Shifting Environmental Education Towards Reconciliation Rooted in Land and Relationship

MEd Portfolio

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Lindsay Sargent

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Dr. Lisa Korteweg, Supervisor

Dr. Ellen Field, Committee Member

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CHAPTER 1: INTRODUCTION

This portfolio began as a response to my growing awareness that, as a settler environmental educator, I have been perpetuating colonial harms by teaching about Land from a purely colonial lens, while remaining ignorant to the perspectives and stories of Indigenous Peoples who have long standing, deep, interconnected relationships with this Land[1]. This realization first dawned into my consciousness about six years ago when I was working as a Forest School educator, facilitating experiential, child-centered learning programs in the outdoors. While I knew it was important to respectfully include Indigenous knowledges and stories in young children's environmental learning, as a non-Indigenous educator, I did not know how to bridge this gap. I had no connections with local Indigenous communities and remarkably, despite years of higher education including a Bachelor of Education, I had very little knowledge of local Indigenous histories, languages, culturally significant geographies or my own role in treaty relationships.

Several years later, I was hired as a teacher-educator, based on my professional experience as an outdoor educator, to instruct a nine-week Environmental Education course for preservice teachers at an Ontario university, well renowned for its commitment to environmental, outdoor, and experiential learning. The seeping realization of my own ignorance to Indigenous ways of knowing and connection with Land from several years prior, now sounded like loud rain in my consciousness, as I found myself in a position of authority, educating future educators about land relationships. I began to recognize the consequences of my own accumulated

[1] Land is capitalized to acknowledge Land as spiritual, emotional and relational, fundamental to place, both as a sentient being and a philosophical construct, an interplay of everything. Land, with a capital L, includes water, air, human, more-than-human, place, story, memory, consciousness (Styres, 2019). In the territory where I am, Land is *Aki.*

ignorance and the fear of my passing colonial biases onto these future educators and their students.

In my first semester of EE instruction, I began to deeply question my own story and connections with the Land on which I live and teach, revealing many gaps and cracks. Increasingly aware of a complicity in colonial harms and my lack of critical consciousness as an educator, I took up M.Ed. studies in hopes of (un)learning my epistemologies of ignorance and colonial logics of relations based on Indigenous erasure and disappearance (Schaefli et al., 2018) in order to (re)story and (re)member (Styres, 2019) my relationship with Land and Indigenous Peoples. And I begin this portfolio with a key story that led me to re(member) how to trust the journey of self-learning as I move across a bridge towards greater decolonial awareness and understanding.

Seeing the Bridge: An Introductory Story-Vignette

In the bright warmth of the spring forest, I hear a grouse beat its wings as I sit along the edge of a nameless creek in a quiet corner of the forest. This is my second visit to this place as part of my M.Ed. course in Indigenous Knowledges and Relational Pedagogies. I am here with the intention of deepening my relationship with Land; Land which I am coming to know as Indigenous Land and the traditional territory of the Anishinabek, specifically, the Chippewas of Rama, Beausoleil Island and Georgina Island First Nations.

Nearby, the creek water trickles, gurgles and swirls its way over rocks and logs, clearly enjoying its journey. I feel peaceful, warm, and content. I try introducing myself to the place. The words feel a bit strange, unfamiliar, coming out of my mouth. I am curious if the water remembers me from the last time I was here, or if the birds recognize me.

Through the early spring foliage, I notice a small bridge spanning the creek. I think it is a bridge, but I must move closer to see it well. I consider how people need to move, as when we move, we interact and learn with those around us.

As I move closer I see that, indeed, it is an old rickety, moss covered bridge with broken rungs, seemingly ready to let go and be taken into the creek. Still, here it is, clinging to the sides of both banks, hanging on, joining together distinct microworlds on either side. I wonder to myself who built this bridge and why? How did I not notice it last time I was here? How is this bridge a part of my story?

A De/colonizing Journey to Address my Misaligned Relationality

Inspired by the work of Madden (2019) and a desire to address my misaligned relationality to Land and Peoples of the Land, I embark on a de/colonizing[2] learning journey whereby I continually examine and address the colonial logics within EE teacher education and within my own life and practice. Throughout this self-documented journey of coming to know (and un/know) my relationship with Land, Indigenous Peoples and place in EE, I move myself from the familiar to the unfamiliar, trusting in an unsettling process as I go, seeking out stories of the Land, and honoring these stories in my teaching.

As an environmental educator who once self-identified as having a deep connection to land and the natural world, I take to heart the invitation put forth by Styres (2019):

[2] Following the lead of Madden (2019), I replace the term decolonization with de/colonization throughout this portfolio. This distinction is to draw attention to the incongruence and complexity of decolonization efforts within educational institutions. It denotes decolonization as not necessarily an opposite to colonization, but rather a constant re/examination of colonial logics within EE teacher education. I add to this, that 'de/colonization' is not a final, binary choice, rather it is an ongoing process. "Decolonization is not an and, it is an elsewhere" (Tuck & Yang, 2012, p.36)

> …those who want to live in deeply sacred and intimate relationship to Land must understand that it first and foremost requires a respectful and consistent acknowledgment of whose traditional lands we are on, a commitment to journeying—a seeking out and coming to an understanding of the stories and knowledges embedded in those lands, a conscious choosing to live in intimate, sacred, and storied relationships with those lands and not the least of which is an acknowledgment of the ways one is implicated in the networks and relations of power that comprise the tangled colonial history of the lands one is upon. (p.29)

I am committed to this journey and know in my heart that it is part rehab from settler-colonialism, part song to inspire harmony, part confessional to acknowledge harms, and part dream to envision education respectful of all treaty partners.

Learning How to be a Treaty Partner

The university campus where I teach is located on Williams Treaty Land, just across Lake Couchiching or *Gojijing* from Rama First Nation and *Mnjikaning*, place of the fish fence, where Indigenous peoples have gathered for over 5500 years to fish and trade (Peltier, 2021). Treaties, such as the Williams Treaty, govern relations between nations that are described as a sacred promise to live together, in respectful co-existence, sharing and caring for the Land together (Canadian Museum of Human Rights, 2024; Donald, 2022). However, Donald (2022) points to educational practices, dominated by a colonial worldview, as "something in the way" (para.4) that blocks opportunities to learn 'from' Indigenous peoples rather than 'about' them.

This portfolio represents my efforts of repairing treaty relationships as a de/colonizing learning journey to address my settler ignorance and onto-epistemologies as I come to know how to live and teach more ethically on the traditional territory of the Anishinabek near *Mnjikaning.*

As a settler teacher-educator engaging in a de/colonizing self-study, I position myself as learner and researcher who is trying to figure out who I am, where I come from and how to educate differently in EE by actioning my treaty promises of ethical relationality with the Chippewas of Rama First Nation and with Land.

Situating Myself

In a self-study learning journey, it is critical that I situate myself; however, I have only come to understand the importance of self-location by learning alongside Indigenous Peoples and engaging in my own critically self-reflexive work. By sharing who I am and where I come from, I lay the foundation of what I might know and not know, based on the experiences that have shaped my life, including the places in which I have spent time and the people with whom I have learned alongside. I situate myself to develop transparency in this research, so that readers may decide the relevance or connection of my de/colonizing story to their own.

I locate myself as a *settler*, one whose ancestors do not originate from where I currently reside, or from any part of so-called Canada[3]. The term *settler* is used to acknowledge my ancestors' and my own problematic participation in ongoing colonialism. My father's family emigrated from Northern Ireland six generations ago and my mother's family from Scotland and England, five generations ago. During the 1840s, my father's great-great-grandparents settled near Essa Township in southern Ontario, on the territory of the Ojibwe, Odawa and Potawatomi Nations and the traditional homeland of the Wendat peoples. This Land, both then and now, is covered by the Lake Simcoe-Nottawasaga Treaty, or Treaty 18, signed in 1818 between the

[3] I use the term so-called Canada occasionally in the portfolio as an attempt to disrupt the assumption that Canada is one nation state, whose people are governed by settler-colonial governments. Instead, I recognize how Canada is a collection of many sovereign Indigenous Nations on Turtle Island, engaged in treaty relationships and "replete with multiple layers of memories, each informing the other in diverse and entangled ways" (Styres, 2019, p.27).

Anishinabek and the British Crown. My mother's great-great-grandparents first settled in Dundas, Ontario on the traditional territory of the Erie, Neutral, Wendat, Haudenosaunee and Mississaugas. Then and now, this Land is covered by the Dish With One Spoon Wampum Belt Covenant, an agreement between the Haudenosaunee and Anishinabek to share and care for the Land around the Great Lakes. This territory is also covered by the Between the Lakes Treaty (No.3) of 1792, between the Mississaugas of the Credit First Nation and the British Crown.

My mother contends that I am likely the first in my family to learn of these treaty relationships in at least two generations and perhaps even further back (S. Corbett, personal communication, November 27, 2023). Neither my parents, nor my grandparents on either side, knew of treaty agreements or history, as this was not taught in the schools they attended or discussed in familial settings (S. Corbett, personal communication, November 27, 2023). It seems that over generations, it was conveniently forgotten that we live on Indigenous Land, though how this could ever become convenient is a crucial question and the nexus of my own learning.

I was born in Toronto, Ontario, the eldest of three children, but I did most of my 'growing up' in Aurora, Ontario, just north of Toronto/*Tkaronto*[4]. My primary language is English, the language spoken by my European ancestors but I also speak French, as my father, who learned to speak French fluently in university, encouraged me to attend French Immersion. Admittedly, I cannot speak more than a few words of Anishinaabemowin, the language of the Anishinabek, consequently, I cannot speak the language that is Indigenous to the place in which I

[4] Tkaronto is the Mohawk word meaning "where there are trees standing in the water". This place name originally referred to The Narrows between Lake Simcoe and Lake Couchiching, at *Mnjikaning*, and later it became associated with Toronto.

live, the language “that actions relationships, reciprocity and responsibility to the lands” (Chiblow & Meighan, 2022).

I have had many opportunities and privileges in life. My parents, both educators, provided me with a comfortable, emotionally stable life as a child, fostering a sense that the world was a good place where everyone had equal potential. And as a young adult, I was keen to explore and my parents encouraged me to follow that desire. So, at age nineteen, I spent four months in northern Thailand, working at an agricultural station as part of a co-op program. This experience shaped me significantly as I saw for the first time that the world beyond my home community was a very different place: I had to learn a new language in order to communicate my needs and emotions; I had to learn new cultural norms to relate politely and correctly with my Thai hosts; and I witnessed poverty first hand, rather than just hearing or reading about it.

Several years later I was in Peru, attempting to hike to the summit of Nevado Mismi, a mountain outside of Arequipa. My travelling companion and I met a young Quechua girl, tending sheep on the top of a sub peak near our destination. Over a shared lunch, she asked where we came from and where we were going. She thought we were scientists. I explained we came from Canada and that we were heading to the peak of Mismi. The young girl explained that she had never been to Mismi, only 5 km away from our lunch point, though her father had told her of this significant place. I was shocked to consider the fact that this young girl had never travelled more than 5 km away from her own home while here I was, a visitor thousands of kilometers away from my own home.

As if reading my mind, the young girl questioned how I could possibly be so far away from my own family. I could tell she was equally stunned by my circumstances as I was of hers, which stirred up perplexing tensions inside of me. I began to realize the extent of my privileged

position and questioned whether or not travelling was a ‘good’ thing. Eventually, I decided to head back home earlier than planned, likely as a result of this exchange.

Many years later, as a fifth/sixth generation ‘Canadian’, white settler woman, I am still reckoning with my unearned privileges and how I benefit from past and ongoing settler-colonial practices of entitlement to and extraction of resources from Indigenous Lands. I use the term ‘benefit’ pejoratively because although I, as a white settler, have benefited from power, wealth, health, and education, I have also been negatively implicated by settler-colonial systems. Resource extraction, relationship denial and cultivated ignorance have all been passed along as socialization and instilled through education systems, disrupting our connections with Land, Indigenous Peoples and the vital knowledges embedded within Land and place (Donald, 2022; Di Mascio, 2010; McCoy et al., 2020; Tuck & Yang, 2012).

I currently reside in Horseshoe Valley, Ontario, a small settler town, not far from where my maternal grandparents farmed in Phelpston, near the Nottawasaga River, and from where my paternal grandparents raised their family in Elmvale, along the Wye River. Both the Nottawasaga and Wye Rivers wind their way to Georgian Bay in Lake Huron. I live in Treaty 16 territory, the traditional territory of the Anishinabek, specifically the Ojibwe, Odawa and Potawatomi Nations, and the ancestral homeland of the Wendat peoples. And I am learning that Horseshoe Valley is the upper watershed of the Coldwater River, which also makes its way to Georgian Bay or *Mnidoo Gamii* and into Lake Huron or *Naadowewi-gichigami.* Through these waterways, I am learning of my connection to all those who have lived as part of these Lands before me and to all those who will live here after me. This feeling of interconnectedness broadens my environmental awareness and reminds me of my treaty responsibility to honour and maintain respectful and

reciprocal relations with Land, waterways and Indigenous Peoples in my EE teaching practice and personal life.

Having lived in the Horseshoe Valley area for less than a decade, I humbly acknowledge that I do not have a longstanding, deep relationship with the Land and waters where I teach, nor have I had many occasions to build relationships with local people, including the Chippewas of Rama First Nation, who hold deep relational connections with the Land and waters. I increasingly realize that I am an uninvited guest or a settler treaty partner who is trying to figure out how to live respectfully and relationally with the Anishinabek and Land.

In addition to being a teacher/learner, I am also a parent, a partner, a daughter, a sister, and a 'Canadian'. From within all these identities, I reflect on what is the right way to live, what is important, what is truthful, what is my story. Concepts that several years ago were sturdy in my consciousness have shifted; concepts such as the nature of science, government, nation, economy, settler-colonialism and modernity. I now sit in a place of unsettling myself (Regan, 2010) or personal upheaval as I begin to seriously question much of my current EuroWestern onto-epistemologies (Nxumalo & Cedillo, 2017) and the effect it has on others as I monitor my actions and language with greater critical awareness of their implicit settler-colonial assumptions.

My growing critical consciousness of how I am implicated in dysfunctional and unjust settler-colonial systems makes me feel challenged, vulnerable and shaky in my grounding of self and purpose. I now know I live on stolen Indigenous Land and that I have participated in an extractive, colonial education system that upholds the status quo by teaching all children Eurocentric languages (English and French), white culture and settler grammars (Calderón,

2014; Moodie & Patrick, 2017) or logics (Lloyd & Wolfe, 2016) that perpetuate ongoing settler-colonialism.

As a settler educator and treaty partner, I am committed to learning how to live and teach in respectful, reciprocal relations with the Chippewas of Rama First Nation and the significant place, *Mnjikaning*. I acknowledge this de/colonizing process as relational reparative work that has no endpoint and that it is intricately connected to how and what I teach. As I move towards reconciliatory praxis in my work as an EE teacher-educator and treaty partner, I deeply consider what I am prioritizing, perpetuating and presenting as valid knowledge. And I seek to create space for and recognize Indigenous ways of knowing and doing that have been so long ignored or erased in EE. Attempting to steer away from disrespecting or impeding Indigenous self-determination in education, I aim to centre and honour Indigenous knowledges and the People of this Land while still focusing on my own critical consciousness development. In this way, my portfolio study is an attempt to demonstrate and dwell in "ethical space" (Ermine, 2007, p. 193) where I can engage in respectful relationality with Indigenous Peoples, while holding distinct and diverse worldviews, opening doors to new thinking and understanding through activation of onto-epistemological space forged by our different histories, knowledge traditions and identities. Essentially, I am journeying to find a sturdier bridge between these distinct worlds in education.

Situating the Study

Shifting EE Towards Reconciliation Rooted in Land, Story and Relationships

Global socio-ecological challenges, such as climate change and biodiversity loss, are the result of capitalist settler-colonial systems, grounded in Eurocentric epistemologies and premised

on profit from the exploitation of Land (Andreotti, et al., 2023; Stein, 2019; Tuck & Yang, 2012). In contrast, Indigenous knowledge systems, while unique based on their local, cultural and linguistic contexts, hold common beliefs of Land as sentient relative, respected teacher and interdependent community (Kimmerer, 2013; McCoy et al., 2020; Styres, 2011). Despite these wholistic[5] onto-epistemologies, Indigenous relational knowledge systems have been largely denied and excluded from settler-colonial education systems, both historically and contemporarily (Bang et al., 2014; Donald, 2022; Simpson, 2014).

With the Truth & Reconciliation Commission's Calls to Action for education (2015b), many provincial governments are now urging educators to acknowledge their treaty responsibilities by teaching curriculum that is relevant and responsive to Indigenous children, addresses the truthful history of Canada, and integrates Indigenous ways of knowing more respectfully (Battiste, 2010; ETFO, 2020). However, most Canadian settler-educators are constrained by their own colonial K-12 education and have either significant ignorance to overcome (Godlewska et al., 2010; Schaefli et al., 2018) or limited capacity to implement pedagogies needed to address historical truths, include Indigenous ways of knowing and provide opportunities for students to develop stronger Land and treaty relations (Korteweg & Fiddler, 2018). Adding to this complexity, Indigenous scholars contend that public education and curriculum, including Environmental Education (EE), still reinforce Eurocentric epistemologies, underrepresent Indigenous relational worldviews and immerse children in a view of Land as inanimate resource for extraction rather than a wholistic web of reciprocal kinship relations (Bang et al., 2014; Battiste, 2013; Calderón, 2014; Simpson, 2014). These onto-epistemological

[5] My use of the spelling wholism, with a "w" throughout this portfolio is in purposeful recognition of Indigenous wholistic theory which "indicates whole as wholistic, complete, balanced and circular" (Absolon, 2020, p. 23).

clashes necessitate a transformation of EE as reconciliation rooted in Land, story and relationships: settler-educators working to shift towards decolonial, Land-focused pedagogies *alongside* Indigenous educators, Elders and Knowledge Keepers, to respond to the multiple, interrelated crises of climate change, biodiversity and habitat loss, water degradation and broken treaty promises.

The Environmental Education Context in Ontario

The primary goal outlined in the policy framework for Environmental Education (EE) in Ontario schools is that by the end of Grade 12, "students will acquire knowledge, skills, and perspectives that foster understanding of their fundamental connections to each other, to the world around them, and to all living things" (Ontario Ministry of Education, 2017, p.2). On the surface, this policy statement offers hope for the future, however, when it is unpacked using a critical lens, several key questions must be asked by EE educators including: Who is designing and delivering the K-12 EE curriculum? What knowledge, skills and perspectives about the world and all living things are passed on to students? How is knowledge about the fundamental connections to each other and to all living things being fostered? Whose voices are present in this knowledge building process and whose are missing? If voices are missing, what are the ramifications of these omissions for students and their relationship with the world they are intricately connected to?

In the Policy Framework for Environmental Education in Ontario Schools, *Acting Today, Shaping Tomorrow* (2009), the Ministry of Education views EE as a shared responsibility between learners, teachers, leaders and community members that should be woven throughout a child's learning in all elementary and secondary years, by integrating interdisciplinary, real-world, contextual inquiries that are locally relevant, culturally appropriate, and participatory

while building capacity for environmental stewardship. According to Bardecki & McCarthy (2020), EE is not flourishing in Ontario schools due to barriers such as lack of teacher awareness of the EE curriculum, lack of teacher confidence about teaching EE and fitting EE into an already overcrowded curriculum. They point to preservice education as one important step to bring and develop EE in schools and curriculum. On the other hand, Bang et al. (2014) contend that Place-based Education (PBE) and EE are "critical sites of struggle" (p. 3) as they typically reinforce a Western-Eurocentric epistemology, ontology and axiology by teaching constructions of place and nature that erase, ignore or avoid Indigenous Land, Peoples and ways of knowing.

Portfolio Purpose and Outline

The purpose of this portfolio is to examine how an EE preservice course can counter underlying settler colonial logics while reimagining EE that addresses both pressing Indigenous and environmental issues present in the world while enacting a more respectful treaty relationship with Land and Peoples. Inspired by the work of Stein (2019), I consider what kind of preservice education I can teach to prepare future educators and learners for imaginaries beyond current dominant colonial paradigms in environmental education and for un-learning my own teaching and perception away from "modern-colonial habits of being" (Stein, 2019, p.198). Following the advice of Styres (2019), I inquire into (re)learning and (re)storying relationships with Indigenous peoples and Lands as I come to know myself and my responsibilities as a settler teacher-educator. My autoethnographic inquiry begins with the central question: as a settler teacher-educator, how can I engage in personal and pedagogical de/colonizing to interrupt my own Eurocentric onto-epistemology of settler-colonial logics in EE while shifting towards respectful, reciprocal relationships with Indigenous Land and Peoples?

The portfolio starts with a literature review that explores the importance of centering Indigenous voice and relational, land-based pedagogies in EE (Bang et al., 2014; Simpson, 2014; Tuck et al., 2014; Wildcat et al., 2014;), as well as inquiring into how a settler-educator might participate in such a process by "peeling back the layers of denial [that I] have been taught to normalize" (Nahanee, n.d., p.1). Following the literature review, an autoethnographic analysis of my lived experiences while instructing an EE course for preservice teacher candidates is presented as I attempt to centre Land as teacher, emphasize contemporary Indigenous realities and respectfully include Indigenous Knowledges and pedagogies by working alongside Elders and Knowledge Keepers. The final task of the portfolio is to present a reimagined EE course outline for preservice teacher-educators with recommendations for highlighting Indigenous ways of coming to know, respecting and including Indigenous worldviews to contrast with Euro-Western worldviews, unsettling settler-colonial logics or grammars while inviting teachers into a collective approach to teaching-as-reconciliation (Korteweg & Fiddler, 2018) rooted in Land.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this literature review is to demonstrate what guides my thinking and planning as I reimagine pedagogies and curriculum for preservice teachers and teacher-educators in EE. Engaging in a review of relevant decolonial research written by both Indigenous and non-Indigenous authors, along with spending time on the Land with Indigenous Peoples and engaging directly in Indigenous pedagogies all inform my emerging EE praxis.

The first part of the literature review examines how EE has been a curricular site that can reinforce a Eurocentric epistemology, entrenching students in settler colonial logics of place, viewing Land as an inanimate commodity or resource-to-benefit-humans through extraction (Bang et al., 2014; Calderón, 2014; Donald, 2022). The second part of the review explores the importance of centering Indigenous voice and relational pedagogies that honour epistemic and ontological diversity to shift EE towards education-as-reconciliation where students are exposed to experiences and actions that "transform what have long been institutions of empire, power, and colonialism towards institutions of greater equity, stronger relationships, and committed justice with Indigenous peoples" (Korteweg & Fiddler, 2018, p. 271). Several decolonial frameworks designed for settler-educators are analyzed as I search for relevant supports to guide me, as a settler-educator, in the ongoing work of reimagining EE preservice education in a way that is respectful, reciprocal and responsive to Indigenous futures, preservice educators, all students and Land. Finally, I seek out a conceptual framework that aligns with local Anishinabek ways of knowing, as a meaning making tool to help me organize, analyze and interpret my auto-ethnographic experiences in a wholistic, relational manner.

Problematizing EE as Anthropocentrism that Reinforces Settler-Colonial Logics

This section explores the conceptualization of colonial logics that are embedded in most Western curriculum, including EE, and function to create a citizenry who will continue to uphold the dominant values of a settler-colonial society, including a view of land[6] as inanimate resource, the supremacy of Euro-Western knowledge, and the denial of existing interrelationships between humans and the more-than-human world.

Learning about land vs. Learning with Land

Leanne Simpson (2014), Indigenous scholar and advocate for Land education and Indigenous resurgence, outlines how government or state funded education is "primarily designed to produce communities of individuals willing to uphold settler colonialism" (p. 1). The author presents the Nishnaabeg story of Kwezens, a child who learns important lessons directly from the Land and from the wisdom of her family, to highlight how Land as pedagogy is an important element of Nishnaabeg education.

Contrasting Kwezens' Land-based learning with the curriculum that occurs in government-run schools, Simpson (2014) reveals stark differences. For example, Kwezens learns on her own terms in relationship with Land and family, without any need for credit from a school-based institution (Simpson, 2014). Kwezens is not forced to learn about Land by following pre-set rules and curriculum, rather she is able to choose what she wants to learn freely, and thus engage in it whole-heartedly *with* Land as respected teacher (Simpson, 2014).

In school-based settings, learning is often determined by curricular standards, large-sized classroom management strategies and a confined indoor environment. Students are taught to follow rules, accept what is being taught as essential to their learning success, and in some cases,

[6] 'land' is not capitalized to denote a purely geographical/resource-based understanding.

choose between their own cultural practices and those of the dominant Euro-Western culture (Simpson, 2014).

This same distinction of learning about Land vs. with Land is evident in Kimmerer's (2013) description of her first day at university where she was challenged by an instructor to leave her Indigenous relational, Land-based understandings aside and accept the dominant Euro-Western view of science as rational and objective. Kimmerer (2013) rejects this need to choose one knowledge system over another, noting that in doing so she would miss out on another way of knowing that would significantly add to her understanding of the world.

Indoctrination through Curriculum

Indoctrination into dominant Euro-Western knowledge systems occurs primarily through curriculum (Calderón, 2014; Donald, 2022; Simpson, 2014), such as the specific outcomes in the Ontario provincial curriculum that promote extractive, resource-based relations between humans (as consumers) and land (as profits). The following two examples of specific outcomes are from the grade 4 Social Studies curriculum that illustrate how students continue to be taught to view land primarily as resource to be extracted for economic gain:

> B.1.1 analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry (e.g., how the characteristics of the Canadian Shield made possible the development of mining and smelting, forestry, freshwater fisheries, pulp and paper…)

> B3.3 describe the four main economic sectors (i.e., the primary sector is resource based, the secondary sector is based on manufacturing and processing, the tertiary sector is service based, the quaternary sector is information based), and identify some industries that are commonly associated with each sector *(e.g.,* primary*: logging, fishing, mining;*

> secondary: *pulp and paper, car manufacturing;* tertiary: *banks, stores, transportation;* quaternary: *education, research and development)*. (Ontario Curriculum, 2023)

This wording is evidence of how the Ontario school curriculum still sets students up to view the environment or land as a resource to be extracted for human use and humans as separate to conquer or subjugate Land. Within these curricular outcomes, there is hardly any space for critical analysis. For example, the outcome B.1.1 is worded in such a way that the existence of specific landforms *implies* that industry and extraction should occur. The outcome B3.3 reinforces a view that the current economic sectors of Canada are fixed and finalized determinations, obliterating the idea that First Nations, Inuit and Métis peoples currently live on these Lands, have for millennia, and have/are participating in different systems of exchange and economic development.

And unfortunately, students in Ontario are still taught that EE or Land do not deserve a dedicated curriculum or set of learning expectations to emphasize its essential role. The document, *Environmental Education: Scope & Sequence* (2017), was created by the province to provide educators with examples of how to interweave EE topics across all curriculum areas in a variety of ways; however, in examining the document, it is evident that there is limited or no EE expectations in certain curricular areas and grades, while in other areas, such as Science and Social Studies/History/Geography, there are only a few more. Critically missing in this *Scope and Sequence* (2017) document is the fact that EE is not portrayed or conceptualized as learning with Land or alongside Indigenous Peoples, but rather focuses on showing educators how to connect EE to pre-existing government curricular outcomes that have been critiqued as anthropocentric, dominated by settler-colonial logics and ignorant of Indigenous perspectives (Gelineau et al., 2024).

Uncritical EE: A Neo-liberal Response to Environmental Crises and Relationship Denial

In Australia, another settler-occupied country, Belcher (2023) explores a similar problematic of school curriculums immersing students into Eurocentric epistemologies of Land (or Country) as owned by the nation state and "collapse[s] place and Country into the concept of environmental resource" to be evenly distributed globally (p.2). With sustainability being touted as a neo-liberal presumed good and as a benevolent global priority as stated by the UN Sustainable Development Goals, Belcher (2023) points out how educators are encouraged to take on the role of teaching climate change education as an urgent response to crisis, despite not knowing what it specifically involves and without undertaking a critical analysis of the colonial processes that shape climate change and sustainability issues. Belcher (2023) theorizes that quick, virtuous moves to sustainability education from a national and global standpoint, fail to recognize "the specific ways the logics of patriarchal white sovereignty result in harm" (p. 13) to Land, people and place, nor does it centralize Indigenous concerns, ways of knowing, or futures.

In contrast, Land-based education (Calderón, 2014) emphasizes the importance of naming ecologically and socially harmful colonial structures while facing and addressing the clashes that arise in contrast to relational, Indigenous, land-based systems. McGregor et al. (2020) agree, stating an Indigenous environmental justice approach is needed to address climate change and biodiversity loss as Indigenous Peoples have their own knowledge and justice systems that move beyond the human dimension and give agency to all relations (e.g. Land, water, air, animals, plants, rocks) in order to live well with the Earth.

Cree scholar Dwayne Donald (2022) emphasizes the colonial ideology of relationship denialism that remains embedded in education and that must be actively challenged and unlearned to build and bridge better relations. As an expert in the field of reimaging teacher

education, built upon a platform of Indigenous wisdom traditions, Donald (2022) deconstructs how settler-colonial education continues to focus predominantly on the mental aspect of human life, prioritizing Euro-Western conceptions of knowledge as the way to be a successful human/learner.

Korteweg & Fiddler (2018) explain that educators, and by extension teacher educators, hold core responsibilities for implementing changes to curriculum and teaching practices as called for in the Truth and Reconciliation Commission's Final Report. They assert that non-Indigenous preservice educators, who themselves have been widely educated in a system that prioritizes the maintenance of colonial ideologies as described by Donald (2022), then have limited capacities for imagining or facilitating a new story of education (Donald, 2021) or engaging in practices that teach accurate accounts of historical truths while "repair[ing] inherited colonial divides" (p. 53).

Responsibility to Include Epistemic and Ontological Diversity in EE

This section explores the responsibility of educators to resist the dominance of Euro-Western epistemology by building a critical decolonizing awareness that can respectfully center, celebrate and honour Indigenous Ways of Knowing in EE. This decolonial consciousness is important, especially in EE, as Indigenous Ways of Knowing, stories and pedagogies come from the Land (Styres, 2019; Simpson, 2014) and should not be detached, falsely presented or misconstrued from learning with or about Land for risk of replicating and perpetuating colonial harms (Bang et al., 2014, Brooks et al., 2023; Wildcat et al., 2014).

Building a Critical Awareness to Combat Eurocentric "ologies"

Indigenous scholars argue that science (Bang et al., 2014) and social studies (Sabzalian, 2019; Calderón, 2014) curricula are steeped in settler-colonialism as they reinforce Eurocentric

onto-epistemologies and begin with constructions that ignore or deny conceptions of Land that are Indigenous. As EE is mostly integrated into science and social studies curriculum (Ontario Ministry of Education, 2017, it too can be examined as a "site of critical struggle" (Bang et al., 2014, p.3) that continues to uphold Euro-Western knowledge of the natural world while erasing or devaluing Indigenous knowledges of Land (Brooks et al., 2023).

Bang et al. (2014) offer educators suggestions of how to combat this dominant Eurocentric epistemology by building a critical awareness of the embedded nature of language used in teaching situations, how to use Land as first teacher and how to listen to what local plants, waters, Land and places have to teach. Brooks et al. (2023) contend that outdoor and environmental educators must be sensitized to "the colonial terrain" (p.118) of outdoor and EE, offering workshops that help settler-educators critically analyze how Indigenous Peoples and Indigenous Knowledges are misrepresented, omitted, appropriated within their educational practices. In these workshops, EE and outdoor education educators learn alongside a team of Indigenous scholars to apply alternative curricular frameworks, and analyze how Indigenous perspectives and concepts can "complicate and enrich" their practice (p. 118).

Similarly, Korteweg & Fiddler (2018) discuss the process of developing non-Indigenous educators' capacities to engage in education-as-reconciliation by first decolonizing their teacher identities. The authors, one Anishinaabekwe and one Euro-white settler, found that non-Indigenous preservice teachers' settler-colonial complacencies and ignorance could be unsettled through facilitation of meaningful engagements with Indigenous Peoples in Indigenous contexts.

Indigenous Onto-epistemologies in EE: Land as Living Relative, Pedagogy and First Teacher

It is critical for all EE educators to recognize how education has been used as a divisive tool of colonization in Canada, both historically and contemporarily. Donald (2022) promotes

Indigenous wisdom teachings of kinship relationality as an antidote to the relationship denial of colonialism. These teachings emphasize how everyone is connected in networks of reciprocal relationships and how to act as a responsible, respectful relative with Land. Education needs to proceed through kinship connections, relational renewal and the unlearning of colonial ideologies into expressions of new knowledge that helps all people living on Turtle Island to better understand treaty relationships and honour other ways of knowing (Donald, 2022).

Furthermore, Donald (2023) expresses concerns that unlearning colonial ideologies in education is not progressing if students are encountering new information in the same way as that they already have from a purely intellectual, abstract or extractive sense or learning 'about' Indigenous Peoples and 'about' Land. Donald insists that there needs to be new ways of encountering and building knowledge, as well as structural changes so that knowledges are not deformed or manipulated by inserting them into pre-existing colonial systems. The notions of kinship relationships (Donald, 2022) and honoring a wholistic approach to learning that includes mind/body/emotion/spirit (Peltier, 2021) can bring about an altogether different relationship to Land, community, and knowledge rather than reproducing the head-based or intellectual methods that dominate even in EE (Ontario Ministry of Education, 2017). Indigenous pedagogies or more heart-based approaches can act to counter settler-colonial views of Land (Anderson et al., 2017) and honour more respectful kinship relationships. Most importantly, these wholistic Indigenous pedagogies in EE need to be led by, taught alongside and designed directly by Indigenous Peoples to avoid further implicating EE as racist curriculum, complicit in Indigenous erasure (Brooks et al., 2024).

McCoy et al. (2020) also contend that by restoring systems of Indigenous relationality in areas of governance, leadership and education, our global society can move towards living in

more respectful ways with the lands and with one another. The authors draw attention to the disproportionate harms caused to Black, Brown and Indigenous peoples and their lands by Covid-19, climate change, white supremacy, capitalism and colonialism. McCoy et. al. (2020) call for an immediate end to further harm against Black, Brown and Indigenous communities and homelands, as well as a revitalization of Indigenous education, governance, leadership and relationship to Land in order to move towards a vision that "ultimately focuses on life, that values and prioritizes the dignity and respect of all living beings" (para. 13).

The UNESCO Canadian Commission (2021) claims Indigenous land-based education (ILBE) goes beyond getting students learning outside as it merges important elements of language, geographies, stories, cosmologies, world views, land protection, rights, relationality, accountability and has a connection to reconciliation. This argument is supported by various Indigenous scholars, who share that ILBE is regional and tied to local languages and place names and looks different, depending on location (Bang et al., 2014; Simpson, 2014; Styres, 2011; Wildcat, 2014). Due to these 'differences', ILBE can be beneficial for all students, both Indigenous and non-Indigenous, creating "a new generation of Canadian citizens that have never been seen before by immersing them in a respect-based worldview of the land from their earliest days" (UNESCO, 2021, para. 38).

Land is centered as a respected teacher in Indigenous Land education and Indigenous knowledge is honoured by learning consensually through, with and for the Land, instead of on and about land for human benefit (Simpson, 2014; Styres, 2011). Simpson (2014) clarifies that this consensual relationship with Land must be fostered by going out in Land and engaging with it as context and curriculum, and also as process and pedagogy. Essentially, Land is the teacher, and everything is taught within the context of Land.

UNESCO (2021) calls upon educators to center Indigenous Land-based education, a way of teaching and learning that has existed since the beginning of human history, and to adapt it to the current Canadian context to address Land-based issues, including Indigenous Land rights, climate change and environmental degradation. However, as noted by Brooks et al., (2023), including Indigenous Land-based education and Indigenous pedagogies in EE and outdoor education, can complicate matters, especially when these approaches are misconstrued or appropriated by non-Indigenous educators who are steeped in white ignorance. Evidently, there is a gap in knowledge of how to center Indigenous perspectives, local land-based knowledges, and ways of knowing respectfully in EE.

Fulfilling Treaty Responsibilities and Responding to the TRC's Calls to Action

The central covenant of all treaties is to share and look after the Land together, Indigenous and settlers, so it is a central responsibility of EE educators to teach treaty and fulfill our treaty responsibilities to respect and live well together, Indigenous and settler, and with the Land (Battiste, 2010; Donald, 2022; ETFO, 2020; TRC, 2015b). Additionally, the TRC Calls to Action for education (#63) states that teaching needs to focus on building student capacity for intercultural understanding, empathy, and mutual respect, therefore, teachers themselves need to learn about treaty, Indigenous histories, Indigenous ways of knowing and the residential school system (TRC, 2015b).

To fulfill our legally binding treaty obligations of ensuring mutual rights and responsibilities to wellness, culturally appropriate education and self-determination of all parties involved in the treaty relationship (Queen's University, Faculty of Education, 2020), educators and teacher-educators must address Indigenous education and ways of knowing in their curriculum and practice. This mandate implies that all settler-teachers, including EE educators,

must take responsibility by continually striving to understand how they are implicated in de/colonization, the truths of Indigenous histories, and then education-as-reconciliation.

Honouring diverse ways of knowing to understand treaty obligations is theorized by Donald (2022) as an education that emphasizes kinship connections, relational renewal and the unlearning of colonial ideologies and that leads to expressions of new knowledge that will help all people and beings living on Turtle Island to find a more harmonious balance.

De/colonizing EE Curriculum as a Settler-Educator

Taking a de/colonial approach as a settler-educator is a complex task as it comes with the risk of re-enacting harms such as appropriation, extraction, erasure and detrimental 'helping' (Brooks et al., 2023; Nahanee, n.d.). Nahanee (n.d.) describes decolonizing as "an unencumbering of colonial narrative and impacts towards our best, actual, selves" (p. 14). As such, the aim of this section is to examine relevant literature to look at settler de/colonizing from both a settler perspective as well as an Indigenous perspective, to support the ongoing work of reimagining EE, specifically preservice educator EE, in a way that is respectful, reciprocal and responsive to Indigenous futures.

Settler Reckoning: Complicated yet Essential in De/colonizing EE

Writing from a place-based settler perspective, Greenwood (2019) asks if there is enough room in EE and academia in general, for people of all nations and cultures to engage in lifelong soul work to figure out who they are, where they come from, and how they relate, on a personal and political level, to the place where they find themselves. Battiste (2010) pushes even further than Greenwood, noting that settler-educators must be sensitized to the Eurocentric consciousness and colonial and neo-colonial educator mindsets and practices that continue to marginalize Indigenous students so that educators can unlearn their superiority myths and

understand how their privileges are shaped and strengthened in an anti-Indigenous racist society. Battiste (2010) encourages all educators to learn alongside Indigenous Peoples, valuing and respecting their unique knowledges, languages and relationships to their Land, while being careful not to appropriate these relational experiences to benefit themselves.

Ermine (National Center for Collaboration in Indigenous Education, n.d.) grapples with the notion that educational institutions have shaped humans to be lacking in knowledge about their own identities, including who they are, where they come from, who their ancestors are and their original languages. While Indigenous Peoples are often framed by Canadian society as poor or pitying given the harms they have endured through colonization, Ermine contends that the real loss or harm is that non-Indigenous people have been taught to erase their ancestral connections and memories of who they are. Questioning the attention that the academy gives to research on or about Indigenous Peoples and communities, Ermine proposes a shift or focus towards non-Indigenous peoples taking greater responsibility to relearn their identities of ancestral land and language connection before they can hold a meaningful dialogue with Indigenous Peoples regarding reconciliation (National Center for Collaboration in Indigenous Education, n.d.).

Settler Unlearning, (Re)membering and (Re)storying Land Relations

Many scholars discuss the value of settler educators (re)membering and (re)storying Land and their relationship with Land, while at the same time unlearning modern colonial ways of being that bring them out of relation with the world around them (Donald, 2022; De Oliveira, 2021; Stein, 2019, Styres, 2018). EE educators must stand alongside Indigenous Peoples in speaking back to manifest destinies (Calderón, 2014, p. 24) by honouring Indigenous Land, Ways of Knowing and troubling how “purposeful ignorance twists the historical realities and the ways colonialist ideologies become normalized with national discourses” (Styres, 2018, p. 32).

Learning alongside Indigenous Peoples and through Land education can help both EE settler educators and EE students unlearn, (re)member and (re)story their relationship with Land and consider environmental sustainability "not solely in ecological terms" as they ask "how their identities with place have been constructed and whose have been omitted in settler curricula" (Calderón, 2014, p. 33). Several concrete ways that EE educators can (re)member and (re)story Land include: telling stories in and of place (Styres, 2018), spending time in Land and places that induce (re)membering of Land as Indigenous storied place (Bang et. al., 2014; Twance, 2019), learning the meanings of Indigenous place names (Twance, 2019), being mindful of language and how it can act to produce and reproduce forms of oppression (Twance, 2019) ensuring concepts of place are informed by Indigenous Knowledge to make settler colonialism visible (Calderón, 2014; Twance, 2019) and to re-orient and transform the focus of environmental education towards Land education (Tuck, McCoy & Mackenzie, 2014).

The Medicine Wheel as a Conceptual Framework

According to Anishinaabekwe scholar and educator Nicole Bell (2014), in many Indigenous cultures, the Medicine Wheel framework contains all of the traditional teachings and can be used as a guide on any journey, including an educational learning journey. Essentially, the Medicine Wheel reflects Anishinaabek pedagogy (Bell, 2014), ontology and praxis in a concrete, visual way that aids with conceptualizing research (Mashford-Pringle & Shawanda, 2023). Similarly, Anishinaabekwe scholar Kathy Absolon, (2020), describes the Medicine Wheel as representative of Indigenous wholistic theory that is "whole, ecological, cyclical and relational" (p.76).

Although Medicine Wheel teachings differ across Nations, underlying meanings revolve around the importance of "appreciating and respecting the ongoing interconnectedness and

interrelatedness of all things" (Bell, 2014, p. 1). Additionally, the Medicine Wheel and four directions can be used to develop healing strategies, as they connect with all levels of being in the emotional, spiritual, physical and mental realms (Absolon, 2020). Considering its connection to both healing and learning, the Medicine Wheel provides a wholistic conceptual framework for organizing and meaning-making from lived experiences throughout a de/colonizing journey that involves ongoing, circular, reparative, relational work, learning and (un)learning. Using the Medicine Wheel as conceptual framework in a de/colonizing self-study affirms learning as a journeying process, not a destination, and honours connections within different qualities from each of the four quadrants (see Methodology section).

CHAPTER THREE: METHODOLOGY

Autoethnography: An Ongoing Personal and Pedagogical De/colonization Journey

"In order to take the leap into creating an autoethnography one has first to recognise that there is no distinction between doing research and living a life" (Muncey, 2010, p.19).

Following an autoethnographic methodology (Ellis et al., 2011), this inquiry focuses on my lived experiences as a settler-environmental educator engaged in the ongoing process of personal and pedagogical de/colonization (Madden, 2019) while simultaneously instructing EE courses for preservice educators. Autoethnography is a qualitative research method that "seeks to describe and systematically analyze personal experience in order to understand cultural experience" (Ellis et al., 2011, p.1). The cultural experience I am trying to understand is one of a teacher-researcher/settler-educator/treaty partner living and working on Indigenous Land, the traditional territory of the Anishinabek while working towards de/colonizing practices and pedagogies in EE.

By engaging in critically reflexive self-study, I gain insights from examining experiences throughout my learning journey as I work towards (re)storying and (re)membering my relationship to Land and Indigenous Peoples (Styres, 2019), de-centering Eurocentric onto-epistemologies in EE and centering Indigenous ways of knowing. Throughout this reflexive process, I build new knowledge as I navigate the joys, challenges, complexities and colonial blunders involved in engaging with different systems of knowledge and being, holding myself accountable to Indigenous Land and Peoples, enacting my treaty responsibilities and unlearning colonial logics of Land (Donald, 2012).

Autoethnography is suitable for this inquiry because it "acknowledges and accommodates subjectivity, emotionality, and the researcher's influence on research, rather than hiding from

these matters or assuming they don't exist" (Ellis et al., 2011, p.2). As such, I keep an ever-present eye on my own colonial mindset as I engage with new ideas, people, perspectives, stories, Land and places. Making myself the subject of inquiry, I lean into moments of uncertainty, tensions and 'colonial missteps', using these in a reflexive manner to reorient my action (praxis) and seek new understanding.

Autoethnography produces rich, descriptive research that can lead to uncovering meaningful, complex phenomena which can then contribute to developing ethics and understanding oneself in relation to others (Ellis et al., 2011). Using documented autoethnographic vignettes as storied research, I analyze and reflect on what I have lived or experienced, with a commitment to critical reflexivity, a willingness to examine my own colonial location and a desire to learn from my actions and relationships.

Storytelling as a Way of Coming to Know

The idea that "to every action there is a story" (Thomas King, 2003, p.15), suggests that storytelling is an active way to produce theory, knowledge and understanding that compels action; relating with and changing the world. The way stories are interpreted too, can change over time, as we listen to stories again and connect with them in different ways. This dynamic creates theory-building through storying that is an "ongoing process that links the concrete and the abstract, thinking and acting, aesthetics, and criticism" (Holman Jones, 2016, p.228).

Viewing stories as "living bodies of thought" (Pollock, as cited in Holman Jones, 2016, p. 228) and through the telling of my stories as lived-experiences, I hope to examine the intersection of theory and interpretive language, which is vital in re-imagining not only what I say, but also what I can be (Homan Jones, 2016). In this way, I strive to unsettle myself and shift

towards something re(membered), something re(storied) (Styres, 2019) as more consciously aware.

Narrative Vignettes: Relational Engagements Along my Learning Journey

As I reflected upon my teaching of these mandatory EE courses, engaging with the B.Ed. students, Indigenous Peoples, Land and places, I recorded experiences, thoughts, emotions, questions and intuitions in short journal entries. I then reviewed these journal entries or narrative vignettes, alongside relevant literature, looking for tensions, gaps in understanding, new awareness and growth as I aimed to gesture towards reimagining an EE course that honours Indigenous ways of knowing, speaks truth to colonial harms and challenges dominant Eurocentric epistemologies. The analysis of these documented lived experiences, or layered accounts (Ellis et al., 2011), occur in the contexts of my multiple positionalities as teacher-educator and researcher in university EE instruction, a Masters student studying Environmental and Sustainability Education (ESE), a settler-teacher engaged in enacting de/colonial praxis, and a parent working hard to role-model for my children our treaty responsibilities.

Ethical Considerations

This portfolio project did not require approval from a university Research Ethics Board (REB) as I am researching myself as the settler-educator subject. Nonetheless, as many of my documented personal experiences were in relation with others, I sought permission from anyone who was identifiable in the vignettes and who reviewed each description to ensure that I represented them accurately and appropriately. In this way, I attempt to center relationships and engage in ethical relationality as "an ecological understanding of human relationality that does not deny difference, but rather seeks to more deeply understand how our different histories, and experiences position us in relation to each other" (Donald, 2009, p.6).

In conclusion, the intentional use of autoethnography as method of inquiry highlights the importance of personal work, introspection and reflexivity involved in gesturing towards decolonial futures (Andreotti et al., 2023) as I re/story my life as settler-educator and treaty partner working towards ethical relationality with Indigenous Peoples and Lands.

Critically Reflexive, De/colonial Approach

Acknowledging who I am in this work and staying focused on a path of respectful relations, I have merged a de/colonial framework designed for settler-educators (Carlson, 2017) with autoethnographic methods. This dual approach to critically reflexive methodologies allows me to analyze my vignettes, looking for tensions, resonances and insights that can lead to new learning about how to live and teach EE on Indigenous Land, alongside Indigenous Peoples, in respectful and relational ways.

Carlson (2017), a white settler Canadian/American researcher in social work studies, designed a framework intended for use by white settler research communities to achieve "greater consistency between the content, process, and aims of scholarship seeking to disrupt settler colonialism" (p. 4). Carlson (2017) offers ways that settler scholars can reorient themselves towards relational, reciprocal, socially located, reflexive approaches that are accountable to Land and Indigenous communities in order to push back against entrenched settler-colonialism. I employ several principles from Carlson's (2017) framework to guide my de/colonizing praxis, including:

- resistance to subversion of settler colonialism,
- relational and epistemic accountability to Indigenous peoples,
- Land/Place engagement and accountability,
- reciprocity,
- social location and reflexivity, and
- wholism

Using De/colonial Guides for Settlers as a Handrail

Many scholars suggest the need for settler educators to become sensitized to the colonial underpinnings of the education system, as well as their own colonial thinking habits, in order to de/colonize their practice and learn reciprocally alongside Indigenous Peoples and Land (Battiste, 2013; Brooks et al., 2023; Carlson, 2017 Donald, 2022). As such, I engage various de/colonial guides designed for use by settlers as handrails to help me pay attention to the way colonial onto-epistemologies and curricula still shape my approach to EE teacher-education. These de/colonial guides help expose problematics as I organize, analyze and interpret my documented autoethnographic lived-experiences and make room for imagining new possibilities, inclusive of Indigenous values, concerns and ways of knowing in EE.

I use a workbook entitled *Developing Stamina for Decolonizing Higher Education: A Workbook for Non-Indigenous People*, to prepare myself to engage in the affective and relational challenges along my de/colonizing journey and to critically observe the systemic problematics of colonial thought, structures and institutions. The authors describe this preparatory process as "doing one's homework" (Stein et al., 2021, p.7) which is more involved than simply educating myself about Indigenous Peoples and colonization. Following this workbook throughout my de/colonizing journey prompts me to hold space for difficult conversations, face my complicity in the process of colonization whilst honouring and building relationships with Indigenous Peoples and Land.

Additionally, I used the guidebook produced and designed by Michelle Ta7taliya Nahanee (Squamish) (n.d.) as another decolonial tool to help me recognize that de/colonization is not someone else's job but rather everyone's job that must begin with an individual's identity work. Elements of this guidebook are extremely useful for educators who wish to embark on a

de/colonizing journey including how to differentiate helping from harming, and how to navigate stages of grieving one's complicity in settler-colonialism (Nahanee, n.d.).

Using Nahanee's (n.d.) guidebook as a handrail on the bridge to more respectful relations, I keep an eye out for my own unconscious biases or implicit beliefs, constantly asking myself why I believe what I believe and whose knowledge I am upholding. In alignment with a pedagogy of discomfort that emphasizes the need for educators to move outside their comfort zones (Boler, 1999; Zembylas & McGlynn, 2012), I go deeper into examining my own discomforts, siting with and using them as opportunities to "grow up and out of [my] presumed entitlements and exceptionalisms and into a sense of responsibility" (Stein et al., 2021, p.4) towards my treaty responsibilities and relations with Indigenous Peoples and Land.

Critical De/colonizing Questions for Environmental Educators

Including and building on the ongoing work of Stein et al., (2021), De Oliveira (2022) offers a series of questions for anyone interested in 'hospicing modernity' and shifting towards de/colonized futures. These questions can be adapted for by EE educators who are interested in orienting themselves towards a de/colonial praxis, as they ideate, plan, reflect on, implement and evaluate courses for preservice educators. I consider some of De Oliveira's (2022) questions as I figure out how to de/colonize my practice and teach EE differently, including:

- How can I engage students in creativity beyond the intellect?
- How can I model and encourage being open to what you can't or may never understand?
- How can I forget being either/or and be both or more?
- How can I make space for new forms of coexistence to be encountered by students?

- How can I relate beyond desires for coherence, purity and perfection? (p. 58-61)

In *Decolonize First*, Nahanee (n.d). offers another series of questions that I, as a settler-educator, can lean on when I feel as though I am slipping into denial of settler-colonialism, when I need to keep focused on this ongoing work, or when I notice a neocolonial moment of oppression. These critical questions include:

- What actions can I take that will not enact further harm?
- What can **I** do about it?
- What ideas do I need to unlearn, relearn or learn?
- What words need to be shared or stopped?
- Which impacts (of settler-colonialism) can I focus on transforming today? this year? (p. 5-14)

The Medicine Wheel as a Meaning-making Tool towards Enacting Praxis

In conversations with my Indigenous mentor about "moving from linear models to the interconnectedness of the circle" (Bell, 2014, para.10), I was inspired to align the autoethnographic research methods with local Anishinaabek ways of knowing that are embedded in the Land where I live and teach. Employing the Medicine Wheel to act as both a conceptual framework and reflexive tool, guides the analysis of my narrative vignettes in a more culturally responsive way as a treaty partner. While I acknowledge that I am not familiar with all the rings of teaching that exist within the Medicine Wheel (Bell, 2014, Absolon, 2020), my hope is to engage in it as a meaning-making tool, to help understand the interconnectedness and interrelatedness of my ideas, relationships, emotions and new knowledges as part of my de/colonizing learning journey.

I am deeply committed to respectfully approaching the Medicine Wheel as the central way of coming to know, alongside other qualitative research methods, in my study as a de/colonizing settler-educator/researcher. This combination of methods is intentional and purposeful to highlight local Indigenous genius, pedagogies, and knowledge systems while reframing myself (settler-educator) as a critical, humble ***learner*** of Indigenous Land and Peoples, which must be at the heart of Environmental Education.

With the Medicine Wheel as the guide for a decolonial analysis of my lived-experiences, I move away from more conventional research methods that follow linear paths of progression to desired outcomes. This unique blended methodology aligns with several of Carlson's (2017) principles of anti-colonial research methods for settlers, including resistance to subversion of settler colonialism, relational and epistemic accountability to Indigenous peoples and a focus on wholism.

CHAPTER FOUR: AUTOETHNOGRAPHIC FINDINGS THROUGH VIGNETTES

Representing my Learning Journey With Medicine Wheel Four Directions Teachings

I follow the Medicine Wheel as my meaning-making guide using "the gifts of each of the directions" (Cree Elder Michael Thrasher, as cited in Bell, 2014, para. 7) to help me to better understand the interconnectedness and interrelatedness of my visions, thoughts, relationships, emotions, knowledges and theories along my de/colonizing learning journey in EE and as a settler teacher-educator. Beginning in the East, I am offered the gift of vision, where I start to 'see' my lack of understanding of Indigenous histories, Ways of Knowing and local, Indigenous stories of Land. I start to form an awareness of the harmful impacts this longstanding ignorance and misaligned relationality has had on my ways of teaching, learning and relating. My vision here is to transform and expand my onto-epistemologies, as well as build relationships as treaty and reconciliation responsibilities that create a good life for myself and others.

Moving clockwise towards the South, I spend time relating with Indigenous community members on whose Land I live and teach, furthering my vision of (re)storying my relations and recognizing the importance of these relationships in de/colonial processes and knowledge building. I also start to relate differently with Land as I listen more intently to learn with it as first teacher (UNESCO, 2021). Through these relations, I build theory in connection with myself as settler, myself as responsible treaty partner, myself as complicit in and repairing colonial harms in curriculum as well as moving towards the possibility of "an elsewhere" (Tuck & Yang, 2012, p. 36) in education. I also spend time relating and reconnecting with my own life story and ancestors, alongside my daughters (see Appendix B) to bring this vision into a more reciprocal and deeper embodiment of ethical relationality.

In the West, I use the gift of reason to figure out how to respectfully engage Indigenous knowledge systems, alongside Western knowledge systems, in environmental education. Confronting and unlearning my own colonial habits of being, while acknowledging the colonial structures that I am working within, I try to reimagine and reconsider how to apply the new knowledges I have gained through visioning and relating.

In the North quadrant, I move towards actualizing my vision through re/storying my role as educator and sharing my vision with the students I teach in EE courses. Essentially, I express, action and embody my knowledge and responsibility by "wear[ing] [my] teachings" (Simpson & Manitowabi, 2013, p. 288), through passing them on to others.

East: Vignette of Vision, Awareness, 'Seeing' (February 2023)

I am one of eight students meeting at a lakeside park on a cold blustery day in February. The outing is co-organized by several members of the Faculty of Education who teach Social Studies and is part of a final celebration of learning involving numerous undergraduate students. In this group, I am a 'tag along' graduate student, hoping to learn more about the local area to support teaching Environmental Education in the same B.Ed. program.

We stand in a group circle and Gary, settler professor and one of the co-organizers, starts the session by asking us to share our name and our connection to the Land. I say something like "I am connected to this land as I grow food on it to nourish myself and my family and I like to spend time canoeing, hiking and biking through the forests and valleys near our home". Mskokii Kwe (Red Earth Woman), professor and co-organizer, states, "I am the Land". *Her statement immediately galvanizes my attention*[7].

[7] In the following vignettes, italicized sections are representative of my internal thoughts or dialogue, both in the moment and afterwards, as I interpret events, feelings, and tensions. They are meant as a visual signal to the reader that, in these moments, I am critically questioning my role and motives as I go through phases of grieving my complicity in settler-colonialism (Nahanee, n.d.)

We walk along the pathway as a group and stop on the point to look out across the grey waters of Lake Couchiching. We stop under a tree whose branches stretch out over the water and Mskokii Kwe points to Chief Island in the distance. She explains it is a spiritual place, an important burial ground. *I didn't know this basic fact and yet I have taught EE many times in this exact same park and yet I never learned this when I should have known!*

When we arrive at *Mnjikaning,* the place of the fish fence at the Narrows between Lake Simcoe and Lake Couchiching*,* the first thing I notice is the sign, located at the very end of the pathway, small and hidden from view by the gigantic highway bridge. On a blue background, and written in formal raised gold-lettering, is the colonial story of this place, captured in a short paragraph, with dates and references to early settlers. I have seen similar signs in parks and along roadways that I have sometimes stopped to read yet more times I have passed by. *How could a National Historic site be located beneath a highway? I've heard of this place, and yet I don't even know its exact location or its significance! I should know as I've driven over this spot numerous times!*

Mskokii Kwe sings to the water, sings to the fish, sings to the four directions and remembers the Grandmothers' water ceremonies. Tobacco is offered and cars rumble over our heads as the drum beat echoes off the concrete bridge. Ducks and swans gather to listen and I listen too, with a deep, growing respect and a sense of gratitude.

The spiritual connection Mskokii Kwe shares means so much more than is written on the sign and so much more than what I have read in my course material. There is an energy in this place that I can feel. *Could this be the spiritual energy of Indigenous Peoples from many ages of the nations who have gathered here, in this exact place, over millennia, to catch fish together, share stories and trade? Are the fish who pass through here every spring and fall, offering*

themselves to the People, part of this energy? Thank you Mskokii Kwe, thank you Grandmothers, thank you water, thank you Mnjikaning, for sharing this significant place with me.

I wonder how such a place, so significant to Rama First Nation and other Indigenous communities, could be buried beneath a highway bridge, squeezed out by marinas, docks, condominiums and boat traffic. I reckon with the fact that I taught multiple sections of the Environmental Education course and yet never shared the story of this place because I didn't know. *How could I have missed this?* I consider the possibility that I am as complicit as the highway builders and possibly as complicit as the sign creators. I also consider that although I have been learning about the importance of including Indigenous voices and stories to 'decolonize EE' in an MEd course, this is not my story to tell as this is not *my* place. How can I, a non-Indigenous EE educator, include a story of this significant place in a respectful way in my courses?

As we walk back along the top of the highway bridge, I stop and stare out over the water, imagining the ancient wooden stakes, planted deep in the muddy lake bottom, during the last 5000 years. This place, *Mnjikaning,* is an ingenious system involving community networking, sharing of resources, spiritual connection to place, sustainable harvesting practice and local engineering for catching fish. *This Indigenous place is a story of living in harmony with the Earth and it is* ***also*** *a story of settler-colonial dominance over Land and Place. As an EE instructor, I must learn more about this place as it should be talked about, instead of buried by colonial curriculum.* Mskokii Kwe tells me I should talk to her brother as he knows a lot about the Fish Fence and is a part of the Fish Fence Circle.

Arriving back at the park, we close with another sharing circle. Feeling much more grounded than when I first arrived, I thank Mskokii Kwe for sharing her stories, her songs and

teaching us about Mnjikaning. *Now that I know Mnjikaning, I feel compelled to teach the EE course in a different way. It's now my responsibility to figure out how to bring this story of place respectfully into my teaching. I can't just take, I have to give back too as I am learning this important knowledge. But what does a giving back look like exactly in EE?*

Gary offers a concluding thank you to the students in the group for coming out, adding that this group was the 'right' group, hinting that we were meant to be here together at this time. And I hear this salutation as a sign that I am on the right path. *Now it is my responsibility to continue this learning and bring it forward.*

Analysis of Eastern Vignette

This vignette, which takes place in the East, describes the awakening process I underwent as I engaged with Indigenous Peoples sharing Indigenous stories of Land and place; stories which act as counter stories (Madden, 2019) to those I was exposed to in school and continues as curriculum. Through experiencing these counter stories, in real time and embodied in place, rather than decontextualized through text, video, or academic discussion, I become aware of myself as occupying the position of perfect stranger to Indigenous Peoples and Indigenous histories (Dion, 2007). I consider the problematics of maintaining such a stance, especially as an environmental educator, including the potential consequences of replicating colonial violence through erasure of Indigenous presence (by omission) and teaching EE from a dominant, unilateral Eurocentric perspective.

While learning about the history of Land and Place with/alongside Indigenous Peoples disrupts my position and allows me 'to see' or envision a different way of being, I am still constrained by what I don't know and what I have (up until this point) refused to know (Dion, 2008). I still wrestle with the fear of offending and the fear of misrepresenting the stories of

others (Dion, 2008). And while I am acutely aware that there is a problem, I am uncertain and uncomfortable with acknowledging my own lack of knowledge, my own potential complicity in colonial harms, and my seemingly ambiguous role in Indigenous-settler relations. For example, my intuition is that the story of *Mnjikaning* needs to be a part of our BEd program's EE learning, but, as a settler-educator, I do not know how to make this inclusion happen respectfully.

Additionally, in this vignette, there are echoes of what Tuck & Yang (2012) describe as "settler moves to innocence" (p.9) as I tried to justify to myself why I cannot include Indigenous stories of Land and place in my EE teaching because they are not my stories to tell. It is within this critical moment that I am pushed to make a choice: either I continue teaching EE as status quo in a "perfect stranger position" (Higgins et al., 2015, p. 250), or I further explore the tensions between my own relationship denial (Donald, 2022) and the idea that I am ethically implicated in this story with an important decolonial role to play, even though I am uncertain on how to include it. My colonial educational upbringing has me accustomed to the idea that knowledge is security and power and by admitting that I am ignorant with a lot of learning and (un)learning to do, I feel quite vulnerable. I consider the advice put forth by the *Gesturing Towards Decolonial Futures Collective* to stop holding 'being' hostage to 'knowing' (Andreotti et al., 2023).

According to Nahanee's (n.d.) method in *Decolonize First*, a guidebook for peeling back the layers of colonialism, the first stage of the self-actualizing process of de/colonizing is one of denial. Being alongside Mskokii Kwe, who storied *Mnjikaning* as significant, spiritual place, and guided by my own "learning spirit" (Battiste, 2010, p. 14) in a consensual way, of my own free will and in my own time, I am pushed momentarily beyond grieving my complicity in settler-colonialism by refusing to acknowledge it, and moved to do some self-facing and critical thinking, with a vision of a new possibility. This vision came about as I paid attention to

Indigenous stories, noticing the contradictions and tensions that existed between dominant narratives and these stories. Experiencing relationship with Land, alongside Mskokii Kwe, in a respectful non-extractive manner (relational accountability) while simultaneously witnessing impacts of settler-colonialism including social inequities, biodiversity loss, and climate change, made the environmental and relational impacts of settler-colonialism visible and therefore, undeniable.

I relate with De Oliveira's (2021) notion that as a settler, I am living off and hanging on to expired settler-colonial stories because they give me a false sense of security and purpose. In the East, I become increasingly aware that I/we need a new story in education that avoids colonial ideologies of relationship denial in order to move towards respectful, reciprocal relations with Land and Indigenous peoples (Donald, 2021).

South: Vignette of Theory-building through Emotional Engagement, 'Relating' (May 2023)

I am part of a small group gathered in a Teaching Lodge high on a hill overlooking Lake Couchiching as part of a community visit in one of my M.Ed. courses. I am here with another graduate student and our Anishinaabekwe professor Mskokii Kwe, to learn alongside several local Knowledge Keepers. It is my first time in a teaching lodge. We learn of the true history of this traditional territory and what happened to the Indigenous Peoples as settlers arrived, breaking treaty promises and pushing Indigenous peoples off their homelands. We learn of violent attempts by settlers and government policies/laws to erase food systems, ceremonies, cultural ways of learning, and family kinship ties.

Two young Knowledge Keepers tell stories of Indigenous science and Anishinabek mariners who travelled far and wide. They tell of artefacts found at *Mnjikaning* from as far away

as Texas and of how their language, Anishinaabemowin, is tied to the land. A very passionate and clear story emerges of intelligent, strong, capable, and caring, spiritual people.

The stories these Knowledge Keepers share do not surprise me, although they do not line up with the ones I learned in public school or even during my undergraduate degree. As I sit in the Teaching Lodge, I realize that, deep down, I have known these truths for a long time; that intelligent, capable, caring Indigenous Peoples, the First Peoples of so-called Canada, were pushed out of their homelands by the British and French, by my ancestors. Up until now, I have ignored these truths, I have not faced them. I feel more angry than surprised. *How could this have happened? Did my ancestors participate knowingly in this attempted genocide? If I knew this truth, why had I gone along with the story of colonialism? Am I still perpetuating a similar violence through the education system? And if so, what can I do about it?*

It is clear to me that this Land is these Knowledge Keepers home, their place. These are their stories to tell about the animals, the lake and all their relations. I wonder how I can continue to teach Environmental Education in this territory, how I can teach about Land that is not my Land, not my story, not my place. I realize that I am an uninvited guest in this Land and feel the same discomforting feeling I did years ago when I experienced similar reservations about my legitimacy as a Forest School instructor, teaching young kids, some of whom were Indigenous, about the Land. *So, who am I here? This is not my place, something doesn't feel right about this… but where is my place?*

This Teaching Lodge feels like a safe learning space, so I speak up and ask a hard question, one that makes me feel quite vulnerable. With a trembling voice I say "So, how can I teach here? This is not my land. I do not know the land like you, I do not know the language of

this land, I do not know the stories of this land. I am just a guest here. What am I supposed to do? I haven't been to England, Scotland or Ireland. I've always lived here."

An Anishinaabekwe woman sitting across the lodge looks me straight in the eye. I feel her gaze so strongly as if a message is being placed straight into my heart. She tells me that indeed I am a guest here **and** I am meant to be here, that I **belong** here. However, she urges me to figure out how to live here with respect and reciprocity with the Land and the People of the Land. I feel a genuine gratitude towards this woman for telling me I belong. *It is my journey to understand how to live here in a good way. This is a life-long journey of building relationships.*

I learn how to introduce myself on this day, in Anishinaabemowin, who I am and where I come from. The Knowledge Keepers let us practice the new words until we can pronounce them fairly well. I say "Lindsay *nindizhinikaaz*, Horseshoe Valley *nindonjibaa"*.

I recognize that I am 47 years old and I just learned how to introduce myself respectfully in the language of this land. A first step I guess, one that involves both anger, frustration, guilt, but also hope and a sense that I am on the right path. *Why didn't I learn this at school? Why didn't I take it upon myself to undertake this journey earlier in life? I'm half way through my life and I have just begun this journey.*

We are invited to end the day down at the shores of Lake Couchiching/*Gojijing* by choosing a rock that calls to us; a grandfather rock, mishomis, from the lake, to help us remember the teachings from the teaching lodge. Rocks, we learn, have spirits and hold memories. This idea that a rock is a grandfather is new to me. Again, not the story I was told in school long ago. We were taught rocks are resources, rocks are inanimate objects, rocks are not alive. My own kids are taught at school that rocks are inanimate resources to this day.

But, I am learning that I am a guest here and I need to figure out how to live here in a respectful way alongside the Peoples of the Land, the Anishinaabek. **I am learning** mishomis is a grandfather, mishomis holds memories. *I will open my heart to these stories even though they are unfamiliar. I know in my heart these ways of being and thinking, although different from my own upbringing, are connected to me learning how to live and teach here in a different way, in a respectful way.*

As I stand on the rocky shore, removing my boots and socks, a mishomis calls to me. This mishomis is a far way out in the cold water. This mishomis is heavier than the rest; green, slippery, slimy, hard to get out with my hands. In my bare feet, on the rocky bottom, I stumble a bit getting this mishomis back to shore. In the moment, I think to myself of how this experience is a good reminder that this learning journey will not be easy; this journey of learning how to live here in a good way, alongside those who were here well before me; the water, the rocks, the four-legged, the winged ones, the crawlers, the trees, the plants, the spirits, the Anishinabek and all Indigenous Peoples of this Land. This journey won't be easy. In fact, it might be uncomfortable and mucky at times. I might stumble. But mishomis will sit with me and remind me to keep going.

Analysis of Southern Vignette

I analyze this vignette through the southern direction to describe the significance of relational engagements with Indigenous Peoples where Indigenous Ways of Knowing and Doing are prioritized, disrupting my colonial mindset and perfect stranger position (Dion, 2008; Higgins et al., 2015) and opening my heart to the possibilities of different ways of knowing and being through emotional understandings and holistic connections. Conversations like the one held in the Teaching Lodge create "ethical space", which is described by Ermine (2007) as the

theoretical space formed "when two societies, with disparate worldviews, are poised to engage each other" (p.193). Ermine (2007) contends that it is the thinking about diverse societies and the spaces in between them that can contribute to the development of more respectful dialogue between communities.

While this pivotal experience of relational engagement occurred in the context of a graduate course, it took place in an Indigenous community and within an Indigenous learning setting, undoing and subverting any residual colonial power relations. This setting created a "schismatic ambience" (Ermine, 2007, p.195) as Indigenous and Western worldviews collided at both physical and philosophical levels. This educational encounter allowed me to relate in a new way of being and as a new story. Through my emotional engagement in the Teaching Lodge, I came to know much more deeply and clearly as to who I am (a settler on Indigenous Land), how I belong here (in relation to the Land and Indigenous Peoples), and what my responsibilities are going forward (to foster respectful and reciprocal relationships).

On this one powerful day, I move through a continuum of grieving my complicity in settler-colonialism (Nahanee, n.d.), feeling angry at myself, my ancestors, and colonial educational institutions for creating and perpetuating divisive, racist, harmful practices and policies that prioritize one way of knowing and being. In the Teaching Lodge, on a hill high above the lake, alongside highly intelligent Indigenous Knowledge Keepers, I 'see' the world differently even though I am so close to my home, my family and my workplace. This moves me out of my comfort zone, into my stretch zone and then into my panic zone (de Oliveira, 2021), as I begin to recognize my complicity in settler-colonialism, but still without the capacity to understand my responsibility or relations within it (Nahanee, n.d.). I utter "bargaining statements" (Nahanee, n.d., p.10), representative of a stage of grieving where I try to shelter

myself from complicity by stating that I have only ever lived in Canada and that I cannot go back to Europe where I do not know my ancestral homelands of Scotland, Ireland and England. I do this disclaimer or become more confessional rather than investigate my own personal story as critical self-examination. This process brings forward a range of difficult emotions from anger, frustration, and fears of error or rejection.

It is the invitation to belong through honouring my relationships that moves me out of this bargaining stage, to the stage of acceptance, where I become aware of my inherent complicity in settler colonialism, as a settler living on Indigenous Land. However, as Nahanee (n.d.) suggests, acceptance does not mean settler colonialism is acceptable, rather it means I must try to stay in relation with this acceptance, acknowledging who I am and my responsibilities as a treaty partner.

As I spend time down at the lake and find mishomis as I grapple with my complacency. I know intuitively, through listening to the spirit inside me, that I must seek out and listen to these stories, repair and strengthen relationships, activate my strengths and gifts and commit to bringing about change. I can do this. I am determined, brave and intrepid. These are my gifts. That is why I waded out far into the cold water, instead of seeing a mishomis near the shore (S. Peltier, personal communication, November 21, 2024).

Here in the South, through various relational engagements such as personal Land experiences, berry picking, attending pow wows, author talks, Medicine Walks and Elder visits, I learn that relationships with Indigenous Peoples and Land are integral to my de/colonizing journey. Time for relating with my vision, alongside Indigenous Peoples and Land, is necessary as I consider new ideas, unlearn, explore tensions, and learn to question my own motives, ensuring I am not engaging in ‘helping’ behaviours that actually reproduce colonial harms, in EE

courses I instruct, or in my personal life (Nahanee, n.d.). It is this time spent relating with the Land and with People of the Land that, above all else, holds me accountable on this learning journey, helps me relate wider. Time and relational engagements in the South help me reconsider what and how I know, and how I might know differently (De Oliveira, 2021).

West: Vignette of Reason/Knowledge Building, 'Figuring out' (September 2024)

The students in my Environmental Education classes are scheduled to participate in a garden-based learning day at a Farm Lab and *Wiigwasitig Gitigaan* (Birch Tree Garden). On the same day as our classes, there is a Sweet Grass harvest taking place at the Medicine Wheel Teaching Garden, adjacent to the other gardens. The event, which is open to all, is being co-hosted by Student Wellness and members of a local Native Women's Group. The harvest overlaps one of our course time slots.

My educator mind immediately considers the possibility that the students and I could attend the harvest as part of our EE learning activities as it would complement our garden-based learning discussions by adding an Indigenous perspective to growing, harvesting and relationship with plants. I contemplate how there would be no need to create a new field trip waiver form because the harvest is taking place at the same location we were scheduled to visit. Then it occurs to me that we are a class of forty students and our large group will overwhelm the event and take away from the intimate learning experience of a smaller group. I also consider that once we arrive at the Sweet Grass harvest, it would not be respectful to leave part way through to continue our learning in the other gardens.

It is at this moment that I recognize how my colonial logics of learning in one class group and sticking to rigid timeframes can clash or complicate matters when it comes to seasonal, relational and wholistic learning! Yet, I know it is my responsibility to make space for

Indigenous perspectives, ways of knowing and relational learning. This Sweet Grass harvest event is taking place now because the Sweet Grass is ready **now** and the grandmothers are ready **now.** I know I must work through these complexities to offer this learning experience to all students, in a respectful and reciprocal way. The Sweet Grass harvest is just as valid as what we are learning in the other gardens, and to some students, this experience may be the pivotal step in their unlearning journey.

I explain the tricky situation to the preservice educators in all three of my EE course sections and invite those who wish to attend the Sweet Grass harvest to do so, in lieu of our garden-based learning in the Farm Lab and *Wiigwasitig* Garden, even though the event takes place outside some of their regular class times. Those students who participate in the Sweet Grass harvest will share their learning with the group afterwards and those who participate in the garden-based learning activities in the other gardens will share as well. I explain to students that this set of dual experiences will increase our overall collective learning. *And I reason that if they want to go, they will be there. Let's see how this goes. I am releasing control of the learning, passing it on to students, community members and the Land.*

Five students choose to participate in the Sweet Grass Harvest. One student checks in with me to see if it would be appropriate to bring in some food from their garden to share with the grandmothers who are leading the harvest. *Yes!*

In the other gardens, my co-instructor and I take a new approach to learning on this day as well. We do this in response to the large group numbers and to avoid direct teaching in such a vibrant outdoor 'classroom' full of possibilities. We invite students to form small groups with a peer "garden-guide" who has had personal experience or background knowledge of plants or gardening. The garden-guide's role is to support the small group as they tour the gardens and

direct their own mini inquiries. While exploring the gardens, students look for curriculum connections, sample different plants, record their inquiry questions and wonder about the challenges of garden-based learning.

During our knowledge building circle[8] afterwards, students who participated in the Sweet Grass harvest carefully and respectfully share their learning. They show us the braids they made, they explain the significance of the numbers of grass blades in each section and how to harvest Sweet Grass in a sustainable, good way. They talk of intergenerational learning, learning through conversation and gratitude for being welcomed and included in the harvest. Students who participated in the self-guided tour of the gardens also have a lot to share. They share observations, curiosities, learning from others, and how technology supported them in identifying plants. Many of these future educators are excited about the possibilities of garden-based learning because they collectively experienced how it integrates cross-curricular learning, life skills, and cultural learning. All groups report learning in the gardens, alongside others, supports mental, physical, emotional and spiritual learning. I share my reflections on our learning with students the following day using a metaphor of the *wiigwasitig* that once stood near the gardens at Lakehead, after whom the garden was named. *Learning from what the Land is teaching us. Teaching through story.*

I share with students that this birch tree that once stood near the gardens was dying and the university feared branches would fall on visitors to the gardens. The tree was harvested, a few years back, by members of several First Nations who shared teachings on how to use all

[8] Knowledge building circles are defined by Anderson et al., (2017) in *Natural Curiosities 2nd ed. A Resource for Educators: The Importance of Indigenous Perspectives in Children's Environmental Inquiry*, as a pedagogical structure designed "to facilitate the group exploration of emergent questions and ideas" (p.15). This collective knowledge building process is modeled throughout the EE course as a way to include the knowledge and ideas of all, to decenter the educator, and to support inquiry.

parts of the tree to make baskets, salves and food. At this time, someone explained that this birch tree likely died early because it was left to stand alone. Birch trees are not meant to stand alone. Birch trees like to live in groups, to support each other.

This birch tree at the garden reminds us of the importance of group learning, sharing our knowledge and gifts with one another, and that collectively we are stronger. Left to stand alone, with all other trees cleared to make room for a university and farm field, this birch tree's early death **also** serves as a reminder of the harms inflicted, through colonial violence, upon Indigenous Land and Indigenous Peoples through separation. Residential schools were used to separate Indigenous children from their families and the reserve system was used to separate Indigenous Peoples from their relationship with their traditional territories and Land. This separation caused grave, ongoing, intergenerational impacts. I remind future educators of their responsibility to create space for collective knowledge building, to work together towards environmental and social justice and to include multiple perspectives. *Let's remember the lessons learned from this birch tree. Do this work collectively by listening to each other, to your students, and to the Land.*

Analysis of Western Vignette

In this vignette, in the Western direction, I begin to 'figure out' what it means to be a treaty person and what responsibilities this role holds. I start to look within and find connections between myself, others, Land and the teachings I received. I reconsider the recommendations of Indigenous scholars such as Battiste (2010), who said years ago, that educators must be sensitized to Eurocentric consciousness, neocolonial practices that marginalize Land and Indigenous students, and unlearn their superiority myths.

I now *know* that I too need to deconstruct the pedagogies and curriculum of the EE course that I instruct and reconstruct them in a way that creates space for Indigenous ways of knowing and Indigenous ways of learning. From a pedagogical standpoint, this knowledge is the result of the vision I had in the Eastern Direction of the Medicine Wheel, of a new story and a different way of being, as well as the time I spent relating with this vision, alongside Indigenous Peoples and Land, in the Southern quadrant.

This garden vignette illustrates how I am beginning to figure out ways of learning that align with Indigenous pedagogies which inherently recognize the holistic nature of knowledge as it is intertwined with mind, body, emotions, and spirit (Brunette-Debassige, 2018). In the gardens students are encouraged to learn in multiple ways that activate embodied learning; through Land, relationships, Indigenous-led Land-based activities, story and sharing. A strong focus is placed on giving back, or sharing knowledge with the collective, which is also an important aspect of Indigenous ways of knowing (Brunette-Debassige, 2018). Additionally, this collective approach to sharing our knowledge and understandings of garden-based learning from both a Euro-western gardening/scientific lens and a local Indigenous cultural lens, supports the idea of Two Eyed seeing in EE (Marshall, 2012).

This vignette also exemplifies the challenges involved in de/colonizing pedagogies and practices while still unpacking my own colonial baggage and working within a colonial institution. For instance, I wrestle with neo colonial structures of timeframes, pre-constructed syllabi, ‘permission’ to engage in off campus learning, ‘standardization’ of everyone learning the same thing, which clash with Indigenous pedagogies that prioritize relationships, Land-based learning and reciprocity. Simultaneously, I negotiate my own preconceptions of teaching and learning, reframing these as inadequate for teaching EE as a settler educator on Indigenous

Lands, echoing Madden's (2019) notion that de/colonizing is often portrayed erroneously as a homogenous mixture of colonizing and decolonizing.

This vignette exemplifies my growing knowledge that despite my position as educator, despite my involvement in a colonial university, despite my ongoing, unfinished de/colonizing journey, and by default my ongoing complicity in settler-colonialism, I still must do my utmost to honour Indigenous Peoples whose Land I am living and working on as a treaty partner. This is my responsibility as a settler educator in order to meet my treaty obligations of looking after one another's children as if they were my own. It is my job to navigate the complexities, the emotional tensions, as I work to figure out how to do things differently.

North: Vignette of Movement/Embodying Learning, 'Expressing'

I have a loose intention in mind as I set out to spend time with/on the Land. I want to explore the idea of consent and how it can be applied to my life and to education. When I arrive at the pond where I plan to spend time, a beaver approaches and swims back and forth about twenty feet from the shoreline where I stand. Soon, this beaver is joined by two more beavers, who swim about, circling in what almost appears to be a dance. I have seen these beavers here before, but from a much greater distance. Today, it seems as though these beavers want to interact with me as they come up close but do not slap their tails. I speak with these beavers, say hello and introduce myself and the relationship seems consensual.

Wondering more about beavers, I happen upon a recorded lecture by Leanne Betasamosake Simpson (Centres for Literatures in Canada, 2020) that explains how in an Anishinaabe worldview, *Amikwag* (beavers*)* "embody the politics and ethical practices of wisdom" (36:27). Simpson describes how beavers work with water, plant and animal nations in diplomatic, consensual ways to create shared worlds.

As I set out with an intention to learn about consent in education on the Land, the beavers presented themselves, causing a cascade of learning to unfold for me, at an opportune time that symbolizes what *is* consent in education. I am ready. I had an intention to learn, my heart was open to learning and I found new knowledge. Now, I know I must share this knowledge with others.

Learning from the beaver's wisdom, I believe that I need to take action in the courses I teach, to build dams that resist the flow or reproduction of colonial systems and habits of being while building new spaces for renewal, generative knowledge, greater diversity, improved interrelationships, and more possibility. I must learn from the beavers how to do this in a consensual way, without overly imposing myself, my goals, my life path, onto the life path of others. For example, beavers take, but give far, far more. Beavers not only resists the flow of water, but also create new worlds. *Resisting **and** creating is what I need to do in my teaching.*

I (re)story my learning alongside the beavers and share this personal narrative with students in my classes, including how I learned to listen to Land by learning alongside my mentor and reading publications authored by Indigenous Peoples. I explain my role as an EE educator is not to focus on teaching mere content from government issued curriculum, but rather to listen, respond and create enlivened space for the diversity of knowledges, experiences and life to emerge. I model for future educators how to work through the discomforts of stepping away from a status quo and familiar structure of education and teaching methods to imagine offering more and new ways.

The students listen and look at me with questioning eyes and respond largely with silence. In this moment, I recognize that they too are somewhere along this de/colonial journey; perhaps in the stage of denial or grief, perhaps as perfect strangers to Indigenous Peoples and

histories, perhaps as a person of Indigenous ancestry personally impacted by colonialism, or perhaps as a settler, like me, uncomfortable with the way things are and trying to envision a new way. We are all different people in different places along our journeys. I must teach through sharing my story while honouring the stories of others.

Analysis of Northern Vignette

In this vignette I move into the movement phase of the North where I gather the knowledge I gained from all directions and enact that knowledge, essentially embodying my learning through modelling it in my teaching. In the words of Elder Edna Manitowabi, I "wear [my] teachings" (Simpson & Manitowabi, 2013, p.288). I can't go back to my old ways of teaching, as these new ways are now a part of me, I have built a relationship with them in all four directions. This type of learning would not have happened if I had just read about it in a book, or listened to others talk about it. I needed to personally experience all stages of this learning journey, through the Medicine Wheel Directions, in order to live it. As noted by Bell (2014), this form of praxis brings about balance and honours fundamental concepts of wholeness, interrelationship, inter-connectedness and respect.

In this vignette, I clearly relate with Land in a much different way than I did earlier in my learning journey. I see Land, including the *Amik* (Beaver), as a teacher. I look to them for guidance, both spiritually and intellectually. I acknowledge there is purpose to the way life unfolds and it is up to me to 'read' the Land and engage in "worlding the world" (De Oliveira, 2021, p.45) by storying in a way that creates movement.

In my teaching practice, as I design tasks, assignments and syllabi I continually ask myself what is being prioritized, perpetuated and presented to students as 'valued' ways of knowing. I place value and recognition on multiple ways of knowing and doing and locate

myself as a settler educator on Indigenous Lands, trying to honour my relationships. I *also* try to honour each student's own life story, choices and interests and work collaboratively to create space for new knowledges to emerge.

Following the wisdom traditions of the Medicine Wheel framework, it is clear that the gift of vision in the East helps me to 'see' the possibility of a new story. The gift of time in the South is actioned as I relate with Land and with Indigenous Peoples. I engage the gift of reason in the West to *figure out* how to decenter myself as "teacher" and respectfully include Land, Indigenous Elders and Knowledge Keepers as valued teachers in my EE courses "where and when it resonates" (S. Peltier, personal communication, October 19, 2024). Viewing the Medicine Wheel as a whole, I need knowledges from each part of the whole or a relationship with each part of the whole, to create the movement required in the northern direction to enact my vision of a new story that "gestures towards a decolonial future" (Andreotti et al., 2023).

While this vignette is just one example of how I try to (re)story myself as a settler Environmental Educator living and teaching on Indigenous Land there are other examples where I enact my learning from each of the Directions while instructing the EE course. For example, I include my own personal stories, sharing knowledge in a subjective way, while at the same time locating myself and my identity in connection to Land. I remain curious and critical of language and how it can be used to communicate, but also be oppressive of other ways of knowing. I push against colonial constraints, quick moves towards global sustainability solutions (Belcher, 2023) and institutional administrative barriers, highlighting to preservice educators how and why I am doing this, to include learning opportunities that are experiential, personal, iterative, emergent and relationally and epistemically accountable to Indigenous Peoples (Carlson, 2017). I look for

opportunities to centre Elders, Knowledge Keepers and Land as teachers who are distinct from, but just as valued, as academic instructors.

Most importantly, I admit to students that I do not know, I do not have all the answers, as I mess up, make mistakes and even commit colonial blunders in efforts to un- and re-learn. I offer students “the gifts of my failures”, as I try to “co-sense with radical tenderness" and “be open to what I can’t and may never understand” (De Oliveira, 2021, p. 59).

CHAPTER FIVE: IMPLICATIONS FOR EE AND ENVISIONING THE FUTURE

"*Decolonizing is a lot like the word healing, it is different for everybody every day, there is no final end point, and it's not easy*" (Nahanee, n.d. p.2).

"*If it was easy, everyone would be doing it*" (S. M. Peltier, personal communication, October 19, 2024).

The following chapter outlines the challenges and implications of implementing de/colonial practices and pedagogies in EE, based on my analysis of lived-experience as an EE course instructor over the past few years. Facing these challenges will require ongoing, reflexive work, collective emotional stamina, and a commitment to working alongside each other: Non-Indigenous and Indigenous Peoples and Land, in reciprocal relationship. It is my hope these reflections and recommendations will provide a starting point for future visioning in EE courses within any Faculty of Education.

Emotionally Challenging, Ongoing, Unfinishable Work

Embarking on a de/colonial journey as a settler-educator is challenging. It not only involves the intellectual rigour I am accustomed to from spending time in colonial educational contexts, it also requires affective work and relational work, which is less familiar (Stein et al., 2021). The affective work includes reflecting and analyzing personal responses to tensions, conflicts, vulnerabilities and uncertainties that come up when distinct worldviews meet in de/colonization efforts. As a settler-educator, this relational work involves mending broken relationships with Indigenous Peoples and Land by spending time listening, acknowledging the pain and harm resulting from these broken relationships and working towards trust, respect, reciprocity and consent (Stein et al., 2021).

Challenging Colonial Urges for Progress, Success (and Dopamine Fixes)

Although this journey to de/colonize my personal and pedagogical practices in EE is part of my Masters portfolio, I recognized it is incomplete and unfinishable. This stands as counter-intuitive to my learned colonial urges for progress, perfection, success and completion. According to De Oliveira (2021), dopamine is a chemical that surges through the body when a task is completed, or something has been mastered/dominated. Colonial education systems promote student engagement in this dopamine driven economy when they focus on linear tasks with endpoints, grades as achievement, competition over collaboration, and product over process.

Reflecting on my own journey thus far, I am well aware of the dopamine fixes I get when I receive a good grade, positive feedback from students in my courses, and make changes that 'appear' to be progressing towards de/colonizing my personal life and educational practice. I must learn how to resist these desires for completion, achievement and success and instead focus on the journey itself, attending to respectful, reciprocal relationships with Land and all people. Maintaining 'good relations' is not fishable work. It is ongoing, reflective, analytic, challenging work that de-centres 'self' and centres 'self as part of the collective' or 'self in relation to others'. This work not only affects how and what I teach in EE courses, it also extends into my personal life, relationships and ways of being. It involves asking critical questions such as:

- Who am I? Where do I come from? How did I get here?
- Whose Land and traditional territory am I on?
- What are my relational roles and responsibilities here?
- How can I live here in a good way?

Complexities of De/colonizing University EE

It is a tricky balancing act to introduce preservice educators to an Environmental Education framework that "gestures towards a decolonial future" (Stein et al., 2021) in a very short, nine-week course. An EE framework should reflect and promote learning that is locally relevant, interdisciplinary, culturally appropriate, curiosity-driven and foster community-based decision-making and stewardship (Ontario Ministry of Education, 2009; Anderson et al., 2017). Additionally, from a critical standpoint, an EE framework must address the fact that many socio-ecological challenges, such as climate change and biodiversity loss, are a direct result of extractive, settler-colonial systems (Stein, 2019; Bang et al., 2014). These systems, including education, work to exploit land, harm relationships and erase, misrepresent, or underrepresent Indigenous knowledge systems (Calderón, 2014; Simpson, 2014; Yankaporta, 2020).

An EE framework must also "be answerable" (Patel, 2014, as cited in Brooks et al., 2023 p. 114) to the TRC Calls to Action and Indigenous and non-Indigenous scholars who insist EE is fraught with Eurocentric epistemologies and "settler-traditions of place", calling for respectfully integrating Indigenous Ways of Knowing and relational pedagogies in EE (Seawright, 2014; Brooks et al., 2023; Styres, Haig & Blimkie, 2013; Scully, 2020).

EE also encompasses climate change education (CCE); however, Stein (2019) argues that CCE does not often include a decolonial analysis that emphasises coloniality as the root cause of the climate crisis. Translating these complex and at times contradictory theories into relatable, engaging, critical place-based experiences for preservice teachers to then build upon as EE practices in schools, adds to the significant complexity of instructing this EE course.

Implications of Ignoring De/colonization in EE

Stein (2019) argues that the dominant modern-colonial worldview is both ethically harmful and ecologically unsustainable, as it is based on the denial of our interconnectedness and

the ongoing racialized exploitation of labour, land, and natural resources. To effectively address climate change through CCE and EE, we must first reconsider how people relate to the land and to one another. Solely promoting action-based, science-driven, or 'transformational learning' in EE without confronting the settler-colonial structures and habits of being that underlie climate change and other environmental and social injustices is similar to the critique raised by Tuck and Yang (2012) in their assertion that decolonization is not a metaphor. If EE and CCE are used as tools to bring about environmental change in schools, institutions, and societies, yet fail to meaningfully challenge harms done to Indigenous communities and Land, or address extractive, relationship-severing nature of settler-colonialism, they risk engaging in what Tuck and Yang describe as a "moves to innocence" (2012, p. 9). This 'move' seeks to absolve individuals or institutions of guilt and responsibility without addressing the root causes of colonial harm, such as relinquishing land, power, privilege, or participation in colonial systems that provide comfort and a sense of settled-ness. Essentially, shifting EE, inclusive of CCE, towards de/colonization should be disruptive and uncomfortable as "it implicates and unsettles everyone" (Tuck & Yang, 2012, p.7).

Meeting Preservice Educators Where They are at

It is important to consider that most preservice educators in the BEd program and EE course start with a cultivated ignorance of Indigenous cultures and realities perpetuated through their own education (Godlewska et al., 2010) and have had little to no experience with deconstructing their deeply personal worldview or stretching their educational imaginations that this type of teaching and learning entails. Furthermore, many preservice teachers have limited experiences or relationship with Land and often face emotional and physical barriers to outdoor learning (Sargent & Chambers, in press; Oberle et al., 2021). Compounding this set of realities,

many preservice teachers as young people have high levels of climate anxiety as well as multiple knowledge gaps related to climate change (Field et al., 2023; Galaway & Field, 2023). Educators in the field know from working with even the youngest of learners, that if someone is not ready to learn a concept or skill, then it is often very difficult to teach it. Unlearning can be an equally difficult and time-consuming process for learners who have been schooled for K-16+ years, marinated in Eurocentric colonial thinking (Battiste, 2013).

In the EE course, preservice teachers are challenged to unlearn some of the 'truths' and pedagogies they were taught or experienced as K-12 students, as well as acknowledge that there is still much, much learning they have yet to do about who they are, where they come from and their responsibilities in the Lands and places where they will teach. Through epistemic ignorance and/or a lack of exposure to decolonizing education (Rice et al., 2022), preservice teachers may have limited knowledge or awareness of colonial harms that have taken or continue to take place upon these Lands; harms that disrupt Indigenous connections to traditional territories, governance systems, food systems, ancestral burial grounds, education systems, stories, languages and kinship (Bang et al., 2014; Klein, 2019). Learning about these harms, especially for the first time, can evoke tensions and emotional responses ranging from denial, anger, bargaining, and grief (Nahanee, n.d.).

Preparing preservice educators to approach de/colonizing pedagogies of Land and place in EE with humility, respect and wonder is critical. I try to role-model these affective states in an attempt to create a safe, comfortable and open learning environment where students can share their questions, feelings, concerns, ideas, and personal stories. According to Bell (2020), all education, including EE, must engage hearts, minds, bodies and spirits. Centering Indigenous relational pedagogies, such as storytelling, collective knowledge building, reciprocal sharing or

‘give backs’, as integrated learning in community and with Land, will help to bring about this wholistic, balanced learning.

Additionally, I share with preservice teachers that this pedagogy is unfinishable work, and humbly acknowledge how I will be constantly unlearning, relearning and learning alongside Indigenous Peoples and Land, moving towards respectful relations and bringing about balance. I look to Battiste’s (2013) description of the power of people's learning spirits for hope, as well as the healing powers of Land, to move us beyond conventional or entrenched colonial pedagogies, standardized curriculums and our own fears of struggling how to know, how to be and how to relate in/with this Land.

With these complexities in mind, I find it helpful to think of the EE course as just a moment in the learning journey of each preservice teacher and hope they may find a point of resonance that they can build on, as they encounter similar relational complexities of Land, people and place in other courses. As such, any EE course that shifts towards de/colonization should connect with and build upon other likeminded courses in the B.Ed. program for greatest impact, such as Indigenous Education, and those Curriculum and Instruction (C&I) courses that could ‘naturally’ address Indigenous and EE content such as Social Studies, History, Geography and Science/Technology.

Un/settling With Affective Learning Experiences in EE

According to Rice et al. (2022), theories of epistemic ignorance amongst settler-educators can only partially explain how distortions and omissions in knowledge systems, such as the historical erasure of Indigenous Peoples and Land, arise. Knowledge and ignorance are not only related to people’s cognition, but are also connected to their emotions and their affective experiences (Rice et al., 2022; Schmitz & Ahmed, 2014). This relationship is evident in my own

experience working through the four quadrants of the Medicine Wheel and is echoed in my mentor's encouragement to "slow down to feel, as this type of work creates great knowing" (S. Peltier, personal communication, November 21, 2024).

I contend, that in a short nine-week EE course for preservice teachers, it is through affective learning engagements with Land and alongside Indigenous Peoples, that preservice teachers might begin to dislodge colonial habits of being and untie "the epidemiological knot of settler ignorance and resistance" (Rice et al., 2022, p. 1) to other ways of knowing, different cultural stories and 'new' ways of relating with Land. In this case, 'affect' refers to "those visceral forces beneath, alongside, or generally other than conscious knowing, vital forces insisting beyond emotion, that can serve to drive us towards movement", towards new or different thinking (Gregg & Seigworth, 2010, p.1).

I begin the course at *Mnjikaning*, the place of the fish fence, alongside a local Elder, who shares stories about the cultural significance of the place to the Anishinaabek and other Indigenous Nations who met here over millennia. My hope is this experience highlights the importance of knowing Indigenous stories of Land students are learning on, and how to centre these stories alongside other settler-colonial stories of place. These experiences confront settler colonialism in EE by showing preservice educators how place, when informed by Indigenous knowledge, renders settler colonialism visible (Calderón, 2014, Twance, 2019).

I model to students that as a settler-educator, I am not telling these stories or dispensing this knowledge as they are not mine to tell. However, we can all relate with Elders' stories as they stir up strong emotions and feelings, evoke movement of thoughts and action. As King (2003) notes, we are forever changed when we hear stories that are profoundly different from our own.

Returning to affect, my intention is to create an experience that challenges preservice educators' conceptions of Land, place, teaching, learning and epistemological superiority. I subtly invite them to pause, consider and learn about how people have lived in good relations in these places and lands before our time and how the histories of these places still impact current economic, social and ecological relationships (Bowers, 2008). Indigenous stories of Land already resonate with EE learning and should frame our collective inquiry of how to live and teach in a good way.

Responding to Structural Challenges in 'De/colonizing' University EE

The most significant structural challenge involved in de/colonizing university EE is that it operates within the academy, a colonial education system, which often reproduces transactional learning, competition, separation over interconnectedness and an imbalanced focus on intellectual aspects of learning. Stein (2019) asks what kind of higher education will prepare learners for the possibility of the end of modern colonial life and create space for imaginaries beyond the dominant Western paradigms.

Higher education institutions are implicated in modern colonial habits of being and, as a result, cannot produce learning conditions that will foster new imaginaries; essentially 'the academy' is beyond reform and de/colonization efforts are limited within it (Stein, 2019; De Oliveira, 2021). De Oliveira (2021) notes that while "adding multiple ways of knowing (epistemologies) onto the same modern way of being (ontology) will always be a limited and limiting strategy for interrupting colonial habits of being" (p. 92) as we continue to work within these institutions and shift towards something different, it is important to include both soft and radical reform strategies to reduce harm to Land, Indigenous Peoples and our collective relationship. In my opinion, EE is a natural fit for implementing harm reducing reforms as it

already insists on the need for change, while at the same time, hints at the need to include Land in education, although currently this is done predominantly from a Western perspective in many EE settings (Bang et al., 2014; Brooks et al., 2023).

Examples of some soft or more radical reforms to the EE course might include: [9]

- Connect with Indigenous Elders and Knowledge Keepers for the duration of the course, rather than for a single class, and work through how to ensure this relationship is reciprocal, benefitting all parties equally.
- Include at least one Indigenous led Land-based learning experience, or offer a version of the EE course that is completely Indigenous led and Land-based as has been done in other university education settings (Bell, 2020).
- Remove transactional practices such as grading and instead model circular learning frameworks. It is challenging to assess such emotional, creative, non-linear work.
- Intertwine EE coursework/curriculum with other courses to model integrated learning practices.
- Respond to the increasing student demand for EE and CCE, as impacts of detrimental relationships with Land continue to rise and mental health of youth is suffering (Galaway & Field, 2023), include *two* mandatory courses of EE during the B.Ed. program, honouring choice in the second offering for students to follow an area interest. Areas of interest could include garden-based learning, food systems, CCE, Forest Schools, and Indigenous led Land-based learning.

[9] It should be noted that many of these reforms require the university and EE instructors to engage in ongoing relationship building, trust building and maintaining of good, reciprocal relations with Elders and local Indigenous communities.

- Including loosely structured, self-directed learning in elements of the EE course such as individual Land experiences, and learning in community settings, including Indigenous communities.
- Give opportunities throughout the EE course for students to show their understanding in different ways, moving away from solely read/write responses that often centre cognition over emotions, feeling, relating, visioning.

A secondary struggle in shifting towards de/colonial practices and pedagogies in university EE, is the increasing structural reliance of university institutions on precariously employed contract faculty (Ellis-Hale & Cobblestone, 2019) who have limited capacity to engage in relationship building on a long-term basis with full time faculty, students, Indigenous/non-Indigenous communities and external organizations who help to support the integration of EE in all aspects of learning. Contracted faculty make up the majority of the instructional capacity in Ontario university institutions and without job security (need to reapply each term), benefits, or adequate compensation for research and service work done outside of their teaching positions (Ellis-Hale & Cobblestone, 2019), the gifts, talents and relational potential of contract faculty is reduced. According to Ellis-Hale & Cobblestone (2019) this affects contract faculty's job performance, engagement in research, physical and mental health.

As the work of de/colonizing university EE is ongoing, unfinishable and centres strongly on repairing, building and maintaining relationships with Land and Indigenous Peoples, short-term contracted faculty will struggle to engage in this work while maintaining personal and relational balance for reasons stated above. Additionally, there is not adequate time or compensation for contract faculty to collaborate/learn alongside full-time faculty members and Elders, which is necessary for circular, integrated EE learning across courses and for countering

antiquated siloed practices. While investigating the hiring practices of university institutions is beyond the scope of this portfolio, and certainly beyond my role as a contract faculty member, I add this to the list of reasons educational institutions are beyond reform and continue to struggle in addressing de/colonization, of any course or curriculum, in a substantive way. It does illustrate, however, the incommensurability (Tuck & Yang, 2012) of transactional, compensatory relationships with de/colonization efforts and the difficulties that arise when inequalities and competitive, structural hierarchies exist within communities.

A final structural challenge of integrating de/colonial approaches in university EE is how to approach the respectful inclusion of Indigenous Elders into EE experiences, through normalizing and elevating their involvement beyond transactional, assigned roles defined by the academic institution. According to Wesley-Esquimaux (2023), all students, and especially Indigenous students, should have the opportunity "to see and feel the connection between themselves and Elders, and they need liberal access to them to appreciate their many roles in education and culture in general" (para. 5). Furthermore, Wesley-Esquimaux (2023) suggests the academy should prioritize ongoing, reciprocal relationships with Elders, through full-time appointments, ensuring Elders are perceived as valuable contributors to learning, cultural well-being and mental health.

As a relatively new member of the academic community in a Faculty of Education, I have limited experience with the involvement and inclusion of Elders in classrooms. However, in my brief time instructing in the Faculty, I have observed numerous structural barriers to the inclusion of Elders as more than "ornaments to be taken out and used occasionally" (Elder Bea Medicine, as cited in Wesley-Esquimaux, 2023, para. 2), including culturally inappropriate communication and administrative practices, the requirement of fixed advanced 'scheduling' of Elder visits and

limiting the number of Elder visits to one visit per course. I spoke up about these structural barriers numerous times and in numerous settings and suggested that more conversations need to occur across faculties and inclusive of contract faculty, Indigenous faculty and administration.

Responding to Relational Challenges in De/colonizing EE

For a long time, 'Canadians' and Indigenous Peoples have inhabited separate realities as the result of the cultural, social, economic and educative forces of colonialism (Donald, 2012). Through an intergenerational habit of disregarding the lived experiences and historical memory of Indigenous Peoples, as well as their own inseparability and interconnection with life-giving Land, many 'Canadians' have learned to deny relationality and exist as "perfect strangers" (Dion, 2007) towards Indigenous Peoples in Indigenous territories. Adding to this, racist policy and practices on the part of the Canadian government, such as Indian Residential schools, the reserve system, the Indian Act, and dominant colonial educational practices have worked to isolate Indigenous Peoples from non-Indigenous Peoples and vice versa, creating seemingly irreconcilable differences (Wilson-Raybould, 2022; Donald, 2012). The ensuing results are broken relationships between Indigenous and non-Indigenous peoples, and a lack of understanding of Indigenous worldviews on the part of settlers. These broken relationships, pervasive in our daily lives and in the context of university educational institutions, are evident by how settler-Canadians continually treat Indigenous Peoples (and Land) in this country, with "a lack of acceptance and care"[10] (Wilson-Raybould, 2022, p. 310, parenthesis added). Broken relationships impede us from building lasting, reciprocal, respectful relationships and require

[10] Wilson-Raybould (2022) refers to a lack of acceptance and care as the legacy of colonialism, noting how through policy, land theft, severe socio-economic conditions on reserves, and destruction of life-ways, Indigenous Peoples have been taught that they are not accepted and they do not matter. Likewise, non-Indigenous Canadians have been conditioned to not accept or care about Indigenous Peoples or view Indigenous Ways of Knowing as distinct and valid alongside their own.

healing. Healing takes time, trust-building and truth telling (TRC, 2015a; TRC, 2015b; Ontario College of Teachers, 2020). Within university EE, and more broadly within Faculties of Education, we need to create space for this type of relational healing.

In her book, *True Reconciliation*, Wilson-Raybould (2022) suggests we can start to close the relational gap between Indigenous and non-Indigenous Peoples by acting with acceptance and care as "inbetweeners" (p. 311). An inbetweener can be anyone who continually chooses to put themselves in the position of 'in-between' to challenge dominant colonial narratives, advance Indigenous futures and elevate Indigenous worldviews including governance, educational pedagogies and cultural systems, to help tangibly build "new understandings and patterns of relations" that will benefit all (Wilson-Raybould, 2022, p. 311).

Wilson-Raybould (2022) also acknowledges an inbetweener can be a company, an organization or a person who occupies a space that "others have been unwilling to stand in" or who "has the courage to break out of defined traditional roles and patterns" to allow for righting of relations between Indigenous and non-Indigenous peoples (p.311). Building on this, I contend ethical and emotionally engaging EE, that respectfully includes both Indigenous and Western ways of knowing and Indigenous and settler traditions of Land and place, is an inbetweener, acting as a bridge between worlds and repairing relationships, both of which are required in imagining de/colonized futures.

EE as a Bridge Between Worlds

The following section outlines tangible ways EE and EE educators can act as a bridge between worlds. It begins with a fifth and final vignette of my lived-experience which highlights the importance of Indigenous/settler relations in de/colonial work and respectful inclusion of

different ways of knowing that move beyond boundaries of academic settings, beyond temporal constraints and activate Land as valued knowledge holder and teacher.

A Final Vignette: Revisiting the Bridge and Completing a Circle

My phone buzzes on a Saturday morning and it is my mentor, Mskokii Kwe, connecting to see if I want to discuss my portfolio research. Somewhat surprised, but pleasantly so, I respond yes! We agree to meet on campus at the cafeteria later in the afternoon.

We chat together, filling each other in about happenings in our personal lives, and then get down to discussing my research. We both reflect on how de/colonizing work takes time, energy and how the relational piece requires balancing with other priorities in life. Mskokii Kwe laughs and reminds me of the tobacco I offered her, in a blue cloth and tied with a red ribbon, many months before, along with the request to include our shared discussions and learning experiences in my portfolio. Mskokii Kwe, who accepted this tobacco, chuckles at the length of time it has taken us to return to this work, but insists she did not forget about my request and has carried the tobacco with her all this time. She explains how, even though time had passed and my learning journey may have shifted, she recently laid down the tobacco in the bush and spoke on my behalf, knowing I was trying to complete my portfolio.

Our discussion moves in the direction of EE and how it can act as a bridge between worlds, between Euro-Western understandings of environmental studies/sciences and Indigenous Ways of Knowing and relating with Land. One will never be the other, but there is a lot of learning to be done in between. *The bridge metaphor I was thinking about earlier is taking on stronger meaning and shape. I think I need to pursue it.*

As I reflect on this conversation, I remember how at the beginning of my Master's journey, during a personal Land experience when I was learning to deepen my connection with

Land through relational pedagogies, I noticed an old bridge. The wooden bridge was hard to see at first, and missing a few sections. At that time, I wondered if the bridge was significant, but now I know how it fits with my story.

I text a photo of the rickety, moss covered bridge to Mskokii Kwe. She remembers my experience with this place from two springs ago and notes the synergy that tobacco brings and how I have travelled a full circle.

Co-creating Curriculum Using an Inquiry-based Approach in EE

Calderón (2014) argues that while place-based education (PBE) and EE foster hands-on, community-connected, real-world learning about citizenship in local contexts, they fall short in addressing the impacts of settler-colonial dominance and the harmful perceptions of stolen Land and settler dominant place that are passed on to students through implicitly colonial educational approaches and curricula. Building on this notion, if settler educators solely follow government-issued curriculum, which has been critiqued for its omission of both the impacts of settler-colonialism and Indigenous perspectives and histories (Simpson, 2014; Gelineau et al., 2024; Calderón, 2014), it perpetuates a colonial view of Land and place and misses the layered hi(stories) that connect them. When an inquiry approach is taken in EE, students can build on their own questions, understandings and perceptions of the world, while respectfully engaging with the questions, stories and perceptions of others as a counter-balance. Students, educators, Indigenous Elders and Knowledge Keepers, as well as Land as teacher, can co-create knowledge together to ensure a dynamic, multidimensional learning environment that is supportive of Indigenous Ways of Knowing and learning, as well as Western approaches. Integrated, inquiry-based approaches in EE (Ontario Ministry of Education, 2009; Elementary Teachers Federation of Ontario, 2020), inclusive of Indigenous Land education and multiple knowledge systems

(Calderón, 2014), should be infused into all grades and across all areas of curriculum; and act as foundation throughout a child's learning journey.

Shifting university EE courses away from frameworks, readings, and resources that focus solely on Western approaches to environmental and social justice, and (re)emphasizing Indigenous Knowledges and relational pedagogies, encourages educators and students to explore different ways of connecting with and understanding Land, and their responsibilities within a broader, interconnected community (Anderson et. al, 2007). This approach offers a wide-ranging perspective on what it means to be human and live in harmony with Mother Earth. Ultimately, it redefines EE as a process of understanding the kind of people we want to become in the places we inhabit, centred around questions such as "Who am I?" and "How can I live here, alongside others, in good, reciprocal, relations?".

Inquiry-based approaches in EE, where learning is co-constructed alongside Land, Indigenous Peoples and within community contexts, gives value to and accepts multiple epistemologies and ontologies, while simultaneously resisting educational hegemony that serves to reproduce dominant ideologies and cultures of the ruling class (Cornelius-Bell & Bell, 2024). According to Cornelius-Bell & Bell (2024), to move beyond the environmental and socio-cultural destructive nature of capitalism and the interrelated assimilationist, exploitative nature of academia, academic activists need to re center cultural and intellectual approaches that have been cast off by colonial education systems. By centering Land and Indigenous perspectives in EE inquiries (Anderson et al., 2017), EE can act as a bridge between worlds, bringing holders of multiple ways of knowing and being to face one another and learn from one another. This might produce the "organic intellectuals" required to confront harmful colonial, capitalist worldviews

that are currently normalized through education and social-justice education (Gramsci, 2007 as cited in Cornelius-Bell & Bell, 2024, p. 49).

Valuing all Teachers: Whose Stories are Here and Whose Stories are Missing?

Calderón (2014) urges all environmental educators to "rethink their relation to land as a dynamic ecological and cultural project of recovery and rehabilitation" and to look at EE not only in ecological terms, but also in cultural terms, taking note of whose stories of Land and place have been omitted (Calderón, 2014, p.10). This message resonates strongly as we collectively face a multitude of global, socio-ecological challenges which are the result of capitalist settler-colonial systems, upheld by education grounded in Eurocentric epistemologies, and premised on capitalistic relationships with Land (Tuck, 2012; Cornelius-Bell & Bell, 2024).

Responding to Calderón's (2014) call, EE can act as a bridge between worlds, engaging many different voices in dialogue, using pedagogies and approaches that honour diversity and difference as a means to 'an elsewhere' (Tuck & Yang, 2012, p.36). Broader perspectives of Land and our relationship to Land can be created and strengthened by learning in proximity to those who hold different worldviews; similar to Two-Eyed Seeing (Marshall, 2012) and development of ethical space (Ermine, 2007). As such, in university EE courses, instructors must continually ask themselves whose stories are being represented, whose voices are present and whose voices are missing. This must be considered when selecting course readings, community partnerships, guest speakers, videos, and when designing the course structure.

Many scholars argue EE has been missing Indigenous voices and stories for too long, or, EE settler educators have misrepresented, misinterpreted or appropriated Indigenous stories in an attempt to Indigenize EE curriculum (Bang et al., 2014; Brooks et al., 2023; Newberry, 2012). In addition to the lack of Indigenous voices, the voice and agency of Land as teacher is often

omitted in Western-focused EE curriculum and pedagogy, resulting in relational and knowledge gaps for all students, especially Indigenous students for whom Land plays a central cultural role in teaching and learning (Simpson, 2014).

In order for EE, which predominantly focuses on people's relationships with Land, to act as a bridge between worlds, it must confront settler land ethics, which are reproduced in educational contexts, by centering the relationship between Land and settler colonialism *from an Indigenous perspective* (Twance, 2019). This can be done by including Indigenous stories of place, Indigenous-led cultural activities, Indigenous-led Land learning and by investigating the politics of place naming to diminish the notion of settler territoriality and elevate Indigenous agency, resistance and spiritual connection to Land (Calderón, 2014). Students must actively relate with Land and Indigenous Peoples, rather than passive learning about Land and Indigenous Peoples. As a bridge between worlds, a university course in EE should model the bringing together of Indigenous voices, non-Indigenous voices and the voices of students, parents, families, community members and Elders. It must also teach how to listen to what plants, waters, Land and places have to teach (Bang et al., 2014). Learning alongside these combined voices, experientially, in communities and local landscapes, produces rich, affective experiences that touch upon heart, body, mind and spirit. The hope being that preservice educators will remember these experiences, emotions and engaging learning practices and implement them in school settings with young learners, giving them an opportunity to engage with Land, alongside Indigenous Peoples, and resisting 'traditional', one-sided, Eurocentric approaches to EE and schooling.

Prioritizing Treaty Responsibility and Settler Reckoning in De/colonizing EE

Throughout my autoethnographic research, I consider settler guilt as one of the stages of grieving my complicity in settler-colonialism and its impact on Indigenous Peoples and Land. In a university course in EE that addresses colonial logics of place and shifts towards reconciliation rooted in Land, story and relationships with Indigenous Peoples, settler guilt will undoubtedly arise as preservice educators are exposed, some for the first time, to their complicity in settler colonialism and broken relationships with Land and Indigenous Peoples.

While a necessary stage of emotional processing, I propose that guilt is not a productive place to dwell in, as it often leads to bargaining statements such as, "I didn't choose to be born a White settler" or "but no one was living there, First Nations moved around a lot" (Nahanee, n.d., p. 10) as a means of mental 'self-protection' to shift away from complicity. Furthermore, focusing on shame and guilt can also cause settler moves to innocence (Tuck & Yang, 2012) such as including Indigenous content as box-checking towards 'Indigenizing' the EE curriculum, or including Land Acknowledgments on course materials, but not actually living or actioning this acknowledgment throughout the course. These actions are (re)settling as opposed to (un)settling and provide no room for de/colonial shifts, reconciliation or Indigenous futurity.

I suggest that, although it is critically important to create experiences in EE that expose colonial logics of Land as well as historic and current day harms to Indigenous Peoples, telling about it, or teaching it through facts, videos or readings that solely focus on Indigenous social, economic, health and educational disparity, cause settler educators to dwell in a place of guilt. It is of far greater impact for preservice educators to experience and witness inconsistencies and incongruencies of their colonial thinking through participating alongside Indigenous Peoples and Land in discussions, storytelling, life experiences and cultural activities. This aligns with an Indigenous resurgence paradigm (Wildcat et al., 2014) whereby space is created, within the

course, for a regeneration of Indigenous cultural, spiritual, pedagogical and political practices.

Through engaging together, alongside Indigenous Peoples and Land, preservice educators, particularly settler-educators, are "forced into reckoning with (their) colonial past and present and undertake in their own decolonizing journey" (Wildcat et al., 2014). In my experience, this 'experiencing alongside', rather than 'direct teaching about', allows preservice educators to engage in a more consensual way with Indigenous Ways of Knowing, Indigenous Land-based knowledges and theorization, Indigenous storytelling and current Indigenous realities. Additionally, I purposefully language pedagogical choices and actions in EE as 'our responsibility as educators teaching on Indigenous Lands', or 'our responsibility as treaty partners' or 'as being accountable to local Indigenous Peoples Ways of Knowing and being in this place'.

Centering Land as Teacher and as Pedagogy in De/colonizing EE

Experiences spent on the Land, whether in urban or remote settings, like my time spent learning alongside the beavers described in the Northern vignette, provide essential moments where students, educators and all people can engage in active rehabilitation and reconciliation by connecting with the knowledges held in Land itself and reflecting on how they can weave these knowledges into their own lives. These experiences, especially when they take place alongside or are informed by Indigenous relational pedagogies (Peltier, 2021) help people learn to speak the language of the Land (Kimmerer, 2017) and get out of purely head-based thinking towards a mind/body/heart/spirit approach to lifelong learning.

Essentially, learning with/from Land is an antidote to dominant Euro-Western epistemologies in education, which focus heavily on unnatural, short term and unsustainable ways of being (Robinson, 2020) where theories, concepts and abstracted facts are prioritized

(Orr, 1991). In my view, centering Land as pedagogy (Simpson, 2014), as a valued way of learning and coming to know, is a reconciliatory action that can help all people learn how to live well in a place by continually experiencing the pluriverse where multiple coexisting worlds interact (Common Worlds Research Collective, 2020).

University courses in EE should include time spent to engage with and learn alongside Land as teacher in a variety of ways. Some examples of ways to honour the agency of Land as teacher in university EE courses include: Personal Land experiences with choice of learner response, Indigenous-led medicine walks, garden-based learning, student-focused inquiries connected with Land and place, Indigenous storytelling, student created land-based stories and learning alongside Indigenous Peoples in land-based cultural contexts (e.g. Sweet Grass harvest or Maple Sugaring).

When preservice educators build EE lesson plans and activity plans they are encouraged to pay close attention to seasonality, weather patterns, animal and plant life-cycles, cultural activities tied to Land/seasons and what Land is 'saying' or 'doing' in their particular location. Using these Land-based provocations as a starting point, rather than external, curriculum-based expectations, gives Land agency as teacher and honours multiple ways of knowing and learning.

It is critical that EE educators remain open and flexible in their planning, so they can adjust accordingly if Land presents a teaching moment, the community presents a teachable moment, or if students learning spirits draw them towards a certain part of Land. This means letting go of control, honouring the learning spirits of each student, paying attention to what is happening in Land, and "breathing with the world" (Anderson et al., 2014, p.134). It means creating flexible timelines, course outlines and learning goals and engaging in multiple, meaningful forms of assessment.

As noted by Anderson et al., (2017) reciprocity is not only an Indigenous cultural tendency, it is also evident in all aspects of Land and our interconnectedness with Land: the symbiotic relationship of flowers such as aster and goldenrod (Kimmerer, 2013), the exchange of air as we breath, as well as our thoughts and feelings as we interact with the world are all examples of the reciprocal world we are a part of. As we learn alongside Land, it is important to weave ourselves into this reciprocal rhythm in a way that honours our responsibility to Land, not because we are here to steward, manage or act in superiority to Land, but because we are an interconnected part of Land.

Modeling gratitude and reciprocal relationships in learning engagements with Land and each other throughout an EE course encourages preservice educators to consider what they can give back, whenever they take something. For example, in sharing a story, a lesson or a personal experience with the group, preservice educators are giving back to the collective knowledge of the learning community. Participants consider what they can give back to the Land on which we learn as well, which may include talking to the Land, singing to the Land, listening to the Land, creating land-based art, local rehabilitation/action projects, and amplifying local Indigenous stories that stem from Land. Gift giving and ongoing sharing of learning with Elders who take part in EE courses is also an opportunity to model reciprocity and gratitude.

Land as pedagogy means negotiating what success looks like from multiple perspectives, creating space for multiple teachers and becoming comfortable with the time it takes to engage in ethical relationships. Relationships, deep learning, and negotiations of co-constructed knowledge *all take time.* As such, I agree with Belcher (2023) who cautions against urgently rushing forward with solutions and progressive actions and with De Oliveira (2021) who notes anthropocentric, unethical and unjust systems may need to be gently cared for as they die.

Together we can take time to learn from the lessons these unjust systems offer, and create space for new ways of being to emerge. Spending time learning with Land and alongside Indigenous Peoples and in Indigenous contexts reminds preservice educators that the world has always and will always have a collective knowledge capable of bringing forth continual life and beauty. We must respect and value this knowledge, tap into it, and reproduce it through storying as we learn to become with the world (Common Worlds Research Collective, 2020).

CONCLUSION: A COMMITMENT TO RETURN TO VISIONING

We don't think our way into a new kind of living; we live our way into a new kind of thinking

(Palmer, 1980, as cited in Battiste, 2010, p.18).

The conclusion of this portfolio is one that needs to acknowledge the non-conclusiveness of my learning journey and the unfinishable project of personal de/colonization and pedagogical de/colonization of EE. Having read, reflected and revised continuously throughout these two years of academic study, I want to acknowledge the far greater importance of my learning to live in a more respectful way alongside Indigenous Peoples and their Land, specifically the Chippewas of Rama First Nation and neighbouring communities of Beausoleil Island and Georgina Island First Nations, and to continually honour these relationships by acting with humility and respect.

I am committed to my ongoing work of critical self-reflexivity as I continue to ask how to live in better relations with Indigenous peoples as a treaty partner and how I can give back in return for the many gifts -the stories, teachings, dreams, songs, visions, medicines, and friendships- shared with me along my learning journey by Indigenous Peoples and the Land.

I am dedicated to the continual work of unlearning Eurocentric epistemologies and settler-colonialism in EE while shifting towards de/colonization rooted in Land and in relationship with Indigenous Peoples. As this project will never be complete, I aim to continually pay attention to mind, body, emotions and spirit, to ensure balance in all areas, as this will help me relate well with others and know what steps I need to take next as I re-vision my journey.

Chi Miigwech to all those teachers, the people, the Land, the water, who held me up, pushed me in the right direction, sat with me in relation and challenged me to open my heart to different ways of knowing and being. I am a better person and EE educator for knowing and

learning with/from you. I will carry your songs and stories forward as they are now intertwined with mine.

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UNESCO (2016). *UNESCO, Climate change education and COP22.* Retrieved from: https://unesdoc.unesco.org/ark:/48223/pf0000246479?posInSet=11&queryId=83f5748e-605e-4072-ab29-2372439dcc15

Wesley-Esquimaux, C. (2023, February 21). The important role of Indigenous elders in the academy. *University Affairs*. https://universityaffairs.ca/opinion/the-important-role-of-indigenous-elders-in-the-academy/?gad_source=1?gad_source=1

Wildcat, M., McDonald, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, *3*(3), 1-15.

Wilson-Raybould, J. (2022). *True reconciliation: How to be a force for change* (Hardcover edition). McClelland & Stewart.

Zembylas, M., & McGlynn, C. (2012). Discomforting pedagogies: Emotional tensions, ethical dilemmas and transformative possibilities. *British Educational Research Journal*, *38*(1), 41–59. https://doi.org/10.1080/01411926.2010.523779

APPENDICES

Appendix A: Course Syllabus (2024) B.Ed. Environmental Education

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EDUC 4374(FEO)
2024-2025

Course Code & Title:	EDUC 4374 Environmental Education
Course Term:	Fall 2024
Class Times:	8:30-10:30
Instructor:	Lindsay Sargent
Office Tel & Location:	n/a
Office Hrs:	By appointment
Teaching Assistant:	

COURSE DESCRIPTION:

In the face of climate change, environmental degradation, and food and water insecurity, one of the key aims is to explore the interdependent relationship between human and natural systems. Inherently interdisciplinary and with diverse emphases, environmental education occurs in a variety of learning contexts and in an experiential manner. Current environmental education research, theory, policy, curriculum, and practice will be critically examined, as will constraints and possibilities for implementation in Ontario schools.

LEARNING OUTCOMES
Learning outcomes for this course are available at Learning Outcomes - Education Courses

The OCT accredited learning outcomes for this course are:

1. Show an understanding of the elements of the natural world, including water, earth, sun, animals, plants, etc. and how we are reliant on them for our own health.
2. Show an awareness of the principles of environmental stewardship and how to foster them in students.
3. Demonstrate how to inspire natural connection amongst children and youth.
4. Demonstrate creativity in making positive changes in social systems to promote social and environmental justice.
5. Demonstrate how gratitude and awareness can inspire personal, social and environmental change.
6. Demonstrate an understanding of the breadth and depth of environmental education.
7. Be able to critically examine underlying assumptions of environmental education, including the influence of race, class, gender, sexuality, size, and ability on environmental education theories, practices and research.

8. Demonstrate awareness of root causes of environmental problems and the ways in which educators can respond.
9. Articulate ways in which environmental education can be infused across the curriculum.
10. Demonstrate familiarity with different types of environmental education, including but not limited to climate change pedagogy, humane education, outdoor experiential education, and place-based education.
11. Demonstrate familiarity with environmental education research and how it informs practice in schools.
12. Demonstrate familiarity with, and ability to critically assess relevance of, environmental education resources produced by the Ontario Ministry of Education, teachers' associations, and nongovernmental organizations.
13. Articulate ways in which environmental education can be practiced in schoolyards and adjacent communities.
14. Demonstrate ability to minimize risk to students when engaging in outdoor activities.
15. Articulate an understanding of scientific, social, political, economic and ethical aspects of climate change.
16. Demonstrate the ability to plan classroom and outdoor experiences that nurture in students a sense of responsibility, commitment and excitement for acting on climate change.

FOUNDATIONS OF PROFESSIONAL PRACTICE
A commitment to a clear vision of what it means to be a teacher is at the core of teacher professionalism. The principles of the Ontario College of Teachers' (OCT) *Professional Standards* have been embedded in the learning expectations for this course. Visit: http://www.oct.ca/public/professional-standards

TEXTS/READINGS

Most texts and readings are available through links on this document and within D2L. The only **required** course text for this course is *Natural Curiosity A Resource for Educators 2nd Edition: The Importance of Indigenous Perspectives in Children's Environmental Inquiry*. A PDF version of this text can be purchased directly from Natural Curiosity at https://utpdistribution.com/9780772726445/natural-curiosity-2nd-edition-a-resource-for-educators/. **Please note**: A print copy of Natural Curiosity 2nd edition will also be on short term loan and available at the Heritage Place library desk.

COURSE RESOURCES
- D2L

COURSE CONTENT/TOPICS

We will meet for two hours on Wednesdays, most often at Heritage Place (several exceptions, see Field trip schedule). On Fridays we will go on field trips for experiential learning in nearby locations. During the Wednesday classes, we will discuss EE theories, readings, assignments, outcomes/observations from the experiential activities and participate in several personal Land Experiences. Class times on Wednesdays and Fridays are mandatory.

Date	Topics	Location	Readings/Viewings (read or scan before class)
Wed. Sept. 4, 2024	Community Building, Course Overview **What is EE? What are the environmental/ educational challenges of the 21st century?** Field trip prep	Room OH- 04	Read course outline and familiarize yourself with D2L site
Friday Sept. 6, 2024	**Field trip to Mnjikaning Fish Weirs National Historic Site** Grounding ourselves in Land and ethical relationships *where we are* with Elder Mark Douglas of Chippewas of Rama First Nation	Atherley Narrows https://maps.app.goo.gl/YGaSH2PXUzgqpMYW6 **Park on Bridge Street** meet at walkway at the end of Bridge Street	SCAN Rama First Nations website (About Rama section) VIEW The Land Between: Beginning of the Fish Fence Circle
Wed. Sept. 11, 2024	**What is Environmental Education?** Environmental Education Policy Context, translated, as integrated interdisciplinary learning about human and nature relationships across all subjects in Ontario schools Indigenous Ways of Knowing and Relational pedagogies in EE **Community walk** Intro Assignment #1 *EE Community Survey*	Room OH- 04	READ: David Orr, (1991). What is education for? https://kohalacenter.org/teachertraining/pdf/What_is_Education_For.pdf SCAN Ontario Ministry of Education. (2009). Acting today, shaping tomorrow: A policy framework for environmental education in Ontario schools. https://www.edu.gov.on.ca/eng/teachers/enviroed/ShapeTomorrow.pdf READ We Need a New Story: Walking and the wâhkôhtowin imagination. (2021). Dwayne, Donald. https://jcacs.journals.yorku.ca/index.php/jcacs/article/view/40492/36659 **In class, we will review:** Ontario Ministry of Education (2017). The Ontario curriculum grades 1-8 and the Kindergarten Program: Environmental Education Scope and Sequence of Expectations. Retrieved from: http://www.edu.gov.on.ca/eng/curriculum/elementary/environmental_ed_kto8_eng.pdf

Date	Topics	Location	Readings/Viewings (read or scan before class)
Friday Sept. 13, 2024	**Field trip to Tudhope Park** Sensory immersion experiences Place-based learning and Land as co-teacher Exploring relationality and interconnection	**Tudhope Park** 450 Atherley Rd, Orillia, ON L3V 1P2 https://goo.gl/maps/BA9fM7oy383bZCDj7	READ Towards a Pedagogy of Land (Styres, Haig-Brown & Blimkie, 2013) https://journals.sfu.ca/cje/index.php/cje-rce/article/view/1293/1529 READ Sobel, D. Place-based Learning "Everyone Ought to Have a Ditch" Retrieved from: https://medium.com/communityworksjournal/everyone-ought-to-have-a-ditch-eb9edacb8274
Wed. Sept. 18, 2024	**What does Ethical and Engaging Environmental Education look like?** Intro to Key Resources for Environmental Inquiry Importance of Indigenous perspectives in EE Intro Assignment #2 *EE Experience Grounded in Land* (Pick groups)	Room OH- 04	READ *Land-based learning: Considering the fundamentals* https://everactive.org/blog/land-based-learning-considering-the-fundamentals/ SCAN *Connecting the Dots: Key Strategies That Transform Learning - From Environmental Education to Citizenship and Sustainability* https://lsf-lst.ca/media/LSF_Connecting_the_Dots_February2014.pdf In class, buzz reading: *Natural Curiosity 2nd Edition. Building Children's Understanding of the World Through Environmental Inquiry (2017)*. See first page of this outline for link to purchase. (DO NOT READ IN ADVANCE, but ensure you have a copy of this required text available for this class).
Friday Sept. 20, 2024	**Field trip to Tudhope Park** Instructor Models EE Experience/Formative Assessment Knowledge Building Circle Assignment #2 groups brainstorm EE	**Tudhope Park** 450 Atherley Rd, Orillia, ON L3V 1P2 https://goo.gl/maps/BA9fM7oy383bZCDj7	SCAN A Teacher's Guidebook to Taking Children Outside https://childnature.ca/wp-content/uploads/2021/01/T.O_9_EN_A-Teachers-Guidebook-for-bringing-learning-outside-1.pdf Review: *Natural Curiosity 2nd Edition. Building Children's Understanding of the World Through Environmental Inquiry (2017)*. P. 82-93 (Sending out Roots to prepare for assignment #2)

Date	Topics	Location	Readings/Viewings (read or scan before class)
	experiences using a Land as co-teacher lens		
Wed. Sept. 25, 2024	**Taking Schooling Outside** Risk Management, Experiential Learning Opportunities, Preparing for Outdoor Learning Work time in groups to develop EE Experiences	Room OH- 04	READ**:** (June 30, 2021). Toronto teen would not have drowned if he wore a life jacket, teacher acknowledges trial. The Globe and Mail. https://www.theglobeandmail.com/canada/article-toronto-teen-would-not-have-drowned-if-he-wore-a-life-jacket-teacher/ SCAN: Risk Benefit Assessment for Outdoor Play: A Canadian Toolkit (Child and Nature Alliance of Canada, 2019) Retrieved from: https://childnature.ca/wp-content/uploads/2020/09/2019-11-03-CANADA-RBAT-ENGLISH-1.pdf **DUE: Assignment #1 EE Community Survey (D2L by midnight)**
Friday Sept. 27, 2024	**Field trip to Farm Lab and Wiigwasitig Gitigaan (Birch Tree Garden)** Exploring Garden-based learning and food systems/security in EE Building a connection to local food	University Ave.	WATCH: Akon, A. (2018, May 30). *Food as radical empathy* [Video]. https://youtu.be/f3aW-5qmblY READ or LISTEN: *The Serviceberry: An Economy of Abundance* Robin Wall Kimmerer, October 26, 2020 Retrieved from: https://emergencemagazine.org/essay/the-serviceberry/
Wed. Oct. 2, 2024	Current Environmental Issues and Climate Change Education • What do we need to know as adults? Developmental readiness of young learners Recorded lecture: Dr. Ellen Field- Climate Education	Room OH- 04	READ Field, E., Schwartzberg, P., Berger, P. & Gawron, S. (2020). Climate Change Education in the Canadian Classroom: Perspectives, teaching practice, and possibilities. EdCan Network Magazine. Retrieved from: https://www.edcan.ca/articles/climate-change-education-canada/ READ: Tran, C. (2016, July 26). Stories are how we make sense of ourselves and the world around us.

Date	Topics	Location	**Readings/Viewings** (read or scan before class)
	Intro Assignment #4 *Climate Action Passion Project*		In class buzz reading: Macy, J. (2013). Hearing the call. *Resurgence & Ecologist, 277*, 34-37. https://www.resilience.org/stories/2013-06-17/hearing-the-call/
Friday Oct 4, 2024	**Field trip to Tudhope Park** 4 groups of students present EE Experience Assignment #1	**Tudhope Park** 450 Atherley Rd, Orillia, ON L3V 1P2 https://goo.gl/maps/BA9fM7oy383bZCDj7	*Students presenting on this day are encouraged to hand in their write ups, however they are not officially due until the following week.*
Wed. Oct 9, 2024	Follow up from Group presentations Knowledge Building Circle Existing Programs in Ontario and Community **Who are partners that support EE?** Intro Assignment #3 *Personal Land Experience*	Room OH- 04	Explore readings on D2L to support and prepare for Personal Land Experience (in Assignments and Resources tab) SCAN: Ontario EcoSchools. https://ecoschools.ca SCAN: Natural Curiosity: https://www.naturalcuriosity.ca/ SCAN: The Council of Outdoor Educators of Ontario https://www.coeo.org/
Friday, Oct. 11, 2024	**Field trip to Tudhope Park** 4 groups of students present EE Experience Assignment	**Tudhope Park** 450 Atherley Rd, Orillia, ON L3V 1P2 https://goo.gl/maps/BA9fM7oy383bZCDj7	**DUE Write up of Environmental Education Activity Assignment (**Sun. Oct. 13 by midnight on D2L)** • Submit one copy per group of your outline/write up • Each group member submits their own written personal reflection.
Wed. Oct. 16, 2024	**Personal Land Experience #1**	Location of your choice	
Friday, Oct. 18, 2024	Follow up from Group presentations Emergent learning, Play-based learning, Forest	**Tudhope Park** 450 Atherley Rd, Orillia, ON L3V 1P2	**VIEW** Forest School: Outdoor Learning for Kids in Canada https://youtu.be/0rvzaGIHs10 **VIEW** Forest schools and risky play https://youtu.be/xGEit0wfJUo

Date	Topics	Location	Readings/Viewings (read or scan before class)
	School Model, Risky Play	https://goo.gl/maps/BA9fM7oy383bZCDj7	
Wed. Oct. 23, 2024	**Personal Land Experience #2**	Location of your choice (same location as last Wednesday)	
Friday Oct. 25, 2024	Sharing of Personal Land Experience stories Work on Passion Project EE Questions with Lindsay/Emergent learning	Room OH- 04	**DUE Personal Land Experience Assignment #3 (by midnight on D2L)**
Wed. Oct. 30, 2024	Field trip to Scout's Valley Regan House	**Scouts Valley-Reagan House Entrance** Regan House, 325 Line 15 N, Orillia, ON L3V 6H1 https://goo.gl/maps/cAYqwqgrQUVKBqGd8	**Briefly share (~ 3 min) verbally about your Climate Action Passion Project. See if you can spread the passion!** **Due Climate Action Passion Project Assignment #4 (on D2L by midnight)**
Friday Nov. 1, 2024	Presentations of final Climate Action Passion Projects Final Reflections/Actioning Learning through Reciprocity	**Scouts Valley-Reagan House Entrance** Regan House, 325 Line 15 N, Orillia, ON L3V 6H1 https://goo.gl/maps/cAYqwqgrQUVKBqGd8	

ASSIGNMENTS AND EVALUATION

Assignment/Test	Due Date	Value
Environmental Ed. Community Survey (Assignment #1)	Wed. September 25th by midnight	20%
Design an engaging Environmental Education Experience, assessment and safety plan (presentation/activity write up)	Write up due Sun. October 13th by midnight	30%
Personal Land Experience	Fri. October 25 by midnight	20%
Climate Action Passion Project	Wed. October 30th by midnight	30%

Assignment Descriptions:

All rubrics available on D2L
All assignments expectations will be reviewed in class ahead of assignment due dates.
Some class time will be given to support both discussion and collaboration for some of the assignments outlined below.

Assignment #1 EE Community Survey: Individual

Weight: 20%

Submit: One document with the completed provided template in the Assignment Folder on D2L

Select a school/community that you would like to explore, focusing on environmental learning opportunities for P/J students. You can a school in Orillia (e.g. Heritage Place, Regent Park) or the community where you live. Based on the location you choose you are asked to create a description of possible environmental learning experiences/opportunities. The community learning survey you develop should be individualized and unique to the specific school community, local environment and student needs. It is meant to act as a resource bank, wherein you identify and record information on a variety of programs, organizations, community members and place-based learning opportunities (e.g., nearby local environments, environmental issues, ongoing community projects). You will focus your community learning survey so that it is responsive to place and local environmental concerns. For example, if you select an elementary school in an urban location, you will want to identify learning opportunities that are relevant to the elementary level, as well as resources for place-responsive pedagogy and instructional strategies that best connect students to the city and reveal locally significant environmental issues. Similarly, if you select a rural school or at a school in a remote area, you will want to identify learning opportunities that exist within that community and bring awareness to the local environment in meaningful ways.

Generate as many entries as possible (minimum 5). A template will be provided in class to support this activity and document the information. You will include information such as location descriptions, learning opportunities, logistical info (walk, community bus, volunteers needed etc.), big ideas and questions, hands-on learning ideas, curriculum connections. You could also include a mix of maps, graphic organizers, pictures, and text. Further examples and ideas are provided in D2L.

Note: During week #2 expectations for this assignment will be modelled and reviewed.

Assignment #2 Design an EE Learning Experience with Assessment and Safety plan (Group)

Weight: 30%

Submit: EE Learning Experience using template on D2L (one copy per group). Each group will facilitate a portion of the activity during our field trip (details outlined below). Submit individual written reflection on D2L.

i. EE Learning Experience Write Up (15%):

Working in groups of 4-5, you will design a 40-minute lesson that will be shared with your peers. Your group will be assigned a specific grade level and subject area. The EE experience you design should be connected to Land and Place and appropriate for PJ students. Your EE experience will include a minds-on, main experience/activity, and a debrief. All resources will be shared with your class. Please be creative with pedagogy, resources, inclusivity and include:

- Specific curriculum expectations you 'uncovered' or would likely 'uncover' across two different subject areas, the one you were assigned plus one more.
- How the experience is intertwined with Land and Place (Land as co-teacher)
- An attempt to unsettle 'zero-point epistemologies' by including diverse perspectives, diverse truths and diverse ways of coming to know.
- A detailed safety plan referring to OPHEA standards https://safety.ophea.net/ or other relevant safety policy from OPHEA's Outdoor Education toolkit https://ophea.net/sites/default/files/2022-07/OET_Toolkit_ele_14JA22.pdf.
- A 100-word statement explaining what you see as the heart of this lesson and how it demonstrates what you have been learning in this course (refer to readings!).
- One formative assessment piece as follow-up on activity

You will write up your group's learning experience using the EE Facilitation template using the Ontario Curriculum documents and supporting resources available on D2L. One submission per group. Please show division of labour by having each group contributor type in a different colour and add a legend. (e.g. Lindsay = red, Marg = blue etc.).

This assignment is technical in that it involves specific documents, but it is also a chance to show the underlying ideas and thought processes that you may have been developing throughout the course. As an educator, please let loose your creativity, expertise, or own learning to make this a lesson that you would love to teach and that students would find engaging.

ii. Bringing your EE activity to life: facilitating the portion on field trip (10%):

To bring your activity to life, your group will facilitate your main activity on a field trip to Tudhope Park as if you were facilitating a P/J class. You can briefly speak to the minds on and debrief portion, but we won't have time to actually present/do them. Each participant will demonstrate Essential Skills of teaching. Please use the google sign-up sheet available on d2L to organize your group's facilitation on one of the two available weeks.

iii. Written Personal Reflection (5%): (individual, each person must submit a reflection)

In addition, each group member will submit an individual 300-word or 2 min voice recording personal reflection reflecting on your growth as an educator through this process, how you thought the facilitation went and your reflections on teaching outside.

Assignment #3 Individual Land Experiences (20%):

Taking place independently at your "location of choice" on October 16 and October 23. During these times you will have the opportunity to spend some time individually connecting with Land. Supporting resources will be shared on D2L to encourage connection, learning and renewing relationships with Land. Each student will prepare a short oral story to share about their experience, as well as a photo of the Land in which they spent time. Stories will be shared with peers in class. A ~2 min voice recording **or** 300-word personal reflection describing your learnings from this process plus the photo will be submitted on D2L. Evaluation will be based particularly on depth of engagement with course ideas, depth of engagement with your experience, creativity and lucidity of thought.

Assignment #4 Climate Action Passion Project (30%) (Individual or Pairs)

This assignment is focused on identifying and implementing a tangible climate action that is driven by your personal talents and interests. Inspired by the work of marine biologist Ayana Elizabeth Johnson, you will watch the TED Talk "How to Find Joy in Climate Action" (10:51 min), and use the Climate Action Venn Template to determine your climate action that can contribute to an existing climate solution. While we cannot solely rely on individual actions to meet drastic greenhouse gas reduction targets, implementing a climate action that brings you joy while also tackling the climate work that needs to be done can be useful for several reasons. It can help us to realize that the changes we need to make collectively may not be as hard as we thought, and may actually make our lives better - or even joyful. It can provide an example or guidance for others. It can raise awareness as people become interested in how we can tackle the climate crisis in all different aspects of society. This project can revolve around education, or not. For inspiration, you can visit @climatevenn on Instagram or climatevenn.info

Quite possibly you are most powerful in your existing role, where you have specialized knowledge and existing networks. How might you lean into those talents? Can you help your town, company, church or school charge ahead with climate solutions? Because what we need is change in every sector, and in every community.

- Ayana Elizabeth Johnson

For this assignment, complete and submit ALL 3 components:

1. A completed Climate Action Venn Template (available in D2L) in legible, clearly stated and descriptive jot notes. Fill in all three circles, plus a brief but concise overview of your climate action in the right-hand box. This can be handwritten or typed over in a program like Canva. **If working in a pair, each partner must a personalized copy.**

2. A detailed Climate Action Summary that includes four parts:

   Part 1: What are you good at? Describe your skills, resources and networks (150 words). *Suggested prompts to get started:*

   - What are skill(s) we/I feel we/I have mastered, or am working on?
   - What resources do I/we have that are easily attainable?

- What networks do I/we have a strong connection with or what relationships do I/we want to build?

Part 2: What brings you joy? Describe your sources of satisfaction and delight (150 words)
Suggested prompts to get started:

- What in life makes me/us feel genuinely joyful and happy?
- What is something that I/us truly enjoy working on or doing?

Part 3: What work needs doing? Cite and describe some climate justice and actions that you research using at least two popular press resources (publicly available NGO websites, peer-reviewed journal articles, etc.) (200-300 words). An example website is Project Drawdown's Solutions Library

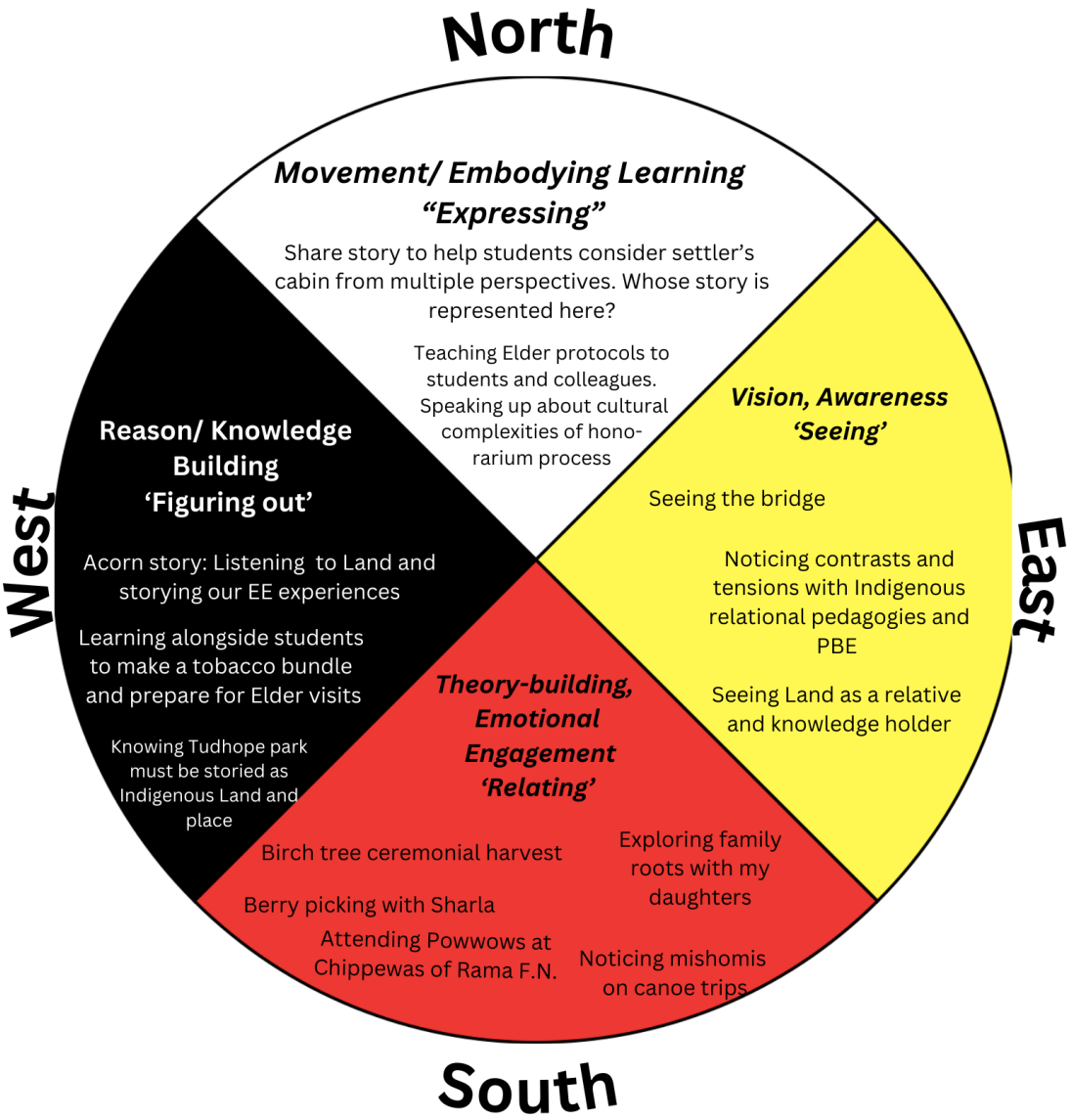
Suggested prompts to get started:

- Which existing climate action can have the most impact?
- Which existing climate action could people be more involved in?
- What existing climate action is local/relevant to where you live?

3. A 500 word summary on how you implemented your climate action and explains how you spent the required 6 hours (individual) 10 + hours (pairs) in the form of a time log with actions. Additionally, you must include any relevant documentation of your time spent implementing your work (photos, planning documents, social media content, advertisements, flyers, schedules, letters, invitations, recipes, art). **NOTE: The 6 hours (or 10 if working in pairs) does not include the time it took to complete part 1 and 2 (Venn Diagram and Climate Action summary part 1 & 2).**

Appendix B: Medicine Wheel as a Meaning-making Tool: Mapping Vignettes

Examples of other vignettes from my journal notes, not included in the portfolio, as they align with the Medicine Wheel meaning-making framework.



Appendix C: Photographs of my Learning Journey from each Direction

East: Vision, Awareness, 'Seeing'

"Water basket" Responsive Land-based art created during Personal Land Experience

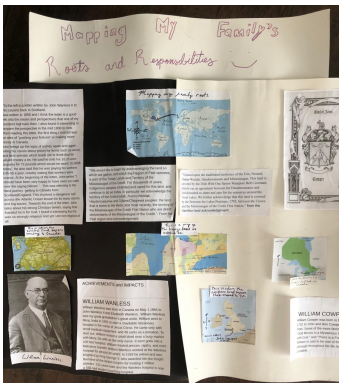
"Seeing the Bridge"

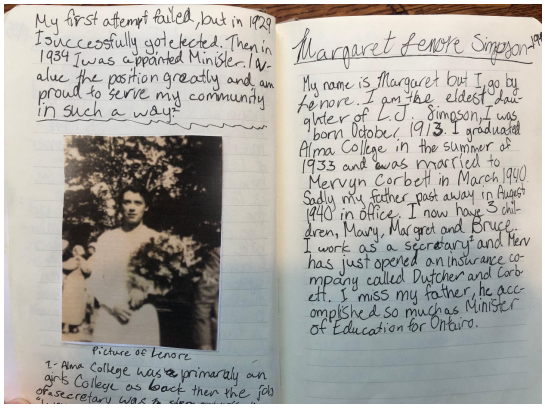
Mnjikaning National Historic Site (note: I did not take photos on my visits to Mnjikaning out of respect for Knowledge carriers and the significant place. Photo found here: https://www.orillialakecountry.ca/item/mnjikaningfishweirs-nationalhistoricsite/

South: Theory-building with Emotional Engagement, 'Relating'

With mishomis at Rama First Nation near pathway created by Sixties Scoop survivors

Artistic response to Teaching Lodge experience





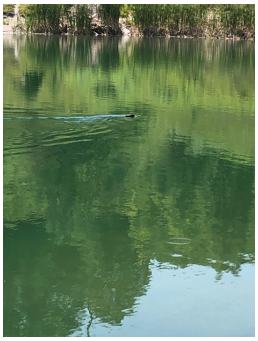
Mapping our Families Roots and Responsibilities with my two daughters to understand where we come from and our treaty responsibilities (Photo credit: Payton and Sophie Sargent used with permission).

Berry picking and learning about *Ode'iminan*

West: Reason/ Knowledge Building, 'Figuring out'

Learning at Farm Lab and Wiigwasitig Gitigaan
North: Movement/ Embodying Learning, 'Expressing'

Reframing the Settler Cabin story at Scout Valley



Learning alongside Beavers

Appendix D: Definition of Key Terms

As a settler-educator, rather than decolonizing myself or my practice, I can gesture or shift towards a de/colonial future (Andreotti et al., 2023; Madden, 2019) by ensuring my work is done within the context of Indigenous sovereignty, that I am relationally accountable to Indigenous peoples, and that I explicitly acknowledge the Indigenous Knowledges, scholarship and pedagogies that are undoubtedly a principal constituent of this future (Carlson, 2017). I understand that language is not neutral (Styres, 2018). The following terms have been synthesized from a variety of Indigenous and non-Indigenous sources, to reflect current understandings of these terms across a variety of cultural contexts.

Decolonization and De/colonization: Throughout my learning journey, I have been challenged to consider the term 'decolonization' and what it means from my position as settler-educator. Tuck & Yang (2012) point out that decolonization is a term meaning the rematriation of all Lands, sovereignty, culture and traditions back to Indigenous peoples. With this definition in mind, I do not believe I can legitimately, as a settler-educator, use the term to describe any process or action I am taking as I (still) benefit from being on stolen land and I (still) work/participate within oppressive neo-colonial systems, such as the education system. I refrain too, from using the term decolonial to describe a reimagined EE curriculum as I fear using this term suggests a near or final destination of a decolonized future; a future in which the brutality and oppression that has occurred and is occurring on these lands is reconciled, forgiven and *over*. Yet, as Tuck & Yang (2012) contend, "decolonization is not an "end". It is an elsewhere." (p. 36). To use the term decolonial to describe the work I am doing would be a settler move to innocence, as it would metaphorically create a sense of closure and relief from guilt and

responsibility, without addressing the need for ongoing relational work, Indigenous sovereignty, and a redress in power and privilege in these Lands (Tuck & Yang, 2012).

Leaning on the work of Madden (2019), I use the term de/colonization to show "the complexity and, at times incongruity of the material-discursive structures, commitments, and practices of educational institutions and the Indigenizing, decolonizing, and reconciliation initiatives they pursue" (para. 11). Madden (2019) suggests decolonization isn't always a direct opposite to colonization as it requires "consistent examination of colonial logics" and that oftentimes what is reproduced in teacher education programs are "hybrid experiences of colonizing and decolonizing" (para. 11).

Indigenous: Indigenous or Indigenous peoples is a collective name for the original peoples of North America and their descendants and encompasses a wide range of cultural groups (Government of Canada, 2022). In some cases, the term Aboriginal peoples is also used (Government of Canada, 2022). The word Indigenous is capitalized in this portfolio as a sign of respect. Whenever referring to a local context, specific cultural names based on community location will be used.

Land: Throughout this portfolio, Land is capitalized to show it "encompasses all water, earth, and air and is seen simultaneously to be an animate and spiritual being constantly in flux" (Styres, Haig-Brown, & Blimkie, 2013). As such, Land is seen as something far beyond the parameters of resource-based geography lessons with borders defining nation states and personal property. Land is both context and process as individuals freely come to know things about themselves and their relationship with the world by spending time engaging with Land, family and community (Simpson, 2014).

Land-based pedagogy: A Land-based pedagogy draws on "the interconnectedness and interdependence of relationships, an understanding of cultural positioning, as well as subjectivities that extend beyond the borderlands of traditional mainstream conceptualizations of pedagogy" (Styres, 2011, p. 722). A Land-based pedagogy goes further than learning about local issues, which are a foundational component of place-based pedagogy, to include "the spiritual, emotional and intellectual aspects of Land" respecting Land as history, as first teacher, as alive, sentient being (Styres, Haig-Brown, & Blimkie, 2013). To engage in land-based pedagogy is to recognize and acknowledge the deep relationships Indigenous peoples have with their lands since time immemorial (Styres, Haig-Brown, & Blimkie, 2013).

Environmental Education (EE): Environmental Education is defined in Ontario schools as:

> Education about the environment, for the environment, and in the environment that promotes an understanding of, rich and active experience in, and an appreciation for the dynamic interactions of:
>
> - The Earth's physical and biological systems
> - The dependency of our social and economic systems on these natural systems
> - The scientific and human dimensions of environmental issues
> - The positive and negative consequences, both intended and unintended, of the interactions between human-created and natural systems." (Ontario Ministry of Education, 2007, p. 6).

This definition was initially created by a working group of predominantly white, academic, environmental settler-educators and published in the document *Shaping our Schools Shaping our Futures* in 2007. The working group identified key priorities for action in EE in the province of Ontario and "a coherent approach to environmental education in Ontario schools that

will prepare our young people to take their place as environmentally responsible citizens" (Ontario Ministry of Education, 2007, p. 3).

I suggest this definition of EE is problematic as it is largely missing Indigenous voice. It does not acknowledge systems of relationality outlined by many Indigenous scholars and educators as being critical for creating strong, sustainable relationships with humans and Land (McCoy et al., 2020; Simpson, 2014). For example, McCoy et al. (2020) argue that in order to imagine a future where all humans live in reciprocal, sustainable relations with each other and the natural world, we must first address the challenging contexts that led to the current environmental problems we find ourselves in. A critical examination of how and why changes to Earth's environment and its natural systems are occurring **is not** addressed in the definition of EE (Ontario Ministry of Education, 2007, p. 1). Many Indigenous and non-Indigenous scholars agree the problematics of climate change, biodiversity loss, and human inequality, are created by dominant systems of capitalism and settler colonialism, centered on a Eurocentric epistemology, that prioritizes extractive, consumerist relationships with Land (Tuck & Yang, 2012; McCoy et al., 2020; Simpson, 2014; Root, 2010).

A secondary problem with the definition of EE, as put forth for Ontario schools, is that it doesn't clarify who 'our' is referring to. The collective use of the word 'our' implies that we are all one group of citizens, equally responsible for the "positive and negative consequences" between human-created and natural systems (Ontario Ministry of Education, 2007, p. 6). The use of the collective 'our' in the definition of EE can be seen as a *settler move to innocence* strategy as it ignores the fact that the generational way of life of some people has contributed much more to current environmental problems and injustices than the lives of others (Tuck & Yang, 2012).

Calderón (2014) urges environmental educators to "rethink their relation to land as a dynamic ecological and cultural project of recovery and rehabilitation" and to look at EE not only in ecological terms, but also in cultural terms, taking note of whose stories of land and place have been omitted (p.10). In response to Calderón's call, I use the term EE within this portfolio, as it connects with school-based curriculum and preservice teacher education, in a transitional way, noting there must be a reimaging of EE informed by both Indigenous and non-Indigenous voices, inclusive of a broader view of Land and an honest representation of the current and historical contexts in which we collectively live.

Climate Change Education (CCE): Climate change is a critical issue in current times and the United Nations has highlighted the need for climate change education in schools (UNESCO, 2016). However, across the climate change education field, there is little consensus on what climate change education is and how to deliver it effectively (Field et al., 2023). For example, in a Canadian context, after an in-depth curriculum analysis of climate change expectations across provincial curricula, Field et al. (2023) found most CCE expectations were fractured, inconsistent and shallow when it came to engaging youth in CCE and action. Field et al. (2023) indicate the emerging evidence base of effective climate change education shows that it must be transdisciplinary, move beyond science and environmental literacy, involve a socio-emotional dimension and be personally relevant to learners. Within this portfolio, it is important to note that elements of CCE are incorporated into the term EE, which also strives to be locally relevant, connected with learners on a socio-emotional level, and integrated across a broad range of subject areas (Anderson et. al, 2017). The term CCE and its relation with EE will be explored further in the final portfolio submission.

Reconciliation: Reconciliation, as described by The Truth and Reconciliation Commission of Canada (2015a) means "establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. In order for that to happen, there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour" (p.6-7).

Despite the TRC's (2015a) definition of the term reconciliation, it is often used without a clear definition and its meaning is not regarded in a similar way amongst all people or across all contexts (TRC, 2015a; Wilson-Raybould, 2022). For the purposes of this portfolio, reconciliation will be largely discussed in terms of education. The term will be used in connection with ongoing action and pedagogical choices I make as a settler-educator instructing an EE course for preservice educators that responds to the T.R.C's Calls to Action for Education (2015b), including an investigation into best practices in teaching, building student capacity for intercultural understanding and responding to teacher-training needs as they relate to Call to Action #63. Reconciliation is also actioned and modeled through establishing and maintaining respectful, reciprocal relations with the Chippewas of Rama First Nation (Mnjikaning), the Land and the Waters.

Eurocentric epistemologies: Broadly, the term Eurocentric epistemologies refers to dominant knowledge systems and ways of knowing that emerged from Western European and North American cultures and that have been historically privileged in academic and scientific arenas (Silvestru, 2023). Eurocentric epistemologies are often critiqued for exclusion of other knowledge systems and worldviews, including Indigenous Ways of Knowing, with a hyper focus on objectivity, positivism, empiricism and reductionism (Kerr, 2014; Silvestru, 2023). I use the term within this portfolio to describe "the epistemic monoculture that emerges from Western

cultural traditions of thought and practice that dominate educational spaces and knowledge-making practices (that) affirm and perpetuate a structure of coloniality" (Kerr, 2014, p. 87).