

**Land-Based Pedagogies:
A Path to Decolonizing Environmental Education in British Columbia**

Portfolio

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Masters of Education for Change**

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Chapter 1: Introduction

Description of Portfolio

“Indigenous knowledge rooted in the long inhabitation of a particular place offers lessons that can benefit everyone, from educator to scientist, as we search for a more satisfying and sustainable way to live on the planet.” (Barnhardt & Kawagley, 2005, p. 9)

There is a growing concern in mainstream Canadian education that the current school system is not serving Indigenous students to ensure their academic success. A 2011 report released by Statistics Canada shows that only 68% of Indigenous people aged 35 to 44 had a high school diploma, and only 48.4% of Indigenous people aged 25 to 64 held a postsecondary degree (Statistics Canada, 2016). This compares to the same age demographics of non-Indigenous people, where 88.7% held a high school diploma and 64.7% held a postsecondary degree. While the younger generation of Indigenous students have achieved more education than older generations, there is still a significant achievement gap between Indigenous and non-Indigenous communities (Statistics Canada, 2016).

The echoes of Indian Residential Schools can still be felt by the Indigenous community today: “many descendants of residential school survivors share the same burdens as their ancestors even if they did not attend the schools themselves” (Hanson, n.d.). Both Indigenous and non-Indigenous students continue to be colonized through an education system that reinforces the superiority of Eurowestern knowledge over local, traditional Indigenous Knowledge (IK): “Eurocentrism is a consciousness in which all of us have been marinated” (Battiste, 2000, p. 124). Eurocentrism is problematic because by excluding Indigenous content from provincial curricula, Indigenous people are relegated to the past. Indigenous students cannot recognize themselves in the curriculum assigned to teach them, and non-Indigenous

students only see themselves represented thus passively reinforcing their Eurowestern worldview (Asher, 2008, p. 8; Butler, Ng-A-Fook, Audrin-Charette, & McFadden, 2015). Battiste (2013) has said that decolonizing education means that:

Our responsibility is making a commitment to both unlearn and learn—to unlearn racism and superiority in all its manifestations, while examining our own social constructions in our judgements and learn new ways of knowing, valuing others, accepting diversity, and making equity and inclusion foundations for all learners. (p. 166)

The Truth and Reconciliation Commission (TRC, 2015) identified several educational/schooling struggles that Indigenous students face in its report and has made a number of recommendations about how both band schools and public schools can reform education to increase Indigenous student success. In 2016, the BC Ministry of Education introduced their new curriculum, *Building Student Success*, which includes Indigenous content in most subjects throughout the grades with the intention of promoting “positive personal and cultural identity” for all students (BC Ministry of Education, 2016). However, there continues to be many hurdles for teachers and communities who are working to be more culturally responsive for their Indigenous students, including a lack of local resources and a lack of teacher knowledge and comfort with Indigenous content (Onuczko, & Barker, 2012, p. 5).

Outdoor and environmental education have become increasingly relevant around the world, and Cajete (1999) notes, many outdoor and environmental programs “parallel the traditional practices of indigenous societies” (p. 190). Place-based pedagogy is an increasingly popular approach to environmental education but has been critiqued by Indigenous scholars and educators as being too Eurocentric in its approach. Instead, Land-based pedagogies have been

proposed as the teaching approach that can work to connect all learners to the Land through a deep relationship with community, culture, language and Land (Lisa Korteweg, personal communication, 2016), that acknowledges and honours local Traditional Knowledge (TK) and worldviews (Tuck, McKenzie, & McCoy, 2014).

With these understandings in mind, I have completed a review of the relevant literature and have completed two tasks rooted in a decolonizing approach of starting first with Community, Culture, Land, and Language (2L2C) to support the efforts being made to improve Indigenous education for all in BC: 1) I have designed a planning guide for teachers wanting to teach Indigenous content from a Land-based approach. 2) I have designed an assessment model for consultation and co-planning of Land-based curriculum with Indigenous communities.

McGregor's *Decolonizing Pedagogies Teacher Reference Booklet* (2012) highlights the importance of decolonizing education and working to recenter "Indigenous ways of knowing, being and doing" (p. 4). The planning guide will reflect McGregor's¹ (2012) goal of modelling a decolonizing curriculum through an Indigenous-focused Land-based approach to curriculum design for in-service teachers. The first task, the planning guide, will also demonstrate a model of community consultation and assessment audit for greater localized Indigenous Knowledge (IK) input by following the four pillars and developmental levels of community consultation and curriculum assessment as outlined by Sutherland and Swayze (2012). These guidelines parallel Korteweg's 2L2C approach (2016) highlighting the importance of Community, Culture, Land, and Language. The planning guide will be flexible enough to be used for cross-curricular purposes and by BC teachers from K-12. The second task, the assessment model, is designed to

¹ McGregor's work was for Aboriginal Focus School for the Vancouver School Board. Her work relies heavily on the work of Indigenous scholars, and is an example of how non-Indigenous educators are working to be allies and to share the work of bringing Indigenous content into mainstream curriculum through working with Indigenous communities (Sichel, 2015).

support the planning guide and to provide a framework for working with Indigenous communities to gain their input, guidance and knowledge or to make these lessons more 2L2C responsive to the community.

As a non-Indigenous teacher, I have a limited ability to create content or to teach local Indigenous Knowledge (IK) on my own. Through community collaboration and consultation, however, I can work to help local Indigenous communities document and share their knowledge in such a way that they retain control of the content and delivery of the knowledge while supporting BC teachers in their efforts to include culturally responsive materials in their curriculum. This portfolio will demonstrate the learning that I have done towards my own journey of decolonization through graduate coursework, as well as the experience that I have gained to integrate TK/IK in teaching. My goal for this portfolio is to create a practical and accessible planning resource that will support teachers and Indigenous communities in their co-planning and collaboration processes to promote respectful and meaningful learning and teaching of Indigenous content.

“No person alone holds the responsibility for narrowing the education gap between Indigenous and non-Indigenous students; we are all in this together.” (Wallace, 2016, p. v)

Purpose of the Portfolio

The purpose of this portfolio is to provide evidence of my graduate learning and to employ this new knowledge in a manner that contributes to the rich and varied decolonization efforts that are being made by Indigenous communities and educators across BC. I have created a resource for teachers and designed a planning resource to facilitate planning that is inclusive of Indigenous knowledge (IK). My literature review explores issues in Indigenous education in BC,

the (ongoing) effects of colonialism in schools, and the current efforts being made to change pedagogy and schools to be more inclusive of Indigenous knowledge and First Nations, Métis and Inuit (FNMI) students. It also explores the challenges that face non-Indigenous/White educators set with the task of teaching Indigenous-focused content as recommended in the new BC curriculum. Land and language as the basis for an Indigenized pedagogy is a central theme in much current scholarship (Tuck, McKenzie & McCoy, 2014; Calderon, 2014; Styres, Haig-Brown & Blimkie, 2013) and is increasingly promoted as a way forward together in education to begin to heal the rifts and injuries of a long history of continuous colonization.

I have two portfolio tasks, a planning guide and an assessment model, that work to support each other. The first task is a planning guide for eco/environmental and Land-based lessons for teachers who are planning their own Land-based eco/environmental units. This task employs the work of Sutherland & Swayze (2012), Joseph (2016), and Korteweg (2016) to create a practical planning guide that educators and curriculum designers can use to co-design Land-based environmental education curriculum with Indigenous communities and organizations. The assessment model for consultation and co-planning of Land-based curriculum is designed for teachers and curriculum writers working with Indigenous communities. It was developed by adapting the assessment model from the Center for Disease Control and Prevention's (CDC, 2015) web page on planning for work with communities. My adapted assessment model for BC educators will be flexible so that it can be used in a variety of settings, helping to support the planning process and to provide a framework for working with Indigenous communities to gain their input, guidance and knowledge or to make content responsive to the local community.

Background and Rationale

Placing Myself.

I am a White Euro-Canadian, living, learning, and working in the traditional territories of the Esquimalt and Songhees People who are part of the Lekwungen Group on Vancouver Island. I am privileged to have lived on these beautiful Lands for over ten years. I am also a graduate student at Lakehead University, which is located on Anishinaabe Land, the traditional territory of the Fort William First Nation, in Thunder Bay, Ontario. Indigenous scholars remind us that it is important to understand and acknowledge our place in the world and within our communities so that we may build relationships that are grounded in respect while striving for understanding (Absolon & Willet, 2005; Brant Castellano, 2004). Without the understanding of who I am within my community, and the historical context that we all live in together, I would not be able to build the relationships that are needed to further the effort of decolonization in my school and in my community. Advancing the interests of Indigenous peoples in Canada helps to shift what is seen as being important and relevant.

Decolonization is not “integration” or the token inclusion of Indigenous ceremony.

Rather, it involves a paradigm shift from a culture of denial to the making of space for Indigenous political philosophies and knowledge systems as they resurge, thereby shifting cultural perceptions and power relations in real ways. (Regan, 2010, p. 189)

My grade school and undergraduate experiences were reflective of a Eurocentric education system. When I started working in the public-school system as a teacher, I was excited about the programs in my community that were being developed to support the growing urban First Nation population, but I did not yet see myself as being part of the solution. I could not see

how my position as a White teacher could allow me to be part of the change that was critically needed to improve Indigenous education beyond advocating for the needs of my students and their families while in my class.

It was during my masters' program that I was finally exposed to the readings and conversations that would become the catalyst for my decolonization journey: I began to understand more fully how my life and community are a direct result of European colonization of North America and how many of the things I took for granted every day came at the direct disadvantage of Indigenous peoples in Canada. I began to understand how, in many ways, I was choosing to ignore the impact that my culture and lifestyle were having on Indigenous communities who I was working with through education. Through my MEd coursework, I have come to an understanding that my decolonization journey is the most important work I can be doing to support better Indigenous-non-Indigenous relations as a community and to demonstrate un-learning as the necessary step towards education-as-reconciliation with my students and teaching peers and to exemplify through curriculum and teaching understandings of what Canada is as a Nation-2-Nation relationship (Henderson, 2013; Turner, 2013) and move away and beyond the dominance of Eurowestern experience and Eurocentric "cognitive imperialism" (Battiste, 2013). The planning guide and assessment model are practical applications of theory from academics working in the field of decolonizing education, and environmental education, in particular.

Portfolio Tasks.

The purpose of this portfolio is to share practical and relevant planning resources that fit with the new BC curriculum, *Building Student Success* (2016), and that teachers can easily use in their own planning to support students' learning. The literature review situates the portfolio work

within literature fields that address how to decolonize curriculum as well as emphasize Land-based pedagogies, Indigenous languages, and culturally responsive moves towards Indigenizing education. The first task is a planning guide for teachers planning eco/environmental units that could incorporate more Indigenous content and First Nation worldviews. This planning guide has been informed by researching other planning guides and relies heavily on Sutherland & Swayze's (2012) four pillars and four developmental levels that speak to teaching with strategies that "meaningfully support learning while reflecting local cultural traditions, languages, beliefs, and perspectives" (p. 82). The planning guide also reflects Joseph's (2016) work on best practices in working with Indigenous Communities as well as Korteweg's (2016) 2L2C model.

Lastly, my second task is an assessment model that will assist educators to consult and respectfully co-design curriculum with Indigenous communities and knowledge keepers as the gatekeepers, or evaluators, or guides, of what best constitutes appropriate, relevant, and respectful teaching for Indigenous students and communities. This assessment model has been adapted from the CDC's assessment model for working with communities. In tandem with the planning guide, the assessment model will support teachers and curriculum designers as they move to work collaboratively with Indigenous communities to gain their input, guidance and knowledge or to make this curriculum more 2L2C responsive to the Indigenous community.

Literature Review.

My literature review places my work within the research on culturally responsive teaching practices, specifically in framing learning through a Land-based approach to teaching. I use the work and "calls to action" of the Truth and Reconciliation Commission of Canada (TRC, 2015) as a starting place for my study and I reference the work of Indigenous scholars to frame the importance of decolonizing education by acknowledging and following Indigenous expertise

in education. To work against and try to avert neo-colonizing tendencies and biases, I have chosen to focus on Land-based pedagogies and Indigenous languages as the foundation for my curriculum design. I also reference other White educators who are working within the field of Indigenous education to make reference to how other White teachers like me are tackling the daunting but necessary and long overdue task of decolonizing ourselves and our practices. My literature review forms the foundation for the planning guide and assessment model, arguing for the content and teachings to be based in Indigenous Land, languages, community and culture in order for it to be assessed through community consultation, co-planning and review by Elders, families, and knowledge keepers.

Task 1

I have reviewed existing planning guides to design an Indigenizing curriculum planning guide that reflects the criteria set out by Sutherland & Swayze (2012), Korteweg (2016) and Joseph (2016) on how to work successfully with Indigenous communities. My BC curriculum planning guide identifies important and effective aspects of environmental/Land-based lesson plans so that teachers can ensure that their lessons or curriculum are culturally responsive and respectful enough to then enter into collaboration and review with Indigenous communities in order to support Indigenous children's meaningful learning in BC schools.

Task 2

My second task is an assessment model for consultation and co-planning of Land-based curriculum with Indigenous communities. This third task will support teachers to take their planning to the next stage of reciprocal and culturally responsive curriculum design that is authentically and respectfully centered in 2L2C approaches through an open dialogue between Indigenous community members and non-Indigenous educators. This final task will be a stage of

Indigenizing curriculum by non-indigenous educators who are reaching for reciprocal relationships by engaging themselves more fully in Indigenous communities and asking for guidance, expertise and finalization of IK/TK knowledge from families, Elders and knowledge keepers.

Definition of Terms.

Kesler states that, “[in] a field of complex and contentious issues...perceptions of Indigenous identity can be complex. Definitions may have legal implications that often operate in surprising ways” (2009). The following terms and definitions will be paraphrases or direct quotes from Indigenous scholars, respecting the research already achieved by Indigenous academics in Canada as well as reflecting the preferences of Indigenous communities.

Achievement Gap: Wildcat, McDonald, Irlbacher-Fox, & Coulthard describe the achievement gap as an “educational deficit that expresses itself in lower academic success rates and experiences of racism and alienation in the classroom” (2014, p. III). These gaps then accumulate over a school span as lost credits and content gaps in later years that are very difficult to overcome.

Colonization: Defined as some form of invasion, dispossession and subjugation of a people (LaRocque, n.d.). Root (2010) adds that “colonization displaced Indigenous peoples from their traditional lands, which were in turn cleared for settlement and resource exploitation” (p. 106).

Culturally Responsive Teaching: “A pedagogy that recognizes the importance of including students’ cultural references in all aspects of learning” (Ladson-Billings, 1994). In this paper, culturally responsive teaching will refer to culturally responsive teaching *for* Indigenous students.

Decolonization: Tuck & Yang (2012) state that decolonization must bring “about the repatriation of Indigenous land and life” (p. 1). This means that “decolonization is accountable to Indigenous sovereignty and futurity... [and] offers a different perspective to human and civil rights based on approaches to justice, an unsettling one, rather than a complementary one. Decolonization is not an “-end-”. It is an elsewhere.” (p. 36).

Indigenous: Means “native to the area... its meaning is similar to Indigenous Peoples, Native Peoples or First Peoples” (NAHO, 2012). Indigenous is a term that is beginning to be widely preferred by many of the First Peoples of Canada.

Land-based Pedagogies: For the purpose of this portfolio, Land-based pedagogy works from the principle that:

Land encompasses all water, earth, and air and is seen simultaneously to be an animate and spiritual being constantly in flux. It refers not only to geographic places and our relationships with urban Aboriginal landscapes but also gestures to the ways that discourses within places inform and are informed by our vision, pedagogies, and teaching practices. (Styres, et al., 2013)

Lekwungen Nation: Refers to the group of people whose traditional territories are on Southern Vancouver Island. Before the colonization of Vancouver Island, “the Songhees were not the single unified group we know today but were comprised of several local groups who collectively referred to themselves as Lekwungen” (Bill Reid Center, Simon Fraser University, n.d.). It was not until they settled on the north side of the Inner Harbour in Victoria that they became known as the Songhees.

Chapter 2: Literature Review

Context matters; local contextual clues offer insights to connecting children to their schooling, and academic success follows. (Castagno & Brayboy, 2008, p. 48)

To begin my literature review with respect, I wish to acknowledge that Indigenous cultures within Canada are diverse and rich, each with their own belief systems and distinct languages. As Munroe, Borden, Orr, Toney & Meader (2013) have said,

We use the term Indigenous knowledges in its plural form so as not to imply that one should see Indigenous peoples as ‘all the same’ or make the false assumption that what is true of one Indigenous community is also true of another. Yet, Indigenous communities have a shared history with colonization and have shared values with respect to their relationship with the natural world. Thus, it can be argued that Indigenous knowledges share some commonalities but also have unique contextually based features. (p. 320)

It is with this intent and acknowledgement that I will refer to the First Peoples in Canada as Indigenous people unless I am referring to a specific group.

In my journey as a graduate student, I have had my eyes opened to the challenges of decolonization, particularly in education. Like many non-Indigenous teacher-scholars beginning their decolonization journey, I have come to struggle with what my role could be in the emerging cultural and political landscape. Specifically, who am I, as a non-Indigenous teacher, to teach Indigenous content? I do not want to ignore my privilege or to ignore the tensions between Indigenous and non-Indigenous communities. Rather, I want to use my life experience, and the life experiences of my students and their families as a starting point for a dialogue that can go

beyond improving individual life experiences to planting the seeds for social change (Anderson, 2016).

In response to this nagging doubt of critical reflexivity, Fee (2000) reminds us that relationships with living Indigenous people are the key to maintaining strong and healthy relationships based on respect and to avoid misrepresentation of Indigenous cultures.

Without a conversation with living First Nations people about what they think and feel about their writing, their culture, and their lives, the likelihood that we will have produced bad interpretations arises, as we make ourselves the experts, and them into the mute subjects of monologic expertise” (p. 7).

I will never be Indigenous to this Land, but I can do my best to honour the cultures, knowledge, and languages of the people who are Indigenous to the Lands that I work, play and learn within. I can work to build the relationships within my community that I will need to help support my students and to avoid appropriating and/or misrepresenting the cultures of this Land. In my work, I am striving to avoid replicating the power imbalance between Western and Indigenous cultures, to have my work benefit the community that I am working with, and to respectfully promote the teachings that Indigenous knowledge keepers would generously share with all Canadians living on this territory. I believe that the key to this educational relationship is an open dialogue between me and the communities I work with. I need to come to my teaching work with an open heart and open mind, to be willing to face what I do not know so that together we can build a common ground and strong community for all children.

Historical Context.

Mainstream education is outdated for environmental and climate change (Orr, 2011) realities and needs, and has arguably never served the needs of Indigenous children (Munroe et al., 2013). Historically, Residential Schools, the Indian Act, and the reserve system have worked in tandem under a colonial capitalist culture to disconnect people from the Land: “in which their cultures, traditional knowledges, and languages were rooted. The devastation of the land jeopardized the traditional ways (hunting, fishing, gathering, travel) in which [Indigenous people] had sustained themselves for thousands of years” (Root, 2010). Today, Indigenous people continue to suffer the effects of “neo-colonization” through federal control of resources, Land, and education, which continues to “impede the transmission of knowledge about the forms of governance, ethics and philosophies that arise from relationships on the land” (Wildcat et al., 2014). The reality caused by policies that have separated People from the land are beginning to be made public, and a demand for change has become increasingly louder from Indigenous communities and their allies.

The Truth and Reconciliation Commission (TRC) was established in 2008 and fulfilled its mandate to “guide and inspire Indigenous peoples and Canadians in a process of truth and healing on a path leading toward reconciliation and renewed relationships based on mutual understanding and respect” (2015). In response to the hearings, the TRC wrote an extensive and comprehensive list of actions in their final report (2016), *Calls to Action*, for how governments, both provincial and federal, can support Indigenous communities in Canada.

The calls to action for education systems include adequately funding them, especially for band or reserve schools, making a concerted effort to close the achievement gap between Indigenous and non-Indigenous students, and allowing for greater parental involvement in Band

schools (TRC, 2015, p. 2). Perhaps most importantly, the TRC called for the development of “Culturally appropriate early childhood education programs for Indigenous families” including providing adequate funding so that culturally appropriate teaching methods can be utilized in the classroom (2015, p. 2). Another key recommendation was to highlight that Indigenous rights include language rights. This is important because much of Indigenous culture and Traditional Knowledge (TK) and Indigenous knowledge (IK) is embedded in language; thus, languages need to be taught in schools. The TRC also recommends teacher-training programs that teach pre-service teachers “how to integrate Indigenous knowledge and teaching methods into classrooms” (2015, p. 7).

Decolonizing Canadian Education.

Many scholars agree that education is a vital tool in the decolonization process. Scholars have critiqued mainstream education as white *whitestream* (Grande, 2003) and engaging cognitive imperialism (Battiste, 2013) by privileging, centring and embedding Eurocentric worldviews and languages at the expense of Indigenous ones (Asher, 2009, p. 8). The TRC, in its final report, reiterated this sentiment stating that: “Indigenous peoples’ experiences of education in Canada have been shaped by a distant and colonial government that assumes it knows what children need better than their own families” (Butler et al., 2015, p. 47). Sharpe & Curwen (2012) argue that what is omitted from the curriculum sends an equally powerful message as to what is valued as worthy enough. By omitting Indigenous knowledge, language, and history from mainstream curriculum, the dominant culture is sending the false message to Indigenous students that their culture, language, knowledge and teachings are less valid than Eurowestern teachings (Castagno, & Brayboy, 2008). A lack of cultural representation in the curriculum has

been linked to students being “pushed out” of school (Onuczko & Barker, 2012). “Students bring the legacy of their cultural backgrounds to their studies and there can be substantial discontinuity between what young people experience in science classrooms and the rest of their lives” (Onuczko & Barker, 2012, p. 4). This is true in disciplines other than science as well. Excluding Indigenous content from the curriculum furthers the colonial education agenda of alienating Indigenous students from their cultural identities and reinforcing mainstream schools as *whitestream* (Grande, 2003) or *settlerstream* (Korteweg & Bissell, 2016) education systems.

Challenges to Indigenizing the Curriculum.

Past attempts to make schools more inclusive to reduce drop out / push out rates by ‘Indigenizing the curriculum’ have been met with limited success (Saunders & Hill, 2007). The Coalition for the Advancement of Indigenous Studies suggests that:

Teachers have difficulty incorporating Indigenous perspectives into the curriculum because they are not adequately prepared; that the purchase of resources in schools with a limited Indigenous student population may not appear to be justified; and, in some cases, the incorporation of the Indigenous perspectives may not be mandated or required” (2002, p. 5).

Kanu (2005) identified many roadblocks to the successful integration of Indigenous content into the curriculum. Kanu found that many teachers thought that the work of bringing Indigenous content into mainstream curriculum was vital work, but agreed with the Coalition for the Advancement of Indigenous Studies that the largest barrier was teachers’ lack of knowledge. She also found that racism, lack of support from administration and, in some cases, an

incompatibility between school structures and some Indigenous cultural values hindered teacher's attempts to be inclusive of Indigenous perspectives in their classrooms and curriculum.

Attempts to Indigenize the curriculum have often resulted in re-colonizing Indigenous knowledge for mainstream school purposes, cultural misrepresentations, or in some cases, a total lack of cultural representation in schools. Still, it is crucially important: "A major barrier to Indigenous students' success is their resistance, either overt or intuitive, to being absorbed in a world of knowledge and a society that appear to have no place for them or their people" (Castellano, Stonechild, McKee, 2014). Students struggle to connect with a curriculum that does not reflect their identities and the world that they know (Brum, 2016).

This is why the TRC's (2015) calls to action are so important. "With momentum increasing on both a provincial and national scale acknowledging the historical and current inequities that exist between Indigenous and non-Indigenous peoples, there is no better time than now to commit to a process of transformative learning" (Burm, 2016, p. 18). Many scholars argue that adopting a Land-based pedagogy will help to create a space for this transformative learning to occur and an Indigenous futurity to be forged (Root, 2010; Tuck et al., 2014; Wildcat et al., 2014).

Culturally Responsive Teaching Practices.

There needs to be a shift towards more culturally responsive teaching practices which are reflective of student's "local communities and relationships with their environments" (Butler et al., 2015, p. 50) so that all students can feel that they belong and are respected. Place-based and environmental education, which have often been used by White educators to fill this role, have been recently criticized by Indigenous scholars for "position[ing] themselves as culturally or politically neutral while perpetuating forms of European universalism" (Tuck et al, 2014, p. 1).

To Indigenize the curriculum, Indigenous knowledge should be represented in every subject and at every grade level (Castellano et al., 2014). Indigenizing the curriculum in authentic ways has the potential to help students feel comfortable and validated in schools for their cultural heritage and Indigenous community experiences.

Land-Based Pedagogies.

Land-based pedagogies have been suggested as a way to Indigenize the curriculum in meaningful and authentic ways. “Calderon emphasizes that ‘land education takes up what place-based education fails to consider’: the ways in which place is foundational to settler colonialism” (as quoted in Gruenewald, 2013, p. 33). Land-based pedagogies focus on:

Indigenous epistemological and ontological accounts of land at the center, including Indigenous understandings of land, Indigenous language in relation to land, and Indigenous critiques of settler colonialism. It attends to constructions and storying of land and repatriation by Indigenous peoples, documenting and advancing Indigenous agency and land rights. (Tuck et al., 2014, p. 13)

Land-based education promotes a shared, more equitable future for Indigenous and non-Indigenous people in Canada since it goes beyond the understandings of western scientific research methods and understandings of the world, and has the potential to go so far as to interrupt Eurocentric oppressive worldviews and practices (Root, 2010) while revising curriculum and the pedagogical methods to deliver the curricular content: “Revising pedagogy used to produce and transmit Indigenous curriculum content can be equally important to effectively changing educational practice to make it more inclusive, holistic and reflective of Indigenous ways of teaching and learning” (McGregor, 2012, p. 5). It is not enough to simply add Indigenous content to the curriculum, teachers need to adopt pedagogical methods that are

culturally responsive in order to reflect the knowledge being taught. Land-based pedagogies go beyond teaching Indigenous content and demand a shift in Eurocentric thinking; they demand a different way of understanding the world beyond the Western perspective.

To understand why Land-based pedagogies have the potential to create the change we need to see in education, it is important to understand the importance of Land to many Indigenous peoples in Canada:

Every cultural group established this relationship to [their] place over time. Whether that place is in a desert, a mountain valley, or along a seashore, it is in the context of natural community, and through that understanding they established an educational process that was practical, ultimately ecological, and spiritual. In this way they sought and found their life. (Cajete, 1994, as cited in Lowen, 2009, p. 47)

Land-based pedagogies reflect the Indigenous understanding that the Land is an all encompassing, sentient, living thing, that has existed since time immemorial; it is the air and the water, the rocks and the soil. The Land is an “animate and spiritual being constantly in flux... It refers not only to geographic places and our relationships with... landscapes but also gestures to the ways that discourses within places inform and are informed by [Indigenous] vision, pedagogies, and teaching practices” (Styres et al., 2013, p. 37). The Land and the People have grown up together through the years; when Indigenous people talk about the need to care for all their relations, they see the Land and all the things in it as their relations, not just the other humans living on the Land with them (Kajner, Fletcher, & Makokis, 2012).

Indigenous relationships with the Land are not limited to rural landscapes, but are present in urban landscapes as well: “Land education must start from the supposition that all places were once Indigenous lands and continue to be” (Calderon, 2014). Indigenous cultures maintain their

relationship with the Land through language and stories. While urban cityscapes have changed the natural landscape, the hills, rivers, lakes, and rocks that root the stories in the land are still present:

Placed stories... are contextualized around events and traditional teachings... as well as historical and contemporary sagas, and, as such, are not situated within linear time frames. Rather, time is viewed as layered... with each layer building upon the stories of the previous; it is an organic web of intersections forming past, present and future. (Styres et al., 2013, p. 41)

Land-based pedagogies privilege the relationship of people to the Land. Styres et al. (2013) also say that a pedagogy of Land can renew “an understanding that we all exist in relationship with Land... all the time” (p. 41). The stories that are told about Land tell about how it has changed through time, as well as telling about a People’s relationship to the Land, even in urban settings, creating layers through time that tie communities back to the first people that walked this Land. “Indigenous education is not Indigenous or education from within our intellectual traditions unless it comes through the land, unless it occurs in an Indigenous context using Indigenous processes” (Simpson, 2014). For the Nishnaabeg, for example, learning from the Land means that each person develops their own relationship to the Land, all the people together then make a web of knowledge where each person is cherished for their differences and what they bring to the community and they also have the responsibility of sharing what they have learned with others. Simpson says that this is vitally important work:

We cannot carry out the kind of decolonization our ancestors set in motion if we don’t create a generation of Land-based, community based intellectuals and cultural

producers... we shouldn't be just striving for land-based pedagogies. The land must once again become the pedagogy. (p. 13)

Learning from the Land is a holistic experience that puts the learner at the center. All knowledge is considered important and valid and “a connection to nature is important to children’s intellectual, emotional, social, physical and spiritual development” (Restoule, Gruner, & Metatawabin, 2013). Land-based education goes beyond getting students back into nature and seeks to reconnect them to the Land that they live on in holistic ways consistent with localized Indigenous ways of knowing and being; a critical Land pedagogy teaches us how to create spaces that allow us to live well in our shared environment. (Restoule et al., 2013).

Sutherland and Swayze (2012) believed that Indigenizing environmental education played a vital role in decolonizing education in that it “will help broaden all peoples’ understandings of interconnected relationships with the earth, human and non-human animals, and living and non-living entities in the environment and beyond” (p. 81). Sutherland & Swayze used the framework called “Ininiwi-kisk n tamowin,” which translates from the Swampy Cree language as “the knowledge of the people in how we understand the earth” (Sutherland & Henning, 2009, p. 174). They identified four important developmental levels: coming-to-know; cross-cultural pedagogy; social and ecological justice; ecological literacy, as well as four pillars: Elders; culture; language; and experiential learning. Sutherland & Swayze view the pillars and developmental levels as being key to successfully integrating Indigenous perspectives into Western science curriculum.

Land-based pedagogies work at the local level because approaches and cultural understandings do vary between territories or homelands. Land-based pedagogies are flexible and able to change as the people and territorial Land change through time and adaptations.

“Relationships to land within Indigenous frameworks are not between owner and property, as typified in settler societies.... Instead, land is collective” (Tuck et al., 2014, p. 10). Burkhart (2004) invoked Descartes’ insistence, ‘I think, therefore, I am’ in his statement ‘land is, therefore we are’ to “express the saliency of collectivity in Indigenous life and knowledge systems” (as cited in Tuck et al., 2014, p. 10). For many Indigenous people and scholars in Canada, language is essential in connecting students to the Land. Tuck et al. explain that the Land evolved a language with which to speak to, and through, humans and that this relationship between the Land, language and humans have been evolving through the interaction between people and the Land over thousands of years (p. 12). “Indigenous knowledges and languages can be accomplished in English, even if nuanced and sophisticated renderings of Land-based concepts are made more possible within Indigenous languages” (p. 13). Language reclamation and resurgence are an integral part of Land-based pedagogies.

Land-based pedagogies inevitably demand that the displacement of Indigenous peoples from their traditional Land and territories through the Indian Act, reserves, and the Residential School system be taught in an open, critical and honest manner to all Canadians. Canada’s colonial history and damage must be acknowledged along with the reclamation that all Land is Indigenous Land before any meaningful change can happen (Root, 2010; Scully, 2012; Simpson, 2014). For non-Indigenous people, this blunt history education and land entitlement statement can be hard to understand and accept as Western concepts of place and ownership are very different from Indigenous views of Land and title, however, it is the key to any decolonization journey for the nation of Canada. Without this paradigm shift, the dominant culture will continue to disregard Indigenous rights to the Land and ignore the multiple traumas caused by colonization (Haig-Brown, 2009). Land-based pedagogies taught alongside and through

Indigenous languages can help to both disrupt the Eurowestern domination of history of stolen Indigenous territories and replace it with an understanding of Nation-2-Nation belonging and being responsible to the Land and Indigenous territorial title.

Land-Based Pedagogies and Language.

This displacement history and set of colonial logics (Donald, 2011) creates challenges all of its own for teachers wanting to represent Indigenous perspectives in their classrooms. For example, in an urban classroom in Vancouver, teachers could have students from multiple Indigenous cultures and territories, so how do teachers then choose which Indigenous knowledge or culture should be focused upon in the curriculum?

Baloy (2011) spoke to Indigenous people living in Vancouver about the complexities of teaching Indigenous content in a classroom where more than one Indigenous culture is represented. The people that Baloy spoke to agreed that, “acknowledgment of **local** peoples, their lands, and their languages offers a starting point for addressing diverse language needs in the city” (p. 516, emphasis added). In this way, the culture and language of the local homeland or territory are recognized and the local community “can maintain strong connections to their heritage and homeland” (p. 516). Baloy claims that even “nonlocal urban Indigenous peoples’ connections with homelands can be strengthened through enhanced access to language and culture” (p. 516). Through her interviews, Baloy heard that both:

Local First Nations individuals and nonlocal urban Indigenous people agreed that the ties between land, language, and identity must be acknowledged and respected by emphasizing local peoples. By adhering to protocol, language workers can participate in placing language: localizing the connections between land, language, and identity. (p. 523)

Language revitalization projects are an important facet of Land-based pedagogies because language places people in the Land and allows people to live their culture:

Many Indigenous people emphasize the close connection between languages and land. The languages of British Columbia developed over time in specific environments, and their vocabularies often heavily reflect the activities conducted on the land, particularly relating to the natural environment. Xálek', a Squamish hereditary chief, explained: 'I strongly encourage our people to keep getting out on the land because that's where it makes sense, that's where our language is directly manifested from our connections to our lands and territory.' He also expressed a literal interpretation of the effect of land on language, noting that the sounds of the language emulate the landscape. (Baloy, 2011, p. 524)

Baloy emphasizes that making space to privilege local Indigenous languages can be done in simple ways, like learning basic greetings and including Indigenous names for places. In schools, teachers and administrators can work with local Indigenous communities to include local languages into the curriculum and school space. Local languages can be taught alongside English instruction like the widely accepted second language programs already taught in Canada. Ultimately, teaching Indigenous language is about placing people into relation within the Land. Since language and culture are embedded in the Land that they grew up in, teaching local language ultimately utilizes Land-based pedagogy.

Practical Approaches for Decolonizing Education.

Joseph, of the Gwawaenuk Nation, (2016) provides educators and curriculum writers with practical guidelines on working with Indigenous communities. While Joseph's work is focussed on business relationships, many of his suggestions on building positive relationships

with Indigenous communities are applicable to non-Indigenous educators collaborating with Indigenous communities. Joseph's work stresses the importance of doing research to become 'culturally literate' and approaching projects with cultural humility and respect.

Chambers (2008) collaborated with several First Nations communities in the Northwest Territories on what a Land-based curriculum needed to do. In her paper, she outlines four dimensions of a 'curriculum of place.' They include (as section headings): A curriculum of place calls for a different sense of time; A curriculum of place is en-skilment; A curriculum of place calls for an 'education of attention'; A curriculum of place is a wayfinding. (Chambers, 2008, p. 215)

These dimensions are meant to teach how "more than one people might call a place home" (p.215). They recognize that North America has been irrevocably changed by colonization and both Indigenous people and non-Indigenous people are here to stay and so they have to find ways to co-exist (Chambers, 2008; Donald, 2011). Korteweg and Russell (2012) warn, however, that decolonization must occur for an equitable shared future to become a reality. Colonizers need to learn to "actively recogniz[e], centr[e], validat[e], and [honour] Indigenous rights, values, epistemologies or worldviews, knowledge, language, and the stories" in order to create an equitable future where Indigenous and non-Indigenous people can live parallel to each other, peacefully and respectfully (p. 7).

Ideally, cultural content would be taught by local Elders. However, as Sichel (2015) points out, there are many reasons why this is not always possible. Often times, there are a limited number of Indigenous teachers in a community, and frequently they may choose to teach in Band schools over public schools to help strengthen their own communities. Often, Indigenous teachers struggle to teach from a culturally responsive perspective as their teacher

training has failed to prepare them for teaching any way other than from a Eurowestern perspective (Oskineegish, 2014). If mainstream schools in BC are going to meet their goals of respectfully integrating Indigenous content into the curriculum, non-Indigenous teachers are going to need to teach Indigenous content. To be successful, both Indigenous teachers and non-Indigenous teachers will need to be supported through their learning processes and they will need to be provided with materials that are locally relevant to their communities.

Blending Perspectives.

“The future success of our society will require the combined wisdom of Aboriginal and non-Aboriginal cultures” (Lowan, 2011, p. 10). Richardson suggests a “third space” where such a blending could happen. The first space is Indigenous, as Indigenous cultures inhabited the Land first. The second space is European as it is the result of colonization. The idea of a third space comes from a Métis philosophy of Métissage and offers a flexibility in how people can think about the world (Donald, 2011; Lowan, 2011). It is a blend of the two perspectives together and offers a new space for healing to take place. The third space allows for a reconciling of worldviews.

Similar to the third space is the idea of Two-Eyed-Seeing, or Etuaptmumk (Mi'kmaw word for Two-Eyed Seeing), put forward by Mi'kmaw Elder Albert Marshall (The Institute for Integrative Science and Health, n.d). Two-Eyed seeing is about Life according to Elder Albert. Indigenous worldviews have something of value to contribute in such a way that no one person (or the Eurowestern conceptualization of “individualism”) can have any more than a small piece of the knowledge in the world. It takes all of us coming together to share what we know to see more of the world and life together. For example, one person alone cannot hold all the

knowledge, but the community of Elders together holds a wealth of knowledge that will help their communities navigate the world. In ‘Two-Eyed Seeing’,

it may be that in a particular set of circumstances we will choose to call upon the strengths within Indigenous sciences, whereas in another set of circumstances we might choose to call upon those within the Western sciences. Two-Eyed Seeing can require a ‘weaving back and forth’ between knowledges, and this will draw upon abilities to meaningfully and respectfully engage in an informed manner in collaborative settings. (The Institute for Integrative Science and Health, n.d.).

Through the lens of Two-Eyed Seeing, Elder Albert seeks a collaborative, cross-cultural work. Two-Eyed Seeing seeks to put people back in touch with the living natural world, to put them back in the Land, and also to keep the benefits that scientific objectivity gives us.

Conclusion.

For many Indigenous communities, Land-based pedagogies are helping students to reconnect with their cultural heritage while learning in more culturally appropriate ways while simultaneously promoting more ecologically sustainable practices. For non-Indigenous people, adopting Land-based pedagogies is a way forward in the decolonization journey. Oppressive practices and worldviews are incongruent with the teachings of Land-based pedagogies.

Colonizers are required to engage with their continued colonization of other peoples and their Lands and we are required to critically engage with our relationships with the Land we live on, its history, present, and future. The TRC (2015) says that:

together, Canadians must do more than *talk* about reconciliation; we must learn how to *practise* reconciliation in our everyday lives—within ourselves and our families, and in our communities, governments, places of worship, schools, and workplaces.

To do so constructively, Canadians must remain committed to the ongoing work of establishing and maintaining respectful relationships. (p. 21)

Land-based pedagogies are poised to help with this work of reconciliation as they require colonizers to honestly examine how settler practices displaced Indigenous people from their Lands and attempted to eradicate entire cultures. Land-based pedagogies offer a way to heal what Cajete calls our *split head*, “blending the best of Western (and other) and Indigenous cultures to create a unified whole” (as quoted in Lowen, 2011, p. 10).

Education is about relationships, and perhaps the most important relationship for learning is the relationship between students, teachers, parents and the community. The Indian Act and Residential Schools helped to reduce education to a one-way relationship between White teachers and Indigenous communities. Land-based pedagogies have so much to offer as a way forward; they offer opportunities for healing between Indigenous people and non-Indigenous people in Canada, re-connection to the Land, an opportunity for language resurgence and opportunities for healing with Indigenous communities.

The land is always stalking people. The land makes people live right. The land looks after us. The land looks after people. -Annie Peaches quoted in Basso, Wisdom Sits in Places, 1995(as quoted in Tuck et al., p. 1)

Chapter 3: Methods and Methodology

As a White educator and curriculum researcher, I approach this Indigenous education task humbly, acknowledging that I am not an expert in Indigenous Traditional Knowledge, territory/Land or culture; however, I have abilities that in the future I will be able to offer as educational service to my Indigenous collaborators or school community partners (or treaty partners). I have made an extensive consultation of the Indigenous education literature taking care to centre Indigenous scholars so that my portfolio work is respectful and based in “cultural humility” (Lund & Lee, 2015). I have worked to strive to adopt Indigenous research methods during all phases of this research. These methods of Indigenous research comprise the following:

... [to] enfold a researcher and community members into a layered relationship (mind, body, emotion, and spirit) in a holistic, investigative endeavour. All Indigenous methods serve to preserve Indigenous voices, build resistance to dominant discourses, create political integrity and most importantly perhaps, strengthen the community. (Bill Reid Centre, University of Calgary, n.d.)

I relied on the work of Sutherland & Swayze (2012), Korteweg (2016) and Joseph (2016) to design my planning guide (Task 1). While Korteweg and Sutherland & Swayze are White scholars, they work with First Nations communities, and their own work is based in Indigenous scholarship. Korteweg works with the Nishnawbe Aski Nation communities and sits on school

board advisory councils as a collaborator-educator between non-Indigenous teachers and First Nation education authorities (by invitation). Sutherland in her CRC research works with Far North First Nation Cree communities in Manitoba and Sutherland is a Canada Research Chair in Indigenous science education at the University of Winnipeg. Sichel (2015) suggests that non-Indigenous teachers who wish to be allies to Indigenous communities and to further the effort of decolonization, should help Indigenous communities with the task of teaching Indigenous content. Styres et al. (2013) remind us that non-Indigenous teachers are “not advised to try to become experts in traditional skills or language; [are] encouraged to build community connections, and to learn how to invite and include Elders, local colleagues, and community members who would be willing to support language or land-based activities” (p. 518) The work of Joseph, of the Gwawaenuk Nation, provided guidance on practical approaches to working with Indigenous communities to establish positive working relationships. Korteweg’s approach and Sutherland & Swayze’s work were foundational in building a practical model for planning for a Land-based curriculum. Korteweg’s approach (2L2C) focuses heavily on Community, Culture (2C), Language, and Land (2L) which support Sutherland & Swayze’s developmental levels and pillars. The work of these scholars helped me to design a planning guide (Task 1) that teachers and curriculum designers can use when collaborating with Indigenous communities. I also used these scholars to inform my assessment model (Task 2). The model is adapted from the model used by the CDC when collaborating with communities. I shifted the focus from health-related issues to a focus on community engagement for the purpose of co-planning curriculum.

Chapter 4: Tasks

There is beginning to be a substantial body of work by scholars who are advocating for meaningful Indigenization of the curriculum. The literature focuses predominantly on the philosophy behind the need for Indigenous content and pedagogical approaches that are compatible with authentically incorporating Indigenous content and perspectives into curriculum. There are some, like Oskineegish (2014), who offer practical suggestions on how to begin teaching Indigenous content, the importance of working with communities and bringing Elders into the school. My portfolio sought to apply their scholarship to create a practical document (Task 1, Planning Guide) to help with the co-planning process while offering the flexibility for teachers and Indigenous communities to plan for their own needs while working within a Land-based pedagogy. I have also provided suggestions for non-Indigenous teachers to build relationships with Indigenous communities to facilitate the co-planning process and to foster healing between Indigenous and non-Indigenous communities. The assessment model (Task 2) is designed to support the communities using the planning guide to facilitate their co-planning process. The assessment model reflects the values and “best practices” from my research for non-Indigenous teachers and curriculum planners hoping to working with Indigenous communities. The assessment model has been presented in two ways. First, it is presented in a circular format to represent how the process is circular in nature, that the process repeats itself, and builds upon itself throughout the planning process while simultaneously reinforcing and nurturing the relationship between the groups involved. The circular format also demonstrates the flexibility in the model. Any step can and should be revisited whenever it is helpful/needful to do so. The second format is in a linear format to demonstrate how each step builds on the last. The second format also has each of the steps fleshed out with suggestions on how to facilitate

each step. The literature has guided my work, and my work is my interpretation of the best practices, philosophies and foundations as put forward by scholars within the field of decolonizing education.

Task 1: Land-based Approaches for Environmental Education: A Planning Guide

This planning guide will explore:

- Teaching environmental education with Indigenous content
- Land as a decolonizing pedagogy
- Considerations when working with Indigenous communities
- A guide to help with culturally responsive curriculum planning

Introduction

The Ministry of Education in BC has recently implemented the new curriculum, *Building Student Success* (2016), with the intention of promoting “positive personal and cultural identity” for all students (BC Ministry of Education, 2016). Indigenous content has been added to every grade level and in almost every subject area. Many teachers struggle to plan and teach Indigenous content and perspectives (Coalition for the Advancement of Indigenous Studies, 2002; Kanu, 2005; Sanford, Williams, Hopper, & McGregor, 2012). The goal of this document is to provide a planning tool to support teachers planning for the new BC curriculum.

Decolonizing education in BC is an integral step in the reconciliation process (Truth and Reconciliation Commission of Canada, 2015). Land²-based pedagogies offer opportunities for cross-curricular learning through Indigenous and environmental lenses. Land-based pedagogies are decolonizing pedagogies that seek to interrupt the Western narrative about the environment and scientific knowledge by promoting alternative perspectives and knowledge bases (Tuck, McKenzie, McCoy, 2014). Like place-based pedagogies, Land-based pedagogies do centre students in their local communities and environment; however, the focus on the Land reinforces Indigenous people’s relationship to the Land.

Indigenous perspectives and Land-based pedagogies embed humans as interconnected in the natural world and teach reciprocal relationships of respect and responsibility to keep the natural world healthy (Cajete, 1999). In respectfully including local Indigenous Knowledges and pedagogies within environmental science education, it is important that “the strategies used will

² Land with a capital *L* refers to an “Animate and spiritual being constantly in flux... It refers not only to geographic places and our relationships with... landscapes but also gestures to the ways that discourses within places inform and are informed by [Indigenous] vision, pedagogies, and teaching practices” (Styres, Haig-Brown, & Blimkie, 2013, p.37).

meaningfully support learning while reflecting local cultural traditions, languages, beliefs, and perspectives” (Sutherland & Swayze, 2012, p. 82).

Relationships with Indigenous communities is key to maintaining respect and avoiding misrepresentation of Indigenous cultures (Fee, 2000). This guide will help teachers and other education-community members to plan for a Land-based pedagogy. This document is meant to support co-planning between communities, as well as supporting teachers and curriculum writers who have fewer opportunities to plan with local Indigenous communities.

Overview

“Indigenous knowledge rooted in the long inhabitation of a particular place offer lessons that can benefit everyone, from educator to scientist, as we search for a more satisfying and sustainable way to live on the planet” (Barnhardt & Kawagley, 2005, p. 9).

Land-based pedagogies work to connect all learners to the Land through a deep relationship with community, culture, language and Land (called 2L2C, Lisa Korteweg, personal communication, 2016), and acknowledge and honour local Traditional Knowledge (TK) and worldviews (Tuck, McKenzie, & McCoy, 2014).

Sutherland and Swayze (2012) believe that Indigenizing environmental education plays a vital role in decolonizing education: it “will help broaden all peoples’ understandings of interconnected relationships with the earth, human and non-human animals, and living and non-living entities in the environment and beyond” (Sutherland & Swayze, 2012, p. 81).

Sutherland & Swayze (2012) used the framework called “Ininiwi-kisk n tamowin,” which translates from the Swampy Cree language as “the knowledge of the people in how we understand the earth” (Sutherland & Henning, 2009, p. 174). They identified four important

developmental *levels*: L1) coming-to-know; L2) cross-cultural pedagogy; L3) social and ecological justice; L4) ecological literacy, as well as four *pillars*: P1) Elders; P2) culture; P3) language; and P4) experiential learning. This guide will be centred in Sutherland & Swayze's four *Pillars* and *Developmental Levels* to support planning that is inclusive of Land, language, community and culture (2L2C).

Limitations

We use the term Indigenous knowledges in its plural form so as not to imply that one should see Indigenous peoples as 'all the same' or make the false assumption that what is true of one Indigenous community is also true of another. (Munroe, Borden, Orr, Toney & Meader, 2013, p. 320)

Each Indigenous community is unique: each Indigenous community has a unique community history, unique governing parties and protocols, worldviews, culture and traditions that vary from community to community and as such, there is no one approach that 'fits all' or will work with every Indigenous community (in BC). This planning guide will help provide educators with a framework for developing a relationship with Indigenous communities and a starting place for planning, however, each community you work with will require you to start the process from the beginning. Approach each project with humility, an open heart, and a willingness to be flexible and learn flexibly.

This document is meant to act as a support for entry level work with Indigenous communities. The scholars that I have modeled the planning guide after are primarily White scholars. However, through their work, these scholars have engaged with Indigenous communities and they rely heavily on Indigenous scholarship in their writing. The planning guide and assessment model are not meant to center the non-Indigenous teacher or curriculum

designer as the expert; rather, the document is meant to support non-Indigenous teachers and curriculum designers in their work with Indigenous communities to facilitate healthy relationships and learning opportunities.

Planning

This document is meant for teachers wanting to plan an environmental unit for a Land-based pedagogy and who wish to draw on Indigenous Knowledge. The document provides a series of suggested steps that should be taken before, during and after each planning project when working with Indigenous communities that will help with the planning process, and will help to facilitate stronger relationships between communities³. This planning guide will be accompanied by an assessment model to help support you as you engage to work as collaborators with Indigenous communities. The following suggestions are adapted from Gwawaenuk Nation member Joseph's (2016) work for non-Indigenous businesses working with Indigenous communities.

Before

- Research the Indigenous community you wish to work with! Becoming more culturally competent will help to facilitate a healthier, cooperative and more responsive relationship between Indigenous and non-Indigenous (education) communities;
- Find out where most of your Indigenous partners are from because not all Indigenous communities are living on their traditional territories, especially in urban contexts;

³ These suggestions for what to do before, during and after the planning process are modeled from Gwawaenuk Nation member Bob Joseph's work on how to work effectively with Indigenous communities in business.

- Understanding community dynamics, learning protocols, being aware of the timing of traditional activities and ceremonies and community events, and staying aware of deaths and births, will help you choose more effective and culturally responsive engagement strategies;
- Establish positive relationships early in the process; participate in cultural activities when appropriate to do so, and when invited;
- Come to the community with enough of a plan to show you have done your research and homework to be ready to engage with community, but do not come with a fully made or locked plan. You have to plan enough to design and allow generative space for curricular co-planning;
- Be flexible with the “cultural content” of your co-planning project; respect that the community may have different goals for what they want included, and that they must ultimately have final say in what they want to share or contribute to the project;
- Obtain the community’s permission to share the cultural learning you have made or presented in this curriculum project. You may learn things through your relationship with the community that they do not want you to share with others;
- Establish how you are going to meet, engage and communicate regularly with the community according to their preferences;

During

- Be aware that cultural survival, rights and respect are the fundamental drivers of any Indigenous community’s decision-making process;

- Be flexible with your dates and timing; recognize that your project is important to the community, but it is not the only planning, project or engagement process that the community has going on;
- Always follow protocols of acknowledging the host community, its people, and its territory in order to show respect. Also, be aware that protocols of sharing food and/or ceremony may be critically important steps in engaging your host community;
- Be aware that communication styles can be different; slow down and give time for people to respond. Do not feel the need to fill the silence in a conversation. Listen carefully and listen more than speaking out;
- Stay up to date with community issues; this can help to guide your strategy and engagement approach to your planning and allows you to stay sensitive to the needs of the community you are working with;
- Be aware that Indigenous rights are communally or collectively held and that the whole community may need to be involved in any or all decision-making process;
- Use a cooperative planning/problem solving approach. Rather than striving to be the expert, acknowledge what you do not know and what you need help with;
- Honour your agreements, especially oral agreements. Indigenous cultures follow oral traditions and oral agreements are taken seriously;
- Do not stress about the duration of a meeting or the time needed to consult and engage the community in the project;

- Take the time to assess the project with the community. Provide community members multiple opportunities to view the project and provide input to ensure the project is authentic and respectful;

After

- Plan a time to share and celebrate the work you have created with the community and according to cultural protocols (Elders, feasting, ceremony, etc.);
- Ensure that the community retains all intellectual knowledge in your project;
- Receive permission to distribute the project or curriculum unit, especially if you wish to distribute the project beyond the originally intended audience or Indigenous community. For example, if you worked with a local community on a Land-based unit for your school and wanted to share it with other teachers or other schools, ensure that this sharing is cleared or authorized by your community partners before you share this work and IK knowledge;
- Maintain community relationships. Continue to visit and attend cultural events, especially when invited.

Planning guide

“Ininiwi-kisk n tamowin,” which translates

from the Swampy Cree language as “the knowledge of the people in how we understand the earth” (Sutherland & Henning, 2009, p. 174).

Sutherland & Swayze (2012) identified four developmental *Levels* as well as four *Pillars* that are necessary components in science programming in order for curriculum to be inclusive of

Indigenous content and worldviews. Sutherland & Swayze summarize their developmental *levels* as the following⁴:

Developmental Levels

(1) Coming-To-Know: learning science wholistically by “coming-to-know”, perspectives that identify how individually, Indigenous students uniquely engage with Western science and Indigenous knowledge;

(2) Cross-Cultural Pedagogy: culturally relevant approaches to teaching science: suggested pedagogical approaches to teaching science in Indigenous settings;

(3) Social and ecological justice: approaches to teaching for social and ecological justice in science;

(4) ecological literacy; the inclusion of incorporating values into science instruction with the overall goal of ecological literacy.

(Sutherland & Swayze

2012, p. 86)

(Graphic from Sutherland & Swayze

(2014, p.89)



⁴ For a more in depth explanation on the Pillars and Developmental levels, please refer to Sutherland & Swayze’s paper, *Including Indigenous Knowledges and Pedagogies in Science-Based Environmental Education Programs* (2012).

These *Levels* work together with the *Pillars* (Elders, culture, language, and experiential learning) to create a wholistic science program.

This planning guide, *Land-based Approaches for Environmental Education*, uses the Developmental Levels and Pillars as guidelines for planning for including Indigenous content in environmental education lessons through the lens of Land-based pedagogies. It has been designed for co-planning with Indigenous communities, which is the best curriculum design practice when possible.

*The following template has suggestions on how to use the planning guide to best match and reflect the structure of the Building Student Success (BC Ministry of Education, 2016) documents. (See appendix A for a blank copy of the planning guide).

planning page	
topic	Your topic should be broad enough to incorporate different perspectives and specific enough to support your content. These could reflect either your Core Competencies or your Big Ideas.
driving question	The driving question is what the students are going to learn in the unit and will reflect your topic as well as your learning standards. This question can be shared with students and should be open-ended so that learning is not limited, but also needs to be specific enough to focus learning. The driving question should also reflect the environmental learning goal as well as the Indigenous perspectives learning goal.
traditional territories to acknowledge	Find out whose traditional territories are relevant to your driving question. For example, if your topic is about grasslands, and your driving question is about grasslands stewardship, find out which Indigenous communities had their traditional territories in grasslands. This acknowledges Indigenous people's history with the land pre/post-colonization, as well as provides a focus for learning about different cultural practices and traditional knowledge and land uses.
content	The content can be derived from the Core Competencies, Big Ideas, and Learning Standards. Indigenous perspectives demand a wholistic teaching/learning approach and Indigenous content has been integrated into most subject areas providing excellent opportunities for cross-curricular learning. Be creative in looking for complementary Learning Standards, Big Ideas, and Core Competencies in other subjects, and do not feel limited to the curriculum, think of it as a jumping off point.

developmental levels	
coming to know	This section is where to plan for <i>how</i> your students are going to learn, and the learning journey they are on. Reflecting on students learning as a process helps to plan beyond simply covering the Learning Standards. Mi'kmaw Elder Albert Marshall's principle of Two-Eyed seeing is an example of how students can <i>come to know</i> . Coming to know promotes the metacognitive aspects of learning; students learn about their learning process.
cross-cultural pedagogy	This section is for purposeful planning for the cultural background of your students (who may be from different cultural backgrounds), the local Indigenous community, and the non-Indigenous community. Having culturally relevant curriculum can increase student engagement. Two-Eyed, or Many-Eyed seeing approaches encourage understanding environmental education from multiple perspectives, creating an appreciation for the strengths of each view.
social and ecological justice	This section moves beyond Land as the perspective, and moves into a global context, exploring power structures. Ecological justice takes on social justice issues from an environmental perspective. Indigenous perspectives may see different issues as being problematic than a Western perspective would. Explore one issue from multiple perspectives, or find issues that impact one community, a local Indigenous community for example.
ecological literacy	This stage is arguably the “goal” of Land-based environmental education, tying together ecological knowledge, human ecology, and sustainability as well as problem-solving skills. This section will help you to plan for including multiple “literacies”, again, striving for wholisitic understanding of your topic.

pillars	
Elders	Who are the Elders in your community that would be able/willing to work with you? Are they able to visit, or will they be supporting you only in your planning stage? Are you able to bring your students to them? What are the protocols for working with Elders? Elders are the knowledge holders in the community and one of your most important resources.
culture	How are you going to plan for cultural representation in your unit? Part of this will be dictated by what the Indigenous community that you are working with is ready to share. This may be reflected in stories, song or dance, it may also be in the form of sharing traditional knowledge in a formal learning setting.
language	Language ties people to the land and reflects their knowledge. Ideally, a unit would be inclusive of Indigenous language when appropriate. Simple examples are Indigenous names for places, plants and animals. Some communities have recordings and videos of words and stories in their language. Include examples of native language speakers whenever possible.
experiential learning	It is important for students to be able to learn through doing, and equally as important to reflect on their learning experiences. When possible, take the students into the environment that they are learning about. When this is not possible, find ways to bring it into the classroom. Open-ended activities and problem-solving activities allow for more critical thinking and a deeper understanding of the topic.

further questions for planning

How will this unit help students to develop an understanding of how we interact with the Natural world?

What is the goal for your unit/lesson? How are you going to know what your students have reached that goal? How is your planning going to help your students develop a more positive environmental perspective?

How can we transfer their learning into real world contexts?

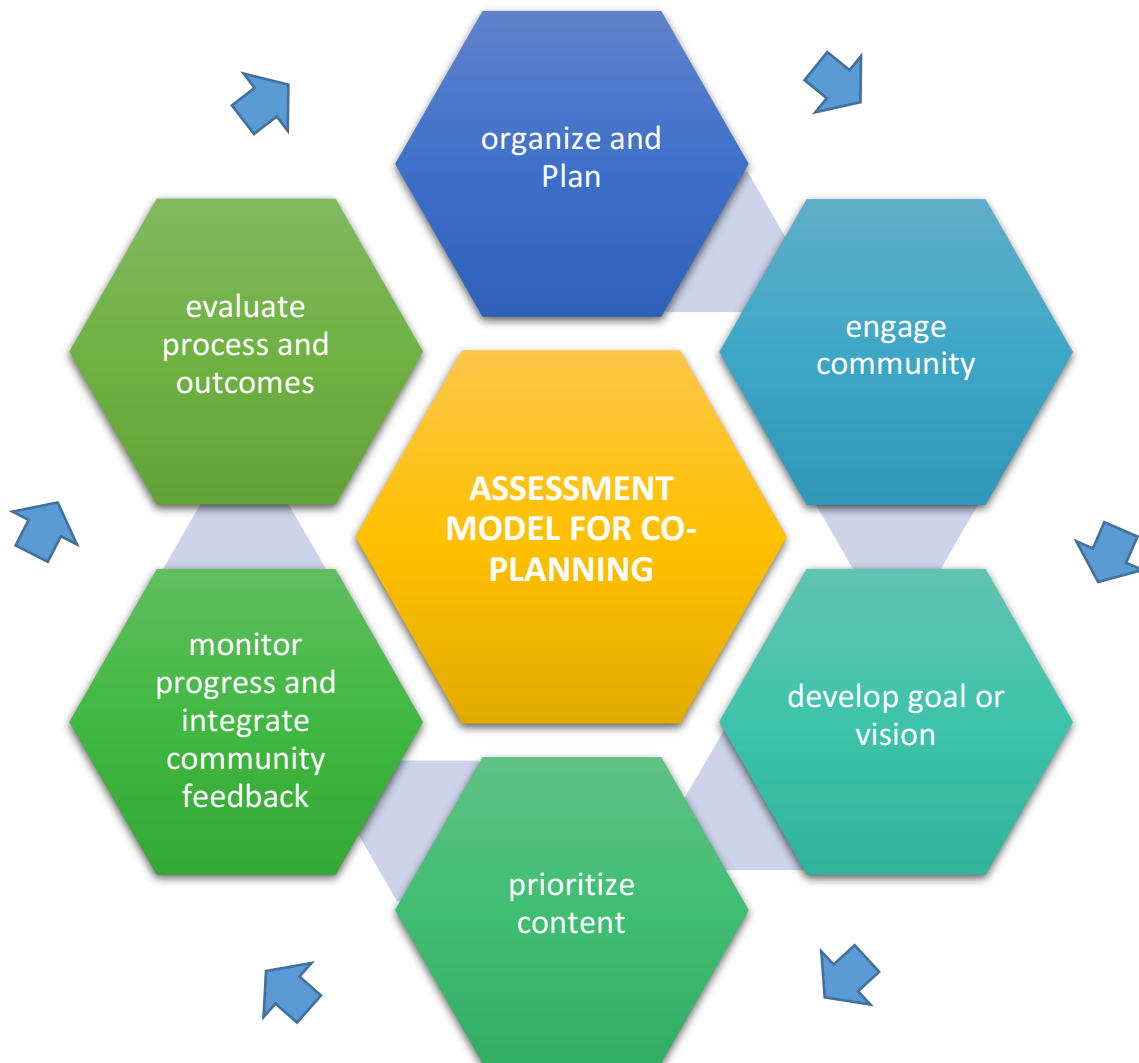
Find real-world contexts and problems for your students to learn from. What are the issues that are facing your community and Indigenous communities in your area? How are these issues impacted by/grounded in the environment?

Resources*	
community connections	<p>name: title: email address: phone number:</p> <p>name: title: email address: phone number:</p> <p>community connections could be the band office or local Indigenous education department for your district. Find out who is available to support your teaching.</p>
webpages	<p>Any resource that you use when teaching about Indigenous content should be created by Indigenous peoples, or promoted by Indigenous peoples. This is how you will be able to ensure that what you are teaching is appropriate and authentic. It is also important to give credit to the knowledge holders who are sharing their culture.</p> <p>A good place to start looking for online resources is your school district's Indigenous education department and Band websites/blogs. (For a list of suggested websites, see appendix B.)</p>

<p>books/ publishers</p>	<p>Just like with webpages, when choosing print resources choose books by Indigenous publishers/editors. Generally, if you are questioning if the resource is respectful or accurate, it is probably not. (For a list of suggested Indigenous publishers see appendix C.)</p>
<p>Other (pictures, recordings, artifacts, etc.)</p>	<p>Just like with digital and print resources, use Indigenous sources whenever possible. Choosing Indigenous content promotes respect for other ways of knowing about the world, and ensures that the resources that you are using are respectful and authentic. Sometimes it is not always possible to use content created by Indigenous people, for example, with artifacts like archival photographs, acknowledging the bias that may be present in historical documents is important and can be used to teach about historical social justice issues.</p>
<p>*only use resources from Indigenous publishing houses, authors, illustrators, speakers, or resources that have been made through community consultation and that acknowledge the community that the knowledge comes from. *acknowledge the culture/People that the stories and information came from during your lessons</p>	

Task 2: Assessment Model

The assessment model⁵ may be used for self-assessment and community feedback. Collaboration and feedback should happen in face-to-face meetings and should be on-going throughout the co-planning process.

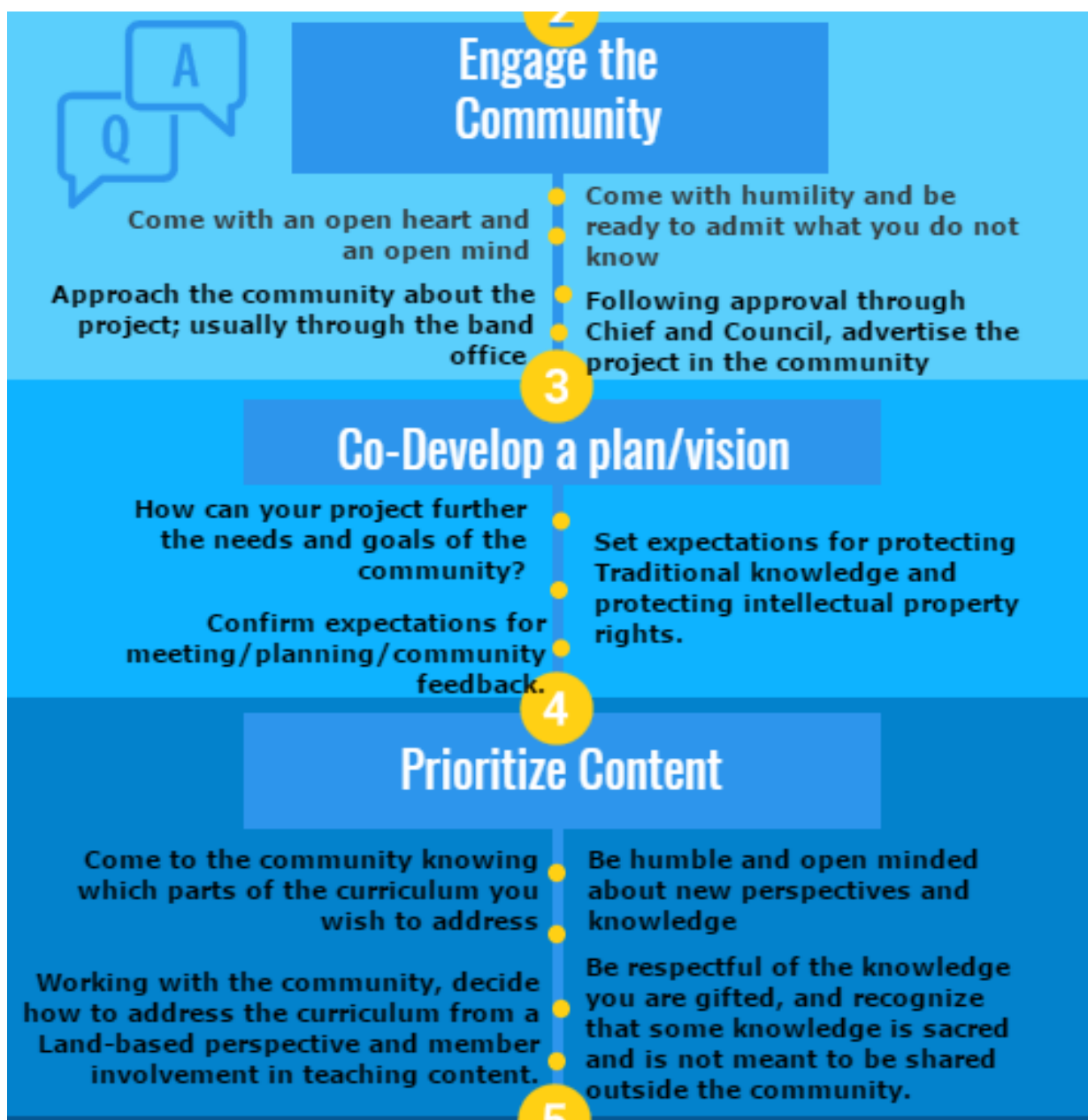


⁵ Adapted from the CDC's assessment model for working with Indigenous communities in health care settings.

This version of the assessment model represents how the process is circular. Any step can and should be revisited as needed through the process. Remaining flexible in your approach will help you maintain a positive relationship with the community you are working with.

The following is the same assessment model again laid out linearly to flesh out each step in the process. While the linear presentation does not reflect the circular nature of the work, it is important to remember that each step can and should be revisited as needed. When starting a project, one of the most important steps is to learn local protocol. Learning protocol demonstrates respect and can lay the foundations for positive relationships between the Indigenous and non-Indigenous communities throughout the project.





5 Monitor progress and integrate community feedback



Attend community meetings to present the progress of your work.

Implement changes based on community feedback and discussions.

Provide opportunities for feedback and dialogue about the project form the community.

Be prepared to review and change the work based on feedback many times until both parties are happy with the product.

6

Evaluate process and outcomes

Throughout the process and when the project is completed, meet with the community to evaluate both the product and the process

Follow feed back about both the process and the work if there are requests for change.

Discuss what went well and what each side would change for the next project.

7

Celebrate the Project With the Community



Give credit to the community in the project.

Invite Elders to see the project in the schools

Provide opportunities for the community to engage with the completed project.

Give a copy of the completed project to the community.

8

Questions To Support Assessing the Project

Are community members getting enough chances to participate in the process?

How is the planning representing the Land?

Is the planning accessible to teachers in a variety of contexts?

Is language adequately represented?

Is the culture being respectfully and authentically represented through the work?

Are students being given opportunities for experiential learning?

How will the work be distributed?

Appendix**Appendix A****Blank Version of the Planning Guide:**

planning page	
topic	
driving question	
traditional territories to acknowledge	
content	

developmental levels	
coming to know	
cross-cultural pedagogy	
social and ecological justice	
ecological literacy	

pillars	
elders	
culture	
language	
experiential learning	

further questions to help your planning

How will this unit help students to develop an understanding of how we interact with the Natural world?

How can we transfer their learning into real world contexts?

resources*	
community connections	<p>name: title: email address: phone number:</p> <p>name: title: email address: phone number:</p>
webpages	

books/ publishers	
Other (pictures, recordings, artifacts, etc.)	
<p>*only use resources from Indigenous publishing houses, authors, illustrators, speakers, or resources that have been made through community consultation and that acknowledge the community that the knowledge comes from.</p> <p>*acknowledge the culture/People that the stories and information came from during your lessons</p>	

Appendix B

Websites with Recommended Indigenous Resources

The following are examples of school district websites that have amassed collections of Indigenous resources.

- ABED <http://abed.sd79.bc.ca/hulqumimum-resources/>
 - Aboriginal Education for SD79 Hul'q'umi'num' Resources
 - Aboriginal Nations Education Department provides a list of resources from Indigenous communities across Canada
- Aboriginal Perspectives Page <http://aboriginalresourcesforteachers.weebly.com/>
- ANED <https://aned.sd61.bc.ca/>
 - SD36's page for supporting teachers integrating Aboriginal content and perspectives into the curriculum.

Appendix C

Indigenous Publishers From BC

The following are a list of Indigenous publishers in BC. Some of the publishers provide books and other publications on cultures outside of BC.

- Eaglecrest Books <http://www.eaglecrestbooks.com/>
 - Literacy books that feature First Nations children which encourage understanding, respect and interest among all students.
- Strong Nations- <http://www.strongnations.com/>
 - Focus on three First Nation territories from across Canada and the United States, the stories reflect the belief that stories are the roots of people, lands and cultures.
- Yinka Déné Language Institute <http://www.ydli.org/pubs.htm>
 - Includes YDLI publications as well as relevant material published by other organizations.

References

- Absolon, K. & Willett, C. (2005). Putting ourselves forward: Location in Aboriginal research. In L. Brown & S. Strega (Eds.). *Research as resistance: Critical Indigenous and anti-oppressive approaches*. Toronto: Canadian Scholars Press.
- Anderson, M. D. (2016, July 19). *The long-term effects of social-justice education on Black students*. Retrieved March 28, 2017, from <https://www.theatlantic.com/education/archive/2016/07/the-long-term-effects-of-social-justice-education-on-marginalized-students/491876/>
- Barnhardt, R., & Kawagley, A. (2005). Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropology and Education Quarterly*, 36(1), 8-23.
- Battiste, M. (2000). *Reclaiming Indigenous voice and vision*. Vancouver: University of British Columbia Press
- Battiste, M. (2011). Curriculum reform through constitutional reconciliation of Indigenous knowledge. In D. Stanley & K. Young (Eds.), *Contemporary studies in Canadian curriculum: Principles, portraits, & practices* (pp. 287-312). Calgary, AB: Detselig Enterprises Ltd.
- Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit*. Saskatoon, SK: Purich Publishing.
- BC Ministry of Education. (2016). *Building student success - BC's new curriculum*. Retrieved January 08, 2017, from <https://curriculum.gov.bc.ca/curriculum>

- Brant Castellano, M. (2004). Ethics of Aboriginal research. *Journal of Aboriginal Health*, 1(1), 98-114.
- Burkhart, Waters, A (eds). 2004. "What Coyote and Thales can Teach Us: An Outline of American Indian Epistemology." In *American Indian thought: Philosophical essays* (pp. 15–26). Malden, MA: Blackwell.
- Burm, S. (2016). Culturally-responsive teaching our collective obligation as treaty people. *Our Schools/Our Selves*, 25, 2nd ser., 15-21.
- Butler, J., Ng-A-Fook, N., Audrin-Charette, J., & McFadden, F. (2015). Living between truth and reconciliation: Responsibilities, colonial institutions, and settler scholars. *Transnational Curriculum Inquiry*, 12(2), 44-63.
- Cajete, G. (1999). Reclaiming biophilia: Lessons from Indigenous peoples. In G. Smith & D. Williams (Eds.), *Ecological education in action: On weaving education, culture and the environment* (pp. 180-206). Albany, NY: State University of New York Press.
- Calderon, D. (2014). Speaking back to manifest destinies: A land education-based approach to critical curriculum inquiry. *Environmental Education Research*, 20(1), 24-36.
- Castagno, A. E., & Brayboy, B. M. J. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, 78(4), 941-993.
- Castellano, M. B., Stonechild, B., & McKee, D. (2014, June). *What needs to change?* | *Canadian Education Association (CEA)*. Retrieved August 03, 2016, from <http://www.cea-ace.ca/education-canada/article/what-needs-change>

Chambers, C. 2008. "Where are we? Finding common ground in a curriculum of place." *Journal of the Canadian Association for Curriculum Studies* 6(2), 113–128.

Coalition for the Advancement of Aboriginal Studies (CAAS). 2002. *Learning about walking in beauty: Placing Aboriginal perspectives in Canadian classrooms*. Toronto, Ont: Canadian Race Relations Foundation (CRRF).

Donald, D. (2011). Indigenous Métissage: A decolonizing research sensibility. *International Journal of Qualitative Studies in Education*—First Article, 1-23.

Esquimalt Nation. (2015). *Nation Overview*. Retrieved January 14, 2017, from <http://www.esquimaltnation.ca/nationoverview.html>

Fee, M. (2000, Winter). Reading Aboriginal lives. *Canadian Literature*, 167(4), 5-7.

Greenberg, B. (2012). *Who we are*. Retrieved January 14, 2017, from <http://www.bcgrasslands.org/index.php/about-us>

Gruenewald, D. 2003. "The best of both worlds: A critical pedagogy of place." *Educational Researcher*, 32(4): 3–12.

Haig-Brown, C. (2009). Decolonizing diaspora: Whose traditional land are we on? *Cultural and Pedagogical Inquiry*, 1(2). Retrieved January 18, 2017.

Haig-Brown, C. (2010). Indigenous thought, appropriation, and non-Aboriginal people. *Canadian Journal of Education*, 33(4), 925-950.

Hanson, E. (n.d.). *The residential school system*. Retrieved January 29, 2017, from <http://indigenousfoundations.arts.ubc.ca/home/government-policy/the-residential-school-system.html>

- Henderson, J. Y. (2013). Incomprehensible Canada. In J. Henderson & P. Wakeham (Eds.), *Reconciling Canada: Critical perspectives on the culture of redress* (pp. 115-128). Toronto, ON: University of Toronto Press.
- Joseph, B. (2016). *27 tips on what to say and do* [Ebook]. Indigenous Corporate Training Inc.
- Kajner, T., Fletcher, F., & Makokis, P. (2012). Balancing head and heart: The importance of relational accountability in community - university partnerships. *Innovative Higher Education, 37*(4), 257-270.
- Kanu, Y. 2005. "Teacher's perceptions of the integration of Aboriginal culture into the high school curriculum." *Alberta Journal of Educational Research, 51*(1), 50-68.
- Kesler, L. (2009). *Aboriginal identity & terminology*. Retrieved November 13, 2016, from <http://indigenousfoundations.arts.ubc.ca/home/identity/aboriginal-identity-terminology.html>
- Korteweg, L., & Bissell, A. (2016). The Complexities of researching youth civic engagement in Canada with/by Indigenous youth: Settler-colonial challenges for Tikkun Olam—pedagogies of repair and reconciliation. *Citizenship Education Research Journal/Revue de recherche sur l'éducation à la citoyenneté, 5*(1), 14-26.
- Korteweg, L., & Russell C., 2012. "Editorial: decolonizing + Indigenizing = moving environmental education towards reconciliation." *Canadian Journal of Environmental Education 17*, 5-14.
- Ladson-Billings, G. (1994). *The dreamkeepers*. San Francisco: Jossey-Bass Publishing Co

LaRocque, E. (n.d.). *Colonialism and racism*. Retrieved February 03, 2017, from

<http://www3.nfb.ca/enclasse/doclens/visau/index.php?mode=theme&language=english&theme=30662&film=&excerpt=&submode=about&expmode=2>

Lowan, G. 2009. "Exploring place from an Aboriginal Perspective: Considerations for outdoor and environmental education." *Canadian Journal of Environmental Education* 12, 42–58.

Lowan, G. (2011). Ecological metissage: Exploring the third space in outdoor and environmental education. *Pathways: The Ontario Journal of Outdoor Education*, 23(2), 10-15

McGregor, H. (2012, March). *Decolonizing pedagogies teacher reference booklet [PDF]*.

Vancouver: Aboriginal Focus School, Vancouver School Board.

Munroe, E. A., Borden, L. L., Orr, A. M., Toney, D., & Meader, J. (2013). Decolonizing Aboriginal education in the 21 century. *McGill Journal of Education*, 48(2), 317-337.

Onuczko, T., & Barker, S. (2012). Integrating Aboriginal perspectives: Issues and challenges faced by non-Aboriginal biology teachers. *Alberta Science Education Journal*, 42(2), 4-9.

Open Canada. (n.d.). *Inequality explained: The hidden gaps in Canada's education system*.

Retrieved February 03, 2017, from <https://www.opencanada.org/features/inequality-explained-hidden-gaps-canadas-education-system/>

Orr, D. (2011, September 15). *What is education for?* Retrieved April 21, 2017, from

<http://www.context.org/iclib/ic27/orr/>

Oskineegish, M. (2014). Developing culturally responsive teaching practices in First Nations communities: Learning Anishnaabemowin and Land- based teachings. *Alberta Journal of Educational Research*, 60(3), 508-521.

Regan, P. (2010). *Unsettling the settler within: Indian residential schools, truth telling, and reconciliation in Canada*. Vancouver, BC: UBC Press.

relevance, reciprocity, responsibility. *Journal of American Indian Education*, 30(3).

Restoule, J., Gruner, S., & Metatawabin, E. (2013). Learning from place: A return to traditional Mushkegowuk ways of knowing. *Canadian Journal of Education*, 23(2), 68-86.

Retrieved from <http://jaie.asu.edu/v30/V30S3fir.htm>

Root, E. (2010). This land is our land? This land is your land: The Decolonizing journeys of White outdoor environmental educators. *Canadian Journal of Environmental Education*, 15, 103-119.

Sanford, K., Williams, L., Hopper, T., & McGregor, C. (2012). Indigenous principles decolonizing teacher education: What We Have Learned. *In education*, 18(2). Retrieved April 24, 2017.

Scully, A. (2012). Decolonization, reinhabitation and reconciliation: Aboriginal and place-based education. *Canadian Journal of Environmental Education*, 17(1), 148-158.

Sharpe, G., & Curwen, T. (2012). The hidden curriculum in elementary education - Beyond the straight line: A theoretical, critical and reflective analysis of the hidden curriculum in elementary school education in Ontario, Canada. *RHESL*, 5(15), 57-68.

Simpson, L. B. (2014). Land as pedagogy: Nishnaabeg intelligence and rebellious transformation. *Decolonization: Indigeneity, Education & Society*, 3, 3rd ser., 1-25.

Skeetchestn Indian Band. (n.d.). *Skeetchestn Indian Band*. Retrieved January 14, 2017, from <http://www.skeetchestn.ca/history>

Songhees Nation. (2017). *Our culture*. Retrieved January 14, 2017, from <http://www.songheesnation.ca/about-us/history/>

Statistics Canada. (2016). *The educational attainment of Aboriginal peoples in Canada*. Retrieved January 29, 2017, from https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_3-eng.cfm

Sutherland, D., & Henning, D. (2009). Ininiwi-Kisk n tamowin: A framework for long-term science education. *Canadian Journal of Science, Mathematics & Technology Education*, 9(3), 173-190.

Sutherland, D., & Swayze, N. (2012). Including Indigenous Knowledges and pedagogies in science based environmental education programs . *Canadian Journal of Environmental Education*, (17), 80-96. Retrieved April 21, 2017.

Styres, S., Haig-Brown, C., & Blimkie, M. (2013). Towards a pedagogy of land: The urban context. *Canadian Journal of Education*, 36(2), 34-67.

The Bill Reid Center, SFU. (n.d.). *Songhees*. Retrieved February 03, 2017, from https://www.sfu.ca/brc/virtual_village/coast_salish/Songhees.html

The Institute for Integrative Science and Health, Cape Breton University. (n.d.). *Two-Eyed seeing*. Retrieved October 09, 2016, from <http://www.integrativescience.ca/Principles/TwoEyedSeeing/>

- Truth and Reconciliation Commission of Canada (2015c). *Truth and reconciliation commission of Canada: Calls to action*. Retrieved from:
http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-23.
- Tuck, E., & Yang, W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, 1(1), 1-40. Retrieved February 3, 2017.
- Turner, D. (2013). On the idea of reconciliation in contemporary Aboriginal politics. In J. Henderson & P. Wakeham (Eds.), *Reconciling Canada: Critical perspectives on the culture of redress* (pp. 100-114). Toronto, ON: University of Toronto Press.
- University of Calgary. (n.d.). *Indigenous Methodologies*. Retrieved January 14, 2017, from
<http://www.ucalgary.ca/indigenous/research/methodologies>
- Wallace, S. (2016). Factors in Aboriginal student success final report on the research project We're all in this together: Keeping Aboriginal students in school (KASIS) (Rep.).
- Wildcat, M., McDonald, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the Land: Indigenous Land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, 3(3), I-XV. Retrieved November 13, 2016.