

**SUSTAINABILITY AND INDIGENOUS WORLDVIEWS: A CIRCLE OF BEAUTY  
AND WISDOM FROM MOTHER EARTH'S CHILDREN'S CHARTER SCHOOL**

by

Candice Anita Amber

Graduate Certificate in Education, The University of Calgary, 2012

M.Ed., The University of British Columbia, 1989

B.Sc.Ed., The University of Tennessee, Knoxville, 1980

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE COLLEGE OF GRADUATE STUDIES

(Interdisciplinary Studies)

THE UNIVERSITY OF BRITISH COLUMBIA

(Okanagan Campus)

December 2017

© Candice Anita Amber, 2017

The undersigned certify that they have read, and recommend to the College of Graduate Studies for acceptance,  
a thesis entitled:

**SUSTAINABILITY AND INDIGENOUS WORLDVIEWS: A CIRCLE OF BEAUTY AND  
WISDOM FROM MOTHER EARTH'S CHILDREN'S CHARTER SCHOOL**

submitted by Candice Anita Amber in partial fulfillment of the requirements of the degree of  
Doctor of Philosophy.

Dr. Carol Scarff, Faculty of Education  
**Supervisor, Professor**

Dr. Margaret Macintyre Latta, Faculty of Education  
**Supervisory Committee Member**

Dr. Philip Balcaen, Faculty of Education  
**Supervisory Committee Member**

Dr. Martin Blum, Faculty of Creative and Critical Studies  
**Supervisory Committee Member**

Dr. Judy Gillespie, Faculty of Social Work  
**University Examiner**

Dr. Celia Haig-Brown, York University  
**External Examiner**

December 2017

**Date Submitted to Grad Studies**

## Abstract

This qualitative study celebrates Mother Earth’s Children’s Charter School (MECCS), the first public Indigenous charter school in Canada and *their* Cree and Stoney Indigenous worldviews and Indigenous learners. This study reveals a sustainability ethos at the heart of *their* Cree and Stoney worldview as Sustainability is: “We are Mother Earth” and Sustainability is: “Relationality or Relationship.” The Cree and Stoney languages have no exact words for sustainability but rather deeply held beliefs that reveal a sustainability ethos through a circle of beauty and wisdom. The purpose of this study is to explore an enhanced and relational ethos of sustainability through respect for spirit, place, and humanity throughout non-mainstream worldviews (e.g., Indigenous). This study offers a broader concept of a sustainability ethos than the more limited European, Western, dominant definitions of sustainability that focus on variations of the pillars of people, place, and profit (e.g., commodity). The concept of sustainability cannot be compartmentalized because all people, livelihoods, and the planet are one and connected through relationships in life in the medicine wheel, circle of life, and seven sacred teachings. Therefore, this study replaces the notions of pillars with the circle of beauty and wisdom from the Cree and Stoney worldview as practiced and lived at MECCS. The circle of beauty and wisdom reveals the MECCS sustainability ethos as wisdom-on-the-ground experiences that celebrate thriving learners, the planet Mother Earth, and livelihoods. Foregrounding the circle of beauty and wisdom of Indigenous worldviews, and validating Indigenous worldviews as equal to non-Indigenous worldviews, makes possible the potential for a broader discourse of sustainability. As a non-Indigenous teacher with several years of involvement with Aboriginal Education, I deeply value and respect Indigenous perspectives. This study extends an *invitation* to learn from

Cree and Stoney (Treaty 6) Indigenous worldviews at MECCS. For the purpose of this study, aspects of Appreciative Inquiry and Indigenous Methodologies are used to interview Indigenous and non-Indigenous adult participants to explore Cree and Stoney worldviews as lived and practiced at MECCS.

## **Preface**

The University of British Columbia (Okanagan) Behavioural Research Ethics Board granted ethics approval for this research with certificate number H15-02191.

## Table of Contents

<b>Abstract</b> .....	<b>iii</b>
<b>Preface</b> .....	<b>v</b>
<b>Table of Contents</b> .....	<b>vi</b>
<b>List of Tables</b> .....	<b>ix</b>
<b>Acknowledgements</b> .....	<b>x</b>
<b>Dedication</b> .....	<b>xi</b>
<b>Chapter 1. Introduction: Sustainability and Indigenous Worldviews</b> .....	<b>1</b>
1.1 Rationale .....	2
1.2 Purpose.....	3
1.3 Motivations Behind the Research .....	4
1.4 Research Questions .....	9
1.5 Methodology and Methods .....	12
1.6 Structure of the Dissertation .....	16
<b>Chapter 2. Literature Review</b> .....	<b>18</b>
2.1 Anti-Colonial Theory, Subjectivity, and Michel Foucault.....	18
2.2 Third Space and Hybridized Knowledge .....	29
2.3 Indigenous Learning Models and Indigenous Principles of Learning .....	34
2.3.1 Respect sacred/non-sacred .....	41
2.3.2 Respect language .....	42
2.3.3 Respect for sharing within Indigenous models of learning .....	44
2.4 Understanding Sustainability and Western Worldviews.....	52
2.5 Understanding Sustainability and Indigenous Worldviews .....	59

2.6	Understanding Sustainability, Beauty, and Appreciation .....	79
<b>Chapter 3. Qualitative Methodology .....</b>		<b>89</b>
3.1	Overview.....	89
3.2	Appreciative Inquiry as Theory, Methodology, and Method.....	99
3.3	Aspects of Indigenous Methodology .....	109
3.4	Data Collection .....	114
3.4.5	Delimitations.....	120
3.4.6	Limitations .....	121
3.4.7	Ethics .....	123
3.4.8	Data collection procedures.....	123
3.4.9	Summary.....	129
<b>Chapter 4. Results: Circle of Findings and Analysis.....</b>		<b>131</b>
4.1	Mother Earth’s Children’s Charter School Indigenous Philosophy/Vision.....	131
4.2	A Circle of Beauty and Wisdom from Mother Earth’s Children’s Charter School .....	142
4.3	Elders’ Wisdom for Wahkohtowin-Wetaskiwin (Cree) and Ina-mackoe da? a basiptam; A- we-yakmna-me (Stoney).....	159
4.4	Mother Earth’s Children’s Charter School and Dancing the Circle of Sustainability .....	171
4.5	Circle of Analysis and Interpretation.....	187
<b>Chapter 5. Conclusion: An Invitation .....</b>		<b>201</b>
5.1	Implications and Recommendations .....	216
<b>References .....</b>		<b>221</b>
<b>Appendices .....</b>		<b>248</b>
	Appendix A: British Columbia First Peoples Principles of Learning.....	248

Appendix B: Appreciative Inquiry, 4-D and 4-I Cycles .....	249
Appendix C: Letter of Invitation for Research Study .....	250
Appendix D. Letter of Consent for Participant Interviews .....	251

## List of Tables

Table 1: Fundamental Truths .....	69
-----------------------------------	----

## **Acknowledgements**

I offer my enduring gratitude to my Supervisor, Dr. Carol Scarff and committee members, Dr. Margaret Macintyre Latta, Dr. Philip Balcaen, and Dr. Martin Blum (originally also including Dr. Lawrence Berg). I am forever grateful for learning with everyone connected to Mother Earth's Children's Charter School! My heart especially wraps around Erin Danforth, Maxine Hildebrandt, Mark Ehnes, Victor Tang, Elaine Boe, Lorraine Regamey, Stephanie Burnstick, Jim Cardinal, T.J. Skalski, Janet House, Raquel House, Ed Wittchen, Kokum Theresa, Kokum Jane, the board, parents, staff, and administration and the students—past, present, and future!

## **Dedication**

This dissertation is dedicated to my husband, Godfried de Kleine, our Indigenous and multicultural families, my birth parents, Victoria Anita and Andrew, my sister, Barb and spiritual sister, Hilistis, and special friends who often appear at the perfect time to share encouragement and grace! I love you all! I am so grateful for the beautiful spirits of Jason, Anita, Laura, Payton, Bella, Jack, and Lily! May you all continue to embrace your entire heritage! Of course my journey is completely wrapped up in gratitude for the Creator in my life and all of my relations!

## **Chapter 1. Introduction: Sustainability and Indigenous Worldviews**

“In a sense all the contemporary crises can be reduced to a crisis about the nature of beauty” (John O’Donohue, 2005, p. 3).

“*We are Mother Earth*” (Cree/Stoney Elder Kokum T, personal communication, 2016).

Indigenous worldviews may enhance current Eurocentric definitions of sustainability predicated upon an ethos of profit and commodity (Huckle & Sterling, 1996; Sachs, 2015). Western sustainability worldviews often refer to sustainability through the pillars of people, planet and profit (Brundtland, 1987; Sterling, 2001, 2003). Western sustainability ethos does not include the sacred interconnections between people, planet, and profit (Battiste, 2013; Brown, F. & Brown, K., 2009; Cajete, 2010; Kawagley & Barnhardt, 2005). This gap or problem is addressed through Indigenous worldviews which emphasize the sacred (Aikenhead & Michell, 2011; Atleo, E. R., 2011; Battiste, 2002). The sacred and the beauty of subjugated, marginalized knowledges (Foucault, 1997) are missing from standard Western sustainability frameworks (Sterling, 2003). Sterling (2003) calls for a new ethos of sustainability, to which this study seeks to contribute by foregrounding and being open to learning from Indigenous worldviews.

This study will demonstrate that current dominant Western sustainability worldviews could be improved by non-dominant views (e.g., Indigenous perspectives). This study will show that beauty (e.g., a posture, disposition, or attitude of appreciation), culture, and Indigenous wisdom are intertwined in interdependent sacred relationships with each other and not separate or stand-alone fragments of knowledge and learnings.

Unsustainable practices and worldviews from the dominant Western Newtonian and Cartesian binary paradigms focus mainly on economic profit and stem from the conquest of nature and the industrialization of the planet (Lozano, R., Lozano, F., Mulder, Huising, & Waas, 2013; Lozano, R., Ceulemans, & Scarff Seatter, 2015). One may desire to reverse this trend of destruction and crisis by foregrounding alternative Indigenous worldviews as an approach to healing humanity and the planet (Cajete, 2010). Indigenous wisdom and knowledge systems provide counternarratives to this Western construct of nature separate from humanity and culture (Alfred, 2009; Battiste, 2013; Nisbet, 2011). Indigenous wisdom encourages responsibility from individuals and collectives to oneself, to each other, to livelihoods and to the planet (e.g., environment) throughout a lifetime (Aikenhead & Michell, 2011; Battiste, 2002). For this reason, it is important to understand that a lifetime of formal and non-formal education and learnings shape Indigenous worldviews for surviving and flourishing (Berkes, 1999, 2008; Cajete, 2000; Christensen & Poupart, 2013; Davis 2010).

## **1.1 Rationale**

Regardless of the numerous Western, mainstream terms and acronyms describing sustainability and sustainability education (e.g., S, SE, EfS, ESD, EfSD, LfS, HEfSD, etc.), humanity may benefit from, and be inspired to take, individual and collective action to care for ourselves, each other, and planet Earth (e.g., Mother Earth) by learning with and from Indigenous groups and their worldviews. This learning will fill a gap that needs to be addressed in future sustainability worldviews and collaborations between Indigenous and non-Indigenous groups or Western and non-Western groups (Sterling, 2003). Dockry, Hall, Lopik, and Caldwell (2016) note that “sustainability models used throughout the world can be problematic for Indigenous communities because they do not often address or incorporate

cultural values, concerns, worldviews (epistemologies and ontologies) or teachings ... [like] the health of the land and people are one” (p. 128). The Western worldview is dominant, so the gap is the absence of Indigenous worldview (Cajete, 2010; Simpson, 2011; Sterling, 2003). Is it possible that current dominant sustainability worldviews could be improved by including the beauty and wisdom of Indigenous worldviews, thus providing a more inclusive sustainability ethos for the twenty-first century?

## **1.2 Purpose**

The purpose of this qualitative study is to address the gap by exploring an enhanced and better ethos of sustainability through respect for spirit, place, and humanity throughout non-mainstream worldviews (e.g., Indigenous). Indigenous worldviews recognize sustainability and education for sustainability as a wholistic concept with connections to land, culture, spirituality, ancestry, learning, career/equitable livelihoods, family and community (e.g., local and global) (Cajete, 2010; Fulmes, 1989; Simpson, 2011). It is important to note that the specific words “sustainability” and “education for sustainability” may not be words used in Indigenous worldviews. Each Indigenous nation is unique and distinct and describes these notions according to *their* specific Indigenous knowledge traditions and languages (Battiste, 2013; Kovach, 2009; Young-Ing, 2008). Sartwell (2006) describes the Navajo worldview as beauty integrated wholistically within health and harmony where, “Hózhó teaches first that beauty is one thing: everything” (p. 136). Indigenous worldviews may open our hearts and reorient our thinking about the beauty of who, what, where, when, how, and why of sustainability living on planet Earth (e.g., Mother Earth).

### **1.3 Motivations Behind the Research**

This study is motivated by the desire to foreground and acknowledge the beauty of Indigenous knowledge and philosophy with respect to an expanded sustainability ethos and education for sustainability for the twenty-first century and beyond. As a non-Indigenous person and settler ally (Regan, 2010) with many family members who have Indigenous heritage and with 30 years of involvement with Aboriginal Education, I acknowledge the value of Indigenous worldviews and traditional and contemporary teachings. Mother Earth's Children's Charter School (MECCS) interests me as a research site because it represents a school where Indigenous and non-Indigenous teachers and staff honour and foreground Cree and Stoney worldviews first and then the blending of other Indigenous and Western worldviews. The school values the blend of strengths of Western worldview and Indigenous worldview but finds the importance of highlighting their Cree and Stoney worldview first, as a sign of hope that their Indigenous worldviews matter. I consider MECCS a site of beauty.

Public charter schools in Canada are only found in Alberta. In 1994, under Alberta's then Minister of Education, Halver Johnson, Alberta became the first in Canada to enact charter school legislation, known as Bill 19 or the School Amendment Act which increased local decision making through school-based management and allowed for the formation of MECCS. The MECCS charter provides Indigenous voice to direct the governance and direction of the school. Cree and Stoney Elders, Wilson Bearhead and teacher Charlene Crowe were the founders of MECCS in 2003. Wilson Bearhead states, "MECCS was created as a public charter school to counter 60 years of a mainstream, European education system that failed us, so we are bringing the teachings of our Elders and respect for our Cree and

Stoney worldview to this school so our young people can be successful” (Visioning Sessions, 2005).

In line with the United Nations’ Working Group on Indigenous Populations (1995), this study identifies the concept of Indigenous as populations who are composed of existing descendants of the people who originally inhabited the present territory of a country and were reduced to a non-dominant group within their home territory either by direct conquest or settlement. Indigenous, Aboriginal, and First Nations are terms used interchangeably in this study.

Indigenous groups are not homogenous so worldviews, definitions, concepts, and philosophies are specific to each Indigenous group (Cajete, 2000; Fulmes, 1989; Kovach, 2009; Smith, 1999, 2012). Commonalities between Indigenous worldviews embrace traditional and contemporary knowledge as living, dynamic systems that are an integral part of learning how to survive and thrive in the world (Aikenhead & Michell, 2011; Atleo, E. R., 2011). Indigenous worldviews are embedded in specific local, social, political, economic, ecological, learning, and spiritual frameworks (Cajete, 2000; Kirkness, 1999; Kovach, 2009; Wilson, 2008). These frameworks reflect notions of “relationality, reverence, respect, and responsibility” (Atleo, M., 2009).

Indigenous worldviews offer a vision of co-existing with each other and with the planet because they recognize sustainability and education for sustainability as a holistic concept with connection to land, culture, spirituality, ancestry, family, and community (Battiste, 2002; Cajete, 2000; Chilisa, 2012; Fulmes, 1989). I support the notion that at the core of Indigenous worldviews is a sustainability ethos as expressed in the elements of interconnectedness, reciprocity, relationality, reverence and respect (Atleo, E.R. 2004, 2011;

Atleo, M. 2009; Battiste & Henderson, 2009) as lived in the daily life of a people. I call this *wisdom-on-the-ground* which means actions carried out in lived reality that reflects the beliefs of a person or collective. Fundamental to this study is the quest to understand the unity between the above elements and how they might reveal innovative ways of being, knowing and doing for a sustainable world on Mother Earth. I propose that individuals concerned with sustainability awaken to Indigenous worldviews so that we can collaboratively and respectively address local and global sustainability issues in the twenty-first century and beyond.

Recall the purpose of this study is to explore and acknowledge the beauty of Indigenous wisdom and worldviews with respect to sustainability (S) and education for sustainability (EfS). It is important to note that sustainability (S), sustainability education (SE), sustainable development (SD), education for sustainable development (EfSD), education for sustainability (EfS), learning for sustainability (LfS) and higher education for sustainable development (HESD) are Eurocentric, dominant world terms with many contested definitions and meanings within many disciplines (Carew & Mitchell, 2008). These contested terms reflect the multifaceted perspectives of sustainability and as Sterling (2012) argues, reflect “the dominant western worldview (and the economic, political and educational systems informed by it)—still largely mechanistic, objectivist, materialist, dualist, and reductionist—[and] no longer appropriate to our times” (p. 512).

The United Nations Educational, Scientific, and Cultural Organization (e.g., UNESCO, 2005) attempts to address these contested definitions through the common consensus that the role of education is a central, indispensable driving force for change. UNESCO (2014a) seeks to integrate the principles, values, and practices of sustainable

development into all aspects of education and learning, in order to address the social, economic, cultural, and environmental issues we face in the twenty-first century. UNESCO (2005) maintains that a “special mention must be made of [I]ndigenous peoples, because of their particular and long-term links to specific geo-physical environments and because of threats to their living and futures...[and their] intimate knowledge and sustained use of their environments” (p. 27). Currently, UNESCO uses three pillars to describe sustainable development: social (e.g., people), environmental (e.g., place), and economic (e.g., profit). In my view, these pillars, or variations thereof, can be applied to any notion or label of sustainability.

Beauty could be included as an additional fourth pillar, a different *element* of sustainability or as a heuristic lens from which to view and appreciate Indigenous worldviews. Beauty can include ideas about the sacred embedded within the notions of culture. I see beauty in this study as an element of sustainability that refers simultaneously to respect, to learn/unlearn/relearn, and to apply wisdom from Indigenous worldviews, ways of living, learning, being, and doing. I use the Indigenous elements of interconnectedness, reciprocity, relationality, reverence, responsibility, and respect (Atleo, E.R., 2004, 2011; Atleo, M., 2009; Battiste & Henderson, 2009) to form the concept of beauty. Beauty is an attitude or posture of appreciation for Indigenous worldviews defined by *their* perspectives.

In my view, one notion of beauty embedded within a Cree worldview notes the complex relationships between humans and non-humans on Mother Earth. According to Tracey Lindberg, within a Cree worldview is the notion that “the earth has animus and is perceived as a provider and giver of life” (as cited in Miller, Ruru, Behrendt, & Lindberg, 2010, p. 89). If we view the earth as our Mother Earth, Lindberg states, “we do not destroy

our mother but care for her, the land and all our human and non-human relatives” (as cited in Miller et al., 2010, p. 124). Responsibilities between care of land and each other are woven throughout complex Indigenous relationships predicated upon values of kindness, respect, peace, and reciprocity. Simpson (2011) describes the Nishnaabeg Indigenous worldview as full of “love and beautiful beings that assume responsibilities that honour emotional, physical, spiritual and intellectual aspects of oneself and each other because beautiful beings are created by the First beautiful being, Gzhwe Mnidoo” (p. 40-41). Williams describes Gzhwe Mnidoo as “ the one who invokes awe, warmth, love, total acceptance, protection and can see you and accepts you completely” (as cited in Simpson, 2011, p. 46). This represents a sacred or spiritual element embedded within an Indigenous worldview.

The complexity of beauty and cultures may reveal wholistic concepts and stories that support the interconnectedness of land, spirituality, ancestry, family, community, identity, worldview, and planet Earth. Beingness and ways of knowing from alternative voices may provide examples of beauty within a sustainable world. Indigenous themes of wisdom can inform a new ethos undergirding sustainability and sustainable education as it applies to a healthy sustainable world and its inhabitants, organic, and non-organic (Atleo, E.R., 2004, 2011; Cajete, 2010). With current and future sustainability issues, the wisdom from alternative voices needs to participate in collaborative dialogue for solutions and restoration from global crises. There is no one-size-fits-all form of sustainability or sustainability education. Seeking a new ethos could possibly help orient ourselves to affirming and applying an entirely new, deeper paradigm of living, learning, and being on Mother Earth (Gitksan Elder, personal communication, 1989).

I advocate beauty as a posture, disposition, or attitude of appreciation, or as social constructionist David Cooperrider suggests, “an attitude of seeking a positive core” (as cited in Gergen, 2009, p. 147). Appreciation and beauty could be woven together to advance a new ethos of sustainability that privileges Indigenous worldviews. If Indigenous worldviews reflect diverse notions of beauty (e.g., interconnectedness, reciprocity, relationality, reverence, respect, responsibility), there could be opportunities for a discourse between Indigenous and non-Indigenous groups that resolve contemporary and future sustainability issues. Appreciating the beauty of Indigenous worldviews and validating Indigenous worldviews as equal to non-Indigenous worldviews makes possible the potential for a broader discourse of sustainability.

#### **1.4 Research Questions**

This study focuses primarily on the notion that Indigenous worldviews may challenge current Eurocentric (e.g., Western) definitions of sustainability that are based upon an ethos of profit and commodity. The research questions refer to the absence of Indigenous worldviews in the Western dominant sustainability perspectives that focus on people, planet, and profit. Indigenous worldviews have the potential to reveal a different version of sustainability and education for sustainability. This is a qualitative research study that celebrates the first Indigenous public charter school in Canada called Mother Earth’s Children’s Charter School (MECCS) (K-9) and their Indigenous worldviews and Indigenous learners. The research questions foreground and acknowledge the beauty of Indigenous worldviews and their notions of education for sustainability as practiced at MECCS. Beauty in this study means a posture or attitude for the appreciation of Indigenous worldviews. Research questions were created in collaboration with the participants, principal, and the

superintendent. I had no intended assumptions built into the research questions. The participants decided that the questions would provide an opportunity to tell the truth and they felt comfortable enough after several visits to trust that this study would allow space for that. These research questions seek to provide an alternative worldview in sustainability literature (Sterling, 2003). Mother Earth's Children's Charter School could provide what I am calling *wisdom-on-the ground* sustainability values that could offer valuable insights into the current sustainability dialogues in dominant Western society. For this reason, MECCS is chosen for a qualitative study because the school has a blend of Indigenous and non-Indigenous teachers and staff who follow the Cree and Stoney worldviews first before including other Indigenous and Western worldviews. The study could have included children and parents, however due to time constraints, the participants narrowed the focus to adult staff only. This study would have been enhanced with the additional participants of children and parents.

MECCS illuminates the purpose of this study because their philosophy and foundations are based primarily upon Cree and Stoney traditional Indigenous teachings of the medicine wheel from the Elders. As the MECCS Student Handbook (2012) states, "there are many interpretations of the medicine wheel and the placement of some of the teaching may vary. MECCS believes there is no wrong way to build a wheel—after all, a circular walk has no beginning and no end" (p. 5). The medicine wheel at MECCS shares commonalities with the BC Principles of Learning in that traditional teachings reflect respect for the sacred, language, heritage, place, and lifespan learning.

The research questions seek to honour the participant's experiences at MECCS and what they determine as celebration moments. The participant's stories reveal the importance of their Cree and Stoney Indigenous worldviews. The findings of this study reflect the

medicine wheel teachings and principles of learning as grounded in the sacred essence of the Cree and Stoney worldviews. MECCS reveals lived experiences that then reveal the medicine wheel teachings and principles of learnings on their site. The way the students and teachers interact and support each other throughout the year reflects how their Cree and Stoney teachings are lived and practiced. By honouring Indigenous heritage first, Indigenous and non-Indigenous staff work to provide a respectful and nurturing place of learning for their Cree and Stoney students. The Ministry of Alberta Education curriculum guideline and materials are infused into the MECCS Cree and Stoney worldviews and medicine wheel teachings.

The main research questions to address the gap for this study are

1. Does MECCS support Indigenous learners, and Indigenous worldviews? Describe your best story or experience.
2. Does this (e.g., MECCS worldview) inform a sustainability ethos and mindset?

Other secondary research questions for this study are:

3. Are environmental, social, educational, and economic systems in the Indigenous model of sustainability interrelated at MECCS?
4. Does MECCS appreciate beauty as an element embedded within sustainability?

These research questions are meant to be open-ended, flexible, and subject to change according to the needs of the school and their best interests. I recognize that I am a co-learner with the participants at MECCS and in our collaborations both the linear and circular worldview were expressed. Answers to these questions seek to provide an expanded notion of living well on the planet, with oneself and each other. This study will contribute to the ongoing collaborations about sustainability and global issues that face humanity and non-

humanity currently and in the future. It will offer one specific non-mainstream sustainability ethos specifically located in the Cree and Stoney Indigenous worldviews at MECCS.

This study is not intended to be the answer for all global sustainability issues nor will it provide a universal, prescriptive formula, set of outcomes, achievement data bits, or toolkits. Rather, this study will provide an *invitation* to learn an alternative way of being and knowing that stems from a wholistic sustainability ethos and mindset at the core of the MECCS Cree and Stoney (Treaty 6) worldviews at one school site. The Cree and Stoney Indigenous worldviews arise from a deeper inner spirit that undergirds the heartbeat of their Indigenous worldviews. MECCS's Cree and Stoney (Treaty 6) Indigenous worldviews may offer insights and reflective opportunities at other venues on how to approach sustainability issues and living in today's society.

## **1.5 Methodology and Methods**

For the purposes of this study, a basic qualitative research tradition is chosen that includes aspects of Appreciative Inquiry (AI) (Cooperrider et al, 2008) and aspects of Indigenous Methodologies (IM) (Battiste, 2002; Chilisa, 2012; Kovach, 2009). This study is a pilgrimage, a type of journeying between me, as researcher, and the participants. We are co-learners of hope and positivity in this journey. This study proposes that stories, conversations, informal chats, formal interviews, or vignettes could convey Indigenous ideas about living in this world in a balanced, harmonious, albeit not perfect, and beautiful, way from the past, in the present, and for the future. Indigenous methodology has story and conversation at the heart of data collection as does Appreciative Inquiry. From the stories, participants provided data that revealed the truth of their perceptions about the binary distinctions between Western worldview and Indigenous worldview. Participants valued and

treated both Western worldview and Indigenous worldview respectfully and equally in their interviews.

Each interaction and conversation has the potential to reveal Indigenous worldview value systems. Because I was taught how to respect and do Indigenous research in the 1980s during my Master's degree in Indigenous Science with the Gitksan Nation, I knew that Indigenous wisdom and teachings could arrive formally and informally at any time and in any place. I began my journey of love and appreciation of Indigenous teachings as a non-Indigenous person with Ukrainian ancestry, while teaching and living as a community member in the Heiltsuk Nation of Bella Bella in the very early 1980s. I will use those foundational, lived experiences, teachings, and protocols in this study as well, because they are ingrained in my being, heart, and soul. Indigenous learning is lifespan learning and I remain committed to learning and sharing appropriately in this journey as a non-Indigenous person advocating for the best of both worlds for all learners. Indigenous scholar Cajete (2010) refers to this process as a "journey of discovery" (p. 42) or what Atleo, M.R. (2008) calls "a watching to see until it becomes clear to you" (p. 221).

I draw upon AI, most notably the Appreciative Inquiry interview, because AI is a method, philosophy, and theory that has a positive and life-affirming focus. AI is flexible, and can be used individually, with two persons, small groups or large groups. AI was developed in the 1980s by David L. Cooperrider and Suresh Srivastva, with colleagues from Case Western University and Taos Institute, as organizational behaviour work. However there is a growing body of research in education and health using AI as a method that focuses on the positive (e.g., attitudes, actions, practices, images/metaphors, mindsets, etc.) so that the positive becomes a reality (Carter, 2006; Reed, 2007). Cooperrider et al. (2008) elaborate

further that “AI seeks out the best of ‘what is’ to help ignite the collective imagination of ‘what might be’ ...[so that a] positive vision can be translated into reality and practice” (p. xi). AI is a flexible, improvisational, collaborative, and strength-based approach to personal and organizational development and research. Indigenous scholar Margaret Kovach (2009) affirms that AI is relational, and therefore compatible, with Indigenous research. Because of the flexibility and respect for the fluid nature of the qualitative research process of both AI and IM, I chose aspects of these methodologies for this study. I also honour and respect the lived research Indigenous inquiry process that I was privileged to learn firsthand from, and with, the Gitksan participants in my earlier graduate school days in the 1980s. I carry those lessons forward into this study as a sign of deep respect for the Gitksan Nation, as well as other lessons learned throughout my career in Aboriginal Education.

The AI interview revolves around best and celebration scenarios not problem/deficit solving scenarios. I agree with Tuck & Yang (2014) that researchers should move beyond “telling stories of pain and humiliation” (p. 812) or deficit stories, which drain the life energy of people. I draw upon AI because it has the potential to uncover positive and thriving images that support a flourishing life of sustainability with self, each other, and the planet.

I draw upon Indigenous Methodology (IM) as well, because the research site is a school with a blend of Indigenous and non-Indigenous staff but all of whom firstly, respect Stoney and Cree worldviews as their primary reason for existence as the first Indigenous public charter school in Canada. All other worldviews are welcome but are a secondary priority for the school and infused into the Cree and Stoney worldviews as understood at MECCS, and through their vision statements and charter. This study seeks an alternative perspective to the dominant Western perspective in sustainability, and thus, IM is

appropriate, as I support the notion that Indigenous worldviews are equal to Western worldviews and may provide new sustainability insights that benefit every local and global citizen.

As a non-Indigenous person and settler ally (Regan, 2010), with many family members who have Indigenous heritage, and with 30 plus years of involvement with Aboriginal Education, I acknowledge the value of Indigenous worldviews and protocols. In research, the process of decolonization from non-Indigenous persons is important. Battiste (2002) describes the decolonization of education as a

process that includes raising the collective voice of Indigenous peoples, exposing the injustices in our colonial history, deconstructing the past by critically examining the social, political, economic, and emotional reasons for silence of Aboriginal voices in Canadian history, legitimating the voices and experiences of Aboriginal people in the curriculum, recognizing it as a dynamic context of knowledge and knowing, and communicating the emotional journey that such exploration will generate. (p. 20)

The decolonizing and anti-colonial lenses (Simmons & Dei, 2012) require that research actively re-centre and privilege worldviews that have been marginalized in colonial contexts. IM requires research to be congruous with community beliefs, values, aspirations, protocols, and a shared practice between researcher and participants, where methods and knowledge are co-created, relational, reciprocal, and respectful (Battiste, 2002; Kovach, 2009; Wilson, 2008).

Kovach (2009) notes that effective allies in research, especially those under the qualitative umbrella are those “who are able to respect Indigenous research frameworks on their own terms. This involves a responsibility to know what that means. As Indigenous

researchers, our responsibility is to assist others to know our worldview in a respectful and responsible fashion” (p. 13-14). Kaomea (2016) states that we must “identify and challenge taken-for-granted assumptions...dominant suppositions on which our schools and society are based” (p. 105). As allies, it is important to reflect on power/knowledge relations in intercultural conversations (Foucault, 1997) and in third space (Bhabha, 1994). As an act of decolonization, I am foregrounding the importance of Indigenous worldviews to address questions that revolve around notions of sustainability.

Aspects of both AI and Indigenous Methodology were used to interview and collect data from nine adults (including teachers, principals, guidance counsellors, and teaching assistants) from the school. Interviewees were asked to focus on the best celebratory (e.g. celebration) experiences at MECCS. Results from interviews indicate that MECCS Indigenous worldviews (Cree and Stoney) support a sustainability ethos with emphasis on the value of relationships (e.g., relationality).

In summary, aspects of AI and IM were used to collect data from the interviews. Chapter 3 provides a complete description of the data collection process and procedures.

## **1.6 Structure of the Dissertation**

Chapter 1 provides the Introduction. This chapter includes an overview of the study and introduces Sustainability and Indigenous Worldviews with sections on purpose, rationale, motivations behind the research, a brief look at the research questions, methodology and methods, and summary of results (e.g., findings, interpretation, analysis).

Chapter 2 provides the Literature Review. This chapter includes the literature that informs the study, with sections on anti-colonial theory, subjectivity, and Michel Foucault; third space and hybridized knowledge; Indigenous learning models and Indigenous principles

of learning with aspects of respect (e.g., sacred/non-sacred, language, sharing within Indigenous models of learning, relationships, place, lifespan, wholistic experiences, lifeworld transformation, cycle of time and learning, and continuous learning); understanding sustainability and Indigenous worldviews; understanding sustainability and Western worldviews; and understanding sustainability, beauty, and appreciation.

Chapter 3 provides the Qualitative Methodology. This chapter includes a more in-depth overview of the study, beginning with an introduction and overview of the study and the research questions, as well as data collection (e.g., overview, research questions, research site, backgrounds of participants, delimitations, limitation, data collection procedures and summary). A section on AI as Theory, Methodology, and Method, and one on IM are included.

Chapter 4 provides the Results—Circle of Findings and Analysis. In this chapter, the findings and analysis include: MECCS’s Indigenous philosophy/vision; A circle of beauty and wisdom from MECCS; Elders’ wisdom for Wahkohtowin-Wetaskiwin (Cree) and Indamackoe da? a basiptam; A-we-yakmna-me (Stoney); celebrating MECCS and Circle of Sustainability and Circle of Analysis.

Chapter 5 provides the Conclusion—An Invitation. This chapter provides conclusions for the study with a section on Implications and Recommendations.

References have been included, which are followed by the Appendices. The Appendices provide the BC Principles of Learning; Appreciative Inquiry 4-D and 4-I Cycles; and Introductory and Consent Letters to MECCS.

## **Chapter 2. Literature Review**

As a non-Indigenous person and settler ally (Regan, 2010) with many family members who have Aboriginal ancestry, I acknowledge that I am a co-learner willing to respectfully learn and relearn from the expertise of Indigenous peoples and their perspectives in our local and national conversations. As an act of decolonization, I am foregrounding the importance of Indigenous worldviews to address questions that revolve around notions of sustainability for the twenty-first century and beyond. I draw upon anti-colonial theory by Simmons and Dei (2012), Haig-Brown (2008), and Bhabha (1994), and their research on dialogue/discourse in a “third space,” plus Kovach’s (personal communication, 2014) notion of collaboration as “a juicy conversation” between Indigenous and non-Indigenous peoples. This study considers all the participants interviews as juicy conversations. Indigenous worldviews can reveal mindsets and actions that teach all Canadians how to thrive, define sustainability in their spheres of influence and address global profit, people, and planet issues facing us now (e.g., poverty, environmental degradation, First Nation education, climate change). This study hopes to add to that discussion.

### **2.1 Anti-Colonial Theory, Subjectivity, and Michel Foucault**

Accepting Indigenous worldviews as equal partners in all aspects of life is imperative within anti-colonial theory and practice (Simmons & Dei, 2012). The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP; 2007) definition of “equal” states that “Indigenous peoples are equal to all other peoples, while recognizing the right of all peoples to be different, to consider themselves different, and to be respected as such” (UN General Assembly, October 2, 2007, p. 1). Indigenous worldviews are also looking for an equitable (or just) relation to dominant Western thought and other forms of knowledge. Anti-

colonialism is a means to identify subjectivity within sustainability and all aspects of lifeworlds (e.g., life). Michel Foucault's (1972, 1994, 2001, 2007) notions of subjectivity include power/knowledge relations, parrhesia, and care of the self, and he is recognized as an expert in systems of thought (Dreyfus & Rabinow, 1982, 1983). Collaborative discourses about sustainability may include respect, wholeness, restoration, and healing for the planet and humanity. Indigenous knowledge and worldviews are put forward as equal to Western, European worldviews. Colonization of marginalized peoples, especially Indigenous peoples, rewrites their histories in favour of dominant hegemonic dogmas, usually found in Western, Eurocentric worldviews. This is evident in discourses, attitudes, and policies (e.g., federal, provincial, local levels) that shape various legal, political, education, and sustainability issues in the twenty-first century (Assembly of First Nations, 2006; Alfred, 2009). Paquette and Falon (2011) argue that "Aboriginal policies have never really been satisfactorily defined from an Aboriginal perspective" (p. 337) in our pluralistic Canadian society. Many scholars state that this is due to historical/contemporary policies (e.g., residential schools, Indian Act 1876), which reflect a dominant Eurocentric philosophy/worldview (Battiste, 2002; Kirkness, 1999; Schissel & Wotherspoon, 2002). Intercultural dialogue can be a contested space due to diverse worldviews and knowledge production, especially with Indigenous peoples. Land exploitation, language deprivation, assimilation, debasing ways of being and knowing, and appropriation of knowledge adversely affect Aboriginal communities. As a result of colonialism, material accumulation and land theft are considered violent practices (Alfred, 2009; Miller, 1967, 1997; Smith, 2012).

Attempts at addressing colonialism and improving Aboriginal and non-Aboriginal relationships were made through major documents entitled The Royal Commission on

Aboriginal Peoples Report (RCAP; Government of Canada 1991, 1996) and The Assembly of First Nations Royal Commission on Aboriginal People at 10 Years: A Report Card (2006).

RCAP stated:

Past social policy, based on false assumptions about Aboriginal people and aimed at their colonization and assimilation, has left a heritage of dependency, powerlessness and distrust. Establishing a new relationship based on mutual recognition, mutual respect, sharing and mutual responsibility in an era of Aboriginal self-government is the challenge of the twenty-first century. Aboriginal people are anxious to put the past behind them and work with governments in Canada to meet that challenge. They are gathering strength for the task ahead. (1996, p. 12)

However the Assembly of First Nations (AFN) noted strongly that their analysis of the RCAP “points to a clear lack of action on the key foundational recommendations of RCAP and a resultant lack of progress on key socio-economic indicators...based on our assessment, Canada has failed in terms of its action to date” (2006, p. 2). Using an anti-colonial discourse and theory can hopefully change this scenario and improve Aboriginal and non-Aboriginal relationships and collaborations.

We are all colonized (Alfred, 2009). Anti-colonialism challenges the grand narrative of the colonial mindset which is based on racial tropes (e.g., overused expressions) and root ideas that justify dominant worldviews as the best and only worldview to live by (Thobani, 2007). Anti-colonialism challenges notions of whiteness, white privilege, tolerance, and racism (Brown, 2006; Razack, 2002; Thobani, 2007). Evans, Hole, Berg, Hutchinson and Sookraj (2009) describe whiteness “as a position of structural advantage that White people occupy in society from a standpoint from which White people understand the world and their

position in it with sets of unnamed and unmarked dominant cultural practices in settler societies like Canada and the United States” (p. 6). All other cultures are usually measured by Whiteness which knowingly and unknowingly (depending on the amount of colonialization one recognizes within oneself) is a place of White privilege. Non-whiteness as a racial category is invariably measured against whiteness, another racial category (Shank, 2011). Race as a categorical social grouping includes definitions and comparisons of perceived racial superiority against racial inferiority. Shank (2011) explains further that “racial categories and divisions were developed to create a hierarchy that grants privileges and power to specific groups of people while simultaneously oppressing and excluding others” (p. 129).

I assert it is important to reflect on how we view each other in intercultural spaces and discourses. Quayle and Sonn (2013) note that white dominant society uses “the unquestioned, universal sovereignty lens of Western epistemological, economical, political and cultural representations” (p. 557). This lens usually silences the marginalized, especially Aboriginal peoples. Reflecting upon the impact of racism in intercultural collaborations may help the educator affirm the value and respect for Aboriginal worldviews and teachings. According to Simmons and Dei (2012) anti-colonial theory and twelve central principles can be used as a means to resist colonialism (p. 73-77). They define anti-colonial theory through tenet one and two below:

The anti-colonial framework is a theory about the mechanics and operations of colonial and re-colonial relations and the implications of imperial projects on: processes of knowledge production, interrogation and validation; the understanding of Indiginity and local Indigenoussness; and the pursuit of agency, resistance and

subjective politics. The anti-colonial theory works with the idea that all knowledge must purposively serve to challenge colonial imposition. (p. 73-74)

Indigenous knowledges can be used to redress historical and contemporary inequality notions between dominant Eurocentric and non-dominant worldviews. Repairing relationships between Aboriginal and non-Aboriginal peoples must include equal partnerships and respect for Indigenous worldviews in order to navigate intercultural spaces and reshape any unjust legislation, norms and historical/contemporary injustices (AFN, 2006). It remains important that treaty promises be met and equality between all people groups be accepted so that relationships are improved as we “walk beside each other in a pluralistic society” (Atleo, M., 2009, p. 465). Battiste and Henderson (2009) support this notion when they argue for the blending of their version of Indigenous knowledge with Eurocentric knowledge. This is a continuous process of negotiation from which the transformation of hearts, bodies, spirits and minds in our lifeworlds may occur. Ongoing conversations may provide solutions for the contemporary issue we face together on this planet.

Alternative ways of knowing and worldviews may agitate dominant Eurocentric worldviews in intercultural discourse. This may be due to the breadth of anti-colonial theory as described by Simmons and Dei (2012), because it “examines systems of colonial oppression structured along lines of difference; race, class, gender, sexuality, [dis]ability, language, etc.” (p. 78), with the notion expressed in tenet five that “it is the dominant’s responsibility for removing colonial oppression” (p. 78). Many forms of oppression, conscious and subconscious, may arise in any intercultural encounter. Michel Foucault’s

work can help one recognize the power/knowledge/subject relations triad (O'Farrell, 2005) at play in any discourse or collaboration.

Foucault is an expert in systems of thought, especially on power/knowledge/subject relations (Faubion, 2000). As a French philosopher known for being a historian of systems of thought, he analyzed powerful discourses, usually legitimized and produced by academic disciplines and professions (Foucault, 1989; Rabinow, 1984, 2000). Foucault uncovered powerful discourses that were viewed as empowering to individuals but actually did not liberate individuals in wider society. He found that these discourses contained certain practices that really controlled and constrained humans. Foucault compels subjects to investigate attitudes and presuppositions in taken-for-granted routines of practices and knowledge ideas. Human beings are made subjects by power and knowledge practices that objectify and marginalize within modern capitalism.

Those that agitate the colonized norms of society are resisting unhealthy norms and seeking to loosen and open up spaces to help us interpret ourselves and others differently (Foucault, 1989). This engages and validates Indigenous knowledges and other points of view to unlearn racism, ideology of "racial and cultural superiority" (Thobani, 2007, p.151) and reveal, as Howarth and Hook (2005) state, "our own collusion in racialized relations of power and histories of colonial violence and genocide" (as cited in Quayle & Sonn, 2013, p. 566) wherever and whenever they emerge. Foucault asks us to rattle those barriers that divide us (if we choose to) by an analysis of power as it manifests in the present through our talk and conditions that allow discourse/talk to emerge. An example of this is when a western-trained scientist assumes the superiority of western knowledge by discounting Indigenous knowledge. Foucault would have us rattle that assumption by foregrounding and

appreciating, equally, Indigenous knowledge and ways of knowing. An intercultural encounter would, in Foucauldian terms, examine predetermined notions that reflect superiority. Since knowledge production and implementation transmit power in our society, Western power is disrupted and decolonized by elevating Indigenous knowledge as equal and different from Western knowledge. Indigenous knowledge is elevated from a subjugated position to an equal, qualified and unsubjugated knowledge position in this encounter.

Foucault describes dominant forms of power as interconnections within multiple relations (e.g., family, institution, administration, class, caste) where one person tries to dominate another. In doing so, a person becomes constituted (e.g., formed) as a subject across a number of power relations where power is exerted over oneself and oneself exerts power over others (Faubion, 2000, p. 451-452). Freedom is also a characteristic of power relations, in that, subjects have a certain amount to exercise and resist, otherwise it is only obedience (Faubion, 2000; Foucault, 1989).

Reflecting on how practices, conditions, and intentions marginalize, disregard, and silence other persons and ourselves, helps one decolonize oneself and others in society. Foucault's oeuvre (e.g., collection of writings and work) analyzed the rules, procedures, and thinking where power circulated and dominated the dominant and the dominated (e.g., prison guard and prisoner, doctor, and patient): "People know what they do; they frequently know why they do what they do; but what they don't know is what they do does" (Foucault, personal communication, as cited in Dreyfus & Rabinow, 1983, p. 187).

I agree with Jardine's (2005) questions as a springboard to reflect upon collaborative dialogues. Jardine (2005) describes Foucault-type questions that may provide insights that reflect respect for different but equal systems of knowledge in intercultural dialogue such as:

Who is authorized to speak? Who is authorized to force systems of knowledge upon others? From where (e.g., government, schools, hospitals, institutions, etc.) do the authorities speak? (p. 17-19). Unconscious and conscious rules, regulations, and routines arise from the interplay between subject, knowledge, and power to control, monitor, classify, categorize, and constrain members of modern, Western disciplinary societies. Thus, the aim of genealogy is to expose what knowledge-power relations are valued, applied, distributed, and rejected in society and to expose the workings of different powers that impose their will to truth on others. Foucault offered no solutions to problematic issues (Kendall & Wickham, 1999).

Ball (1990) summarized Foucault's 25 year work as a "series of attempts to analyse particular ideas or models of humanity which have developed as the result of very precise historical changes, and the ways in which these ideas have become normative or universal" (p. 1) with Foucault's words below:

My role—and that is too emphatic a word—is to show people that they are much freer than they feel, that people accept as truth, as evidence, some themes which have been built up at a certain moment during history, and that this so-called evidence can be criticized and destroyed. To change something in the minds of people—that's the role of an intellectual. (Martin et al., 1988, as cited in Ball, 1990, p. 1-2)

Foucault wrestles with, agitates and problematizes coloniality, especially with respect to Aboriginal peoples and sustainability notions. An example of this follows with, as Wane (2008) describes, what could be "a discourse of possibility, where the missing voices and knowledges can be heard and validated" (p. 194).

Early in Foucault's research projects, the construction of the subject (e.g., speaking, living, working human being) was determined by power/knowledge relations (Rabinow, 1984, p. 7-14). Power relations normalize standards of human conduct and create subject positions and subjectivities. These subjectivities dictate how we come to know experience, and view ourselves and others in our lifeworlds.

Power/knowledge practices are deployed through discourses stated as, "identifiable collections of utterances governed by rules of construction and evaluation which determine within some thematic area what may be said, by whom, in what context, and with what effect" (Faubion, 2000, p. xvi). Subjects are produced within discourses which "fabricate and subjugate by disciplinary power" (Harrer, 2005, p. 75) which then produces subjectivity (e.g., how we come to form ourselves as subjects). Subjectivity is the way in which subjects experience themselves through the formation of procedures by "which the subject is led to observe himself [sic], analyze himself [sic], interpret himself [sic], recognize himself [sic] as a domain of possible knowledge...in a game of truth where he relates to himself [sic]" (Foucault, 1984, p. 942-944).

Power/knowledge relations can further objectivize the subject through dividing practices (e.g., modes of manipulation) of social objectification and categorization. Foucault (Faubion, 2000) explains that our institutions, be they medical, judicial, religious, educational, governmental, etc. have practices that deal with and label subjects. Discourse has rules that define and produce the objects of our knowledge in particular historical moments. We are all objectified by acts of power and knowledge relations in society. Foucault states:

I do not think that a society can exist without power relations, if by that one means the strategies by which individuals try to direct and control the conduct of others. The problem, then, is not to try to dissolve them in the utopia of completely transparent communication but to acquire the rules of law, the management techniques, and also the morality, the ethos, the practice of the self that will allow us to play these games of power with as little domination as possible. (as cited in Rabinow, 1997, p. 298)

In Foucault's later work, he came to understand the subject as a human being who has agency to transform and reconstitute oneself even within the power/knowledge nexus via the care of the self. This is done through "a number of actions exercised on the self by the self, actions by which one takes responsibility for oneself and by which one changes, purifies, transforms, and transfigures oneself. It involves a set of practices, most of which are exercises that will have a very long destiny in the history of western culture, philosophy, morality, and spirituality" (Foucault, 2001, p. 11). The care of the self is meant to open up a space to live our lives differently with respect to ourselves, others, and society. Perhaps this could be viewed as a quest for wisdom and a transformation of worldviews, especially in our intercultural spaces.

Transformation of self and worldviews may be done through Foucault's notion of parrhesia which portrays free speech and its relationship to frankness, truth-telling, criticism and duty. Accordingly, "The one who uses parrhesia, the parrhesiastes, is someone who says everything one has in mind: he [sic] does not hide anything, but opens his [sic] heart and mind completely to other people through his [sic] discourse" (Foucault, as cited in Pearson, 2001, p. 12). Both have agency to express different worldviews equally to each other. Dominant discourses which devalue and marginalize or subjugate other knowledges could

change with the application of parrhesia. Coupled with anti-colonial theory and discourse, the possibility of healing Aboriginal and non-Aboriginal relationships could be had.

Power/knowledge relations are different today than in the past and thus, have the potential to change for the better in the future. Foucault states:

The political and social processes by which Western European societies were put in order are not very apparent, have been forgotten, or have become habitual. They are part of our most familiar landscape and we don't perceive them anymore. But most of them once scandalized people. It is one of my targets to show people that a lot of things are part of their landscape—that people think are universal—are the result of some very precise historical changes. All my analyses are against the idea of institutions and show which space of freedom we can still enjoy and how many changes can still be made. (as cited in Rabinow, 1997, p. 223-252)

As we walk beside each other, we can share the best of learnings from our worldviews to move every generation forward in life. Without sharing our equal voices throughout discourses, we cannot move forward in advancing healthy sustainability notions which need wisdom for thriving with each other and with the planet (Grant, 2012). Capra and Luisi (2014) communicate this best by noting that in our overpopulated, interconnected world, we need a new worldview that includes the philosophical, spiritual, and political implications of a unified view of life.

Accepting Indigenous worldviews as equal partners in all aspects of life is imperative within anti-colonial theory and practice. Indigenous knowledge production must be acknowledged as an equal narrative within dominant Western collaborations. Indigenous worldviews and knowledge are embedded in specific local, social, political, economic,

ecological, learning, and spiritual frameworks. The AFN (2006) and Battiste (2002) describe knowledge not as a commodity that can be possessed or controlled by educational institutions or corporations, but a living, dynamic process to be absorbed and experienced, to be understood where knowledge is an integral part of learning how to survive in the world. Academics of learning and corporations who yield so much power from the dominant worldview of commodification and profit would benefit from respecting non-Western worldviews as equal knowledge partners and improve sustainability learning and notions for all peoples (AFN, 2006). I assert that the depth of Indigenous knowledge could offer lessons on how to value the planet and each other that can benefit every citizen.

By honouring Indigenous knowledge and worldviews through anti-colonial theory and practice supported with Michel Foucault's notions of subjectivity, participants can reconfigure a healthier, flourishing, humanity and planet in the twenty-first century.

## **2.2 Third Space and Hybridized Knowledge**

As non-Indigenous persons, it is important to seek understanding of Indigenous worldviews from *their* perspectives and decolonize ourselves, as FitzMaurice (2011) states, "from the binaries of colonizer and colonized and the corresponding effects of colonization" (p. 364). Celia Haig-Brown (2008) provides support for this decolonizing process through understanding in "Guswentha, the two-row wampum, a treaty drawn between the Haudenosaunee and the Dutch in the seventeenth century" (p. 259). She goes on to describe John Borrow's Anishinaabe view of Guswentha as a belt with beads representing two different nations, travelling in parallel to each other through time in lasting peace and friendship. The wampum belt in this treaty-making implies that one nation does not dominate the other but rather, each nation could inform and affect each other (Haig-Brown, 2008, p.

260-261). Bhabha (as cited in Haig-Brown, 2008, p. 261) describes this impact upon one another as hybridization within a third space. Bhabha (1994) describes third space “as moments of articulation between a listener and a speaker where that in-between space (e.g., third space) is a spatial zone for new interpretations of meaning” (p. 1). Based on these scholars, my interpretation of third space is a mixture of talk which creates a new hybrid of co-constructed meanings and knowledge. Respect for different worldviews, like Kovach’s (personal communication, 2014) notion of juicy conversations and appropriate listening, and honouring Indigenous perspectives, are key elements that sustain healthy dialogue in a third space.

An example of successful dialogue in a third space could be the Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan 2020 Vision for the Future (British Columbia Ministry of Advanced Education –AVED, 2012) document, developed and agreed upon by the BC Ministry of Advanced Education, First Nations Education Steering Committee, the Indigenous Adult and Higher Learning Association, the Métis Nation British Columbia, the First Nations Public Service, British Columbia Colleges, British Columbia Association of Universities and Institutes and the Research Universities’ Council of British Columbia (p. 2). The above groups navigated different worldviews and lifeworlds to arrive at a new understanding of how to promote the province and Aboriginal learners as evidenced in the document.

An example of how an individual can be shaped by successful dialogue in a third space may be considered a personal decolonizing experience. Christensen and Poupart (2013) state that “decolonization is the intelligent, calculated, and active resistance to the forces of colonialism that perpetuate the subjugations and/or exploitation of our minds, bodies, and

lands and it is engaged for the ultimate purpose of overturning the colonial structure and realizing Indigenous liberation” (p. 93). The act of asking Indigenous knowledge keepers and Elders for clarification and meaning is an act of decolonization.

Early in my teaching career (1980s), I had questions about relating European dominant science curriculum to Indigenous students. In this case, I took my questions directly to the community to ask for their perspectives on science and traditional knowledge. I knew that my Western-based knowledge was limited and I was eager to learn from the community. In my case, this started a lifelong journey for valuing and respecting Indigenous knowledge. Further exploration of Indigenous Science (Fulmes, 1989) was completed in my graduate studies, where some Elders taught me about their specific relationships to the land, to the people, and Indigenous ways of life that wholistically included creation stories, community protocols, philosophy, values, governance, social structures, and spiritual relationships with the land and the people. Elders often spoke of the past, present, and future within the circle of lifespan learning.

The Elders were generous, kind, and very patient with my questions as were my students, my co-learners. I learned in that third space that an individual could become a better teacher, a better person, a lifelong learner, and a co-learner by valuing and respecting Indigenous knowledge. I suggest that such third spaces can be contentious, but that they can also be a space for impacting each other in a humorous, patient, and caring manner. In a third space, individuals can seek and understand Indigenous knowledge and engage in the decolonization process (Fulmes, 1989). I submit that the learning process requires an open heart, patience, and willingness to relearn from multiple miscommunications and successful communications. Western and Indigenous worldviews can complement each other.

Cajete (2010) reminds us that embracing other ways of looking at the world can offer a plethora of possible solutions for global issues that impact society now. Indigenous worldviews may provide valuable insights on how to resolve problems in our interconnected global society. Perhaps through collaborative dialogue and relationship-building, we can combine the best of learnings from Indigenous and non-Indigenous lifeworlds to move each generation forward in life and wellness. I support the reconciliation wisdom of Elder Crowshoe (as cited in the Truth and Reconciliation Commission Report, 2015) who states that “our conversations must be broader than Canada’s conventional approaches” (p. 17) (e.g., colonial policies of assimilation, residential schools, cultural genocide, etc.). Dr. Tracey Lindberg and Priscilla Campeau (personal communication, 2015) remind us that in hard conversations we should use respect, kindness, gentle corrections, and become informed by talking to those whose Indigenous land one lives on. This implies that the value of love can help maintain healthy relationships in difficult conversations in third spaces. Taiiaki Alfred (2009) describes power in Indigenous thought as “whether or not power is used in a way that contributes to the creation and maintenance of balance and peaceful coexistence in a web of relationships” (p. 73). Relationship-building is important in intercultural exchanges. Relationship and relationality can be used interchangeably to mean having a relational view of the world, where humans have a direct and ancient relationship with people, planet, plants, animals, stones, trees, mountains, rivers, stars, nature, and all things in nature within the entire web of life (Cajete, 2000). Christensen and Poupart (2013) state that a teaching relationship is inclusive to everything in creation. Humans have relationships with each other but we rarely stop to think about the relationships we have with the grasses and the trees or the animals and aquatic life forms. This

thinking involves a mindset of ‘we are all related’ and seeing each other as equals or just as deserving of life as any other being. (p. 110-111)

It is important to note that relationships (e.g., relationality) are embedded in infinite forms of spirituality. Wane (as cited in Dei & Kempf, 2006) suggests that “spirituality lies at the heart of being human” (p. 89). I assert that ongoing talk in third spaces requires openness to the existence of spirituality in each person to understand the dynamics in the flow of words. M. Atleo (2001) explains that “all things start with the relationship between the Creator and the creations” (p. 25). M. Atleo (2001) explains further that “due *reverence*, [is] an awe that is about the wonder of it all, a wonder that requires a mind and heart which is open and compassionate to be able to be receptive to vision” (p. 26). The Canadian Council on Learning, Aboriginal Centre (CCL, 2007) depicts reverence, as “a world of continual re-formation... [and] interconnectedness of life” (p.19). Indigenous Science or knowledge depicts reverence as respect for intergenerational kinship teachings and social practices (Aikenhead & Michell, 2011; Battiste, 2002; Cajete, 2010). Aboriginal communities suffer from colonialism and imperialistic ill-conceived federal policies (e.g., residential school history, Indian Act) so repair of relationships between Indigenous and non-Indigenous could begin with a reverence for the Creator (e.g., however defined) and the Created (e.g., however defined). Being open to the possibility that spirituality exists, could be a solid attempt toward decolonization and another example of Simmons and Dei’s (2012) anti-colonial theory, specifically tenet eight, which is described as, “anti-colonial theory also recognizes the central place of spirituality and the spiritual knowing-embodiment of knowledge” (p. 75).

Indigenous peoples have dynamic and changing cultures that adapt to contemporary times while respecting ancient truths and traditional teachings (Hilistis Pauline Waterfall,

personal communication, 2016). It is due to this connection between the past and the present that Indigenous cultures remain resilient and strong. Communication in third spaces should respect multiple points of view, and not just a Eurocentric worldview or any single, monocultural way of knowing or being. This does not displace or subjugate any worldview but reimagines notions of subject-power-knowledge relations for the benefit of current and future generations.

### **2.3 Indigenous Learning Models and Indigenous Principles of Learning**

Indigenous peoples embrace sustainability beliefs and practices through their worldviews, but how does the beauty of an Indigenous worldview inform sustainability? Lifeworlds and worldviews are used interchangeably throughout this study to reflect a comprehensive belief system that guides how one lives life. This includes norms and values that organize relationships between humans, non-humans, planet, and profit (e.g., economy, livelihood) elements. Worldview is part of the cycle of life, and changes within the lifecycle. Cajete (2000) describes worldview as “a set of assumptions and beliefs that form the basis of a people’s comprehension of the world” (p. 62). Oxford Online Dictionary (2016) describes lifeworld as “all the immediate experiences, activities, and contacts that make up the world of an individual or corporate life.” Indigenous sustainability concepts derived from worldviews may include norms and values from Mother Earth as a life-giving force that provides life-sustaining elements of how to thrive in the world (Manitoba Education & Training, 2000). It is important to note that changing one’s worldview into something more open to questioning one’s assumptions and biases is often called transformative learning. A worldview is not static, but living and dynamic, and able to change. Broader society can benefit from Indigenous life-sustaining elements and notions of care, respect, reciprocity, and

interconnectedness as offered by Indigenous lifeworlds. I assert that Indigenous peoples apply principles of learning to every aspect of their lives, and thus, may provide models for sustainability, education for sustainability, and sustainability mindsets for non-Indigenous peoples.

According to the British Columbia Ministry of Education (BCME, 2015) and First Nations Education Steering Committee (BCME & FNESC, 2008), Indigenous worldviews reveal and include the British Columbia First Peoples Principles of Learning or First Peoples Principals of Learning (BCFPPOL or FPPL, 2008). Note that BCME (2015) states that “First Peoples includes First Nations, Métis, Inuit peoples in Canada as well as indigenous around the world.” Indigenous worldviews and Indigenous principles of learning may provide a conceptual framework from which to ask questions and to seek to understand this concept of education for sustainability. Indigenous worldview concepts put forth by the Canadian Council on Learning-Aboriginal Learning Knowledge Centre (CCL, 2007, 2009) and British Columbia First Peoples Principles of Learning (2015) describe learning as wholistic and interconnected. Some aspects of the BC First Peoples Principles of Learning (2015) that relate to respect for the sacred/non-sacred, language, sharing, place, lifespan, wholism, transformation, cyclical time, and continuous learning are key to understanding Indigenous worldviews (see Appendix A).

According to BCME (2015), FNESC (2008) and Battiste (2013), teachings from Indigenous principles of learning represent a flourishing life for individuals, for others, and for the planet. We may look to wisdom keepers from many Indigenous groups, as the non-mainstream voices that provide examples of learning for healthy living within a sustainable world. Brascoupe (2000) reminds us that Indigenous peoples have been “hunters, fishers,

ecologists and storytellers.... [and] now are major players in resource restoration and sustainable resource harvesting” (p. 429). Examples of major players in natural resource development are the Quebec Cree of Nemaska (e.g., Whabouch Lithium mine), Mi’kmaq of the Gaspé Peninsula (e.g., Escuminac windfarm) and the Cree of Mistissini (e.g., Stornoway Diamond) where common ground was found between these First Nations and the Quebec government to care for the land and boost economic benefits for their territories that surpass the average earnings of most other Canadian Aboriginal communities (Descôteaux, 2015).

The Aboriginal principles of learning for Indigenous and non-Indigenous peoples are a positive tool to help rebuild positive and respectful relationships in the twenty-first century and beyond. Canada recognized its role in building respectful relationships in the 2008 apology (Government of Canada, June 11, 2008) that recognized its past failures in First Nation education. Building trust and repairing relationships require meaningful dialogue between Indigenous and non-Indigenous nations that reflect core values of Indigenous peoples that are consistent with Article 13 (UNDRIP, 2007). As Chief Justice Murray Sinclair (CBC media interview, June 1, 2015) suggests, “this is an article for Canada to continue to aspire toward in our national conversations about education for our Aboriginal Nations” and with respect to the findings from the Truth and Reconciliation Commission Report issued June 2, 2015. The UNDRIP, Article 13 (2008), states that “Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons” (p. 7).

This national conversation should be undergirded by Indigenous worldviews which include *variations* of the principles of learning that directly link to education for

sustainability. Indigenous groups are not homogenous, so variations of worldviews and Indigenous principles of learning will occur between nations. Indigenous worldviews include “sustainability at their very core” (Aikenhead & Michell, 2011, p. 11) and revolve around respect for spirituality, language, reciprocity, relationality, environment, and lifelong learning in formal and informal venues. These notions link directly to an equal balance of respect between people, planet, and profit (e.g., economic livelihoods). The Indigenous learner, Mother Earth and lifeworlds are intricately connected to each other, and are not separate stand-alone entities; therefore, this understanding of interdependence/interconnectedness provides an alternative perspective to Western, colonial, empire-building paradigms that separate these entities for profit priorities (Sterling, 2003).

Underpinning Indigenous sustainability worldviews are Indigenous perspectives of learning as relational, lifelong, and wholistic (Battiste, 2013). The innate balance of Indigenous worldviews is one of their most valuable aspects, especially in a modern world of imbalance. Worldviews include principles of learning that privilege cultural ways of being and knowing associated with the specific wisdom of each Indigenous group (Fulmes, 1989). These worldviews are, therefore, highly contextual in ways that foreground the definition of knowledge itself. That is to say, Indigenous worldviews undergird aspects of education, legal, cultural, social, governmental, and lifeworld meanings. Understanding and valuing the complexity of Indigenous worldviews of learning are critical steps for informing any effective sustainability mindsets and for the intercultural relationship-building that decolonizes systemic and unequal relations in the education of Indigenous learners (Christensen & Poupart, 2013).

By valuing Indigenous perspectives as equal to dominant European perspectives, we may repair negative relationships from historical, colonial injustices, and legislations from residential schools and the Indian Act (Government of Canada, 1876-Current; St. Denis, 2007; Truth and Reconciliation Commission of Canada, 2015). Equal refers to the ability to value and listen to different worldviews as though they are as important as a dominant Western, European worldview. Would both Indigenous and non-Indigenous learners of the twenty-first century ultimately benefit from traditional and contemporary Indigenous worldviews? The literature suggests that benefits include Indigenous capacity building and improved relationship-building with Western dominant societies. Multiple worldviews may contribute to better solutions for global sustainability issues like poverty, climate change, and conflict.

Battiste (2013) describes some Indigenous notions of learning from the Canadian Council on Learning-Aboriginal Learning Knowledge Centre (CCL; 2007, 2009) as “wholistic, rooted in Aboriginal languages, spiritually oriented and a community responsibility involving family, community and elders” (p. 181). According to Battiste, these positive life-affirming notions of learning are embedded in the wholistic understanding that comprises the many varieties of Indigenous worldviews. Similar notions of Indigenous learning are echoed in the BCFPPOL (2008) with the caution that “they do not capture the full reality of the approach used in any single First Peoples society” (p. 1). A fuller comprehension of healthy Indigenous sustainability knowledge will allow healthy third spaces of discourse (Bhabha, 1994; Haig-Brown, 2008) and collaboration. Could this co-learning quality allow benefits across the spectrum of social, economic, and environment spheres? The Truth and Reconciliation Commission of Canada (2015) echoes this point:

“Establishing constructive, mutually beneficial relationships and partnerships with Indigenous communities will contribute to their economic growth, improve community health and well-being, and ensure environmental sustainability that will ultimately benefit Indigenous peoples and all Canadians” (p. 353).

Indigenous learning models and collaborative learning communities provide opportunities to expand Indigenous and non-Indigenous understanding of each other’s worldviews. The CCL (2007, 2009) describes three lifelong learning models entitled *First Nations Holistic Lifelong Learning Model*, *Inuit Lifelong Learning Model* and the *Métis Holistic Lifelong Learning Model*. These CCL (2007) models do share a common vision of learning as a wholistic process across our lifespans, in that, each model contains “sources and domains of knowledge...recognizes the lifelong learning journey and focuses on community well-being” (p. 3). Unique elements specific to First Nations, Inuit and Métis are depicted in the models as well. These CCL (2007) models state that they are developed from landmark policies on First Nations, Métis, and Inuit education, such as Indian control of Indian Education (National Indian Brotherhood, 1972), *Tradition and Education: A Vision of Our Future* (National Indian Brotherhood & Assembly of First Nations, 1988) and the Royal Commission on Aboriginal Peoples (RCAP; Government of Canada, 1996).

The *First Nations Holistic Lifelong Learning model* (CCL, 2007) reflects four key elements which are applicable from birth to death as “learning from the world of people...learning from and about the land...learning from and about languages, traditions and cultures and learning from and about spirituality” (p. 18). Sylvia Moore (2011) explains how the Mi’kmaw people learn from the salmon throughout their lifespan where “the salmon are with us for a short time in order to teach us, keep us connected to our laws and practices

learned over thousands of years” (p. 40-41). Tsosie (2012) describes the concept of salmon as being “‘First Foods’, [and therefore], a sacred resource [to Indigenous groups]” (p. 1139).

The *Inuit Holistic Lifelong Learning model* (CCL, 2007) reflects the “Inuk’s lifelong learning journey as a cyclical path that revolves within the centre of a learning blanket (which represents the sources and domains of Inuit knowledge)” (p. 31). A focus on oral communication and storytelling are emphasized as “learning tools for passing on history, knowledge, values and beliefs through word-of-mouth and regular community interaction to children through sharing circles, songs, ceremonies and meditation” (CCL, 2007, p. 35). Sheila Watt-Cloutier (Kahane, 2014) explains how the Inuit thrive in the Arctic environment by respecting nature and one another, sharing, and taking only what one needs (p. 137). She explains that “Inuit culture can serve as a model of a sustainable Arctic and a sustainable planet” because they are “inventors of the best-engineered boat in the world (e.g., qajaq), architects of a snow house, able to read weather conditions and travel using constellations as their guides” (p. 137).

The *Métis Holistic Lifelong Learning Model* (CCL, 2007) reflects the links between learning and community well-being, grounded in sacred laws that restore and regenerate. The Métis learner is depicted as a “tree, a complex, living entity that needs certain conditions for optimum growth... conditions change throughout the natural cycle...the health of the tree or the learner impacts the future health of the root system and the forest of learners” (p. 12). Maria Campbell (as cited in Gingell, 2004) explains how the Métis view identity, language, and Mother Earth: “our language comes from the Earth, and the Earth is our mother and a particular place on the mother, a particular landscape makes me the being that I am” (p. 203).

Learning communities can be undergirded by British Columbia First People's Principles of Learning (BCME & FNEESC, 2008) and other Indigenous worldviews. Aspects from Métis, Heiltsuk (BC), Gitksan (BC) and Cree (Alberta, Saskatchewan, Quebec) worldviews can help navigate through the ups and downs of intercultural and third space dialogue (Mitchell & Sackney, 2009; Bhabha, 1994). These CCL Models (2007, 2009) can provide a basis for linking Indigenous worldviews, principles of learning and intercultural dialogue. Mitchell and Sackney (2009) describe "knowledge societies as learning societies where deep cognition, ingenuity, invention, creativity and responsiveness are the gold standards of learning" (p. 9). It is important to anticipate that similar notions of Indigenous learning principles will be provided in Indigenous and non-Indigenous collaborations.

### **2.3.1 Respect sacred/non-sacred**

British Columbia First Peoples Principles of Learning (BCME & FNEESC, 2008) may be expressed differently within each Indigenous group (e.g., over 600 plus in Canada), but generally, the worldview of an Indigenous people is congruent with sacred relationships and teachings from the land and the people of specific territories (Brown, F. & Brown, K., 2009). The land and Mother Earth are considered relatives for many Indigenous groups (Atleo, E., 2004; Battiste, 2013; Fulmes, 1989). Indigenous peoples have a whole system of consciousness based on relationships with the land, ecosystems, people, and other species (Coates, Gray & Hetherington, 2006). Kirkness and Barnhardt (1991) suggest that it is an act of respect to privilege and acknowledge Indigenous ways of being, knowing, and learning. Eurocentric peoples, settlers, allies, and global non-Indigenous populations are reminded of the United Nations Declaration on the Rights of Indigenous Peoples (2007, endorsed by Canada on November, 12, 2010) which "sets the parameters for full engagement and

mutually acceptable resolution on the many long-standing issues facing First Nations and Canada.” UNDRIP is grounded in “balancing the principles of justice, democracy, respect for human rights, equality, non-discrimination, good governance and faith and is consistent with the original Treaty relationship between First Nations and the Crown” (AFN, 2010). I recognize that there is no one-size-fits-all understanding of Indigenous perspectives, but we can grow in our understandings of each other if we continue to value, listen to, and learn from each other. If this collaborative process occurs at the local and international level, could an entire new paradigm of living, learning and solving local and global sustainability issues be possible? From common ground established “through collaboration and cooperation, across our diversity” (St. Denis, 2007, p. 1087), could we learn to have good relationships with each other—not perfect but compassionate? Could we both recognize the intrinsic worth and value of each other’s lifeworlds and perspectives? I believe this process begins relationally, by seeking understanding of Indigenous worldviews and principles of learning.

### **2.3.2 Respect language**

First Peoples Principles of Learning (BCME & FNEESC, 2008) celebrate strengths of Indigenous people rather than their perceived deficits. This is explained by a Heiltsuk term, “nuaqicua, meaning learners are resourceful and have inventive minds” (Hilistis Pauline Waterfall, personal communication, 2015). As learners in intercultural (e.g., third) spaces our lifeworlds (e.g., worldviews) exist within culturally and linguistically transmitted frameworks which bind together the individual and society (Battiste, 2013; Mato, 2011; Smith, 2012). In this study, intercultural spaces are third spaces or hybrid spaces as described earlier in Bhabha (1994), and hybrid spaces include language that reflects Indigenous worldviews (Atleo, E.R., 2011). The seventy-five year cultural ban on Native language use

and subsequent loss of language was part of the colonial system imposed upon Indigenous people through residential schooling (e.g., 1896-1996) and the Indian Act (Government of Canada 1876, RCAP, 1996). The legacy of identity loss, distrust, social discrimination, isolation, loneliness, suicide, and dysfunctional relationship patterns resulting from these colonial policies, impact contemporary Indigenous peoples (Browne, Smye & Varcoe, 2005; Miller, 1967, 1997; Schissel & Wotherspoon, 2002). As we navigate each other's lifeworlds, misunderstandings will occur due to privileged, dominant positions of paternalism, disrespect and colonialism from the legacy of the Indian Act and residential schools, but rebuilding respectful relationships and trust with each other requires a respect for Indigenous languages (Battiste, 2013). Worldviews and values are encapsulated within language structures and composition (Simpson, 2004) and oral narratives or stories (Mills, 2008). For example, Mills (2008) explains that the Gitksan word "adaawk, describes territory, history and how people travel through territory" (p. 90-91). Napoleon (2007) supports this notion by describing "adaawk as oral history that preserves the identity and history" (p. 14) of a people. Davis (2010) takes the position that disrespect and dismissal of Indigenous traditional knowledge and language will be problematic for alliance-building between Indigenous and non-Indigenous peoples. Therefore, building respectful relationships begins with a respect for Indigenous language and the realization that language is the container for worldviews. Indigenous languages contain knowledge that is encoded with beliefs that respect the land and the people. For example, the Heiltsuk word, "Gvi'las, directs us to balance the health of the land and the needs of our people, ensuring there will always be plentiful resources" (Heiltsuk Tribal Council, Living document, n.d.). Could Indigenous language provide a lens of beauty to understand sustainability and education for sustainability?

### **2.3.3 Respect for sharing within Indigenous models of learning**

Indigenous learning models and collaborative learning communities provide opportunities to expand Indigenous and non-Indigenous understanding of each other's worldviews. Learning communities can be undergirded by First People's Principles of Learning (BCME & FNEESC, 2008), to navigate the ups and downs of intercultural dialogue (Mitchell & Sackney, 2009, p. 188). These CCL Models (2009) can provide a basis for linking Indigenous worldviews, principles of learning, and intercultural dialogue. Any dialogue can be complex and fraught with challenges. Dialogue between Indigenous peoples may present challenges as indicated by the axed First Nations Education Act (Assembly of First Nations, 2014).

Perhaps the First Nations Education Act was not accepted by all the First Nation groups in Canada because individual First Nation worldviews were not all represented as unique sovereign nations with unique worldviews. Mendelson (2014) affirms that negotiations were done in good faith on both sides but contentious issues about treaties, legislation, financing, and Aboriginal control derailed the act. Each First Nation is a sovereign nation, and therefore, must be heard and given space to speak to their own traditional laws and contemporary principles of learning (AFN, 2000-2015).

### **2.3.4 Respect relationships**

Indigenous learning models are grounded in traditional laws, relationship-building and reciprocity. Cardinal and Hildebrandt (as cited in Miller et al, 2010) explain these concepts from Treaty 6 as:

Powerful laws were established to protect and to nurture the foundations of strong, vibrant nations. Foremost amongst these laws are those related to human bonds and

relationships known as the laws relating to miyo-wicehtowin...include those laws encircling the bonds of human relationships in the ways in which they are created, nourished, reaffirmed, and recreated as a means of strengthening the unity among First Nations people and of the nation itself. (p. 90-91)

Cardinal (as cited in Miller et al, 2010) reminds non-Indigenous people that Indigenous lifeworlds and relationships to each territory were not altered by the arrival of European settlers and other non-Indigenous groups. Indigenous laws govern the treatment of the land (e.g., Mother Earth) as living, and as a relative. Respecting these principles contributes to positive relationship-building and lessons on how to uphold Indigenous laws in any intercultural dialogue. Trust is gained in this manner. As the binary of “we versus them” is replaced with “us,” a deeper understanding about historical and contemporary relations between Indigenous peoples and Canada could begin with the RCAP (Government of Canada, 1996) and wisdom keepers from the Indigenous land that non-Indigenous live on. Russell Diabo from Mohawk Nation asserts that identity, history, and treaty-making are important for breaking down barriers between Indigenous and mainstream peoples (Diabo, 2013). Prime Minister Justin Trudeau (Government of Canada Budget, 2016) has begun to take action on these barriers by “investing \$8.4 billion dollars over five years, beginning in 2016-17, to improve the socio-economic conditions of Indigenous peoples and their communities and bring about transformational change” (p. 134).

Each CCL model represents “an enduring philosophy and a way of living that integrates all knowledge and experience throughout each stage of a person’s life” (CCL, 2009) while linking individual learning to the collective well-being of each community. The individual cannot be separated from the community or Mother Earth. Parker and Grossman

(2012) state that, “systems of Indigenous knowledge are not quaint folklore but ways of looking at the world that have proven more resilient and sustainable than the Western system” and that “tribes, First Nations, and other Indigenous communities can lead the way with innovative solutions and provide models for non-Native neighbours that can solve global and local sustainability problems” (p. 160). This process involves a commitment to listen, learn, unlearn, and relearn from Indigenous wisdom that revolves around sustainability ways of living, learning, and being.

### **2.3.5 Respect place**

Sterling (2003) echoes this request as a call for a different sustainable education that is, “affirming rather than dislocating, hopeful rather than soulless” (p. 33) in his “participatory ecological education paradigm” (p. 33). He calls for a systems-based orientation to sustainability that is healthy, whether it is “a family, a community, a farm, a local economy, a school, or an ecosystem” (p. 54). His systems thinking emphasizes transformative learning as learning from change, which engages the whole person and the whole learning institution, where ambiguity, uncertainty, space, time, creativity, imagination, and cooperative learning flourish (p. 61). Many Indigenous peoples are deeply embedded in forms of transformative learning that honour ceremony, place, and traditional knowledge (Atleo, M., 2009; Battiste & Henderson, 2009) and are inextricably linked to specific land bases occupied in pre-contact times as sovereign nations. Notions of place are communicated through origin stories as, Hilistis Pauline Waterfall (2012), from the Heiltsuk Nation explains:

Hilistis comes from an original story of a territorial homeland that we share with our Nuxalk neighbours at Cascade Inlet. And it’s related to the origin of how the

hierarchy of animal clans came to be where the Raven was the contestant winner. And so the raven clan is the highest rank in that area, in that village site. (p. 1)

She is the owner of the Raven origin story, which connects her to Heiltsuk culture and the world through her traditional, coastal British Columbia territory. The Raven story confirms her lineage to Heiltsuk territory and geography. Origin stories provide principles of learning for humanity as Cajete (as cited in Aikenhead & Michell, 2011) states:

All human development is predicated on our interaction with the soil, the air, the climate, the plants, and the animals of the places in which we live. The inner archetypes in a place formed the spiritually based ecological mind-set required to establish and maintain a correct and sustainable relationship with place. (p. 73)

This echoes the First Peoples Principle of Learning that describes “learning [that] ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors” (BCME & FNEESC, 2008). The CCL (2007) notion of reverence can be extrapolated from their idea of “a world of continual re-formation and interconnectedness of life.” Reverence for the interconnectedness of relationships between human and non-human is a valuable component of a healthy, sustainable, worldview.

### **2.3.6 Respect lifespan**

Another First Peoples Principle of Learning is that “learning involves generational roles and responsibilities” (BCME & FNEESC, 2008). The CCL (2007) describes Aboriginal learning as, “the community’s collective well-being [that] rejuvenates the individual’s learning cycle through guide-mentors, counsellors, parents, teachers, and Elders.” Battiste and Henderson (2009) affirm that learning Indigenous knowledge is sacred, and wholistic, and requires lifelong responsibility. Indigenous knowledge keepers have social and cultural

frames of reference that provide direction and guidance for learning in an entire lifespan. This cohesive and validated Indigenous knowledge is equal to, and as valuable as, Eurocentric knowledge. Indigenous knowledge is not an add-on to normative mainstream education, formal and informal, but rather a legitimate knowledge base and worldview from which to help orient humanity toward a fresh ethos of sustainability thinking. Responsibility toward oneself, each other, and the planet, are valuable principles of learning that provide healthy sustainable living and flourishing.

### **2.3.7 Respect wholistic experiences**

Another First Peoples Principle of Learning is described as, “learning is [w]holistic, reflexive, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place)” (BCME & FNESEC, 2008). Wholism is “one-ness” within the flexibility of looking forward and backward within the cycles of life (Atleo, E.R., 2004, p. 25). This is reflected in the CCL (2007) concept of “the four dimensions of personal development—spiritual, emotional, physical, and mental—through which learning is experienced [w]holistically.” Castellano (2000) describes wholistic living as “placing the part that we have come to know by close analysis in the context of all its relations, which will continually impact on that which we thought we knew, and thereby transform it” (p. 30). This applies to knowledge as well as relationships seen and unseen (e.g., metaphysical or spiritual). Wholistic oneness is based on care for one’s inner and outer relationships where everyone and everything is connected. Coates, Gray and Hetherington (2006) remind us that we are all a part of a wholistic, universal family as indicated by the phrase “all my relations” (p. 394). When lifeworlds are viewed as wholistic systems that thrive on harmony, balance, and respect for each other, nature and biodiversity, then these elements can be the lens from

which to view sustainability issues, orientations and mindsets. I remind the reader, here, that this can also be described as a lens of beauty that appreciates Indigenous worldviews.

Indigenous cultures are dynamic cultures that adjust to change and constantly test knowledge in the economic, social, and political spheres. The social fabric of a healthy sustainable worldview is rooted in a wholistic connection between the interactions of body, mind, and spirit. McCubbin and Marsella (2009) restate this notion from a Hawaiian Indigenous worldview where interconnected, thriving, relationships include:

Ke Akua (God), Aumakua (Family guardian gods), Kupuna (Family Elders), Makua (parents), Opio (children), Moopuna (grandchildren), Hanai children (those offspring of other families incorporated into another family to be raised and cared for) provide teachings and learnings that support thriving learners. (p. 376)

Wholistic learning is embraced and delivered by an entire community to transform and grow the individual and the collective in a balanced way within Indigenous worldviews.

### **2.3.8 Respect lifeworld transformation**

Transformation and reshaping learners can occur through the collaborative process. Transformation is a movement toward increasing wholeness, uniqueness, and unity, as defined by Hart (as cited in Byrnes, 2000, p. 25). Transformation focuses on uniting the deep inner lifeworld with outwardly visible actions of compassion, integrity, and mindful awareness. Knowledge is transformative as we take it in, ponder, reflect, reject, relearn, accept, and share with others in a continuous cycle of learning and relearning.

Recall that Atleo, M. (2006, 2009) discusses learning principles embedded in notions of reciprocity, relationship, reverence, respect, and relationality with the dynamics of interconnectedness, inter-relatedness, synergy, and wholism. This is part of the Nuu-cha-

nulth worldview described as “Tsawalk, all is one” (Atleo, E.R., 2004, 2011). Relationship to each other, and then to the information, becomes knowledge within the individual through a transformational process that converts prior learning into new learning throughout one’s lifespan. The individual brings one’s prior knowledge and learnings to each other in intercultural spaces and dialogue. Indigenous peoples bring specific teachings, orientation, and teachings from a worldview to each interaction. It is important not to generalize from one specific interaction to all other Indigenous interactions. Recall that Indigenous peoples are not one homogeneous group.

### **2.3.9 Respect cycle of time and learning**

Memory circles and circles of learning depict the wholistic nature of some of the First Peoples Learning Principles. Dillon and Reuter (2013) describe the circle with no beginning or end, but rather a symbol of circulating knowledge and learning principles given to each person at appropriate seasons of one’s life by appropriate teachers (e.g., community member, family, Elders, wisdom keepers, etc.). They refer to a circle of learning which brings to the forefront four basic medicine wheel teachings: mind (e.g. mental), body (e.g. physical), emotion (e.g. emotional) and spirit (e.g. spiritual) where the highest forms of partnership learning (e.g. from each other’s worldviews) is found within a “spiraling sustainable generating balance” (p. 79).

These notions are practiced in a cycle of learning and unlearning in a caring and trusting environment where cultures and languages are honoured. Error is sometimes corrected gently and firmly, depending on the particulars of the learning situation. Dillon and Reuter (2013) state that in, “Aboriginal worldviews all living things are considered sacred...we have spiritual responsibilities to renew the Earth and we do this through our

ceremonies so that our Mother the Earth can continue to support us” (p. 87). This supports another BCFPPOL (2008) which states that “learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.” An example of honouring sacred time and specific learning is explained by Maria Campbell (1995), as teaching appropriate life learnings according to each season. It is only appropriate to share winter teachings during winter seasons reflecting the complex nature of one’s ancestry and the laws and governance of one’s heritage.

### **2.3.10 Respect continuous learning.**

Honouring and seeking understanding of Indigenous worldviews and First Peoples Principles of Learning provide a strong positive pathway toward new approaches to sustainability and education for sustainability. The cycle of continuous learning through an Indigenous lens will deepen our understanding, respectful collaboration, relationality, language, place lifespan, and wholistic experiences. Indigenous learning models provide opportunities to improve mainstream notions of sustainability. Transformation may occur through the complex terrains of dialogue, with patient learning and relearning. Pauline Waterfall (Hilistis) summarizes the importance of Indigenous worldviews in the transformation of oneself, each other, and the planet. She states that “as a human family, our similarities outweigh our differences...we can unite in our quest to leave this world a better place for our future children, just as our ancestors left it a better place for us” (personal communication, 2014).

In summary, First Peoples Principles of Learning and Indigenous sustainability worldviews are intricately related to the healthy balance between people, planet, and profit (e.g., livelihoods). An Indigenous worldview provides a framework for developing a

sustainability mindset through beliefs and practices originating from time immemorial (Gitksan Elder, personal communication, 1989). It is the thread of relationship that weaves all aspects together. This is a relational worldview.

#### **2.4 Understanding Sustainability and Western Worldviews**

While the Indigenous worldviews regarding sustainability are relational, this approach is absent from the dominant Western sustainability worldview that undergirds the current predominant sustainability paradigm in existence today. This is possibly a result of the fact that the Western worldview does not satisfactorily include Indigenous principles of learning or an Indigenous sustainability ethos—a gap that this study seeks to address. The reader should note that this study does not provide all views of Western sustainability. Western sustainability worldviews refer often to the primary pillars of people, planet, and profit, whereas Indigenous sustainability worldviews do not compartmentalize these dimensions. Western worldviews wrap notions of sustainability around “consumerism, economic or material growth and individual rights...[which] serves certain interests, while marginalizing and oppressing others” (Witt, A. H., 2014, p. 8316). Separation of humanity from nature, market forces, positivist science, industrialization, and technology elements are endorsed by the Western ethos (Witt, A. H., 2014).

Sustainability notions originated in Western dominant thinking in the context of the environmental movement and the protection of renewable resources movement (e.g., forests, fisheries) in the 1960s/1970s (Caradonna, 2014; Van Opstal & Huge, 2013). Sustainable development was the catch all phrase for the concepts of sustainability and development and both terms include multi-dimensional “dynamic concepts and processes” (Blewitt, 2008, p. 23).

Kopnina and Shoreman-Ouimet (2015) trace the history of sustainability back to “environmental and social inequality issues of the Industrial Revolution in late eighteenth-century England” (p. 7). Capitalism (e.g., capitalistic economy) emerged out of the Industrial Revolution, multinational corporations (e.g., International Monetary Fund; World Bank) internationalized trade in the 1950’s, and the Organization for Economic Cooperation and Development (OECD) emphasized economic growth in the 1960s (Kopnina & Shoreman-Ouimet, 2015). The Club of Rome (e.g., 1972) noted that there were limits to growth from human industrial developments (Kopnina & Shoreman-Ouimet, 2015) and the United Nations Environment Program (UNEP) and UNESCO called for the “use of environmental education to develop ‘a new global ethic’ to tackle industrialism and consumerism” (Kopnina & Shoreman-Ouimet, 2015, p. 9). Lélé (1991) describes the concept of sustainability as that which includes the “connotations of literal (e.g., sustaining anything), ecological (e.g., sustaining ecological basis of human life in ecological and social conditions), and social (e.g., sustaining social basis of human life)” (p. 608).

Kopnina and Shoreman-Ouimet (2015) summarize the many terms of sustainability and its “derivatives [like sustainable development]... [as] the capacity to support, maintain or endure; it can indicate both a goal and a process” (p. 3). Lélé (1991) also describes the concept of development with “connotations of process (e.g., growth and/or change) and objectives (e.g., basic needs, etc.)” (p. 608). Washington (2015) states that “there are well over 300 definitions of sustainability” (p. 1) that are “full of contradictions, tangled meanings, unstated assumptions and confusion...[with] people pushing their *own* particular agendas” (p. 2). Burns (2015) states that “sustainability [sustainable development] has generally come to mean taking a stance toward making changes and finding solutions to

address complex cultural and ecological problems” (p. 260). In an effort to consolidate decades of work on sustainability, definitions, and pillars, the Brundtland Report, *Our Common Future* released its version in 1987 (World Commission on Environment and Development).

Currently the most accepted definition of sustainable development is from Gro Harlem Brundtland, which states, “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 43). The Brundtland Report as described by Ciegis, Ramanauskiene and Martinkus (2009) focuses on “on fair distribution of natural resources both among different generations and among the present generation of people from the first, the second, and the third world, and finding a positive consensus between the environment, social and economic dimensions of environment” (p. 30). Thompson (2016) puts the Brundtland emphasis on sustaining economic growth and relating economic growth “to what to count and how to count it” (p. 21). Thompson (2016) further explains that meeting needs requires a choice between economic activity, or biodiversity, thus reflecting a broader concern with “resource sufficiency” (p. 21).

The Western worldview of sustainability includes the three common pillars (e.g., 3P’s, triple bottom line, dimensions, aspects, elements) of people (e.g., society/social), planet (e.g., environment), and profit (e.g., economy). Profit can be best explained with Chambers’ (1995) definition of sustainable livelihoods which “refers to the means of gaining a living, including livelihood capabilities, tangible assets and intangible assets” (p. 174). Chambers (as cited in Lélé, 1991, p. 619) unpacks sustainable livelihoods as “a level of wealth and of

stocks and flows of food and cash which provide for physical and social well-being and security against becoming poorer.”

Despite the fact that the pillars in principle are seen as having equal importance, the Western dominant ideology of growth and accumulation in reality elevates profit at the expense of people and planet (Throsby & Petetskaya, 2016; Washington, 2015). Throsby & Petetskaya (2016) state that the West is “all too ready to abandon, if necessary, the holistic ideals in favour of economic or sectoral gain at the expense of environmental or social principle[s]” (p. 129). The pillars, along with sustainability and sustainability development notions, are complex, and subject to change as “the world changes” (Blewitt, 2008, p. 23).

Waas, Hoge, Verbruggen and Wright (2011) also note that the original three pillars: people, planet, and profit (e.g., 3Ps, triple bottom line), grew out of a “melting pot of different ideas about progress” (p. 1640). That melting pot included “Kidd’s (1992) six roots: ecological/carrying capacity, resources/environment, biosphere, critique of technology, no-growth/slow growth, ecodevelopment...Quental et al. (2011) limits, means and ends, needs, complexity....[and] Jabareen’s (2008) ethical paradox, equity, global agenda, eco-form, utopia, integrative management, and natural capital stock” (as cited in Waas et al., 2011, p. 1640). Mainstream (e.g., Western) advocates choose between these various pillars according to their own values, beliefs, goals, agendas, and interests.

A fourth pillar (e.g., institutional, democracy, governance) was added from the political realm with an emphasis on “process of improvement” (Meadowcroft, 2000) or “process of change” (Spangenberg, 2004) between all pillars. Lockley and Jarrath (2013) expand the Brundtland Report to include the four pillars as, “environmental, social, cultural and economic sustainability” (p. 118). Lockley and Jarrath (2013) describe their fourth pillar

as cultural, specifically noting the cultural aspect as “human rights, cultural diversity, political decision making, democracy, global agreements, consumerism, and lifestyle choices” (p. 118). All pillars are informed by equity, interdependence, and responsibility for action (Lockley & Jarrath, 2013, p. 118).

Waas et al. (2011) describe the four pillars specifically as “economic, environmental, institutional, and social” (p. 1651). They break down the economic pillar to include, “economic growth as an engine for long-term welfare creation to satisfy essential needs for jobs, income, food, energy, water, sanitation, social security, and consumption opportunities” (p. 1651). Waas et al (2011) further break down the environmental pillar to include “environmental protection to conserve and enhance the resource base and to keep within the Earth’s environmental limits for a long term perspective” (p. 1651). They break down the institutional pillar to include “institutional change to merge environment and economics in decision making and to enforce the common interest through greater public participation, locally and internationally” (p. 1651). They, then, break down the social pillar to include “social justice to achieve an equal distribution of welfare, equal access to natural resources and equal opportunities between people (gender, social groups, etc.)” (p. 1651).

Western sustainability concepts are complex and contested spaces mostly due to the separation of humanity from nature (Giddings, Hopwood & O’Brien, 2002; Mebratu, 1998). Giddings, Hopwood and O’Brien (2002) state that “this separation has been shaped by the alienation of much of human life from the environment we live in,...the separation between the production and consumption of the means of life...a philosophy of the separation of mind and body” (p. 187-188). Separation of mind and body has its origins in Descartes (Harlow, Golub, & Allenby, 2011). Harlow et al (2011) describe “René Descartes’ conception of a

world composed of objects under man's control... [with] the power of humankind to make and remake the world" (p. 274). Descartes believed in dualism, the separation of mind (e.g., or soul) from the body, which worked like a machine, thus by extension, includes the right to impose human will upon nature with disregard for that will upon nature (Harlow et al, 2011). This is in opposition to Indigenous worldviews that value the interconnectedness between body, spirit, mind, and land. Indigenous worldviews do not separate humankind from nature (Brown, F. & Brown, K., 2009).

Van Opstal and Huge (2013) cite Boutilier (2005) when describing the Western mainstream mindset in modernity as having "linear notion[s] of time, anthropocentrism, dualism, secular or monotheistic assumptions, formality, disciplinarity, materialism and mechanistic approaches, ownership of land, superiority of mankind [humankind], and methods of knowledge creation focus[ing] on rationale, quantification or verifiable qualitative research" (p. 695). These notions culminate in universal claims to knowledge, a one-sided view of empirical science as dominant (e.g., hegemonic), and value-free, fragmented, privileged worldviews (Van Opstal & Huge, 2013). None of the pillars focus on the spiritual or relational way of being-in-the-world as commonly understood within Indigenous worldviews (Cajete, 2010).

Indigenous worldviews are mostly in opposition to these notions, in that, intercultural dialogue and perspectives are all seen on an equal basis (Mignolo, 2000), not universal but tied to localized cultures and traditions (Berkes, 1999, 2008) and values are interconnected throughout a wholistic view of body, spirit, mind, and place (Cajete, 2000). Lozano (2008) states that "modern ideologies that rely on short-term economic profits and scientific

traditions based on reductionist cause-effect relationships are failing to address the complex dynamic interrelations” (p. 1844-1845) among the pillars of Western sustainability.

In summary, Western dominant thinking results in a posture that seeks to dominate, interrogate, and exploit nature under the Western Science banner, which honours the empirical, positivist, and linear mindset (Berkes, 2008; Whyte, Brewer & Johnson, 2015). Generally, the Western sustainability models with the pillars of people, planet, and profit have been criticized for not providing elements that emphasize culture and social equity (Duxbury & Jeannotte, 2012). Duxbury and Jeannotte (2012) call for “more culturally sensitive development paradigms” (p. 4) like the Kingston, Ontario framework “of the four pillars of sustainability, seeing sustainability as a process of continuous renewal through balance and interconnectedness across the four dimensions of sustainability-cultural vitality, economic health, environmental responsibility, and social equity” (p. 10). The Kingston, Ontario cultural pillar specifically claims “to bring beauty into our daily lives” (Duxbury & Jeannotte, 2012, p. 10) as well as art, culture, and heritage within a nurturing community. The current trend in Western sustainability models is to recognize that perhaps “humans cannot be detached from nature” and that “sustainability is multi-dimensional in that it means different things to different people” (Hicks, 2012, p. 267). Washington (2015) concludes that “sustainability—first and foremost—must be about solving the environmental crisis...it has to be about creating a culture that lives in harmony with nature (and each other) into the future” (p. 372).

Including culture as an additional pillar may be an attempt to move beyond pillars that undergird unrestricted economic growth at the expense of planetary well-being, but we

need to learn from Indigenous worldviews on why that is important and how to do that, since their worldviews honour that perspective in the first place.

## **2.5 Understanding Sustainability and Indigenous Worldviews**

Sustainability, sustainability education, and sustainable development are concepts with many contested definitions and meanings (Carew & Mitchell, 2008). Carew and Mitchell (2008) note that “anthropocentrism (e.g., utility to humans) and ecocentrism (e.g., intrinsic value to humans) may underpin different conceptions of sustainability” (p. 111) which revolve around the concepts of environment, society, and economy. Recall that environment, society, and economy may also be referred to as planet, people, and profit. Anthropocentrism within mainstream Eurocentric sustainable development discourse undermines Indigenous worldviews and developing countries by devaluing Indigenous ways of knowing, and by assuming that the better worldview is the dominant, Western one (Kopnina, 2013; Kopnina & Meijers, 2014). They argue for sustainability discourse to include serious reflection on underlying assumptions and impact upon non-western countries and other cross-cultural encounters. This may reduce tensions between different worldviews and support Sterling’s (2001, 2003) call for personal and collective transformation from a sense of responsibility, care and concern for the environment, each other, and positive changes for our collective futures.

Sterling’s call for an alternative ethos of sustainability is also echoed in Indigenous collaborations that highlight the ability to listen to, and learn from, Indigenous peoples that are the original authors of sustainability (Hilistis Pauline Waterfall, personal communication, 2012). Waterfall’s Indigenous ways of knowing and being, as owner of the Raven Origin story, connects and confirms her lineage to Heiltsuk territory and sustainability teachings that

adapt and change with increasing challenges to the territory. This could be considered an ecocentric worldview because of the intrinsic worth and value placed upon people, place (e.g., planet) and livelihood (e.g., economic) relationships. Heiltsuk teachings are but one example of the many Indigenous wisdom traditions that could reshape dominant sustainability mindsets. Non-Indigenous peoples need to be willing to honour and respect marginalized worldviews (Foucault, 1997).

Walter Filho (2009) states that sustainability from the Brundtland Report is widely defined as, “the ability to meet the needs of the present while living within the carrying capacity of supporting ecosystems and without compromising the ability of future generations to meet their own needs” (p. 9). To accomplish this, education is seen as a necessary driver for learning that supports sustainability elements in local and global societies. Education remains a “vital part of all efforts to imagine and create new relations among people and to foster greater respect for the needs of the environment” (UNESCO, 1997, paragraph 38). Indigenous worldviews depict education as a lifetime process where everyone and everything (e.g., trees, rocks, stars, animals, fish, etc.) has the ability to impart knowledge (Battiste, 2002; Cajete, 2000). Embedded in many Indigenous worldviews is the concept of “Seven Generations” where intergenerational relationships transfer knowledge by looking seven generations in the past and in the future (Mooradian, Cross, and Stutzky, 2007). Like the Brundtland Report (G.H. Brundtland, 1987), the long view perspective of Indigenous Education includes the importance of future generations surviving well on the planet and with each other. However, the Indigenous worldview places a stronger emphasis on the importance of relationship between every aspect of life and learning in formal and informal venues in the past, present, and future simultaneously (Battiste, 2002).

Indigenous worldview deems education as learning and living within a web of relationships that orient the individual and the community toward respect and care for Mother Earth and all of its inhabitants (e.g., human and non-human) (Atleo, E.R., 2004; Waterfall, Hopwood, Gill, 2001). I assert that Indigenous Education includes notions of sustainability, if one understands sustainability using McKenzie and Morrissette's (2003) description: an "essence [or] spirit [the sacred] being the ultimate link between all things [in relationship to each other] and to Creation [and the Creator]" (p.259). Western education is seen as the driver for changing attitudes and behaviours that will support the notions of sustainability (Scarff Seattor & Cuelemans, 2017). Wals (2012) suggests that critical reflection on the various meanings and manifestations of learning with respect to sustainability are "not static but rather continue to adapt and change to accommodate the shifting demands of our time" (p. 11) locally and globally. I assert that Indigenous worldviews may be in direct conflict with other education reforms that solely demand, impose, or prescribe accountability and efficient management without respecting the relationships between body, spirit, mind, place, time, and the sacred. This remains a complex and continuous challenge within Indigenous and non-Indigenous collaborations, which require time and deep listening for new negotiated meaning-making that respect different worldviews. Purposeful and meaningful action, practices and mindset changes are a result of patient collaborations, not the reverse (Battiste, 2013; Davis, 2010). If we seek first to understand the values and beliefs underpinning different worldviews, only then can we find some consensus of an improved sustainability ethos that benefits both Indigenous and non-Indigenous peoples.

Alvarez and Rogers (2006) depict contested sustainability notions as being too “prescriptive, as in the label education *for* sustainability, which implies fixed undisputed products like environmental targets or audits” (p. 183). They contrast the prescriptive notions against the process notions of Wals and Jickling (as cited in Alvarez & Rogers, 2006) that reflect a “participatory and openness to diverse perspectives and attitudes as in the label, sustainability education” (p. 183). Alvarez and Rogers (2006) argue for broader notions of the sustainability agenda that include an interpretive stance rather than an investigative stance. They describe how day-to-day practices of sustainability (e.g., sustainability-on-the-ground or my term, wisdom-on-the ground) broadens any economic or environmental theoretical perspective. Day-to-day sustainability practices (e.g., farming) include cultural and political aspects as well as environmental and economic aspects. I assert that broadening one’s understanding is enhanced by dialogue and observation at the local community level. Gros and Frithz (2010) depict the importance of the Mayangna traditional Indigenous worldview and knowledge in a local fish example:

Liwa, a master spirit of the waterways controls whether individuals go home empty-handed or with abundant catches and that depends on those who harvest carelessly and take too much... ‘white fishes’ are particularly close to liwa... these are sabaleta, robalo, palometa and the turtle kuah... (p. 9)

The Mayangna (e.g., Honduras and Nicaragua territory) provide details on more than thirty species of fish and six types of turtles in their habitat and cosmological reflections on the respect of human-animal relations within the biodiversity from which they all share life. Some of this Indigenous knowledge was unknown to the Western world until the Mayangna, in collaboration with UNESCO, shared their complex and intricate Indigenous knowledge.

Human society, whether Indigenous or non-Indigenous, wants sustainable futures. The United Nations, with their variety of organizations, exists in part to support sustainable futures for local and global peoples; one organization in particular is UNESCO. UNESCO, as the lead agency for the UN Decade of Education for Sustainable Development (2005-2014) “seeks to integrate the principles, values and practices of sustainable development into all aspects of education and learning, in order to address the social, economic, cultural and environmental issues we face in the 21st century.” Currently, UNESCO uses variations of the *three pillars* to describe sustainable development: social, environmental, and economic (2014). Since the sacred and the beauty of subjugated, marginalized knowledges (Foucault, 1997) are missing from standard Western sustainability frameworks (Sterling, 2003), I assert that one way of foregrounding Indigenous worldviews in the sustainability discussions, could be through the notions of beauty, culture, and Indigenous wisdom. I assert that beauty could be included as an *additional fourth pillar* or as a different element of sustainability or a lens through which to appreciate the complexity and importance of Indigenous worldviews in the sustainability dialogues.

Cultures reflect diverse notions of beauty (Holthaus, 2008; Sartwell, 2006). Sartwell (2006) describes beauty from the English, Hebrew, Sanskrit, Greek, Japanese, and Navajo perspectives. He speaks to an attitude of sensitivity toward different dimensions of beauty. These beauty dimensions are explained as “the object of belonging (English); the glow, bloom (yapha-Hebrew); whole, holy (sundara-Sanskrit); idea, ideal (to kalon-Greek); humility, imperfection (wabi-sabi-Japanese) and health, harmony (hózhó-Navajo).” Seeking beauty may orient a “learners’ capacity to care for the world” (Windhalm, 2011 as cited in Burns, 2015, p. 261) instead of harming or commodifying the world. Plant breeders David

and Daniel Podoll (as cited in Holthaus, 2008) reflect on an Indigenous example of the nature of beauty within sustainability:

Beauty is essential to sustainability...all the most durable qualities of a plant, or of a sustainable food system follow on from beauty...the color of the seeds, the better spirit of the seed from the touch of the outer skin versus the sour spirit of tough seed skins...the measure of healthy soil, good health, is all beauty. It means that you have found the balance between raising food and doing no harm to the natural environment. (p. 23)

This example reflects an encounter with an Indigenous worldview. Beauty is woven throughout this dialogue. From the spirit of the humans interacting with the spirit of the non-human world (e.g., plants, seeds) to the reflecting of the new knowledge that balance between entities is beauty and that this learning is wrapped up within sharing and humour. This dialogue reflects openness to new ideas, humility to value another perspective, and life-giving sustenance for all. David and Daniel are being constituted (e.g., formed) and transformed in this encounter by all of these aspects. There is a spiritual value to all aspects in relationship between each other. Orientations to learning from an Indigenous perspective require respect, gratitude and, in this example, joy and beauty. Beauty could be considered part of culture. Blewitt (2008) states that “the UN Decade suggests that culture, understood in a broadly anthropological and connective sense, will in large part predetermine the way issues of EfSD [sustainability] are addressed in specific national contexts” (p. 217). Beauty as a fourth pillar could expand the Western dominant sustainability ethos, as it could provide a positive direction from which to view the inclusion and value of Indigenous culture and worldview.

UNESCO (2014) describes the multiple aspects of culture as “ranging from cultural heritage to cultural and creative industries... as a thread that binds together the social fabric of our societies and can be a crucial factor for reconstruction and reconciliation in the aftermath of conflicts” (5 May, 1). With a world full of diverse cultural and Indigenous groups with unique beauty and sustainability worldviews, the potential for healing, thriving and resolving issues could become a quicker reality. This is a gap that needs to be addressed in future sustainability definitions, approaches, concepts, and collaborations. However it is important to note Leroy Little Bear’s (2000) caution:

No one has a pure worldview that is 100 percent Indigenous or Eurocentric; rather, everyone has an integrated mind, a fluxing and ambidextrous consciousness, a precolonized consciousness that flow into a colonized consciousness and back again.

It is this clash of worldviews that is at the heart of many current difficulties... (p. 85)

Even though Leroy Little Bear speaks to Indigenous perspectives, his comment may be extended to other cultural, non-mainstream groups as well. Cultural worldviews do collide with each other, and beauty may provide a safe and easier lens to challenge and negotiate new ways of communication and understanding each other. Current sustainability conversations and concepts are broadened and may benefit from the collective wisdom of humanity.

The importance of culture is addressed in the recent Hangzhou Declaration from China (May, 2013). The Hangzhou Declaration from China (May 2013) “recommended that a specific goal focused on culture be included as part of the post-2015 UN development agenda, to be based on heritage, diversity, creativity and the transmission of knowledge” (p. 15-17). These themes may also reveal aspects of beauty depicted in diverse ways of being,

knowing, doing and thinking that reflects specific ecosystems, language systems, and relationship systems. This is encouraging. Since culture has long been recognized by Indigenous groups as a priority in all forms of education and sustainability (Atleo, M.R. 2006, 2009; Kawagley & Barnhardt, 1998, 2005; Smith, 2012), Indigenous worldviews can possibly reorient our thinking about the who, what, where, when, how, and why of sustainability living on planet Earth.

Western dominant sustainability ethos emphasize the driving force of economics (e.g., profit pillar) as being the sole direction for health and well-being. According to Nisbet (2011), “the Western definitions for both sustainability and sustainable development are debated because of an overemphasis on profit and economic aspects implied by the term ‘development’ despite the interplay of the environment and the economy” (p. 51) as important as well. Environment and economy are indeed important, but they are elements that hold equal importance to people, place, and the relationships between them all. Issues of how to apply sustainability according to separate categories of social, economic, and environmental concerns lead to unsatisfactory solutions for global problems. Better solutions may arise from some Indigenous ways of knowing and being that integrate all facets of living well with the planet, self and others, locally and internationally.

Indigenous worldviews are undergirded by systems thinking and multidisciplinary interconnections. For example, Lopik (2013) describes sustainability forestry practices on tribal lands (e.g., Wisconsin), which include the operations of harvesting timber plus the connections of timber, spirituality, ethics, government, business, and resource management woven through a Menominee way of life. The dimensions of sustainability in the tribal college reflect the holistic interactions between “land and sovereignty, natural environment,

institutions, technology, economics, human perception, activity, and behaviour” (ibid, p. 107). The emphasis is on all of these dimensions of sustainability, not just the economics of harvesting as profit as the stand-alone important key focus. This Indigenous worldview reflects the importance of the interrelationships between all of the dimensions. Dockry, Hall, Lopik and Caldwell (2016) note that “sustainability models used throughout the world can be problematic for Indigenous communities because they do not often address or incorporate Indigenous cultural values, concerns, world views (epistemologies and ontologies) or teachings...the health of the land and people are one” (p. 128).

As stated earlier, Indigenous peoples are not one homogenous group, but some commonalities do exist for the concept of sustainable development. For example, Manitoba Education and Training (2000) states, “traditionally Aboriginal people have exemplified the qualities of good stewardship; collective responsibility for the future as far as seven generations; depict Mother Earth as a living person and life-giving force and embrace interrelationships and interconnectedness” (p. 41-42). Recall that Marlene Atleo’s (2001, p. 17) 4Rs (e.g., reverence, respect, responsibilities and relations) and 4Ds (e.g., wholism, interconnectedness, synergies, and reciprocities) are strong values in an Indigenous worldview. For clarification, the 4Ds represent the dynamic flow between the 4-Rs. Could the 4Rs and 4Ds be considered beautiful elements of Indigenous sustainability? Battiste and Henderson (2000, 2009) argue for the blending of their version of Indigenous knowledge with Eurocentric knowledge to advance education and sustainability awareness, beliefs and actions. Battiste (2002) further describes knowledge, not as a commodity that can be possessed or controlled by educational institutions or corporations, but a living, dynamic

process to be absorbed and experienced, to be understood, where knowledge is an integral part of learning how to survive and flourish in the world.

The imagined fourth pillar of beauty or lens that appreciates Indigenous worldviews could reflect the above Indigenous perspectives and equate dominant and marginalized worldviews as equal to each other whenever intercultural encounters or third space collaborations occur (Bhabha, 1994; Haig-Brown, 2008). This could help develop citizens with sustainability mindsets over a lifetime. This type of lifelong learning creates global citizenry and leaders that benefit all societies on Earth (Gibson, Rimmington & Landwehr-Brown., 2008; Lee, 2012). This is supported by American Field Service (AFS) Intercultural programs, under UNESCO patronage, as an international non-profit volunteer-driven educational organization that provides intercultural learning for all ages in over 103 countries and supports global citizenry as change makers who resolve differences for a more just and peaceful world. AFS Global Intercultural and Youth Symposiums (2014) cite Jacques Delors from *Learning: The Treasure Within* -UNESCO Report on Education (1996) as inspiration for challenges facing lifelong education for global citizenship as involving:

Our capabilities to learn to live together by developing an understanding of others and their histories, traditions and spiritual values and, on this basis, creating a new spirit which, guided by a recognition of our growing interdependence and a common analysis of the risks and challenges of the future, would induce people to implement common projects or to manage the inevitable conflicts in an intelligent and peaceful way. ([www.symposium.afs.org](http://www.symposium.afs.org), 2014)

Economy (e.g. economics, profit) is important to livelihood in Indigenous worldviews, but thinking about it as the sole driver of sustainability living as less important is a better way.

Economy (e.g. economics, profit) is in relationship with all other facets of sustainability and is not the driving, dominant force for sustainability and revering Mother Earth.

A collaborative conversation about education for sustainability and encouraging people to think about our collective futures, and planning for them, is important. Indigenous worldviews are embedded in teachings and learnings that are taught throughout the life cycle of each community member. Sterling (2003) echoes this notion by emphasizing the need to teach future citizens how to value sustainability beyond the profit motive, as indicated in the dominant Western worldview.

We need the best of both perspectives in future sustainability definitions, approaches, and policy development (Brown, F. & Brown, K., 2009). One particular example is the Heiltsuk, Haida, and Namgis way of understanding sustainability. Specifically, in their book *Staying the Course, Staying Alive—Coastal First Nations Fundamental Truths: Biodiversity, Stewardship and Sustainability*, Brown, F. and Brown, K. (2009) address sustainability principles based upon seven fundamental truths.

**Table 1: Fundamental Truths**

Fundamental Truths		Description
1	Creation	We the coastal First Peoples have been in our respective territories (homelands) since the beginning of time.
2	Connection to Nature	We are all one and our lives are interconnected.
3	Respect	All life has equal value. We acknowledge and respect that all plants and animals have a life force.

Fundamental Truths		Description
4	Knowledge	Our traditional knowledge of sustainable resource use and management is reflected in our intimate relationship with nature and its predictable seasonal cycles and indicators of renewal of life and subsistence.
5	Stewardship	We are stewards of the land and sea from which we live, knowing that our health as a people and our society is intricately tied to the health of the land and waters.
6	Sharing	We have a responsibility to share and support to provide strength and make others stronger in order for our world to survive.
7	Adapting to Change	Environmental, demographic, socio-political, and cultural changes have occurred since the Creator placed us in our homelands and we have continuously adapted to and survived.

Note: Based on Brown, F. and Brown, K. (2009, p. xiv).

These truths are validated through “language, maps, practices and stories” (2009, p. xiii) and are interwoven together as a wholistic approach to living with others and on Mother Earth. This specific example may inform new thinking and dialogue about living in harmony with nature and each other in the local and broader sustainability education field between Western and Indigenous collaborations.

An Indigenous transformative example from Brown, F. and Brown, K. (2009) uses the fundamental truths to teach some of the Heiltsuk, Haida, and Namgis worldviews of relationships to land and each other throughout the lifetime of each person in formal and

informal educational/learning venues. Specifically, an example of Heiltsuk sustainability-on-the-ground or wisdom-on-the-ground (e.g., local Indigenous traditional and contemporary knowledge) describing Fundamental Truth 5 (e.g., stewardship) is when, “openings were intentionally left in fish trap walls so that fish could escape when the traps were not in use, or ‘gates’ were opened to release the remaining fish after the trap users had taken what they needed” (Lepofsky & Caldwell, 2013, p. 8). Heiltsuk education is lifelong education that never ends and continues generation after generation “adapting creatively to change, and welcoming people with specialized knowledge to contribute to their understanding of their own world, and of the *waax-wais* as a whole” (Waterfall, Hopwood & Gill, 2001, p. 106-107).

A Western sustainability ethos could be enhanced with Indigenous worldviews like the Heiltsuk, Haida, and Namgis descriptions of creation, connection to nature, respect, knowledge, stewardship, sharing, and adapting to change. UNESCO (2005-2014) successfully raised awareness of the importance of sustainable development, sustainability, and sustainable education but a paradigm shift that highlights beauty as an element within sustainability as the fourth pillar has not happened yet. I assert that learners begin by seeing specifically Brown F. and Brown K.’s (2009) notions of British Columbia coastal First Nations’ (e.g., Heiltsuk, Haida, and Namgis) perspectives on sustainability and their fundamental truths as beauty embedded within a whole Indigenous philosophy of relating to the planet, profit, and people differently. Shifts of thinking about humanity as part of the Creation as opposed to separate from Creation could shape sustainability and a new ethos of sustainability. This shift of mindset, attitude, and behaviour involves patience, trust, and humility (Berkes, 1999, 2008; Cajete, 2010). Their views easily support and reflect the new

UNESCO post 2015 development agenda, Zero Draft (Open Working Group, 2014)

statement:

We call for holistic [wholistic] and integrated approaches to sustainable development that will guide humanity to live in harmony with nature and lead to efforts to restore the health and integrity of the Earth's ecosystem. We acknowledge the natural and cultural diversity of the world, and recognize that all cultures and civilizations can contribute to sustainable development. (p. 1)

We are all beneficiary stakeholders of a healthy humanity and healthy planet. By dialoguing with Indigenous cultures and many other cultures as well, a sustainability policy could provide a different way of looking forward, beyond anticipatory thinking, adapting to new issues and perspectives that meet the demands of post-2015 UNESCO goals. Indigenous stakeholders may provide innovative, creative, and wholistic answers to how to include beauty as the fourth pillar connected seamlessly to social, environmental, and economic pillars.

It has already been noted that sustainability is a contested notion, so we need an expanded ethos that inspires a more positive and caring approach to creating a healthy future for humanity and non-humanity. The UNESCO Roadmap for Implementing the Global Action Programme on EfSD (2014) says it best by reminding us that “political agreements, financial incentives or technological solutions alone do not suffice to grapple with the challenges of sustainable development” (p. 8). I assert that we need Indigenous perspectives, as well as many other equally valuable cultural group worldviews, to expand the Western sustainability ethos by elevating beauty (e.g., as an appreciation of Indigenous worldviews)

to a fourth pillar in UNESCO's influential world dialogue on sustainability issues and sustainability education.

Multiple worldwide documents and discussions describe the various facets of sustainability (Bartels & Parker, 2012; Blewitt, 2008; Washington, 2015). I remind the reader that Western notions for education for sustainable development began with international discussions on sustainable development and culminated in the Brundtland Report's widely-used definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, 1987). Another important, current, document entitled *Realizing the Future We Want for All*, compiled by the United Nations System Task Team on The Post-2015 UN Development Agenda (2012), emphasizes open, inclusive consultations that build upon previous summit outcomes in social development (e.g., education), environmental sustainability, peace and security, and economic development. They recognize that a long time horizon of 15 to 25 years may be needed for major transformational changes in behaviours and attitudes to take place. International and local collaborations continue as indicated in a current document entitled *The UNESCO Roadmap for Implementing the Global Programme on EfSD* (2014), which highlights quality education empowered by knowledge, skills, and values as a key driver for change in sustainability mindsets. Sterling (2001) argues that changing sustainability mindsets includes "flexibility, resilience, creativity, participative skills, competence, material restraint, sense of responsibility and transpersonal ethics" (p. 52). Indigenous worldviews and mindsets already include these elements with respect to the meaning of care and love for humanity, non-humanity, and Mother Earth (Absolon, 2011; Cajete, 2000; Wilson, 2008).

Since UNESCO (2014) calls for a “change in ethos” (p. 18) by having schools and universities incorporate sustainability principles and practices within a wholistic view, it would be prudent to highlight Indigenous worldviews, since Indigenous groups have been living and educating generations in this manner since time immemorial (Battiste & Henderson, 2009; Elliott, 2009; Fulmes, 1989). This is further supported in Canada by The Council of Ministers of Education (CMEC, February 2014), who strongly advocate for urgent dialogue with Indigenous peoples, especially on education for sustainable development and environmental education. CMEC represents different provincial and territorial points of view on sustainability components, but all agree that continuous discourse with Indigenous peoples is required to live differently together and on this planet.

The CMEC (2014) document also notes that notions of sustainability vary among provinces and territories, but a common thread between these variations are interrelationships between economic, social, and environmental perspectives that foster engaged, informed, and responsible citizens (p. 13). The CMEC (2014) assumes that cultural diversity, equity, gender, global citizenship, human rights, peace, traditional, and Indigenous knowledge are assumed to cut across Education for Sustainable Development (EfSD) engagement from early childhood and care, primary education, secondary education, technical/vocational education and training, higher education, teacher education, nonformal education, training and capacity building and public awareness.

Quality education with notions of sustainability by both dominant and Indigenous cultures can also be explained as “linking knowledge, values, perspectives, and skills/behaviour (the head, the heart, the hands)” (CMEC-ESDWG, 2010, p. 5) and “transdisciplinary study (head); practical skill sharing and development (hands); and

translation of passion and values into behaviour (heart)” (Sipos, Battisti, & Grimm, 2008, p.68). A transformative sustainability learning chart (TSL) (ibid., p. 75) depicts several combinations of head, hands, and heart pedagogy and its fluid nature (e.g., multiple, creative, re-creative synergies) for understanding sustainability. Another example of this, albeit named differently by Correia, do Valle, Dazzani & Infante-Malachias (2010) is the Brazilian School of Arts, Sciences and Humanities (SASH) curriculum which focuses on concept mapping and scientific literacy for post-industrial informed learners and autonomous citizens. Even though these examples are aimed at higher education, they could easily be adapted for other levels of education. These examples serve to illustrate attempts by the world to incorporate sustainability principles under that banner of education.

Indigenous worldviews and sustainability principles are reflected in Indigenous Science, Traditional Ecological Knowledge, and Indigenous Education (Battiste & Henderson, 2009; Cajete, 2010). Castellano (2000) states that Indigenous Science and worldviews come from multiple sources of knowledge described as “traditional (e.g., wisdom of elder generations), empirical knowledge (e.g., careful observation of ecosystems) and revealed knowledge (e.g., dreams, visions, intuitions)” (p. 23-24). Lifeworlds (e.g., norms, cultures, traditions, languages, beliefs, values, ways of knowing and being) can be harmonious and balanced through these sources of knowledge. I agree with Castellano (2000) that experiential learning through the lens of observation and reflection or reflective practice (Schon, 1983), balance between the knower of knowledge (e.g., wisdom keeper, knowledge keeper, recognized traditional knowledge holder, cultural keeper), the known (e.g., knowledge) and the coming-to-know knowledge (e.g., process of learning) is all interconnected and revealed in daily practices and interactions.

It is important to note that it is not only through Indigenous lenses that this wholistic view of learning exists. Scarff Seatter & Ceulemans (2017) describe how Schon's (1983) reflective practitioner work overlaps with Roberts and Silva's three pedagogical styles: Trialogue, Imposition and Abandonment. The Trialogue brings together the knower, known, and coming-to-know, with the prerogative on the learner and his/her prior knowledge and experience (not mentioned in Schon's model, except as the process). This pedagogy advances a new ethos of sustainability education, thinking and learning. Scarff Seattor's Trialogue (2017) and Shrivastava's (2010) pedagogy of passion, both recognize the importance of prior knowledge and life experiences of each learner as he/she engages with new knowledge. Indigenous ways of knowing include these aspects of learning as well, to scaffold and transform learners throughout the life cycle of change. Ancestral teachings and learnings are predicated upon deep learning (e.g., uncovering underlying meanings) (Warburton, 2003), prior knowledge and experiential education, which culminates in healthy practices that sustain the individual, the community and the environment.

Shifting between these aspects for Indigenous and non-Indigenous learners requires a conceptual balancing act between Indigenous and Eurocentric worldviews. Elliott (2009) describes this shifting as "Asokan (Cree 'to bridge')" (p. 290) between Western Science and Indigenous science through metaphoric meaning. As learners stand in the interface between different social, cultural, and domain spaces, they require sensitive hearts and reflective practices to navigate the shifting process.

Indigenous Science includes, as Gregory Cajete (2010) explains, Indigenous theories of education that centre on "deep abiding respect for the spirit of each child; orientation to place; social learning and applying tribal knowledge in daily living; initiation into guiding

myths, rituals, ceremonies; peace of mind; life vision through relationship and diversity; transformation through unconsciousness and conflict and finally, finding one's true center" (p. 1129–1130). Cajete suggests that these principles are reflected in all Indigenous and Western civilizations and need to be part of any discourse on educational philosophy and reform. He proposes a "new kind of educational consciousness, ecology of Indigenous education" (p. 1132) that elevates emancipatory learning at all levels.

There is no one-size-fits-all in sustainable education or education for sustainability, so we must orient ourselves as non-Indigenous allies (Regan, 2010), settlers and other cultural groups to affirming and applying an entire new paradigm of living, learning, and being in this co-education journey. We need to embrace and include new metaphors for education that change our sustainable education ethos. Karatzoglou (2012) supports this view as well, when he describes the need for non-prescriptive emancipatory approaches in our collaborative learning processes (p. 50). Communication stops when Western worldviews are imposed upon Indigenous peoples.

Several Indigenous Science philosophies (Brayboy & Maughan, 2009; Mack et al., 2010) or worldviews depict healthy, balanced living that is embedded in the interaction of body, spirit, and mind within contextual, ecological, and interactional models of human behaviour (Davidson-Hunt & Berkes, 2003; Galliher, Tsethlikai & Stolle, 2011). Within Indigenous Science teachings and Heiltsuk fundamental truths (Brown, F. & Brown, K., 2009) as a specific example, we can move forward in advancing sustainability education that benefits all of Canadian society and international society.

We must maintain open hearts and minds toward each other's worldviews. Conflict, mismatched narratives, difficult emotional dynamics in intercultural spaces will occur (Selby,

2004) but Indigenous and non-Indigenous people must not give up on creating decolonized, anti-colonial, equitable sustainability education policies, practices and philosophies. Mato (2011) argues that, “the most difficult problems to solve in intercultural collaboration are those related to translating worldviews and sensibilities, meaning not simply translating words and ideas from one language to another” (p. 49). Patience, time, and humour are required to build social relationships.

In summary, a change in ethos can be achieved more quickly by validating and implementing sustainability notions from Indigenous perspectives as with dominant Western sustainability perspectives. Perhaps the nudge to do this could be through the beauty lens, regardless of whether it becomes a UNESCO fourth pillar or necessary element of sustainability. Embracing participatory and collaborative dialogue and foregrounding equally Western and Indigenous worldviews of beauty, culture, ritual, place, and harmony is important for today’s pressing global issues. These issues may require lifelong learning and education to continue to understand and resolve, in that, for Western and Indigenous peoples, as Kovach (2009) notes, “culture depends upon their life context and how they engage with culture” (p. 115). That is the dynamic process of living and learning from generation to generation and sharing our cultural life lessons. The cycles of life continue with new global issues that must be addressed. Sustainability defined and revealed from an Indigenous perspective are conversations that may contribute to sustainable mindsets for all societies. These multiple voices could weave a tapestry of beauty, of sustainability notions and ethos that may motivate the individual and the collective to care for the planet and to take action for the planet at the local and global levels.

## 2.6 Understanding Sustainability, Beauty, and Appreciation

“The Navajo mindset says you must contribute beauty to your world” (Yazzie, 2003, p. 13). Here, Elmer Yazzie, a Navajo artist, is describing the Navajo philosophy of Hózhó which governs “one’s thoughts, actions, behaviours, and speech” (Kahn-John & Koithan, 2015, p. 24). Hózhó refers to a Navajo prayer of walking in beauty throughout life (Sartwell, 2006). I advocate beauty as a posture (e.g., disposition) of appreciation or, as social constructionist David Cooperrider suggests, “an attitude of seeking a positive core” (as cited in, Gergen, 2009, p. 147). Appreciative moments (e.g., peak experiences, celebrations, quiet reflections) and beauty could be woven together to advance a new ethos of sustainability based on Indigenous wisdom, traditions, and philosophies. I argue that appreciation and beauty could be woven together to advance a new ethos of sustainability that privileges Indigenous worldviews.

All cultures express the beauty of their worldviews differently with stories, ceremonies, observations, beliefs, and actions (Cajete, 2000). For example, the Merriam – Webster’s Collegiate Dictionary (11th Edition, 2007) describes beauty as “the quality or aggregate of qualities in a person or thing that gives pleasure to the senses or pleurably exalts the mind or spirit.” The UNESCO Module 11 (2010) document titled “Teaching and Learning for a Sustainable Future” compares Indigenous views of knowledge and Eurocentric views of knowledge in chart-form (Activity 5, Q4). Some differences include Indigenous views of knowledge as a combination of sacred (e.g., spiritual) and secular, wholistic, and stored orally and within cultural practices, whereas Eurocentric views of knowledge are formal, secular, compartmentalized and stored in books and computers. Beauty is not mentioned. Perhaps this is because as Hillman (as cited in Alder, 2015) states

that “beauty is one of the most repressed and taboo concepts in our secularized and materialistic times” (p. 484). Hillman (1998) further explains that the absence of beauty results in a “world [that] is loveless... that the world is loveless results directly from the repression of beauty... [this signals that] below the ecological crisis lies the deeper crisis of love, that our love has left the world” (p. 264).

Humanity can be considered as a part of Mother Earth and not separate from it (Cajete, 2000; Fulmes, 1989); thus Indigenous ancestral lands are not considered “merely” an economic resource to extract secrets and wealth (UNESCO, Module 11, 2010, Activity 4) but also the source of all relationships that connect the past, present, and future. How humanity conducts itself on the earth may be driven by these differences in worldviews and knowledge. I seek beauty in these differences.

I argue that both Western (e.g., Eurocentric) and Indigenous wisdom include aspects of beauty and culture that impact each other in a positive way if collaborations deeply honour, and respect alternative perspectives. In doing so, common themes in the human experience may be heard. These common themes could include awe, wonder, mystery, interconnectedness, humility, reverence, appreciation, and beauty. Peterson and Seligmann (2004) state: “We think of appreciation as a specific emotional responsiveness, the tendency to experience at least subtle self-transcendent emotions such as awe, admiration, and elevation, triggered by the frequent perception of beauty and excellence in one’s surrounding” (p. 539). Our differences can seek and reveal new moments of beauty and appreciation of each other, thereby opening up our hearts in collaborative dialogues. By foregrounding alternative perspectives from many cultures, especially Indigenous cultures, a new fresh lens from which to view ourselves, and sustainability may emerge.

These diverse perspectives offer different orientations to learning about and within sustainability education (Scarff Seattor & Cuelemans, 2017; Wals & Schwarzin, 2012). In essence, van Egmond and de Vries (2011) describe similar notions of worldviews as a combination of mental maps, values, and life experiences. They call for the articulation of and adjustment of worldviews that maintain human dignity and balanced living while resolving sustainability issues. This supports the notion of Indigenous worldviews that integrate all aspects of knowing, living, and being within a philosophy of a people group (Gitksan Elder, personal communication, 1989).

Perspectives of beauty from our unique cultures may broaden and provide more inclusive participation for resolving sustainability issues which may include poverty, pollution, education, equality, economic equity, health-wellbeing, population, energy, water, or ecosystem/biodiversity. Through the lens of beauty, this may provide the motivational buy-in to collaborate and resolve our complex, global issues. What is important is to have a personal orientation to learning from others without imposing or seeking a rigid, firmly fixed one and only answer, especially with respect to the potential for complex notions of beauty. Howard Gardner (2011) echoes this point when he notes “that a single standard of beauty is gone forever....And since one person’s beauty need not clash with the sensibilities of others, this situation is welcome—no need for a consensual canon” (p. 32).

Indigenous worldviews and perspectives will make a strong difference in future collaborations in intercultural encounters. Regardless of the numerous terms describing the practice of teaching for sustainability (e.g., SE, EfS, ESD, etc.), the partnerships, the documents, the institutions and the contested notions, I argue that we need to foreground and validate Indigenous worldviews in all collaborations about thriving on the planet together.

This includes seeking beauty at the core of a worldview. I argue that we may all benefit and be inspired to take individual and collective action to care for ourselves, each other, and planet Mother Earth by learning from our Indigenous global family members.

Jeremy Caradonna (2014) traces the history of European notions of sustainability back to “the Agricultural Revolution that took place 10,000 years ago and the Industrial Revolution(s) of the late eighteenth and nineteenth centuries” (p. 3) through to current times. Indigenous notions of sustainability go back much further and belong to the beginning of civilizations on Mother Earth and are reflected in stories, ceremonies, wisdom teachings, relationships, and interdependence between human and non-human species (Cajete, 2000; Fulmes, 1989). As a settler ally, I accept that orientations and protocols for learning about sustainability require humility, respect, gratitude, and open-heartedness to courageously learn and relearn Indigenous values and knowledge from *their* unique perspectives. Hendry (2014) reminds non-Indigenous peoples that the challenges of the Maori to share and translate Maori worldviews for the benefit of both communities must be done collaboratively and patiently. I argue that valuing Indigenous knowledge as equal to Western knowledge is beauty and thus requires a willingness to continuously weave new threads of learnings throughout a lifetime, and to relearn and be willing to learn that which is yet to be learned.

In this learning process, McGregor (2004) describes the conditions for equitable power relationships as “coexistence” (p. 87) where Aboriginal and non-Aboriginal hold legitimate worldviews equal to each other and either worldview “does not allow for the domination of one over the other” (p. 87). McGregor (2004) relates this to the “Two-Row Wampum model based on the treaty relationship between the Dutch and the Haudenosaunee

peoples where each culture remains separate and distinct from each other while interacting and assisting each other as need be” (p. 86).

Placing beauty as a lens of appreciation for non-dominant worldviews or as a fourth pillar in UNESCO’s definition of sustainability could advance the respect for Indigenous knowledges and worldviews plus elevate collaborations of an expanded new vision of sustainability for all that is in relationship on Mother Earth (e.g., human and non-human). Locating beauty within worldview collaborations is a spiritual quest for me. Perhaps this is best summarized in the Earth Charter (Clugston, 2010) ESD description of spiritual capacities which include “awaken us to the astounding story in which we exist— understanding the cosmological, evolutionary and developmental saga, helping us appreciate the mystery of natural and human creativity, and the delicate and resilient ecology that makes life possible” (p. 162).

Multiple perceptions of beauty exist. Some of these perceptions exist in an individual perception of beauty as pleasurable, formless, and cherished as an important aspect of a good life. Alder (2015) reminds us that “beauty has a thousand definitions and could easily be understood as inherently subjective” (p. 483). Scruton (2011) argues that beauty is a “real and universal value, one anchored in our rational nature, and the sense of beauty has an indispensable part to play in shaping the human world” (p. xii). John Paul Stephens (2010) summarizes E.F. Carritt’s (1931) book on beauty from ancient Western philosophies as “the holistic form that emerges from an ordering and magnitude of constituent parts (Plato) or an ‘essential character’ that unifies ‘formless matter’ (Plotinus) in ways that are pleasurable (Aristotle) and appealing to our intelligence (Aquinas)” (p. 7).

It is worth noting the idea that beauty may reside in acts of cooperation and in a state of flourishing. Sartwell (2006) states that, “beauty is something we make in cooperation with the world” (p. 5). Sartwell (2006) describes the Navajo concept of beauty included within Hózhó philosophy as a state of flourishing that includes “balance, health, harmony, and goodness” (p. 135). Kahn-John and Koithan (2015) describe Navajo whole-person wellness attributes within Hózhó as “spirituality, respect, reciprocity, discipline, thinking, and relationships” (p. 25). Hózhó is a complex philosophy which, as Sartwell (2006) states, “teaches first that beauty is one thing: everything” (p. 136).

The shaping of one’s view of a sustainable future may also include beauty and how it can reorient one’s life to a positive view of life. In aesthetics, Bateson (1979) describes beauty “as the pattern that connects” (as cited in Kremer, 1996, p. 36) while Ramirez (2005) describes the notion of “cooperation” (p. 28) as the condition from which beauty arises, especially with respect to responsible management in organizations. Alder (2011) implores us to “think about the state of the world and the events that now define our shared reality” (p. 208) and how we must “invoke beauty” (p. 208) to intervene on behalf of humanity. Alder (2011) asks us, “Can we see the beauty in our organizations and our lives?” (p. 210). Kuhn stated that “people would not shift to a new paradigm simply because the old ways of understanding and approaching a situation had been shown to be wrong...people need examples of how a new paradigm would work” (as cited in Alder, 2011, p. 214). I assert that the posture (e.g., disposition) of “appreciation is beauty” or “beauty is a posture of appreciation” could inspire that new paradigm of being-in-the-world and caring for each other and also, for this study, a new pillar of sustainability. Thus, this study seeks to

understand sustainability from a posture of appreciation for the beauty and wisdom of Indigenous worldviews.

Other scholars describe the notion of beauty as a way of knowing how best to live a good life as it connects one to place, spirit, and healing. Aaftink (2014) describes beauty as “situative beauty in which beauty is experienced as involving all aspects of the situation that the experiencer finds herself [himself] in” (p. iii). Bignell (2009) describes beauty as “a way of knowing” (p. 191) in that the “more learners can become fully themselves through developing a sense of beauty in being-in-the-world, the less likely they are to destroy that world, since they would know that they are destroying themselves” (p. 194). Chatterjee (2013) states “beauty is this powerful and mysterious thing that we crave. But we don’t know where it is to be found and what it is all about” (p. 36). Gablik (1998) links beauty with artists when their work “heals our soulless attitudes toward the physical world...beauty is an activity rather than an entity, a consciousness of, and reverence for, the beauty of the world” (p. 2). Feaver (1999) describes beauty as “restorative ... [and] irresistible” (p. 1). Feaver (1999) weaves beauty into “the flash of brilliance or the exquisitely slow, unfolding revelation. It can detain and inspire; it gets attention. Beauty is in the broad sweep and the telling detail, in the perfectly timed punchline, in piquant colour and in mathematical proof” (p. 1). Arnold Berleant (2012) describes beauty in the modern world as “not as a property of objects, but as a quality of situations [where] beauty becomes contextual” (p. 205).

I resonate with the notion of beauty as a source of maintaining right relationship with self, community, and the Creator. Bowers (2012) discusses beauty from Mi’kmaq worldview as “balance...attainable when my centre, my heart and body can live in tune with my spirit” (p. 208). Bowers finds balance and beauty from within an “Indigenous integrative and

holistic model of eco-psycho-social-spiritual methods for maintaining right relationships within human and natural systems” (p. 290).

Alfred (1999) notes that everything on Mother Earth was created “by a power outside of human beings, and we must respect the fact that human beings did not have a hand in making the earth; we have no right to dispose of it as we see fit” (p. 9). According to Lickers (1999) the Creator gave, “human beings... the intelligence and free will to be able to appreciate the beauty of Creation” (p. 155). Lickers (1999) explains that Haudenosaunee philosophy includes “concepts of harmony, balance, and the Good Mind required that our people must think in long time frames...seven generations represents all the generations one person can know” (p. 157). Lickers (1999) explains further that greed, irresponsibility, and contempt for Mother Earth does affect the concept of Good Mind. Beauty does not include disregard for a healthy planet and all its inhabitants. Alfred (1999) describes the selfish disregard of Mother Earth as a “world economy dominated by exploitation and greed (e.g., capitalism) obsessed with generating excessive wealth from the earth’s natural resources” (p. 10). Beauty is embedded with gratitude and thanksgiving for the Creation and the Creator.

Bignell (2009) notes that the fate of our world requires “beauty as a way of knowing” (p. 191) and that “beauty is not the exclusive province of aesthetics; the experience is available to all” (p. 193). He further explains that beauty is “about entering, in full consciousness, the experience of knowing and, in the experience, seeing the known and ourselves in a new light” (p. 193).

Merritt (2010) uses arts-based notions of beauty to “spark a personal transformation that may include a breakthrough in self-confidence, a breakdown of old assumptions, and the creation of new connections” (p. 76). Merritt (2010) links eight patterns of beauty in the

business world that comprise of “vitality, luminosity, unity in variety, complexity, utility, simplicity, synchronicity, and sublimity” (p. 72). Merritt (2010) notes these qualities are from arts-based methods being used in organizations around the world [that] can help you connect to the secret power of beauty ...to improve your business and the people in it” (p. 70).

Adler (2015) states that beauty has a “thousand definitions and could easily be understood as inherently subjective” (p. 483). Adler (2015) explains that we cannot reclaim and create beauty “until we can reclaim our underlying capacity to see” (p. 484). Adler focuses on the notion that to “invoke beauty, we need to embrace serendipity, both as a concept...a process...as a strategic approach” (p. 489). Adler continues explaining serendipity as “turning something bad into something good... [like a] situation that has resulted in outcomes that you neither planned for nor want” (p. 489). Ultimately, Adler (2011) reminds us that we need to care about our “ability and responsibility to co-create a more beautiful world” (p. 6).

In summary, it is suggested that all of these descriptions of beauty could provide a new lens from which to see the interconnections between people, planet, and our livelihoods. The concept of beauty in this study is “a posture, disposition, or attitude of appreciation” and recognizes that beauty is derived from moments of celebrations that shape us as individuals and hopefully into better persons. As better persons, we share our individual giftedness with the community, fulfill our destinies, and contribute to a flourishing circle of life that includes people, planet, and livelihoods. As O’Donohue (2005) describes: “when we experience the Beautiful, there is a sense of homecoming” (p. 2) and if we value that home, Mother Earth, then perhaps humanity can co-create a beautiful world for all of society. This study seeks to

include beauty as simply a posture (e.g., disposition) of appreciation, however, it is mentioned or is extrapolated from the experiences with the participants at the research site.

### **Chapter 3. Qualitative Methodology**

This chapter provides a brief introduction and overview of this qualitative study, the research questions (here and also in data collection), data collection overview, research site, background of participants, delimitation, limitation, data collection procedures and summary. A more complete description of the methods chosen for this study is included in the sections: Appreciative Inquiry as theory, methodology, and method as well as aspects of Indigenous Methodologies.

#### **3.1 Overview**

The purpose of this study is to foreground and acknowledge Indigenous worldviews and their notions of education for sustainability as practiced at Mother Earth's Children's Charter School (MECCS). MECCS is a tuition-free public school (K-9) that supports Cree and Stoney Indigenous learners and Indigenous worldviews in Alberta (MECCS, 2015; TAAPCS, 2015). As a charter school, MECCS chooses to honour their Cree and Stoney Indigenous worldviews first and then infuse Western and other worldviews. It is the first and only Indigenous Public Charter School in Canada, located in Leduc County near Stony Plain, Alberta (Treaty 6 territory). For that reason, it was chosen for the research site.

Indigenous and Appreciative inquiries are qualitative approaches to this study. Bloomberg and Volpe (2012) state that, "qualitative research implies an emphasis on exploration, discovery and description" (p. 28). Creswell (2013) describes the qualitative process as one that

[b]egins with assumptions and the use of interpretive/theoretical frameworks that address the meaning individuals or groups ascribe to a social or human problem or

question...data analysis is inductive and deductive and includes the voices of participants, reflexivity of the researcher and a contribution to the literature. (p. 44)

Qualitative research is appropriate for this study, because such an approach contributes to understanding the meanings people derive from their context, experiences, and actions with self, each other, and the planet. Qualitative research provides the human side of an issue, which may provide culturally specific information about worldviews, which include values, opinions, behaviours, and social contexts of particular groups. Quantitative research is not appropriate for this study, as it does not focus on process but on causation between variables (e.g., x causes y). Maxwell (2005) describes the difference between qualitative and quantitative research as an emphasis on “understanding processes and mechanisms, rather than demonstrating regularities in the relationships between variables [e.g., x causes y]” (p. 23).

Creswell (2013) describes a research paradigm as a worldview or framework which guides research and practice, where paradigm includes these components: epistemology, ontology, methodology, and axiology. Wilson (2001) describes these paradigm components:

Ontology is a belief in the nature of reality. Your way of being, what you believe is real in the world...Second is epistemology, which is how you think about that reality. Next, when we talk about research methodology, we are talking about how you are going to use your ways of thinking (your epistemology) to gain more knowledge about your reality. Finally, a paradigm includes axiology, which is a set of morals or a set of ethics. (p. 175)

This study emphasizes meaning from the participants' perspectives, derived from their worldviews and contexts. This is a social constructionism theoretical position, whereby

meanings are created from the social engagement between participants through dialogue (e.g., one-on-one or in larger groups). Social constructionist Kenneth Gergen (2001, 2009) argues that all meanings or claims to knowledge making are founded within communities of meaning-making, co-construction, collaboration, and community building in cultural contexts. The social construction of knowledge is co-constructed through meaningful relationships. Our worlds of meaning are constructed together through dialogue that occurs in relationship. Cooperrider and Whitney (1999) explain that constructionism replaces the individual with the relationship as the locus of knowledge by valuing the power of language to create our sense of reality. Gergen K. and Gergen M. (1997) confirm that social constructionism has no one theory, prescribed methods, or practices, therefore, the opportunities to explore the possibilities for life-sustaining worlds are infinite.

I explore the notion that Indigenous worldviews are equal to Western worldviews and may provide new sustainability insights that benefit every local and global citizen. Manitoba Education and Training (2000) agree and assert that “Aboriginal people are a source of beliefs and practices that contribute to understanding education for a sustainable future for humankind, flora, fauna, and all that exists on Mother Earth” (p. 1-2). This implies a wholistic view, whereby people, planet, profit (e.g., livelihoods) are interconnected and perceived as one whole system. AI also views organizations, groups, and humanity as whole systems that are built upon relationships that thrive when “people see the best in one another, when they can share their dreams and ultimate concerns in affirming ways, and when they are connected in full voice to create not just new worlds but better worlds” (Cooperrider, n.d., p. 1). For these reasons, I assert that qualitative research through a social constructionist

lens—aspects of both AI and Indigenous Methodology (IM)—would provide the data needed to answer the research questions in this research study.

This study seeks an expanded version of sustainability by exploring a fresh ethos of sustainability through respecting spirit, place, and humanity (e.g., people, place, profit) through non-mainstream worldviews (e.g., Indigenous). Indigenous worldviews recognize sustainability and education for sustainability as wholistic with connections to land, culture, spirituality, ancestry, learning, equitable livelihoods, family, and community (e.g., local and global) (Cajete, 2010; Fulmes, 1989; Simpson, 2011). Recall that Sterling (2003) calls for a different kind of sustainability mindset that values sustainability beyond dominant worldviews that emphasize profit motives. Therefore, I used qualitative research that supported an Indigenous approach to sustainability and education for sustainability through a life-affirming AI approach. Both approaches supported storytelling and conversation as methods appropriate for Indigenous Methodology (Battiste, 2002; Chilisa, 2012; Kovach, 2009) and Appreciative Inquiry (Cooperrider et al, 2008). Collecting stories or vignettes via conversations and open-ended interviews from MECCS revealed innovative and new understandings about sustainability.

Creswell (1998) described qualitative research as “multi-method in focus, involving an interpretive, naturalistic approach to its subject matter” and included a “variety of empirical materials—case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts in individuals lives” (p. 15). I was open to the intuitive nature of what and who would offer any type of knowledge sharing beyond the formal interview process as well. I was comfortable with the non-linear process of this study. Kovach (2009) states with respect to Indigenous inquiry that “rather than a

linear process, this research followed more of an in and out, back and forth, and up and down pathway” (p.45). This study used a combination of aspects of Appreciative Inquiry method and Indigenous Methodology because both focus on strengths and on the positive. I was not interested in problem solving and reiterating deficit talk around Indigenous Education. Instead, I was interested in Indigenous worldviews and the hope they may bring to the sustainability ethos dialogues.

I am aware of the Euro-Western-dominant hegemonic frameworks in institutions and settler society (Fulmes, 1989; Kirkness, 1999; Reagan, 2010; Smith 2012) and so the reason for my choice of research methods reflects sensitivity to perceived power differentials and methods that resonate with respect to Indigenous worldviews. Thus, aspects of AI and IM were used. I, too, support the medicine wheel teachings and Indigenous worldviews, especially as a co-learner for the past 30 years or so of involvement with Aboriginal Education.

Because of my history in Aboriginal Education, the participants (e.g. adult teachers and staff) and I bonded immediately with our shared storytelling. They knew I understood, and had undergone, similar experiences as they did throughout my own career. I brought my lived experience in Indigenous Methodology to the interview protocols as well, which solidified our respect for each other and the blend of Indigenous and non-Indigenous worldviews.

When I did my M.Ed. graduate research on Indigenous Science in the 1980s, I was directly taught how to do Indigenous research/ methodology/methods /protocols by eight community participants from the Gitksan Nation. As I recall, Indigenous Science was not called that in the academy at that time. The participants included Elders, Hereditary Chiefs,

Chief Band Councillors, and community liaisons. I was a graduate student in the 1980s with a drive to understand Indigenous Science, and so the participants patiently walked me through the process over several months. Years later, that process came to be known formally as Indigenous research in the academy, but for me, it was the practice of learning how to listen and respect the circle of learning under the patient care of the Elders and community members who walked me through it years ago. I stumbled, made mistakes, got back up and relearned, celebrated my victories and carried forward the learnings to share with others as my life unfolded. I am an advocate for giving back and sharing as part of reciprocity for the honour of learning from, and with, Indigenous cultures. I am an advocate for Indigenous Education.

I was prepared for that part of the journey earlier, when I lived on reserve in Bella Bella (BC) and was immersed in the learning of the Heiltsuk Nation as a community member and teacher. I also taught elementary school in Nuu-cha-nulth territory, specifically the Tseshaht Reserve (BC). I never forgot those cherished lessons from the Gitksan, Heiltsuk, and Tseshaht friends. Those cherished lessons enabled me to continually apply them throughout my journey as a non-Indigenous learner and teacher, supervisor, administrator, curriculum consultant, and director of education in Aboriginal Education.

I used the same process and lived teachings in this research as well. Those teachings are a part of my heart and spirit, and continuously provide a guiding philosophy throughout my life. Shawn Wilson (2008) reminds us that Indigenous philosophy does not exclude anyone who values relationships with people, the planet, and the Creator. I remain a learner who is open, receptive, and aligned with Indigenous philosophy and worldview as part of my being, as well as a Canadian with Ukrainian ancestry.

Today, this is called being an ally (Bishop, 2002). Bishop (2002) describes some of the characteristics of allies as having “a connection to all people...a sense of ‘power-with’ as an alternative to ‘power-over’... and their acceptance of struggle” in all of our individual and collaborative “efforts to work towards social change” (p. 111). As a non-Indigenous ally, this positions me at the outset of relationship-building, and is a pre-requisite for observing a research process that honours “cultural protocols, values, and behaviours” (Smith, 1999, p. 15). Even though MECCS is a public charter school with Indigenous and non-Indigenous staff and learners, their primary vision is embedded in an Indigenous worldview and thus, follows specific protocols for any research process.

Upon our first few meetings at the research site, I made clear my motives, intentions, and background experiences as a way of positioning myself at the outset. Absolon and Willet (2005) state: “the actual research cannot take place without the trust of the community, [school], and one way to gain trust is locate yourself” (p. 97). The Superintendent and principal gave me permission to do the research with them as co-learners throughout the process.

Part of my lived experience while interviewing Gitksan community members in the 1980s was my willingness to honour which parts of the interview were allowed to be conveyed, and which nuances and personal information were to be left out. These lessons of respect were applied to the participants in this current study as well. Often, interviews with Elders would follow a unique intuitive cycle, which included random stories here, there, and everywhere, all in a non-linear style, more in a circle, and designed to lead the learner to suitable lessons from which one could draw one’s own conclusions. Western worldviews tend to have one way of leading the learner from the beginning to the end in a linear, logical

style (Battiste, 2002, 2013; Wilson, 2008). Some of the Elder stories and lessons I learned took me many years to understand and others quickly found an understanding in my heart and in a spiritual way connected my research questions to the deeper philosophy of the questions. I remain in process, learning the deeper lessons in this season of my life as well.

Walter & Andersen (2013) describe the protection of knowledge sharing: “when we write up the results of an elders discussion circle we cannot include all personal and cultural nuances and probably not even all the words that were spoken” (p. 76). What is most important is that brave scholarship is making space for “academically legitimated Indigenous knowledge” (ibid., p. 76) in the academy in the twenty-first century. I extended this respect to all formal and informal participants in this current study. For example, after reading the transcripts, some of the participants wanted words and phrases removed and changed to better reflect their hearts to a wider, outsider, audience. I honoured all editing and change requests, because I knew that our co-learning was in a dynamic state of change, building trust at all times. I often would change my thinking about what I thought I heard when asking for clarification over and over again. I wanted to honour the participants’ voices first and foremost, every stage of the process.

The initial research questions provided an alternative worldview in sustainability literature (Sterling, 2003) that may enhance current sustainability ethos predicated upon profit and commodity. It was explained that Sterling (2003) extended this notion to include education for sustainability as a means to support a different kind of sustainability mindset that valued sustainability beyond dominant worldviews that emphasized only profit motives. It was hoped that broader society would benefit from the example of MECCS for those that may choose to extrapolate from MECCS wisdom-on-the-ground insights and apply to their

unique formal or informal situations (e.g., education, government funding formulas, institutions, NGO's, businesses, schools, etc.). Indigenous worldviews from MECCS provided counter narratives to Western dominant worldviews in sustainability. MECCS considered the importance of their Indigenous worldviews as equally acceptable as Western worldviews. This study was an opportunity to participate in decolonization (Battiste, 2013) and to broaden the Western worldview of sustainability.

MECCS could provide what I call wisdom-on-the-ground sustainability values, mindset, and ethos as extrapolated from the interviews. The participants' responses could offer valuable insights into the current sustainability dialogues in dominant Western society. The principal agreed that the questions and interviews would open up a dialogue and reveal their wholistic Indigenous worldview as lived and practiced at MECCS.

We collaboratively agreed upon the initial two main research questions to start the dialogue between researcher and participants as:

1. Does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story or experience.
2. Does the MECCS worldview inform a sustainability ethos and mindset?

Other secondary research questions of interest were agreed upon as well:

3. Are environmental, social, educational, and economic systems in the Indigenous model of sustainability interrelated at MECCS?
4. Do we appreciate beauty as an element embedded within sustainability at MECCS?

Emphasis was placed on the research process as open-ended, flexible, and subject to change, according to the needs of the school and their best interests. Primary question number 1 was the question that provided the most data, from which some of the data answered the

remainder of the questions in a non-direct manner. Questions 2, 3, 4 were answered in the insights provided from primary question number 1 with respect to the medicine wheel, seven sacred teachings, and their Indigenous worldview. The interwoven connections between these elements naturally lent themselves to the remainder of the questions without compartmentalizing them.

Immediately after ethics approval, individual interviews occurred in the fall of 2015 (October-December) at the school and other venues chosen by the participants (e.g., restaurants, coffee shops, and food markets at malls). Participants opted to remain anonymous, and were able to withdraw at any time. Interviews and vignettes (e.g., stories) were reviewed by the participants for accuracy and clarity throughout the process. All ethical processes, protocols, and practices were honoured and respected.

The participants enthusiastically supported an Indigenous approach to sustainability and education for sustainability through aspects of AI that highlighted their past and present positive, best, and beautiful experiences with their students and each other (Battiste, 2002; Chilisa, 2012; Kovach, 2009). Embedded in MECCS alternative worldviews were themes of wholistic concepts that recognized the interconnectedness of land, culture, spirituality, ancestry, family, community, identity, beauty, and planet Earth. The research questions were designed to appreciate an Indigenous understanding of beingness and ways of knowing from alternative voices and providing a better ethos of sustainability. I initially referred to this as weaving stories of sustainability through respecting spirit, place, and humanity, but discovered that the circle of beauty and wisdom was the most appropriate metaphor for MECCS.

### **3.2 Appreciative Inquiry as Theory, Methodology, and Method**

Appreciative Inquiry (AI) is embedded within a social constructionist theory. AI was developed in the 1980s by David L. Cooperrider and Suresh Srivastva (Reed, 2007), with colleagues from Case Western University and Taos Institute, as organizational behaviour work. However, there is a growing body of research in education and health using AI as a method that focuses on the positive (e.g., attitudes, actions, practices, images/metaphors, mindsets, etc.) so that the positive becomes a reality (Carter, 2006; Reed, 2007). Cooperrider and Whitney (1999) describe AI as:

A cooperative search for the best in people, their organizations, and the world around them from a positive focus which involves a systematic discovery of what gives a system 'life' when it is most effective and capable in economic [equitable profit], ecological [planet] and human terms [people]. (p. 245)

Cooperrider et al. (2008) elaborate further that "AI seeks out the best of 'what is' to help ignite the collective imagination of 'what might be' so that a 'positive vision can be translated into reality and practice'" (p. xi). AI is a flexible, improvisational, collaborative and strength-based approach to personal and organizational development and research. Kovach (2009) comments on the fact that AI is relational and reveals evidence of process and content just as Indigenous inquiry does.

This study proposed that stories, conversations, informal interviews and vignettes would convey Indigenous ideas about living in this world in a balanced, harmonious, and beautiful way from the past, in the present and for the future. Each conversation has the potential to reveal Indigenous worldview value systems. Themes were collected from the data and analyzed for sustainability notions that could stretch current dominant worldview

notions and definitions of sustainability. This study was a pilgrimage, a type of journeying between the researcher and the participants. Indigenous scholar Cajete (2010) refers to this process as a “journey of discovery” (p. 42) or what Atleo, M., (2008) calls “a watching to see until it becomes clear to you” (p. 221). Storytelling and conversations revolve around best scenarios not problem/deficit solving scenarios.

To aid dialogue in intercultural spaces, I also drew from the social constructionism notion of “relational being,” whereby, Gergen (2009) states that “relationships arise not from separate selves... [but are] born, sustained, and/or extinguished within the ongoing process of relationship” (p. xv). Gergen (2009) calls this process “a world of co-constitution. We are always already emerging from relationship; we cannot step out of relationship; even in our most private moments we are never alone” (p. xv). It is the “our” spaces of dialogue that drive the conversations into new directions (Gergen, 2009). This “our” hybrid space is where “we enter into the relationship-building that focuses on ‘ours’ versus ‘you’ [where] one listens not for the internal state of a motive or intention behind the words, but on the directions they invite in the conversation” (Gergen, 2009, p. 132). It is an orientation to deep listening that recognizes that our understandings between each other will change as we learn from each other. I was interested in future-oriented possibilities that were generated from conversations, while at the same time, being sensitive to the multiple stories that make up each person. We are changed in the process of learning from each other. Gergen (2009) calls this “in sum, all meaning/full relations leave us with another’s way of being, a self that we become through the relationship, and choreography of co-action....the multi-being is socially embedded, fully engaged in the flow of relationship” (p. 137). This view inspired me to focus on that which can enhance participation in relationship-building or as Gergen (2009)

describes, “advance productive forms of relational being” (p. 141). Since “relational being” is embedded in the “communal creation of knowledge,” then our deep listening must respect the relationship that is forming and changing between us.

Reflexivity is a part of that process. In intercultural spaces or third spaces (Bhabha, 1994), we reflect to help us absorb the complexity of the conversation and what we are learning. The Indigenous scholar Margaret Kovach (2009) describes reflexivity as “the researcher’s own self-reflection in the meaning-making process” (p. 32) and the importance of it in the decolonization or anti-colonial process where “self-reflection purposefully gives space for the political examination of location and privilege” (p. 33). Kovach (2009) notes that effective allies in research, especially those under the qualitative umbrella are those “who are able to respect Indigenous research frameworks on their own terms. This involves a responsibility to know what that means. As Indigenous researchers, our responsibility is to assist others to know our worldview in a respectful and responsible fashion” (p. 13-14). These aspects of social constructionism underpin AI and, in my view, support Indigenous Methodology. After 30-plus years of involvement in Aboriginal Education, I consider myself an ally who remains a constant co-learner and wants to give back to others, in a good way, all that my experience has taught me.

What inspires me about AI is that it does not focus on problems or deficits or deficit thinking mindsets. AI is based upon a whole-system theory of change, originally organizational change, but today, the five core principles (discussed later) of AI have been applied and adapted to many other disciplines, groups or individuals (Cooperrider, 2008). AI enables organizations, groups, and individuals to build their own generative theory of enabling transformational shifts by learning from their most positively exceptional moments

through conversations (Watkins & Mohr, 2001, p. 15). Drawing from Cooperrider & Whitney (2007) in the Change Handbook (Holman, Devane, & Cady, 2007), the AI method is summarized as:

A paradigm of conscious evolution geared for the realities of the new century...and as a methodology that takes the idea of the social construction of reality to its positive extreme—with its emphasis on metaphor and narrative, relational ways of knowing, on language and its potential as a source of generative theory. (p. 74-75)

This study proposed that, through collaborative conversations and vignettes in third spaces (Bhabha, 1994; Haig-Brown, 2008), positive encounters with oneself and others would potentially energize and offer insights of living well on the planet and with each other (e.g., thriving sustainability).

Hammond (1998) states that AI “appreciates and values the best of what is; envisions what best might be; dialogues what best should be and innovates what best will be” (p. 24). The language between problem solving and AI is very different. Language and the emotional meaning in the words we use affect our thinking. Problem solving language reflects deficit thinking and may lead to life-draining, negative perspectives, and lower morale. AI language reflects positive language and may lead to life-affirming perspectives and a joyful morale. As an example, San Martin and Calabrese (2011) used the power of AI positive language and thinking to transform an at-risk alternative school into a healthy learning environment for students, educators, and administrators. They did this by linking student thinking to positive desired futures and the appreciative eye. An example from Mace, Hocking and Waring (2015) unpacks the notion of homelessness and permanent homes in New Zealand. The participants used the appreciative eye to perceive objects, people, and activities as a treasure

box holding his/her most precious items. These items gave participants a home identity filled with hope and permanency shaped by land and family. Using the AI method, the participants were asked to see the best of what is that makes a home instead of what is lacking. The AI questions were adapted to encourage hopeful, thriving responses for the future. Undergirding my research questions was the hope that positive themes would surface from the vignettes and celebrate fresh innovative ways of understanding sustainability and education for sustainability. In my view, these positive themes would represent beauty in this study.

AI Commons (n.d.) describe the core principles that guide an AI research project as constructionist (e.g., we live in worlds our questions create and we see the world we describe), simultaneity (e.g., inquiry and change are simultaneous), poetic (e.g., infinite interpretations from multiple worldviews), anticipatory (e.g., what we anticipate determines what we find) and positive (e.g., actions align with positive image of what is and what can be better).

The constructionist learning theory core principle is described best by Cooperrider and Whitney (2000) as, “built around a keen appreciation of the power of language and discourse of all types to create our sense of reality—our sense of the true, the good, the possible” (p. 17). Human knowledge is generated and acted upon by our shared perceptions of what brings life to our worlds and the ideas used to describe it. If learners perceive learning as best achievements, strengths, motivating, creative or innovative, they may feel involved in an empowering process at school. They may exert a sense of power to shape the future of their school to bring hope and positive growth for others. If Indigenous learners view themselves as future nation builders (e.g., local, community, and global leaders), their

view of empowerment is very different from a view of at-risk, deficit learners without hope. Nation Builder stories shape nation builder learners that value a sustainability future.

The simultaneity core principle is described by Cooperrider and Whitney (2007) as, “inquiry and change wrapped up in AI questions that drive participants to stimulate new visions for their future at the same time questions are asked and reflected upon” (p. 83). Stories between community members and teachers co-construct better classroom practices for learners. For example, if non-Indigenous teachers visit Indigenous community members, they may find new ways of understanding how Elders teach that the land and the learner are sacred. From these shared stories, the classroom is viewed as an extension of that interrelationship and perhaps, the teacher will reflect that element of community wholeness in the classroom.

The poetic core principle is described by Cooperrider and Whitney (2007) as, “our pasts, presents, and futures are endless sources of learning, inspiration, and interpretation—like the endless interpretive possibilities in good poetry” (p. 84). Good poetry is like Indigenous storytelling. Indigenous nations extend wisdom and learning through storytelling over several generations. This is sometimes expressed as seven generations into the future. Pauline Waterfall and Cyril Carpenter (as cited in Turner & Berkes, 2006) cite specific Heiltsuk stories and terms that

[e]mbody conservation concepts, understandings and teachings, (e.g., *mnages*, refers to ‘selectively collecting things outside,’ and *misisila*, which refers to ‘someone whose responsibility it is to be a guardian of certain fish-bearing rivers.’ Combining the lessons and understanding gained from all of these pathways and building up

knowledge, practices and beliefs into complex systems of land and resource management (e.g., Heiltsuk berry garden; Saanich reefnet fishery). (p. 505-506)

These Heiltsuk stories are examples of the poetic core principle, where traditions provide an endless supply of inspiration and teachings from a good heart and spirit. Notions of sustainability and education for sustainability are intricately related to Indigenous conversations of governance, spirituality, land, resources, Indigenous rights, responsibilities, harvesting, technology, and learning within a complex web of interrelationships.

The anticipatory core principle is described by Cooperrider and Whitney (2007) as, “any image of the future guides the current behaviour of any organization or community” (p. 84). Basically, positive images for a future will direct the individual and collective to positive actions now and for the anticipated future. Excitement for a positive future generates positive energy for “engaging in activities that will bring those images into reality” (Mace, Hocking & Waring., 2015, p. 192). For this study, conversations around flourishing on the planet for the individual and broader society could generate innovative practices and images of hope and inspiration. As Smith (2012) echoes: “by centering consciousness on the landscapes, images, languages, themes, metaphors and stories of the Indigenous world” (p. 147) we gain a fuller understanding of Indigenous ways of being, doing, and learning for a sustainable future. The positive core principle is described by Cooperrider and Whitney (2007) as “the more positive the question we ask, the more long lasting and successful the change effort” (p. 84). For example, by focusing on what people do well, participants may be more motivated to sustain positive attitudes, actions, behaviours, and mindsets. For example, by opening our minds to the worldview of another, and setting aside personal biases, participants may feel heard, valued, and supported for the first time in their lives. These conversations could

contribute to weaving a social network aimed for inspired action. That social network is built upon stories that focus a group's energy toward "hope, excitement, inspiration, caring, camaraderie, sense of purpose and joy in creating something meaningful together" (Cooperrider & Whitney, 2007, p. 84).

From these core principles flow actions that generate trust, dignity, respect and energy to try something new based on what worked successfully (e.g., peak experiences) in the past and in real time experience. Mace et al. (2015) describe "storytelling as an essential component of the Appreciative Inquiry process, especially at the start, where the positive and life-giving themes of collective narratives are discovered" (p. 192). These stories drive individual change and collective change depending on the venue. AI is designed for individuals, groups, cities, international networks, schools, businesses, universities, and families within multiple forms of engagement like small events (e.g., two-person), large forums, workshops and conferences.

AI Commons (n.d.) asks questions about best experiences and core values (e.g., what to build on), what needs to be created (e.g., possibilities and opportunities) and what actions are required to move forward. Reed (2007) echoes the above with questions such as "What factors give life to this organization when it is and has been most alive, successful, and effective? What possibilities, expressed or latent, provide opportunities for more vital, successful, and effective forms of organization?" (p. 29). Basically, all positive questions aim to embrace the possibility for bold, incredible change for the individual, collective and broader society. Participants are not randomly selected but rather shaped by contacts and relationships within each project and process. Validation occurs between participants

involved in the questioning interviews when responses are checked and edited for correct interpretations. This is also a requirement for processes found in IM, protocols, and ethics.

The AI process and questions focus on peak experiences and things that are valued most by participants about themselves and the nature of the work/topic/organization or system within a life-affirming stance. This method works best when there is a need for heart-felt inquiry, discovery, and renewal. It is not used if predictable, linear processes, and outcomes are required or there is lack of support for passionate dreaming and inspired self-initiative (Hammond, 1998). What works in AI is that this methodology supports multiple realities and differences. AI gives the individual and the group the ability to imagine a journey to the future (e.g., the unknown) by carrying forward parts of our best images and stories of the past (e.g., the known) into a future filled with potential, wonder, and beauty. These assumptions are not set in stone, but remain open to challenge and to reinvention, thus the fluid and dynamic nature of the change process embedded in AI.

As Cooperrider and Whitney (2007) proclaim, AI is a “roadway express, moving from good to great for personal and whole-system transformation” (p. 85). Cooperrider et al. (2008) and Reed (2007, p. 32-33) describe components of the AI process as the 4-D Cycle (e.g., ready for action) and the 4-I Cycle (e.g., ready for ideas) (see Appendix B). These cycles are markers that help participants and facilitators assess progress and create a climate of appreciation, reflection, and exploration. Talk and stories give life to the AI process and method. A researcher can adapt these cycles and processes to fit the questions and suggestions of each organization, group, or specific population. AI is open-ended and designed to identify the life-giving forces, unique values, structures, and processes that are

embedded in worldviews. AI provides the opportunity to remember, retell, and inspire action from a positive affirming individual and collective stance.

Reed (2007) suggests that AI informs research by “supporting people, putting people together, telling stories, positive development and changes in the workplace” (p. 42). Since AI is based upon multiple participants and their worldviews, different connections will be continuously made and examined.

As with all methods, AI has criticisms and limitations. Some of these have been explained as the “Pollyanna issue” where AI appears to ignore or suppress accounts of negative experiences. However, within AI contexts with freedom from blame and censure, difficulties may be discussed before moving on to strengths (Cooperrider et al., 2008; Reed, 2007). AI has an inclusive approach, where differences are managed by building upon the positive, and not concentrating on problems or the negative.

AI explores the positive within ways that people socially construct their world with multiple truths, thus making space for varying differences and interpretations. AI does not focus on finding one objective truth (Cooperrider et al., 2008; Reed, 2007). Dissonance between AI and traditional methods (e.g., positivist) will exist on this point, as Bellinger and Elliott (2011) show that, in AI, “all knowledge is relational and co-constructed and...there is no truth out there to be uncovered... the focus remains on relational processes rather than product and no attempt is made to reduce multiple and divergent voices to consensus” (p. 712). He notes that those that do not share this style of thinking may oppose the AI method. Choice is key in this process. Participants can join or exit the process at any time.

Another criticism of AI states that AI does not engage with power differentials (Aldred, 2011; Reed, 2007); however, AI does not deny the impact of interviews between

people wielding different forms of power. By sharing stories, AI attempts to link untapped inspiring accounts of the positive directly to any change, learning or agenda with the purpose of honouring each voice. Participants may understand another point of view that enables one to overcome the fear of power differentials. With deep listening, participants may see how to overcome what an individual or group never thought possible. Power differences speak to the complexity of factors that play out in participant dynamics. Vigilant attention given via reflexive/reflective practice throughout the method prevents positive principles of AI from being undermined.

Appreciative Inquiry, thus, is a method, philosophy, and theory that invites participants, as Reed (2007) asserts, is “co-ordinating a generative future together” (p. 180) with infinite changes and possibilities. It is a refreshing option that removes the attack and counter-attack of many other research models and methods. Collectively and individually, AI provides an opportunity to revise thinking and to press onward with different, passionate, bold ideas of seeing and being-in-the-world. I agree with Watkins and Mohr (2001) that, if we describe our lives as a cup of water half full as opposed to half empty, this image, like the sunflower turned toward the sun, will bring into our reality days full of powerful images of a future that is generative, creative, and joyful. AI has the potential to uncover positive and thriving images that support a flourishing life of sustainability with self, each other, and the planet.

### **3.3 Aspects of Indigenous Methodology**

As a non-Indigenous person and settler ally (Regan, 2010) with many family members who have Indigenous heritage and with 30 plus years of involvement with Aboriginal Education, I acknowledge the value of Indigenous peoples, protocols, and

worldviews in every aspect of life. In research, the process of decolonization from non-Indigenous persons is important. Battiste (2002) describes the decolonization of education as a

process that includes raising the collective voice of Indigenous peoples, exposing the injustices in our colonial history, deconstructing the past by critically examining the social, political, economic, and emotional reasons for silence of Aboriginal voices in Canadian history, legitimating the voices and experiences of Aboriginal people in the curriculum, recognizing it as a dynamic context of knowledge and knowing, and communicating the emotional journey that such exploration will generate. (p. 20)

The decolonizing lens and anti-colonial lens (Simmons & Dei, 2012) require that research actively re-centre and privilege worldviews that have been marginalized in colonial contexts. Indigenous Methodology (IM) requires research to be congruous with community beliefs, values, aspirations, protocols, and a shared practice between researcher and participants where methods and knowledge are co-created, relational, reciprocal, and respectful (Battiste, 2002; Kovach, 2009).

Respectful conversations between the author and Indigenous and non-Indigenous participants are aided by the heuristic aspects of Van Manen's (2014) phenomenology of lifeworld existentials, which are based on lived time, lived space, lived body, lived relationality, and lived experiences. These questions reflect Van Manen's heuristic: When you recall a best moment, what was the time? What was the space or place where it occurred? What was your body feeling? What emotion were you feeling? Who else was there? What do you remember most about that moment that I have not asked? These questions in concert with AI questions could activate a deeper knowledge that reflects an

untapped tapestry of lived experience from one's worldview. If these questions are not needed in the study, then I could use them to guide my reflective process. The researcher cannot know in advance the findings of a qualitative study (Creswell, 2013). Since Indigenous Methodology is flexible and open-ended, it is appropriate for this study to generate a constant space for wonder, appreciation, honour and beauty to appear.

This study is not intended to be the answer for all global sustainability issues. This study will not provide a universal formula, a set of outcomes or toolkits. Thus, this study will not be a prescription, but an invitation to learn from an Indigenous worldview how to approach sustainability issues and living. Specifically, this study will not be a prescription for resolving all sustainability issues but rather an *invitation* to learn from a Cree and Stoney (Treaty 6) Indigenous worldview at MECCS and *their* sustainability ethos and mindset.

Wilson (2008) explains that Indigenous systems of knowledge are built on relationships and ceremony. He describes the definition of ceremony as:

An indigenous paradigm comes from the fundamental belief that knowledge is relational. Knowledge is shared with all of creation. It is not just interpersonal relationships, or just with research subjects I may be working with, but it is a relationship with all of creation. It is with the cosmos; it is with the animals, with plants, with the earth that we share this knowledge. It goes beyond the individual's knowledge to the concept of relational knowledge...you are answerable to all your relations when you are doing research. (p. 56)

Kovach (2010) notes the similarity between Indigenous protocols and research, as both "reflect[ing] community teachings and are done in a good way" (p. 40-41). Since Indigenous peoples are not homogeneous, local knowledge will be specific to each group or

nation, and reflected in unique worldviews. The researcher does not impose one's worldview upon an Indigenous group, but rather learns from their direction and perspectives. It is a change process, much like the AI process of change, learn, relearn, reflect, and aspire for the best understanding between individuals and the collective. Both IM and AI involve fluid and dynamic exchange of learnings from different worldviews. We are shaped and reshaped by our new learnings. That which emerges from collaborative discourse and storytelling will reveal multiple realities and differences.

I was inspired by the emergent qualities of IM which Kovach (2009) states “place significant value on the relational, and that allow[s] recognition of the experiential nature of Indigenous research frameworks” (p. 34). Every conversation is a new experience. We do not know in advance how we will be changed by each conversation or interview. The participants would guide the flow of conversation into the reality of the in-between spaces that emerge from the coexistence of beings talking together (Gergen, 2009). I saw this as the beauty of being open and receptive to the flow of Indigenous inquiry and methodologies. I did not know what the outcomes were in advance; I saw this intercultural space as filled with potential for learning from, and with, our hearts.

Guba and Lincoln (1981) remind us that “reality, as it is lived by the subjects of research [co-learners]...is experienced holistically [wholistically] and mediated heavily by values, attitudes, beliefs and the meanings which persons ascribe to their experiences” (p. 249). That which emerges from this study (e.g., themes, patterns, insights, actions, practices) could allow entry points for readers, who hopefully, will find space to reflect and make connections to their own lives and views on sustainability and flourishing from an Indigenous worldview.

It is a collaborative process based on the openness for learning from each other. Bartlett, Marshall and Marshall (2001) call this “Two-Eyed Seeing” and explain this Mi’kmaw notion as:

The gift of multiple perspectives treasured by many Aboriginal peoples and explains that it refers to learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all. (p. 335)

Cajete (2010) reminds us that embracing other ways of looking at the world can offer a plethora of possible solutions for global issues that impact society now and in the future.

Chilisa (2012) notes that those who engage in research with Indigenous partnerships are called to “envision research methodologies built on worldviews that emphasize connectedness and the cyclical nature of human experiences; resist colonizer/colonized relationships that embrace deficit theorizing and damage-focused research about the Other; and practice researcher reflexivity informed by an ‘I/we’ relationship” (p. 295). Indigenous and non-Indigenous collaborations through interviews, stories, and conversations can complement the best of our learnings so that each generation can thrive and flourish in a sustainable future.

Locating beauty in the collaboration between Indigenous and non-Indigenous worldviews can inform a new ethos of sustainability for the twenty-first century. Blending aspects of the positive nature of AI and privileging IM supported this research study. I concurred with Indigenous scholar Bagele Chilisa (2012) in that “relational accountability, respectful representation, reciprocal appropriation, and rights and regulation” (p. 296) can

guide the collaborative research between Western (e.g., Eurocentric, Dominant) and non-Western (e.g., Indigenous, non-Mainstream/Dominant) researchers. I concurred with Cooperrider & Whitney (1999) that AI could provide the opportunity for “participants to co-create a future for the betterment of all” (p. 4). This study addressed the lack of Indigenous worldviews undergirding education for sustainability and sustainability ethos in the twenty-first century (Aikenhead & Michell, 2011; Cajete, 2010; Fulmes, 1989). I asserted that both AI and IM could generate life-affirming, positive insights that could generate actions that support a healthy sustainable future for all societies on Earth. I conclude with a plea from Hilistis Pauline Waterfall (as cited in Brown, F., & Brown, K., 2009) that:

If we don't say it, who will? As keepers of the knowledge, it is our responsibility to share what has been passed on to us. Lessons learned are gifts and we have the responsibility to share these in order to teach about living in harmony, balance and respect with each other and with nature and its biodiversity. (p. xviii)

### **3.4 Data Collection**

This study foregrounded Indigenous worldviews through an anti-colonial lens (Simmons & Dei, 2012) that recognized subjugated knowledge from marginalized groups (Foucault, 1972) as equal partners within dominant Western collaborations and knowledge production. This research study foregrounded and acknowledged the beauty of Indigenous knowledge and philosophy with respect to an expanded sustainability ethos for the twenty-first century and education for sustainability. As described already, the research site was the first public Indigenous charter school in Canada, named Mother Earth's Children's Charter School (MECCS), Alberta.

### **3.4.1 Overview**

Qualitative research, aspects of Appreciative Inquiry (AI), and aspects of Indigenous Methodology (IM) were used to provide the data needed to explore the research questions in this study. Data collection focused on interviews that appreciated and valued the best of what is and envisioned the best of what will be at MECCS, especially with budget relief and higher student enrollment in the future.

### **3.4.2 Research questions**

The main research questions to start the dialogue between researcher and participant were: Does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story or experience. Does this inform a sustainability ethos and mindset? Are environmental, social, educational, and economic systems in the Indigenous model of sustainability interrelated? Do we appreciate beauty as an element embedded within sustainability? These research questions generated an alternative worldview in sustainability literature (Sterling, 2003) that enhanced the current sustainability ethos predicated upon profit and commodity. Sterling (2003) extended this notion to include education for sustainability as a means to support a different kind of sustainability mindset that values sustainability beyond dominant worldviews that emphasize profit motives.

The research questions were informed by the MECCS website, charter, and original visioning statements from 2003. The MECCS website described traditional and contemporary worldviews (e.g., humility, honesty, respect, courage, wisdom, truth, love). The formal interview responses and the informal conversations reflected these worldviews constantly in a non-compartmentalized, fluid like manner. I extrapolated notions of beauty from the website, interview responses, observations, and interactions at each school visit.

Beauty revealed itself constantly throughout each school visit. Poet Charles Simic (2000, as cited in Patton, 2015, p. 123) states that “Each moment of our lives, each thing we say, is equally true and false. It is true, because at the very moment we’re saying it that is the only reality, and it is false because the next moment another reality will replace it” (p. 11). Thus, the nature of the research questions created an atmosphere of openness and fluidity. I was aware that the research questions were open to change throughout the interview process because intercultural dialogue reflects changing perceptions of moments of truth in specific moments of time. I remained open to whatever truth and insights the participants presented at any given moment of time.

### **3.4.3 Research site**

MECCS is located on 200 plus acres of rivers and forested land in Treaty Six territory in Alberta, approximately 75 km west of Edmonton. It officially opened as the first Indigenous public charter school in Canada in 2003. It began in the hearts and minds of several Elders (mostly Stoney and Cree), primarily Wilson Bearhead and a teacher named Charlene Crowe. Mostly, Paul First Nation and Alexis First Nation children attend the school. All Aboriginal and non-Aboriginal children were welcome then and now. Teachers and staff are Cree, Stoney, Métis, and non-Aboriginal. As the first Indigenous charter school in Canada, MECCS derives its philosophy from the worldview of the Cree and Stoney First Nations. These worldviews generate specific notions of relationships which honour body, spirit, mind, and land.

I contacted the Superintendent of MECCS in the early part of 2015 to talk about the school and my research. I was aware of the school’s existence because my spouse, Godfried (Fred) de Kleine was involved in the school startup as secretary-treasurer in 2003 (personal

communication, 2015). Also, the current superintendent, Ed Wittchen, worked with my husband in the 1970s in the Ft. Vermillion School Division.

I was invited out to the school to meet him and the principal. I was given a tour of the school and introduced informally to several staff members. I walked the grounds of the school to feel the connection between me, the school, and the Creator. Several conversations and visits to the school followed and I was given permission to conduct the study. I was invited to a formal staff meeting to describe the study and explain the research process. There, I explained that this is a research study about sustainability and Indigenous worldviews. Indigenous worldviews have the potential to reveal a different version of sustainability and education for sustainability. This is a qualitative research study that would celebrate the first Indigenous public charter school in Canada (K-9) and their Indigenous worldviews and Indigenous learners. The purpose of this study was to foreground and acknowledge the beauty of Indigenous worldviews and *their* notions of education for sustainability as lived and practiced at MECCS (K-9).

Introductory letters and oral invitations were extended to anyone who wanted to participate in the interviews. Immediately, several of the participants volunteered to participate. Two of the participants required additional personal one-on-one visits to build trust and bond with each other by sharing our hearts and motives with each other. Trust is important in Indigenous Methodology. Sharing stories with each other about our journeys in Indigenous Education and lived experiences bonded us immediately.

Due to low student enrollment numbers, one of the participant's position was cut, but he/she wanted to participate in the study despite moving to another part of the province for work. I travelled to another part of the province to interview him/her. After our interview,

that participant contacted a former staff member at MECCS to introduce me and the research, and to suggest his/her involvement as well. That participant was contacted via email, a phone call ensued, and then a meeting was held at their place of employment to discuss the particulars of the research process. That participant agreed to also participate after our face-to-face visit. The participants were assured of my heart and sincerity for honouring their worldviews and their ways and our co-learning together. We intuitively knew that our relationships would remain lifelong. I felt honoured to be accepted into the MECCS family.

All participants had a longtime involvement with MECCS and supported MECCS Indigenous worldviews as the primary focus for their original and current charter. Other worldviews are welcome, but the uniqueness of MECCS is that all learning is centered on Stoney and Cree Indigenous worldviews first and then Western and other Indigenous worldviews are added, not vice versa. Most public schools infuse Indigenous learning into the Western model of learning, but the opposite is true for MECCS.

#### **3.4.4 Background of participants**

I focused on the Discovery phase of the 4-D model (see Appendix B) as the research instrument for the interviews and specifically a modified version of the AI questions. Michael (2005) describes AI as an interview tool for field research because it provides a rapid, versatile, textured understanding of any group, individual, and organization. Michael (2005) reminded me that, like a plant growing toward the source of light (e.g., sun), “people and organisations move towards what gives them light” (p. 222). Cooperrider and Whitney (2005) use the interview process to share stories of appreciation within oneself, one-on-one, or in any size of groups. Interviews focus on “valuing what gives life to the organization or community at its best” (Cooperrider & Whitney, 2005, p. 14).

Participants were eager to dwell in the light and joy of their recall of celebrations and peak experiences. Coffee, snacks, and extra school supplies were provided as part of gift giving throughout the process. Due to unexpected severe budget cuts because of reduced student numbers, the staff was under constant threat of job loss and school closure. In addition to that, unwelcome external pressures to join other school divisions or districts were offered as options to alleviate budget concerns. Participants welcomed the opportunity to speak freely about their best or celebration experiences (e.g., peak) at MECCS. AI provided a welcome relief from the strain of budget variables that were out of their control.

The interviews provided an atmosphere of appreciative moments that fostered relief and hope for the future of their school. AI sustains hope by focusing on positive energy of commitment and growth of an organization. I did not follow any particular prescription or formula for all parts of an AI process (see Appendix B for all phases) but only used the AI interview as the basis for data collection. The flexibility of the AI process is that it can be adapted to any venue that seeks transformation by focusing on the best and the positive (Cooperrider & Whitney, 1999).

Both Indigenous Methodology and Appreciative Inquiry use open-ended storytelling (Kovach, 2009) and “narrative-rich communication” (Cooperrider & Whitney, 1999, p. 256) as part of interview protocols. The open-ended structure of the interviews allowed for dynamic and unrehearsed information, no fear of reprisal due to the trust factor created between us, and an enthusiastic willingness to share much more than the initial primary research questions required. Interviews were filled with many appreciative moments that unpacked celebration peak moments as multifaceted, lived experiences as interconnectedness

and beauty. Despite moments of deep concern for budget restraints, the participants were brave, resilient, and generous with their time and energy.

### **3.4.5 Delimitations**

“Delimitations clarify the boundaries of your study” and narrow the research scope to elements such as “time, location, and sample selected,” according to guidelines provided by Bloomberg and Volpe (2012, p. 114). The study was done at a small Indigenous public charter school setting outside of Edmonton, Alberta. It was not on reserve but situated in Treaty 6 territory, which Edmonton is as well. The delimitation utilized by the researcher in this study was determined by a desire to gain a broader understanding of an Indigenous worldview at a site where both Indigenous and non-Indigenous educators practiced and valued Indigenous worldviews. In-depth and ongoing relationships with the participants created trust and respect and could be observed in a small setting, whereas a larger setting has time constraints and unwieldy larger dynamics. All protocols and permissions to conduct the research were given via the Superintendent and the principal. It is important to stress that this research represents one school site with mostly Indigenous learners (e.g., approximately 60) from the Paul Band and Alexander Band. Teachers and staff are a blend of Indigenous and non-Indigenous ancestry. It is important to note that pan-Indianism is the tendency to treat members of a different nation as more or less interchangeable and this is not acceptable (Battiste, 2011; Kirkness, 1999): “Research compilations often treat conclusions based on one Indian nation [Aboriginal, Indigenous, First Nation] as necessarily relevant to other Indian Nations [Aboriginal, Indigenous, First Nation]. There is no theoretical or empirical basis for either practice” (Chrisjohn & Lanigan, 1984, p. 50-51). Indigenous groups are not homogeneous, yet may hold common aspects of worldviews such as respect, reciprocity,

relationality, and reverence (Atleo, M., 2009; Battiste & Henderson, 2009). It is extremely important to remain humble and aware of oneself as a co-learner in the school. This informed my behaviour throughout the study.

### **3.4.6 Limitations**

“Limitations of the study expose the conditions that may weaken the study” as discussed by Bloomberg and Volpe (2012, p. 114). Earlier, I mentioned that I was receptive to Indigenous worldviews since my involvement with Aboriginal Education from the 1980s, and I was aware that my experiences and values influenced my own interpretations about the data. However, to counter my bias, I used ongoing reflection to help listen well to the participants’ voices and stories. Guba and Lincoln (1981) remind the researcher that “reality, as it is lived by the subjects of research...is experienced holistically and mediated heavily by values, attitudes, beliefs and the meanings which persons ascribe to their experiences” (p. 249).

Bogdan and Biklen (1992) echo this point by describing qualitative researchers as “researchers [who] do not approach their subjects neutrally” (p. 33). Part of the flexibility of AI and IM is allowing themes to emerge from the storytelling and narratives without prompted responses to leading questions. The interviews promoted a reflective discourse that gave space to the participant to provide insights from their heart and spirit. I found myself deeply listening to the threads of data that would lead back to the primary and secondary research questions in the flow of our talk. Patton (2002) calls the back and forth flow of talk a working “back and forth between parts and wholes, separate variables, and complex, interwoven constellations of variables in a sorting-out then putting-back-together process” (p. 67).

This study is done at a small site with a small number of teachers and staff who value a particular Indigenous worldview comprised of Stoney and Cree perspectives. Other Aboriginal and non-Aboriginal perspectives are included wherever possible, but the primary springboard for learning is the value of Stoney and Cree worldviews. The findings of this research cannot be generalized to an entire population. The participants represent a small number, and their views may or may not be duplicated in another setting. Variables such as budget cuts loomed as a constant in the research year (and remains so, due to low student numbers) so these variables impacted the responses. Due to severe budget cuts, the teachers were teaching multiple grades, so time restraints put a boundary around what could be conducted from the AI process. However, Taylor & Francis (2013) determined that validity in research occurs when the measurements, tests or assessments involved achieve the purpose for which they are designed. Plenty of results were gathered from the Appreciative Interview questions modified from the Discovery aspect of the AI model.

Patton (2002) noted that since the tests or measurements used in qualitative research are observational, participatory, and interview oriented, it is critical for validation and reliability to be achieved through the researcher's accurate detailing of the phenomenon as it exists to those being studied, not as the researcher wished it would be. I was constantly monitoring my own biases and sense of wonder throughout this process.

To ensure validity and reliability of the findings in this research, several key steps were taken. They all followed the same format. The initial primary research question was consistently stated to all participants. The responses to the initial primary question were accurately recorded using field notes (e.g., paper, pencil, or pen) with audio tape or without audio tape as per participant request. Each interview was transcribed. The co-

researchers/learners (e.g., participants) reviewed their own responses to ensure the accuracy of what was said. The researcher's analysis only reflected themes introduced by the participants and subsequent interview questions were limited to seeking clarification of that information or additional information participants deemed important.

### **3.4.7 Ethics**

The ethics of the research process included the participant's right to confidentiality, information security, anonymity, privacy, and the choices of where and when to do the interviews and to edit all responses while also able to withdraw at any time. This reflected the respect needed in reciprocal relationships that are expressed in all aspects of social conduct before, during, and after a research process (Smith, 2012). This way, harmony and an atmosphere of respect, are threaded throughout the entire research process and healthy relationships are maintained. This research focused on adult educators both current and former only. The participants were identified by a numeric code to protect their privacy, confidentiality, and anonymity.

### **3.4.8 Data collection procedures**

Interviews began in the fall of 2015. They were open-ended, with primary research questions considered semi-structured, in that "some questions are developed in advance [and] follow-up questions are developed as the interview progresses based on participant responses" (Lunenburg & Irby, 2008, p. 192). The flexibility, intuitive nature, and fluidity of AI and IM allow for this. Nine participants (Aboriginal and non-Aboriginal) were interviewed in two interviews for approximately 1 and ½ hours each (more or less) from October-December 2015 at the school site, coffee shops, and food markets in Edmonton, Alberta.

Introductory letters and consent forms (see Appendix C and Appendix D) were provided for all volunteer participants. Participants could withdraw at any time. Interviews were audio recorded with note taking and audio only and/or note taking only. Transcripts captured the actual words, phrases, and quotations of the participants to capture each interviewee's perspective (Patton, 2015). Transcripts were provided for each participant for changes and clarification. During the follow-up interviews, many of the participants removed sections from, and reworded the transcripts to better reflect how they wanted their voices to be perceived in the wider community, and to better capture the gist of their hearts and words. I reviewed the transcripts and the documents (e.g., archival visioning statements of the founders of the original charter, current charter school policy and school manuals). I was honoured to view the original vision statements of the founders and Elders for the first charter school in 2003. A participant related strongly to many of the Elders' perspectives found in the original charter, so much so that she had safely guarded the original visioning statements from 2003. I was honoured to be able to include this valuable document that she entrusted to me.

I used colour-coding techniques with highlighters, coloured pencils, index cards, and flipcharts to determine the theme categories and organize insights throughout the research process. I gave each participant a particular colour to highlight their quotations, phrases, and the gist of the key themes as they were making themselves known. Because of the volume of material, I used narrative smoothing techniques (Polkinghorne, 1995) to capture the essence of key themes and insights in face-to-face interviews as well as in any documents. Patton (2015) suggests that during the data interpretation and analysis phase to make "sense out of what people have said, [look] for patterns, [put] together what is said in one place with what

is said in another place, and [integrate] what different people have said” (p. 471). All participants chose to be anonymous, and could withdraw at any time. Introductory letters were provided with instructions to contact me directly via phone or email. Consent forms were given for each participant who chose to be a part of the research process and interviews. Participants were assigned numbers to protect their confidentiality and anonymity. Due to the small number of participants, descriptors of participants as requested were kept to a minimum to protect their confidentiality as requested.

Bogdan and Biklen (1992) state that qualitative research is descriptive and quality interviews (e.g., vignettes ) are, as Lunenberg & Irby (1998) describe, established through “trust, empathetic listening, and good rapport” (p. 90). If participants wanted to change anything in their transcripts, I immediately did so. Lunenberg & Irby (1998) explain that this is accomplished through “careful listening, nonverbal cues, the progress of the conversation, probing when needed” (p. 91) and appreciating silence during thinking and sharing (Kovach, 2009). I was deeply present and aware that the participants and I were engaged in a back and forth dance of sharing, laughing, pausing, and reflecting throughout our conversations. I took the stance that participants immersed in an experience are the experts and I felt privileged to be part of the conversation.

The progression of the interview process was firstly, relistening to the tapes and notes in their entirety to get an overall sense of the experience and thinking; secondly, transcribing immediately or within one day, the transcripts while removing the ums, coughs, pauses and extraneous tidbits to represent key phrases in the fluidity (e.g., the gist) of natural conversations (participants did not want ums, coughs, etc., recorded); thirdly, emailing participants the transcripts and/or both physically providing the transcripts at the next school

visit for clarification and reflection; fourthly, follow-up interviews assured data accuracy, clarification, updates on thinking from the first interview; fifthly, all participants were available for corrections and follow-up on an ongoing basis for discussion via phone and school visits throughout the school year. I respected these relationships beyond the formal interview process and have remained friends with those that are easily accessed and employed at MECCS today (2017).

The transcribing process followed Patton (2015), Seidman (2013) and Creswell's (1998, 2013) suggestions. Patton (2015) explained that "verbatim note taking can interfere with listening attentively" (p. 472) and should be taken strategically to "formulate new questions as the interview moves along, capture emergent insights, locate important quotations and backup notes for recorder malfunction" (p. 473). Immediately following the interview, I checked to see if the recording was working, and to check my notes to make certain they made sense, to uncover any ambiguity or things I wondered about that emerged; I did the same in the transcribing process, quickly noting any uncertainties (Patton, 2015). I often did my interviews in private in the staff room, and when the interview was finished before I left for home, if I had any unclear points, I could clarify them on the same day with the staff member, the next day, or by email and/or phone. Patton (2015) described the importance of rigor and validity of qualitative inquiry as the period after an interview or observation for guaranteeing the quality of the data by checking for unclear areas, noting poorly worded questions, rapport, tone, and reflection while the interview process is fresh in your mind (p. 473). I used highlighting markers to do just that, immediately after the interviews and later upon reflection at home and during the transcribing process.

I used flip charts at home to record specific quotations and the gist of thinking that presented answers to the research questions, as well as those answers that represented wondering insights or “ah ha” moments of connections. I put these flip chart papers on the walls throughout my home to keep the insights and questions alive and present throughout the interview, data collection, analysis, and correction phases of the research process. Any new insights from the participants or from my reflection were added with different coloured highlighters or post it notes.

I organized statements into “meaning units” (Giorgi, 1975) or chunks of speech in which an idea or experience was expressed. Each transcript was divided into units that clearly expressed one idea or theme, or multiple themes. Each separate meaning unit was put onto a card, and these cards were grouped into thematic categories. Each participant was assigned different coloured index cards and highlighters, or coloured pencils. Each quotation was cross-referenced, so it could be easily found again in the context of the interview. As thematic categories arose from the cards, other similar statements were put into the same pile or on the flipcharts with post it notes, or highlighted. Reality checks for my perceptions of the themes and categories were provided during my many visits to the school.

At the end of this process, data from each interview was put into a pile of cards, each representing a thematic category. From each pile of cards, quotations and the gist of summary phrases were chosen that most clearly expressed the salient themes of participant experiences and worldviews. The themes were then written up to show both the commonalities and the diversities among the participants, and highlighted with various colours throughout the transcriptions.

Van Manen (1984) describes themes as being like “knots in the webs of our experiences around which certain lived experiences are spun and thus experienced as meaningful wholes” (p. 59). These knots also represent the important aspects of a story while noting that not all data elements will be needed for the telling of the story (e.g., vignette) and thus, are left out and called “narrative smoothing” (Polkinghorne, 1995, p. 16). The major themes or knots and variations that were identified gave a sense of the core responses from the research questions. The writing reflected a story filled with the participants’ key life lessons at this moment in time.

Reflection of each theme was considered throughout the living and writing up of the research. Interviews revealed a shared worldview that foregrounded Indigenous perspectives and then blended in other worldviews (e.g., Western). Yes, the blending also revealed the strengths of multiple worldviews, but that blending was grounded in the primary Indigenous worldview of MECCS first. Observations, participation in ceremonies, field trips to an art gallery, drumming events, my teaching as a guest in various classrooms, examining documents (e.g., minutes of meetings, vision statements, policy) were also used in the data collection process. This was the circle of appreciative and beautiful moments that informed the research process.

Conversations were held everywhere, before and after daily smudge ceremonies, informal chats throughout the day with teachers, staff, and students; lunch chats, recess chats, moments of repose and reflection in the staff room, family liaison office and Elder visit chats, judging pow wow dancing, observing guest speaker events, walking the land surrounding MECCS and communing with nature, praying, 6 am school coffee visits, visits before hockey games and so much more, which were all part of this process. There was a

strong spiritual process that was reflected in ceremony and multiple conversations. The data procedures were immersed in the daily life of MECCS.

All of the data collection provided flexibility and openness “consistent with qualitative research” (Lunenburg & Irby, 2008, p. 193). Capturing different experiences and perceptions of their best experiences at MECCS, the AI method honours the idea of “multiple realities.”(Hammond, 1998, p. 20). Guba and Lincoln (1981) believed that the determination of credibility can be accomplished only by taking data and interpretations to the source from which they were drawn and asking them directly whether they believe, or find plausible, the results. To date, I continue to get deeper insights into the results over coffee visits and dinner visits with some of the participants, thus reflecting the ongoing nature of the fluidity of co-learning as an ongoing open-ended process in Indigenous Methodology. Lifetime learning is just that in Indigenous Education: lifetime learning. All data collection and research process conformed to UBCO Ethics requirements with certificate number HI5-02191 (summer and early fall, 2015).

### **3.4.9 Summary**

As expressed already, the research questions were: “Does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story or experience. Does this inform a sustainability ethos and mindset? Are environmental, social, educational, and economic systems in the Indigenous model of sustainability interrelated?” Each story or vignette and conversation from the interview process celebrated what is best at MECCS.

Being heard in a dominant Western society and sharing with each other in a respectful manner is an “end in itself” (Patton, 2015, p. 123) and reflects the beauty of the fluidity of Indigenous Methodology and Appreciative methodology. Not every appreciative moment

leads back to actionable outcomes and evidenced based decisions; sometimes, the deeper notions of why we are human provides an ethos of sustainability through respecting spirit, place, and humanity (e.g., people, place, profit) is what needs to be included in sustainability power broker discussions.

Since 2003, MECCS remains a successful public Indigenous charter school, fighting valiantly for survival of their Indigenous charter and vision for the future of all learners. The results of the data collection revealed that MECCS has a sustainability ethos grounded in time immemorial. Their sustainability ethos is embedded in the circle of beauty and wisdom of their Indigenous worldviews as practiced and lived wholistically at MECCS.

## **Chapter 4. Results: Circle of Findings and Analysis**

This chapter includes the results, or the circle of findings and analysis. The chapter includes Mother Earth's Children's Charter School (MECCS) Indigenous philosophy, vision and mandate, a circle of beauty and wisdom from MECCS, Elders wisdom for Wahkohtowin-Wetaskiwin (Cree) and Ina-mackoe da? a basiptam; A-we-yakmna-me (Stoney); Celebrating MECCS and their Circle of Sustainability, and Circle of Analysis. The above are meant to be understood as a circle of learning, not as distinct, compartmentalized rigid versions of learning. The circle reflects a metaphor that invites learning and living to flow back and forth throughout one's lifespan.

### **4.1 Mother Earth's Children's Charter School Indigenous Philosophy/Vision**

Mother Earth's Children's Charter School (MECCS) is located on 200 plus acres of rivers and forested land in Treaty 6 territory in Alberta, approximately 75 km west of Edmonton. MECCS is "Indigenous which means it is on the land and from the land" (Participant # 2, November, 2015). It officially opened as the first Indigenous public charter school in Canada in 2003. It began in the hearts and minds of several Elders (mostly Stoney and Cree), primarily Wilson Bearhead and a teacher named Charlene Crowe. Mostly Paul First Nation and Alexis First Nation children attend the school. All Aboriginal and non-Aboriginal children were welcome then, and now. Teachers and staff are Cree, Stoney and non-Aboriginal. Participant #4 (November, 2015), for example, reflects on her memory of the ideal school as "the founders and Elders dreamed of an ideal school that would teach my Cree and Stoney grandparents' traditions of loving one another and taking care of one another on the land and with each other." This heart-cry is echoed in the current charter as the vision and mission of the school: "Rediscovering the gifts and potential given to them by

the Creator, our children will achieve personal excellence and fulfillment. To wholistically nurture, guide and challenge each child's spiritual, intellectual, physical and emotional self through traditional Indigenous teachings" (2016, MECCS website: [www.meccs.org/site](http://www.meccs.org/site)).

The members of MECCS exhibit flexibility and commitment to the original charter, building resilience and pride in Indigenous worldview, heritage, language, culture, Elders, ceremonies, relationships, spirituality, community, identity, planet Mother Earth, and lifespan learning: "MECCS has had big changes and experiments with multifaceted and multidisciplinary projects and programs that each balance academics and culture all with varying degrees of success" (Participant #2). Despite current budget cuts due to declining student enrollment in 2015-2016 the determination to hold fast to the original charter philosophy, mission and vision of MECCS is palpable in the spirit of unity in the school. The funding formula for Aboriginal children in education remains tied to student body count and as Chief Perry Bellegarde (AFN) states:

We must improve the conditions for our First Nations children's learning. Think of this as an investment in human capital not expenditures. We are in a new era of reconciliation where full involvement and full inclusion is a possibility for us in all issues facing First Nations and Canada. (CBC News, interview, March 7, 2016)

This school year's severe cuts were made to teaching and cultural staff. Teachers are teaching multiple grades without resources. Participant #8 (November, 2015) refers to these stressors as "a brokenhearted time because we are a unique family here yet even with the loss of students and money, we want to give every child the opportunity to grow and be who they want to be. We won't give up." All remaining teachers and staff have been at the school either from the beginning or for many years. Many of the participants echo a similar

sentiment to Participant # 8 (November, 2015): “ For myself I feel I am part of this culture even though I am non-Aboriginal, I’ve sunk all my heart into this place, all of my tears into these guys. There is no separation between these kids, myself, Paul Band and Mother Earth. We will continue to build a relationship with each other.” Many of the students that have grown up through MECCS from Kindergarten through grade 9 have strong bonds with each of the staff and many return for school feasts, ceremonies and pow wows throughout the year. Participant #5 (November, 2015) emphasizes the bond between staff and student as “once a MECCS student, our children are our children forever.” Participant #4 (November, 2015) expressed the importance of this continuity:

My kids have a balance of culture and education because they went through MECCS. Having struggled for years to know my language, culture and spirituality I was/am determined that my children and grandchildren will know where they come from and be proud of who they are as First Nation people.

In the early years, MECCS had a larger number of students when they were in a strip mall in Wabamun, Alberta near the Paul Band and near a piece of land where traditional cultural teachings were experienced. In that memory, teepees, pipe ceremonies, and Elders from Paul Band and Alexis Band were a frequent sight. MECCS moved to the current, large, school site of the old St. John’s school facility in 2009. The move to the new school site was to accommodate more students in the future. The school is now far away from both bands, and transportation proves to be a challenge for parents, Elders, and students. Many students take the 75 km bus ride from Edmonton daily to be a part of this special learning environment. MECCS is a unique niche of heart, spirit and ancestral power (Elder T, personal communication, 2016). Participant #1 explains the reason for the move as:

We moved to this location because we recognized that there was a need to give our kids equal footing and similar opportunities as other schools. This location met the modern needs and expectations around technology as well as the physical space with a gym and decent sized classrooms. This school had the openness and the ability to host sweats, culture camps, traditional games, snowshoeing and real learning on the land. (December, 2015)

It does provide a powerful connection to the land and room to grow beyond grade 9, but current student numbers have dropped significantly, and so has the funding. Chief Bellegarde's words of concern and hope couldn't come at a better time. Hopefully, this will lead to a review of the funding formula. Participants agree that the answer is not to uproot the MECCS students into a mainstream school because mainstream schools are not specifically designed to support the philosophy and traditional teachings of the original charter. The public school system did not meet the wholistic needs of these students in the first place, thus the original charter was birthed out of those concerns. Founder Wilson Bearhead (Visioning Sessions, May 11, 2005) describes his perception of sixty years of the mainstream, European education system and the reason for starting MECCS:

A system that has made us fail ourselves as Indian people of this land. WE are trying to bring the teachings of the old people to our schools so our young people can be successful. WE are finding that the European style and the methods that they used is not geared to or suitable for our children. WE must use the old methods not only to teach but to educate the young minds.

In 2015-2016, MECCS holds onto the original charter with a skeletal staff and budget because of the deep belief of meeting the needs of their Indigenous students. Daily, MECCS

models and teaches how to live well on the planet with oneself and each other. Their dreams and hopes are equally as palpable as the stressors from budget cuts. Participant #6 (December, 2015) emphatically states that “without cultural events and activities, then it becomes too colonized and feels more like a residential school with colonial rules and regulations.” Money was not an issue in the early years but in 2015-2016 it is, and thus, a new vision for financial stability is required to continue the traditional, cultural, and language teachings that make up the essence of this school. That essence revolves around meeting and nurturing the whole child’s needs “through medicine wheel teachings as passed down from our Elders” ([www. meccs.org/site](http://www.meccs.org/site), 2016) evidenced through Martin Brokenleg’s Circle of Courage dimensions for “belonging (I mean something to you), mastery (I am good at something), independence (I have power to make decisions) and generosity (I have a purpose in life)” ([www. meccs.org/site](http://www. meccs.org/site), 2016; Brendtro, Brokenleg & Ban Bockern, 2014, p. 12-13). All participants believe that the charter for MECCS is a good model for other Indigenous schools. Participant #6 (December, 2015) offers a plea for a financial solution for the future of MECCS:

The best thing for the school is our new facility because it will be enough to handle growth. If the government came in and bought the school and the land outright that would take a whole big part of the financial problem away. Then there would be some accessible dollars to continue what the original charter, vision, intention and mandate was of MECCS in the first place. Our kids love their sports, their cultural events, languages and pow wows. When you have to cut back on even a pow wow, which is one of the largest events that draws people from all over, then you are taking away from the cultural and traditional aspects of our school. To me that’s not right. To me

you can't do that because you are showing total disrespect for the culture. You are saying culture doesn't matter here. That event matters so much, not just to the school, but to the community as well. I just pray to the Creator that the school doesn't close and that this isn't their last year!

All participants are holding onto the best parts of their dreams for the students and the family of MECCS despite budget restrictions that are out of their control. Everyone connected to the MECCS family is determined to teach to the strengths of each child because each strength is considered a gift given by the Creator. Student gifts are woven throughout the delivery of the medicine wheel, and culturally sensitive and responsive curriculum and beingness.

Participant #6 (December 2015) states that "their gifts are their livelihoods." Gifts are strengths derived from culture, language, and traditional teachings. These strengths comprise the core or essence of a person and their worldview. Participant #7 (November, 2015) states that modeling who I am as a Cree person and focusing on strengths helps students "appreciate and be confident in who they are. You bring the passion for learning and it inspires everything. The kids are responsive and enter into it. Kids appreciate and become confident in who they are." Participant #8 (November, 2015) states, "I truly believe these students have gifts that nobody sees or nobody knows. It is up to us the educators to give them the confidence and push that it is okay to make mistakes but showcase what you've got!"

This study is a remarkable and healing experience to be part of. For me, building relationships with the MECCS school family began in the spring of 2015. At a staff meeting that I was invited to attend, Participant #5 (October, 2015) offered these kind words, "this study and your visit is serendipity." Serendipity, according to the Oxford etymology

dictionary means “the act of making happy discoveries by accident” (1996). The process of building relationships with the MECCS family feels like arriving at the perfect place at the perfect time to celebrate and foreground Indigenous worldviews that include their lived values of interconnectedness, reciprocity, relationality, reverence, respect and responsibility (Atleo M., 2006, 2009). I feel delighted that MECCS and I discovered each other by accident, but I also know that it is meant to be in the journey of my lifespan learning in life and theirs. This process feels like learning together and unpacking deeper lessons of life that the Creator, as Participant #7 explained, “you are predestined and meant to be with us now” (January, 2016). I embrace and recognize that I have entered into the medicine wheel teachings of MECCS. Elder C (Visioning Session, 2005) reminds us that

We call upon the Creator to provide us with guidance and identify what are our roles and responsibilities; we always ask the Creator to show us the path that he has designed for us, always for the betterment and always for the help of our people, our children and for all to accept the responsibilities of our Elders to us; when the Creator has made the decision that they have accomplished their responsibilities, he calls them back; the gift of life is loaned to us; as well the children are loaned to us.<sup>1</sup>

From my deeper learnings gained through friends, family, and throughout my career in Aboriginal Education, I too believe this to be true.

The philosophy of the school is based upon the medicine wheel, seven sacred truths, ten Native Commandments, cultural knowledge, language acquisition, tribal protocols, sacred teachings, storytelling and Elder teachings through a land-based education situated on

---

<sup>1</sup> After a few visits to the school and developing relationships with the participants, I was given access to documents and interviews with Elders and founders of the charter school conducted in the planning and visioning sessions for MECCS charter. Elders are referred to as Elder A, B, C, D, E, F, G, and H out of respect for their privacy.

260 acres around the school building. The medicine wheel has many interpretations. It usually has seven directions (e.g., North, East, South, West, Father Sky, Mother Earth, Spirit) with emphasis on the spiritual, physical, social/emotional, and intellectual. All four components are of equal importance and as Participant #2 (November, 2015) states “we do not leave out the spiritual like many other schools because that is why we exist.”

“Our philosophy is connected to our Indigenous learners and worldview in every way; worldview is not compartmentalized here,” states Participant #1 (November, 2015). MECCS policy manual (2008, p. 2) emphasizes this belief as “we believe (in fact, we know) that if we neglect the development of any of the parts of the whole self [represented in the medicine wheel], none of the parts will develop to their maximum potential.” MECCS philosophy is grounded in the celebration and strengths of each learner. The medicine wheel teachings are represented at MECCS through these descriptions:

NORTH—Spiritual Needs, Self Knowledge and Acceptance, Traditional Teachings, Ceremony; EAST—Physical Needs, Air, Food, Water, Fitness, Rest, Safety; SOUTH—Social/Emotional Needs, Love, Acceptance, Understanding, Stability, Self-Discipline, Healthy Relationships; WEST—Mental Needs, Concepts, Knowledge, Thought, Ideas, Education, Training. (MECCS policy manual, 2008, p. 2)

MECCS supports the Alberta Curriculum and provincial standards, but it is infused into the medicine wheel teachings, not vice versa (Baydala L., Letourneau, N., Bach, H., Pearce, M., Kennedy, M., Rasmussen, C, Sherman, J., Charchun, J., 2007). These authors note that “Aboriginal curricula exist in a number of public schools in Alberta, but it is how the indigenous curriculum is situated within those schools as compared to MECCS that differentiates MECCS from schools in the public school system” (p. 204). Throughout my

ongoing visits to the school, I see the participants and students embracing the beauty of Indigenous ancestry and medicine wheel teachings through their interactions with each other and staff. Woven into these lived experiences is love, care, encouragement, determination, perseverance, joy and celebration. As soon as I enter MECCS property, I feel the spirit of the people and land. It is an honour to be included and accepted into the family of MECCS. Many of the participants spoke about what it means to be a good fit for our school and community and embraced by MECCS's philosophy and worldview. Participant #6 (December, 2015) describes this as:

We belong to MECCS through Aboriginal knowing, teachings, culture, love, collaborations and community. I felt an immediate connection with the kids and staff when I first arrived. I can't explain it. You can only feel it. It's a spiritual feeling and spiritual connection in this school. There was a purpose for the school being here. I could feel it, sense it, see it and hear it in everything.

Participant #3 states "Aboriginal culture is beautiful in my opinion. I've had celebration and peak moments. I'm stretched and expanded all the time by my students," (November, 2015). The staff of Indigenous and non-Indigenous have walked together for many years and all have grown in their knowledge of the medicine wheel and the seven sacred teachings. MECCS's seven sacred teachings are humility, honesty, courage, love, truth, wisdom, and respect. Due to the legacy of residential schools, discrimination and poverty, many of the MECCS children and staff have encountered adversity (MECCS Student-Parent Handbook, 2012). Participant #3 (November, 2015) continues to highlight that:

It is hard for some families because of what has happened in the past. You have to earn respect and give respect back, it's the same with humility, honesty and courage

too. Yes, it makes my heart swell with love for Aboriginal culture. I'm very concerned about insulting the culture or doing something wrong. I'm getting better now and I can apologize too. If we can expand the culture into the Western world and make the Western world more aware of Aboriginal worldview that would be good.

The culture is giving and beautiful and it will open some people's eyes.

Like the medicine wheel, the seven sacred teachings are not compartmentalized or taught as separate parts of a curriculum; instead, they permeate the essence of how one speaks and conducts oneself at school, at home and in wider society. Participant #7 (November, 2015) states that:

We do not standardize the seven sacred teachings. I do not believe these teachings are for me to explicitly teach. They should not be standardized into conventional lesson plans or taught in westernized ways. I believe they are more modeled in the way you live your life.

Through ceremonial acts like smudging daily in each classroom and every Monday as a whole school gathered in a big circle in the cafeteria, the teachings of kindness and thankfulness and sharing are being taught. Participant #9 (November, 2015) explained that "there are budget cuts to our language instruction and culture this year, but I do culture and language in my own classroom. What I know as a First Nations person, I share in my class the good ways." Participant #9 (November, 2015) continues cultural teaching through pow wow dancing at school and at home with her children at "every summer pow wow." MECCS supports the pow wow trail by adapting their calendar to fit it. Participant #2 (November, 2015) explains the importance of celebrations and competitions like pow wows as:

The main thing is a gathering of families. Some start on the trail and stop coming to school because they go all around North America travelling to different powwows. We end earlier than other schools before the last week of June. We support the worldview and what is important to our communities and the people that we serve. So if it is the powwow trail, we accommodate that and that gives the families more summer to travel around. We end before June 21 National Aboriginal Day which is the summer solstice.

MECCS philosophy, worldview, vision, and charter are undergirded by the medicine wheel, seven sacred teachings, ceremonies (e.g., sweat lodges, Sun dances, smudges, pow wows, culture camps, etc.), Stoney and Cree languages and Elders' traditional teachings. Elder C (Visioning Session, 2005) reminds us that everybody is gifted differently; thus:

When the Creator, at least from the First Nations perspective... granted our people life, it was meant that we were not all to be the same. Therefore, our learning habits and our ability to be able to comprehend what we need to teach ourselves is going to not be all at the same stages....we need to elevate our spiritual beliefs and have that incorporated into the teachings of our governance and hopefully we'll have an impact on how our people are going to advance themselves into mainstream society and they will be able to acquire the skills from that society that will help them maintain a lifestyle that is above poverty and be able to maintain their spiritual belief because that is the foundation of our First Nations peoples and how they are able to maintain themselves all these years.

The flexibility of the medicine wheel and all dimensions of MECCS charter provide opportunities for students and staff to adapt to each other's needs, differences, strengths and

weaknesses. In my view, that is the purpose of lifespan learning: we never know it all. Students and staff learn from each other on a continuous basis. Participant #3 (November, 2015) uses the metaphor of Aboriginal hair weaving and basket weaving to describe the beauty of the blending of all the charter elements at MECCS.

Participant #3 (November, 2015) states:

This reminds me of hair weaving. Aboriginal hair weaving is like basket weaving. One weave could be Aboriginal, another could be Chinese or Muslim or any other culture. Together the threads make a beautiful idea of peace and beauty without any violence. We must make room for an equal Indigenous worldview for all of our futures. We have to in our own hearts be peaceful first and set that peaceful example for our students. It [medicine wheel teachings] has a good ripple effect.

MECCS Indigenous philosophy, vision and mission comprise their worldview. Elder B (Visioning session, 2005) summarizes the purpose of our education as “in our teaching we use sight, we use sound, we use feeling, we use thought, and we use experience as teachers including grandparents, aunts, uncles, and all relatives, in a holistic way of teaching.” This is the way of the medicine wheel and the seven sacred teachings. Elder B continues, “We are taught as individuals. We have our own hearts, our own minds, our own bodies, and our own spirits. Everyone has a role to play to teach our children their culture, language, roles and responsibilities.”

#### **4.2 A Circle of Beauty and Wisdom from Mother Earth’s Children’s Charter School**

Data in this study is gleaned from interactions with participants in conversations and interviews at MECCS. Recall that beauty is a value found in Indigenous wisdom traditions and many worldviews. Beauty is wholistically embedded within sustainability (Fulmes,

1989). Beauty may contain the notions of flourishing, learning, well-being, place, interconnectedness, care, aliveness, spiritual-physical-mental-social-financial harmony, and humanity-Earth appreciation. Beauty is lost in unsustainable practices and attitudes that damage humanity and the Earth (O'Donohue, 2005). I believe that beauty, as a value, opens a space for individual and collective collaboration about sustainability and sustainability global issues. Beauty supports an attitude or posture of appreciation for Indigenous worldviews from the participants at MECCS. These encounters reveal an uncompartimentalized, wholistic, circle of beauty and wisdom from the MECCS family. Winston (2010) informs us that “none of our understandings of beauty are detached from historical and cultural experiences” (p. 9) and thus we can be profoundly impacted by our conversations and stories. These conversations weave a tapestry of beauty about the circle of life that sustains the Indigenous learner, Mother Earth (e.g., place or territory) and livelihoods (e.g., economic equity). Their voices may provide a motivating force for others to really listen and learn from each other and to apply this inclusive, diverse knowledge to thinking about an expanded version of sustainability beyond people, planet, and profit. Relationality (e.g., relationships) connects beauty, culture, and Indigenous wisdom into a Circle of Sustainability. These notions of beauty, culture, and Indigenous wisdom are intertwined in this study's participants' stories.

Encounters between, and with, the participants and myself are ongoing through my role as guest teacher, as well as school visits and field trips. It is true as many participants shared that adults and children associated with the MECCS family are intertwined forever. MECCS is a magical place. Gergen (2009) states that education in a “‘relational key’ is critical to the global future....Everywhere there is a need for collaboration, teamwork,

networks and negotiation...[that] serve the good of all” (p. 243–244). The MECCS participants are forward-thinking in that they are aware of the relationships that are threaded through learner, planet (e.g., place) and future livelihoods. Gergen (2009) asks us to think through this question: “With what skills are students prepared in order to enter the relationships on which global life will depend?” (p. 243). Answers to this kind of question are couched in the recognition that MECCS has a common charter, vision and mandate. It calibrates the MECCS participants’ thinking around relationships and connections between school, community, and the world. Gergen (2009) calls this extended web of relationships a “circle of participation” (p. 246) and “‘unceasing circles’... [where] education is sensitive to relationship, we realize that in terms of future well-being, ‘we are all in it together’” (p. 269). Let us hear the voices of relationality, reverence, respect, responsibility, and much more from our participants at MECCS.

In celebrating Indigenous worldview at MECCS, there is no magic formula or set of rules to follow, because MECCS honours the whole child and their needs within their circle of life which is within the medicine wheel and sacred teachings. Each time I visit MECCS, I feel exactly how the medicine wheel permeates the atmosphere. It is an indefinable presence of beauty, open-heartedness and practice of the seven sacred teachings. Participant #5 (November, 2015) explains that “people think that we have a magic formula you can do it anywhere if you have support for doing it but there are differences here.” Participant #5 explains the importance of the sacred teachings embedded in a practical example:

Take head lice and how we know some students have this. We do not line kids up every morning and check them. For instance, we know that one girl has literally rolled out of bed in the morning and gets on the bus to travel more than an hour to get

to Mother Earth. This little one is in Kindergarten and takes herself to school. She has a problem with head lice. Our family liaison, a community member, calls the mom to ask if we can help with the head lice. We did not want to offend mom but our staff auntie knew how to ask the mom with respect and dignity. Now this could be done at other schools but because there are so many barriers like legal and health barriers a child can get stigmatized. We do it differently here. Our teacher assistant does all of the children's hair every morning with pretty things or braids boys' hair. She keeps separate baggies with individual combs and tells the young ones that they are beautiful. We know that this is a problem so we deal with it and take care of it. It does not matter how expensive the lice medication is. We do what we do. Kindness, understanding, nurturing, humility and all of the sacred teachings embody that act of caring for that child. That is love and courage for us to reach out to the parent to ask about the situation. Courage for the mom to say she wants our help. That is how we do it.

The sacred teachings of love and courage are evident in this practical example of sustaining the well-being of this child. Clearly, the staff is concerned with supporting the whole network of people involved in raising each child. Shaming and bullying are not allowed. Building resilience through belonging and dignity are foremost in developing healthy relationships with each child and their family members. Participant #5 asks us to expand our understanding even further in the above example. In major centres, students have access to a washer and dryer, and also have access to power, amenities and disposable income to buy items like expensive lice medication. This is not the case for every family associated with

MECCS. Participant #5 (November, 2015) asks us to imagine the background of our young student:

Imagine if you have four children all under the age of four with no washer or dryer and in order to do your laundry you have to go to the laundromat. You have no car that is yours and you have to borrow your mom's car. You only have \$100.00 left in the bank and you have not bought groceries yet but you need gas. Now go ahead and add all those factors into your problem and now tell me how well you are going to do. So again I understand that there is a whole background to these children that walk into our school door. You are not just teaching this child in front of you. You are not just interacting with that child, you are interacting with their entire family, their home, their history and you have to be mindful of that for each child. That is what teaching the Indigenous child is about. It is understanding the context of each child and then teaching to that context.

This next example also represents the circle of beauty and wisdom in the MECCS context with an emphasis on the interconnection between the circular learning and being in the cycles of life. Participant #2 (November, 2015) defines Indigenous worldview as circles and connections:

It is all about the circle which when you get right down to it, the sun is a circle, the Earth is a circle, the moon is a circle and the womb is a circle. It is all beauty and that is why this place survives through all the changes over the years. The children that go through here and their children, the way we do things here it is all about circles and connections building relationships.

Elder B (Visioning sessions, 2005) describes circles within worldview as:

The way we understand things is we start from the universe. All of creation, for us, is a circle. Some call it the medicine wheel; some people call it the circle of life. We call it the sacred hoop. To us everything is round. When birds build a nest they make it round. When bees build their house they build it round. When the four winds come together they make a whirlwind. So that, for us, it is a law of nature. When you pick up a pebble when you are sitting by a river, you toss that pebble up in the air that pebble hits the water, even the water obeys the law of nature, and it makes round ripples.

The medicine wheel represents the circle of life. It is painted in classrooms and hallways. All of the participants referred to the importance of keeping the medicine wheel as a reminder of the circles of life as a priority. The smudges, feasts, ceremonies, and prayers are ongoing in the daily life of the MECCS family. Participant #2 (November, 2015) states that “we refer to the medicine wheel each day, especially when we do our planning, report cards and curriculum. We think about how it is going to affect our student’s intellect, physical needs (e.g., our hot lunch program) spiritual needs, and emotional well-being.” Indigenous ways of knowing, being, and doing permeate the atmosphere of MECCS.

There are many different interpretations of the medicine wheel with the circle representing four stages of life (e.g., infancy, child, adult and Elder), four directions, four races, four personality types, and four colours. Elder D (Visioning sessions, 2005) explains that the medicine wheel has “four directions which are of the Creator and that the fifth direction is Mother Earth...that is why the colour of green is used in the flags in the Sundance.” Participant #2 (November, 2015) states that “many schools try to do the same

thing, probably unconsciously but we explicitly try to meet all parts of the circle so we are aware of the importance of a complete circle at all times.”

An Elder and his wife live on the property, and conduct sweat lodge ceremonies and other Elder functions. In the earlier years, another Elder would visit and prepare food for the students on a daily basis. Health issues and travel concerns in winter make this a challenge at the current site. Just recently, Kokum J. received an award honouring her dedication to the students since the forming of the school. There is a permanent corner in the cafeteria that is called “Kokum’s Corner” named for her as of Spring, 2016. Elder involvement continues through ongoing consultation, culturally appropriate activities, and special projects throughout the school year. All participants noted the Elders teachings are foundational to the medicine wheel teachings, practices and relationship-building (e.g., relationality) at the school. Participant #7 (November, 2015) describes the connection between the medicine wheel and the Elders as:

The medicine wheel refers to four aspects of life in general terms but deep spiritual answers come from Elders in a proper way. I do not overstep Elder knowledge. If you ask an Elder you take an offering to an Elder and ask them and they will give you an answer. That is how a deeper answer comes. It is too sacred to talk about that or to pretend that you have a right to talk about it. I really believe we need to have more involvement with Elders in this school to help guide our children.

The process of Elder input begins from the beginning of life through to the end of life. Elder A (Visioning sessions, 2005) remembers the connection between the cycle of learning and respect from his/her Elders (e.g., grandparents’ teaching) as:

I am going to tell a story when I was a young child. The old people use to go visiting each other. I started to go along with them. After two weeks I went home and my parents told me to continue with my grandparents. I worked with them for two years when I was a child. The way the Elders respected me taught me how to respect them. Every day, just like a school class was taught different things. In the afternoon I was told stories of long ago. After two years, when I was done, when I was 9, the Elder told me a story. The old lady, a blind woman, her too she gave me some strong words and advice. Every time I sat to meet with them they would put a different blanket every time. When they sat me down, I was told how a person should learn about survival and how a person should make a life for himself ([e.g.] how they should live). Towards springtime I took some tobacco again and I went there. They took it and they made me eat and they started telling me stories again. They told me about things that they did in the springtime such as trapping beaver and muskrats and how to survive. In three or four years, when we were done, at the end they sat me down and they fed me again, and told me stories again. After he was done he went out and did not come back for a while. It scared me. When he came he said you have learned what we have taught you, you have learned everything. From here when you leave from here your mind will be different. You will not have the child's mind that you had when you came here. Your thinking will be different. After he said that he prayed with his pipe and when we were done we smoked the pipe. Now you can go home and do whatever your parents ask of you. You have learned everything. From there you can possess your own mind. What you have learned is something that you can teach the children who want to listen to you. What I have done to teach you over the

last 3 or 4 years, this is what raising a child is all about. All of the things that we have from each other in the time that you have come here to learn. If they are taught that way, and if they learn that way, that is how that respect comes about.<sup>2</sup>

Elders speak the language of Cree and Stoney. Without the language there is no culture; cultural teachings are embedded in the language. Participant #4 (November, 2015) describes the importance of the wisdom of our Elders providing the protocols for our “pipe ceremonies, visits to the land, teepees, sharing circles, sweats and teachings that were universal for all the school so all feel welcome.” Before current budget cuts, MECCS had an ongoing presence of a cultural headman/leader explaining the protocols and conducting the ceremonies, but now it is by invitation only. However, MECCS also has a school Elder who advises them on an ongoing basis, about protocols and ceremonies and all unexpected issues. For instance, just recently, the school Elder advised MECCS to postpone the spring feast (e.g., March 2016) since an unexpected community death has impacted the entire school. This is a practical example of how the Elder uses the sacred teaching of wisdom.

Medicine wheel traditions respect life events at all times. The Elder and the family liaison know the context of each child and their family. Both are part of the community and act on behalf of the well-being of each student and community. Participant #5 (November, 2015) describes the nurturing relationship that the family liaison has with MECCS:

Our family liaison is our home liaison and acts as a go between community and school. ‘What does a family liaison do at school?’ She tracks our students down. She will know the context. So we don’t call the family and say where is your child and

---

<sup>2</sup> I have made what, for me, is a writing and ethical decision to keep long quotations intact, out of respect for the Elders’ and participants’ voices.

add more stress on the family especially if they are trying to pick the pieces of their life back together. She knows which parents are having problems and tough times because she is part of the community.

The staff and students are keenly aware of the emotional atmosphere when a member of the MECCS family is affected by life circumstances. Love and respect is given in culturally appropriate ways for how each person processes emotions. Participant #9 (November, 2015) explains that “I can tell when I am wanted in any space, so can each child here. We know the energy of each person. We even know that the energy in the school is affected by the financial part of it all.” This is an example of the sacred teaching of love. Participant #9 candidly reflects on the honesty and truth of emotions in people and in the atmosphere. Be yourself; be honest with yourself and with others so that the tone and energy of conversations reflect all of the sacred teachings. Participants emphasize their need to understand who each child is as a whole child first, before teaching any curriculum component. Participant #8 (November, 2015) states:

For myself I know for a fact education and the recommended Alberta Curriculum is important but it is understanding their needs first as an Indigenous learner that is our priority. This is a priority so we have meaningful conversations to understand their identity and move them forward to be successful. If you just teach curriculum you will not understand them and that is just putting on a fake mask. The students know you. Learning how to accept teachers’ differences and their own is also all part of growing. Change and transitions for these kids are ongoing. They will have to go through many obstacles in life. Change is not a bad thing. Meeting other people and their gifts gives the kids the opportunity to grow up to be who they want to be. You

cannot judge or hold onto grudges you must build relationships one on one and one at a time. The children in grade 9 now are the same children I had in grade 2. So I have watched them grow and followed them step by step. For these kids to go through the transition of budget cuts, losing teachers and resources is sad, but when someone is down we pick them up and move forward.

This is an example of the sacred teaching of humility, truth, and honesty. Every child will perceive each educator as a whole being as well. Children will be gauging how honest and truthful the educator is with them at all times. It is important to simply be who you are.

Participant #7 (November, 2015) speaks Cree and, up until last year, worked alongside the Cree instructor to teach the language to the students; however, with budget cuts, the instructor is gone, so she/he continues to incorporate language and culture throughout the day. Participant #7 (November, 2015) provides this example:

In our school I know we have a budget crunch. We continually look for ways to incorporate culture into our daily practices at school like at Christmas, last year we sang a Huron Carol in Cree and in English. Two years before, we sang Little Drummer boy in Cree. This year we sang O Canada in Cree. Remembrance Day Service we sang songs and spoke in Cree and English. We have a strong desire to look for ways to incorporate culture into our daily practices at school. It does not cost money to sing a song in our Native languages. We ask questions like, 'Where else can we bring in culture?' 'How can we appreciate culture?' We have to keep the language alive, we just have too!

The notion of threading Aboriginal languages in everything is an act of love when one views Indigenous worldviews through the lens of beauty. When I visited a classroom, I was blessed

to hear the students make a special effort to personally share “O Canada” in Cree with me. It is an honour to witness the students proudly sing and speak their language. They beam with delight and confidence! Elder B (Visioning session, 2005) explains that “language has spirit,” for instance, in a cultural setting like the Sundance, “people respect the language and the directions given by the Elders...because of the understanding of who we are and it’s meaning to them, it touches them in the heart, the mind, the spirit and they identify with it.” At the Spring feast (April, 2016) which I attended, the Elders blessed the food in Cree and Stoney. During that experience, I felt their words enter my heart, body, mind, and spirit and was full of gratitude for the opportunity to observe, listen and learn. In the traditional Cree and Stony school environment, MECCS (2016) describes the purpose for the spring feast as an important piece of “protocol to establish relationships, share culture, and express gratitude to the community for the privilege of working with their children. Prayer and feast are performed to seek blessings for another successful year of school” for all who are connected to MECCS.

Elder F (Visioning session, 2005) describes the language as descriptive and full of meaning and traditional teachings. He/She relates the importance of the language in the gift of name giving. Elder F then explains that, from the language, an

Indian name is given to each child born; we say that every child is born with something. The spirit world recognizes that child by that name. From there the child is watched by the family until they are five years old, sometimes until 10 years old, because they have a pure spirit. They are closer to the Creator. When it is your time to go to the holy land, you are going to be called by that name. Usually the Indian names were done just as a family. The eldest person in the family would come and pray on it

and smoke the pipe and give the name and then they would announce it out in the community. Here on earth there are two forces at work. There is Waka Washte and there is the no good one and they will both fight for the spirit of the child. That is why name giving is so important. The Creator sees him and recognizes him. If you don't name the child the no good one will go after him and get them through gangs, drugs, and alcohol. The language coming back to them is going to give them the foundation, from there will come the teachings.

This is a practical example of the sacred teaching of respect. The Aboriginal name implies the gifts of the child and the leadership qualities they will develop over a lifespan on behalf of themselves, their communities, and their Nations. At MECCS they are planting the seeds of a good life through the language and the teachings within the language. The language is connected to rebuilding strengths in families, communities, and individuals. Participant #4, (November, 2015) reminds us that culture and language teach us the relationships between kinship, respect, values, morals, principles, and beliefs.

The language, stories, and teachings build a foundation of good intentions and practical survival skills. Participant #9 (November, 2015) boldly describes the lessons learned from his/her late grandmother:

I'm very grateful for my late grandmother, who was a survivor of residential school. She showed me how to cook on a fire, skin a moose, do ducks, dry meat, do smoke houses, sweats, pow wows and sun dances. Put me in the bush and I can survive. I respect my mom too. I love my First Nation's heritage, language and forever hold onto that. We don't want these things to die off now. Residential school was heartache and for us as a people to rise again and be as powerful as we are today is

big! Being a part of that makes me very thankful! I also sat near my uncle's bedside when he was ill until he died. I learned many teachings from this man. You don't push away the hard lessons and don't let them drag you down. You learn the gifts from them and your gifts get bigger and bigger. The way you think and what you want to hear and what you want to hold onto is important. I have big dreams for the future.

This is an example of the sacred teaching of humility. Participant #9 understands that the pain of the past can build resilience, courage, compassion, and hope for a better future for all. Leadership demands that humility be learned from the harsh lessons learned throughout the circle of life. The beauty and wisdom of MECCS is grounded in Indigenous worldview and Elders' teachings and languages.

Another aspect of Indigenous worldview is learning culturally appropriate protocols. Participant #5 (November, 2015) describes the difference between sacred protocols and non-sacred protocols:

We smudge every morning and every week we gather as a school and smudge. Pow wow is and is not a ceremony. It has sacred elements associated with it but it is not sacred as an event. For example we have an eagle staff that was gifted to the school and we only take it out for that. It is tied to the pow wow. Before the pow wow we have a sweat. Then the eagle staff is brought into the sweat and it is blessed and made sacred again. It is then brought into our pow wow and treated with honour and respect. Our eagle staff is connected to our school and by bringing the eagle staff into the pow wow it then spiritually feeds the school. That is one reason why the pow wow is important to us.

In conversation with an Elder at the Spring feast (April, 2016), it was explained to me that at MECCS it is important for the children to blend worldviews: “We believe in blending worldviews but it is important for others to understand our general beliefs too and this is done by participating in our ceremonies and feasts” (MECCS Elder, personal communication, April, 2016). MECCS encourages everyone from whatever ancestry to come and learn about their Indigenous beliefs and practices. Additionally, the Elder shared that “you have to learn these general beliefs first before you earn the right to learn about our sacred beliefs” (MECCS, personal communication, April, 2016). All participants agree that we are living and learning the sacred teachings. Participation in culturally appropriate ceremonies and feast demonstrates the sacred teaching of courage, respect, and humility.

Participant #5 (November, 2015) describes the importance of the sweat lodges, ceremonies, and pipe ceremonies along with the explanation of Elder protocols as events that “are not just events or happenings they are deeply connected to the spirituality of the school and there is a way you do and honour them.” Sweat lodges and ceremonies occur in the beginning of each school year and the end, while two pipe ceremonies occur with fall and spring equinox. Feasts accompany the pipe ceremonies. MECCS highlights the Cree and Stoney worldview plus inclusively incorporates other First Nation, Métis, and Inuit focus where applicable as well. The importance of spiritual connectedness is reflected in the MECCS charter #1 Goal and outcome as “each child will understand how his/her spirit connects to the world around him/her” (MECCS, Combined 3 Year Education Plan, 2015–18 & Annual Education Results Report, 2014-2015, p. 4).

Participant #5 (November, 2015) explains that “respect is also an Indigenous protocol. A protocol is different because it is attached to something that has an expectation

and a spiritual connection.” The simple request for women wearing long skirts to a feast has a spiritual significance that goes beyond modestly covering your legs when sitting on the floor. There is much more to it than that.” Participant #5 notes in another example that:

The protocol that we have at a sweat for the eagle staff before the pow wow is important to follow and respect. First of all it is a huge honour you just don't give away eagle staffs and right now it is not in our sacred room but put away by one of our community elders. We no longer can afford a cultural coordinator and he/she would take care of the eagle staff usually. So one of our community Elders has taken it away from the school to his home where he takes care of it for us. He has the protocols, teachings, and understandings and he knows how to properly respect and care for it plus the other eagle staffs he keeps.

Proper protocols are taught at MECCS. Protocols reflect the seven sacred teachings, which are “love, truth, wisdom, courage, respect, honesty, and humility” (MECCS, 2016). These are part of MECCS' Indigenous worldview. Participant #9 (November, 2015) states that “there is equality between all worldviews. Indigenous worldview honours all worldviews. We teach our children that we are all human. We need to understand and respect each other.” The teachings are scaffolded, in that, they are built upon one another, as in the following example, where spiritual connectedness is taught first before equality of all worldviews. Participant #9 describes this teaching about spiritual connectedness through his/her daughter's eyes:

I say to my daughter, let's go watch your brother play hockey. On the way my daughter looks at the sky and say look what the Sky Painter did. The Creator gave him the paint to paint the sky. Yes. The Sky Painter did a beautiful job. The Creator

made it. She says, Who is the Creator? Is he alive? Does he eat? Does he drink coffee? Where does he live? Oh, the Creator must put us to sleep and then he goes to sleep. I think my daughter wouldn't be that beautiful if I didn't teach her. I taught her that. When she is doing something well she knows there is a Creator.

First the Creator provides the identity and worldview of each person. Next, the respect and importance of all worldviews is explained. Teachings build upon each other, and thus

Participant # 9 (November, 2015) continues with a story about the equality of worldviews:

My daughter saw a magazine showing her all nationalities. In real life she saw a very different person and ran away and cried. Okay, I say to her, you see all those people, you see the sky, the sun, the moon, all these people including me, daddy, family, we all live under the same one sky, one moon, one sun. We are all human. We just look different. Everybody has a heart, sleeps, eats. We are all the same. We just look different. After that she is open to everybody and she tells others the same thing that we are all the same. You have to put it in a way they understand. Children are little humans and we need to help them understand our teachings.

This is an example of the sacred teaching of love, which includes respect for all worldviews.

Recall that beauty is a posture or attitude of appreciation for Indigenous worldviews to be seen as equal to all other mainstream worldviews. Indigenous worldviews encompass the circle of life, which is beauty itself. Beauty in the Navajo culture is "Hózhó." It means beauty is in everything. Beauty is part of the Indigenous worldview. Participant #5 (November, 2015) replies:

Beauty is just who you are as a whole person in context. Indigenous worldview is difficult to compartmentalize because I live it, am in it and am part of it. It is

everything we do. It's from looking at the child as a whole being, to what they need as a whole being, to working within a community that is wonderful and beautiful and very relevant and very damaged and injured and not whole. We work with everything in our community.

Beauty is the lens of appreciating Indigenous worldviews, the medicine wheel and seven sacred teachings taught through the traditional teachings and wisdom of the Elders. MECCS provides these choices for each Indigenous learner and staff both Aboriginal and non-Aboriginal. Participant #9 (November, 2015) summarizes this well: "I say the Creator gave us this big blank canvas. We paint that canvas with the gift of choice. Our choices are a reflection of me, an Indigenous Me."

#### **4.3 Elders' Wisdom for *Wahkohtowin-Wetaskiwin* (Cree) and *Ina-mackoe da? a basiptam; A-we-yakmna-me* (Stoney)**

The MECCS charter, vision, and mandate reveal a sustainability mindset and ethos. Recall that MECCS philosophy, worldview, vision, and charter are undergirded by the medicine wheel, seven sacred teachings, ceremonies (e.g., sweat lodges, sun dances, smudges, pow wows, culture camps), Stoney and Cree languages, and Elders' traditional teachings. The Student-Parent Handbook (2012) outlines the vision, mission and philosophy of MECCS as "rediscovering the gifts and potential given to them by the Creator, our children will achieve personal excellence and fulfillment (e.g., vision)...to wholistically nurture, guide and challenge each child's spiritual, intellectual, physical and emotional self through traditional Indigenous teachings (e.g., mission)" (p. 5). The principal's welcome message (Student Handbook, 2012) describes MECCS as a place where "children learn to respect themselves and one another; learn to care, learn to learn, learn to lead, and learn to dream... and prosper in society" (p. 4). All participants use the charter's philosophy, mission

and vision to guide their thinking and teaching practices. The Elders from the original charter reflect current thinking and teaching practices as well.

Participant #4 (November, 2015) shared the Visioning Sessions transcripts (2005), where Elders spoke about MECCS. Participant #4 (November, 2015) points out that “I’ve kept these interview transcripts in my files for years and I want to share them with you so that the Elders’ words can be included in this study.” The importance of Elder knowledge is revealed through the request from Participant #4 (November, 2015) that “we must revisit the original charter for our school and the way that the Elders’ talked about meeting the needs of our children.” The essence of sustainability links directly to Elder perspectives on their worldviews. Excerpts from those transcripts where Wilson Bearhead conducted the interviews and the meetings are woven throughout this study (2005). Elders’ wisdom provides understanding for the foundation of harmony between all things, people, planet, gifts, and strengths which become future livelihoods (Participant #1). Elders Cardinal and Hildebrandt (2000), for example, describe characteristics that are taught to help develop gifts and strengths into future livelihoods as codes of conduct. Some of these codes of conduct include “the ability to develop a keen mind, sense of hearing, discerning faculties, understanding, industriousness, personal initiative, respect, and kind[ness]” (Cardinal & Hildebrandt, 2000, p. 45). Codes of conduct are embedded in Indigenous worldviews that respect the connections between the spiritual, physical, and economic. The Elders extend the Western worldview of sustainability from people, planet, and profit by including the emphasis on the spiritual which connects all the sustainable elements. Weaving a tapestry of beauty from an Indigenous worldview recognizes the respect for the spiritual within the circle of life taught through the traditional teachings. A spiritual essence connects all aspects

of the MECCS worldviews. Thriving for Indigenous cultures includes respect for the land, resources and the capacity to “make a living and meet the responsibilities demanded of them by the spiritual values contained in the codes of their nations” (Cardinal & Hildebrandt, 2000, p. 45).

The essence of sustainability is also revealed through Cree Elders William Dreaver, Isaac Chamakese, George Brertton, and Fred Campiou (Learning Resources Centre, CD, 2009) and their discussions about “*Wahkohtowin-Wetaskiwin* where *Wahkohtowin* in Cree means everything is related, not compartmentalized but integrated as part of Cree Natural Law.” The Elders (Learning Resources Centre, 2009) explain that “we are all related based on Cree traditional law where all things are created and alive...the trees, rocks, grass, and humans are all related...Mother Earth provides everything for us.” The Elders (Learning Resources Centre, 2009) stress that Indigenous people were given a lot of things to survive and thrive so it is paramount that “we have one law for Indigenous people and that law is we respect Mother Earth” and “That is why we have to respect Mother Earth and smudge...the Creator cultivates life”, according to Elder William Dreaver (Learning Resources Centre, 2009). The Elders (Learning Resources Centre, 2009) describe *Wetaskiwin* in Cree as “friendship rules that govern healthy relationships of one thing with another.” Mutual respect and responsibility for one another, and between all things, will foster healthy relationships that lead to harmony. Elders teach that their natural laws create a stronger, healthier society for all ethnic groups. Elders Dreaver, Chamakese, Brertton and Campiou (Learning Resources Centre, 2009) conclude that as Indigenous people “we have a relationship with *Wahkohtowin* and *Wetaskiwin* and if others would listen to our worldview we could teach them about it.”

Participant #4 (personal communication, February, 2016) describes the essence of sustainability in the Stoney language as “‘Ina-mackoeda? a basiptam’ which means sustain Mother Earth and ‘A-we-yakmna-me’ which means to keep something for the future—preparing something and keeping it for future use.” Accordingly, “The Alexis Nakota Sioux Nation are closely related to their Cree neighbours through intermarriage and centuries of neighborly interaction” and are guided by their “spiritual beliefs and moral values to walk in both worlds without compromise” (Alexis Nakota Sioux Nation, 2016). Both Cree and Stoney live with traditional natural laws that govern the people from the past and in contemporary times. The Indigenous languages for *Wahkohtowin-Wetaskiwin* (e.g., Cree) and *Ina-mackoeda?-a basiptam-Awe-yakmna-me* (e.g., Stoney) both describe the essence of sustainability on Mother Earth and with each other.

Sustainability is at the core of the Indigenous worldviews and traditional teachings based on Cree and Stoney Natural Law. The Elders summarize the essence of sustainability as the circle of life which is embedded in Indigenous philosophy, vision, mission, language, culture, gifts of the people, livelihoods, land, identity, and traditional teachings. Elder H (Visioning Session, 2005) explains that following natural law can result in a beautiful life. Elder H (Visioning session, 2005) describes how an education is connected to his/her willingness to be taught at school and in the bush as:

There is no greater pleasure than to speak about my journey through life and my relationship with prayer. Fear has no place in your life when you are on a spiritual journey. I was initiated to the sweat lodge through the spiritual way. I worked with my grandchildren, direct grandchildren and indirect grandchildren (indirect meaning my nieces and nephews’ children). With my own grandchildren I am more direct and

open about life...about how important it is to understand, not only academia but cultural background...why our background is important...why the sweet grass is so important, why the smudge is so important, why the pipe is so important...the sweat lodge ceremony [too]. Education for me has been a book of many pages [including]... culture, land, relationships, ceremonies, university.

Traditional education includes the sun dance. Elder H (Visioning session, 2005) also explains that participating in the sun dance four times as a dancer resulted in a beautiful life, in that “my journey began through a vision quest...I dreamed about my mother putting a sundance whistle over my head, around my neck...as a result a lot of beautiful things happened in my life.” If a person has a dream, one can send a messenger to an Elder to interpret the meaning of a dream and how it relates to the well-being of that person as was the case with Elder H. Well-being can be understood as walking in beauty which the Navajo describe as “‘Hozhone haaz’dlii’...living in balance and harmony with yourself... the world...caring for yourself-mind, body, and spirit...honor[ing] all relationships....Balance and harmony come together at a mental state within the Navajo person and this well-being reflects outward as an example to others” (Fixico, 2003, p. 71).

Elder F (Visioning session, 2005) reminds us that “we do need to get our children educated in the mainstream ways, but we need to get the language and cultural teachings as a solid foundation first.” Elder F (Visioning session, 2005) states, that “the Wasechews did everything to take away our language through residential schools” but this school is “the place to plant the seed of language.” Elder C (Visioning session, 2005) agrees that language and culture is a priority that “the charter school concept is in the best interest for our children

and will empower them under the natural law of our people.” Elder C (Visioning session, 2005) provides an example of the natural law:

We ask the Creator to give us those forces under the natural law, we do certain things in the seasons because it is governed by nature and natural law provides those seasons to be able to allow for whatever it is that we need for the benefit of our people....they take only what they could use. Learn the Stoney or any First Nation language because there are many learnings and teachings that are missed if you just speak in English....it is very important to master the language. You never quit learning is part of our natural law. Every creation has a spirit behind it like when we are working traditional medicines it is not the individual or the combination of those herbs that allows for the cures it is the spirit behind those medicines. So what are we doing to prepare our children to become the leaders of tomorrow?

Elder F (Visioning session, 2005) agrees that at MECCS “a seed planted is just the beginning of the rebuilding of a nation that we were given certain responsibilities by the Creator (Ade Wakantak) to take care of and to remember the language and the teachings.” Elder D (Visioning session, 2005) agrees that “we must use the old methods not only to teach but to educate the young minds about who they are as Indigenous people and why our stories and language are for them.”

Many of the Elders spoke about the importance of the land and stories attached to their specific territories as well. Elder B (Visioning session, 2005) describes learning lessons from the land as:

My dad use[d] to tell stories about the old ways and how we lived off the land. I learned about the plant, animals, trees and how to look after the land. He said you

have to look after the land because the land will look after us. If you destroy the land then the land is not going to look after you. Even taking sweet grass he said you have to cut it not pull them out, if we pull them out we pull out the roots and they won't grow again. But if we cut them and leave the roots they will grow again next year. Stuff like that I learned from my dad and my auntie and the old people, and those ones I value the most. I went to live on the trap line with my dad, too. We caught a lot of beaver and muskrat.

Whitt (2009) agrees that respect for plants is demonstrated with knowing that “medicine plants have a specific song and prayer to go along with them....you have to make an offering to them to get the healing spirit of the herbs to work...You only collect what is needed nothing more or less” (p. 144). Elder C (Visioning session, 2005) demonstrates the importance of the language and how it teaches deeper lessons about character building and living well on the land. Elder C (Visioning session, 2005) describes the concepts of living under the natural law:

The very word natural is from nature...forces come from the Creator. The Creator has provided our societies with the inherent right to govern themselves. We ask the Creator to give us those forces under the natural law. So when we talk about governing ourselves from that perception, we need to look at the entire concept of our society. We do certain things in the seasons. You cannot do everything all year around because it is governed by natural law. Natural law provides those seasons to be able to allow for whatever it is that we need for the benefit of our people.

Elder C (Visioning session, 2005) continues with an example of greed where one would not be living under the natural law of the people. The language is intertwined with deeper lessons

of the natural law as well. Elder C (Visioning session, 2005) notes that one should not take more than what one can use: “You don’t stockpile and you do not try to make or gain an economic benefit out of that...stockpiling welcomes sickness...your thinking is influenced by greed.” The language details deeper understanding of the word greed as “a person who cannot get enough, is kniving[conniving], corrupt, calculating for themselves...in English our word is translated as ‘he has no good mind’.” Elder C (Visioning session, 2005) details that English does not have the deeper messages of Indigenous language, in that, Indigenous language gives “us many messages about what we need to do to prepare for dealing with that [greedy] person, who lies, cheats...there are lessons to be taught out of that. The point is it is important to master the language for these teachings.” It takes a long time to learn the language and the deeper spiritual lessons from traditional teachings and natural law of the people. This is why every attempt is made at MECCS to supply ongoing language instruction in all grades.

However, the Elders confirm that it is important to accept and utilize these traditional teachings in positions of leadership and lifespan learning. Elder C (Visioning session, 2005) relates this to MECCS and positions of authority like the suggestion that the chairperson of the board “could also be a pipe holder.” Elder C (Visioning session, 2005) recalls the importance of lifespan learning from childhood to death as respect for “cultural orientation from life teachings that are ongoing so those connections have to be maintained throughout the life of individuals [in leadership] and the responsibility imposed upon them during that time.” Since children are considered gifts loaned to Indigenous families, MECCS has a responsibility to treat the students as future leaders. The participants agree with the Elders’

views on the importance of the sustainable learner, sustainable planet, and sustainable livelihoods.

Developing character, leadership qualities, and traditional teachings is usually done through spiritual circles and the stories of Iktoome. Iktoome is a character found in legends and myths. J. Frieson and V. Frieson (2004) describe legends as formal and informal “oral literature of each particular tribal configuration” (p. i) ... that generally fall into four categories in North America as “entertainment legends (e.g., trickster), instructional legends (e.g., origin stories), moral legends (e.g., behaviour) and sacred or spiritual legends (e.g., worship)” (p. ii-iii). The trickster is ‘Wisadkedjak’ in Cree and ‘Iktumni’ [Iktoome; Iktome] in Stoney (Frieson, J. & Frieson, V., 2004, p. ii). In spiritual and teaching circles, the transmission of culture and teachings are shared throughout a lifespan. Elder B (Visioning session, 2005) describes the role of specialists in the teaching circles as:

They had specialists within the community. If someone was a rock specialist, he knew everything about the rocks. Which rocks you needed to make arrow heads, which rocks you needed to make sweats, which rocks you needed for the rattle, pipes, carvings and even the rocks you needed for medicine...some rocks were ground and made into medicine...another person specialized in wood. The arrows, the bows...you had to have certain wood that was flexible for the bows so they wouldn't break. The arrows needed wood that when it was dry it wouldn't warp so it would go straight. They knew about aerodynamics. They put arrows at the tip of it and feathers at the end of it so it would go straight. So aerodynamics is not something that is new to our people.... Some woods were used to smoke meat so it wouldn't taste bitter. Certain wood was used in teepees (fires) so they wouldn't throw sparks. We use

certain wood to build the fire for the sweat lodge so the rocks get good and hot and sparks won't fly.

Elder B (Visioning session, 2005) states that specialist knowledge “needs to be developed in our children and incorporated into the school system so that our children would have a better chance of learning and understanding and developing their skills and gifts.” Skills and gifts of people are seen as “mental (washubee, they call it intellectual), some people have skills that come from the heart...or from the spirit or from the body.”(Elder B, 2005) There is a direct link to these skills to the medicine wheel teachings currently at MECCS. Elder B (Visioning session, 2005) continues describing talking circles as a tool used by adult leaders to hear the concerns of the people and to teach lessons about sharing and distribution of resources. In the words of Elder B (Visioning session, 2005), talking circles include:

It is also about respecting the parents and the teachers and the leadership. Sometimes the leadership is not stable today because of the Indian Act. In the old days they had a hereditary system. When you became a chief you were a chief for life, but being a chief didn't mean that you were on a pedestal. That meant that you were there for all of the people, you were there for everybody. That meant you had to listen to everybody. That is where the talking circles came in. People talked about what was best for the family, for the children and for the community. What was best for the community was best for everybody. They came to one agreement because they shared their thoughts and feelings their hopes, their dreams. The distribution system was based on [a system] like the ants. When they build an anthill they all work together. Everybody shared in the building of the anthill. Even the bees work together. The

wolves travel in packs. Some animals they travel in herds and that is how we worked as a people. We helped each other.

This is also an example of the sacred teachings of humility and wisdom. Indigenous communities work together to provide sustenance for oneself, family, community and neighbouring communities. Sharing resources without depleting them, is evidence of honouring the Creator. Stories are important in cultures that value oral transmission of culture. Indigenous legends and symbology may represent different aspects of life, for example animals, fish, cosmos, and people. The bear, dream catcher, halibut, eagle, moon, Inukshuk, and Iktoome are examples. Wilson Bearhead (Visioning session, 2005) a preliminary founder of MECCS describes the talk about Iktoome as:

the teacher that went out to be the first man that went out to live among the animals and learned from the animals. Iktoome stories tell many legends and many tales in terms of how to raise children, how to form governance, how to respect the plants, the water, trees and the wildlife. My understanding from the Elders is that the animals use to speak to each other. They use[d] to talk to one another. They shared with one another how they lived so it was very easy for Iktoome to sit and listen. He listened to the animals as they talked because it was the animals who were giving the teachings as well. What he learned he taught to mankind and this is why we always praise Iktoome in how he has taught our people.

Many aspects of the Elders' words reflect the importance of the natural law and how this governs life on Mother Earth. '*Wahkohtowin*,' '*Wetaskiwin*,' '*Ina-mackoeda? a basiptam*,' and '*A-we-yakmna-me*' are at the core of natural law within the circle of life that highlights good behaviours, harmonious relationships, and the sacredness of life (Learning Resources

Centre, 2009; Native Counselling Services of Alberta, 2007). Elders (Native Counselling Services of Alberta, 2007) state that “Mother Earth is not clean anymore due to cutting trees all over the land and throwing garbage everywhere.” Elders (Native Counselling Services of Alberta, 2007) describe Mother Earth as “the land is our family and we are connected to Mother Earth and Grandfather Sky.” This is an emphasis on the interconnectedness between all people, places, and things in Indigenous worldviews rather than isolation and separation so often found in a Western worldview. Elder A (Visioning session, 2005) articulates the importance of natural law, ceremony and the seasons:

The Indian prayer ceremonies were done by our old, old people. They are only done at a certain time but never done during the winter (November, December, January). And again they will start the ceremonies in the spring. That is when, in the spring, they practice what they were given by the Creator-healing, turning themselves into the spirits, making the spirits come into the sweat lodge, example the rock, the eagle, the bear. The spiritual people get together to practice it-kind of like a play or a display to show the people that it is real...young people need to know and believe that the Creator has given their people practices that they must learn because they might be that person that must carry on this practice one day. They will have that responsibility...not only in verbal statements but in practice to move forward the teaching of our ancestors. For example, the medicine...everything that is in the ground is medicine. Medicines have a certain smell and the Elders will tell you the purpose and the use of that medicine for you. Some of those medicines we receive through a dream for use in the sweat lodge...The inimi (which translates to ‘live

again' but has now been called the sweat lodge in English)...are run according to proper protocol...then the sweat lodges have a lot of strength to offer.

Following Elders' wisdom and natural law provides an understanding of restoration, healing and how to live well with one self, each other, and on the planet. All cultural groups can benefit from these teachings. Recall that each Elder E (Visioning session, 2005; Learning Resources Centre, 2009; Native Counselling Services of Alberta, 2007) stressed the point that all things are related, alive, and part of the circle of life or the medicine wheel. By sharing Elder knowledge and stories with the children at MECCS, Elder G (Visioning session, 2005) states, "I share the stories and teachings with the children and to show them I am proud of myself and I am proud of them." Sharing stories and cultural teachings are a key method of educating each generation about how to live a healthy and satisfying life.

#### **4.4 Mother Earth's Children's Charter School and Dancing the Circle of Sustainability**

Sustainability is at the core essence of the Indigenous worldview throughout the circle of life, as practiced and believed at MECCS. This author believes the beauty and wisdom of their MECCS Indigenous worldview reveals notions of a sustainable worldview, a sustainable learner and sustainable gifts (e.g., strengths transferred into economic livelihoods) beyond the Western pillars of people, planet and profit. The Cree and Stoney worldviews articulate a circle of life, which include all aspects of life. Elder B (Vision session, 2005) states that "we live by a wholistic life...the future is not about ourselves [but] is for the next generation." With the focus on the next generation, Elder B (Vision session, 2005) states that "we have everything that we need from the earth...we have to look after that so the next generation can have the same benefits that we enjoy from the land ... we stress respect for things like the plants and animals." Indigenous worldview includes learning about

respect through traditional teachings and vision quests where young people would learn about themselves and living on the planet, while engaged in stories and dreams through vision quests.

Elder B's comments reflect *Wahkohtowin-Wetaskiwin* (Cree) and *Ina-mackoeda? a basiptam - A-we-yakmna-me* (Stoney). It is mercurial. It is fluid. It is eloquent. The essence of sustainability is the core of Indigenous worldview at MECCS. There is movement and growth between all the interconnections within the circle of life. It has a dancing quality to it. Dancing the Circle of Sustainability, I believe is best expressed by the notion of respect found in ceremony. It is described by Elder B (Visioning session, 2005) as:

Life is a ceremony in itself. The way you conduct yourself is going to let people know who you are and that is one of the teachings. How you live, how you act, how you talk is who you are. What you have been taught. It is a reflection on your parents, your Elders, your community, and also your relatives.

Protocols are part of ceremony and cultural education. Protocols provide social bonding between the generations in communities. Elder H (Visioning session, 2005) describes "cultural education as family cohesion" which develops through the protocols and preparation for different types of ceremonies and dances. The method of delivery for these teachings usually requires that one sit still, observe, and listen carefully. Parents and others have a role to play in sharing these protocols. Elder H (Visioning session, 2005) describes the preparation for various ceremonies and dances (e.g., Sundance, Ghost Dance, Soup Dance) as a process by which "we would watch and we would hear these songs, sit and listen...we have to have quiet because this is a church service too." For a soup dance or ghost dance, Elder H (2005) describes dancing with a little pail to celebrate the "spiritual connection

between the grandfathers, the spiritual world, and ourselves....we know, through education, that we are not dancing alone even if we think we are...not only human people are dancing here...the spirits of our forefathers are here also.” As a young child, Elder H (Visioning session, 2005) was taught to observe the Iktoome dance. These protocols were age appropriate for a reason because “the power of the spirits are powerful you might be over equipped with knowledge and education about things that you wouldn’t be prepared for....So as years went by I got to understand what they meant” (Elder H, Visioning session, 2005). As an adult Elder H (Visioning session, 2005) learned about himself/herself in the Sundance “by dancing every song” through which he/she “got to know about myself in an in-depth way through participation.” While learning the protocols, young people are taught to observe and not ask too many questions of the Elders. After lengthy periods of observation, parents were responsible for explaining the protocols later.

Murphy (as cited in Doolittle & Flynn, 2000, p.142-143), described dance as “practices [that] are aspects of ceremony and celebration.” Murphy explains that her interviewees view dancing as dancing with the ancestors within one’s heritage. It is important to recognize the cellular memory of the ancestors within oneself and what that means for a dancer. Dancing changes a person’s knowledge about themselves and their ancestors. Murphy (2000) describes the importance of change in intergenerational dances as “your culture has a history that’s still changing, it’s going somewhere, same as your personal history...the challenge is to get in tune to that, to hear it and feel it, [and] respond to that kind of memory” (p. 143–144). Drumming and dancing are part of ceremony at MECCS for students to learn more about themselves and their heritage as well. The drumming in

ceremony at MECCS is described as the heartbeat of a Stoney and Cree worldview (Participant #8, Participant #9).

Participant #1 (December, 2015) explains that “smudging and participating in the drumming circle every Monday morning was the way we set the tone for the week.” Drummers from the community taught a handful of boys the protocols of the drum. Participant #1 (December, 2015) explains that a “large pow wow drum was built for them...our morning circles were usually the hand drums. It’s important to focus on all these wonderful cultural aspects so our kids could see how their culture only added to who they were.” Participant #1 (December, 2015) described the importance of different literacies noting that cultural literacy is “know[ing] who they are and where they come from...there is absolutely a need for numeracy... literacy... and physical literacy too. These literacies have to come together in some way. We know the importance of building the body, mind and spirit.” The various literacies support a well-balanced life for a sustainable learner.

Dancing the Circle of Sustainability from what I’ve been taught by the participants, and Elders at MECCS is a metaphor for the practice of deep core values of interconnectedness, reciprocity, relationality, reverence, respect, and responsibility. These are elements of a sustainability ethos embedded within the MECCS Indigenous worldview and their philosophy of Belonging, Mastery, Independence, and Generosity. Dancing reflects movement, growth, stops, starts, learning, unlearning, stretching, and seeking new experiences. Dancing reflects a strong inner core of behaviours based upon the sacred teachings (e.g., love, truth, wisdom, courage, respect, honesty, humility). Participants reveal conversations and stories that reflect each person’s dance at MECCS. Participants recall their

peak experiences as a celebration of their sustainability ethos. Their moments of celebration capture their unique perspectives.

Participant #8 (November, 2015) states that the “non-Aboriginal teacher does not have the right to teach the cultural needs, but without a culture or language teacher we can tweak it up and put it in our own words that is okay.” Participant #8 (November, 2015) explains that time is given for traditional activities during learning time like the “boys drumming.” Participant #8 recalls that, as a young child, the “teacher let me go line dancing when I was little during learning time because it is tradition too and part of learning in my community. I took that mindset. I respect their [MECCS] culture [of drumming] and what the family taught them.” As a non-Indigenous teacher, this participant sees similarities in the way he/she was brought up and the way Indigenous students are brought up. Both cultures respect traditional ways of learning. Participant #8 (November, 2015) noted that “we have the right people here... we envision and recognize the kids’ gifts in all we do in the classroom setting. Helping kids out especially our special needs kids is a sign of love...humility is being who you are.”

Moments of celebration for Participant #8 (November, 2015) describe the power of planning for a field trip to Jasper and the awe of “watching the kid that never left the reserve get to see what a mountain looked like just sitting on a bus on a five-hour bus ride with his friends. This was the best bonding experience ever!” Participant #8 (November, 2015) states that “in my classroom last year we had a vision to go somewhere. ‘Think big kids,’ I asked them...and they did with the trip to the mountains in Jasper in January.” Participant #8 (November, 2015) explained that the class took five months to raise \$5000. “Eventually we met our target to raise \$5000...every kid sacrificed despite family issues, deaths in the

family... they still found ways to fundraise money, each \$210.00 over 20 weeks...through canteens...we pulled together in every way” (Participant #8, November, 2015). Teacher and children were invested in each other’s success. Participant #8 (November, 2015) notes that “the kids have a deep desire to help another kid that can’t pay anything because their mom just had a new baby... it melted my heart... they used their own money to cover the other kid’s money who had none.” The teacher contacted the parent of the child who initiated the plan to collect money for the student who had none. The teacher relayed just how proud he/she was of her by stating, “it must be coming from you and the background your family provides ...the parents said that it wasn’t just our family it was what I do for the kids too...treat[ing] them like a family.” The bonding between students, teachers and parents is key to successfully fulfilling the medicine wheel teachings at MECCS. This class had zero dollars for a big dream that was accomplished through determination, courage, love and honesty. Participant #8 proudly states that “we found a way...I told all the parents how proud I was of these kids! We celebrated by going to Jasper despite all the things we went through for only a two day trip.” The resilience and generosity of the teachers and the students demonstrate the importance of relationship between each other. This supports the sustainable learner.

Moments of celebration for Participant #9 (November, 2015) involve ongoing intergenerational teachings one experienced and passes on daily to the students, all of which focus on “expecting good things in life.” Participant #9 (November, 2015) inspires the students by linking current events in broader society to Indigenous identity when she/he describes the Canadian election in the following terms: “I talked to the kids about the election and explained that there is going to be a new chief of Canada... the young ones

understand all First Nations worked together to get a new chief in this election.” The importance of culture and identity forms the basis for discussing Indigenous worldview and non-Indigenous worldview relationships. Participant #9 (November, 2015) emphasizes that, “we have to work together and teach them to respect and be thankful through the culture because some don’t have respect for where they came from yet...it’s sad...it wasn’t their choice to be washed of all their identity.” Residential school was designed to destroy Indigenous identity (Miller, 1997). Participant #9 (November, 2015) stresses the importance of transmitting the culture to the students through “lessons about seasons and animals to help them know who they are and where they come from and where they stand in society.” This is an example of supporting the sustainable learner and sustainable planet.

Moments of celebration for Participant # 7 (November, 2015) include guest speakers and authors that the students really admire. Participant #7(November, 2015) explains:

My goal is to bring literacy into my classroom by exploring various Native authors.

For example, last year we did a big study on David Bouchard. It was a few months in the making. We studied his Facebook page, blogs, and his different books, made connections to the stories and the kids got a sense of loving his work and the ideas he talks about.

This study included several books and flute performances from the Métis author, David Bouchard. Specifically, Participant #7 (November, 2015) describes how the class learned from the book *The Elders are Watching* (Bouchard & Vickers, 1991) and what humans have done on the Earth and why the Elders are not happy with humans. The book helps the students think about restoring balance to the planet and humanity. Teachers do not have to step out of Indigenous beliefs and worldviews in order to include sustainability practices

because such practices are part and parcel of the Indigenous worldviews. Participant #7 (November, 2015) notes that “it’s better to wake up at some point and undo some of those negative things...the kids went deep into these issues.” Participant #7, thus, built a bridge between the curriculum, natural law, the sustainable learner, and the sustainable planet by linking the concepts of harmony, balance, reverence and reciprocity. Participant #7 (November, 2015) states that:

The kids started to think about how we protect our fossil fuels and resources if we use them at a huge rate. What is that going to do for us? Alternative energy sources, cleaner fuels and a lot of that was inspired by his book. He is a Native author. We loved him so much we did art projects like watercolours on the painting of his book with their own interpretations. After that we interviewed each child about their painting, what does that mean to them? They would talk about it and how their artwork made a connection to the book. They wrote their own paragraphs on what they took from the book. We bound them all and put it in a book and kept it. We asked him to come to our school. He did and will return in April, 2016.

Once the invitation was sent and accepted the class had to fund raise \$2800.00 in two weeks. They undertook this monumental task and received pledges, donations, Canadian tire money, and bottles. Participant#7(November, 2015) emphasizes that:

We got pledges for a read-a-thon and a corporate sponsorship and we did it! It’s amazing! The kids were so enthused and handed me a bunch of pennies, pledge sheets and money. When I saw the heart of the kids they were really wholeheartedly into this. It’s more than an author visit. The kids really wanted him here because they made connections to his books. When he came, they treated him like a friend. That’s

what I like to see in this school, so they can be proud of whom they are.... For them in other schools it's like the school is bringing in the author, but here the kids were bringing him here themselves. They owned this project!

David Bouchard's books are translated into Cree and Anishinaabe so the children connected quickly to their Indigenous heritage. Participant #7 (November, 2015) reflects that "it's that kind of experience in my class that has really energized my classroom." Indigenous authors broaden their horizons; additionally, sharing Bouchard's visit with the rest of the school was done in respect to sharing knowledge and bonding together. Participant #7 (November, 2015) describes this peak experience further as "the feelings with the kids is that they owned it all...you take it into your heart and never really let go of it...that's the kind of things I celebrate with my kids." This peak experience depicts the beauty of the dance of the circle with interconnections between language, stories, leadership, wisdom, respect, honesty, and humility. The sacred teachings and the amplification of harmony, learning and pedagogy rise up from the inner spirits of the children and their connections to their heritage and their love for learning about others.

Moments of celebration for Participant # 6 (December, 2015) include the smallest acts of kindness and love which include

...high fives with each child each day as they enter and exit the school and anytime throughout the day always given with a chuckle and hope beaming from the spirit.

When you ask a kid a question, 99 percent of the time, they are going to tell you the truth whether you like to hear it or not. They sense the negativity. Kids are smart.

That's why I love these kids. They are a big part of my life. We welcome everyone to become a part of the culture of the school, which is part of the uniqueness of our

school. MECCS is the only public Indigenous charter school in Canada and is a model for others. Collaboration is supporting each other and showing that love towards the kids. These kids love their sports, their cultural events, language and powwows.

Small acts of kindness support each student through negative and positive moments. The learner's spiritual, mental, physical and emotional well-being is supported by the staff. The staff pulls together during tragedies and celebrations with the support of the Elders. The circle of life prepares individuals to be emotionally and culturally sensitive. Participant #6 (December, 2015) also strongly expressed the need for financial stability to continue the traditional and cultural teachings and language that support the identity of each child.

Remember that context plays a role in the success of each child. Participant #6 (December, 2015) describes the issue of transportation:

Our buses don't travel on Paul Band roads, so we have pick up points for the kids. But parents don't have vehicles to drive the kids to the pick up points so instead of having 40 to 50 kids on a bus, we have only 10 or 20. Hopefully in the future, the bad roads on reserve will be maintained and it would be easier for a lot of our kids to get here. MECCS has a real good attendance record this year but it depends on the weather.

Transportation is a contributing factor to budget cuts which factor into low student count and therefore lower budgets to support all cultural, language and Indigenous events. Participant #2 (November, 2015) discusses the financial impact on the school as people, staff, and students come and go a lot:

The principal has been around as long as I have, close to 15 years. A few of us on staff are very settled and at home here. Some last a day, year, month and they do good things as well, but it's harder for the rest of us to carry on their good things when they are gone. We do try our very best for the kids. We are a staff of six now and we have had as many as 19. With 19 we got to spread around all the good things that support culture, language and identity but now, when I'm teaching three grades at once, it's tough, but we never give up because MECCS is for our kids!

Despite the skeletal staff and low budget, perseverance, dedication, and vision propel MECCS' courageous fight to keep moving toward a better future. Indigenous philosophy and sacred teachings are evident despite budget cuts. The connection between identity, character, and belief in Indigenous philosophy despite all obstacles (e.g., financial and social concerns) is met with humour and the drive for success as defined by the MECCS charter.

Moments of celebration for Participant #5 (November, 2015) include:

A sports academy in the spring where hockey instructors will offer six sessions for learning how to skate hours plus actual hours of hockey practice for those who play hockey for our school at the finals. This will improve their hockey skills. Others will donate hockey gear to those who need it. This will help the kids feel good about themselves. We will collaborate as a staff on how we can culturally support this sports academy too. It's looking at what our kids need. Academic support we are doing really well at. We got that covered. What are we not doing well at? Physical needs maybe that's why the sports academy is offered. This will help in that aspect. Spiritual needs as well. We will do what we say we are going to do to make language, culture and academics fun and rewarding here. Some of the cultural activities will

include rattle making, singing, dancing, baking, cooking, crafts, sewing and archery.

We hope to have volunteers flood our ice rink on our MECCS property as well as getting a deal for the sports arena use.

The staff is constantly looking for ways to support the needs of the students. This is an example of forward-thinking despite budget cuts. Collaboration is an example of building positive relationships.

Moments of celebration for Participant #3 (November, 2015) describe the smallest, most poignant, expressions of love, truth and caring even

...when we have to discipline in a firm and fair manner and teach that this is the consequence for this action. If caring mean disciplining them then that's what we do, if caring means hugging them because they want a hug then that's what we do. It's a small part of our day to give a child a hug. If they are out on the playground and got left out of something and they are feeling poorly, then we can encourage and give them a hug. I really agree with our seven sacred teachings. Our kids experience a lot of trauma from the residue of residential school in the form of suicide and violence on the reserve, so helping our students feel safe and cared for at MECCS is important to us.

This is an example of flexibility and emotional sensitivity, both of which support the sustainable learner. Participant #3 (November, 2015) describes another peak moment:

A little tiny thing is a big deal here. My special needs student remembered the vowels from last week and it brought tears to my eyes. Relationship building is crucial here. Catching the bus and taking the hour plus ride here every day is an accomplishment

for them. I carry on learning so much from my students. I'm stretched and expanded all the time!

It is important to validate each student's process of learning and accomplishment. Each child is known for their unique strengths. Staff and students constantly encourage and help each other. When conflict occurs, immediate action is taken through dialogue to resolve issues.

Moments of celebration for Participant # 2 (November, 2015) describe connections to the land through traditional games and culture. Participant #2 (November, 2015) states that

I want to see more done on the land and the resources to support that as in the earlier days of our charter. In the past I've had a really nice connection to the land. In grade 3 one of the units is rocks and minerals. I contact a local artist from Wabamun and he did soap stone carving over three days in my class. This project included connection to science, art and cultural instruction. As he taught soapstone making, my kids got cultural instruction as they go because they are doing a Native carving. So all those things are rolled into one with one local person, but it costs a lot of money. It was such a wonderful connection! I still have my carving and the kids do too. If you look at the front desk that giant bear soap carving is the soap carving from our guest artist. I was able to bring him into my class and this project connected directly to regular curriculum plus our cultural curriculum. That's how we support indigenous learners by supporting a range of regular curriculum embedded within cultural aspects and bring in someone from our communities to do the traditional teachings. It's a small cost when you think of all the connections made to the culture here.

This example connects people, planet and prosperity. The local artist celebrates his Indigenous identity through his livelihood while teaching the importance of Mother Earth

and what she provides for each person. Another peak experience at MECCS for Participant # 2 (November, 2015) is teaching Aboriginal games, in that:

Elders teach traditional games to the small children and use the language throughout the teachings, plus at the same time the games teach the physical skills but also how to get along with everybody, making rules, taking turns, being fair, all the social rules to survive in a community and then when you get older you are learning more complicated skills, where you belong and how to get along in bigger groups of people. As adults we have different social rules and language still transmits these cultural rules. I've seen the Elders use the circle to explain so many things and so many connections. It's all part of the MECCS worldview.

This is an example of the importance of intergenerational wisdom and resilience. The life experiences of Elders provide teachings that help the students understand their place in the world as Indigenous persons. Elders demonstrate the connections between a sustainable learner, sustainable planet and sustainable prosperity. It is important to note that each community defines who an Elder is according to their worldviews and selection processes (Colorado, 1988).

Participant #2 (November, 2015) explains that non-Indigenous people, like himself/herself can adopt the sustainability ethos of Indigenous people if they “come at learning with humility, respect and an open mind ... listen and learn and see the Indigenous worldview as part of the medicine wheel.” The importance of MECCS as a charter school survives according to Participant #2 (November, 2015) “because the kids are successful here,

they grow up and their kids come here...we all understand and respect the circles of life and the connections between us and those circles.”

Moments of celebration for Participant #1 (December, 2015) involve the connection between Indigenous values, beliefs and cultural traditions of our learners to mainstream society, thereby finding the balance between the best of both worlds. Participant #1(December, 2015) highlights that the importance of culture camps and camping for several days on the land builds a foundation for respect of oneself, of the land and each other by “prepping food, cooking on a campfire, building a shelter, collecting water and starting a fire; all survival teachings.” Participant #1 (December, 2015) explained that staff, students, Elders and community members would camp for several days with Mother Nature and would experience “getting back to our roots and who are we as a people, and learning the necessary skills to survive in the wilderness.” In preparation for the culture camp experience, Participant #1 (December, 2015) explained that a community outdoorsman would come out to the school once a month for a whole school year to teach survival activities and terminology like “the difference between tinder and kindling and how to build a shelter area away from camp so you don’t utilize all the resources in the area.” This is an example of how the sacred teachings bond people together through cooperation to survive with each other on the land. These teachings are transferred to any group activity in life. Participant #1 (December, 2015) stressed that culture camp was more than survival skills, in that, “students were reminded how to engage in conversation, how to make a friend, how to ask a teacher a question and how to tap into personal courage to access these types of skills.” The sacred teachings of courage, truth, respect, honesty, humility, love, and wisdom are integrated

throughout every aspect of a culture camp. Culture camps provide teachings for the sustainable learner and the Mother Earth.

Moments of celebration for Participant #4 (November, 2015) highlight the importance of “continuously returning to the original charter and the original intent of the founders and Elders which focus on the language and culture.” Participant #4 (November, 2015) explains:

My paternal grandparents were both fluent in Cree, but only my Mosom (grandfather) was fluent in both the Cree and Stoney languages. All of their 11 children could speak or understand Cree. My maternal grandparents were also both fluent in the Stoney language. However my Papa (grandfather) could also speak and understand both Cree and Stoney languages. I grew up only speaking English, we weren't taught or encouraged to speak Cree or Stoney. With the loss of my Native languages also came the loss of my culture, identity, and spirituality. At MECCS my children and grandchildren will not feel that loss. That is why it is important to have language and culture teachings and teachers in MECCS!

The original charter and the Elders' dreams expressed in the early Visioning Sessions are a treasure to refer to, and to remember why MECCS is here. The children are the future and education is all about meeting their needs through traditional teachings, the medicine wheel and the Sacred Teachings. Wilson Bearhead (Visioning session, 2005), one of the founders of MECCS reminds us:

Today is the beginning of a process that will take time in developing our approach at our school. I think that by what has been shared here we have planted a seed. People have shared what they know and what has worked for us in the past. By using the

ways of others it has not really worked. It takes a lot of hard work. We have to find the way to teach our kids. We have to find the way to govern ourselves the way it was taught through the stories of Iktoome. We need to teach them the stories and they will see for themselves. Right now they only know that there are 10 commandments and that there is a Bible, but they don't know their own side of the story. There is always two sides to one story.

The seed for MECCS was planted before 2003. Clearly the Elders wanted to protect the circles of relationship, wisdom and futures of each of their children and their ancestral, contemporary, and future relationships. In 2016, MECCS continues to grow and thrive because of their sustainable ethos and Indigenous worldviews. Dancing the Circle of Sustainability at MECCS implies movement and growth as they adapt to the changes in each other, their communities, Mother Earth and their giftedness that eventually becomes their livelihoods (e.g., sustenance).

#### **4.5 Circle of Analysis and Interpretation**

The Western sustainability ethos exists in many models but generally models use mostly the Brundtland Report (G. H. Brundtland, 1987) pillars of people, planet, and profit. The contested views of Western sustainability, sustainability education, and sustainable development include variations of pillars named people (e.g., society/social), planet (e.g., environment; ecological), profit (e.g., commodity; economical sustainability), political (e.g., institutional, democracy, governance), and cultural (e.g., human rights, diversity) with no mention that humanity and non-humanity *are* Mother Earth (Brundtland, WCED, 1987; Chambers, 1995; Lockley & Jarrath, 2013; Meadowcroft, 2000; Sterling, 2001, 2003; Waas et al, 2011; ). In fact, not a single participant used the notion of pillars, which leads me to

believe that pillars represent aspects of linear, rigid thinking within a Western dominant worldview, a dualistic, Cartesian worldview (Aikenhead & Michell, 2011; Atleo, E.R., 2004, 2011; Cajete, 2000). Instead, the participants referred to the circle of life or the cycle of life throughout the entire interview process; therefore, I conclude in this study that pillars have morphed into the circle metaphor, a more appropriate metaphor for their Indigenous worldviews.

The pillars melt into a circle and still reflect the equality and importance of Indigenous principles and Indigenous worldviews as equal to each other whenever intercultural encounters or third space (Bhabha, 1994; Haig-Brown, 2008) collaborations occur. This notion is evidenced in the participants' practices at MECCS. Practices include: "teaching to the strengths of the children" (participant #1); "modeling Indigenous principles that reflect humility, honesty, courage, love, truth, wisdom, and respect" (participant # 7); "supporting the philosophy and traditional teaching of the original school Charter" (participant #6); valuing "Elders knowledge and wisdom" (participant #4); and recognizing the "Creator and the spiritual" (participant #2). These culturally responsive practices are embedded within the circle of medicine wheel teachings. At MECCS (MECCS Policy Manual, 2008, p. 2) the learners' needs are met through the North quadrant (Spiritual), East quadrant (Physical); South quadrant (Social/Emotional) and West quadrant (Mental). I take this to mean that the learner is viewed as a wholistic person travelling through a wholistic journey of learning that includes all aspects of body, spirit, and mind (e.g., soul, spirit, body). Nothing is compartmentalized or taught as separate parts of a curriculum; instead, medicine wheel teachings and the seven sacred teachings permeate the essence of how one speaks and conducts oneself in school and in wider society. The medicine wheel teachings are practiced

in concrete examples of daily circle gatherings and smudging ceremonies, drumming, singing, storytelling, annual powwows, school feasts, Cree/Stoney language instruction, field trips, school exchanges, culture camps, traditional games, and real learning on the land when budget permits. In fact, ceremony and cultural practices at MECCS reinforce the learner's connection to Indigenous ancestry, place, and human plus non-humankind. As Littlebear (2000) aptly states, "renewal ceremonies, the telling and retelling of creation stories, the singing and resinging of the songs, are all humans' part in the maintenance of creation" (p. 78). This wholistic view of interconnection between body, spirit, mind, and place is different from the Western, Cartesian worldview. This means that MECCS worldview and philosophy reflects the principles of "reciprocity, relationship, reverence, respect" (Atleo, M., 2006, 2009).

The Cartesian worldview separates humanity from nature creating a dualistic ontology, whereas an Indigenous worldview is non-dualistic and hinges on the elegance of the interconnections between body, spirit, mind (e.g., spirit, soul, body), and place as equal to each other and in relationship to each other. I understand that the circle of life or medicine wheel teachings reflect a porous, fluid, wholistic, non-linear, non-compartmentalized sustainability ethos, mindset, and worldview. The core of MECCS sustainability ethos is *relationality* as depicted through the interconnections between environment, social, education, and economics (Research Questions 1, 2, 3, 4). From the findings, this research claims that every aspect of living and learning is lived in context and in relationship with the Creator and the Created within the circle of life.

Participant #2 (November, 2015) defines an Indigenous worldview as the beauty of circles and connections that are all around us, as in "the sun is a circle, the Earth is a circle,

the moon is a circle and the womb is a circle...it is all beauty and that is why this place survives.” Within the Cree/Stoney worldview, Elder B (Visioning sessions, 2005) explains that the circle is “all of creation, for us, is a circle. Some call it the medicine wheel; some people call it the circle of life. We call it the sacred hoop. To us everything is round...it’s a law of nature.” The medicine wheel at MECCS represents the circle of life. It reminds the participants and students about balance and harmony between the spiritual, intellectual, physical, and emotional aspects of living and learning. MECCS sustainability ethos is grounded in land, kinship, Elder wisdom, Cree/Stoney worldviews, giftedness, and strengths that lead to positive, life-affirming livelihoods that support the individual, community, and wider society. MECCS Indigenous worldview and cultural practices can be understood as Indigenous Science (Fulmes, 1989) and Traditional Ecological Knowledge (McGregor, 2004) where the emphasis in a life journey of learning is not only “understanding the relationships in Creation but also participating in those relationships” (McGregor, 2004, p. 85) in a good way. I understand that MECCS Indigenous worldview and mindset reflects beauty.

Recall that beauty in this study is a “posture, disposition, or attitude of appreciation” for the Cree/Stoney worldview, as it is lived and practiced through the medicine wheel teachings, the seven sacred teachings, the ten Native Commandments, Brokenleg’s the Circle of Courage (Brendtro, Brokenleg & Van Bockern, 2014) and wisdom of the Elders. The findings suggest that beauty means MECCS Indigenous worldviews are seen as equal to all other mainstream worldviews. Beauty in the Navajo culture is “Hózhó.” It means beauty is in everything. Beauty is in everything at MECCS as well. Participant #5 (November, 2015) explains “beauty is just who you are as a whole person.” Participant #3 (November, 2015)

explains that the metaphors of “Aboriginal hair weaving and basket weaving describe the beauty of blending of all the Charter elements at MECCS.” From the findings I think that beauty can be understood from the acronym: BEAUTY, where B is for being, E for elegance of the circle, A for action, U for unity, T for triumph and Y for yearning.

B is for being and accepting that the Creator adores the individual and their Indigenous ancestry. I think that MECCS worldview connects being to the Creator and the Created and is recognized, as Clair (1998) describes Cherokee philosophy as the “habit of being where patterns and rhythms sustain the heartbeat of humanity...in a circular culture rather than a linear one, that views life itself as an artistic creation” (p. 183). The patterns and rhythms of life lived at MECCS does sustain the essence of MECCS worldview and their unique charter. The heartbeat of MECCS is based on their Indigenous identity, ways of knowing and being and through the cultural practice of Cree/Stoney Indigenous principles. Students and staff live the wisdom and natural law teachings from a Cree/Stoney perspective and thus, promote harmony intrinsically (e.g., within oneself) and extrinsically (e.g., with others and Mother Earth). Participant #4 (November, 2015) states that the Elders provide wisdom on how to be in harmony with oneself, community, and Mother Earth with cultural practices such as following proper protocols for “pipe ceremonies, visits to the land, teepee construction, sharing circles, and sweats.” The atmosphere of respect from learning about protocols is felt by everyone at the school. Participant #9 (November, 2015) candidly reflects on the honesty and truth of emotions in people and in the atmosphere that is created by one’s words and conduct. These reflect the MECCS pattern of being and ways of knowing in the school all day long. When one is in harmony, this reflects in a good way and when one is not, disharmony and dysfunction result. The seven sacred teachings provide support for bringing

one back into harmony. The staff is constantly monitoring themselves and their students for imbalance with the good intention of restoring healing, well-being, and respect. Participant #6 (December, 2015) states that MECCS creates an atmosphere of learning together through the “spiritual connections in this school. There is a purpose for the school being here. I could feel it, sense it, see it and hear it in everything.” Affirmation of the strengths of each learner reflects the support of Indigenous identity and ancestry.

E is for the elegance of the circle that encompasses ceremony and medicine wheel teachings at MECCS. Ways of being and knowing are reflected in MECCS’ Indigenous worldview. I found that MECCS charter and vision statements calibrate the participants’ thinking around relationships and connections between school, community, and the world. Gergen (2009) calls this extended web of relationships a “circle of participation” (p. 246) and “‘unceasing circles’... [where] education is sensitive to relationship, we realize that in terms of future well-being, ‘we are all in it together’” (p. 269). Cree/Stoney Elder, Kokum T. (personal communication, 2016) describes their sustainability ethos of relationship as that which has been maintained by the Cree and Stoney worldviews since ancient days. The participants’ revealed that their web of relationships is found within the traditional teachings of the circle. The core essence of Cree/Stoney worldviews reveals that people, Mother Earth, and sustenance (e.g., livelihoods, economics) are found within the medicine wheel and circle of life. All relationships are equal to each other and maintained through the seven sacred teachings (e.g., love, truth, wisdom, courage, respect, honesty, and humility). There is no superior position reflected in the medicine wheel and circle of life. At MECCS, there are no exact words in their Cree and Stoney language for the English word sustainability, but rather,

deeply held beliefs that reveal a sustainability ethos and mindset found within the circle of life.

Some Elders and participants describe the essence of Cree and Stoney worldviews as *Wahkohtowin-Wetaskiwin* (e.g., Cree) and *Ina-mackoeda? a basiptam and A-we-yakmna-me* (e.g., Stoney). *Wahkohtowin* means everything is related and all things are alive or we are all related; *Wetaskiwin* means we are to love each other and have good harmonious relationships and that good friendships govern healthy relationships of one thing with another. *Ina-mackoeda? a basiptam* means sustain Mother Earth and *A-we-yakmna-me* means to keep something for the future or preparing something and keeping it for future use.

I find that the elegance and fluidity of the circle embodies the Cree/Stoney ways of being and knowing in protocols, conduct, language, stories, prayers, relationships, and non-dualistic ontologies. Non-dualistic ontologies (e.g., the way we view reality) means that we are part of nature, not separate from it. As Arguette, Cole and The Akwesasne Task Force On The Environment (2004) explain “people are not superior to the natural world” (p. 338). They echo the MECCS findings that we are inextricably linked to the lifeblood of Mother Earth by recognizing the “importance of Mother Earth as the sustainer of life, the earth provides for all the nations and the people” (p. 340). Humanity moves back and forth within the circle of life from birth through death learning how to take care of our relationships so that we can, as Tafoya and Kouris (2003) explain, learn from “necessary teachings and experiences for the next crisis and transformation, and that this process is a circle of greater and greater self-awareness as well as awareness of one’s place in the universal circle of friends, family, nation, and beyond” (p. 145).

A is for actions that reflect a good life. Actions demonstrate one's understanding of Indigenous ways of being and knowing. Humility is important so that learners may learn from mistakes and develop their gifts that eventually provide an economic livelihood. Participant #7 (November, 2015) states that "modeling who I am as a Cree person and focusing on strengths helps students appreciate and be confident in who they are." Commitment to culturally responsive curriculum and practices as Participant #8 (November, 2015) states "give[s] every child the opportunity to grow and be who they want to be." MECCS demonstrates the essence of sustainability itself by a beautiful teaching act, leadership quality, drumming performance, dance step, silence while an Elder speaks, sharing lunch with another student, and providing hospitality to a guest speaker. The participants were constantly demonstrating the essence of beauty and their sustainability ethos, which, as Taylor (2013) states, are the result of "little beauties, aesthetics, craft skill, and the experience of beautiful action" (p. 6). Taylor (2013) further explains that "little beauties offer us something more than just success they are examples of exceptional success" (p. 79). The MECCS participants aim for excellence in how they demonstrate their commitment to the medicine wheel teachings and Cree/Stoney worldviews. The essence of participants joining forces to support each other during budget cuts by teaching multiple grades and pooling resources are informed by the essence of a sustainability ethos. Participant #8 (November, 2015) describes the current budget cuts as "The children in grade 9 now are the same children I had in grade 2....For these kids to go through ...budget cuts, losing teachers and resources is sad, but when someone is down we pick them up and move forward." Participant #7 (November, 2015) incorporates language and culture throughout the day despite budget cuts for full time Cree language support. Participant #7 (November, 2015)

states “in our school I know we have a budget crunch. We continually look for ways to incorporate culture...like at Christmas, last year we sang a Huron Carol in Cree and English...this year we sang O Canada in Cree.” Conduct and protocols like the above are actions that simultaneously focus on a caring curriculum delivery and learning atmosphere filled with hope, resilience, and laughter.

Adjusting to each learner’s emotion and also to learning style are interrelated and simultaneously being addressed throughout the whole teaching day at MECCS. The participants are reflecting beautiful acts of reverence for their Indigenous worldview. O’Donohue (2005) describes these examples as “a sense of reverence which includes the recognition that one is always in the presence of the sacred. As parent, child, lover, prayer, or artist—a sense of reverence opens pathways of beauty to surprise us” (p. 31). O’Donohue (2005) describes the state of a heart filled with reverence as “to live without judgement, prejudice, and the saturation of consumerism. The consumerist heart becomes empty and lonesome because it has squandered reverence” (p. 31). I think this means the MECCS Indigenous worldview supports reverence in the daily encounters of sharing and support exhibited by the acts of teaching and modeling a good life in the classroom.

U is for unity and a “peaceful coexistence” (McGregor, 2004, p. 86). McGregor (2004) reminds us that the Royal Commission on Aboriginal Peoples (RCAP), a five year study completed by the Canadian federal government in 1996, discussed “a new relationship between Aboriginal people and dominant society... land is not a [sic] just a commodity; it is an inextricable part of Aboriginal identity, deeply rooted in moral and spiritual values” (RCAP 1996, p. 430). This new or renewed relationship that RCAP calls for is based on the ancient Indigenous philosophical view that sought “coexistence” among Nations. McGregor

(2004) explains that coexistence is founded on the “Two-Row Wampum treaty of friendship between the Dutch and the Haudenosaunee peoples...[where] the Dutch and the Haudenosaunee travel side by side down the ‘river’ of existence...[as] separate... distinct people...they interact and assist each other as need be” (p. 86). McGregor (2004) explains further that “this coexistence approach does not devalue Western or Indigenous resource management practices and the knowledge that informs them...equitable power relationships...[of] coexistence does not allow for the domination of one over the other” (p. 87).

Participant #9 (November, 2015) reminds us that at MECCS, there is a legacy of residential school trauma. He/she emphasizes that, “we have to work together and teach them to respect and be thankful through the culture because some don’t have respect for where they came from yet...it’s sad...it wasn’t their choice to be washed of all their identity.” Residential school was designed to destroy Indigenous identity (Miller, 1997). McGregor (2004) uses Traditional Ecological Knowledge (TEK) to explain coexistence as “sustaining a creative reciprocal relationship with all of Creation and about fulfilling our lives as human beings in relation to Creation” (p. 85). I take this to mean that the participants practice harmony and respect when dealing with the legacy of residential trauma. Participant # 8 (November, 2015) explains “For myself I feel I am part of this culture even though I am non-Aboriginal, I’ve sunk all my heart into this place, all of my tears into these guys. There is no separation between these kids, myself, Paul Band and Mother Earth. We will continue to build a relationship with each other.” I take this to mean that at MECCS they have successfully blended their Western and Indigenous worldviews as an example of peaceful

coexistence as wisdom-on-the-ground example. MECCS provides a microcosm of practicing principles for peaceful coexistence.

T is for triumph. Participant #1 (November, 2015) states, with respect to moving to a new location, that “we recognized that there was a need to give our kids equal footing and similar opportunities as other schools.” From teaching in a strip mall to the current site situated on 260 acres, it is a triumph of efforts to provide the students with a powerful connection to the land. Fulfilling the original charter without money is a big obstacle in the eyes of the staff, especially for Participant #6, who states that “without cultural events and activities, then it becomes too colonized and feels more like a residential school with colonial rules and regulations.” Pressing on, past the budget crisis, is a testimony to how one overcomes obstacles and pain to do more than just survive to keep reaching for the dream of providing the best education possible based on the Cree/Stoney worldviews. Wilson Bearhead (Visioning Sessions, May 11, 2005) describes his perception of sixty years of the mainstream, European education system and the reason for starting MECCS as “a system that has made us fail ourselves as Indian people of this land. WE are trying to bring the teachings of the old people to our schools so our young people can be successful.” I take this to mean that the essence of being positive propels the participants to keep striving for the best and also dreaming the best for the benefit of future generations. Participant #6 (November, 2015) states “I just pray to the Creator that the school doesn’t close and that this isn’t their last year!” The efforts of the participants are beautiful, felt, moments, as Taylor (2013) describes: “a felt difference at least for someone—in how it is done, in the quality of the execution” (p. 73). I take this to mean, as I observe the courage and effort of a school pulling together to

survive budget cuts, that I experience a felt difference and am a witness to the beauty of the medicine wheel in action.

Y is for yearning to provide the best education that affirms Indigenous identity and their sustainability ethos. The budget should meet the needs, not the numbers, for MECCS. Participant #4 (November, 2015) reflects on his/her memory of the ideal school as “the founders and Elders dreamed of an ideal school that would teach my Cree and Stoney grandparents’ traditions of loving one another and taking care of one another on the land and with each other.” This heart-cry is echoed in the current charter as the vision and mission of the school: “Rediscovering the gifts and potential given to them by the Creator, our children will achieve personal excellence and fulfillment. To wholistically nurture, guide and challenge each child’s spiritual, intellectual, physical and emotional self through traditional Indigenous teachings” (2016, MECCS website-[www.mecs.org/site](http://www.mecs.org/site)). Participant #5 (November, 2015) reminds us about supporting Indigenous learners and states

people think that we have a magic formula you can do it anywhere but you can’t some things yes but day by day you meet the needs of our Cree/Stoney kids.

Indigenous worldview is everything we do. It’s from looking at the child as a whole being, to what they need as a whole being, to working within a community that is wonderful and beautiful and very relevant and very damaged and injured and not whole and we work with everything in the community. The staff has an indigenous worldview because of the work they do with the community.

I take this to mean that everyone sacrifices to pull together and keep MECCS a place that affirms Indigenous mindsets, beliefs, and teachings. There is an ebb and flow to the budget crisis. Despite this, the staff focus on the medicine wheel teachings and the seven sacred

teachings as a guiding light to move through one budget crisis after another, and to endure the growing pains of striving for the best at all times. MECCS encourages everyone from whatever ancestry to come and learn about their Indigenous beliefs and practices. Participant #5 (November, 2015) states “beauty is just who you are a whole person in context. Indigenous worldview is difficult to compartmentalize because I live it, am in it and am part of it. It is everything we do.”

Linear Western worldviews may find that beauty is indeed a possibility for a 4th pillar in their sustainability dialogues. I find that the circle metaphor incorporates these pillars and, in fact, melts them into a circle of wisdom and beauty in the MECCS findings. The invitation to perceive this as a starting point for entry into third space dialogue on sustainability may, in fact, open up the doors of healthy communication that can inform each other on how to solve the sustainability crisis on the planet.

In summary, conceptually, instead of aiming for yet another pillar in the Western worldview, the findings of MECCS lead me to believe that the Western sustainability ethos should be replaced with Indigenous sustainability ethos by focusing on the circle of life and how we enter and exit that continuum of learning and living. The Circle of beauty and wisdom as lived at MECCS is an example of wisdom-on-the-ground. This model could broaden and enhance the Western sustainability ethos. Like the Two-Row Wampum or Two Way Mi'kmaw models, both Western and Indigenous worldviews can live side by side in peaceful coexistence and recognize that we are all living and breathing in the circle of life. I take this to mean that conceptually entering a circle together could generate new types of dialogues that solve our sustainability issues of the day. Applying and recognizing medicine

wheel teachings unique to each situation could springboard humanity into a healthy and flourishing life for all current and future generations.

## Chapter 5. Conclusion: An Invitation

I was having coffee with Cree/Stoney Elder, Kokum T during my dissertation revision. She was sharing her wisdom with me about sustainability and the special nature of the Cree/Stoney worldviews. I asked for her help to understand the deeper meanings of the Indigenous cultural teachings at Mother Earth's Children's Charter School (MECCS). She shared more wisdom and encouragement with me, and with a twinkle in her eye, she firmly summarized all of my research in this phrase, “*We are Mother Earth!*”

This study is an invitation to embrace the MECCS Cree and Stoney worldviews, sustainability ethos and mindset. This qualitative research study focuses on the best, celebratory experiences from nine staff members, including teachers, teacher assistants, principals (e.g., current and former) and a guidance counsellor. Conversations occurred (and are continuing) throughout the study, with Elders and others associated with the MECCS family as well.

This study began with the notion that Indigenous worldviews may enhance current Eurocentric (e.g., Western) definitions of sustainability which are based upon an ethos of profit and commodity (Huckle & Sterling, 1996). Western, European, dominant worldviews often refer to sustainability as people, planet, and profit (Brundtland, 1987; Sterling, 2001, 2003). Indigenous worldviews have the potential to reveal a different version of sustainability and education for sustainability (e.g., sustainability education) than the Eurocentric (e.g., Western) notions (e.g., pillars) of people, planet, and profit. Indigenous worldviews reflect the importance of the interrelationships between all of the dimensions of sustainability. Remember that Dockry, Hall, Lopik and Caldwell (2016) note that “sustainability models used throughout the world can be problematic for indigenous

communities because they do not often address or incorporate indigenous cultural values, concerns, world views (epistemologies and ontologies) or teachings...[like] the health of the land and people are one” (p. 128). MECCS addresses that concern by emphasizing Cree and Stoney Indigenous worldviews in everything they do.

This study *celebrates* the first Indigenous public charter school in Canada and *their* Indigenous worldviews (e.g., Cree/Stoney) and Indigenous learners. MECCS school Staff Handbook (2012-2013) explains that, “the name Mother Earth stems from Cree and Stoney worldview understanding that the earth nourishes us and sustains us” (p. 14). This research study foregrounds and acknowledges the beauty of MECCS’ Indigenous worldviews. Beauty in this study means a posture, disposition, or attitude of appreciation for Indigenous worldviews.

The beauty of MECCS Cree/Stoney worldviews is revealed through these main research questions: How does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story and experience. How does MECCS Indigenous worldviews inform a sustainability ethos and mindset? How are environmental, social, educational, and economic systems in the Indigenous model of sustainability interrelated? How do we appreciate beauty as an element embedded within sustainability? Answers to these questions provide an expanded notion of sustainability and living well on the planet with oneself and each other. Each of the participants’ stories and conversations, throughout my many visits to the school, celebrate what is best at MECCS and what might be even better in the future.

At the core of sustainability of MECCS are the Stoney and Cree worldviews. Sustainability is: relationship. Relationship and relationality are used interchangeably. Each

person is in relationship with the trees, the sky, the Creator, each other, the water, and the entire planet: Mother Earth. If we are in relationship with Mother Earth, then we do not harm Mother Earth because we *are* Mother Earth. We do not harm ourselves. We also all come from the Creator, thus the thread of spirituality connects everything to each other in the circle of life (e.g., medicine wheel, Sacred Hoop).

At MECCS, there are no exact words in the Cree and Stoney languages for the English word “sustainability,” but rather, deeply held beliefs that reveal a sustainability ethos and mindset. As discussed in chapter 4, some Elders and participants describe the essence of Cree and Stoney worldviews as *Wahkohtowin-Wetaskiwin* (Cree) and *Ina-mackoeda? a basiptam* and *A-we-yakmna-me* (Stoney). *Wahkohtowin* means everything is related and all things are alive or we are all related; *Wetaskiwin* means we are to love each other and have good harmonious relationships and that good friendships govern healthy relationships of one thing with another. *Ina-mackoeda? a basiptam* means sustain Mother Earth and *A-we-yakmna-me* means to keep something for the future or preparing something and keeping it for future use. Thus, the essence of sustainability is woven throughout Indigenous worldviews, ceremonies, and the cultural teachings embedded in the Cree/Stoney languages.

The sustainability ethos of relationship has been maintained by the Cree and Stoney worldviews since ancient days (Kokum T, personal communication, 2016). The core essence of their Cree and Stoney worldviews reveal that people, Mother Earth, and sustenance (e.g., livelihoods, economics) are found within the medicine wheel and circle of life. All relationships are equal to each other and maintained through the seven sacred teachings: love, truth, wisdom, courage, respect, honesty, and humility. There is no superior position reflected in the medicine wheel and circle of life. The seven sacred teachings keep the relationships

between people, planet, and livelihoods strong. Behaviours and actions flow out of the understanding that relationships are critical to a fulfilling, sustainable, and flourishing life. Spirituality is also woven throughout every aspect of the Cree/Stoney worldviews at MECCS.

A flourishing life for each learner is described in the MECCS vision statement (Staff Handbook, 2012-2013) as, “rediscovering the gifts and potential given to them [the learner] by the Creator, [thereby helping] our children...achieve personal excellence and fulfillment” (p. 6). The Creator gives each person gifts to develop within the medicine wheel and circle of life. These gifts (e.g., one’s giftedness) are nurtured, so that each child finds their purpose and eventual livelihood in life. All of this occurs in a lifespan of relationships. MECCS philosophy (Staff Handbook, 2012-2013) describes this nurturing of gifts through the four needs described by Brendtro, Brokenleg and Van Bockern (2014): every child feels the need for belonging (e.g., I mean something to you); mastery (e.g., I am good at something); independence (e.g., I have power to make decisions), and generosity (e.g., I have a purpose in life). We experience belonging, mastery, independence, and generosity through healthy relationships between people, Mother Earth, and our spiritual growth. Respect, reverence, relationality, and responsibility are also reflected in the notions of belonging, mastery, independence and generosity ([www. meccs.org/site](http://www.meccs.org/site), 2016; Brendtro, Brokenleg & Van Bockern, 2014).

The importance of the medicine wheel and the seven sacred teachings are reflected in the results of the interviews. MECCS maintains healthy relationships with each other, the land, and lifespan learning through the celebration of ceremonies, stories, dances, programs, language instruction, and cultural teachings. All relationships are viewed holistically

through the medicine wheel. Relationality leads to sustainability thinking in all aspects of life as reflected in the components of the medicine wheel: physical, spiritual, social/emotional, and intellectual. Each component is necessary for the wholistic development of each learner's potential. MECCS does not emphasize one component over another; all components are equal to each other.

The sustainability ethos and mindset are reflected in the charter, philosophy, vision, and mandate to which all adhere. Severe budget cuts (e.g., due to low student enrollment numbers) have curtailed the volume of programming and activities, but the essence of the beauty of the Indigenous worldview shines brightly. Dedicated staff, students, Elders and parents remain determined to fulfill the original charter. The participants' and the Elders' statements reveal that sustainability revolves around the people (e.g., learners), Mother Earth, and livelihoods (e.g., sustenance).

From participants' stories we learn that a "relational being" (Gergen, 2009) generates new relationships as we come to know each other (e.g., Indigenous and non-Indigenous) and learn with each other. Teachers and students co-create new worlds of understanding through dialogue that are respectful of each other's worldviews. As mentioned earlier, respect, reverence, relationality, and responsibility are also embedded within the MECCS' circle of beauty and wisdom. Participants keep their eyes and hearts on the meaning of the medicine wheel as they relate to each learner and to each other as close knit colleagues. They are a family unit.

There is no magical formula to duplicate the successes of MECCS, because their successes are part of a lived daily practice of relationships that are nurtured through their Cree/Stoney worldviews. However, what others can duplicate is their understanding of

sustainability as relationship embedded within a worldview that values respect, reverence, responsibility, and spirituality in their own contexts. The transmission of sustainability as relationship is demonstrated through smudging, traditional prayers, feasts, medicine wheel teachings, sweat lodge ceremonies, round dances, pow wows, storytelling, Elders, Cree/Stoney language instruction, land-based activities, drumming, singing, and many other Indigenous identity-supportive events.

All these culturally responsive activities support the Cree and Stoney worldview with an emphasis on the sacred and spirit. Michell (2013) states, “We all come from spirit and we all return to spirit in a never-ending cycle. The earth nurtures our living bodies and when we die, our bodies return and become part of Mother Earth” (p. 27-28). If we are in good relationship with Mother Earth, then we treat Mother Earth with respect, reverence, and responsibility. Decisions on how to maintain a flourishing society flow from the respect we have for the places we live and the people we are in relationship with (e.g., local and global).

The charter calls for the MECCS family to respect the language, traditional teachings, learners, planet Mother Earth, and to nurture the gifts, and strengths of each learner, as these strengths will develop into livelihoods that contribute to a prosperous future for all. “All” here refers to the individual and the collective in community: “We are all in this together” (Gergen, 2009, p. 269) is similar, but not the same, to MECCS’ Indigenous worldview “that we are all one.” It is through conversations as equals that we generate a life-affirming future of possibilities in our intercultural spaces (e.g., third spaces). We can begin healthy collaborations by recentering beauty as an attitude that appreciates Indigenous worldviews as equal to the dominant, European worldview. As Cree/Stoney Elder, Kokum T (personal communication, 2016) explains, “all worldviews are equal to each other because we are all

given life through the Creator; we are different but equal to each other. We all have the same Creator.” The Western, European dominant worldview and the Indigenous marginalized worldviews are different but equal. Worldviews are complex. We can honour and respect each different worldview. As Michell (2013) states, “All people and their knowledge systems occupy an equal place within the sacred hoop of life” (p. 26).

Cree and Stoney worldviews reveal a sacred element to all life as revealed in the statement “all my relations,” meaning that all human and non-human are alive and related to each other. We are gifts from the Creator to each other. Gergen (2009) states that “this sense of the sacred is equated with relational unity” (p. 390) which is part of the sustained ongoing dialogue about any sustainability issue relating to people, planet, and profit (e.g., prosperity). With respect to courage and vulnerability in intercultural dialogue, Thich Nhat Hanh (Thich Nhat Hanh Quote Collective website) states:

We come to an appreciation of inter-being that ‘everything is in everything else.’

Consider the waves of the ocean. In our vision we can separate the waves as they come rolling into shore. They each seem to have an individual identity. However in their evanescent existence they cannot be separated from neighboring waves....Or to extend this vision, each wave is ultimately within all others. And, it is proposed, to discover the arbitrary nature of our distinctions, and the possibility for their suspension, gives rise to an all-encompassing compassion. If I am in you and you are within me, then mutual caring should replace antagonism. (2016)

Seeing the sacred within yourself and your worldview reveals the sacred in others and their worldviews. The MECCS participants frequently spoke of the Creator and the respect of the sacred in worldviews. The participants also revealed the practical in experiences that

celebrate what I call their *wisdom-on-the ground*. Since Indigenous worldviews cannot be compartmentalized, it is my view that sustainability cannot be either. This research invites others to look at life as wholistic, a circle, a sacred hoop of ongoing relationships that originate in time immemorial and are generated into a future web of relationships. MECCS has confirmed to me that we are one. My invitation to the reader is to consider that idea for oneself and within one's sphere of relationships.

The Cree and Stoney worldviews emphasize the powerful cultural connection between spirit, place and lifelong acceptance as a valued learner throughout all stages of life. Participant #5 (November, 2015) celebrates the connection between language, culture, and academics through fun activities like annual sports and cultural projects. These events nurture the learners' needs for belonging, mastery, independence and generosity, which support the long-term goal that MECCS students will take these learnings into their future. Their sustainability ethos undergirds the long-term thinking that "once a MECCS student our children are our children forever"(Participant #5, November, 2015) Blending mainstream and Indigenous worldviews contributes to the goal of each MECCS student to have a fulfilling and prosperous future in a sustainable world.

Sacred teachings are found in the smallest things and interactions at MECCS. Participant #3 (November, 2015) describes that "the beauty of Aboriginal worldview is like hair weaving and basket weaving, where strands and threads are woven together to represent peace, love and care." Participant #9 (November, 2015) echoes this point when "Kinder [Kindergarten] boys ask to have their hair braided, because only warriors have long hair in our culture. It makes them proud of who they are." The connection between hugs, words of encouragement, and fixing the young one's hair nurtures the identity of an Indigenous child.

Modeling care and sharing love and acceptance are important in the Cree and Stoney worldview. Participant #7 (November, 2015) brings her Cree heritage and language to the classroom and celebrates the Indigenous heritage of her students by modeling the seven sacred teachings to them throughout the day. The modeling of cultural sensitivity and cultural activities are connected to the children's desire to be known, accepted, loved, and adored for their quest for learning. The MECCS staff and students are in constant process of sharing and learning from the medicine wheel teachings. Staff and students co-learn and celebrate their learning together. With high fives, hugs, ceremonies, drumming, dancing, and awards, MECCS persists in celebrating the best in each learner.

Developing leadership qualities through patience and conflict resolution are valued within the Cree and Stoney worldview. Participant #8 develops his/her students' leadership qualities that emphasize Sean Covey's 7 Habits of Happy Kids (2008): Be Proactive. Begin with the End in Mind. Put First Things First. Think Win-Win. Seek First to Understand and then to be Understood. Synergize. Sharpen the Saw. Decisions and conflict resolution in the classroom are made collectively through these seven habits and link them to the medicine wheel. The notion of seeking the best answers until the best breakthrough arrives could be described in M. Atleo's (2009) words of "watching until it became [becomes] clear to me[you]" (p. 455). Indigenous worldviews incorporate patience and respect for the learning process.

The notion of persistence and serendipity exist side by side at MECCS. The teachers, staff, students, visitors, and guests arrive at the perfect time to share and learn. As participant #5 states, "this is serendipity" (November, 2015). The Creator connects the dots, so we only need to accommodate and trust the Creator to be a full participant in every act of learning

between learners (e.g., students with teachers, etc.). Elders remind us that this is part of understanding the medicine wheel teachings specifically. As Elder B (Visioning session, 2005) states,

Creator made us all and gave us each gifts. The way of our teaching is to understand who we are and to respect most of all your parents, your Elders, and your extended family and the people in the community because each one of them are gifted, each one of them have a teaching. Some people will teach you about songs, some people will teach you about dancing, some people will teach you about plants, roots, medicines, some people will teach you about the rocks, some people will teach you about trees, about the animals, and all of these things are supposed to be respected and that is how we teach each other. The Elders, the grandparents, the community we all work together to teach the young people about culture, about language, about living, about survival. It's wholistic.

The connection between the wholistic view of each child and each teaching supports the flexibility and growth exhibited in the circle of life. Each person has gifts from the Creator that develop into a livelihood which contributes to the well-being of that person, the family unit, and the community itself. Benefits are extended to all for healthy living.

During difficult life challenges, the Cree and Stoney worldviews provide resilience and hope to find solutions that support the individual and the community. Participant #6 (December, 2015) describes the financial budget crisis and the wisdom of the staff pulling together to provide and meet the needs of the students in their care. Despite severe budget cuts (e.g., due to low student enrollment numbers), MECCS is thriving because of its resilience, fortitude, and love which are forging the way for their future. In fact, the

Combined 2016 Alberta Education Accountability Pillar Overall Summary (MECCS website, 2016) reflects that MECCS overall academic achievement is excellent when compared to other Alberta public provincial schools. MECCS is also showing excellent results in safe and caring schools, parental involvement, and continuous improvement. MECCS is thriving with their sustainability ethos. However, to sustain the excellent results at MECCS and meet the rising costs of transportation and building repairs, a new funding framework is needed (Superintendent Ed Wittchen, personal communication, 2016). MECCS has a vision for future growth which requires financial support. Former Secretary-Treasurer, Godfried (Fred) de Kleine echoes that point by strongly asserting that “funding should be based on need not numbers” (personal communication, 2015).

The MECCS (2016) charter is the beautiful focal point of Indigenous philosophy and the circle of life. When I first visited the school in 2015, it was also Participant #6 who gave me a tour of the facility. This person took me to the centre of the school itself, to stand under a giant dream catcher with eagle feathers floating from the ceiling. Participant #6 (December, 2015) explains:

The dream catcher is for catching the good spirits in and keeping the bad spirits out. For example I have one in my house like in my bedroom, so I dream of good things. I'm safe and bad things are not coming in. That dream catcher is protecting me and my home. In vehicles a dream catcher is hung to protect you and get you to your destination and back home safely. It is the same in the school.

Access to the giant ceiling dream catcher is limited due to locked hallways not in use because of budget cuts and maintenance costs, so I made a small pink dream catcher for the entrance to the school as a gift for all the hospitality and love that MECCS embraces me with on my

regular visits. Gift giving is part of many Indigenous traditions to show reciprocity for all that is shared within relationships. I was taught this over 30 years ago, and look for many opportunities to honour and respect gift giving. It is an expression of love.

The circle metaphor is critical to understanding the Cree and Stoney worldview of sustainability. Participant #2 (November, 2015) states that “it’s all about the circles which when you get right down to it, the sun is a circle, the earth is a circle, the moon is a circle, and the womb is a circle. It’s all beauty.” The blend of Indigenous and non-Indigenous participants and staff is a reminder that with respect, humour and an open heart, relationships can develop as individual worldviews are respected. Mistakes may be made, but with humility and a willingness to learn from our mistakes, we can move forward with a positive outlook. Learning from our mistakes is part of making choices within the medicine wheel and the circle of life. Beauty is inherent in the sacred teachings of humility, courage and honesty. Learners are made aware of the seven deceptions of the sacred teachings as well: pride, lust (e.g., dishonesty), envy, wrath (e.g., violence), sloth, gluttony, and greed (Bouchard, 2013). Elders tell stories to reveal the lessons of the deceiving spirits through the Trickster and Iktomi stories.

The Cree and Stoney worldview are revealed through the language and cultural practices passed down from generations. Participant #4 (November, 2015) describes the importance of Indigenous language and culture as the foundation for MECCS. Elders and founders remind us that:

The charter school concept is empowered under the natural law of our people. Our old people sat us down, told us to watch and to listen. We govern ourselves under

First Nations natural law. We educate under natural law. Natural law is given by the Creator for our societies.

The MECCS (2016) charter reflects an ongoing conversation about Natural Law as part of their sustainability ethos, which honours their Indigenous worldviews. The MECCS Staff Handbook (2012-2013) describes Natural law as including “four laws to live by: kindness, respect, sharing and caring; four elements of nature: land, water, air, fire; four seasons: spring, summer, fall, winter and present [contemporary] adaptation and interpretation: [by] plants, animals, land, resources, community and children” (p. 11). MECCS is thriving with their sustainability ethos based upon the Natural laws.

One goal, one aim, and one purpose drive MECCS and that is to empower their children through learning at their charter school. It has, and it will continue to do so, with the skeletal staff’s and parents’ commitment to sustaining a circle of beauty and wisdom which reflect *their* Indigenous worldviews. The medicine wheel, seven sacred teachings, and cultural teachings provide a fresh framework for understanding sustainability. MECCS is a model of sustainable education as revealed through its Indigenous worldviews, which includes the sustainable learner, planet, and gifts that later become future livelihoods (e.g., prosperity).

Both Indigenous and non-Indigenous learners could ultimately benefit from traditional and contemporary Indigenous worldviews. Benefits include Indigenous capacity building and improved relationship-building with Western dominant societies, healthier collaborations and better solutions for current local and global sustainability issues like poverty, climate change, and international conflict. The Truth and Reconciliation Commission of Canada (2015) echoes this point:

Establishing a fuller comprehension of healthy Indigenous sustainability knowledge will allow benefits across the spectrum of constructive, mutually beneficial relationships and partnerships with Indigenous communities that will contribute to their economic growth, improve community health and well-being, and ensure environmental sustainability that will ultimately benefit Indigenous peoples and all Canadians. (p. 353)

If this collaborative process occurs at the local and international level, like the MECCS model, perhaps an entire new paradigm of living and learning and solving sustainability local and global issues is possible.

Ultimately, I found that the data revealed that Indigenous sustainability insights gleaned from the MECCS interviews could indeed benefit and broaden local and global citizens' understanding of sustainability. AI viewed organizations, groups and humanity as whole systems that are built upon relationships that thrive when "people see the best in one another, when they can share their dreams and ultimate concerns in affirming ways, and when they are connected in full voice to create not just new worlds but better worlds" (Cooperrider, n.d., p. 1).

The themes from the vignettes (e.g., interviews) revealed wholistic concepts that recognized the interconnectedness of land, culture, spirituality, ancestry, family, community, identity, beauty, and planet Earth. The interviews revealed a circle of beautiful moments that reflected stories of sustainability through respecting spirit, place, and humanity. Ultimately, I found in our participant/researcher collaborations, that an Indigenous sustainability ethos at Mother Earth's Children's Charter School was, indeed, the basis for their existence as the first public Indigenous charter school in Canada.

In summary, from common ground, “through collaboration and cooperation, across our diversity” (St. Denis, 2007, p. 1087), we can learn to have good relationships with each other—not perfect, but compassionate, in that, we both recognize the intrinsic worth and value of each other’s lifeworlds and perspectives. It is my position that this process begins relationally (e.g., relationship), as reflected in the participant interviews by seeking understanding of Indigenous worldviews and principles of learning (see Appendix A). I submit that the Indigenous worldviews can provide a fresh lens to understand sustainability and education for sustainability. Note that Indigenous knowledge is not an add-on to normative mainstream education—formal and informal—but rather, a legitimate knowledge base and worldview from which to help orient humanity toward a fresh ethos of sustainability thinking.

Such a paradigm shift requires humility. Humility is keeping an open heart and mind without imposing one’s viewpoint on another, “making kind mistakes” (T.Lindberg, personal communication, 2015) and having a willingness to be a continuous learner from each other’s worldviews. Respect, humility, and the other seven sacred teachings may be the best orientation to have in any learning situation. This is what MECCS has taught me about their essence of sustainability. MECCS has also taught me that the combination of spirituality, harmony, balance, and peace with all human and non-human relationships between people, Mother Earth, and livelihoods (e.g., sustenance, economics) is beauty. A relational worldview demonstrates itself in the day-to-day practices of a lived sustainability ethos in culture, politics, environments, and economics. MECCS has broadened my understanding of the Cree/Stoney sustainability ethos. MECCS notion that sustainability is relationship could help develop citizens with sustainability mindsets over a lifetime. This type of lifelong

learning could create global citizenry and leaders that benefit all societies on Earth (Gibson, Rimmington & Landwehr-Brown, 2008; Lee, 2012).

With such humility, future research could include looking at other alternative worldviews and their unique sustainability ethos. Is relationship important in other worldviews? Is the notion of beauty important in other worldviews? Could collaborations for solving humanitarian and environmental issues start with a deeper understanding of the essence of relationship and relationality as revealed through Indigenous worldviews? MECCS and I say, Yes! This study invites you to consider future sustainability dialogues beginning with the importance of relationship and the notion that “We are Mother Earth.”

## **5.1 Implications and Recommendations**

Data from MECCS could support the school in advocating for better funding for school needs and more financial support for their unique charter and Indigenous worldviews. The hearts of all participants wanted to more closely align with the original charter and resource allocation provided in 2003 when student enrollment was high (e.g., 120). This is reflective of the time that MECCS moved from the original home near the reserve to a location farther away, but one that is bigger, at 200 plus acres, increasing the transportation costs, which means that low funding puts a strain on resources and staff. The funding formula is established by the government, and everyone connected to MECCS is creatively stretching those dollars to support their original charter for Indigenous Education. Because student enrollment is in the low 60s, it is a great stress to provide resources and field trips to sustain the original charter vision due to lack of funding. As an example, the pow wow original scheduled for 2017 was cut due to lack of funding. However, the sustainability ethos remains strong in the hearts of teachers, staff, parents, and students. In my view, if funding

was based on need and heart, and not just on student enrollment numbers, no money concerns would exist. Funding formulas are not addressed specifically in this study, but clearly, they are connected to the continued success of this school.

Being heard in a dominant Western society and sharing with each other in a respectful manner is an “end in itself” (Patton, 2015, p. 123) and reflects the beauty of the fluidity of Indigenous Methodology and AI. Not every appreciative moment leads back to actionable outcomes and evidence-based decisions; sometimes, the deeper notions of why we are human provide an ethos of sustainability through respecting spirit, place, and humanity (e.g., people, place, profit) and is what needs to be included in sustainability power broker discussions.

Ultimately I found, in our participant/researcher collaborations, that an Indigenous sustainability ethos at MECCS was indeed, the basis for their existence as the first public Indigenous charter school in Canada. Embedded in MECCS’ alternative worldviews were themes of wholistic concepts that recognized the interconnectedness of land, culture, spirituality, ancestry, family, community, identity, beauty, and planet Earth. The research questions were designed to discover the beauty of understanding beingness and ways of knowing from alternative voices and providing a better ethos of sustainability. I initially referred to this as weaving stories of sustainability through respecting spirit, place, and humanity, but discovered that the circle of beauty and wisdom was the most appropriate metaphor for MECCS.

Since 2003, MECCS has remained a successful public Indigenous charter school, fighting valiantly for survival of their Indigenous charter and vision for the future of all learners. The results of the data collection revealed that MECCS has a sustainability ethos grounded in time immemorial. In chapter 4, the results revealed that their sustainability ethos

is embedded in the circle of beauty and wisdom of their Indigenous worldviews as practiced and lived wholistically at MECCS.

I conclude that this study and the Indigenous sustainability ethos in the heart of Cree and Stoney Indigenous worldviews as lived and practiced at MECCS will contribute to the ongoing collaborations about sustainability and global issues that face humanity and non-humanity currently and in the future. This implies a change in one's sustainability ethos from a dominant, mainstream, Western, worldview of various pillars of people, planet, and profit to expanding one's sustainability ethos to include an Indigenous worldview like the Cree and Stoney, wholistic and flexible worldview of a circle of beauty and wisdom found at MECCS. "We Are Mother Earth" and "Sustainability: is Relationality or Relationship" are at the core of the MECCS Indigenous worldviews. Their Cree and Stoney sustainability ethos provides a circle of beauty and wisdom from which to dream a better world for all of humanity and non-humanity. Perhaps, this study will inspire other venues to seek beauty at their unique sites. This study provides an acronym or heuristic lens to consider reflecting upon beauty as first, "a disposition, attitude, or posture of appreciation" and secondly, as a reflection of the acronym B.E.A.U.T.Y. as B=being present, E=elegance, A=action, U=unity, T=triumph, and Y=yearning for wholeness. I conclude that MECCS supports all Indigenous learners and Indigenous worldviews through a sustainability ethos at the core of their Cree/Stoney worldview.

Different venues may adopt or consider the following recommendations for their versions of sustainability and education for sustainability. Adopting the MECCS sustainability ethos of "We are Mother Earth" and "Sustainability: is Relationality" broadens

the limited Western perspective of people, planet, and profit at larger school sites. I make these recommendations:

1. Recognize that sustainability education is best understood as providing education that aims at supporting each learner's giftedness as given by the Creator because this is related to developing economic livelihoods in sustaining the health and well-being of each individual and each community, thereby contributing to the health of global society and the planet.
2. Extrapolate from cultural practices at MECCS to inform your unique school situation, which may create sustainable mindsets that can create a better (e.g., best) world. True changes in thinking may only occur when the learner is appreciated as a whole person with unique Creator gifts to share rather than being viewed solely as a commodity for wealth creation and exploitation.
3. Seek celebration moments constantly to counteract the negative experiences in the world, and to provide an avenue to seek restoration and healing from historical and contemporary injustices.
4. Consider a research study that focuses on the notion that funding for charter schools should be based on need, not numbers, to stabilize the hopes and dreams for each school like MECCS. Otherwise, small schools like MECCS will be destabilized, which is not a healthy condition for thriving and well-being for any learner.
5. Consider other Indigenous worldviews in our current sustainability global conversations as being equal to Western, dominant, worldviews.

6. Consider doing a complete Appreciative Inquiry cycle research study with multiple Indigenous focused schools, divisions, or districts across Canada to further explore sustainability ethoses and practices.
7. Consider replacing Western, dominant thinking of sustainability as pillars of people, planet, and profit with the MECCS circle of beauty and wisdom or embracing beauty as a fourth pillar defined by some other metaphor.

A sustainability essence of “*We are Mother Earth*” and “*Relationality or Relationship*” is at the heart of Cree and Stoney worldviews. This study demonstrates that current dominant Western sustainability worldviews could be improved by non-dominant Indigenous perspectives, specifically the Cree and Stoney worldviews at Mother Earth’s Children’s Charter School in Alberta.

## References

- Aaftink, C. (2014). *Kaleidoscope a phenomenological-empirical study of beauty* (Doctoral dissertation), University of Alberta.
- Absolon, K. (2011). *Kaandossiwin: How we come to know*. Blackpoint, NS: Fernwood Publishing.
- Absolon, K., & Willett, C. (2005). Putting ourselves forward: Location in Aboriginal research. In L. Brown & S. Strega (Eds.), *Research as resistance: Critical, Indigenous, & anti-oppressive approaches* (pp. 97–126). Toronto, ON: Canadian Scholars Press.
- Adler, N. J. (2011). Leading beautifully: The creative economy and beyond. *Journal of Management Inquiry*, 20(3), 208–221. doi: 10.1177/1056492611409292
- Adler, N. J. (2015). Finding beauty in a fractured world: Art inspires leaders—leaders change the world. *Academy of Management Review*, 40(3), 480–494.  
doi:10.5465/amr.2015.0044
- AFS Global Intercultural Education and Youth Symposiums. (2014). *Learning the treasure within: UNESCO report on education*. Retrieved from <http://www.symposium.afs.org/>
- AI Commons (n.d.). Retrieved from <http://www.appreciativeinquiry.case.edu/>
- Aikenhead, G. & Michell, H. (2011). *Bridging cultures: Indigenous and scientific ways of knowing nature*. Toronto, ON: Pearson Ltd.
- Aldred, R. (2011). From community participation to organizational therapy? World café and appreciative inquiry as research methods. *Community Development Journal*, 46(1), 57–71. doi: 10.1093/cdj/bsp039

- Alfred, T. (1999). The People. In *Haudenosaunee Environmental Task Force: Words that come before all else. Environmental philosophies of the Haudenosaunee* (pp. 8–14). Cornwall Island, ON: Haudenosaunee Environmental Task Force.
- Alfred, T. (2009). *Peace, power, righteousness: An indigenous manifesto*. Don Mills, ON: Oxford University Press.
- Alvarez, A., & Rogers, J. (2006). Going out there: Learning about sustainability in place. *International Journal of Sustainability in Higher Education*, 7(2), 176–188. doi: 10.1108/14676370610655940
- Assembly of First Nations [AFN]. (2000-2015). *Bill C33-First Nation control of First Nation Education*. www.afn.ca
- Assembly of First Nations [AFN]. (2006). *Royal Commission on Aboriginal People at 10 years: A report card*. Ottawa, ON: Assembly of First Nations.
- Atleo, E. R. (2004). *Tsawalk: A Nuu-chah-nulth worldview*. Vancouver, BC: UBC Press.
- Atleo, E. R. (2011). *Principles of Tsawalk: An Indigenous approach to global crisis*. Vancouver, BC: UBC Press.
- Atleo, M. R. (2001). *Learning models in the Umeek narratives: Identifying an educational framework through storywork with first nations elders* (Order No. NQ71429). ProQuest Global. (304774336).
- Atleo, M.R. (2006). The ancient Nuu-chah-nulth strategy of Hahuulthi. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 2(1), 1-22.
- Atleo, M.R. (2008). Watching to see until it becomes clear to you: metaphorical mapping-a method for emergence. *International Journal of Qualitative Studies in Education*, 21(3), 221-233. doi:10.1080/09518390801998338
- Atleo, M. R. (2009). Understanding Aboriginal learning ideology through storywork with Elders. *Alberta Journal of Educational Research*, 55(4), 453–466.

- Ball, S. (Ed.) (1990). *Foucault and education*. New York, NY: Routledge.
- Bartlett, C., Marshall, A., & Marshall, M. (2001). Two-eyed seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences* 2(4), 331–340. doi:10.1007/s13412-012-0086-8
- Bartels, K., & Parker, K. (2012). *Teaching sustainability/ Teaching sustainably*. Sterling, VA: Stylus Publishing.
- Battiste, M. (2002). *Indigenous knowledge and pedagogy in First Nations education: A literature review with recommendations*. Eskasoni, NS: Apamuwek Institute.
- Battiste, M. (2013). *Decolonizing education*. Saskatoon, SK: Purich Publishing.
- Battiste, M., & Henderson, Y. J. (2000). *Protecting Indigenous knowledge and heritage*. Saskatoon, SK: Purich Publishing.
- Battiste, M., & Henderson, Y. J. (2009). Naturalizing Indigenous knowledge in Eurocentric education. *Canadian Journal of Native Education*, 32(1), 5-18.
- Baydala, L., Letourneau, N., Bach, H., Pearce, M., Kennedy, M., Rasmussen, C., ... Charchun, J. (2007). Lessons learned through research with Mother Earth's Children's Charter School. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 5(2), 201–216.
- Beauty. In *Merriam-Webster's Collegiate Dictionary*. (2007, 11th Edition). Springfield, MA: Merriam-Webster, Inc.
- Bellinger, A., & Elliott, T. (2011). What are you looking at? The potential of appreciative inquiry as a research approach for social work. *British Journal of Social Work*, 41(4), 708–725. doi: 10.1093/bjsw/bcr065
- Berkes, F. (2008). *Sacred ecology: Traditional ecological knowledge and resource management*. Philadelphia, PA: Taylor and Francis. (Original work published 1999)

- Berleant, A. (2012). *Aesthetics beyond the arts: New and recent essays*. New York, NY: Ashgate Publishing
- Bhabha, H. K. (1994). *The location of culture*. New York, NY: Routledge.
- Bignell, B. (2009). Being as a way of knowing: The redemption of knowing through the experience of beauty. In A. Stibbe (Ed.), *The handbook of sustainability literacy: Skills for a changing world* (pp. 191–195). Cambridge, England: Green Books.
- Bishop, A. (2002). *Becoming an ally: Breaking the cycle of oppression in people*. Blackpoint, NS: Fernwood Publishing.
- Blewitt, J. (2008). *Understanding sustainable development*. Sterling, VA: Earthscan.
- Bloomberg, L., & Volpe, M. (2012). *Completing your qualitative dissertation*. Thousand Oaks, CA: Sage Publications, Inc.
- Bogdan, R., & Biklen, S. (1992). *Qualitative research in education: An introduction to theory and methods*. Needham Heights, MA: Allyn & Bacon.
- Bouchard, D., & Vickers, H. (1991). *The Elders are Watching*. Richmond, BC: Raincoast Books.
- Bouchard, D. (2013). *Dreamcatcher and the seven deceivers*. Vancouver, BC: More Than Words Publishers.
- Boutilier, R. G. (2005). Views of sustainable development: A typology of stakeholders' conflicting perspectives. In M. Starik, S. Sharma, C. P. Egri, & R. Bunch (Eds.), *New Horizons in research on sustainable organizations: Emerging ideas, approaches, and tools for practitioners and researchers* (pp. 19–37). Oxford, England: Greenleaf Publishing.
- Bowers, Kisiku Sa'qawei Paq'tism Randolph. (2012). From little things big things grow, from big things little things manifest: Indigenous human ecology discussing issues of

- conflict, peace and relational sustainability. *AlterNative: An International Journal of Indigenous Peoples*, 8(3), 290–304. doi: 10.1177/117718011200800305
- Brascoupe, S. (2000). Aboriginal Peoples' vision of the future: Interweaving traditional knowledge and new technologies. In D. Long & O. P. Dickason (Eds.), *Visions of the Heart* (pp. 411–423). Toronto, ON: Harcourt Canada Ltd.
- Brayboy, B., & Maughan, E. (2009). Indigenous knowledges and the story of the bean. *Harvard Educational Review*, 79(1), 1-168.
- Brendtro, L., Brokenleg, M., & Van Bockern, S. (2014). Environments where children thrive: The Circle of Courage Model. *Reclaiming Journal*, 23(3), 10-15.
- British Columbia Ministry of Advanced Education. (2012). *Aboriginal post-secondary education and training policy framework and action plan 2020, vision for the future*. Victoria, BC: Government of British Columbia.
- British Columbia Ministry of Education, Aboriginal Education (2015). *First Peoples Principles of Learning*. Retrieved from <http://www.bced.gov.bc.ca/abed/>
- British Columbia Ministry of Education and First Nations Education Steering Committee (2008). *English 12: First Peoples integrated resource package*. Victoria, BC: Queen's Printer for British Columbia.
- Brown, W. (2006). *Regulating aversion: Tolerance in the age of identity and empire*. Princeton, NJ: Princeton University Press.
- Brown, F., & Brown, K. (2009). *Staying the course, staying alive: Coastal First Nations fundamental truths. Biodiversity, stewardship and sustainability*. Victoria, BC: Biodiversity Press.
- Browne, A.J., Smye, V.L., & Varcoe, C. (2005). The Relevance of postcolonial theoretical perspectives to research in Aboriginal health. *Canadian Journal of Nursing Research*, 37(4), 16-37.

- Brundtland, G. H. (1987). *World Commission on Environment and Development (WCED) and our common future*. New York, NY: United Nations.
- Brynes, K. (2012). A Portrait of contemplative teaching: Embracing wholeness. *Journal of Transformative Education*, 10(22), 22-41. doi: 10.1177/1541344612456431
- Burns, H. (2015). Transformative sustainability pedagogy: Learning from ecological systems and Indigenous wisdom. *Journal of Transformative Education*, 13(3), 259–276. doi: 10.1177/1541344615584683
- Cajete, G. (2000). *Native science: Natural Indigenous ways of knowing and being*. Santa Fe, NM: Clear Light Publishers.
- Cajete, G. (2010). Contemporary Indigenous education: A nature-centered American Indian philosophy for a 21st century world. *Futures*. doi:10:1016/j.futures.2010.08.013.
- Campbell, M. (1995). *Stories of the Road Allowance People*. Penticton, BC: Theytus Books.
- Canadian Council on Learning (2009). *First Nations holistic lifelong learning model, Métis holistic lifelong learning model and Inuit lifelong learning model*. Ottawa, ON. Retrieved from <http://aboriginaleducation.webs.com/pedagogy-and-plans>. (Original work published 2007)
- Capra, F., & Luisi, P. (2014). *The systems view of life*. Cambridge, UK: Cambridge University Press.
- Caradonna, J. (2014). *Sustainability: A history*. New York, NY: Oxford Press.
- Cardinal, H., & Hildebrandt, W. (2000). *Treaty elders of Saskatchewan*. Calgary, AB: University of Calgary Press.
- Carew, A., & Mitchell, C. (2008). Teaching sustainability as a contested concept: Capitalizing on variation in engineering educators' conceptions of environmental, social and economic sustainability. *Journal of Cleaner Production*, 16(1), 105–115. doi:10.1016/j.jclepro.2006.11.004

- Carritt, E. F. (1931). *Philosophies of beauty: From Socrates to Robert Bridges being the sources of aesthetic theory*. Oxford, England: Clarendon Press.
- Carter, L. (2006). Home and location: The problem of place as an ethnic identifier. *International Journal of the Humanities*, 4(3), 33–44.
- Castellano, M. (2000). Updating Aboriginal traditions of knowledge. In G. Dei, B. Hall, & D. Rosenberg (Eds.). *Indigenous knowledges in global contexts: Multiple readings of our worlds* (pp. 21-36). Toronto, ON: University of Toronto Press.
- Chambers, R. (1995). Poverty and livelihoods: Whose reality counts? *Environment and Urbanization*, 17(1), 173-204.
- Chatterjee, A. (2013). *Aesthetic brain: How we evolved to desire beauty and enjoy art*. New York, NY: Oxford University Press.
- Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, CA: Sage Publications, Inc.
- Chrisjohn, R., & Lanigan, C. (1984). *Research on Indian intelligence testing: Review and prospects*. Vancouver, BC: Mokakit, UBC.
- Christensen, R., & Poupart, L. (2013). *Connective pedagogy: Elder epistemology, oral tradition and community*. Winnipeg, MB: Aboriginal Issues Press.
- Ciegis, R., Ramanauskiene, J., & Martinkus, B. (2009). The Concept of sustainable development and its use for sustainability scenarios. *The Economic Conditions of Enterprise Functioning*, 62(2), 28–37. doi:10.5755/j01.ee.62.2.11609
- Clair, R. P. (1998). *Organizing silence: A world of possibilities*. Albany, NY: State University of New York.
- Clugston, R. (2010). Earth charter education for sustainable ways of living. *Journal of Education for Sustainable Development*, 4(2), 157–166. doi: 10.1177/097340821000400202

- Coates, J., Gray, M., & Hetherington, T. (2006). An 'ecospiritual' perspective: Finally, a place for Indigenous approaches. *British Journal of Social Work*, 36, 381-399. doi: 10.1093/bjsw/bc1005
- Colorado, P. (1988). Being Native and western science. *Convergence*, XXI(2/3).
- Cooperrider, D. (n.d.). *Resources for getting appreciative inquiry started*. OD Practitioner. Retrieved from <http://appreciativeinquiry.case.edu/>
- Cooperrider, D.L., & Whitney, D. (1999). Appreciative inquiry: A positive revolution in change. In P. Holman & T. Devane (Eds.). *The Change Handbook* (pp. 245-263). San Francisco, CA: Berrett-Koehler Publishers Inc.
- Cooperrider, D.L. & Whitney, D. (1999). *Collaborating for change: Appreciative inquiry*. San Francisco, CA: Berrett-Koehler Publishers Inc.
- Cooperrider, D. L. & Whitney, D. (2000). A positive revolution in change: Appreciative inquiry. In D. L. Cooperrider, P. Sorensen, D. Whitney, & T. Yaeger (Eds.), *Appreciative inquiry: Rethinking human organization toward a positive theory of change*. Champaign, IL: Stipes Publishing.
- Cooperrider, D. L. & Whitney, D. (2005). *A positive revolution in change: Appreciative inquiry*. San Francisco, CA: Berrett-Koehler Publishers Inc.
- Cooperrider, D. L., & Whitney, D. (2007). Appreciative inquiry: A positive revolution in change. In P. Holman & T. Devane (Eds.), *The Change Handbook* (pp. 74-88). San Francisco, CA: Berrett-Koehler Publishers Inc.
- Cooperrider, D. L., Whitney, D., & Stavros, J. (2008). *Appreciative inquiry handbook*. Brunswick, OH: Crown Custom Publishing Inc.
- Correia, P., do Valle, B., Dazzani, M., & Infante-Malachias, M. (2010). The importance of scientific literacy in fostering education for sustainability: Theoretical considerations and preliminary finding from a Brazilian experience. *Journal of Cleaner Production*, 18(7)5, 678-685. doi:10.1016/j.jclepro.2009.09.011

- Council of Ministers of Education Canada, Education for Sustainable Development Working Group (ESDWG). (January 2012, 2010). *Background – Developing a Pan-Canadian ESD framework for collaboration and action*. New York, NY: UNESCO.
- Council of Ministers of Education Canada. (February, 2014). *Canada's response to UNESCO questionnaires on the UN decade of education for sustainable development, 2005–2014: Education for sustainable development after 2014 and UN Decade of ESD Final Report*. New York, NY: UNESCO.
- Covey, S. (2008). *The 7 habits of happy kids*. New York, NY: Simon & Schuster
- Creswell, J. (1998). *Research design: Qualitative & quantitative approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Creswell, J. (2013). *Qualitative inquiry & research design*. Thousand Oaks, CA: Sage Publications, Inc.
- Davis, L. (2010). *Alliances: Re/envisioning Indigenous–non-Indigenous relationships*. Toronto, ON: University of Toronto Press.
- Davidson-Hunt, I., & Berkes, F. (2003). Learning as you journey: Anishnaabe perception of social-ecological environments and adaptive learning. *Conservation Ecology*, 8(1):5  
<http://www.consecol.org/vol8/iss1/art5>
- Dei, G. J. S., & Kempf, A. (2006). *Anti-colonialism and education: The politics of resistance*. Rotterdam: Sense Publishers.
- Descôteaux, D. (2015). *The Cree and the development of natural resources*. Montreal, PQ: Economic Notes.
- Diabo, R. (2013). Breaking down the Indian Act. Retrieved from [www.youtuberusselldiabo.com](http://www.youtuberusselldiabo.com)

- Dillon, D., & Reuter, R. (2013). Memory circle and circle of learning. In Christensen, R. & Poupart, L. (Eds.), *Connective Pedagogy, Elder Epistemology, Oral Tradition and Community*, (pp-67-93). Manitoba: University of Manitoba, Aboriginal Issues Press.
- Dockry, M., Hall, K., Lopik, W., & Caldwell, C. (2016). Sustainable development education, practice, and research: An Indigenous model of sustainable development at the College of Menominee Nation, Keshena, WI, USA. *Sustainability Science*, *11*, 127–138. doi:10.1007/s11625-015-0304-x
- Doolittle, L., & Flynn, A. (2000). *Dancing bodies, living histories: New writing about dance and culture*. Banff, AB: Banff Centre Press.
- Dreyfus, H., & Rabinow, P. (Eds.). (1982, 1983). *Michel Foucault: Beyond structuralism and hermeneutics*. Chicago, IL: University of Chicago Press.
- Duxbury, N., & Jeannotte, S. M. (2012). Including culture in sustainability: An assessment of Canada's integrated community sustainability plans. *International Journal of Urban Sustainable Development*, *4*(1), May, 1–19. doi: 10.1080/19463138.2012.670116
- Elliott, F. (2009). Science, metaphoric meaning and Indigenous knowledge. *The Alberta Journal of Educational Research*, *55*(3), 284–297.
- Evans, M., Hole, R., Berg, D. L., Hutchinson, P., & Sookraj, D. (2009). Common insights, differing methodologies: Toward a fusion of Indigenous methodologies, participatory action research, and white studies in an urban Aboriginal research agenda. *Qualitative Inquiry*. *15*(5). 893-910. doi:10.1177/1077800409333392
- Faubion, J. (Ed.). (2000). *Michel Foucault: Power*. New York, NY: The New Press.
- Feaver, W. (1999). Reawakening beauty. *ARTnews*, *98*(9).
- Filho, W. (2009). *Sustainability at universities: Opportunities, challenges and trends*. New York, NY: Peter Lang.

- FitzMaurice, K. (2011). Transgressing the boundaries of Native studies: Traces of 'White Paper' policy in academic patterns of Indigenization. *The Canadian Journal of Native Studies*, 31(2), 63–77.
- Fixico, D. (2003). *The American Indian mind in a linear world*. New York, NY: Routledge.
- Foucault, M. (1972). *The archaeology of knowledge*. London, UK: Tavistock Publications.
- Foucault, M. (1984). Dictionnaire des philosophes. (942–944). Retrieved from <http://www.foucault.info/foucault/biogaphy.html>
- Foucault, M. (1989). *Foucault live: Collected interviews, 1961–1984*. S. Lotringer (Ed.). J. Johnston (Trans.). New York, NY: Semiotext(e).
- Foucault, M. (1994). *The order of things*. London, UK: Tavistock Publications.
- Foucault, M. (1997). *Ethics, subjectivity and truth*. P. Rabinow (Ed.). Robert Hurley et al., (Trans.). New York, NY: The New Press.
- Foucault, M. (2001). *Fear-less speech*. J. Pearson (Ed.). Los Angeles, CA: Semiotext(e).
- Foucault, M. (2007). *The politics of truth*. S. Lotringer (Ed.). Los Angeles, CA: Semiotext(e).
- Friesen, J.W. & Frieson, V.A.L. (2004). *More legends of the elders*. Calgary: Detselig Enterprises.
- Fulmes, C. (1989). *What do Native people want taught in science classrooms to reflect Indigenous science?* Unpublished M.Ed. Major Paper Project. Vancouver, BC: UBC
- Gablik, S. (1998). The nature of beauty in contemporary art. *New Renaissance Magazine*, 8. Retrieved from <http://www.ru.org/81gablik.html>.
- Galliher, R.V., Tsethlikai, M.M., Stolle, D. (2011). Perspectives of Native and Non-Native scholars: Opportunities for collaboration. *Child Development Perspectives*, 6(1), 66-74. doi: 10.1111/j.1750-8606.2011.00200.x

- Gardner, H. (2011, Sept. 21). Reframing truth, beauty, and goodness. *Education Week*, 21, 31(4). 29-32.
- Gergen, K. J. (2001). *Social construction in context*. Thousand Oaks, CA: Sage Publications, Inc.
- Gergen, K. J. (2009). *An invitation to social construction* (2nd Edition). Thousand Oaks, CA: Sage Publications, Inc.
- Gergen, K. J. (2009). *Relational being*. New York, NY: Oxford University Press.
- Gergen, K.J. & Gergen, M. (1997). Toward a cultural constructionist psychology. *Theory and Psychology*, 7(1), 31-36. Retrieved from <http://www.swarthmore.edu>
- Gibson, K., Rimmington, G., & Landwehr-Brown, M. (2008, Jan-Mar). Developing global awareness and responsible world citizenship with global learning. *Roeper Review*, 30(1), 11-23. doi:10.1080/02783190701836270
- Giddings, B., Hopwood, B., & O'Brien, G. (2002). Environment, economy and society: Fitting them together into sustainable development. *Sustainable Development*, 10, 187–196. doi: 10.1002/sd.199
- Gingell, S. (2004). One small medicine: An interview with Maria Campbell. *Essays on Canadian writing*, 83, 188–205.
- Giorgi, A. (1975). An application of phenomenological method in psychotherapy. *Duquesne Studies in Phenomenological Psychology*. Pittsburg, PA: Duquesne University Press.
- Government of Canada (1876 – Current). *Indian Act*. Ottawa, ON: Government of Canada.
- Government of Canada (1991, 1996). *Report of the Royal Commission on Aboriginal Peoples*. Ottawa, ON: Minister of Supply and Services Canada.
- Government of Canada (11 June 2008). *Statement of apology*. Ottawa, ON: Prime Minister of Canada.

- Government of Canada (2016). *Growing the middle class federal budget*. Ottawa, ON: Department of Finance Canada. Retrieved from <http://www.fin.gc.ca/>
- Grant, G. (2012). Transforming sustainability. *Journal of Corporate Citizenship*, 46, Summer, 123–137. doi: 10.9774/GLEAF.4700.2012.su.00008
- Gros, P., & Frithz, N. (2010). *Mayangna knowledge of the interdependence of people and nature: Fish and turtles*. LINKS: UNESCO.
- Guba, E., & Lincoln, Y. (1981). *Effective evaluation: Improving the usefulness of evaluation results through responsiveness and naturalistic approaches*. San Francisco, CA: Jossey-Bass.
- Haig-Brown, C. (2008). Working a third space: Indigenous knowledge in the post/colonial university. *Canadian Journal of Native Education*, 31(1), 253–320.
- Hammond, S. (1998). *The thin book of appreciative inquiry*. Texas: Thin Book Publishing Co.
- Hangzhou Declaration. (17 May 2013). *Placing culture at the heart of sustainable development policies*. People's Republic of China.
- Harlow, J., Golub, A., & Allenby, B. (2013). A review of utopian themes in sustainable development discourse. *Sustainable Development*, 21, 270–280. doi: 10.1002/sd.522
- Harrer, S. (2005, May). The theme of subjectivity in Foucault's lecture series, L'hermeneutique du sujet. *Foucault Studies*, 2, 75–96.
- Heiltsuk Tribal Council (Living Document, n.d.). *Heiltsuk land use plan executive summary*. Waglisla, BC: Heiltsuk Tribal Council
- Hendry, J. (2014). *Science and sustainability: Learning from Indigenous wisdom*. New York: Palgrave Macmillan.
- Hicks, L. E. (2012). Sustainability and what it means to be human. *Studies in Art Education: A Journal of Issues and Research*, 53(4), 267–269.

- Hillman, J. (1998). The practice of beauty. B. Beckley and D. Shapiro (Eds.), *Uncontrollable beauty, toward a new aesthetics*, (pp. 261-274). New York, NY: Allworth Press,
- Holthaus, G. (2008). *Learning Native wisdom*. Lexington, KY: University of Kentucky Press.
- Holman, P., Devane, T., & Cady, S. (2007). *The change handbook*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Howarth, C., & Hook, D. (2005). Towards a critical social psychology of racism: Points for disruption [Editorial]. *Journal of Community and Applied Social Psychology*, 15(6), 425–431. doi:10.1002/casp.840
- Huckle, J., & Sterling, S. (1996). *Education for sustainability*. London, UK: Earthscan.
- Jardine, G. M. (2005). *Foucault & education*. New York, NY: Peter Lang Publishing.
- Kahane, A. (2014). *Possible Canadas: Perspective on our past, presents and futures*. Montreal, PQ: Community Foundation of Canada.
- Kahn-John, M., & Koithan, M. (2015). Living in health, harmony, and beauty: The Dine (Navajo) Hózhó wellness philosophy. *Global Advances in Health and Medicine*, 4(3), 24–30. doi:10.7453/gahmj.2015.044
- Kaomea, J. (2016). Qualitative analysis as ho'oku'iku'I or bricolage: Teaching emancipatory Indigenous research in postcolonial Hawai'i. *Qualitative Inquiry*, 22, 99–106.
- Kawagley, A., & Barnhardt, R. (1998). *Educating Indigenous to place: Western science meets Native reality*. Fairbanks, Alaska: Alaska Library.
- Kawagley, A., & Barnhardt, R. (2005). Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropology and Education Quarterly*, 36(1), 8–23. doi: 10.1525/aeq.2005.36.1.008
- Karatzoglou, B. (2012). An in-depth literature review of the evolving roles and contributions of universities to education for sustainable development. *Journal of Cleaner Production*, 49, 44–53. doi:10.1016/j.jclepro.2012.07.043

- Kendall, G., & Wickham, G. (1999). *Using Foucault's methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Kirkness, V. (1999). Aboriginal education in Canada: A retrospective and a prospective. *Journal of American Indian Education*, 39(1), Fall, Special Issue 2.
- Kirkness, V., & Barnhardt, R. (1991, May). The 4Rs: Respect, relevance, reciprocity, responsibility. *Journal of American Indian Education*, 30(3), 1–15.
- Kopnina, H. & Meijers, H. (2014). Education for sustainable development (EfSD). *International Journal of Sustainability in Higher Education*, 15(2), 188–207. doi: 10.1108/IJSHE-07-2012-0059
- Kopnina, H. (2013). Schooling the world: Exploring the critical course on sustainable development through an anthropological lens. *International Journal of Educational Research*, 62, 220–228. doi: 10.1016/j.ijer.2013.10.002
- Kopnina, H. & Shoreman-Ouimet, E. (2015). Introduction: The emergence and development of sustainability. H. Kopnina & E. Shoreman-Ouimet (Eds.), *Sustainability key issues* (pp. 1–24). New York, NY: Earthscan.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*. Toronto, ON: University of Toronto Press.
- Kovach, M. (2010). Conversational method in Indigenous research. *First Peoples Child & Family Review*, 5(1), 40–48.
- Kremer, J. (1996). Evolving into what, and for whose purposes? Reading Bateson. *Re-vision*, 18(3), 27–36.
- Learning Resources Centre (Producer). (2009). *Wahkohtowin: The relationship between Cree people and natural law* [DVD]. Edmonton, AB: Learning Resources Centre.

- Lee, W. (2012). Education for future-oriented citizenship: Implications for the education of twenty-first century competencies. *Asia Pacific Journal of Education*, 32(4), 498–517. doi:10.1080/02188791.2012.741057
- Lélé, S. (1991). Sustainable development: A critical review. *World Development*, 19, 607–621.
- Lepofsky, D. & Caldwell, M. (2013). Indigenous marine resource management on the northwest coast of North America. *Ecological Processes*, 2(12). Retrieved from <http://www.ecologicalprocesses.com/content/2/1/12>
- Lickers, Henry F. (1999). The Creator. Haudenosaunee Environmental Task Force (Ed). *Words that come before all else: Environmental philosophies of the Haudenosaunee*. Cornwall, ON: Haudenosaunee Environmental Task Force.
- Lifeworld. In *Oxford English Dictionary Online*. Retrieved from <https://en.oxforddictionaries.com/>
- Little Bear, L. (2000). Jagged worldviews colliding. M. Battiste (Ed.), *Reclaiming Indigenous voice and vision* (pp. 77–85). Vancouver, BC: UBC Press.
- Lockley, J., & Jarrath, M. (2013). The nature of sustainability as viewed by European students. *Journal of Education for Sustainable Development*, 7(1), 113–124. doi: 10.1177/0973408213495611
- Lopik, W. (2013). Learning sustainability in a tribal college context. P. Barlett & G. Chase (Eds.), *Sustainability in higher education* (pp. 105–114). Cambridge, MA: MIT Press.
- Lozano, R., Lozano, F.J., Mulder, K., Huisingh, D., & Waas, T. (2013). Advancing higher education for sustainable development: International insights and critical reflections. *Journal of Cleaner Production*, 48, 3–91.
- Lozano, R., Ceulemans, K., & Scarff Seatter, C. (2015). Teaching organizational change management for sustainability: Designing and delivering a course at the University of

- Leeds to better prepare future sustainability change agents. *Journal of Cleaner Production*, 106, 205–215. doi.org/10.1016/j.jclepro.2014.03.031
- Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, 16, 1838–1846. doi: 10.1016/j.jclepro.2008.02.008
- Lunenburg, F., & Irby, B. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioral sciences*. Thousand Oaks, CA: Corwin Press.
- Mace, J., Hocking, C., & Waring, M. (2015). Appreciative Inquiry. S. Nayar & M. Stanley (Eds.), *Qualitative research methodologies for occupational science and therapy* (190–207). New York, NY: Routledge.
- Mack, E., Augare, H., Cloud-Jones, L. D., David, D., Gaddie, H. Q., Honey, R. E., Wippert, R. (2010). Effective practices for creating transformative informal science education programs grounded in Native ways of knowing. *Cultural Studies of Science Education*, 7, 49–70. doi:10.1007/s11422-011-9374-y
- Manitoba Education & Training. (2000). *Education for a sustainable future: A resource for curriculum developers, teachers, and administrators*. Winnipeg, MB: Government Publications.
- Mato, D. (2011). There is no ‘universal knowledge, intercultural collaboration is indispensable. *Social Identities*, 17(3), 409-421. doi:10.1080/13504630.2011.570978
- Maxwell, J. (2005). *Qualitative research design*. Thousand Oaks, CA: Sage Publications, Inc.
- McCubbin, L.D. (2009). Native Hawaiians and psychology: The cultural and historical context of indigenous ways of knowing. *Cultural Diversity and Ethnic Minority Psychology*, 15(4), 374-387. doi: 10.1037/a0016774
- McGregor, D. (2004). Traditional ecological knowledge and sustainable development: Towards coexistence. M. Blaser, H. Feit, & G. McRae (Eds.), *In the way of*

- development: Indigenous peoples, life projects and globalization* (pp. 72–91). New York, NY: Zed Books.
- McKenzie, B., & Morrissette, V. (2003). Social work practice with Canadians of Aboriginal background: Guidelines for respectful social work. A. Al-Krenawi & J. R. Grahams (Eds.), *Multicultural social work in Canada: Working with diverse ethno-racial communities* (pp. 251–282). Don Mills, ON: Oxford University Press.
- Meadowcroft, J. (2000). Sustainable development: A new(ish) idea for a new century? *Political Studies*, 48, 370–387. doi: 10.1111/1467-9248.00265
- Mebratu, D. (1998). Sustainability and sustainable development: Historical and conceptual review. *Environmental Impact Assessment Review*, 18(6), 493–520.
- Mendelson, J.R. (2014). *A Second Look at the First Nations Control of First Nations Education Act*. Ottawa, ON: Caledon Institute of Social Policy.
- Merritt, S. (2010). What does beauty have to do with business? *Journal of Business Strategy*, 31(4), 70–76. doi: 10.1108/02756661011055203
- Michael, S. (2005). The promise of appreciative inquiry as an interview tool for field research. *Development in Practice*, April, 15(2), 222–230.  
doi:10.1080/09614520500042094
- Michell, H. (2013). *Working with Elders and Indigenous knowledge systems*. Vernon, BC: J. Charlton Publishers.
- Mignolo, W. (2000). *Local histories, global design: Coloniality, subaltern knowledges, and border thinking*. Princeton, NJ: Princeton University Press.
- Miller, J. R. (1967). *Canada and the Aboriginal peoples, 1867–1927*. Ottawa, ON: Canadian Historical Association.
- Miller, J. R. (1997). *Shingwauk's vision: A history of native residential schools*. Toronto, ON: University of Toronto Press.

- Miller, R., Ruru, J., Behrendt, L., & Lindberg, T. (2010). *Discovering Indigenous lands*. New York, NY: Oxford University Press.
- Mills, P.D. (2008). *For future reconciling Gitxsan and Canadian law*. Saskatoon, SK: Purich Publishers.
- Mitchell, C., & Sackney, L. (2009). *Sustainable improvement: Building learning communities that endure*. Rotterdam: Sense Publishers.
- Mooradian, J., Cross, S., & Stutzky, G. (2007). Across generations: Culture, history, and Policy. *Journal of Family Social Work*, 10(4), 87. doi: 10.1300/J039v10n04\_04
- Moore, S. (2011). *Trickster chases the tale of education*. (Order No. NR78738). ProQuest Global (1038968772)
- Mother Earth's Children's Charter School (2015–2016). All documents retrieved from <http://www.meccs.org/site/>
- Napolean, V. (2007). *Thinking about Indigenous legal orders*. National Centre of First Nations Governance. [www.fngovernance.org](http://www.fngovernance.org)
- Native Counselling Services of Alberta. (Producer). (2007). *Environmental Law*. [DVD]. Edmonton, AB: Bearpaw Media Productions.
- Nisbet, C. (2011). *Living responsibilities: Indigenous notions of sustainability and governance in action*. (Thesis). University of Victoria, Victoria, BC.
- O'Donohue, J. (2005). *The invisible embrace of beauty*. New York, NY: Oxford University Press.
- O'Farrell, C. (2005). *Michel Foucault*. London: Sage.
- Open Working Group – United Nations. (2014). *Zero draft introduction and proposed goals and targets on sustainable development for the post 2015 development agenda*. Retrieved from <http://www.sustainabledevelopment.un.org/owg.html>

- Paquette, J., & Fallon, G. (2011). Framing First Nations education policy: Toward constructing a coherent conceptual “place to stand.” *The International Journal of Interdisciplinary Social Sciences*, 5(9), 331–374. Retrieved from <http://www.SocialSciences-Journal.com>
- Parker, A., & Grossman, Z. (2012). *Asserting native resilience: Pacific rim indigenous nations face the climate change*. Corvallis: Oregon State University Press.
- Patton, M. (2002). *Qualitative research and evaluation methods* (3rd edition). Thousand Oaks, CA: Sage Publications.
- Patton, M. (2015). *Qualitative research and evaluation methods* (Fourth Edition). Thousand Oaks, CA: Sage Publications, Inc.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Polkinghorne, D. (1995). Narrative configuration in qualitative analysis. *Qualitative Studies in Education*, 8(1), 5–23.
- Quayle, A. F., & Sonn, C. C. (2013). Explicating race privilege: Examining symbolic barriers to Aboriginal and non-Indigenous partnership. *Social Identities: Journal for the Study of Race, Nation and Culture*, 19(5), 552–570. doi:10.1080/13504630.2013.796881
- Rabinow, P. (Ed.). (1984). *The Foucault Reader*. Toronto, ON: Random House, Inc.
- Rabinow, P. (Ed.). (2000). R. Hurley, et al, (Trans.) *The essential works of Foucault, 1954–1984: Power* (Vol. III). New York, NY: The New Press.
- Ramirez, R. (2005). The aesthetics of cooperation. *European Management Review*, 2, 28–35. doi: 10.1057/palgrave.emr.1500028
- Razack, S. (Ed.) (2002). *Race, space and the law: Unmapping a white settler society*. Toronto, ON: Between the Lines Press.

- Reed, J. (2007). *Appreciative inquiry: Research for change*. Thousand Oaks, CA: Sage Publications, Inc.
- Regan, P. (2010). *Unsettling the settler within: Indian residential schools, truth telling, and reconciliation in Canada*. Vancouver, BC: UBC Press.
- Sachs, J. (2015). *The age of sustainable development*. New York, NY: Columbia University Press.
- San Martin, T., & Calabrese, R. (2011). Empowering at-risk students through appreciative inquiry. *International Journal of Educational Management*, 25(2), 110–123. doi: 10.1108/09513541111107542
- Sartwell, C. (2006). *Six names of beauty*. New York, NY: Routledge.
- Scarff Seattor, C., & Cuelemans, K. (2017). Teaching sustainability in higher education: Pedagogical styles that make a difference. *The Canadian Journal of Higher Education*, 47(2)
- Schissel, B., & Wotherspoon, T. (2002). *The legacy of school for aboriginal people: Education, oppression and emancipation*. Don Mills, ON: Oxford University Press.
- Schon, D. (1983). *The reflective practitioner*. Cambridge, MA: MIT.
- Scruton, R. (2011). *Beauty: A very short introduction*. New York, NY: Oxford University Press.
- Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Columbia University.
- Selby, J. (2004). Working divides between indigenous and non-indigenous: Disruptions of identity. *International Journal of Qualitative Studies in Education*, 17(1), 150–164. Retrieved from <http://dx.doi.org/10.1080/0951839032000150284>

- Serendipity. In *Oxford English Dictionary Online*. Retrieved from <https://en.oxforddictionaries.com/>
- Shank, C. (2011). What is “whiteness”? C. A. Rossatto, (Ed.) *Teaching for global community: Overcoming the divide and conquer strategies of the oppressor*. Charlotte, NC: Information Age Publishing.
- Shrivastava, P. (2010). Pedagogy of passion for sustainability. *Academy of Management Learning & Education*, 9(3), 443–455. doi: 10.5465/AMLE.2010.53791826
- Simmons, M., & Dei, G. (2012). Reframing anti-colonial theory for the diasporic context. *Postcolonial Directions in Education*, 1(1), 67–99.
- Simpson, L. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous knowledge. *American Indian Quarterly*, 28, 373–384.
- Simpson, L. (2011). *Dancing on our turtle’s back*. Winnipeg, MB: Arbeiter Ring Publishing.
- Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: Engaging head, hands and heart. *International Journal of Sustainability in Higher Education*, 9(1), 68–86. doi:10.1108/146763708142193
- Smith, T. (1999,2012). *Decolonizing methodologies*. New York, NY: Zed Books.
- Spangenberg, J. (2004). Reconciling sustainability and growth: Criteria, indicators, policies. *Sustainable Development*, 12, 74–86. doi:10.1002/sd.229
- St. Denis, V. (2007). Aboriginal education and anti-racist education: Building alliances across cultural and racial identity. *Canadian Journal of Education*, 30(4), 1068–1092.
- Stephens, J. P. (2010). *Towards a psychology of coordination: Exploring feeling and focus in the individual and group in music-making*. (Doctoral Dissertation), University of Michigan.

- Stephens, J. P. (2016, February). Adapting for the sake of beauty: The role of leaders, levels, and learning in the coordination of a choral group. B. Bechky & K. Elsbach, (Eds.). *Qualitative Organizational Research, Vol. 3: Best Papers from the Davis Conference on Qualitative Research*, (pp. 223–265). Davis, CA: University of California Press.
- Sterling, S. (2001). *Sustainable education: Re-visioning learning and change*. Totnes, UK: Green Books for the Schumacher Society.
- Sterling, S. (2003). *Whole systems thinking as a basis for paradigm change in education: Explorations in the context of sustainability* (Doctoral dissertation). Bath, UK: University of Bath.
- Sterling, S. (2012). Afterword: Let's face the music and dance? A. E. J. Wals, & P. B. Corcoran (Eds.), *Learning for sustainability in times of accelerating change* (pp. 512–515). Wageningen, Netherlands: Wageningen Academic Publishers.
- Tafoya, T., & Kouris, N. (2003). Dancing the circle: Native American concepts of healing, S. Mijares, N. Douglas-Klotz, D. Judy, S. Kramer, & S. Gilligan (Eds.). *Modern psychology and ancient wisdom: Psychological healing practices from the world's religious traditions* (125–145). Binghamton, NY: Haworth Integrative healing Press.
- Taylor, B. J., & Francis, K. (2013). *Qualitative research in the health sciences: Methodologies, methods, and processes* (1st ed.). Abingdon, Oxon: Routledge.
- Taylor, S. (2013). Little beauties: Aesthetics, craft skill, and the experience of beautiful action. *Journal of Management Inquiry*, 22(1), 69–81.  
doi:10.1177/1056492612441393
- The Association of Alberta Public Charter Schools (2015). Retrieved from <http://taapcs.ca>
- Thich Nhat Hanh Quote Collective (2016). Thich Nhat Hanh. Retrieved from <http://ThichNhatHanhFoundation.org>
- Thobani, S. (2007). *Exalted subjects: Studies in the making of race and nation in Canada*. Toronto, ON: University of Toronto Press.

- Thompson, P. (2016). The many meanings of sustainability. S. Moore (Ed.), *Pragmatic sustainability*, 16–28. New York, NY: Taylor & Francis.
- Throsby, D., & Petetskaya, E. (2016). Sustainability concepts in Indigenous and non-Indigenous cultures. *International Journal of Cultural Property*, 23, 1119–140. doi:10.1017/S0940739116000084.
- Truth and Reconciliation Commission of Canada (2015). *Honouring the truth, reconciling for the future: Summary of the final report*. Winnipeg, MB: TRC.
- Tsoise, R. (2016). The politics of inclusion: Indigenous peoples and U.S. citizenship. *UCLA Law Review*, 63(6), 1692.
- Tuck, E., & Yang, K. W. (2014). Unbecoming claims: Pedagogies of refusal in qualitative research. *Qualitative Inquiry*, 20(6), 811-818. doi:10.1177/77800414530265
- Turner, N., & Berkes, F. (2006). Coming to understanding: Developing conservation through incremental learning in the Pacific Northwest. *Human Ecology*, 34, 495–513. doi: 10.1007/s10745-006-9042-0
- UNESCO. United Nations Working Group. (1995). *Report of subcommittee on bioethics and populations genetics of the UNESCO International Bioethics Committee*.
- UNESCO. (1997). *Education for a Sustainable Future: A transdisciplinary Vision for Concerted Action*. Par. 38. Paris: UNESCO.
- UNESCO. (2005). *United Nations decade of education for a sustainable future: draft international implementation scheme*. Paris: UNESCO.
- UNESCO. (2005–2014). *Promotion of a global partnership for the UN decade of education for sustainable development*. Paris: UNESCO.
- UNESCO. (2010). *Teaching and learning for a sustainable future*, Module 11. Paris: UNESCO.

- UNESCO. (2012). *United Nations system task team on the post-2015 UN development agenda*. Retrieved from <http://www.un.org/en/development/desa/policy/untaskteamundf/index.shtml>
- UNESCO. (2014). *Roadmap for implementing the global action programme on education for sustainable development*. Paris: UNESCO.
- UNESCO. United Nations. (2014, 5 May). *Culture and sustainable development in the post-2015 development agenda*. New York, NY: United Nations.
- UNESCO. (2014). *Roadmap for implementing the global action programme on education for sustainable development*. Paris: UNESCO.
- United Nations General Assembly. (2007, 2 Oct.; 2008). *United Nations declaration on the rights of Indigenous Peoples*. Retrieved from [http://www.un.org/esa/socdev/unpfii/documents/DRIPS\\_en.pdf](http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf)
- Van Egmond, N.D., & de Vries, H. J. M. (2011). Sustainability: The search for the integral worldview. *Futures*, *43*, 853–867. doi: 10.1016/j.futures.2011.05.027
- Van Manen, M. (1984). Practicing phenomenological writing. *Phenomenology and Pedagogy*, *2*(1), 36–69. Edmonton, AB: University of Alberta online magazine
- Van Manen, M. (2014). *Phenomenology of practice*. Walnut, CA: West Coast Press, Inc.
- Van Opstal, M., & Huge, J. (2013). Knowledge for sustainable development: A worldview perspective. *Environment, Development and Sustainability*, *15*, 687–709. doi: 10.1007/s10668-012-9401-5
- Waas, T., Huge, J., Verbruggen, A., & Wright, T. (2011). Sustainable development: A bird's eye view. *Sustainability*, *3*, 1637–1661. doi:10.3390/su3101637
- Wals, A. (2012). *Shaping the education of tomorrow: Report on the UN decade of education for sustainable development, 2005–2014*. New York, NY: UNESCO

- Wals, A. (2013). Sustainability in higher education in the context of UN DESD: A review of learning and institutionalization processes. *Journal of Cleaner Production*, 62, 8–15. doi: 10.1016/j.jclepro.2013.06.007
- Wals, A., & Schwarzin, L. (2012). Fostering organizational sustainability through dialogical interaction. *The Learning Organization*, 19(1), 11–27. doi:10.1108/09696471211190338
- Walter, M, & Andersen, C. (2013). *Indigenous Statistics: A quantitative research methodology*. Walnut Creek, CA: Left Coast Press, Inc.
- Wane, N. (2008). Mapping the field of Indigenous knowledges in anti-colonial discourse: A transformative journey in education. *Race, Ethnicity and Education*, 11(2), 183–197. doi:10.1080/13613320600807667.
- Warburton, I. (2003). Deep learning and education for sustainability. *International Journal of Sustainability in Higher Education*, 4(1), 44–56. doi:10.1108/14676370310455332
- Washington, H. (2015). *Demystifying sustainability towards real solutions*. New York, NY: Earthscan.
- Waterfall, P. (2012). Oral presentation to Enbridge and Government of Canada. *Joint Review Panel Hearings*. Retrieved from <http://www.jlsreport.com/?p=3836>
- Waterfall, P., Hopwood, D., & Gill, I. (2001). *North of caution*. Vancouver, BC: Ecotrust Canada.
- Watkins, J. M., & Mohr, B. L. (2001). *Appreciative inquiry: Change at the speed of imagination*. San Francisco, CA: Jossey-Bass Pfeiffer.
- Whitt, L. (2009). *Science, colonialism, and Indigenous peoples: the cultural politics of law and knowledge*. Cambridge, UK: Cambridge University Press.

- Whyte, K. P. (2013). On the role of traditional ecological knowledge as a collaborative concept: A philosophical study. *Ecological Processes*, 2(7), 2–12. doi: 10.1186/2192-1709-2-7
- Whyte, K. P., Brewer, J. P., & Johnson, J. T. (2015). Weaving Indigenous science, protocols and sustainability science. *Sustainability Science*, 11, 25–32. doi:10.1007/s11625-015-0296-6
- Wilson, S. (2001). What is indigenous research methodology? *Canadian Journal of Native Education*, 25(2), 175–179.
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Winnipeg, MB: Fernwood Publishing.
- Winston, J. (2010). *Beauty and education*. New York: Taylor and Francis
- Yazzie, E. (2003). Native American artists. *SEEN, The Journal of Christians in the Visual Arts*, 111, 13.
- Young-Ing, G. (2008). Conflicts, discourse, negotiations and proposed solutions regarding transformations of traditional knowledge. R. Hulan & R. Eigenbrod (Eds.). *Aboriginal Oral Traditions: Theory, Practice, Ethics* (pp. 61–78). Blackpoint, NS: Fernwood Publishers.

## Appendices

### Appendix A: British Columbia First Peoples Principles of Learning

The British Columbia First Peoples Principles of Learning (British Columbia Ministry of Education, 2015) are:

- Learning ultimately supports the well-being of the self, the family, the community, the land and, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning involves recognizing the consequences of one's actions.
- Learning involves generational roles and responsibilities.
- Learning involves recognizing the consequences of one's actions.
- Learning involves generational roles and responsibilities.
- Learning recognizes the role of indigenous knowledge.
- Learning is embedded in memory, history, and story.
- Learning involves patience and time.
- Learning requires exploration of one's identity.
- Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations (p. 1).

## **Appendix B: Appreciative Inquiry, 4-D and 4-I Cycles**

Appreciative Inquiry uses the 4-D Cycle (e.g., ready for action) and the 4-I Cycle (e.g., ready for ideas) (Cooperrider et al, 2008; Reed, 2007, p. 32-33). The 4-D Cycle is:

- Discovery phase: appreciating what gives life; appreciate the best of what is
- Dreaming phase: envisioning what might be; identify what might be; envision results the world is calling
- Designing phase; determining what will be; identify what should be the ideal; co-construct the future and
- Delivery/Destiny phase; planning what will be; identify how to empower, learn, and improvise; sustain what gives life.

The 4-I Cycle is used when emphasis is placed on ideas rather than action. The 4-I Cycle (Reed, 2007, p. 34) is:

- Initiate: topic, focus, core group chosen
- Inquire: initial interviews and agenda developed
- Imagine: data collated, themes identified and provocative propositions developed and validated with as many team members as possible plus
- Innovate: plans developed, implemented and reviewed with further adaptation and debate ongoing.

## Appendix C: Letter of Invitation for Research Study



a place of mind  
THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Education, Okanagan Campus  
EME 3119 – 1137 Alumni Avenue  
Kelowna, BC Canada V1V 1V7

Tel: 250.807.9176 Fax: 250.807.8084

### Sustainability and Indigenous Worldviews Research Study

Principal Investigator: Dr. Carol Scarff, Faculty of Education, University of British Columbia Okanagan: Phone: 250-807-9177; email: [carol.scarff@ubc.ca](mailto:carol.scarff@ubc.ca)

Co-Investigator and Primary Contact: Candice Amber, Graduate Student, Interdisciplinary Studies-Faculty of Education, University of British Columbia Okanagan: Phone (Edmonton): 780-420-1218 (home); 780-920-2934 (cell); email: [caamber@telus.net](mailto:caamber@telus.net)

We would like to invite you to participate in a research study about sustainability and Indigenous worldviews. Indigenous worldviews may enhance current Eurocentric (Western) definitions of sustainability based upon an ethos of profit and commodity. Indigenous worldviews have the potential to reveal a different version of sustainability and education for sustainability. This is a qualitative research study that *celebrates* the first Indigenous Public Charter School in Canada called Mother Earth Childrens Charter School (MECCS) (K-9) and *their* Indigenous worldviews and Indigenous learners. The purpose of this study is to foreground and acknowledge the beauty of Indigenous worldviews and their notions of education for sustainability as practiced at Mother Earth Childrens Charter School (MECCS) (K-9).

The main research questions for this study are: How does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story or experience. How does this inform a sustainability ethos and mindset? Answers to these questions will provide an expanded notion of living well on the planet with oneself and each other. Each story and conversation from the interview process will celebrate what is best at MECCS and what might be even better in the near future. Data may support MECCS in advocating for better funding for school needs and more support for your unique charter and Indigenous worldviews. MECCS website describing traditional and contemporary worldviews (e.g., humility, honesty, respect, courage, wisdom, truth, love) will possibly be expanded from what is learned via data analysis.

Your involvement will entail 2 interviews for approximately 1 and ½ hours each (more or less) from October-December 2015 at the school site or at any other convenient venue of your choice. Interviews will be audio recorded with note taking or audio only or note taking only. Transcripts will be provided to each participant for changes or clarification. Data will be used in graduate thesis (dissertation) and publically available on the internet via cIRcle (UBC). All participants will be given a code name or number unless you prefer that your name be used. Storage of data long term will be held on a secure site at UBCOkanagan. Participants can withdraw at any time.

If you wish to participate in this research study and be interviewed, please contact directly Candice Amber (as above).

Thank you!

## Appendix D. Letter of Consent for Participant Interviews



a place of mind  
THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Education, Okanagan Campus  
EME 3119 – 1137 Alumni Avenue  
Kelowna, BC Canada V1V 1V7

Tel: 250.807.9176 Fax: 250.807.8084

Sustainability and Indigenous Worldviews Research Study

**Principal Investigator:** Dr. Carol Scarff, Faculty of Education, University of British Columbia Okanagan: Phone: 250-807-9177; email: [carol.scarff@ubc.ca](mailto:carol.scarff@ubc.ca)

**Co-Investigator and Primary Contact:** Candice Amber, Graduate Student, Interdisciplinary Studies-Faculty of Education, University of British Columbia Okanagan: Phone (Edmonton): 780-420-1218 (home); 780-920-2934 (cell); email: [caamber@telus.net](mailto:caamber@telus.net)

**Purpose:** This is a qualitative research study for a graduate thesis (dissertation) that celebrates the first Indigenous public charter school in Canada called Mother Earth Childrens Charter School (MECCS; K-9) and their Indigenous worldviews and Indigenous learners. The purpose of this study is to foreground and acknowledge the beauty of Indigenous worldviews and *their* notions of education for sustainability as practiced at MECCS. The main research questions for this study are: How does MECCS support Indigenous learners and Indigenous worldviews? Describe your best story or experience. How does this inform a sustainability ethos and mindset?

**Study Procedures:** Your involvement will entail 2 interviews for approximately 1 and ½ hours each (more or less). You will be asked to describe your best story or experience at MECCS and how this supports Indigenous learners and Indigenous worldviews. With your permission the interview will be audio recorded with note taking or audio recorded only or note taking only. Transcripts will be provided to each participant for accuracy, changes or clarifications. Interviews will occur at the school site or any other place you prefer. All participants will be given a code name or number unless you prefer that your name be used.

**Study Results:** The results of this study will be reported in a graduate thesis (dissertation) and may also be published in journal articles, books or future research projects. As thesis documents are published on cIRcle, this study will be publically available on the internet via cIRcle (UBC).

**Potential Risks of the Study:** There are no known potential risks. You have the choice to participate or withdraw at any time. If you withdraw, your responses will not be included. You do not have to answer any question if you do not want to.

**Potential Benefits of the Study:** This study uses Appreciative Inquiry method which focuses on strengths and the positive. Interviews will appreciate and value the best of what is and envision the best of what will be at MECCS. Interviews and stories from MECCS will honour and respect Indigenous worldviews and how each participant describes them and their experiences. Personal professional growth with participation in the research process itself

may occur. Participants recognize the best of their experiences to date and what might be even better in the near future at MECCS. Broader society may benefit from the example of MECCS. Data may support MECCS in advocating for better funding for school needs and more support for your unique charter and Indigenous worldviews. MECCS website describing traditional and contemporary worldview (e.g., humility, honesty, respect, courage, wisdom truth, love) will possibly be expanded from what is learned via data analysis.

**Confidentiality:** All hard copies of documents (including electronic files and transcriptions) and recordings will be identified only by code name or number; password protected, encrypted and kept in a locked filing cabinet at the primary contact and co-investigator's (Candice Amber) home during the study. After publication all items will be retained for a minimum of five years and locked in a password protected, encrypted secure filing cabinet of the Primary Investigator (Dr. Carol Scarff) on UBC Okanagan campus. You will not be identified by name in either the recording or the interview transcripts unless you want to or in any future reports of the completed study.

**Payment:** There is no payment for participation in this study.

**Contact for Information About This Study:** If you have any questions or desire further information with respect to this study, you may contact the researchers at the top of this form.

**Contact for Complaints:** If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research participant Complaint Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832. It is also possible to contact the Research Participant Complaint Line by email ([RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca)).

### **Consent/Signature:**

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw without consequences at any time. If you withdraw your interview data will not be included in the study. By signing this consent form and a copy (for your own records) indicates that you agree to participate in this study.

Subject Signature: \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Check off what you want:

1.  I agree that **both** an audio tape recording and note taking can be done in my interview.
2.  I agree that **only** an audio tape recording can be done in my interview.
3.  I agree that **only** note taking can be done in my interview.
4.  I agree to have my name used in this study.
5.  I do not want my name used in this study.