

First Peoples Principles of Learning: Elaborations

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Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors

This principle refers to the understanding that ultimately, the primary purpose of learning is for well-being. Teaching should support the well-being of the self, the family, the community, the land, the spirits, and the ancestors.

- Learning ultimately supports the well-being of the self.

As there are diverse learning styles and needs among all learners, there are diverse learning styles and needs among Indigenous learners. The uniqueness of each learner is valued and appreciated. Each person is perceived as coming into the world with specific gifts that can be nurtured as they grow, and it is the responsibility of the adults in the child’s life to acknowledge those strengths so those gifts can be supported to flourish. It is also recognized that as each person is unique, there are many different ways learning occurs. This understanding encourages having options for learners in terms so that they can access ideas and develop understanding through their strengths (as opposed to a deficit model).

- Learning ultimately supports the well-being ... of the family ... [and] of the community.

This element of the principle reflects the understanding that there is always a need to balance individual achievement against responsibilities to, and for, the family and community. Because of this belief, what is learned by individual needs to also be of benefit to their family and community. This idea can stand in contrast to an individualistic perspective where the individual is more important than the community. Responsibility to family and community is also supported by the concept that “we are all related”, a view of the world deeply held by most Indigenous peoples in North America (Cajete, 1994; Greenwood & de Ledeeuw, 2007; Kirkness, 1998). Imbedded in this concept is the belief that as human beings, we all share commonality, and what affects one person affects all others, and the world around us.

- Learning ultimately supports ... the well-being of the land.

The relationship to land and place is deeply rooted in First Peoples' cultural perspectives; living and learning is inextricably tied to sense of place, and connection to the land itself. Traditionally, in addition to the learner's family and community, the place in which they live, and the land that supports that life, provide the context and source for teaching and learning. The community and natural environment are regarded as the "classroom".

In contrast with a perception that people "own" land, is the understanding that people "belong to the land" (Hampton, 1995, p. 39). Education is tied to place; the two cannot be separated. This element of First Peoples' worldview includes the understanding that the health of human beings is tied to the health of the land they inhabit. Therefore, what is learned needs to not jeopardize health of the land that sustains us. Place is a way of knowing, experiencing, and relating with the world, and that the understanding of this anchors Indigenous peoples (Coulthard, 2010).

- Learning ultimately supports ... the well-being of the spirits, and the ancestors.

That last section of this principle honours the understanding that people owe their lives to those who have come before, and learning should respect what has been learned and passed from those ancestors to succeeding generations.

Relation to Other Educational Theory

The emphasis on relationship and connectedness in First Peoples' world-views parallels the stress on collaboration in constructivist learning. It supports the constructivist concept that learning is socially constructed, and the social constructivist theory that learning occurs as a result of the individual's interaction within a group or community (Vygotsky, 1978). The collaborative nature of group learning reflects Vygotsky's understanding that social interaction is the necessary and primary cause of ontological development of knowledge in an individual (Glassman, 1994).

Scardamalia and Bereiter (1994) also suggest that knowledge building is supported by intentional social interaction where participants provide constructive response to each other's work, and the positive effect of collaborative learning is supported by Rogers and Ellis in their explanation of collaboration within the framework of distributed cognition (Rogers & Ellis, 1994) whereby knowledge is shared throughout networks of people.

Implications for Classroom and School Include:

- Critically examining what is/has been considered important to teach and learn and why it is/has been considered important (i.e. asking what, or whose agenda, it serves, and whose knowledge is valued or devalued).
- Critically examining what is being learned in terms of how it affects self, family, community and the land.
- Connecting learning to the broader community. The classroom should extend beyond the walls of the classroom and school, and should also be connected to both "place" and the land. In addition, bringing in community members reinforces the links between school and the rest of the learners' lives.
- Ensuring that there are multiple access points in learning to enable all students to engage from where they are.
- Ensuring that learners have various ways to represent what they learn.

- Making explicit connections to the social responsibility aspect of learning.
- Beginning with looking at local contexts when examining topics or subject material, and then move outward.
- Engaging as much as possible with parents and extended family.

Relevant Core Competencies

Social Awareness and Responsibility

The ability and predisposition to cooperate and collaborate with others, display community-mindedness and stewardship, empathize with and appreciate the perspective of others, and create and maintain healthy relationships within one's family, community, society, and environment.

Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)

This principle reflects the Indigenous perspectives that everything is interconnected, that education is not separate from the rest of life, and relationships are vital.

- Learning is holistic...

Effective learning environments pay attention to the whole learner, including the physical, mental, social/emotional, and spiritual aspects of the person. The holistic nature of life and education are central and critical to the discussion about Indigenous views of education because they underpin Indigenous understandings of human development and learning.

The holistic nature of life and education reveals itself in multiple ways. The first of these is that there is not a natural separation between the concept of education and the rest of a person's experience. Learning is not viewed as an action separate from any other part of life. In a contemporary context, a person's experiences in school needs to be an authentic part of students' life experiences rather than be designed or experienced as a preparation for a life to be lived later. This emphasizes an understanding of education as contextual and integrated into all aspects of daily life. Where possible, learning activities should be a part of real-life situations, but where that is not possible, they should reflect real-life situations so that the knowledge learned is directly transferable to the learner's life. In this way the learning also helps to create and support community.

The holistic and integrative nature of life and education also manifests itself in the concept of four aspects of a whole and healthy being. Some Indigenous peoples use the concept of the Medicine Wheel or Circle to identify four aspects of being: mental, physical, spiritual, and emotional (Brown, 2004; Cajete, 1994; Calliou, 1995; Regnier, 1995; Weenie, 1998). It is important to note that these aspects do not exist in isolation from each other; they are viewed as equal and integrated parts of the whole, and each must be attended to simultaneously in the development of the whole person.

Of particular relevance to a discussion of Indigenous worldviews with respect to education is the understanding that each of these four aspects carries equal value and weight. The development and attention to the spiritual and emotional domains of a person is as important as the consideration given to the mental and physical. A complete integration of the four aspects of the person might be seen as running contrary to a post-industrial Euro-centric worldview which, some might argue, compartmentalizes these aspects of people's existence, with only some being contained within the domain of formal education or schooling. Ermine (1995) writes that "[w]estern science has habitually fragmented and measured the external space in an attempt to understand it in all its complexity

(p.103). He contends that this paradigm for understanding our existence hinders the ability to fully appreciate the holistic nature of life.

It is important to understand that “spiritual” in this context does not equate with religious doctrine. It is not a discussion about worship. It is embedded in the understanding how the world works, and is at the core of First Nations cultures. Doige (2003) indicates that “[o]ne’s spirituality is the inner resource that facilitates knowing oneself, one’s surroundings, and finding meaning for one’s self in connection and relation to those surroundings” (p. 146-7). Katz and St. Denise (1991) also indicate that in Indigenous ways of being in the world, both “the spirit and the heart are essential ways of knowing” (p. 31). The importance of nourishing the spirit is an integral part of learning.

The other aspect of the person that cannot be separated from the mental and physical aspects of the person is the emotional or “affective” capacity of a person. In fact, Brown (2004) posits that not only are the heart and mind connected, but that the heart is the root of the mind. Thus the development of the affective capacity is essential to the development of the cognitive capacity” (p.19). This attention to the emotional nature of life moves the concept of learning beyond mental capabilities and processes. To further support this idea, Brown (2004) asserts that because the heart and mind are connected, “educating the mind alone is absurd” (p.10). Adding to this concept is the fact that in some First Nations languages, the word for mind and heart is the same word.

- Learning is ... reflexive

Learning is reflexive. It builds upon itself, exponentially increasing as learners develop new knowledge and deeper understandings of how everything is ultimately connected.

- Learning is ... reflective

Learning does not happen without reflection. Reflective thinking is a key process in coming to understand new concepts and determining the relevancy of information and ideas. In many of the stories shared by elders, there is an intention to help the listener learn what he or she needs to learn without explicitly saying what the lesson is. Often this story is repeated several times in a life time and each time the listener is expected to decide for him or herself what needs to be learned from the story. The ability to meaningfully reflect is a necessity for such a process.

- Learning is ... experiential

Meaning is made from direct experience. Learning is achieved by doing and thinking, through engaging in a hands (and minds on) approach. It “provides a tactile and tangible connection between knowledge and life” (Battiste, 2002). The experiential aspect of making meaning from learning also reinforces the need for meaningful reflection to process the experience into knowledge and understanding.

- Learning is ... relational (focused on connectedness, on reciprocal relationships, and a sense of place).

A recurring theme that surfaces in an examination of First Peoples’ perspectives of education is the importance of relationship. The concept of “we are all related” is understood by most First Peoples in British Columbia. It is a phrase echoed in many documents and uttered by many Indigenous peoples in Canada. Imbedded in this concept is the belief that as human beings, we are all interconnected and what affects one person affects others as well. Treating all people as related (or as kin) requires and reinforces a way of being in the world that helps shape our actions, as we think about how our

actions affect those around us. The concept of relationship also encompasses relationship to self, relationship to others (current and past) and relationship to land and place.

The concept of relationship also encompasses “community”, and it is through the context of knowing one’s community that people can understand themselves. It is also asserted that “...context is essential in education and determines the meaning *and application* (added emphasis) of teaching and learning” (Cajete, 1994, p.165). Context can be understood to relate not only to the people, community, and place that one is a part of, but also to the purpose of learning. What and how we learn is connected to our contexts (place, time, needs) and therefore has a significant impact on the choices that are made.

In all discussions of relationship in Indigenous contexts, there is both a sense of belonging to, and relating to, others. This is tied to the idea of collective identity and responsibility (Cajete, 1994; Dene Kede, 1993; Greenwood & de Ledeeuw, 2007; Kirkness, 1998). Learning is a highly social process that nurtures relationships within the family and the community. In this context, the meaningful incorporation of First Peoples’ world views, with their associated knowledge bases, values, beliefs and preferred pedagogical practices, into the education system, would benefit both Indigenous and non-Indigenous learners.

This principle also emphasizes the relationship to the land. In First Peoples’ cultural constructs, living and learning is inextricably tied to sense of place and connection to the land. The community and natural environment are regarded as the “classroom”.

Relation to Other Educational Theory

The importance of reciprocal relationships in learning is also echoed by Scardamalia and Bereiter (1994), who also suggest that knowledge building is supported by intentional social interaction where participants provide constructive response to each other’s work. In addition, the positive effect of collaborative learning is supported by Rogers and Ellis in their explanation of collaboration within the framework of distributed cognition (Rogers & Ellis, 1994), whereby knowledge is shared throughout networks of people.

The emphasis on the experiential nature of learning supports the constructivist approach to learning which emphasizes “knowledge and competence as products of the individual’s conceptual organization of the individual’s experience” (von Glasersfeld, 2008, p. 48). Learners actively engage in experiences that allow them to develop new understandings based on the interaction of their prior experience and perceptions and the new experience. They construct knowledge through their learning experiences. The emphasis on experiential learning is also supported by Brown, Collins and Duguid (1989) in their emphasis on using authentic activity for learning.

A link to sense of place is also echoed in situated learning, another concept in constructivist pedagogy. Brown, Collins and Duguid (1989) emphasize that in order for learning to take place, activity and enculturation are paramount. They argue that knowledge is “situated, being in part product of activity, context and culture in which it is developed and used” (Brown, Collins & Duguid, 1989, p. 32). Knowledge is a tool to be developed and used in the appropriate, authentic context to become meaningful and learned effectively. While they emphasize the link between the learning and the activity, one could argue that the space or place of the learning also influences what is learned. In a similar vein, constructivist theorists view learning as highly contextualized; knowledge does not exist independent of the culture and history of people and place (John-Steiner & Mahn, 1996).

Implications for Classroom and School Include:

- Developing strong healthy relationships between teacher and learner. The relationship between teacher and learner is often considered one of the primary indicators of student success for First Nations, Métis and Inuit students.
- Integrating family (including extended family) and community members into the learning experiences in classrooms and schools.
- Helping learners develop relationships with the surrounding community (both people and land).
- Developing cross-curricular learning experiences for learners.
- Including as much experiential, authentic learning opportunities as possible.
- Ensuring learners see relevancy in what they are learning.
- Providing choice and flexibility in activities so that different aspects of the whole self can be attended to.
- Using humour to facilitate relationships and learning.
- Helping learners develop the skills they need for effective self-reflection.
- Respectfully incorporating the use of the circle for group discussion.
- Creating collaborative and cooperative learning opportunities.
- Providing apprenticeship options for learning.
- Providing opportunities for learners to mentor, or be mentored by, other students.
- Providing multiple access points for all learners in learning activities so that everyone can access opportunities for learning.
- Providing multiple ways for learners to represent their learning.
- Understanding that connecting learning to place also means providing opportunities for learners to develop their knowledge and understanding of the First Peoples who have inhabited this land for thousands of years.

Relevant Core Competencies

Positive Personal and Cultural Identity

- The awareness, understanding, and appreciation of all the facets that contribute to a healthy sense of oneself. It includes awareness and understanding of one's family background, heritage(s), language(s), beliefs, and perspective, and sense of place.

Social Awareness and Responsibility

- The ability and predisposition to cooperate and collaborate with others, display community-mindedness and stewardship, empathize with and appreciate the perspective of others, and create and maintain healthy relationships within one's family, community, society, and environment.

Communication

- The set of abilities that students use to acquire, impart, and exchange information, experiences and ideas; to connect, engage, and collaborate with others; and to recount and reflect on their experiences and learning.

Learning involves recognizing the consequences of one's actions

This principle highlights the understanding that people must take responsibility for their actions, and that every action has a consequence (both intended and unintended). It is understood that actions may have consequences for the individual as well as for others. Given the awareness that we are all related, it is important to think about how one's actions may affect others (such as family, community, and/or the land), instead of focussing on compliance behaviours. This principle also highlights the need for authentic learning situations, and the need for learner autonomy, as recognizing the consequences of one's own actions can only genuinely occur when the learner has made autonomous choices.

Relation to Other Education Theory

Chickering and Gamson (1987) point out that an effective learning environment respects and supports diverse talents and learning styles; the way in which one person learns may not be effective for another. Providing learners with autonomy over their learning not only motivates them but also provides them with avenues to pursue knowledge in the form that best suits them. This leads to greater knowledge acquisition, motivation and most importantly, supports and fosters a learner's talents and strengths, which can also be used to support learning in other areas of need for the learner.

Implications for the Classroom and School Include:

- Providing learners with appropriate levels of autonomy and choice in their learning. This might include some choice in what they learn, in how they learn, and in how they represent what they have learned. How this looks will depend on the age and skill sets of the learner.
- Helping learners become aware of the natural consequences (to themselves and others) of their actions. This might include letting learners make mistakes and then helping them to learn from those mistakes (as long as those mistakes do not cause harm to themselves or others).
- Focussing on reflective and critical thinking to help learners understand the natural consequences of their actions (as opposed to punitive consequences).

Nurturing the development of empathy and understanding of the interconnected of all being and the land. This helps learners extend their thinking of consequences beyond themselves.

Relevant Core Competencies

Personal Awareness and Responsibility

- Involves all aspects of personal well-being; making ethical decisions and taking responsibility for one's actions and how they impact self and others; and self-regulation.

Social Awareness and Responsibility

- The ability and predisposition to cooperate and collaborate with others, display community-mindedness and stewardship, empathize with and appreciate the perspective of others, and create and maintain healthy relationships within one's family, community, society, and environment.

Learning involves generational roles and responsibilities

This principle reflects the understanding that teaching and learning is the responsibility of all members of a community. The responsibility for teaching *belongs to everyone* in the community. As people develop their skills and knowledge in particular areas, it is expected that they will in turn teach others. This is seen as a responsibility that ultimately strengthens communities. Conversely, the responsibility for learning also lies with the learner. It is the responsibility of the learner to determine what they are supposed to learn from any given situation. For example, a learner may be told a story that is intended to help the learner learn something. Rather than being explicitly told what the lesson is, the learner must figure that out for themselves. This process allows learners to develop understandings that are applicable to them personally, and that they see as relevant (based on their specific context).

A common understanding of this principle is that Elders in communities are significant teachers for learners. Rather than age alone dictating the designation of “Elder” or Knowledge-Keeper”, it is understood that an Elder/Knowledge-Keeper is a knowledgeable person who understands things that need to be learned by younger generations. Importantly, this person is also a model for learners. In First Peoples’ cultures respect for Elders is embedded in peoples’ consciousness. The Elders actions and words serve as models for learners. Elders/Knowledge-Keepers often notice when a teaching needs to happen based on the needs of the learner, and if there is a relationship established, then move to help the learner. Elders/Knowledge-Keepers can also be sought out when the learner recognizes that learning is needed.

Relation to Other Education Theory

Jonassen (1999) refers to behavior modelling and cognitive modelling as methods of supporting a constructivist learning environment. These two terms precisely describe the traditional modelling done by Elders/Knowledge-Keepers in First Peoples’ communities.

This principle supports the concept that learning is a socially constructed activity (Jonassen, 1999). The reference to generational roles refers to both the learner and the teacher. Traditionally, all Elders of a community taught learners, and in a contemporary society this role can also be filled by the classroom teacher and more capable peers. One of the roles of the teacher is to ensure that learners are ready to learn. In constructivism this would be reflected by the concept of scaffolding – providing initial supports that are gradually reduced until the learner is able to master the new learning (Hmelo-Silver, Duncan and Chinn, 2007). The roles and responsibilities also extend to the learners’ peers who, in group learning situations, also have responsibilities to interact and support each other in the learning.

The concept of generational roles and responsibilities being integral to learning in a First Peoples’ context also refers to the traditional style of teaching and learning where learners would work side by side with more knowledgeable experts (Elders) to learn a new skill or develop needed knowledge in an authentic setting. Brown, Collins and Duguid (1989) refer to this apprenticeship model as learning through cognitive apprenticeship. and it reflects a constructivist approach to teaching and learning.

Implications for Classroom and School Include:

- Providing learning opportunities for students to teach and learn from other students in different ages/grades.
- Providing leadership opportunities in a range of contexts.

- Connecting Elders/Knowledge-Keepers and learners in and out of classrooms and schools.
- Connecting the classroom and school to other members of family and community.
- Bringing learners into the community to learn from people in other contexts.
- Providing opportunities for learners to mentor younger students, or be mentored by older learners or adults.
- Explicitly modelling learning processes for students.
- Providing necessary scaffolding and gradual release as the learner develops mastery.
- Help learners develop their reflective capacity to engage in understanding their own learning needs.

Relevant Core Competencies

Personal Awareness and Responsibility

- Involves all aspects of personal well-being; making ethical decisions and taking responsibility for one's actions and how they impact self and others; and self-regulation.

Social Awareness and Responsibility

- The ability and predisposition to cooperate and collaborate with others, display community-mindedness and stewardship, empathize with and appreciate the perspective of others, and create and maintain healthy relationships within one's family, community, society, and environment.

Learning involves patience and time

This principle reflects the awareness that knowledge and understanding is built over time, often requiring a recursive approach to teaching and learning. It reflects the understanding that Indigenous knowledge is the result of centuries of learning and teaching in by Indigenous peoples.

This principle directly supports the idea that learning is an individualistic process that cannot be rushed or arrived at according to a pre-determined schedule (including specific age). This refers to the understanding that learning happens when a person is ready for it, and that learning is most effective when it occurs in a setting where the learning can be applied in an authentic context. The need for patience and time is also a requirement to develop thorough conceptual and transferable understandings, rather than surface level familiarity. In order to develop understanding, information needs to be examined/explored from multiple perspectives, in different contexts, and over time.

In First Peoples' contexts, this understanding of learning is also the result of cultural values of collaboration and taking the time needed to develop consensus. Collaboration requires that all people in a group contribute according to their specific skill sets, or "gifts". Through collaboration group members also learn from each other.

Traditionally, group decisions were often made through consensus rather than by voting, and this requires the time needed for everyone to have a say and be heard. It requires skilled negotiation, a process that also requires patience and time, and encourages people to listen to and understand differing perspectives. And while the process takes longer than a "majority wins" process, decisions that result from the consensus process tend to build stronger communities.

Relation to Other Education Theory

It is recognized that learning in a constructivist environment usually requires more time than might be needed in a more didactic, knowledge as transmission teaching environment (Perkins, 1999, as cited in Wing-Mui So, 2002). The increased time and patience is also reflected in collaborative learning environments which require members of a group to make connections and organize their knowledge. In addition, the need for time and patience indicated in this principle is also needed to encourage learners to reflect on their performance in order to further their own learning. Jonassen (1999) indicates that in a constructivist learning environment, a good coach encourages and supports learners to reflect on their own learning.

Implications for Classroom and School Include:

- Ensuring that learning is about understanding concepts and the application of knowledge, rather than only memorization of information.
- Allowing for time to develop relationships and to revisit prior learning to help build new knowledge.
- Revisiting concepts multiple times, providing learners with opportunities to deepen their knowledge by layering their understanding (recursivity).
- Providing for flexible scheduling in schools and in classrooms so that learners can take more or less time to learn what they need to know and understand.
- Understanding the value of Indigenous knowledge that has been built over centuries.

Relevant Core Competencies

Critical Thinking

- Involves making judgments based on reasoning: students consider options; analyze these using specific criteria; and draw conclusions and make judgments. Critical thinking competency encompasses a set of abilities that students use to examine their own thinking, and that of others, about information that they receive through observation, experience, and various forms of communication (2015, BC Ministry of Education).

Personal Awareness and Responsibility

- Includes the skills, strategies, and dispositions that help students to stay healthy and active, set goals, monitor progress, regulate emotions, respect their own rights and the rights of others, manage stress, and persevere in difficult situations. Students who demonstrate personal awareness and responsibility demonstrate self-respect and express a sense of personal well-being (2015, BC Ministry of Education).

Learning recognizes the role of Indigenous knowledge

This principle reflects the understanding that Indigenous peoples hold an extensive wealth of knowledge, even if this knowledge has not always been recognized by post-industrial Euro-centric cultures (Battiste, 2005). It also recognizes that Indigenous knowledge contributes to the non-Indigenous understandings in the world. As one example, educators are now growing in their understanding that the First Peoples Principles of Learning represent a highly effective approach to

education that, among other things, supports deep learning, inclusivity, and responding to learners' needs.

What is Indigenous Knowledge (IK)?

IK can be broadly defined as the complex knowledge systems that have developed over time by a particular people in a particular area and that have been transmitted from generation to generation. It includes ecological, scientific, and agricultural knowledge in addition to processes of teaching and learning. It also encompasses both the traditional and the contemporary as Indigenous knowledge continues to expand and develop. Because Indigenous knowledge has often been referred to as "traditional knowledge," some people view it as unchanging knowledge based only in the past. Instead it is "an adaptable, dynamic system based on skills, abilities, and problem-solving techniques that change over time depending on environmental conditions" (Battiste, 2005). The body of IK can no more be summed up than the body of knowledge of any other society. It is vast, and based on context, often connected to specific geographical areas.

Inclusion of non-appropriated Indigenous knowledge (in the form of curriculum, resources, pedagogy etc.) in schools serves multiple purposes. It honours the fact that Indigenous peoples do have a robust and deep knowledge base that has been previously either ignored or denigrated (often as a part of colonial policies); it makes room in our schools for Indigenous learners to see elements of who they are reflected around them (an often necessary condition for the success of almost all learners), and it helps non-Indigenous learner develop understandings to bridge some of the divide between Indigenous and non-Indigenous peoples in Canada. Integrating the traditional Indigenous perspectives of teaching and learning can also be immensely valuable in creating a more responsive education system for *all* students.

Relation to Other Education Theory

Constructivism supports the belief that there is not one objective reality to which all learners aspire to know and understand. Instead, the learners makes sense of the world based on their experiences in it (von Glasersfeld, 2008). In this light, one can appreciate that there are different ways of understanding knowledge. While most societies tend to value some types of knowledge over others, one can also presume that there can be value found in knowledge systems of various cultures (Jegede, 1995).

Rather than criticize the learners' perspectives if they seem to contradict the paradigms being promoted in the classroom environment, an effective educational experience helps articulate learners' pre-existing conceptual understandings and uses these to help to create bridges to new understandings (Aikenhead & Jegede, n.d.). Jegede (1995) proposes that the cultural knowledge held by the learner, even when it may seem to come into conflict with other concepts being taught, needs to be recognized, and can in many cases be used to help learners understand concepts stemming from other cultural worldviews. However, it is important to not view what has been traditionally taught in formal "Western" education as the pinnacle of learning. Providing opportunities for multiple ways of understanding the world can lead to a deeper understanding of the complexities of knowledge.

Implications for Classroom and School Include:

- The willingness of educators to see themselves as learners, and seek to develop their own understandings first
- Recognizing that all learners benefit from learning about (unappropriated) Indigenous knowledge and perspectives.
- Critically examining whose knowledge and voice has been valued in the education system.
- Understanding that education systems are not value neutral. Instead what is taught, and how it is taught reflects cultural values. Helping learners understand this may help them navigate through differing cultural beliefs.
- Ensuring meaningful inclusion of Indigenous content and/or perspectives in all curricular areas (without appropriation).
- Recognizing that Indigenous knowledge is connected to specific contexts. There is a great diversity in First Peoples across not only Canada, but also within BC. Because of this, it is important to understand that teaching resources that might be appropriate and relevant in one community might not be appropriate for another community or school district.
- Starting local. When deciding upon content that will be incorporated into the school or classroom, begin by checking with any local First Nations communities or Aboriginal organizations. Some may be able to help provide resources that are appropriate.
- Recognizing that local Indigenous people can also be effective resources. This can be facilitated by developing relationships with the local community or First Nations, Metis, or Inuit organization(s).
- Ensuring that Indigenous knowledge is not trivialized by turning deeply meaningful cultural practices into “arts and crafts” in the classroom. Instead, it may be more meaningful to help learners understand the cultural practices, and learn about the practices in an authentic venue.

Implications for Specific Curricular Areas

While each of the following areas is described separately (and briefly), it is recognized that multi-disciplinary educational experiences may better reflect the holistic emphasis of the FPPL. In general, the explicit inclusion of Indigenous knowledge and perspective in the curriculum is based on the understanding that First Peoples perspectives and knowledge are a part of the historical and contemporary foundation of BC and Canada. Practical applications of Indigenous knowledge are balanced with deeply respectful spiritual practices leading to informed decision-making that is in the best interest of self, others and the world around us“ (Michell et al, 2008).

In addition, the concept of learning through story or narrative is not restricted to Language Arts learning. Story is understood as a fundamental means to through which people can learn in all aspects of life. The emphasis on story also help learners to organize new concepts that develop from their learning.

For Sciences – it is important to understand that there are additional understandings of science that are not reflected in how science has often been taught in schools (which is not always in accord with how science is practiced outside of schools, what many refer to as Western science). Increasingly,

both Canadian and international research has been “discovering” truths that have already long been known and shared by First Peoples. Incorporating First Peoples’ perspectives and knowledge in school science can “broaden all people’s worldview and understanding of our interconnected relationship with the earth and environment. Hence, incorporating First Peoples’ perspectives in school science has the potential to resolve social, cultural, and environmental crises that impact all humanity” (Michell et al. 2008).

In “Education Indigenous to Place” (2007) Barnhardt and Kawagley share the richness of Indigenous knowledge in the context of Alaskan First Peoples. In BC, the First Nations Education Steering Committee (FNESEC) and the First Nations Schools Association (FNSA) have developed a Science First Peoples 5-9, and Secondary Science First Peoples Teacher Resource Guides to help educators understand how to integrate local Indigenous knowledge into classrooms.

For Language Arts – it is important to understand that the word “story” in First Peoples’ contexts has a different meaning than it does in post-industrial Euro-centric contexts. Stories are narratives (traditionally oral, but now also written) that are used to teach skills, transmit cultural values and mores, convey news, record family and community histories, and explain our natural world. In First Peoples’ contexts, stories do not equate with the construct of “short story” as is often taught in BC classrooms. They do not necessarily follow what is often taught as the conventional story structure (i.e. follow the “story arc”), and can often have complex circular or cyclical structures. The story is an evolving form in Indigenous cultures, as is evidenced by the powerful work of many contemporary story-tellers who create story through spoken word, song, writing, and music. The explicit inclusion of Indigenous literature (in its various forms) in BC schools and classrooms is based on the understanding that this is the land from which that rich literature originates.

In BC, provincial courses such as English First Peoples 10, 11, and 12 have rich teacher resource guides created by FNESEC/FNSA that can help educators navigate through potential resources to help teach these and other ELA courses.

For Social Studies – it is important to reframe some of the conversation around the history and development of Canada. There is increased awareness of the need to “teach social studies from the perspective of peoples who have been traditionally marginalized in, or excluded from, national narratives told in schools. This shift in outlook reflects a move away from engaging students with any singular conception of a national past” (Scott, 2013). This shift includes ensuring multiple perspectives in the telling of Canada’s stories of origin, its histories, and the movements of people. It also means including an understanding of the richness of Indigenous histories prior to, and post, European contact with First Peoples in this land. It also requires an age-appropriate examination of the effects of colonization and the legacies of governmental policies over the history of Canada, including Residential School policies that have a significant effect on our society today. An inclusion of First Peoples’ perspectives in Social Studies classes requires a critical examination of what is considered important to teach and learn, and whose voices have been valued or devalued in determining what is important to learn and understand in classrooms.

Resources such as FNESEC/FNSA’s BC First Nations, Land, Title and Governance and Indian Residential Schools and Reconciliation Teacher Resource Guides can facilitate further learning in this area.

For Math – As with other curricular areas, there is growing recognition that education should be culturally responsive, and Math is no exception. Recent work on curricular resources in Math, such as *Thuuwaay, ‘Waadlu x an’: Mathematical Adventures* (Nicola & Jovanovich, 2011) demonstrates that the learning of Math can be approached through a culturally relevant lens. Students can be

supported in understanding the mathematical concepts that are a part of Indigenous cultural practices. FNEESC/FNSA have also developed a *Math First Peoples Teacher Resource Guide* to help educators integrate First Peoples knowledge into Math. In addition to these resources, exploring Math through an Indigenous lens is a part of the [UBC Aboriginal Mathematics K-12 Network](#).

For Health and Physical Education – The emphasis on the need for balance integration of all aspects of being, and the interconnectedness of a person’s physical, mental, spiritual and emotional aspects are of particular significance to the teaching and learning in Health curricula. In addition, as has been noted, the health of human being is linked to the health of the land and environment.

Relation to Other Educational Theory

The concepts of culturally relevant and culturally responsive curricula support the need to integrate indigenous knowledge in all curricular areas. This process has come to be termed by many researchers as “culturally relevant” or “culturally responsive” teaching, and it has been identified as a necessary element of student success (Allen&Labbo, 2001; Gay, 2002; Ladson-Billings, 1995; Young, 2010). However, the inclusion of First Peoples’ knowledge and perspectives into classrooms for all students is necessary for more than culturally relevant or responsive education. The knowledge and languages of First Peoples in BC are connected to the land in this province. BC First Peoples’ languages and knowledge are not taught and learned anywhere else in the world; they are a part of the collective history and contemporary knowledge of BC and Canada.

Implications for the Classroom and School Include:

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- Integrating indigenous knowledge and perspectives in all curricular areas as an integral part of all learning (and not as an “add-on”, or to do “only if there is time”).
- Educators undertaking their own learning to help prepare them to respectfully integrate First Peoples’ perspectives and content into their classrooms and/or schools.
- Modelling for learners the importance of Indigenous knowledge and perspectives.
- Understanding that integrating authentic Indigenous knowledge will require relationships with local First Nations or Indigenous organizations to learn about locally held knowledge.
- Modelling for learners educators’ own learning about Indigenous knowledge and perspectives if necessary.

Relevant Core Competencies

Critical Thinking

- Involves making judgments based on reasoning: students consider options; analyze these using specific criteria; and draw conclusions and make judgments. Critical thinking competency encompasses a set of abilities that students use to examine their own thinking, and that of others, about information that they receive through observation, experience, and various forms of communication (2015, BC Ministry of Education).

Learning is embedded in memory, history, and story

In First Peoples' cultures, knowledge was traditionally kept in oral tradition. The oral tradition, still highly valued today, includes oral narratives (or stories) that are used to teach skills, transmit cultural values, convey news, record family and community histories, and explain the natural world. In addition to expressing spiritual and emotional truths (through symbol and metaphor), specific stories also provides a record of literal truths (regarding events and/or situations) as narratives were passed unchanged from generation to generation.

This tradition (both content and process), and the process of learning through story helps to create the learners' concept of the world. The emphasis on history and story help learners to organize new concepts that develop from their learning.

“For countless centuries, First Nations knowledge, traditions, and cultures have been passed down from one generation to another in stories, and narratives, as well as through songs, dances and ceremonial artifacts. Before Europeans arrived in BC, First Nations had oral cultures: their languages had no written form. The oral tradition was integrated into every facet of life and was the basis of the education system. The education system in an oral tradition is very precise and procedural: the information is taught to the next generation exactly as it was taught to the one before. Stories are used because they are easier to remember: you learn by listening closely and remembering. The oral tradition passed on the spiritual beliefs of the people and the lineage of families. It recorded ownership of property and territory, political issues, legal proceedings and survival skills. The oral tradition also mapped the geography of an area, and it recorded history.”

BC First Nations Studies 12 Textbook

First Peoples' knowledge is also developed in historical and cultural contexts; that is why there is an emphasis in First Peoples' cultures to keep the oral tradition alive, so that as each individual grows, he or she is aware of what has come before, and how it influences both what is now and how each person came to be (often shared in explanations of lineage and affiliation – a common First Peoples' method of introduction – which also emphasize the importance of relationship). The development in historical and cultural contexts also means that much knowledge is locally-based.

Relation to Other Educational Theory

Constructivism posits that knowledge is created by individuals in a historical and cultural context (von Glasersfeld, 2008).

Implications for Classroom and School Include:

- Using story and narrative to teach across curricular areas.
- Providing learners with opportunities to share their stories, and their voices.
- Understanding the oral tradition, as well as its value and legal implications in Canada.
- Providing learners with the opportunities to listen to and connect with the stories of others.
- Understanding that all education systems are constructs based on specific sets of cultural values; what is considered important to learn is based on sets of the cultural values in a particular context, including the place (land) where the learning occurs.
- Thinking critically about what we consider important for students to learn and about how we choose to structure their learning experiences.

Relevant Core Competencies

Communication

- Encompasses the set of abilities that students use to impart and exchange information, experiences and ideas, to explore the world around them, and to understand and effectively engage in the use of digital media (2014, BC Ministry of Education).

Critical Thinking

- Involves making judgments based on reasoning: students consider options; analyze these using specific criteria; and draw conclusions and make judgments. Critical thinking competency encompasses a set of abilities that students use to examine their own thinking, and that of others, about information that they receive through observation, experience, and various forms of communication (2015 BC Ministry of Education).

Positive Personal and Cultural Identity

- Involves the awareness, understanding, and appreciation of all the facets that contribute to a healthy sense of oneself. It includes awareness and understanding of one's family background, heritage(s), language(s), beliefs, and perspectives in a pluralistic society (2014, BC Ministry of Education).

Learning requires exploration of one's identity

This principle reflects the importance of identity in relation to learning. Identity is what connects people to each other, to communities, and to the land. The exploration of one's identity includes developing an understanding of one's place in the world, in addition to being able to identify all the factors that contribute to how people see themselves. These factors include their strengths and their challenges, their innate abilities (gifts) and capacities to learn. In addition to using this understanding to help one grow in life, knowing one's own strengths and challenges is a part of the responsibility a person has to his or her family and community, as a people are considered to have a duty to use them to contribute to others (family, community, and land).

In First Peoples communities, the emphasis on identity is often overtly reflected in the practice of people traditionally situating themselves in relation to their family and community when introducing themselves to others. Identity is related to where one feels a connection (place), and with whom one feels a belonging (community).

Relation to Other Educational Theory

This principle touches upon two components of constructivism. Vygotsky proposed that social interaction plays a fundamental role in the development of knowledge and that social learning comes before development (Vygotsky, 1978). The role of social interaction is paramount, and a significant part of that role is the understanding of who one is within his or her social contexts, as an individual's self-concept is often embedded in his or her social contexts (Ladson-Billings, 2000).

Constructivist theory proposes that the learner must make sense of his or her experiences into order to develop knowledge (von Glasersfeld, 2008). If knowledge is created by the individual, knowing one's self can help the learner develop deeper awareness of the process of his or her own knowledge construction. It can be argued that in order to facilitate this process the learner needs to also come to know who he or she is, and develop some awareness of the concepts he or she knows or understands.

Implications for Classroom and School Include:

- Recognizing that “culture” is a complex construct and that people usually identify with many cultural contexts (including, but not being limited to, heritage).
- Recognizing that learners may feel that they have multiple identities based on significant differences between what is valued at home, in their communities, and in their schools and classrooms.
- Avoiding generalizing about learners based on cultural stereotypes (i.e. all Indigenous learners don’t make eye contact, are shy, or follow traditional ways).
- Recognizing that the development of positive personal and cultural identity in many Indigenous learners is made more complex because of the perceptions of Indigenous peoples held by many people in the larger society, and the legacy of colonial laws in Canada.
- Creating safe opportunities for learners to articulate and express their developing identities.
- Understanding that educators need to be aware of the relationship between their own identities and their roles in education.

Relevant Core Competencies

Positive Personal and Cultural Identity

- The positive personal and cultural identity competency involves the awareness, understanding, and appreciation of all the facets that contribute to a healthy sense of oneself. It includes awareness and understanding of one’s family background, heritage(s), language(s), beliefs, and perspectives in a pluralistic society (2014, BC Ministry of Education).

Personal Awareness and Responsibility

- Includes the skills, strategies, and dispositions that help students to stay healthy and active, set goals, monitor progress, regulate emotions, respect their own rights and the rights of others, manage stress, and persevere in difficult situations. Students who demonstrate personal awareness and responsibility demonstrate self-respect and express a sense of personal well-being (2015, BC Ministry of Education).

Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations

Whether or not knowledge is shared depends on the type of knowledge, who holds that knowledge, and the context. Some knowledge is freely shared, while other knowledge is not. Some knowledge is held by specific people, families, clans, or First Nations, and permission must be gained from the holder(s) before it is shared. An example of this are some narratives or “stories” that cannot be retold unless permission is given by the person or family to whom the story belongs. Being told a story is not implicit permission to retell it, such as reading a story from another person or culture does not mean one can rewrite it as one’s own.

There is knowledge within various First Peoples communities that is not intended to be shared with people who are not members of the community. These may include specific ceremonial practices that incorporate songs and dances that belong to specific people or families. For examples, many First

Nations have long house teachings that happen in traditional ways, and these teachings are honoured by not sharing them with people who are not a part of the process.

The understanding that some knowledge is not freely shared requires the people who do not hold that knowledge to be comfortable with asking respectful questions about what they can use, and understanding when they cannot use knowledge. It also requires thinking about how to avoid trivializing knowledge or cultural practices of others by trying to replicate practices in inauthentic contexts.

Relation to Other Educational Theory

Ownership of knowledge can be loosely compared to the concept of copyright. It also encompasses Traditional Knowledge and Intellectual Property, and connects to Ownership, Control, Access, and Possession (OCAP).

Implications for Classroom and School Include:

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- Ensuring that First Peoples knowledge can be shared before using it. This can mean double checking the source of material (ensuring that that a story was not written down by a non-Indigenous person and published without permission).
- Asking about what local protocols might be attached to specific knowledge or process.
- Being comfortable with asking respectful questions.
- Not assuming that Indigenous learners will share all aspects of their home and community lives in the school or classroom.
- Thinking about reciprocity. If one is asking for something to be shared, ask what is being provided in return.
- Ensuring that Indigenous knowledge is not trivialized by turning deeply meaningful cultural practices into “arts and crafts” in the classroom. Instead, it may be more meaningful to help learners understand the cultural practices, and learn about the practices in an authentic venue.

Relevant Core Competencies

Personal Awareness and Responsibility

- Includes the skills, strategies, and dispositions that help students to stay healthy and active, set goals, monitor progress, regulate emotions, respect their own rights and the rights of others, manage stress, and persevere in difficult situations. Students who demonstrate personal awareness and responsibility demonstrate self-respect and express a sense of personal well-being (2015, BC Ministry of Education).

Social Responsibility

- The ability and disposition to consider the interdependence of people with each other and the natural environment; to contribute positively to one's family, community, society, and the environment; to resolve problems peacefully; to empathize with others and appreciate their perspectives; and to create and maintain healthy relationships (2015, BC Ministry of Education).

Source: <https://firstpeoplesprinciplesoflearning.wordpress.com/first-peoples-principles-of-learning/>

Accessed: August, 2019