impact they have, good and bad. Like, you can really tell if a teacher believes you can do ok [at school]. I guess because I was always fairly social, teachers saw me as having potential. But [my friend] thinks that because she was really quiet she wasn’t seen as being interested. I would get more attention than her even though we were both interested. I just showed it more. I would be one of those to press and ask, and she would be more quiet – but it didn’t mean she didn’t care. Then, when I began to get lower grades it was like this was expected. I don’t remember anyone really challenging me [at school] to do better. I

still wonder if they just expected I would eventually begin to not do as good [because I was First Nations]. My mom really would chew me up though if I wasn't doing well and tell me to do better. But she would be bossy but at the same time encouraging. Then, in Grade 11 I felt [two teachers] really believed in my potential. That was the difference. I think they saw everyone had potential. It didn't matter who you were, you had potential.

(Grant – A Recent Graduate)

Much of your success as a student is about whether teachers know you and really believe in you. I can see that those teachers I respected were the ones you knew were committed to you [and your learning]. Some teachers put emphasis on what needed to be learned. That was what was important [to them]. It wasn't about you as a learner. Then there were those who put the learner above the stuff to be learned. That's what I think. You can see it even today with my [children]. When I am with [my children] they will say "Hi" to one teacher and not say anything to the next. This really is about whether they see that teacher as believing in them. If they believe in you, [the teacher] wants you there and see's you as important. If they don't see you being able to do it, then it's like ok, you don't belong and I picked up on it. Sometimes you weren't able to do what was required to pass, but still you needed someone there to have that belief in you. That's what comes through. They would work with you and show you that you were capable as a learner. Sometimes, you just knew you weren't welcome – it just wasn't going to work. You just have to see everyone as being able to learn. As soon as you get labeled as a bad learner, that's where it begins. Then you just end being on the side. There are just too many [First Nations students] that end up being left that way – just for the few that can make it through.

(Harold – A Parent)

Commonly apparent in the conversations were comments associated with teachers' perceived views of learners. In several conversations, participants perceived they were viewed by teachers as 'lesser' or 'not as capable as' [non-native learners]. These beliefs, in turn, influenced how teachers interacted with students. As Bishop et al. (2003) assert, at the heart of many school systems' thinking is a belief or, at least, an assumption that Western ways are superior and that Aboriginal culture and specifically students may bring deficits to classrooms, not assets. Such thinking suggests that not only are students' background experience and knowledge of limited importance to promote learning, but so are their cultural foundations. Deficit thinking or theorizing, as it is called, is the notion that students, particularly low-income, minority students, fail in school because they and their families experience deficiencies such as limited intelligence or behaviours that obstruct learning (Bishop, 2003; Castagno & Brayboy, 2008; Valencia, 1997). In contrast, teachers of significance in this study were perceived as individuals who believed students possessed a 'worthwhileness' and, in turn, manifested. this belief through a variety of actions that follow.

Theme 2: What are the learning priorities?

A common concern voiced by community members, especially older members, was associated with the learning priorities of schools. As two members commented:

It is like for many years we have watched this thing you call ‘education’ occur in our town. I know there is much that can occur in the school that is good, but it does not make a person wise. In our culture there is nothing more important than the learning that makes a person wise. The main thing [your] culture wants from school is ‘head knowledge’. That is what it has always emphasized. I do not know why. It intrigues me. Your focus is mainly on the gaining of a kind of knowledge that seems to have little value in understanding the world and to make us wise people. I see it has some value, but maybe this value is only to make someone seem better than another. I think that schools can become focused on this. I think this is why many of us in the past questioned the very purpose of schools. It seems to focus on the individual and their future, not the future of the community. Our community would say that is only a small part of what schools should be about – it is about ‘making a human being’ that can contribute to our society. There is much to learn from our culture, not only our knowledge of the natural world but maybe, more importantly, how one should live in this world. It is most important this learning about how to live in the world. This is not seen as important. Without this things will not go well, both for the person and the world as a whole. In our culture the wise person has qualities like being innovative and resourceful for the benefit of others, or a willingness to persevere and not give up easily or contribute to the welfare of the group. All of these have not had much value in school, but now I hear it is becoming that way. This must happen.

Percy (Elder)

It’s like if you can’t learn just this one way, then you can’t be a good student. That is what we have to think about. If you don’t get it that way, then you need remedial work. There has to be thinking that there are more ways to show you can be a good student. Learning in different ways, because the one way that usually decides whether we can be a good learner is not good enough. It’s like all the students need to change how they learn because this teacher thinks this is the way students have to learn. Who decided that there should be one way on how to learn? Then the next year they have to change to learn a different way because this teacher believes in a different approach. There has to be a purpose in education. It has to be much more than just learning things that might one day be used for a future career. If that is what education is, then really it’s pretty limited in value. It has to be about learning knowledge and skills and values that are important for life. If it is about these thing asserts it has to be more than just in a classroom or what a classroom can offer. I think it is odd there are classrooms for a whole year and then another classroom for another year. What is that about? Does that mean you can’t learn anymore from that that teacher? I think there is much more going

on at school now, but the way you become successful still has to do with just how you do in those academic subjects. There has to be ways kids can show they are successful other than just with mathematics and writing. If these are the ways we have success then most students would choose not to go to school. Why would you go to school to prove you can't be successful? I think when we think about education, we have to see it as allowing more opportunity and more things being important.

Allan (Parent)

Both of these commentaries present a very thoughtful critique and a 'consciousness' of the education being provided in their community. Both question an orientation to education that is focused simply on an academic rationalistic view of education (Eisner, 1979). As Eisner suggests, increasingly schools, and education, are focused on the intellectual growth of the student in those subject matter areas most worthy of study, usually reducing the focus on personal and social goals. As Kemmitt contests (2012), education is, ultimately, about the formation of persons who in turn become a part of the collectives of communities, societies and our shared world. Unfortunately, as Kemmitt suggests, schooling can often interfere with education because schools and schooling can be suffocated by a dominating focus on curricula and assessments and students' achievement. Clearly, the commentaries above suggest that many would question an education that focuses on an academic rationalist orientation, subscribing to a need for a critique of the learning and teaching priorities of school.

Theme 3: What are the practices for causing learning?

Following on from the above commentaries and the respondents' views of the priorities in schools, we present two commentaries that focus on classroom practices.

I remember days at school where I felt all I was doing was numbers, letters and words, things I was not that used to. If it wasn't from a textbook, it was from a worksheet. And one sheet was followed by another and one page was followed by another. I recall days where it seemed like me, alone, with just words and numbers and I was supposed to be able to something with all of these words and numbers. I know that this was the time I did not feel like I was any good at *schooling*. I say schooling, because I know now that not being very good at schooling was what made me think I was no good at school. I understand that now, but I did not understand that then. I understand now, that success was all about how well I could use the numbers and words. Do this with them, that with them. That was the schooling part that I was no good at. I shouldn't say *no* good at it because I could do some of it, but not as fluently as some of the others in the class. We supposedly had good teachers, but I don't think so. In those two or three years what was expected was a very narrow road on what was important for learning. It was a very narrow view on what a good student was. I mean a good learner was. It all seemed to be about working with those numbers and letters. One teacher was very nice but the focus was all about us working alone with numbers and letters and how well we did with these was used to find out if we were good students. I know about this time I decided I wasn't a good learner. I fell behind and at the same time I was deciding I wasn't a good

learner, the teachers were coming to the same judgment about me. I don't remember anyone telling me otherwise. I guess that was the beginning of the end. My friends seemed to be the ones also not being good at schooling and pretty soon I just stopped going to school. Grade 8 or 9 I think.

(Catherine, Parent)

When I went to school, basically the teacher stands up at the front of the class and talks on and on about their subject. It was hard, because they're up there and you're down here, and you're sitting there and there are lots of other students, so there are lots of distractions. They get their twenty minutes up there and you are just expected to listen [to learn] and they start getting you to do your work, and there's so many students that if they make it to you, they make it to you, and if they don't, they don't. I felt like the teacher was up here like a judge, and you're down here like you're guilty or something. That's kind of how I felt. Or, you know, 'you're just a little person, what do you know?' It's like 'well, I'm an empty vessel; you're supposed to give me knowledge.' But it was a little bit harder learning that way because you're being told what to do and not being shown really how to do it. It was easy for me to just go daydreaming, because it was my good luck to be in the back of the class. For me, and I notice for my peers too, it's easier to learn when the elders are telling me stories, and then we get hands-on experience right there. So, for example, with something like 'First Fish' [a program run by elders to assist young people in learning about fishing] we're told stories and then we get to help and learn and there's always someone there to help you. You go through the whole process. Just being told what to do doesn't work for me. I don't have the comprehension. I need to see it. I'm a visual learner. And the assistance and supervision of the elders helps. They work with you and watch with you. If they see you make a mistake they'll come over right away and say 'this is the proper way', or 'this works safer this way.'

(Kimberly, Young Adult)

These two commentaries provide some initial insights into practices commonly identified by community members as contributors to learning. The mention of being 'alone' in learning and 'listening to learn' were the most common references made by participants. In all, community members identified over 18 teacher practices that contributed to their learning. In good teaching practice, respondents mentioned that modeling and demonstrating were common. Visual images were commonly used to inform. Repetition and focus on mastery were emphasized. Time provision was made to gain mastery and think things through. Learning was demonstrated in a variety of ways, not just in written form. Learners were given feedback to support next steps in learning. Collaboration and reciprocity in learning was seen as important. The teacher and students involved each other in a student's learning. It was seen as vital that students were receiving individual attention and are given feedback and affirmation as they learn. Story-telling and the use of narratives focusing on relatable subjects were significant in promoting engagement and learning. Most of these practices have been voiced to us as researchers in previous studies (Lewthwaite et al. , 2010) and are commonly cited in the literature (Bishop, 2003; Castagno & Brayboy, 2008). As we have suggested

previously (Authors, 2010), we believe many of these practices are culturally located; that is, they are a part of students' home and familiar culture.

Theme 4: What patterns of relationship contribute to learning?

Following on from the commentaries associated with teaching practices, we present two commentaries that focus on patterns of relationship.

A big part is realizing that each student has something to contribute. Without expecting it, you'll be doing something and then, suddenly, they [referring to a quiet student or students] would have something to say and you would just sit and listen. I try to get to know each of them really well. I would say my First Nations students, overall, are *very* cautious learners. Many of my students are. They are cautious about me, school and their learning. I really work hard at that. It largely requires me to give attention to students – really just being with them and encouraging them along – providing them with the opportunity to show me how they are doing and – just being there and making suggestion along the way. I don't invade their space. I just try to give them space to respond. A lot of our time is on essential skills - reading, speaking, communicating, expressing – it requires opportunity for them. You can't do it for them, but they must have some initial success and persevere. We worry about students that are too depending on us, but that can't change overnight. Once they see more success in themselves they are willing to do more on their own. It's like blooming – if we feed them encouragement through their little successes it gets better.

Eleanor (Teacher)

It changed a lot in Grade 8. This teacher was more informal in his style, and tried to personalize the history so it was relevant to students' lives. When he looked at historical events he made a point of really personalizing them in a form that allowed students not only to understand, but also to relate to them. So it became something that was really quite meaningful for students, and it was something that they could apply to their own lives. At an early stage often within a classroom the learning encouraged was quite narrow and book-based. All it required was memorization, without relevance, and though I was really determined, I was quite frustrated by this approach. I wanted to think and talk about the importance of being able to think about these events and being given the opportunity to apply them to my own life so that they actually became real learning experiences. By looking for something that was more relevant for my own life meant I didn't give up on myself as a learner. As I got older, I wanted to see a classroom environment that respected me more as an individual, and the fact that I could make decisions on my own and that I could work through these things, and that with encouragement, I would have insight into situations. Few teachers had this kind of orientation, and generally the schooling I received tended to be very teacher-dominated with little emphasis on me and my potential to learn.

(Jacquie, Parent)

Similar to these responses, the community's responses, overall, focused strongly on the need to develop positive relationships in the classroom environment where each individual was respected and seen as important. Manifest in the description of the relationships was a priority on caring. Caring manifests itself in actions – it supports, expects, it challenges, it affirms and it is responsive to each individual and their situation. It is our understanding that the theorist that is most closely aligned with the community's admonition for education is that advocated by Nel Noddings. As Noddings suggests:

The key, central to care theory, is this: caring-about (or, perhaps a sense of justice) must be seen as instrumental in establishing the conditions under which caring-for can flourish. Although the preferred form of caring is cared-for, caring-about can help in establishing, maintaining, and enhancing it. Those who care about others in the justice sense must keep in mind that the objective is to ensure that caring actually occurs. Caring-about is empty if it does not culminate in caring relations. (Noddings 2002: 23-4).

In summary, this community's responses imply that a pedagogy of consequence for its students is based upon a pedagogy of relationship underpinned by an ethic of care (Noddings, 2002).

Theme 5: In what ways does this classroom ecologically represent the community?

What is evident from these participants is that there is a confirmation of the 'worthiness' or 'worthwhileness' of each individual and their community. This is not simply used as a means to engage students, but, moreso, exemplifies beliefs in the individual and the community they represent.

My parents were never made to feel welcome at school when I was a student. They would not set foot inside a school and when you think of their experience [at Carcross Residential School], I can see why. Teachers really need to be aware of this. It's not that they don't care. Then, [my daughter] had this teacher that made you feel welcome. I mean, you just didn't drop them off at the classroom; you could actually go into the classroom and feel welcome. That teacher has people from the community help her with the teaching. There's a message there isn't there. There's something we can contribute. They are down at the Heritage Centre. They learn about history.

(Darren, Parent)

This is a pretty special town we have here and we should know about the people that are a part of that heritage. Why was there no input from [people in the FN] to my learning? What does that say when there is no effort to include them? School starts to really change when you're in Grade 7, 8 and 9. It starts to get more academic – just focusing on this stuff not relevant- and this is where things start to be divided. Pretty soon you

have friends saying they don't want to be there, and it's because they start feeling stupid. They don't feel they belong. They have to go to the [special class] and are on special programs. There's not much happening then that makes you feel like you should go. Why should I go to not feel any good about myself?

(Edward, Parent)

What was apparent from community members is that there is a perceived need for more confirmation of the local community in the education of its children; that is, efforts to affirm and encourage the involvement of FN community. In the authors' experience, community engagement with schooling is a commonly expressed concern (Lewthwaite et al., 2009), both by the administration and teachers, and the community itself. What respondents were suggesting was not, simply, that the community be more involved in their students' learning, but that the school confirm the participation of the community in students' learning. It is the authors' belief that the legacy of Residential Schools requires schools in the Yukon to be confirmatory in their interactions with the FN community.

As asserted by Noddings:

When we confirm someone [or thing], we identify a better self and encourage its development. To do this we must know the other reasonably well. Otherwise we cannot see what the other is really striving for, what ideal he or she may long to make real. Formulas and slogans have no place in confirmation. We do not posit a single ideal for everyone and then announce 'high expectations for all'. Rather we recognize something admirable, or at least acceptable, struggling to emerge in each person and community we encounter. The goal or attribute must be seen as worthy both by the person trying to achieve it and by us. We do not confirm people or communities in ways we judge to be wrong (Noddings 1998: 192).

Theme 6: How can classroom organization say about how we learn and what is important in learning?

Consistently community members made mention of the importance of high expectations being encouraged for classroom behavior and student performance. Classroom routines were regarded as important. Expectations were to be clearly communicated. There was opportunity for negotiation and re-negotiation of these expectations, but consensus was essential. Organization provided time, opportunity and support for students to learn and show learning. Working for learning allowed for assistance and feedback from peers. As described by a local teacher and a parent:

I think it starts on day 1. I know the students know me around the school but that first day and the message I give is important. Students may know you and of you out of the classroom and the school, but until they are in your class they don't really know what

you are all about. That can make the start of the year difficult. There have to be routines and expectations but it's not just on my terms. I focus on them telling me [how does she do this?] what they think my responsibilities are and them telling me what their responsibilities are. We write these on a wall poster. We always return to these. We try to live by these. They know what I should be like as a teacher. Our list is pretty detailed and it's about expectations. [She talks about how she isn't supposed to take her mood out on students – it's on the list!]. I have to be really true to myself. I know they'd figure that out pretty quickly if I didn't.

Angela (Teacher)

I look back and realize the best teachers were those that expected lots from you. They believed you had potential and you were able to do things well. My parents expected that of me, and I expect it of my children and my children's teachers. It shouldn't be easy just because they are native.

Louise (Parent)

These comments are consistent with Berger's (2007) reflections of previous assertions about teacher expectations and positive learning environments for northern settings. He suggests that a warm and caring environment where a teacher is seen as part of 'the team' *and* maintains high expectations is thought to be best (Clifton & Roberts, 1988; Watt-Cloutier, 2000) and is something teachers can work towards. Consistently participants in our study and similar to previous studies (Lewthwaite et al., 2010) made distinctions between classrooms that were very structured and teacher-directed and those classrooms where the environment was co-constructed and reflected students' perceptions of a positive learning environment.

Theme 7: What are the communication patterns of the classroom?

As we have found in previous northern studies (Authors, 2010), language patterns were perceived to influence student engagement and learning.

For my children, they become frustrated as learners when the directions given out are not very clear. Often the words that are used to communicate an idea are too complex, and just need to be simplified. Even the names that are used can unnecessarily complicate the concepts. This means that when students read something, they're often just trying to figure out through the words what it means, rather than being able to work towards solving a problem. I believe it is really important that what is said be crystal clear in terms of what is required.

(Jacquie, Parent)

It was sometimes like being in a foreign language class - just all the words being said. They would speak so fast. You'd be put on the spot and I didn't like that. If I had an idea, I would offer it, but not being put on the spot. I liked teachers that spoke clearly

and we would listen. I didn't have to say things. I wanted teachers that would show us what to do rather than just telling us. I can't follow books and when I help my kids today, we all just get lost in the words. I just wanted someone there to help me through it and not complicate it with all the mumbo-jumbo. Then, we couldn't help each other. You would sit there waiting; which now seems silly when someone else in the class could have been helping each other. That's what we do at home here – help each other – but why can't be the way at school.

(Naomi-Parent)

Making clear the intended learning was very important to community members. Clarity of speech and learning intent was seen as crucial for causing learning. The communication patterns were encouraged to be dialogical rather than univocal, voluntary rather than involuntary. Listening was seen as important as talking. Sharing circles, or a modified form of sharing circles, were a common practice to provide each student time and space to contribute, without interruption. Teachers of consequence under-talked more commonly than they over-talked. When teachers talked with students individually or collectively, they physically situate themselves at their students' level. Students communicated their learning through a variety of modes, not just in writing. The learning environment encouraged learning both as an individual and a collective activity.

Theme 8: What do I emphasize as the content to be learned?

Surprisingly, few participants mentioned the importance of content inclusion, supporting Stairs' (1995) claim that the most significant influence upon learning is not about content or *what* is being learned, but, instead, the *processes* and *priorities* of classrooms.

I don't want to patronize, but when we learned about our culture that was important - especially when it kind of was the background behind the learning. Both of my children learned about the past [archaeology] of the area through a Grade 4 topic and they spoke so much about that. It just opened up conversations at home and I was able to tell them much about our past and that was fascinating them for them. I think that is important. It just made them [and me] feel prouder. They were likely learning social studies stuff, but they were also learning about themselves.

Naomi (Parent)

When you use stories based upon their context, it really engages them. They show an interest in the stories and can relate to it more. The stories though are just the starting point for the learning. I know they view themselves more positively as learners when the learning can be relevant. The stories usually encourage them to do something practical, like building a cache or a salmon wheel and they thrive on those types of projects. They can illustrate their learning. They can describe their learning in the project. The literacy part in reading and writing is important, but there are other ways to show their learning and they take pride in showing their learning.

Anita (Teacher)

Participants asserted that the formal curriculum became the vehicle for the development of personal attributes deemed as important, especially students' self-beliefs about themselves as learners and culturally located individuals (Barnhardt & Kawagley, 2010). Learning was not abstract; instead it was connected to students' lives and prior learning. It focused on knowledge, skills, attitudes and values and was located in local context and connected to students' lives. Learning was enriched through 'working to end' type projects that promote independence and collaboration, creativity, perseverance, and self-evaluation of progress tangible end products. Literacy and numeracy development were emphasized as we are learning. Developing fluency in these areas was a priority. Respondents commonly mentioned their lack of symbolic fluency (working with letters and numbers) as an impediment to their progress in school, but also identified a high regard for achieving this fluency. Despite this high regard for symbolic fluency, what was learned was not to compromise on students' cultural background. Instead it was to use this to engage students and support their learning.

Pedagogical Framework for Culturally Responsive Teaching

In the section that follows, we illustrate, the categories of thinking that members of this Yukon First Nation identify as representative of a pedagogy of consequence for its members. It captures what we refer to as a responsive pedagogy for Yukon First Nations students. It is important to note that it represents, primarily, low-inference behaviors that would typically be easy to observe in a teacher's practice. In all, they not only refer to what is taught but, also and more importantly, how the teaching unfolds and the priorities in their learning. At the heart of this illustration is a teacher's beliefs about their students and the community they represent. These effective practices occur because teachers accept that *they* are the central players in fostering change, first in themselves by altering their beliefs about students and the cultures they represent and, then, working collaboratively towards an environment where practices reflect the culture in which students and assist students in their learning.

In Table 1, we provide some detailed description of these attributes based upon the conversations with the community. All attributes are consistently mentioned by community members as attributes of teacher's of consequence and, we have found, consistently identified as practices influencing students' learning in northern settings (Authors, 2010). As we have discussed previously, a question that arises from this study is the uniqueness of these effective teacher attributes for YFN students. Are they not, simply, good teaching practices

for all students? The literature identifies characteristics commonly evidenced of effective teachers (e.g., Tobin & Fraser, 1990). As one might expect, the general education literature contains a plethora of citations referring to effective teaching characteristics.

Figure 1
Pedagogical Framework for Informing Culturally Responsive Teaching



What provides significant credibility to these behaviors identified by northern students and community members is that most of these attributes are identified as highly effective teaching practices in a meta-analysis of over 800 international studies focusing on identifying what influences and causes learning (Hattie, 2009). Referring back to the respondent's comments previously presented, we see the importance of practices such as succinct explicit instruction, modeling, and proximity and feedback during learning as characteristic of the teaching and learning practices of the community and thus 'normalized' teaching practices for the First Nation community. In Hattie's (2009) identification of the most significant influences for advancing student learning, he lists teacher practices such as the provision of feedback, clear direct instruction and instructional quality as some of the most significant influences on learning. Participant's comments represented many of the categories of practice identified by Hattie (2009). Although we saw correspondence between what the community was saying and the literature on attributes influences learning, we could see many influences were specific to 'place' emphasizing the context-specific nature of effective teaching in northern settings. For example, the frequent mention of the need for prolonged wait time for learners

Category	Description
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to process ideas and be afforded opportunity for response, and the common reference to teachers over-talking rather than under-talking, we saw, as researchers in a community we knew well, these as normalized learning practices. In brief, there was orthodoxy of practice for learning in the community, and this orthodoxy was, we believed, was not representative of the common practice of schooling.

Table 1:
Characteristicsof Culturally Responsive Teachers

What are my beliefs about students?	Students are regarded as culturally located individuals having capacity to learn, like any other, and contribute to my and the entire class' learning. Students expect me to have high expectations for them as learners and as members of a community.
What do I emphasize as the content to be learned?	The formal curriculum becomes the vehicle for the development of personal attributes deemed as important. Learning is not abstract. It focuses on and is located in local context and connected to students' lives. Academic ideas are embedded with contexts. Enriched through 'working to end' type projects involving tangible end products. Literacy and numeracy development are emphasized in every curriculum area. Developing fluency in these areas is a priority. What is learned does not compromise on students' cultural background. Instead it uses this to engage students and support their learning.
What patterns of relationship contribute to learning?	The teachers' role is to cause learning. Establishing a classroom environment that promotes and expects learning is the priority. Manifest in the relationships is a priority on caring. Caring manifests itself in actions – it supports, expects, it challenges, it affirms and it is responsive to each individual and their situation. To do this, classroom routines are very important. Expectations and learning goals are clearly communicated and upheld. There is little compromise on established priorities, especially in regards to learning. Families are on board with these priorities and support these priorities. There is opportunity for students to contribute to decision-making. Classroom allows for student voice in establishing consensus, but such that they never compromise on learning.
In what ways does this classroom ecologically represent the community?	The classroom is physically represented through a variety of cultural representations and artifacts. Most importantly local language and community members and their protocols are welcomed and encouraged to be expressed. Learning is promoted through the participation of community members. Much learning occurs outside of the classroom because the community is seen as a contributing resource for fostering learning.
When I am teaching how do I teach; what are my practices for causing learning?	In teaching practice, modeling and demonstrating are common. Visual images are commonly used to inform especially as a pre-reading exercise. Repetition and focus on mastery are emphasized. Time provision is made to gain mastery and think things through. Students show learning in a variety of ways, not just in written form and are given feedback to support next steps in learning. Collaboration and reciprocation in learning are important. The teacher and students must involve each other in a student's learning. It is vital that students are receiving individual attention and are given feedback and affirmation as they learn. Story-telling and the use of narratives focusing on local context is frequent. Connections always made between prior learning and new learning across curriculum areas.
How can classroom organization say about how we learn and what is important in learning?	Classroom routines are very important. Expectations are clearly communicated. There is opportunity for negotiation and re-negotiation, especially because we are a community of individuals. Organization provides time, opportunity and support for students to learn and show learning. Working for learning allows for assistance and feedback from peers.
What should be the patterns of communication when teaching and learning is occurring	The communication patterns are dialogical rather than univocal, voluntary rather than involuntary. Listening is as important as talking. Sharing circles, or forms of, are a common practice to provide each student time and space to contribute, without interruption. As a teacher, I under-talk more commonly than I over-talk. My communication is clear and succinct. Direct instruction is used as a purposeful means to make learning and learning goals clear. When I talk with students individually or collectively, I physically situate myself at their level. Students communicate their learning through a variety of modes, not just in writing. The communication patterns are encouraged by a learning environment that focuses on learning as a collective activity. Constructive questions or ideas expressed by students are used to extend learning and are encouraged
What are the learning priorities?	Focus is on the development of individuals who believe in themselves as culturally located individuals that are self-reliant, resilient and contributors to their classroom and community. Although academic knowledge is important, the learning must be broader focusing on the development of life tools such as perseverance and self-sufficiency as well as interdependence and respect. Fundamental literacy and numeracy skills are regarded highly.

Although these attributes are evidently linked to some attributes of effective teachers identified through this study for YFN students, what is most apparently missing in Hattie's list is any explicit mention of pedagogies that *respond to the cultural norms of the settings students represent*. Several of the effective teaching practices identified within this study (e.g., succinct communication patterns, use of local resources and contexts), we believe, are manifest in students' home and community culture. This is the distinction and potential relationship between culturally responsive and effective teachers. Culturally responsive teachers are effective teachers by responding to the cultural norms of the settings students represent. They are able to use the cultural knowledge, prior experiences, frames of reference, and performance styles of students to make learning encounters more relevant to and effective for them (Gay, 2000).

What is likely more meaningfully absent from these dimensions is reference to how attitudinal dispositions and beliefs of teachers becomes manifest in low-inference, easily observable teacher behaviours. In other words, if we have beliefs about a student, we are likely to display that belief in some tangible way. In a previous paper, we commented on how a Middle-Years Inuit student knew his teacher cared for him as a learner because "she bothered [him] and [held high expectations] for his learning (Authors, 2010). In this study, participants similarly give indication of a conscious awareness of how teachers' beliefs become manifest in their actions. As examples, respondents made mention of how much time [native] students were given in assistance in learning, how engaged teachers were in their learning, what expectations teachers had for their learning or if local contextual information or people were used as resources in the learning process. Inferred from these experiences by many respondents was that it is not uncommon for teachers to hold a deficit view of students or the community they represent. This perceived pathologizing (Shields, Bishop and Mazawi, 2005) of students, the families and the cultures they represent influences the categories of practice illustrated in Figure 1 including the quality of teachers' relationships with students and instructional practices. It is suggested, that if teachers hold deficit views of students, they have little awareness of the agency they possess for enabling students' learning. In contrast, if teachers regard students and the culture they represent from an asset perspective, they are aware they have the agency to respond to students' learning preferences (Valencia, 1997). Rather than attributing blame on family and community, they recognize they can bring about change by adjusting their practices. Inherent within the thinking of teachers of consequence as indicated by the respondents in this paper, is that

respond to and adjust their practices based upon individuality, irrespective of cultural background.

As one of our current teacher suggests in this community suggests,

Although I can see that these behaviours (from Figure 1 and Table 1) are indicative of my practice, it is really about my mindset. I wasn't like this always, but I have adjusted my teaching overtime to better help students here learn. I believe that my mindset needs to be very open. I need to understand my students, each one individually and to do this, takes time. I need to understand my students. I am constantly trying to adapt my practice to integrate their interests and abilities to assist them in their learning. I feel as though you need to be adapting to the needs both socially and intellectually of each student. This isn't easy in the least and making these connections between the student and the curriculum cause engagement through relevance. I believe that the mindset of a responsive teacher needs to be exactly that – responsive. If it isn't working, I am doing it wrong. One student not learning is the barometer of how I am doing. You need to be in control of your teaching and to make learning happen for your students. You can teach but can your students learn? I need my students to learn that learning is my bottom-line and I believe I need to respond to their needs to do that. I believe responsive teachers are motivated because they like to learn, and in turn they want to see their students learning. They are not afraid to question their teaching. Responsive teaching allows student to feel like they are being cared for but also being challenged to learn and take ownership of their learning.

Summary

The purpose of this study has been to report on the first phase of a research and development project focusing on culturally responsive teaching in Yukon First Nation settings. In this first phase of the study, we have attempted to understand what classroom environments and teacher practices would look like that are, indeed, reflective of YFN students' preferences. We have used the oral accounts from members of a YFN about their formal and informal learning of experiences to develop a pedagogical framework that helps to make explicit what culturally responsive teaching would look like.

We started this paper by emphasizing the significance of the political events that have occurred more recently in Canada's Yukon Territory. With the establishment of SGFNs, each Yukon First Nations with the required co-operation of Yukon Education, faces the challenge

of reversing assimilation and regaining a sense of identity especially through the education provided for children. A tension evident in the conversations presented in this study is associated with the *purpose* and *processes* of education. The long-held belief that *Education for All* is indeed serving the needs of all our citizens has perennially continued to be “education for a few” – primarily because the structures, processes and content of education remain fundamentally unchanged – and unchallenged. A common tension in education is that the goals of education and its processes are usually nationalistic in orientation often marginalizing the interests and aspirations of local communities, especially its Indigenous citizens (McKinley, 1997). As McKinley alludes, education is largely focused on furnishing the needs of national citizenship and, consequently, fails to address what local communities and their citizens see as priorities and appropriate processes for education. Considering that Yukon First Nations citizens have largely been non-participants in deciding the educational goals of their respective schools and are under-represented in all careers where a good education is essential, one must question whether education is, actually, responsive to the YFN citizens.

Nel Noddings asserts that the obligation of schools is to be *responsive*: to listen attentively and respond as positively as possible to the legitimate expressed concerns of communities (2004). The information presented in this study present the voiced concerns of a YFN community, concerns that reflect a critical awareness of the education and schooling process of their community. Responding to these voiced concerns becomes the imperative for the school involved. In response to this, in the next phase of this study we are using the narrative accounts as starting points for engaging teachers in reconsidering their teaching practices. We believe that these oral accounts challenge many of the fundamental structures, practices and content of Yukon education. We are asking teachers to, as the Chief and Council asserted, “Listen and hear what we are saying”. We anticipate that the community’s voice will draw into question the protocols of mainstream classrooms and, in response, promote a dynamic and synergistic relationship between home and community culture and school culture (Ladson-Billings, 1995). This questioning ultimately and purposely “problematizes” teaching, upsets the orthodoxy of classrooms, and encourages teachers to ask about the nature of student and teacher relationship, their teaching, the curriculum, and schooling (Ladson-Billings, 1995, Gay, 2000). By creating this disequilibrium, educators are pushed to seek resolution of these issues to move their classrooms to become more *culturally* responsive as they employ a culturally preferred pedagogy. Early indicators (Authors, Under Review)

suggest that responsiveness to culturally responsive teaching based upon adjusted beliefs and practices does have consequence on student learning and, potentially, more significantly, a community because of the confirmatory nature of responding to the voiced concerns of the community involved.

References

- Barnhardt, R., & Kawagley, A. (2010). *Alaska native education; Views from within*. Fairbanks, AK: Alaska Native Knowledge Network.
- Bevan-Brown, J. (1998, July 7-9). By Māori, for Māori, about Māori – Is that enough? In Te Pumanawa Hauora (Ed.), *Te Oru Rangahau* (Proceedings of the Māori Research & Development Conference) (pp. 231-246). Palmerston North, New Zealand: Massey University.
- Bishop, R. (1996). *Collaborative research stories: Whakawhanaungatanga*. Palmerston North, New Zealand: Dunmore Press Limited.
- Bishop, R. (2003). Changing power relations in education: *Kaupapa Maori* messages for 'mainstream' education in Aotearoa/New Zealand. *Comparative Education*, 39(2), 221-238.
- Bishop, R., & Glynn, T. (1999). *Culture counts: Changing power relations in education*. Palmerston North, New Zealand: Dunmore Press Limited.
- Bishop, R., Berryman, M., Tiakiwai, S., & Richardson, C. (2003). *Te Kōtahitanga: The experiences of year 9 and 10 Māori students in mainstream classrooms* (Report to the Ministry of Education). Hamilton, New Zealand: Ministry of Education. Retrieved February 1, 2012, from http://www.educationcounts.govt.nz/__data/assets/pdf_file/0017/7532/tekotahitanga.Pdf.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods* (2nd ed.). Boston, MA: Allyn & Bacon.
- Castagno, A., & Brayboy, B. M. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, 78(4), 941-993.
- Chisholm, S. (1994). Assimilation and oppression: The northern experience. Education and the Aboriginal adolescent. *Education Canada*, 34(4), 28-34.
- Clifton, R. A., & Roberts, L. W. (1988). Social psychological dispositions and academic achievement of Inuit and non-Inuit students. *The Alberta Journal of Educational Research*, 34(4), 332-343.
- Deakin University Press. (1991). *Aboriginal pedagogy: Aboriginal teachers speak out*. Geelong, Victoria, Australia: Author.
- Eisner, E. (1979). *The educational imagination: On the design and evaluation of school programs*. (2nd Edition). New York: MacMillan.
- Freire, P. (1970). *Pedagogy of the oppressed* (M. Bergman Ramos, Trans.). New York: Herder and Herder.

- Freire, P. (1998). *Pedagogy of Freedom: Ethics, Democracy, and Civic Courage* (Clarke, P., Trans.). Maryland: Rowman & Littlefield.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Giroux, H. (October 27, 2010) Lessons from Paulo Freire. *Chronicle of Higher Education*. Retrieved 05/05/12.
- Goulet, L. (2001). Two teachers of Aboriginal students: Effective practice in sociohistorical realities. *Canadian Journal of Native Education*, 25(1), 68-82.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London, UK: Routledge.
- Kemmis, S. (2012). *Contemporary schooling and the struggle for education*. Bob Meyenn Lecture. Charles Sturt University. Albury, April 24, 2012.
- Kemmis, S., & McTaggart, R. (Eds.). (1988). *The action research planner* (3rd ed.). Geelong, Victoria, Australia: Deakin University Press.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465- 491. Retrieved February 1, 2010, from <http://diversitypedagogy.com/EDCI6333.270Sheets/Secured/Ladsonbilings.%20toward%20a%20theory%20of%20culturally%20relevant%20pedagogy.pdf>.
- Lewthwaite, B.E., & McMillan, B. (2010). “She can bother me, and that’s because she cares”: What Inuit students say about teaching and their learning. *Canadian Journal of Education*, 33 (1), 140-175.
- Lewthwaite, B., McMillan, B. Renaud, R. Hainnu, R., & McDonald, C. (2010). Combining the views of “Both Worlds”: Science education in Nunavut *pigusit tamainik katisugit*. *Canadian Journal of Educational Administration and Policy*, 98, 1-71.
- Lewthwaite, B.E., & Renaud, R. (2009). *Pilimmaksarniq*: Working together for the common good in science curriculum delivery and development in Nunavut. *Canadian Journal of Mathematics, Science and Technology Education*, 9(3), 154-172.
- Lewthwaite, B.E., & Wood, A. (2009). The development, validation and application of a science delivery evaluation instrument for Māori settings. *Waikato Journal of Education*, 14, 69-88.

- Lewthwaite, B.E. (2007). From school in community to a community-based school: The journey of an Aboriginal principal. *Canadian Journal of Educational Administration and Policy*, 64, 1-23.
- Lewthwaite, B.E. (2007). "It's more than knowing the science": A Yukon case study in elementary science curriculum review. *The MERN Journal*, 1, 51-52.
- Lewthwaite, B.E., & McMillan, B. (2007). Combining the views of both worlds: Perceived constraints and contributors to achieving aspirations for science education in Qikiqtani. *Canadian Journal of Mathematics, Science and Technology Education*, 7(4), 355-376.
- McKinley, E. (2000). Research and Māori education. In G. Haisman (Ed.), *Exploring issues in science education* (pp. 24-35). Wellington, New Zealand: Research and Curriculum Division, Ministry of Education.
- Murray, H. G. (1999). Low-inference teaching behaviors and college teaching effectiveness: Recent developments and controversies. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research: Vol. 15* (pp. 323 - 345). New York: Agathon Press.
- Noddings, N. (1996). The cared-for. In S. Gordon, P. Brenner, & N. Noddings (Eds.), *Caregiving: Readings in knowledge, practice, ethics, and politics* (pp. 21-39). Philadelphia, PA: University of Pennsylvania Press.
- Noddings, N. (2002). *Educating moral people*. New York: Teachers College Press.
- Shields, C, Bishop, R., and Mazawi, A, (2005). *Pathologizing practices: the effect of deficit thinking on education*. New York: P Lang.
- Smith, G.H. (1997). *The development of Kaupapa Māori theory and praxis*. Auckland, NZ: Department of Education, University of Auckland.
- Smith, L. (1999). *Decolonizing methodologies: Research and Indigenous peoples*. Dunedin, NZ: Zed Books.
- Smith, M. K. (2004) Nel Noddings, the ethics of care and education', the encyclopaedia of informal education, www.infed.org/thinkers/noddings.htm.
- Stairs, A. (1995). Learning processes and teaching roles in Native education: Cultural base and cultural brokerage. In M. Battiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds*. Vancouver, BC: University of British Columbia Press.
- Stephens, S. (2003). *Handbook for culturally responsive science curriculum*. Fairbanks, AK: Alaska Science Consortium and the Alaska Rural Systemic Initiative. Retrieved February 1, 2010, from <http://www.ankn.uaf.edu/publications/handbook/>.
- Tobin, K., & Fraser, B. J. (1990). What does it mean to be an exemplary science teacher? *Journal of Research in Science Teaching*, 27(1), 3-25.
- Valencia, R. (Ed.). (1997). *The evolution of deficit thinking: Educational thought and*

practice. New York: Routledge.

Watt-Cloutier, S. (2000). Honouring our past, creating our future: Education in Northern and remote communities. In M. B. Castellano, L. Davis, & L. Lahache (Eds.), *Aboriginal education: Fulfilling the promise* (pp. 114- 128). Vancouver, BC: University of British Columbia Press..

Wood, A., & Lewthwaite, B. E. (2008). *He putea whakarawe*: Māori science education in Aotearoa-New Zealand. Aspirations and realities. *Cultural Studies of Science Education*, 3, 625-662.

Wyatt, J. D. (1978-1979). Native involvement in curriculum development: The native teacher as culture broker. *Interchange* 9(1), 17-28.

Yukon First Nations Advisory Council (2008). *Helping students succeed: Vision, goals, and priorities for Yukon First Nations education*. Whitehorse: Author.