

Indigenous Education: Empowerment Through Knowledge of Self

Laura McLennan

University of British Columbia

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Preface

This paper accompanies the website <http://blogs.ubc.ca/undriplearning/>. The paper is an introduction to Indigenous education practices. The methodologies described in this paper could be used in a school setting for Indigenous students or a mix of Indigenous and non-Indigenous students. I believe that more of these ideas need to be mainstreamed into the public school systems, as they are beneficial to society. Writing this paper has specifically helped me, to be able to articulate my beliefs about education. I hope that this paper can also be s useful for educators working with Indigenous students or communities.

Authors Background

I write this paper as a woman of Metis-Cree (apihtawikosisan-nehiyawî) decent and a member of the Metis Nation of British Columbia. My undergraduate degree is in First Nations Studies at UBC, which opened my eyes to the complex issues and history of Aboriginal peoples in Canada. During this time, I worked for a number of different Aboriginal youth initiatives. After my undergraduate degree, I moved to Thailand to work with a non-governmental organization (NGO) that did advocacy with Indigenous peoples in Southeast Asia and learned a great deal about the international context of Indigenous issues. Through this work, I came to see education as the key for Indigenous peoples to be able to speak for themselves. I was also exposed to some of the unethical practices of “international development” which encouraged my belief that communities need to be able to advocate for themselves and be full participants in decision making. I returned to Canada to complete the Bachelor of Education Program and then returned to Thailand to teach at a private school. During this time, I continued to volunteer with

schools on the Thai-Burma border. Finally in 2013, I moved to the Thai-Burma border to work at a new training center for adult activists (most of whom were Indigenous peoples), which was designed and run by local Indigenous people. My students were strongly rooted in their cultural identity and desired to learn skills to help their communities deal with the impacts of globalization. I am currently working as a teacher in the Vancouver School Board. I would like this paper to serve to guide the practices of the training center on the Thai-Burma border and to guide my own personal practice as an educator.

Introduction

Education is fundamental to social development. There are endless theories about the best ways to teach, all varying in popularity, feasibility and quality. The dominant method of teaching in western society is still test based and teacher focused. It is a cost effective method for mass public education. But ideas and methods are changing and alternative methodologies are gaining popularity. As Indigenous communities gain more voice, Indigenous methodologies are gaining ground in both Indigenous run schools and mainstream educational programs.

This paper describes the main elements of Indigenous education as taken from a literature review of publications from influential Indigenous educators. From these articles, I pulled common themes addressing Indigenous education. Much of this literature has served to provide the basis or background of Indigenous education programs or schools. Many elements of Indigenous education are present in mainstream education models that are reforming the outdated public schooling and dominant forms of education. The roots of Indigenous education, addressing identity and having the skills to be successful a globalized society, are aligned with current, pedagogical theories that are quickly gaining popularity. Indigenous education values, historically oppressed by the colonial system, mirror values that becoming popular in state run

and private education. This paper will begin by discussing the background and themes in Indigenous education, then make recommendations for teachers, consider critiques and make comparisons with current popular education programs.

Note of Caution

My first workshop on Indigenous rights was in an abandon school on the outskirts of the town of Mae Sot, on the Thai-Burma border. The participants were adult, Indigenous students who were involved in local community based organizations. What I had not previously considered, but was evident at the workshop, were the negative emotions that come out when learners come to understand their own oppression. They have every right to be angry. Freire (1993) talks about this extensively, but I had not yet read Freire at the time. Now, I think the key to success here is to focus this anger into energy directed at a well-planned justice action or to join in on a project that is already taking place. Smith (2004) emphasizes the importance of Indigenous education to promote proactive planning instead of reactive actions so to better prepare communities to forge their own future. The action from anger would be best directed towards a positive future that avoids oppressing someone else and truly attempts to restore humanity. As Larocque (2010) states,

Decolonization has to mean something beyond a collective rage or reversion to clichés. It is crucial not only to destroy colonial constructs, but to restore our humanity, and the heart of that humanity is moral agency through thought and emotion. (p. 159)

Indigenous Peoples

This paper will define Indigenous peoples according to the definition used in the International Labor Organization Indigenous and Tribal Peoples Convention, 1989 (ILO, 1991). This convention offers the most concise definition of Indigenous peoples in three main points.

The first point, Indigenous peoples have a culture that is unique from the culture of the dominant population. Second, Indigenous peoples are descended from people who lived on the land prior to colonization. Finally, if the first two points apply, Indigenous peoples have the right to self-determination of their Indigenous identity. Ultimately, they chose whether or not to identify as Indigenous peoples. The United Nations estimates that there are more than five thousand different groups of Indigenous peoples living in over seventy countries, making up about five percent of the world's population. However, in many cases, Indigenous peoples are overrepresented in negative statistics of poverty, unemployment and incarceration (United Nations, 2010). This is a result of historical and continued marginalization and discrimination.

In this literature review, the majority of works used focused on the Canadian Indigenous education situation; the other works used discussed the situation in the United States of America, Australia and New Zealand. When I refer to Indigenous peoples in Canada, I am inclusive of status and non-status Indians, Metis and Inuit.

Reforming Education

Education is one of the key factors that can empower Indigenous communities to take control of their situation (Beynon, 2008; Castellano, 2000; Haig-Brown, 1991). Historically, Indigenous peoples' experiences with the mainstream education system have been negative as formal education has been a key component of colonization (Crey & Fournier, 1997).

Paulo Freire, whose name appears frequently in literature about education reform, began teaching illiterate, rural people in Brazil in the 1960's. At that time, literacy was a requirement for voting. His teaching techniques were so effective and revolutionary that he was imprisoned and then forced into exile. His work was to help oppressed people to be able to advocate for

themselves. His ideas form the backbone of what is now known as anti-oppressive education and Indigenous education pedagogy.

Freire's (1993) students were rural, disenfranchised people. A description of his students tells a story that mirrors the experiences of too many Indigenous peoples around the world.

He came to realize that their ignorance and lethargy were the direct product of the whole situation of economic, social and political domination – and of the paternalism of which they were victims. Rather than being encouraged and equipped to know and respond to the concrete realities of their world they were kept submerged in a situation in which such critical awareness and response were practically impossible. And it became clear to him that the whole education system was one of the major instruments for the maintenance of this culture of silence. (p. 12)

Freire (1993) asserted that the education system was the major factor holding people back from being able to take control of their own lives. Canada has a brutal history of residential and industrial schools that were designed to assimilate Indigenous children (Crey &Fournier, 1997). The destruction that these schools caused hurt not only the children who attended. This pain was passed on to subsequent generations. This toxic education system caused multi-generational destruction (Crey &Fournier, 1997). If we consider the flip side, a positive education system has the potential to create multi-generational empowerment. To Freire (1993) education was a political act done with a purpose in mind; education can be done to empower people to change their situation.

Smith (2000) expands on Freire's thinking. He asserts that empowerment through education, writing in the case of the Maori Indigenous peoples, can only be done when Maori

people are the ones doing the teaching. Indigenous peoples need to be the ones in leadership positions to reform the education process.

“Despite the painful experiences Aboriginal people carry with them from formal education systems, they still see education as the hope for the future and they are determined to see education fulfill its promise.” (Royal Commission on Aboriginal Peoples, 1996, p.405)

The goal of Indigenous education, repeated frequently by respected scholars, has two points (Archibald, 2008; Castellano, 2000; Hampton, 1993; Michell, 2013; Nee-Benham, 2000; Smith, 2004). The first point is for learners to have an empowering self-identification as an Indigenous person. This comes through understanding culture, history, language and the connection to current social situations. This is what Freire (1993) calls critical consciousness, Battiste (2004) calls Aboriginal consciousness or Smith (2004) calls Indigenous consciousness. It is to understand and be confident of one's self in society and be empowered to act (Marker, 2004).

The second goal is to be able to confidently participate in the mainstream, globalized society (Archibald, 2008; Castellano, 2000; Hampton, 1993; Michell, 2013; Nee-Benham, 2000; Smith, 2004). The successful Indigenous student needs to be able to walk in both worlds, the Indigenous world and the globalized world. The first goal gives way to the second. When students can develop critical Indigenous consciousness it will give them the self-confidence to be successful in mainstream society, rooted in the knowledge of who they are.

Engagement with the globalized system is critical. The new wave of colonization encompasses far more than a white colonial system; it is a globalized, faceless corporation that has the possibility to exert far more oppression than the historical colonial system ever did. An example of this is the situation of the oil sands in Northern Canada and the Indigenous

communities that live in the area of the oil development (Tar Sands Watch, 2014). The Indigenous communities around them need to understand and be able to engage with it because their very survival is at risk.

The Changing Direction of Mainstream Education

In this section, I want to highlight the reforms in the dominant education system that are parallel to themes in Indigenous education. Elements of Indigenous education are already present in mainstream education models. Developing students to be critically conscious of their personal situation and have the skills to success in the globalized world are becoming universal measures of a quality education system.

The International Baccalaureate (IB) program is one of the most popular formal curriculums in the world (Tan, 2013). It offers curriculum from kindergarten to grade 12 and emphasizes personal development, local and global knowledge and critical thinking. It is an academically challenging program and is also designed to leave students to be self-directed learners who can maintain a holistic life balance and are considerate to others and the world around them. Today, there are IB programs in public and private schools around the world (IB, 2014).

The province of British Columbia, Canada is currently reforming the public education system with “BC’s Education Plan” which includes personalized, flexible learning, high standards and technology integration. This is a drastic move away from the previous standardized system. While keeping the academics, the program will provide flexibility for students to be challenged at their own pace and more ability to pursue their individual interests. Learning empowered by technology allows for the student to be exposed to significantly more

diverse perspectives than a textbook has to offer allowing the student to develop his critical thinking skills (Ministry of Education, 2014).

What is in line with Indigenous education practice is that both programs put emphasis on meeting the needs of the learner by moving away from standardization of teaching and learning techniques. The focus is developing the individual student and providing multi-disciplinary skills (Nee-Benham, 2000). But much needs to be done to mainstream Indigenous education by including the more difficult aspects of deconstructing stereotypes, accepting historical responsibility and recruiting more Indigenous teachers (Larocque, 2010; Mitchell, 2013). But the direction that education is going in is encouraging.

Themes of Indigenous Education

Developing Critical Indigenous Consciousness

As an undergraduate student I enrolled in the First Nations Studies Program at the University of British Columbia, which was a mix of Indigenous and non-Indigenous students. At that time, the first course served like an introduction to Indigenous issues in Canada (First Nations Studies Program, 2014). In my understanding of it, it served to position the learner to understand why Indigenous peoples in Canada are in their current situation, a key component to developing critical consciousness. It should not be assumed that students, Indigenous or not, are well versed in the history or the multi-faceted issues that make up the lives of Indigenous peoples. Students need to understand these issues so that they can work to change the negative situation (Nee-Benham, 2000).

The experience of colonization needs to be brought to the forefront of an Indigenous classroom. Successful Indigenous learners understand that many issues of today are rooted in colonial oppression (Haig-Brown, 1991). The local and global, current and historical situation of

colonization need to be understood by the students. In some cases different Indigenous nations have collective histories of colonization as well as unique community experiences; colonization can be a unifying experience (Haig-Brown, 1991). Learning one's history can be empowering and help to make sense of the current situation (Michell, 2013). Small focused groups that can discuss colonization are better as it can be a painful topic. Smaller, personalized settings maximize students' comfort and ability to express their ideas. (Haig-Brown, 1991) The Native Education Center in Vancouver, for example, provides training and education to Indigenous adults as a way of transitioning to university or directly to the workforce. Issues of colonization are an important component for these adult learners education (Haig-Brown, 1991).

However, as Larocque (2010) states "colonization can not explain everything about who we are today"(p. 155). Developing the critical Indigenous consciousness does not solely involve discussing negative experiences. It also involves positive cultural learning and opportunities for an empowering future that will be discussed later in this paper. Indigenous education should be both decolonizing and positively transformative (Archibald, 2008).

Building Trust and Community

For Indigenous learners, there can be numerous obstacles to achieving education as the long process of colonization has affected all aspects of peoples lives (Mackinnon, 2013).

Educators need to take the time to develop the classroom into a trusting learning community.

Building a trusting classroom is essential in any educational setting. It is particularly important in the classroom using Indigenous educational practices. Students need to feel that they are safe to share thoughts and feelings (Haig-Brown, 1991). Students may have had very negative experiences with education in the past. They may have been labeled as failures (Nee-Benham, 2000). They may have experienced racism in previous classrooms and that cannot

happen in the Indigenous educational classroom (Aikenhead & Michell, 2011; Haig-Brown, 1991). Issues with racism need to be talked about, not glossed over, but this is difficult to do if trust has not been established (Burridge, Whalan, Vaughan, 2012; Calliou, 1995). In order to learn effectively, students need to be free of negative influences that may have hurt their educational experience in the past. Building or regaining trust can be a long process that teachers must be patient to work towards (Freire, 1993).

Teaching practices should promote caring personal relationships and multi-cultural understanding (Burridge, Whalan, Vaughan, 2012). Building a respectful environment is not just part of the course introduction but a running theme that underlies all relationships in the education setting (Archibald, 2008). Multi-cultural understanding is crucial as even if all of the students are Indigenous, they could be from different nations and communities that have very different cultural understandings from one another. Multi-cultural understanding can help students work through differences with each other and the wider society. Students and teachers must promote peoples right to be different (UNDRIP, 2007)

Life experiences should be valued (Burridge, Whalan, Vaughan, 2012; Kristiansson, 2013; Michell, 2013). Regardless of how much or how little formal schooling the students have had they should be encouraged and feel safe to share their life experience and make connections between it and the classroom content. This fosters positive relationships and the attitude that learning happens both inside and outside of the classroom.

The school or learning center needs to promote a friendly supportive environment that should never just be classes but also activities and social events where everyone (students, teachers, administrators) participates. This helps foster positive and trusting friendships (Haig-Brown, 1991). Past experiences of Indigenous students in school could include negative feelings

of alienation and loneliness (Hodgson-Smith, 2000; Smith, 2004). A trusting community works to heal past negative experience and sets the tone for positive transformative learning.

Understanding Identity

“Indian education must enhance Aboriginal consciousness of what it means to be an Indian, thus empowering and enriching individual and collective lives” (Battiste et al., 1995, p. xv). In teaching from an Indigenous perspective it is vital to explore identity. This highlights what Smith (2000) says about the importance of Indigenous educators as they should be the ones guiding the conversation about identity. Non-Indigenous educators can also participate by encouraging positive self-identities, deconstructing stereotypes and promoting Indigenous role models. Accepting ones self leads to increased self-confidence, which can empower the learner to peruse their dreams and goals; this is critical Indigenous consciousness (Nee-Benham, 2000). What it means to be an Indigenous person is not a clear, definitive concept. Even when sharing a common colonial experience, there is no uniform identity and it would be a reinforcement of stereotypes to assume one (Larocque, 2010). Identity is a fluid concept; not something that will be decided in a single learning module. It is a thinking process that can happen over an entire lifetime (Castellano, 2000).

The self-image of Indigenous students has been attacked with negative stereotypes (Archibald, 2008; Larocque, 2010). From popular media to school textbooks, Indigenous students seldom have the opportunity to see positive reflections of themselves. Particularly, Social Studies text books in Canada are guilty of portraying the stereotype of the “vanishing Indian”. In Canadian history studies, Indigenous peoples had influence and a role to play and as time progresses, they inexplicably disappear from discussion. In some cases they are mentioned in radical protests and portrayed as enemies of the state (Ministry of Education, 2005). How is an

Indigenous student supposed to understand herself in society as only either an aid or an inhibitor of the colonial process? Personal identity should be more than just the self in relation to colonization.

Identity can be a complex and stressful issue (Cole, 2006). Besides Indigenous students growing up with negative stereotypes, in the case of the Canadian residential schools, the goal of the school was assimilation. In these schools, phased out by the 1990's, students were taught that the Indigenous identity was wrong and shameful (Crey & Fournier, 1997). This defeated attitude remained in many students into their adult lives and was passed on to their children. It is entirely possible that the topic of identity could be very uncomfortable as some students were brought up to be ashamed of who they are. However, as Cree elder Maria Linklater states "the minute we accept who we are in our identity, we can heal from any kind of obstacle" (Elliot et al, 2004, p. 104). Understanding identity can put students on the right path to moving out of shame and into empowerment. This leads to a positive self-concept for the students, an enjoyment of learning and retention of knowledge (Sterling, 1995).

Wholistic

A visual model of Indigenous education is often represented with the student in the middle encompassed by family, community and nation (Archibald, 2008). "Teaching the mind alone does not constitute education" (Regnier, 1993, p. 313). Indigenous education strives to be holistic: educating the mental, emotional, physical and spiritual being of the learner (Archibald 2008; Battiste, 1995; Nee-Benham, 2000). All aspects are equally important. The mental aspect includes academics and critical thinking. The emotional aspect should help students understand and be able to cope their feelings, emotions and relationships. The physical aspect should teach

learners how to maintain a healthy body and environment. Education should develop the ability to live a good life (Regnier, 1993). Academics alone cannot do this.

The idea of spirituality in schools is a big hesitation for educators. But this is not the religious indoctrination of spirituality; it is spirituality in the sense that human beings are part of everything else (Nee-Benham, 2000). Spirituality in this sense is about remaining in touch with nature and understanding the connection to all living things. This is not strict dogma or ceremonies. Educators should read *The Sacred Tree* (1984), which is the corner stone for literature on Indigenous spirituality. Although this would not fulfill the spirituality requirement, it can serve as a starting point or introduction. Educators, Indigenous and non-Indigenous need to understand the spiritual practices and beliefs of their students in order to act respectfully. If possible, consultations with local spiritual leaders should happen to gain an understanding of how to proceed. However, this does become complicated in, for example, urban situations where there could be a number of different Indigenous communities represented in one classroom with different spiritual beliefs. For example, in the UBC Summer Science Aboriginal youth program, a non-formal educational event, students participate in talking circles, smudges and sweat lodges (Center for Excellence in Indigenous Health, 2014). The availability of these activities depended on the elders involved. For many students, this is their first experience with Indigenous spirituality and it was very exciting for them. The point is that spirituality needs to be a classroom consideration. Spirituality can even be connected to the science curriculum that will be discussed in a later section.

Cultural Co-existence

An essential goal of Indigenous education is cultural competence (Archibald, 2008; Castellano, 2000; Hampton, 1993; Michell, 2013; Nee-Benham, 2000; Smith, 2004). The level

and style of cultural integration depends greatly on the community and the students but culture should be included in course content (Haig-Brown, 1991). Indigenous education should value cultural heritage (Burridge, 2012). Past and mainstream education experiences have been assimilation based (Castellano, 2000). The current public education system is culturally relevant for the white, middle class culture and must be opened up to also be culturally relevant for the Indigenous student (Hampton, 1993). This will also be a benefit to non-Indigenous students as it will help them to understand and appreciate the cultural diversity that they live in.

Depending on colonial and assimilationist experiences, students will come with varying degrees of cultural understanding, however, colonization did not kill aboriginal culture (Larocque, 2010). Some Indigenous students will have no cultural background. For students who are culturally competent, it should be reinforced that their culture is special and a value to humanity. It is not backwards or wrong. They should be taught to develop confidence in expressing who they are in their culture. Non-Indigenous students can learn from this that there are many ways to be in the world. They have a historical responsibility to be a part of ending cultural oppression (Olick, 2007).

The medicine wheel from the plains cultural traditions is often used as a metaphor for understanding Indigenous education (Hodgson-Smith, 2000). The medicine wheel looks like a circle divided into four sections. Using the holistic approach, the medicine wheel can be used to represent endless metaphors for life and learning. It can help students to understand themselves as a holistic being.

An Indigenous worldview should be the central theme of cultural integration. Cree educator Dr. Herman Michell (2013) uses the term “relational consciousness” to promote the common Indigenous worldview of humans being interdependent on the environment and animals

around them (p.36). The world is understood to be in constant transformation that we are all a part of. Indigenous understanding is that we can not possibly know everything (Michell, 2013). The idea of learning to live in the world, includes learning to live with others and with nature. Learning to live in the world includes the notion of environmental stewardship, a theme that is now beginning to run strong in mainstream education.

Indigenous cultures are extremely diverse. It is important not to create stereotyped ideals of Indigenous culture but actively seek similarities and explore the many differences (Haig-Brown, 1991). The ideas of the living dynamic culture vs. cultural preservation should be actively discussed in the classroom (Nee-Benham, 2000).

Cultural integration can include the design and decoration of the learning space. This could include posters or photos of Indigenous role models, Indigenous art, political representations or symbols of Indigenous resistance (Burridge, Whalan, Vaughan, 2012). The physical space should also provide a comfortable place for elders to meet with students.

Elders need to be regularly involved in school activities to promote cultural understanding, mentoring and intergenerational connections (Aikenhead & Michell, 2011; Michell, 2013). For example in the UBC Summer Science youth program, the elder in residence provides the cultural and spiritual guidance. Storytelling by elders can promote learning to listen, think and imagine. As stories can have multiple meanings, storytelling encourages the Indigenous worldview of infinite knowledge (Archibald, 2008).

Community involvement

Community involvement includes both getting the students out to be active participants in the community and bringing the community into the classroom. Community involvement is more accessible to First Nations operated band or independent schools as the decision making

authority rests directly with these schools (British Columbia Assembly of First Nations, 2011). Public schools, however, do have the ability to participate in community involvement through Aboriginal Enhancement Agreements but this is more limited compared to First Nations band or independent schools (Vancouver School Board, 2009).

Students should be encouraged to be a part of positive change in their community and environment (Morrissette, 2013). This could include participating in community events, taking leadership roles or organizing justice activities in collaboration with the local Indigenous community (Burridge, Whalan, Vaughan, 2012). Collaboration can have a number of positive influences including encouraging more people to attend school and creating a positive image of the school. When the community views the school in a positive way, this can also add extra encouragement to the current students. The positive outlook will help to build the emotional health of all those involved in the school (Nee-Benham, 2000). Also when the school has a positive reputation in the community, this will help students who have completed the program to go out into the community for employment or involvement. When students seek to share what they have learned it can be well received because it comes from a place that is respected by the community (Nee-Benham, 2000).

The school community needs to also work to bring people into the actual building or facility. Elders, community leaders, parents and students need to feel welcome and included in the school (Burridge, Whalan, Vaughan, 2012, p. 27; Marker, 2004; Nee-Benham, 2000). Community members from outside of the school are role models that can inspire students (Aikenhead & Michell, 2011).

Languages

Languages around the world are rapidly disappearing. The United Nations Educational, Scientific and Cultural Organization estimates that over half of the world's six thousand languages will become extinct in the next one hundred years if current trends continue (UNESCO, 2003). The prevalence of Indigenous languages varies greatly in communities around the world. It ranges from fluency amongst most community members to being completely extinct. The amount of language inclusion in Indigenous schooling must be carefully considered based on the needs and desires of the school community.

Why even learn a language that will disappear? Some Indigenous educators consider language as the soul of the culture (Michell, 2013; Nee-Benham, 2000). Learning a new language develops the learners' ability to think. It is beneficial to Indigenous and non-Indigenous students. If the opportunity is available to learn an Indigenous language or operate the learning community in the Indigenous language, then that opportunity should be taken. If not, learners can continue to grow in their cultural understanding without the language and should also learn the assimilation process that has made the language inaccessible to them (Aquash, 2013).

Academics, strategies and activities

Burridge, Whalan, & Vaughan (2012) uses the phrase "culture of expectations" in referring to the academics in an Indigenous school (p.36). It should be expected that students will flourish. Smith (2000) discusses that all too often Indigenous peoples are labeled with self-fulfilling prophecies: "oppressed", "minority". Educators need to change the labels put on Indigenous students. When they are in the Indigenous education setting, expect students to be successful. The original goal discussed for Indigenous education included the ability to be successful in the globalized world so the tools for success need to be part of the curriculum. It is

not enough to provide students with only a unique cultural learning experience, as that is not enough to face the globalized world (Hampton, 1995).

Activities and topics should start with place-based learning (Michell, 2013). This puts the emphasis in local knowledge and issues, where the students understand, and build out from there (Aikenhead & Michell, 2011; Freire, 2000; Nee-Benham, 2000). This will provide the extra boost of self-esteem that students need at the start as they are working with a topic that they know well. Place based learning also supports their cultural identity as identity is connected to location. The more students understand about where they are, the more they learn about themselves (Michell, 2013).

Activities need to be delivered as problem based learning (Nee-Benham, 2000). Teaching strategies should provide students with the “higher order, critical thinking skills needed to address the major issues of the day” (Malott, 2009, p. 103). Problem based learning encourages critical thinking and problem solving as opposed to memorization of facts. We live in a world where “facts” are readily available at your fingertips. Problem solving helps students to decide the validity of facts and consider different points of view. For example, in a history course, the instructor could present different points of view to the students and let students consider evidence and made conclusions for themselves (Malott, 2009). Problem based learning is similar to the scientific model: observe, consider evidence, and draw a logical conclusion based on evidence. This also works well in considering history, as there is so much to observe and so much evidence to consider.

Experiential learning is also important and encourages community connections (Malott, 2009). As much as possible, activities should take place outside of the official classroom. This could be a simple trip to the community center or a natural outdoor area. Allow learners to be

part of decision making about where to go and how it fits with their learning (Nee-Benham, 2000). Within reason, allow them to make mistakes, and use it later for reflection and discussion. As Freire says “Education is suffering from narration sickness.” (1993, p. 52) Allow the students to be out and learning through action instead of constantly in the classroom listening to lectures.

Competition is a contentious issue in Indigenous education. Competition can be destructive and it promotes individualism. It should be replaced with more cooperative learning (Battiste 1995; Nee-Benham, 2000; Smith, 2000). Cooperation and teamwork should take precedence as it also encourages community building. But, if we are to remain in line with the goals of Indigenous education, that is to prepare students to be able to be successful in the globalized world, then competition needs to remain part of the curriculum, just a much smaller part.

In Canada, Indigenous peoples are vastly underrepresented in science.

There is a critical need for science education for Indigenous students as around the world lands are being sought after for natural resource extraction. Indigenous peoples need to be able to fully understand possible implications and be able to actively participate in negotiations. (MacIvor, 1995, p. 74)

The need for Indigenous representation in science is not simply a matter of equal representation but the very existence of communities threatened by resource extraction depends on it. There are many innovative ways to integrate Indigenous models of education into science.

Indigenous communities around the world have diverse creation stories that explain the peoples arrival on the earth. Currently with conservative Christian groups there is great debate and anger about teaching evolution to the point that many communities do not want their children learning science, which will be a great detriment to them in the future (Economist,

2013). However, amongst scholars of Indigenous education the idea is that there is a space for both Indigenous knowledge and western science to exist, one does not devalue the other (Aikenhead & Michell, 2011). Clear connections to traditional activities and science can be made. This includes learning the biology and chemistry of traditional medicine or the physics behind animal traps, snowshoes and traditional buildings (Michell, 2013). Science should emphasize the interconnected nature of all things on this planet, an idea that was initially ridiculed by colonizers as being primitive, now popularly being used to promote the message of climate change (Malott, 2009).

It is important that knowledge is overlapped and not compartmentalized (Burridge, Whalan, Vaughan, 2012). When knowledge is divided into subjects it becomes more separated from real life experience. As mentioned earlier, using the scientific method for analyzing historical events is a perfect example of non-compartmentalization of knowledge. It teaches students to apply different thinking techniques to different situations, which will increase their ability in non-linear thinking and their ability to make their own meaning (Archibald, 2008). An interdisciplinary approach can be confusing but “if the blurring of disciplinary boundaries sometimes causes confusion, I think it is a potentially creative confusion that is worth risking” (Kearney, 2005, p.25). Interrupting the norm can promote healthy institutional change (Marker, 2004). In the province of British Columbia, for example, teachers are required to meet learning outcomes based on government standards. Within this system, there is enough flexibility to incorporate interdisciplinary activities while still meeting standardized goals. In this case the final decision rests with the teacher as to determine how the curriculum is implemented.

Role of the Teacher

This section can be equally applicable to Indigenous and non-Indigenous teachers. Both Indigenous and non-Indigenous teachers need to take the time to understand the unique needs of every community (Freire, 1993).

In order for teachers to not repeat mistakes of the past or cause damage to communities there are a few precautionary measures that can be taken. First of all, the teacher needs to understand the place and people before he or she begins teaching (Freire, 1993). A teacher is a role model not only for the students, but for the entire community (Michell, 2013). He or she needs to demonstrate cultural sensitivity, knowledge and the ability to understand the local worldview. (Aikenhead & Michell, 2011; Haig-Brown, 1991; Michell, 2013). Every class, school, and community is different. Teachers need to learn about where and who they are teaching. Particularly when teaching Indigenous students, teachers need to educate themselves first, on not only their unique cultural practices but also their historical and on-going experiences with colonization, oppression and resistance. The Maori Indigenous schools in New Zealand train their own teachers before they get in the classroom (Smith, 2000).

Teachers must be aware of the White Savior Industrial Complex (Cole, 2012). From my personal experience working with vulnerable communities, I have seen this complex in action from more than just “white” people; it is a complex derived from the privileged, not to seek justice but to provide personal glorification through misguided interactions with underprivileged people. This is what Freire (1993) has warned about: the idea that the teacher wants to go and “save” the communities that they are working with. Indigenous peoples all over the world have already had bad experiences with those attempting to “save” them. Before going to teach in an Indigenous community, teachers need to be clear about their motives and be able to explain them

to the community. Teaching is not neutral (Freire, 1993; Malott, 2009). There is a reason why people do what they do. “People have to know your motives - failing to explain why you want to help is the biggest mistake educators can make” (Nee-Benham, 2000, p. 126).

Traditional teacher-student power dynamics need to change. The teacher student relationship is one of exchange, not purely teacher to student transmission. The teacher has as much to learn from the students as the students do from the teacher (Aikenhead & Michell, 2011; Freire, 1993; Marker, 2004).

Critiques

The biggest critique of Indigenous education is that it perpetuates negative stereotypes. The idea of a “pan-Indian” or pan-Indigenous culture degrades the unique culture of individual nations and communities (Haig-Brown, 1991). There is no one Indigenous culture but rather thousands of different Indigenous cultures around the world. The notions of the circle and the medicine wheel are so common that they have become over simplified and have lost meaning. It is not correct to teach “Indigenous spirituality” or an “Indigenous world view” as that is a gross simplification of thousands of unique cultures. There is no simple formula for learning culture. Teachers need to be careful not to recreate stereotypes or degrade complex knowledge systems. At the same time, teachers need to start somewhere and ideas like the circle or medicine wheel, that are used in books such as *The Sacred Tree*, can be a starting point for deeper study.

In my literature review, I encountered a number of, what I thought were, helpful charts that compared Indigenous education with Western education. Then I read Larocques (2010) statement that comparison charts simply reinforce stereotypes. Creating comparison charts are confining and in many ways inhibit growth and change. In this paper I attempted to summarize

main ideas of Indigenous education but this in no way definitive but rather could serve as general guidelines.

Smith (2000) states that too frequently Indigenous movements have been reactive instead of proactive. An Indigenous school or program needs to forge its own future. This connects to the culture of expectations; the plan that the students will succeed. Plan for future success instead of only mitigating problems created by colonial systems.

There is the idea that Indigenous knowledge does not serve people in the globalized world. Gaining a career in the global market over shadows local knowledge (Marker, 2004; Smith, 2004). Indigenous knowledge presents an expanded way to explore the world (Marker, 2004). A globalized career requires the ability to function in a cross-cultural setting and employ multiple methods of thinking and problem solving. To work ethically in the globalized world also requires an understanding that local people will have unique needs. An Indigenous education can build these skills in students.

Way forward

The current public education system is derived from the industrial revolutions goal to produce a mass workforce and in many ways has changed little since then. Students are still made to sit in rows, respond to bells and memorize information to repeat on tests (Collins, 2010). It is the industrial revolution that spurred the massive environmental destruction that is no longer deniable. We need a fundamental shift in the way that we think about ourselves and the planet (Wood, 2009). We need to teach students how to live in this world, instead of how to dominate, destroy or profit off of it; Indigenous knowledge provides a way to support the ecological well being of the world (Marker, 2004). Indigenous education provides a genuine opportunity to shift the paradigm.

Indigenous education pedagogy does not have to be exclusive; it can be used in combination with other teaching methods (Smith, 2004). As an experienced teacher, I feel confident that the suggestions made in this paper are not difficult to incorporate into the classroom to the benefit of both Indigenous and non-Indigenous students. Working to build in your student into a person who is empowered by knowing themselves and has the skills to succeed in the globalized world should just be good practice.

Today, Indigenous education pedagogy is at work in Indigenous run community schools, Aboriginal focus schools in the public system and post secondary programs designed to recruit and retain Indigenous learners. Through this paper, my hope is that I can enrich my own practice with Indigenous education pedagogy and work to integrate elements of it into the schools that I work with.

References

- Aikenhead, G., & Michell, H. (2011). *Bridging cultures: Indigenous and scientific ways of knowing nature*. New Jersey: Pearson.
- Alaskan Native Knowledge Network. (2014, Feb 20). *Lessons taught, lessons learned*. Retrieved from <http://Http://www.ankn.uaf.edu/curriculum/CXCS/Lessons1/ccc.html>.
- Aquash, M. (2013). *First Nations ways of knowing: The circle of knowledge*. Retrieved from http://www.mfnrc.org/wp-content/uploads/2013/04/Section2_First-Nations-Ways-of-Knowing-The-Circle-of-Knowledge.pdf
- Archibald , J. (2008). *Indigenous storywork: educating the heart, mind, body, and spirit*. Vancouver: UBC Press.
- Archibald, J. (1995). Locally developed native studies curriculum: An historical and philosophical rationale. In M. Batiste, J. Barman (Eds.), *First Nations education in*

- Canada: The circle unfolds* (pp. 288-312). Vancouver: UBC.
- Ball, J., & Pence, A. (2007). *Supporting Indigenous children's development*. Toronto: UTP Distribution.
- Battiste, M. (2004) Maintaining Aboriginal identity, language and culture in modern society. In M. Battiste (ED.), *Reclaiming Indigenous voice and vision* (pp. 209-224). Vancouver: UBC Press.
- Battiste, M., Barman, J. (Eds.). (1995). *First Nations education in Canada: The circle unfolds*. Vancouver: UBC Press.
- Beynon, J. (2008). *First Nations teachers*. Calgary: Detselig Enterprises.
- Burridge, N., Whalan, F., Vaughan, K. (2012). *Indigenous education: a learning journey for teachers, schools and communities*. Rotterdam: Sense Publishers.
- Calliou, S. (1995). Peacekeeping actions at home: a medicine wheel model for a peacekeeping pedagogy. In M. Battiste, J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 5-46). Vancouver: UBC.
- Castellano, M., Davis, L., Lahache, L. (Eds.). (2000). *Aboriginal education: Fulfilling the promise*. Vancouver: UBC Press.
- Center for Excellence in Indigenous Health. (2014). *UBC Summer Science Program*. Retrieved from <http://health.aboriginal.ubc.ca/education/ubc-summer-science-program/>
- Cole, P. (2006). *Coyote and raven go canoeing*. Montreal: McGill-Queen's University Press.
- Cole, T. (2012). *The white-savior industrial complex*. Retrieved from <http://www.theatlantic.com/international/archive/2012/03/the-white-savior-industrial-complex/254843/>.

- Collins, A. and Halverson, R. (2010), The second educational revolution: rethinking education in the age of technology. *Journal of Computer Assisted Learning*, 26: 18–27.
doi: 10.1111/j.1365-2729.2009.00339.x
- Crey, E., Fourier, S., (1997). *Stolen from our embrace: The abduction of First Nations children and the restoration of Aboriginal communities*. Vancouver: Douglas & McIntyre.
- Deloria, V. (1991). *Indian education in America*. Boulder, CO: American Indian Science and Engineering Society.
- Economist. (2013). Lexington: All about Adam. Retrieved from:
<http://www.economist.com/news/united-states/21590475-furiousand-politicaldebate-about-origins-mankind-all-about-adam>
- Elliot, M., Halonen, D., Akiwenzie-Damm, K., Methot, S., George, P., (2004). *Empowering the spirit II: native literacy curriculum*. Owen Sound: Ningwakwe Learning Press.
- First Nations Studies Program. (2014). *First Nations Studies Program*, University of British Columbia. Retrieved from <http://fnsp.arts.ubc.ca>
- Freire, P. (1993). *Pedagogy of the Oppressed*. (30 ed). New York: Bloomsbury Academic.
- Haig-Brown, C. (1991). *Taking control: power and contradiction in First Nations adult education*. Vancouver: UBC Press.
- Hampton, E., (1993). Redefinition of Indian education. In M. Batiste, J. Barman (Eds.), *First Nations education in canada: The circle unfolds* (pp. 5-46). Vancouver: UBC.
- Hodgson-Smith, K. (2000). Issues of pedagogy in Aboriginal education. In Castellano, M., Davis, L., Lahache, L. (Eds.). (2000). *Aboriginal education: fulfilling the promise*. Vancouver: UBC Press.
- IBO. (2014). The International Baccalaureate. Retrieved from <http://www.ibo.org>

- ILO. (1991). *C169- Indigenous and tribal peoples convention, 1989*. Retrieved from http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169
- Kearney, R. & Taylor, V. (2005). A conversation with Richard Kearney. *Journal for Cultural and Religious Theory*. 6 (2), 17-26.
- Kirkness, V. (2013). *Creating space: My life and work in indigenous education*. Winnipeg: University of Manitoba Press.
- Kristjansson, D. (2013). Sharing our life stories: transformative writing and learning. In J. Silver (Ed.), *Moving forward, giving back: transformative aboriginal adult education* (pp. 108-128). Winnipeg: Fernwood Publishing.
- Lane, P., Bopp, J., Bopp, M., Brown, L. (1984). *The sacred tree*. Twin Lakes, WI: Lotus Press.
- Larocque, E. (2010). *When the other Is me: Native resistance discourse, 1850 - 1990*. Winnipeg: University of Manitoba Press.
- MacIvor, M. (1995). Redefining science education for Aboriginal students. In M. Batiste, J. Barman (Eds.), *First nations education in Canada: The circle unfolds* (pp. 73-100). Vancouver: UBC.
- MacKinnon, S. (2013). Healing the spirit first: Aboriginal second-chance learners in three inner city programs. In J. Silver (Ed.), *Moving forward, giving back: Transformative Aboriginal adult education* (pp 49-58). Winnipeg: Fernwood Publishing.
- Malott, C. (2009). *Teaching Native America across the curriculum*. New York: Peter Lang.
- Marker, M. (2004). The four r's revisited: some reflections on First Nations and higher education. In L. Andrew & F. Finlay (Eds.). *Student Affairs: Experiencing Higher*

- Education. Vancouver: UBC Press.
- Michell, H. (2013). *Cree ways of knowing and school science*. Vernon, BC: JCharlton Publishing.
- Ministry of Education. (2014). *BC's Education Plan*. Retrieved from <http://www.bcedplan.ca/actions/welcome.php>
- Ministry of Education. (2005). *Social studies 11: Integrated resource package*. Retrieved from http://www.bced.gov.bc.ca/irp/pdfs/social_studies/2005ss_11.pdf
- Morrisette, L. (2013). We are the agents of change: Thoughts on Aboriginal education. In J. Silver (Ed.), *Moving forward, giving back: Transformative Aboriginal adult education* (pp 29-42). Winnipeg: Fernwood Publishing.
- Nee-Benham, M., Cooper, J. (2000). *Indigenous educational models for contemporary practice: In our mothers voice*. Vancouver: Lawrence Erlbaum.
- Olick, J. (2007). *Politics of regret: On collective memory and historical responsibility*. New York: Routledge.
- Regnre, R. (1993) The sacred circle: an Aboriginal approach to healing education at an urban high school. In M. Battiste, J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 313-329). Vancouver: UBC.
- Royal Commission on Aboriginal Peoples. (1996). *Report of the Royal Commission on Aboriginal Peoples*. Vols. 3 Ottawa, ON: Canada Communication Group.
- Silver, J., (2013). *Moving forward, giving back: transformative adult education*. Winnipeg: Hignell Book Printing.
- Smith, G.H., (2004) Protecting and Respecting Indigenous Knowledge. In M. Battiste (Ed.), *Reclaiming Indigenous Voice and Vision* (pp. 209-224). Vancouver: UBC Press.

- Smith, G.H. (2000). Maori education: Revolution and transformative action. *Canadian Journal of Native Education* 24(1), 57-72.
- Sterling, S. (1992). Quaslametko and Yetko: Two grandmother models for contemporary native education pedagogy. In M. Batiste, J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 113-123). Vancouver: UBC.
- Tan, S., (2013). *Growing pains: challenges and opportunities for the International Baccalaureate*. Retrieved from <http://sites.miis.edu/chunhuitan/files/2013/06/Growing-Pains-of-the-IB.pdf>
- Tar Sands Watch. (2014). *Aboriginal rights*. Retrieved from: <http://www.tarsandswatch.org/aboriginal-rights>
- United Nations. (2010). *Activity guide for the implementation of the second international decade of the world's Indigenous people*. Retrieved from http://www.un.org/esa/socdev/unpfii/documents/Second_activity_guide.pdf
- UNDRIP. (2007). *United Nations declaration on the rights of Indigenous peoples*. Retrieved from http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- United Nations Education Scientific and Cultural Organization. (2003). *UNESCO ad hoc expert group on endangered languages*. Retrieved from <http://www.unesco.org/culture/ich/doc/src/00120-EN.pdf>
- Vancouver School Board. (2009). *Aboriginal enhancement agreement*. Retrieved from <http://www.bced.gov.bc.ca/abed/agreements/sd39.pdf>
- Williams, L. (2000). Urban aboriginal education: The Vancouver experience. In Castellano, M., Davis, L., Lahache, L. (Eds.). (2000). *Aboriginal education: fulfilling the promise*. (pp. 129-146). Vancouver: UBC Press.

Wood, M. C. (2009). Advancing the sovereign trust of government to safeguard the environment for present and future generations (Part 1): Ecological realism and the need for a paradigm shift. *Envtl. L.*, 39, 43.