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Ethical Relationality in Land-based Practices: Braiding Stories, Land, and Spirit

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Ethical Relationality in Land-based Practices: Braiding Stories, Land, and Spirit

by

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A THESIS

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Abstract

The purpose of this study is to find ways to sustain, validate and legitimize Tsuut'ina ninisha (way of life), and restore land-based practices that are critical for identity and survival within Tsuut'ina Nation schools. The research question guiding this study is: What is required to sustain, validate, and legitimize Tsuut'ina ninisha uwa gunaha and restore land-based practices to revive a diminishing way of life crucial for identity and survival, within Tsuut'ina Nation schools, as perceived and advocated by Tsuut'ina Elders? Indigenous Métissage is used as a research praxis in this study to braid and weave my personal story, Tsuut'ina Elder's stories and stories of Western attempts of boundary crossing and funds of knowledge as a means to understand the ethical space and ethical relationality needed to create land-based curriculum for Tsuut'ina students that is respectful, reciprocal, relevant, relational, and responsible to Tsuut'ina peoples. Becoming familiar with theories of boundary crossing and funds of knowledge, teachers could have a better understanding of the importance of implementing Tsuut'ina ninisha into their daily teaching practices. Results from the study indicate that fostering community, facilitating experiential learning, nurturing care, and providing spiritual guidance are imperative for sustaining, validating, and legitimizing Tsuut'ina ninisha and revitalizing land-based practices crucial for Tsuut'ina children and youth within Tsuut'ina schools. Furthermore, the study illuminates how the concept of boundary crossing takes on profound significance when imbued with the teachings and wisdom of Tsuut'ina Elders. This enriched understanding of boundary crossing, infused with spiritual essence, encompasses the essential elements required for harmonious coexistence of Alberta Programs of Study and Tsuut'ina teachings within Tsuut'ina schools. These findings carry significant implications for systemic reforms in education, particularly for Indigenous students in reserve schools.

Keywords: Indigenous Métissage, Ethical Space, Ethical Relationality, Funds of Knowledge (FoK), Boundary Crossing, Tsuut'ina ninisha (way of life)

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Dedication

This dissertation would not have been possible without the love, support, and encouragement I received from my partner Stomiksoopi, Daniel Mistaken Chief. He wiped my tears, fed me, and believed in me when I didn't believe in myself. In honour of my late mother Shirley Starlight, I pursued my EDD, she knew before I did what I was meant to do. I also dedicate this dissertation to Tsuut'ina Elders that have guided my work and supported my efforts in making changes in our education system for our young people.

Chapter 1: Introduction

This doctoral thesis entitled *Ethical Relationality in Curriculum: Braiding Stories, Land, and Spirit* is to support Tsuut'ina Elders' vision of Tsuut'ina Nation schools. Since Tsuut'ina Nation took control of their own education, when the Government of Canada recognized the inherent right of self-government as an existing aboriginal right under section 35 of the Constitution Act in 1982, they have struggled to embrace the vision for education that the Elders of the Nation had for how Tsuut'ina gunaha uwa ninisha would be taught in the Nation operated schools. The Tsuut'ina Elders' vision was that Tsuut'ina students would be immersed in the language and culture and have curriculum that was respected, relevant, relational, and responsible to Tsuut'ina ninisha. As a result, Chiila Elementary School officially opened September 1993. Tsuut'ina schools were intended to have Tsuut'ina gunaha (language) and ninisha (way of life) as the foundation of learning. In 1996 Tsuut'ina developed the first K-12 Tsuut'ina Language and Culture Curriculum with Tsuut'ina Elders, knowledge keepers, teachers, and community members. Tsuut'ina ninisha is deeply rooted in land-based, experiential learning. As years have passed the Tsuut'ina curriculum has been put on a shelf or discarded and is only being taught by language and culture instructors as an option class. While I was the curriculum developer for Tsuut'ina Board of Education I worked closely with the Elders, most of whom developed and taught the 1996 curriculum. They were saddened that over the years Tsuut'ina ninisha had not been understood or sustained in the ways they intended. The Alberta Education Programs of Study began to take precedence over the Elders' vision. The Alberta Education Programs of Study does not acknowledge Tsuut'ina ninisha as an equal and valid way of learning, so following the Elders' teachings was seen as an add-on or not understood. One of the results of replacing the Elders' vision with the Alberta Education Programs of Study is that

major gaps have occurred in recognizing and respecting that Indigenous knowledge holds any validity or equity as a way of knowing.

Tsuut'ina Elders continue to fight for and work for changes in the education of Tsuut'ina children within Tsuut'ina Nation schools. I, along with the Elders, strongly believe that Tsuut'ina gunaha uwa ninisha and land-based learning should be the main and dominant curriculum within Tsuut'ina Nation schools. In honour of Tsuut'ina Elders and knowledge keepers I want my research to be respectful, relevant, reciprocal, and responsible of Tsuut'ina Elders vision of Tsuut'ina gunaha, ninisha, and land-based learning.

Structure of the Thesis

This thesis is composed of three sequentially developed manuscripts that are grounded in the overarching purpose to learn from a Tsuut'ina Elders' perspective of land-based learning, teaching, and educational practices and how Tsuut'ina ninisha (way of life) should be recognized as an equal and legitimate way to educate Tsuut'ina children and youth within Tsuut'ina Nation schools. Tsuut'ina peoples are part of the Den'e people. As Tsuut'ina and Kainai historical and traditional stories have told, a small band of Tsuut'ina separated from the Den'e people and relocated to the plains. As Tsuut'ina entered the plains they encountered the Blackfoot people. The Kainai people made alliances with the band of Tsuut'ina. Through traditional stories and research, it remains uncertain how long Tsuut'ina people have lived within the Blackfoot territory. Documents and stories range anywhere from 300 – 700 years before contact. As time went on Tsuut'ina's way of life shifted from its Den'e roots to primarily Siksikaitapitapiiyssin (Blackfoot way of life). The only distinct difference was that Tsuut'ina kept their language and continued to live separately from the Blackfoot people. The Kainai people transferred many ceremonies, songs, some societies, and daily practices to Tsuut'ina throughout their alliance and through mixed marriages. Thus, it is important to note

that up until the signing of Treaty 7, Tsuut'ina ninisha was predominately Siksikaitapaitapiiyssin. While I reference Tsuut'ina ninisha, it is with the full acknowledgement that it is a blend of ninisha and Siksikaitapaitapiiyssin. In this thesis, I am referring to the strong influences the Blackfoot Siksikaitapaitapiiyssin in what Tsuut'ina identifies as traditional Tsuut'ina ninisha. Today, with marriages with other neighbouring tribes like the Cree and Iyahrhe Nakoda, Tsuut'ina continues to make adaptations integrating other ceremonial practices creating a contemporary Tsuut'ina way of life.

Chapters two, three, and four contain the first, second, and third manuscripts that make up this thesis Chapter five summaries the main findings of the three manuscripts and my reflections as the researcher.

Significance of the Study

Tsuut'ina gunaha is on the brink of extinction. Our youngest fluent speaker is in his 70's. Many Tsuut'ina Elders and knowledge keepers depend on the education system to teach the language and culture because traditional ways of learning are not commonly practiced today. School is where children spend most of their time, other than at home. With the rush and societal demands of keeping up with the outside world, visiting and taking time to learn Tsuut'ina gunaha is becoming an irrelevant practice. Our Elders are getting too old to be in our schools and out on the land with our students, leaving Tsuut'ina ninisha uwa gunaha and educators to find ways to reclaim, reconnect, and sustain our way of being, knowing, and doing. When I first started in my role as a curriculum developer, I had asked many elders the same question, what do you believe our students need to learn in our schools? Almost every answer was the same, students need to learn respect. Respect for the land, the language, and the people. Students also need to learn how to survive, all Tsuut'ina teachings come from the land and are held within the language. Without

Tsuut'ina language, our kids will lose their way of life. If they do not know how to survive off the land, the language and culture will die.

I believe that finding what is needed to sustain, validate, and legitimize Tsuut'ina ninisha uwa gunaha will restore a dying way of being that is essential for identity and survival. A sense of Identity and well-being have been identified as human characteristics that help students get through grade school and post-secondary education. Tsuut'ina ninisha teaches children coping mechanisms, strengthens identity, and connects students to the land and spirituality that fosters well-being. Tsuut'ina Nation Department of Education's mission statement is committed to providing educational opportunities that preserve Tsuut'ina language, culture and traditions thereby enhancing the quality of life for Tsuut'ina citizens and ensuring the ongoing strength of Tsuut'ina Nation. Therefore, superintendents, leaders/administrators, teachers, and the Tsuut'ina community should all be responsible for providing these educational opportunities.

Background and Context

All my K-12 education was received in a white-dominant atmosphere in the city of Calgary. Tsuut'ina did not have any schools on the reserve at that time, so I was sent to the city. Both my parents spoke their Native tongue fluently, my mother Tsuut'ina and my father Cree. Both parents did not pass their language down to me, leaving English to be my main language. During grades 4-9 I was able to attend a Tsuut'ina language and culture class that was offered once a week in our schools. I felt at home in this classroom, we could share stories, laugh, learn the language, and create crafts. Once class was over, we were sent back to mix among the mainstream as it was called. Other teachers and non-Tsuut'ina students referred to the Tsuut'ina class as a "special" class or pull-out class like the "special" kids, making me a little apprehensive to attend because I didn't want to be labelled or seen as less than. I asked the Tsuut'ina instructors why they didn't teach the other subjects or classes. They responded that they weren't

allowed. At the age of five, I wanted to be a teacher, by the age of 12 I wanted to teach all the subjects, not just the Tsuut'ina class. As an Indigenous student attending a white-dominant school and system my people's language nor culture was seen as important or equal. The Tsuut'ina culture class was an add-on class that did not require assessments or reports, nor were reflected on our report cards as if these classes happened in secret.

When I graduated with my teaching degree in 1999, I was eager to teach all subjects and I knew this would be the opportunity I was looking for. I would be able to teach and implement Tsuut'ina ninisha within my class. I did the best I could each year but was constantly reminded by my peers and administrators that the Alberta curriculum was the priority. Every chance I could, I would make connections between Tsuut'ina ninisha and the curriculum I was mandated to follow. I would often challenge what the textbook was saying and assuming about Indigenous peoples. The more I worked with and understood the curriculum, the more I felt unrepresented, unjustified, and unappreciated as an Indigenous person and educator. During the two years I worked for the Calgary Board of Education, I felt exploited and tokenized. I did many presentations to other classes but felt my knowledge was not recognized as equal, rather it was seen as a hobby or what I do outside of real learning. I made a career move to teach at an all-Indigenous school on a reserve thinking I had a better chance of equalizing Indigenous knowledge with the curriculum. Many years I spent trying to educate using Indigenous knowledge as the dominant knowledge, hoping, and believing that teaching to an all-Indigenous audience, having many teaching staff Indigenous, and teaching on a reserve would welcome, validate, and encourage Indigeneity. I was wrong. Language and culture still only happened in the Blackfoot or Tsuut'ina class, "special" guests would come in to share a way of knowing that existed outside of the school, and teachers were expected to follow the curriculum given. There were minor differences, we prayed in the language every day, ceremonies at the school would

take place every few years, and elders would come to the school for a brief visit each week. But for me, that still was not enough.

When I took my master's program it woke something inside me that had been oppressed for too long. Many of the courses involved Blackfoot ways of knowing and being and were respected, validated, and taught by local Kainai Elders. The Elders involved in the program would encourage us and strengthen our Indigenous voices to fight to teach Indigenous students our ways of knowing, being and doing within the schools. The spark I had was being fueled again with passion, love, and respect for Indigenous knowledge.

I moved back home to Tsuut'ina, where I soon became a vice-principal. I didn't stay in that position long as I found myself having to confirm and push policies and expectations of the Alberta curriculum. Finally, I found the position I felt would promote Tsuut'ina ninisha throughout all Tsuut'ina Nation schools, the curriculum coordinator. As I worked on my teaching degree and my master's degree, I continued questioning how I could make a change, a real authentic systemic change. The curriculum coordinator role allowed me to review Tsuut'ina and other First Nations' curriculums, consult with elders and knowledge keepers, and work with administrators, teachers, students, and culture instructors, in finding ways to legitimize Tsuut'ina ninisha within our schools. I have found there to be many setbacks, obstacles, and challenges. I believed in the vision and promise that Tsuut'ina Elders and nation leader had when schools within Tsuut'ina opened; where Tsuut'ina schools have the right to educate their students in the way the Nation deems worthy of having Tsuut'ina ninisha uwa gunaha as the foundation of learning.

Tsuut'ina Nation is a sovereign nation and should be treated and respected as such. Our nation should be able to dictate within our lands and in our school's what curriculum students learn and how it should be taught. Tsuut'ina gunaha is on the brink of extinction, having less

than 20 fluent speakers remaining. Many efforts to restore and revitalize Tsuut'ina gunaha are ongoing and important to the community. Therefore, the Tsuut'ina Gunaha Institute collaborates with the Tsuut'ina Department of Education in creating a language and culture curriculum.

Understanding the Problem

Since the signing of Treaty 7 (1877) and the enactment of the Indian Act (1976), the Federal and Alberta governments have wielded significant influence over Tsuut'ina education, perpetuating large gaps and systemic biases. A major deficiency lies in the validation and recognition of Tsuut'ina knowledge as a legitimate and equitable epistemological framework. Additionally, there is a lack of emphasis on creating and implementing curricula that are relevant and relational to Tsuut'ina students' cultural contexts.

The historical context of Indigenous education in Canada traces back to the findings of the 1879 Davin Report, which advocated for the assimilation of Indigenous children through the eradication of their cultural heritage and the imposition of Christianity (MacMath & Hall, 2018). These oppressive and discriminatory practices aimed to nullify parental influence and replace Indigenous mythology with Western ideologies.

With the advent of the Truth and Reconciliation Calls to Action (Truth and Reconciliation Commission of Canada, 2012), there is a glimmer of hope for transformative change within the education system, aiming to validate and legitimize Indigenous cultural and human rights. Notably, on February 7, 2018, the Minister of Education in Alberta Education, through Ministerial Order, implemented three standards: the Teacher Quality Standard (TQS), the Leadership Quality Standard (LQS), and the Superintendent Leadership Quality Standard (SLQS). Of particular significance is Competency 5 within these three standards, which mandates the development and application of foundational knowledge about First Nations, Métis, and Inuit cultures to benefit all students. This directive places the responsibility on

Tsuut'ina schools to incorporate, support, and ensure the integration of Tsuut'ina foundational knowledge into their teaching practices.

Despite these advancements, Tsuut'ina education still faces significant challenges. Locally created curricula, despite being rich in Indigenous knowledge and tailored to community needs, often struggle for recognition and support from teachers, educators, and administrators. Many educators feel ill-equipped or unobligated to incorporate these curricula due to a lack of resources, time constraints, and unfamiliarity with alternative educational frameworks.

The framework outlined by the Alberta government for the 2017 Tsuut'ina Language and Culture curriculum tends to homogenize Tsuut'ina language with English, suggesting that they can be taught using the same framework used to learn European languages. I have tried to use the 2017 curriculum and was even criticized by the Tsuut'ina Elder that helped to create that curriculum, telling me that anyone should be able to just pick up this curriculum and teach Tsuut'ina language. The 2017 curriculum implies that you are a fluent Tsuut'ina speaker, can read and write in Tsuut'ina and have a linguistic background. I also found that the exact same framework was used for Blackfoot and Cree language and culture. No distinct changes were made other than the use of a different language. I met with both Blackfoot and Cree curriculum developers that are fluent in their native tongue and that are aware of the 2017 curriculum framework. I asked if that is how they teach the language in their schools. Their replies were no, this curriculum is useless, but we needed to use this framework to get our locally developed language course approved. However, Tsuut'ina ninisha uwa gunaha is inherently situational and contextual, requiring dedicated time and space for interaction with the land and fluent language speakers that is not part of the 2017 curriculum framework provided by Alberta Education. Teachers in Indigenous schools must be afforded opportunities to engage with the land and Elders who possess the language and traditional teachings.

Tsuut'ina knowledge is derived from the land. Education practices within the Tsuut'ina community should strive to reconnect students with the land. A “dire consequence of... diaspora experienced by Aboriginal peoples is a disconnection from their traditional lands” (Blood et al., 2012, p. 55) and the knowledge embedded in the land. Land-based education can be used as a way for both Indigenous and non-Indigenous teachers to begin to understand and value Tsuut'ina ninisha. Land-based education “requires [a] deeper consideration of the intersections between settler colonialism, the content derived from normative scientific paradigms that have been constructed around the division of nature and culture and is routinely taken up in learning environments” (Bang et al., 2014, p. 7). Land-based education has the power to transform educational practices within Tsuut'ina community schools.

To address the gaps and challenges, comprehensive support and training must be provided to educators to empower them to integrate Indigenous knowledge into their teaching practices effectively. This includes bridging non-Indigenous and Indigenous curricula, leveraging authentic resources, and fostering meaningful relationships with families and community members. Administrators play a crucial role in this endeavor by aligning with the community's vision, providing professional development opportunities, and holding teachers accountable for implementing Indigenous knowledge in their classrooms. Ultimately, these efforts strive to revive and honor the spirit of Indigenous heritage within the educational landscape, countering the historical intent to assimilate Indigenous children into Western norms and values.

In this research, I prioritize fostering ethical space (Ermine, 2007) and ethical relationality (Donald, 2016), which entails providing the structure and the context for dialogue and negotiation and honouring and respecting the fundamental interconnectedness of all beings. Having been nurtured and educated within both realms, I am reminded by Duane Mistaken Chief

of the enduring presence of Sikisikaitsitapiipaitapiysiin, which exists and has always existed, emphasizing that “just because you can’t see it doesn’t mean it is not there” (personal interview, November 22, 2022). Indigenous people have bent their ways of knowing since contact, “it is time now where both sides need to bend” (Duane Mistaken Chief, personal interview, November 22, 2022). This thesis explores the ways that non-Indigenous can “bend.”

Purpose of the Study

The purpose of this study is to understand what is needed to sustain, validate, and legitimize Tsuut’ina ninisha uwa gunaha to restore a dying way of being that is essential for identity and survival. To do this, I need to learn from Tsuut’ina Elders' regarding land-based learning, teaching, and educational practices. Moreover, in learning from the Elders I will learn how Tsuut’ina ninisha should be recognized as an equal and legitimate way to educate Tsuut’ina children and youth within Tsuut’ina Nation schools.

Primary Research Question

My primary research question guiding this thesis is: What is required to sustain, validate, and legitimize Tsuut’ina ninisha uwa gunaha and restore land-based practices to revive a diminishing way of life crucial for identity and survival, within Tsuut’ina Nation schools, as perceived and advocated by Tsuut’ina Elders? This question is addressed in various ways through the three manuscripts.

An Indigenous Theoretical Orientation

The theoretical orientation that guides this research is based in ideas of ethical space (Ermine, 2007) and ethical relationality (Donald, 2016). As a Tsuut’ina woman I am grounded and immersed in a distinct orientation, which offers a unique lens through which to view the Western world. This viewpoint emerges from the collective memory and ongoing narrative of my community, embodying their social, political, and historical consciousness. It emphasizes the

intrinsic validity and purpose of the First people in Canada within the universe. This perspective recalls a pre-colonial era and asserts the Indigenous community's belief in its own humanity. The challenge lies in reconciling diverse worldviews. An orientation to ethical space (Ermine, 2007), acknowledges the necessity of dialogue and negotiation between contrasting worldviews. By creating a space for engagement and dialogue, the ethical space offers the potential to shift from asymmetrical power dynamics to a more equitable partnership between Indigenous and Western societies (Ermine, 2007). Within Indigenous ways of knowing, elders and knowledge keepers speak about the “space” of learning. It is important to remember that the “Indigenous space,” as Leroy Little Bear (2009) calls it, is a space in constant flux where the spirit of knowledge is transferred through ceremony, songs, and stories.

Ethical relationality (Donald, 2016) embodies an ecological perspective of interconnectedness that becomes evident when the sacred balance supporting all life is respected. “Ethical relationality does not deny difference, nor does it promote assimilation of it” (Donald, 2016, p. 11). Rather, ethical relationality supports the conceptualization of difference in ecological terms as necessary for life and living to continue. He contends that rather than negating differences, ethical relationality views difference through an ecological lens as vital for the continuity of life. Donald (2012) explains, “the term ecological in association with the concept of ethical relationality draws attention to the complex interrelationships that comprise the world as it is understood in Plains Cree and Blackfoot wisdom traditions” (p. 535). Ethical relationality encourages deeper exploration of how our diverse histories, memories, and experiences shape our relationships, highlighting these differences as essential for reciprocal relationships and interconnectedness. Donald (2016) states,

ethical relationality is tied to a desire to acknowledge and honour the significance of the relationships we have with others, how our histories and experiences position us in

relation to one another, and how our futures as people in the world are similarly tied together. It is an ethical imperative to remember that we as human beings live in the world together and also alongside our more-than-human relatives; we are called to constantly think and act with reference to those relationships. (p. 11).

Ethical relationality, as articulated by Donald, underscores the interconnectedness of all beings, and emphasizes the ethical imperative to acknowledge and honor the significance of our relationships with others, shaping our actions and interactions in the world.

The two orientations grounding this study, ethical space (Ermine, 2007) and ethical relationality (Donald, 2012, 2016) complement each other in fostering dialogue, understanding, and mutual respect between different perspectives and communities. Ethical space as conceptualized by Ermine (2007) provides a framework for creating a space where diverse voices and viewpoints can come together. It emphasizes the importance of dialogue and negotiation between contrasting perspectives, aiming to transition from asymmetrical power dynamics to more equitable relationships. By establishing parameters for interactions based on ethical and human principles, ethical space sets the stage for meaningful engagement and collaboration. On the other hand, ethical relationality, as articulated by Donald (2012, 2016) highlights the interconnectedness of individuals and communities. It underscores the ethical imperative to recognize and honor the significance of relationships with others, understanding how our histories and experiences shape our interconnectedness. Ethical relationality emphasizes the importance of acknowledging and respecting diverse perspectives and experiences, recognizing that our futures are tied together as people sharing the same world.

Together, these two Indigenous orientations work synergistically to promote understanding, empathy, and cooperation across cultural, social, and political divides. Ethical space provides the structure and context for dialogue and negotiation, while ethical relationality

reminds us of the fundamental interconnectedness of all beings and the importance of honouring and respecting our relationships with others. By integrating these ideas, I can create space for meaningful engagement and collaboration that fosters mutual understanding and respect between Indigenous Knowledge Systems.

Indigenous Métissage

Indigenous Métissage serves as research approach I draw upon for this thesis, as it aligns with the principles of ethical space and ethical relationality, by creating a space—a context for dialogue and negotiation—and at the same time acknowledging and honouring the significance of relationships with others--recognizing the interconnectedness of individuals and communities. In the context of Indigenous Métissage, ethical space and ethical relationality come together through the braiding. In my research, I want to grasp the intricacies and necessities of land-based learning and the intertwining narratives emphasizing the textural qualities of the braid.

Research Design

I used Indigenous Métissage (Donald, 2009) the grounding orientation to my research and conversational methods with the Elders to gain insight into the Elders' teachings. I drew primarily using Kovach's (2010) conversational Indigenous research method, including semi-structured interviews and observations. I also used conversational method to gather data that studies Tsuut'ina Elder's perspectives on land-based learning, leaving space for stories to be shared by Elders.

The conversational Indigenous methodology that is based on traditional Indigenous storytelling. Joann Archibald (2019) contends that Indigenous Peoples are in the process of reclaiming, recovering, and revitalizing their story-based traditions for educational justice and research purposes. Within the traditions of the Tsuut'ina ninisha, I have learned the nature of and protocols for telling and using the stories with which I am entrusted. I have engaged in a process

of meaning-making as I listened to Tsuut'ina Elders share their stories and experiences of land-based learning. I prompted them to address what they feel would be an ideal learning environment at Tsuut'ina schools. I also asked them what Tsuut'ina teaching and educational practices should be recognized as equal and legitimate ways to educate Tsuut'ina children. Finally, I kept the conversation focused on the ways of sustaining Tsuut'ina ninisha in the curriculum and in Tsuut'ina Nation run schools.

I believe that Tsuut'ina Elders have been able to cross boundaries between Western educational practices and Tsuut'ina ninisha. They have been able to do this through the continued use of Tsuut'ina language, their traditional, intergenerational, experiences of the transferring of knowledge through land-based practices that include ceremony and protocol. Experiencing ceremony and following protocol moves theory into practice. As Duane Mistaken Chief reminds me “you don't know anything unless you experience it” (personal interview, November 22, 2022). Therefore, because “ceremony is life” (Duane Mistaken Chief, 2022, personal interview) I will follow Tsuut'ina protocol to bring my research into ceremony.

I am not a fluent speaker of Tsuut'ina. Not being a fluent speaker of Tsuut'ina or has many drawbacks. I have been working to learn Tsuut'ina and Blackfoot because the “language holds the knowledge, the content, and the relationships that constitute the sacred way of life” (Bastien, 2004, p. 128). Therefore, it is important in my process to continue to learn the language and use the language as often as I can. Talking and engaging with the language speakers is vital to the process of learning and understanding Tsuut'ina ninisha. Language is used to transfer knowledge; it is the discipline of knowing. By engaging in language and experiences people come to embody the fluidity and depth of traditional, intergenerational transferring of knowledge.

With the emphasized pressure within academia to both conduct research and disseminate and mobilize knowledge, this dissertation is written using a manuscript-style format. It will be organized into multiple chapters, manuscripts, references, and appendices. Manuscript-style dissertations, also referred to as article-based dissertations, are comprised of self-contained and ready for publication journal manuscripts with their own abstract, introduction, literature review, methodology, results, and conclusion (Krathwol, 1994). In recent years, researchers have called attention to the positive aspects of using a manuscript-style dissertation in that it allows for the acceleration in the process of turning a thesis into a research publication (as opposed to traditional style) and disseminate new knowledge (Ahern, 2012; De Jong et al., 2005; Robinson & Dracup, 2008). I have chosen to use a manuscript-style dissertation as it maximizes the outcome of the process of writing a thesis and allows for the development of publication-worthy empirical research that contributes to both academic and personal goals (Ahern, 2012). A key concern being questioned by researchers is whether the uptake of a dissertation approach might not reach the theoretical and methodological depth (Ahern, 2012). These standards will be explored in depth within the first three chapters of the manuscript (introduction, literature review, and methodology). Using a manuscript-style dissertation provides an opportunity to disseminate research results into publication and the growth of personal academic goals to produce publishable work.

My Role as the Researcher

My role as a researcher is to listen well and document accurately in ways that respect Tsuut'ina ninisha. I have become competent in the methods I choose to use. As a Tsuut'ina, female researcher I have been honest and respectful of both Indigenous and non-Indigenous research processes. I have learned and practiced Tsuut'ina protocols when conducting my research with Elders. I offered tobacco and other gifts for the exchange of the Tsuut'ina

knowledge I was seeking. I was respectful of the way Tsuut'ina Elders wanted to share their knowledge. I am also responsible to uphold the integrity of Tsuut'ina ninisha uwa gunaha and my research as a member of Tsuut'ina Nation.

My Positionality

I am conducting my research as a Tsuut'ina woman first and foremost. I am a mother, grandmother, and educator. I have been engaged and influenced by Elders, knowledge keepers, ceremonialists, and society members of Tsuut'ina and Kainai Nations. I was born and raised in the Tsuut'ina Nation until I married. After I married, I lived amongst the Kainai people for 25 years, my teachings and transfers were given and influenced by my participation in Kainai ceremonies and experiences. I have participated in various ceremonies within Tsuut'ina and Kainai since I could remember. I practice my culture daily. I have also lived on and off Tsuut'ina and Kainai reserves, so I can understand and relate to the experiences of a parent with children attending both on and off-reserve schools and as an educator teaching both on and off-reserve. I have lived and taught for 14 years within Kainai and consider myself part of their community. All my educational experiences from grade school to my education degree were within the city of Calgary. During my master's degree program Siksikaitstapi ways of knowing and becoming were legitimate and honoured and taught alongside non-Indigenous educational practices. The knowledge I gained from my master's program shifted my teaching practices towards implementing land-based learning, traditional sites, and cultural and language experiences throughout the curriculum I was teaching.

My teaching practices have been primarily teaching within Kainai and Tsuut'ina Nations. I have experience teaching elementary 1-6 and high school social studies. In 2017, I have moved back to my people of Tsuut'ina where I worked and communicated regularly with Tsuut'ina Elders and knowledge keepers. I was in an administrative role for a short 5-month period before

I switched roles. My role as a curriculum coordinator has allowed me to explore other Indigenous curricula and ways of teaching. I also have taught an Indigenous perspectives course at Mount Royal University to 3rd and 4th-year pre-service teachers in the fall of 2020 to 2023. My education experience, my teacher training experiences, my teaching practices, and my participation in ceremonies and other cultural practices influence my positionality as a Tsuut'ina woman and educator.

Definition of Terms

Decolonize - the active resistance against colonial powers, and a shifting of power towards political, economic, educational, cultural, psychic independence and power that originate from a colonized nation's own indigenous culture.

Dina-tii – real people (Tsuut’ina)

Nisk’a – land (Tsuut’ina)

NÍSKÁ-HĪ ÁDĀDĀGÚNĀSHŌN – land-based learning/learning from the land (Tsuut’ina)

Tsuut’ina ninisha – Tsuut’ina way of life

Tsuut’ina gunaha – Tsuut’ina language

Siksikaitsitapi - Blackfoot-speaking real people

Siksikaitsitapiipaitapiiyssin - Blackfoot way of life

Uwa – and (Tsuut’ina)

White people – people of European decent

Western – originating from Europe

Conclusion

As a Tsuut’ina educator, I have had a life-long dream of creating a curriculum and learning space that honours, respects and validates Tsuut’ina ways of knowing, being and becoming. I believe that if Tsuut’ina students were engaged in land-based learning that braided Tsuut’ina ninisha into the Alberta curriculum in ways that honour the Elders’ vision for education, then Indigenous pedagogies of respect, reciprocity, relevance, relationships, and responsibility would thrive. Tsuut’ina epistemologies would be validated, honoured, and equal to the Alberta curriculum within Tsuut’ina Nation schools thus, strengthening the identity and spirit of the Tsuut’ina student. This research opens the possibility of decolonizing educational

practices in Tsuut'ina schools and revitalizing Tsuut'ina ninisha uwa gunaha. By centering Indigenous perspectives, protocols, and ways of knowing, being, and becoming, this study seeks to create meaningful change that honour the Elders' vision, Tsuut'ina culture, language, and traditions. Through the lens of ethical space and ethical relationality, I aim to foster dialogue, understanding, and mutual respect between diverse perspectives, ultimately working towards a more equitable partnership between Tsuut'ina and Western orientations to K-12 formal education. By listening attentively to Tsuut'ina Elders' stories, weaving them with my story and stories of Western attempts through theories of boundary crossing and funds of knowledge, while upholding the integrity of Tsuut'ina ninisha, this research endeavours to contribute to the ongoing efforts of reclaiming, recovering, and revitalizing Indigenous knowledge systems for the benefit of the present and future generations. Through Indigenous Métissage, I strive to inform a curriculum where Tsuut'ina children and youth can thrive, reconnect with their cultural heritage, and embrace their identity as proud members of the Tsuut'ina Nation.

Chapter 2: Manuscript 1 - Land-based Knowledge Through an Indigenous Lens

Starlight, T. (2024). Land-based knowledge through an Indigenous lens (Nísk'á-hī ádādàgúnāshōn). In Y-S. Huang & M. Carter (Eds.), *Seasons of change: Interdisciplinary pedagogies for reconciliation and redress*, pp. 64-72. UBC Press.

Seeing From a Different Perspective

The Eurocentric concept of seasonal changes gives insight and recognition of the moon cycles that Indigenous peoples followed before contact. From time immemorial, the land has offered life and knowledge to all beings. Languages, stories, histories, traditions, and ceremonies are derived from people's relationships with the land. Indigenous ways of knowing and being are deeply connected to the relationship that one has with the land. One's relationship with the land, animals, cosmos, and people is symbiotic and dependent upon one another for renewal and survival. Indigenous peoples across Canada are deeply connected, rooted, and in a relationship with their traditional lands. Indigenous peoples' "philosophies, cultural ways of life, customs, language, all aspects of their culture being in one way or another--- are ultimately tied to the relationships that they have established and applied during their history with regard to certain places" (Little Bear 2009, 14). Many Indigenous peoples in Canada followed the cycles of the moon. The moons were named after changes in animal behaviours, weather, and life cycles that were significant in the traditional lands of Indigenous peoples. Like the seasonal changes, where each season is dependent on one another; each of the thirteen moons indicates how beings need to react and support those changes. Many ceremonies and rituals are replicated on each moon out of respect, reciprocity, and survival of all the animate and inanimate beings. In land-based knowledge, the moon cycles offer bridges to connect, build, and reconcile relationships with the

land and beings. In the process of decolonizing, educators should start by connecting with the land using an Indigenous lens.

Introduction

In this chapter, I would like to discuss the importance of land-based knowledge in both Indigenous and non-Indigenous education systems. The question many people and educators ask is, where do I begin? First, I will take you on a journey through the process of learning from the land and attempt to explain how Indigenous knowledge systems and Western science understand land-based knowledge in different ways. Second, I will show how Indigenous knowledge systems go beyond Western science in connecting people's minds, bodies, and spirits to the land. The spiritual relationship with the land must be acknowledged and respected because spirituality creates a meaningful space to learn from the land. I will share how prayer, offerings and protocols are part of the process of the land, acknowledging your intention and readiness to learn. Third, I will speak about your responsibilities as a learner. Being an active learner means you will continue to take and make the time to revisit the land, work towards strengthening your relationship with the land, and recognize the natural changes, shifts, and cycles of the land, water, animals, and all inanimate and animate objects. Fourth, I will attempt to explain some of the reciprocal practices and ceremonies that an active participant of the land becomes responsible for as knowledge and understanding are transferred. I will share my journey of how I became an active learner of the land. Finally, I will show theories and practices of Indigenous Métissage can strengthen teacher-student relationships and bridge gaps between IKS teaching practices within classrooms. Indigenous Métissage allows for unlearning and relearning to happen. Indigenous Métissage "encourage[s] people to rethink and reframe their received understandings of the place now called Canada and thus better comprehend the significance of Aboriginal presence and participation today" (Donald 2012, 542). Indigenous Métissage gives space to see, learn, and

understand from an Indigenous perspective. I am seeing, writing, and sharing using my positionality as an active participant in land-based cultural practices as a Tsuut'ina woman that has strong relationships with the people of Kainai, as an educator and as a curriculum developer. My home is southern Alberta, where I have harvested, hunted, participated in many ceremonies, sang, and danced among trees, waters, animals, and supernatural beings.

Indigenous Knowledge Systems

Indigenous people strive to be one with the land, to live with the land, not to own nor control or dominate. As Dina-tii (real people), we do not control or own the land, animals, nature, water, or stars. Dina-tii were the last beings to be created. We are the most pitiful beings. We relied on the animals to teach us how to read the weather, hunt, and survive. The land and animals took pity on the humans and made many sacrifices to ensure our survival. Throughout the year different ceremonies are held based on the different moons and seasons. Our seasonal ceremonies are part of our knowledge systems. Indigenous Knowledge Systems (IKS) respect and honour the energies and spirits of the land, water, cosmos, inanimate, and animate objects are embodied with. Where “these energies or spirits are considered ‘power’. Many Indigenous people consider sacred places or ceremonial objects as powerful” (Tomlins-Jahnke et al. 2019, p. 474). Sacred places, ceremonial objects, and seasonal ceremonial practices hold the power we need to survive. Our “Indigenous knowledge systems are participatory and have been created through lived and practiced applications with nature, they also require knowledge to have an application and use. Without application via human relationships with environments, IKS lose their meaning” (Tomlins-Jahnke et al. 2019, 461). In other words, as human beings, we are expected and responsible to interact, apply and use the knowledge shared with us.

Indigenous Knowledge Systems (IKS) is different from Western science in many ways. First, IKS is an interdisciplinary pedagogy of reconciliation with the land, people, and oneself.

IKS is “relational epistemologies [that] can be summarized as a theory of knowledge that recognizes all entities, human and more-than-human, as related and interconnected in mutually reciprocal, interactive, dynamic, and always-becoming relationships (Cajete 1999); this shapes the sources, scope, and validity of knowledge and knowledge-making. (Pugh, McGinty, and Bang 2019, 427). IKS is dependent on nurturing relationships that are “established through hands-on learned experiences, based upon respect and reciprocity between humans and their environments” (Tomlins-Jahnke et al. 2019, 469). It is important to recognize that “one of the major differences between IKS and Western science is spirituality” (Tomlins-Jahnke et al. 2019, 473). As Doig (2003) has identified, “The Western secular system of education appears to be blind to the spirituality that infuses or underlies Aboriginal epistemology and thus culturally appropriate education for Aboriginal students” (Doig 2003, 144). IKS recognizes the importance of spirituality in education.

Indigenous scholars such as Bastien (2004), Battiste (2013), Kovach (2010), Smith (1999), and Wilson (2008) speak about the importance of including spirituality as a way of learning, knowing and being. All animate and inanimate objects have a spirit, where “spiritual life forces are found in all things” (Tomlins-Jahnke et al. 2019, 473). These spiritual forces connect; they survive through relationships between people, the land, the living and nonliving, and the cosmos. These “Spiritual beliefs and ceremonies are used as a way of respecting and honouring the relationships humans have to their world” (Tomlins-Jahnke et al. 2019, 473). The spirits of the cosmos, land, and ancestors know if we are being honest with our intentions. They know if we are following protocols and being responsible. They know if you are ready to receive their knowledge if you are ready to participate and if you are ready to apply what you have learned. The knowledge and experience “received from the environment are viewed as a gift but can also be taken away if not respected appropriately” (Tomlins-Jahnke et al. 2019, 467). They

watch us and make teachings available when the time is suitable, when you are in the right space, and when you are ready to listen. The spirit of “Knowledge grows through the ability to listen to and to hear the whispers of the wind, the teachings of the rock, the seasonal changes of the weather” (Bastien 2004, 111).

To understand the moon cycles and seasons, we must recognize the moons, and participate in the seasonal activities and ceremonies that are in place to sustain our existence. There is no magic or formula involved. To learn from the land, you need to be on the land. Protocols are essential to follow when on the land, participating in land activities and ceremonies. Some simple rules: make yourself known by introducing yourself and your purpose for being on the land. Say a prayer giving thanks, asking spirits to watch over you, say your wishes and intentions of your visit with the land, and offer your tobacco. Be attentive, be present in the space you created to connect with the land. Use all the senses you were gifted with to receive what is being offered. Following protocols creates space for the land, animals, spirits, and cosmos to do their work. IKS “are participatory and experiential and provide traditional forms of education. In a sense, they function as a university for traditional knowledge” (Bastien 2004, 115) and should be recognized as such.

The land teaches the people to be responsible and accountable for their actions. As each moon and season passes, all living beings are responsible for participating in the ceremony. The “principle of understanding one’s responsibilities is through the process of participating in ceremonies” (Bastien 2004, 115). Ceremony “is a renewal of the ancient and ancestral ways of knowing and healing” (Bastien 2004, 114). Indigenous ceremonies are derived from the land, animals, weather changes, and our connections with the cosmos, “the way in which life energies or forces are honoured is through ceremonies” (Tomlins-Jahnke et al. 2019, 472). Land-based learning recognizes the different ceremonies within each moon and season. Ceremony “is an

opportunity for all members to collectively renew their alliances and live up to their fundamental responsibility to strengthen the alliances with whom we work independently for the survival of life” (Bastien 2004, 114). It is “during these ceremonies we acknowledge and give thanks to our alliances for another cycle” (Bastien 2004, 113). When you learn from the land, you begin to understand the importance of all living beings and their roles within each ceremony. It is “These ceremonies are the collective consciousness of Siksikaitisitapi, which places them at the center of the universe” (Bastien 2004, 113).

Indigenous ways of knowing are based on relationships, “Contrary to Eurocentred perspectives, Niitsitapi’s conception of self is intricately linked to alliances” (Bastien 2004, 160). Indigenous people are immersed in many relationships. One of the most important relationships to acknowledge is our relationship with the land. What appears to be missing in land-based or place-based education by non-Indigenous educators are the perceptions and relationships with the local Indigenous communities that have been historically connected to the land before contact. Pugh and colleagues (2019) recognize that “For Indigenous peoples, expanding nature-culture relations in learning environments is also central to remediating education from its historical intentions of eradicating Indigenous knowledge systems” (426). Indigenous ways of knowing are a gift, it is “not considered a possession to be owned but is seen as something that has to be returned or passed on” (Tomlins-Jahnke et al. 2019, 467). When used as best practices, these theories can allow for greater insight and understanding of Indigenous ways of knowing that go far deeper than these theories suggest. Our education systems need to make space for IKS.

The Problem

Indigenous peoples have been historically and traditionally marginalized. As a result, IKS has not been seen as legitimate knowledge to be taught within our school systems. Donald (2021)

has identified how “Indigenous-Canadian relations today continue to be heavily influenced by colonial teachings that emphasize relationship denial” (Donald 2021, 53). This was part of the colonization process where “the field of education continues to be dominated by cultural assumptions that block meaningful and deep engagement with Indigenous understandings of knowledge and knowing” (Donald 2021, 60). We must create "pathways and pedagogies that make explicit and resist the epistemic and ontological consequences of settler colonialism... [that are] necessary for viable, just, and sustainable change" (Bang et al. 2014, 5). Alberta Education frameworks continue to be hegemonic, giving settlers power over what is being taught and receiving higher knowledge. These frameworks maintain power and control by the majority and provide little to no opportunities for ethical relationality. What is evident today is that “settler normativity is constructed through a set of dialectic relationships based upon circles of inclusion and exclusion in which the settler constructs himself as normative and superior vis-à-vis Indigenous and non-Indigenous others" (Bang et al. 2014, 4). Where the “core of the settler-Indigenous dialectical structure is defined by the desire to erase or assimilate Indigenous people alongside a continued symbolic Indigenous presence” (Bang et al. 2014, 4). What is absent in the current education frameworks are alternative ways of knowing, being, and doing.

IKS has been pushed to the margins or viewed as add-ons within Euro-centric, dominant orientation, causing Indigenous and non-Indigenous teachers to struggle in their attempts to engage in authentic pedagogical practices with little to no understanding that a different worldview is needed. Part of the problem is where land-based experiences “fit.” Comments from educators I have worked with about implementing Indigenous ways of knowing into teaching practices include teachers being so far removed from lived experiences, they are afraid to offend, community and teachers question the authenticity of the relationship, more time and training is needed to understand, and there are conflicting perspectives in science and Indigenous ways of

knowing. Before contact, Indigenous education was derived from living with the land, and participating in reciprocal practices and ceremonies that honour the embodied spirituality of the land. Unfortunately, “ws [western science] “refuses to accept any sense of spirituality in its realm, thus creating a contested space for anyone who wants to include spirituality in their scientific practices” (Tomlins-Jahnke et al. 2019, 475). We, as educators, must continue to make space for IKS. Many Indigenous peoples still have songs, rituals, and ceremonial practices that respect, reciprocate, renew, and sustain our relationships with the cosmos, water, land, animals, and all animate and inanimate objects that have practical applications in our schools. Educators “must be willing to consider insights from knowledge systems that express alternative ways of being in the world” (Donald 2021, 60). We need to create a space to unlearn colonial practices. A space to see and understand from an Indigenous perspective, to relearn together. In this space, the understanding of IKS of land-based learning must be appreciated, acknowledged, and practiced.

We need to look at theories and practices that can bridge the gaps between Indigenous and non-Indigenous ways of knowing for teachers. Teachers “can lead the way to advancing Indigenous perspectives, reversing decades of assimilation policies, evoking social change, and providing the bridge between rhetoric and meaningful student learning” (Howe, Johnson, and Te Momo 2021, 23). Change can take place “through individuals who are making efforts to learn from both IKS and ws. In addition, these individuals are also learning facilitation and communication skills to assist the transition between IKS and ws and each of their communities” (Tomlins-Jahnke et al. 2019, 477). Indigenous Métissage can see from an Indigenous perspective and weave IKS into the curriculum.

Possible Solution

Indigenous scholar Dwayne Donald has brought to light the ongoing historical relationships between Aboriginals and Canadians that continue to reinforce colonial divides. To “rethink these relations, overcome these teachings, and decolonize educational approaches is to consider a curriculum sensibility called Indigenous Métissage. Indigenous Métissage is recognized as “a place-based approach to curriculum informed by ecological and relational understanding of the world” (Donald 2009, 1). It “carries the ability to transform and, through its properties of mixing, opposes transparency and has the power to undo logic and the clarity of concepts” (Chambers et al. 2008, 141). Indigenous Métissage is a mixing of stories and ways of knowing that creates space for boundary-crossing into new ways of learning and doing. Indigenous Métissage tends to Aboriginal-Canadian relations. It “is focused on interpreting and reframing the historical and contemporary interactions of Aboriginals and Canadians” (Donald 2009, 10). Place is a key aspect of Indigenous Métissage that works to “interpret mixed understandings of these places as a way to explore deep historical relationships to particular places in Canada” (Donald 2009, p. 10). Acknowledging place shows respect for the traditional spaces and land of Indigenous particular peoples. Artifacts that come from a specific place are conceptualized as storied aspects of that specific place and people. These artifacts have “subtle and abstract meanings and concepts-metaphysicalities-attached to their physical matter that emanate from their history, their use and the ways they are presently being conceptualized based upon this history” (Donald 2009, 11). Interpreting the significance of the artifact to a specific place and people shows “how Aboriginal and Canadian perspectives of the artifact and place are rooted in colonial histories and logics that are both simultaneously and paradoxically antagonistic and conjoined” (Donald 2009, 11). The importance of artifacts and place-stories is to recognize the “energy to them that is forever in flux-constantly changing, transforming, combining and recombining” (Donald 2009, 13). The cyclic energy generated by the artifact

gives the artifact its spiritual quality. Thus, recognizing the spirituality in learning from the land and surroundings. In recognizing the spiritual quality of a particular space and artifact.

Indigenous Métissage creates a meaningful historical dialogue of the histories of both parties in relation to specific spaces and peoples and makes space to listen, see, know, be and understand from an Indigenous perspective.

Learning to Listen

It is hard to write about seasonal teachings if you are not an active participant. I took the last year to reflect on participating in the seasonal teachings gifted to me. If I am not participating, reciprocity is not happening; I am not responsible. As a child, I have been taught to listen to my surroundings because everything has something to say. The ability to listen to what is being said and understand what you are being told takes practice. When something went wrong, my grandmother would say, it's because you didn't listen. I would ponder her words, thinking, what didn't I hear? How did I hear that wrong? Or I didn't hear anything. When I was outdoors, I kept my ears to the wind to listen to what I missed. Learning to listen takes a lifetime for some people. But listening is only the beginning. Being able to interpret and understand what is being said is where Indigenous knowledge is embedded.

Now that I am older, I realize that listening starts with acknowledging that everything has a voice and has something to say. The cosmos, the land, the wind, the water, and all living beings have something to say. Listening to their voices goes beyond hearing. To truly listen, all your senses become part of learning. Indigenous wisdom “emphasize[s] the personal and intimate connectivity that people feel to the land and stories” (Blood et al. 2012, 48). In Blackfoot *aoksisowaato’p* “refers to the ethical importance of visiting a place as an act of relational renewal that is life-giving and life-sustaining, both to the place and to ourselves” (Blood et al. 2012, 48). Blood et al. remind us that human beings are part of the ecosystem and that we have a

responsibility to visit the land and listen to the land and our surroundings. Our livelihood, ceremonies, and existence are dependent on interacting and listening to our surroundings.

As spring approaches, I hear the thunder beings calling me, telling me the plants and animals are returning. Spring brings about new growth and birth. The rain and the thunder beings return. The return of the first thunder signals the start of spring rituals and ceremonies. The “Niinaimsskakhoyinniman, the Medicine Pipes, which are opened after the first Ksisstsi’dom [thunder] in spring (Thunder is a potent sky spirit who has given protection to Siksikaitstapi through the Medicine Pipes)” (Bastien 2004, 113). We sat and lit our pipe, offered tobacco, and offered our prayers and support to the thunder beings and thunder pipe holders. The birds begin to return and lay their eggs. These eggs are gathered for the upcoming beaver opening ceremonies. We went out to visit the birds and look for eggs. The “Ksisksstakyomopisstan, the Beaver Bundle [ceremony is] held after the ice breaks in the spring” (Bastien 2004, 113). When the animals, birds and plants are returning, new growth and new life is celebrated and honoured. We smudged, cleansed, and fed our sacred objects so that they were ready to participate in the ceremony.

As summer approaches, I hear the leaves rustling, telling me the berries have ripened. It is time we go out and participate in picking berries, berries needed for the Sundance, and dry for pemmican later on. Summer is a time to have big gatherings. Sundance rituals, ceremonies, songs, dances, and vows are celebrated. The “Aakokatssin, the Sundance, which is held in July or when the Saskatoon berries ripen” (Bastien 2004, 113). The Sundance is when all societies rejoice in the renewal and replicating of their historical and societal duties at the Sundance. All “Ceremonies embody the delicate balance of the cosmic order and thus connections to knowing” (Bastien 2004, 111). We gathered our berries and our medicines for the Sundance. We attended the yearly ceremony to participate, paint our faces and dance with the holy bundle.

As fall approaches, I hear the elk calling me, telling me to prepare for the hunt. I prepare to use all my senses to help me participate in the hunt and connect with the animals. It is by “connecting with the knowing of animals and plants, we strengthen our knowledge” (Bastien 2004, 111). I am looking for mud or water holes where the elk may gather to roll in the mud, looking for elk beds, tracks, and tails that indicate where they are. I am smelling the air for elk urine which suggests they are close. I am smudging my rifle to bless it and connect with the feel of my weapon. I touch the rubbings on the trees to see how fresh they are. The taste of the elk meat and dry meat that I will be preparing for the winter has me excited. Oh, the anticipation and excitement, yet not being too eager, and controlling my emotions all while preparing to hunt. The elk and moose hunt are essential because I know that I will have the meat I need for the upcoming fall and winter ceremonies. I know my freezer will be full. I know my community and family will be fed and have nourishment to get them through the upcoming seasons. The closing of the beaver bundles is done during the fall. The beaver bundles are opened in the spring and closed in the fall. In each ceremony, “We ask for continued protection, prosperity, long life, growth, and strength” (Bastien 2004, 113). We are fortunate each time we can sing the songs, dance to the animals, replicate the rituals, and eat the wild meat, plants, eggs, and berries that have been harvested and prepared for the fall ceremony. The weather changes indicate it is time to move to our winter camp, gather wood, making sure fresh water and food are available before the cold stays.

As winter approaches, I hear the cold winds telling me they are here and need to prepare. In the winter, stories of victories, creation, war, transfers, legends, and entertainment are told. Stories are shared so they are not forgotten to give hope during the harsh and cold weather. Winter brings cold, dark, and hard times where food is scarce, and weather changes can bring sickness. Night ceremonies provide comfort, support, and prayer for the people to help them get

through these challenging times. The “Kanotsisissin, the All-Smoke, [is] held in the winter when the nights are long” (Bastien 2004, 113). The winter solstice signifies the sun's return and triggers preparations and vows for the upcoming Sundance. What we do on the land, how we participate, show respect, honour, and give back to the land matters. As human beings, “everything humans do affect the world is an important lesson in Indigenous knowledge systems” (Tomlins-Jahnke et al. 2019, 469). I have become an active participant in ensuring my ecosystem and way of life survive. I give thanks, respect, honour, and share the gifts the land has shared with me.

Wayfinding

Land-based education consists of “learning about the natural world is a critical necessity given the socio-scientific realities (e.g. climate change) that are currently and will continue to shape the lands and life that land supports, more specifically for present purposes the lives of both Indigenous and non-Indigenous peoples” (Bang et al. 2014, 3). Land-based learning has the power to transform educational practices. It “requires [a] deeper consideration of the intersections between settler colonialism, the content derived from normative scientific paradigms that have been constructed around the division of nature and culture and is routinely taken up in learning environments” (Bang et al. 2014, 7). Indigenous perspectives and voices of their unique relationships with the land must be part of land-based learning because we are the natural inhabitants of this land. By (re)storying and restoring Indigenous “ontologies and epistemologies... we could move towards Indigenous identity and possibility living in our ceded lands not defined by current power paradigms of simultaneous dispossession and containment” (Bang et al. 2014, 14). Thus, becoming “able to resist and act on dimensions of political, sociological, and ideological prescriptions that produce them and ensure settler futures” (Bang et al. 2014, 14). A land-based curriculum must include “the multiplicities of emotional

arrangements that different knowledge systems, especially spatial epistemologies, and unfolding histories in places produce” (Bang 2020, 437). Land-based learning allows one to know their place in the universe, and “by knowing one’s place in the cosmic universe, we form intricate alliances with the world coming from Ihtsipaitapiyo’pa [source of life]. From these relationships arises an intricate constitution of Kiitomohpiipotokoi [roles & responsibilities] that forms the identity of Siksikaitsitapi” (Bastien 2004, 80). Land-based learning assists with decolonizing our education systems because it creates space to cross boundaries of new understandings of IKS.

Our current education system is beginning to make space and acknowledge how important land-based education is for all citizens living in Canada. We must “recognize the significance of the relationships we have with others, how our histories and experiences are layered and position us in relation to each other, and how our futures as people similarly are tied together” (Donald 2009, 7). Attending to ethical space “can help decolonize curriculum and foster the creation of a transactional sphere of public memory (Simon 2000) in Canada wherein Aboriginal-Canadian relations can be decolonized and re-imagined” (Donald 2009, 7). Decolonizing in the curriculum “can only occur when Aboriginal peoples and Canadians face each other across historic divides, deconstruct their shared past, and engage critically with the realization that their present and future is similarly tied together” (Donald 2009, 7). By “attempting to change this system to incorporate Indigenous ways of knowing is about changing attitudes and behaviour established by colonial powers” (Howe, Johnson, and Te Momo 2021, 25). Teachers unlearn colonial practices and relearn them through an Indigenous perspective, where “effective teachers are avid learners with educational experiences that are informed by Indigenous worldviews that are land-, community-, and family-based” (Howe, Johnson, and Te Momo 2021, 36). For change to happen, a space needs to be created where Indigenous and Canadian historical relationships and cultural knowledge can be explored and understood

together before moving forward. Indigenous Métissage has significant implications for improving curricular practices that interweave Indigenous perspectives that are needed to better understand Indigenous ways of knowing, being, and doing.

Indigenous Métissage “can be used by any researcher whose goal is to interweave different, even contradictory, realities and lived experiences and to explore and challenge dualistic notions” (Burke & Robinson 2019, 152). We must delve deep into the historical relationships that have existed between Indigenous peoples and settlers. We need to cross the colonial boundaries that exist into a new way of learning, doing, and being. IKS means learning from the land, following protocols, being responsible for the flux of knowledge that transpires, and creating an ongoing reciprocal relationship with the universe and all its beings. Indigenous “Métissage becomes an ideal framework for bringing diverse perspectives and experiences together” (Burke and Robinson 2019, 156). Where do we begin? Mother earth is the place “where the continuous and/or repetitive process of creation occurs. It is on the earth that cycles, phases, patterns...the constant motion or flux can be observed” (Blood et al. 2012, 65). Tending to the protocols of the land ensures our continued survival. Therefore, “Indigenous knowledge must provide a significant transcultural role in... creating sustainable development, in conjunction with postcolonial and post-structural theories” (Howe, Johnson, and Te Momo 2021, 24). In our efforts in decolonizing the curriculum, “we need transformative teachers and to be guided by the wisdom of Indigenous Elders” (Howe, Johnson, and Te Momo 2021, 30). Together, “we must pay closer attention to the multiple ways our human sense of living together is constructed through... interactions which always are imbued with a living principle of reciprocity, and hence moral responsibility for a shared future” (Donald 2012, 9). The best place to start listening and learning is to be on the land.

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Chapter 3: Manuscript 2 - Braiding Indigenous and Western Knowledge Through Culture Camps: Decolonial Learning Conversations between Indigenous Land-based and Settler of Colour Scholars

Starlight, T., Datta, R. (in press). Braiding Indigenous and Western knowledge through traditional cultural camps: Decolonial learning conversation between Indigenous land-based and settler-of-colour scholars. *Journal of Indigenous Research*.

Indigenous communities often encounter formidable obstacles when engaging with Western knowledge systems. The prevalence of Western knowledge, rooted in colonial history and Eurocentric perspectives, tends to marginalize, and diminish Indigenous knowledge and ways of comprehension (Datta, 2020; Kurtz, 2013). Indigenous scholar Battiste (2013) notes that these challenges perpetuate a “colonial hangover,” hindering the full acknowledgment and integration of Indigenous knowledge into Western systems, thus sustaining historical injustices and marginalization. Confronting these issues necessitates decolonizing Western knowledge systems (Datta, 2018; 2019, 2023). This transformation calls for a paradigm shift that values Indigenous knowledge equally with Western knowledge.

Consequently, bridging Indigenous and Western knowledge systems to foster mutual respect, advance social justice, and address pressing global challenges is crucial. Indigenous scholar Robin Wall Kimmerer (2013) underscores the importance of a meaningful bridge between these two knowledge systems, emphasizing the wisdom and teachings inherent in Indigenous ecological knowledge. Through respectful engagement with traditional cultural camps, we embarked on a critical discourse to construct a meaningful bridge between Indigenous and Western worldviews. Within the framework of Indigenous research methods, an Indigenous cultural camp is a holistic and experiential approach to understanding and preserving traditional

knowledge (Gone & Calf Looking, 2015; Ross, 2016). Through active community Elders and Knowledge-keepers engagement, storytelling, and cultural-based activities, we focused on a deep connection to Indigenous land-based knowledge and facilitated the transmission of intergenerational practice. By integrating cultural camps into research methodologies, we learned how Indigenous communities reclaim agency in shaping research narratives, ensuring their perspectives and practices are meaningfully represented and respected.

Our learning approach, rooted in decolonial learning from Indigenous cultural camps, deliberately diverged from Western data analysis practices. In alignment with Indigenous principles and a profound respect for land-based stories, we refrained from subjecting them to Western forms of data analysis. Instead, we honoured the inherent meanings of these stories by preserving them in their original narratives. Our choice reflects a commitment to acknowledging the agency of these stories and recognizing their transformative power beyond the confines of traditional research data. By reframing these narratives not as data but as stories with intrinsic agency, we aim to foster a more inclusive and culturally sensitive research paradigm that respects and preserves Indigenous knowledge within its authentic context.

Within land-based learning, no individual can assert themselves as an expert; instead, everyone adopts the role of relational and responsible learners, emphasizing a shared and collective approach to knowledge acquisition. This land-based learning approach emphasizes the importance of narrative integrity and the capacity of Indigenous stories to convey knowledge and insights that transcend the limitations of conventional research methodologies. Our decolonial exploration helped us to learn how traditional cultural camps can facilitate meaningful bridges between Indigenous and Western perspectives, fostering reciprocal learning and mutual benefit.

Researcher Positionality and Theoretical Framework

The first author is a Tsuut'ina scholar and educator from the Tsuut'ina First Nation. Tsuut'ina is her Indigenous language. As a land-based educator, she is dedicated to revitalizing Indigenous languages and sharing the importance of traditional cultural knowledge as part of her decolonial responsibility. The second author is a non-Indigenous settler of colour scholar who has resided in Indigenous lands, particularly Canada. As a land-based and decolonial researcher, he acknowledges the historical and ongoing colonization experienced by Indigenous communities and recognizes his social location and power dynamics in research relationships. He views research as a lifelong learning ceremony to decolonize his relationship with Indigenous land and to fulfill his responsibility in respecting Indigenous sovereignty, self-determination, and the rights of Indigenous peoples.

This paper employed decolonial and land-based theoretical frameworks, integral in confronting colonial legacies and prioritizing Indigenous knowledge, perspectives, and connections with the land. The decolonial research framework empowered us to challenge and reshape the conventional research paradigm, which often reinforces colonial power dynamics and marginalizes diverse knowledge systems. Simultaneously, the land-based theoretical framework approached from an Indigenous perspective guided us in foregrounding Indigenous knowledge, culture, and identities. By embracing both research frameworks, we gleaned insights from traditional cultural camps as a vital expression of self-determination and sustainability. These insights illuminated how such camps present opportunities for non-Indigenous scholars to reshape their perspectives and actions into responsibilities.

As an Indigenous land-based scholar, the second author emphasized the importance of Indigenous land-based camps as a critical source for constructing a meaningful bridge between Indigenous and Western worldviews. The second author, a racialized scholar, used deep listening as an opportunity to learn and respect Indigenous traditional land-based knowledge and practice.

Deep listening, as a decolonial method, created numerous opportunities to learn about the land's pre-colonial, colonial, and ongoing colonial history.

Indigenous and racialized scholars cultivated enduring relationships throughout our research, engaging in numerous decolonial discussions centered around traditional cultural camps. Both authors utilized traditional cultural camps as research methods in multiple studies. In our decolonial learning journey, we emphasized narrative stories significantly. We refrained from subjecting these narratives to any analysis to honour and respect land-based stories. We intentionally preserved our decolonial conversations in their raw form to ensure that the essence of these stories remained untouched by colonial analysis. Readers can glean insights into our discussions and the process of creating a meaningful bridge between Indigenous and Western knowledge systems through this narrative approach. Our conversations unfolded in various settings from June 16 to 25, 2023, encompassing land walks, coffee talks, and healing conversations.

Figure 1

Braiding Indigenous and Western Knowledge through Traditional Cultural Camps



The act of braiding is a time for nurturing the spirit with love and care as each strand is weaved. Women teach, comfort, and support family members as she is braiding. Braiding hair is a time to connect and nurture the relationship between braided and braider. Braiding teachings from Tsuut'ina women have been passed down to me (First author). I am responsible for nurturing my family and teaching my children and grandchildren about braiding hair and sweetgrass. The figure represents the blending and weaving of each strand, the strand of Indigenous knowledge, Western knowledge, and culture camps that come together to create new ways of knowing for children, students, and allies moving forward.

Decolonial Learning Conversations

- *Settler of Color Immigrant Scholar:* Would you help me learn some of the meanings of traditional cultural camps and their importance to you and your community as a land-based researcher?

Indigenous Land-based Educator: Traditional cultural camps are collective ways of knowing and doing; they bring a community together. It also brings back a traditional way of educating youth. We have Elders and children in the same room and in the same way, bringing back that traditional communal way of learning. In traditional cultural camps, we are on the land. So, a lot of the learning is on the land. When on the land, you must follow protocols be clear of your wishes, intentions, and time in this space. Once you are in cultural camps, you must be respectful, true to your heart, and have a full-hearted learning spirit, and then knowledge will come to you.

- *Settler of Color Immigrant Scholar:* Why they (land-based knowledge through traditional cultural camps) are essential to you and your community?

Indigenous Land-based Educator: Many Elders in my community are getting older, and we are rapidly losing our fluent Tsuut'ina speakers. They are getting older, our languages are becoming extinct, and our elders are becoming old. Elders cannot be outside as much as they used to, so it is essential to get them on land so that they can share their stories and experiences before they are gone. Their land-based knowledge is our way of life; they know where our stories come from as they have been living on land and revitalizing relationships with the land. They remember the language that goes with the land. Through cultural camps, they [Elders and Knowledge-keepers]

have been contributing to the community and the children to relearn, heal, revitalize, and reclaim.

- *Settler of Color Immigrant Scholar*: What are the critical components of a traditional cultural camp as a research methodology for studying Indigenous communities?

Indigenous Land-based Educator: Being in a cultural camp makes you think outside of the box. You are putting your colonial ways of knowing away. Because you are listening to Elders, you need to ensure that you are always following their protocols. You do not just get up and walk out. You are expected to sit respectfully and participate in deep listening. Furthermore, when they are speaking, they will watch you. They can tell if you are present in that place if you are paying attention to their stories.

- *Settler of Color Immigrant Scholar*: How does a traditional cultural camp as a research methodology contribute to the self-determination of Indigenous communities?

Indigenous Land-based Educator: So, it [traditional cultural camp] creates an environment of a different way of thinking in research. It also honours traditional practices as a research methodology. The emotions and hard work you put into the work that you will walk out of your study together. You are not always thinking and staying in theory; you are putting your heart and mind together because you have embraced it into practice. This process makes the research practices that you do differently. It is not just on paper and not just colonial; it transforms research into emotional and spiritual. Because learning comes from the heart, you relate to emotions and spirituality together; it changes how you need to move forward. Moreover, our traditional cultural camps get you to think for yourself to make sense of your environment and situation. However, it also brings you to think collectively on behalf of your

people so that you always think about your family and community in what you are doing or representing. That is how you get that self-determination in your research because you are not just in yourself. It is not only about one person or one thing. So, it is a sense collective; you are thinking about your community in your allyship, about all Indigenous and non-Indigenous people across the Nations because there are many Indigenous people across North America and internationally.

- *Settler of Color Immigrant Scholar: As a land-based educator and community researcher, how do you think traditional cultural camps as research methodology can build a trustful bridge between Indigenous and non-Indigenous worldviews?*

Indigenous Land-based Educator: When non-indigenous people come into cultural camps, they are also expected to throw away their colonial ways of being and thinking. You should come with an open heart and an open mind. If you do so, you can take away a lot of positive learning. If you do so, you can feel the power of learning from your heart. Your learning can make you a proper human.

Thus, when non-Indigenous people walk away from the experience, Elders will know whether they are being truthful. If you are honest, there will be a meaningful connection and long-term relationships. Deep listening and trust help non-Indigenous people build relationships. If you are not truthful and respectful, then they [Indigenous Elders] can feel it. They will know if you just came to exploit or take what we have.

- *Settler of Color Immigrant Scholar: What examples of successful research projects have used traditional cultural camps as a methodology for studying Indigenous cultures?*

Indigenous Land-based Educator: Much of my work has been done as a land-based educator. From my practices and working with the Elders in my community, talking about land-based learning, I take my students to the land with our Elders. The land is essential for teaching for us. Elders are our guides; they have the knowledge we need to learn; this is an important concept to understand. Our land-based learning helps our self-determination. Our land-based teachings include fire, Tipi, ceremonial bundle, Buffalo, and beaver teachings, and many more. Our land-based teachings are essential to our people; our songs come from our land. Our land-based stories are imperative to know who we are and where we come from. Why did we end up in this place? What kind of relationships did we make? What historical relationships?

Furthermore, how did we maintain those relationships with other Indigenous tribes as a Nation? Our land-based learning is our surviving story. Our land-based stories can help us know the stories of when we signed treaties and our thoughts at that time. What were the fears? How did we overcome them? What are our strengths? In land-based learning, we have a perspective. I use our land-based stories to know our relationships and to overcome challenges.

- *Settler of Color Immigrant Scholar: What ethical considerations should researchers consider when implementing a traditional cultural camp research methodology with Indigenous communities?*

Indigenous Land-based Educator: Again, non-indigenous people are good at exploiting or misunderstanding and misinterpreting historically, right? These are significant ethical considerations if you are true to yourself and honest about your intentions. Again, the Elders will know if you are ready or not. So, respect and honour and being part of the land-based learning journey are significant ethical considerations.

- *Settler of Color Immigrant Scholar: How can learning from traditional cultural camps as a research methodology help non-Indigenous scholars fulfill their responsibility towards Indigenous communities?*

Indigenous Land-based Educator: Traditional cultural camps teach us our stories, how to behave, be safe, and interact with our environment. Our ways of being are through our traditional cultural camps in land-based learning. Once you learn with respect, you give them [Indigenous communities] that strength to move forward. Again, your intention is a huge part of it. As you know, because of the Western education system, we lost our identity. And so many of us have that colonial education; it forces us to forget about the common sense of our lived realities and our traditions and customs. So, our traditional cultural camps help put us on the land. Our traditional cultural camps honour our knowledge systems, language, ancestors, and land to think and act differently. Traditional cultural camps can help us to learn the necessities of our lives. When you pull down your colonial thoughts, you will be in a relationship, and you can erase your tensions and find ways to help more meaningfully.

- *Settler of Color Immigrant Scholar: How can non-Indigenous scholars such as me, a settler of colour scholar, demonstrate cultural sensitivity and respect while incorporating a traditional cultural camp research methodology?*

Indigenous Land-based Educator: First, non-Indigenous scholars cannot assume that we are all the same; they need to build a relationship with our land and with Indigenous Nations, learn our stories, respect our Elders and Knowledge-keepers, and be part of our solidarity to protect land and water as part of the responsibility. Protecting land and water and Indigenous land-based knowledge is all of our responsibility, not only Indigenous people's responsibility. Once you

understand your responsibility, you become our relative, you become part of our family, you become part of our community.

- *Settler of Color Immigrant Scholar: What steps can non-Indigenous scholars take to ensure that their involvement in a traditional cultural camp respects the self-determination and agency of Indigenous communities?*

Indigenous Land-based Educator: I am going to say representation and relevance. So again, please do not put us all in the same; we are not all the same, and our protocols are different. So, when it is relevant, you need to think about what those people are about. What are their experiences? What are their challenges? What is it that they want, not what you want?

Moreover, how can I support or appreciate it? It must be relevant, and it must be meaningful. Significant relationships are essential. Once we have relationships, I will be beside you, and you will be beside me, and we will be together. I speak on behalf of my people. So, when you sit beside them, it is not in front or behind; we sit beside each other, at the table and in discussions and meetings. Then, that representation is unified and collective, and people are more willing to hear or make space for everyone.

Learning Reflections

Our decolonial conversation critically discusses why bridging Indigenous and Western knowledge systems is essential to foster mutual respect, promote social justice, and address pressing global challenges. Through traditional cultural camps, we centred Indigenous land-based knowledge as a wealth of traditional ecological knowledge, sustainable resource management practices, and cultural wisdom that can contribute to addressing climate change, biodiversity loss, and other environmental crises.

Numerous studies have demonstrated that incorporating Indigenous perspectives and practices can lead to more effective and culturally appropriate solutions. For instance, Moller et al. (2004) research highlighted the significance of incorporating Indigenous knowledge in natural resource management. We learned that traditional cultural camps could create a meaningful bridge between Indigenous traditional knowledge and Western scientific approaches, which can enhance the understanding of ecosystem dynamics and improve conservation strategies. This meaningful and trustful bridge can lead to better outcomes for the environment and the local communities.

Our decolonial conversation showcased how bridging Indigenous and Western knowledge systems can contribute to revitalizing and preserving Indigenous cultures and languages. The transmission of Indigenous knowledge from one generation to the next has often been disrupted due to historical injustices and cultural assimilation. Recognizing and valuing Indigenous knowledge empowers Indigenous communities and strengthens cultural diversity, which is crucial for social cohesion and resilience.

Our conversation provided examples from the traditional cultural camps that can bridge Indigenous and Western knowledge. The traditional cultural camps can bring together Indigenous communities, scientists, and policymakers to collaboratively address environmental issues in many Indigenous communities in Canada and beyond. Through this partnership, traditional knowledge holders contribute their deep understanding of the land, climate, and wildlife, while scientists provide technical expertise. The traditional cultural camps can be at the center of providing examples of Indigenous and Western knowledge that can work towards sustainable development and conservation, considering both scientific data and Indigenous perspectives.

Through our decolonial conversation, we have seen that the traditional cultural camps as research methodology, bridging Indigenous and Western knowledge systems, are crucial for a more inclusive and comprehensive understanding of the world. Recognizing and respecting Indigenous knowledge systems' wisdom and contributions, we can foster environmental sustainability, promote cultural diversity, and address social and ecological challenges more effectively.

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Chapter 4: Manuscript 3 - Land-based Learning from Tsuut'ina Elders' Stories: A New Beginning

Abstract

The purpose of this study is to learn from a Tsuut'ina Elders' perspective of land-based learning, teaching, and educational practices and how Tsuut'ina ninisha (way of life) should be recognized as an equal and legitimate way to educate Tsuut'ina children and youth within Tsuut'ina Nation schools. The primary research question is: What does land-based learning mean to Tsuut'ina Elders? Indigenous Métissage creates a space for braiding and weaving boundary crossing, funds of knowledge, and Tsuut'ina ninisha in a respectful, reciprocal, and relational way where educators become responsible for creating relevant and meaningful curricula. Using Indigenous Métissage as a research praxis to braid and weave Tsuut'ina Elders' stories, western theories of funds of knowledge and boundary crossing, and personal experiences as an Indigenous educator to find ways of validating Tsuut'ina ninisha as a respected, honoured way of knowing, being, and learning within Tsuut'ina Nation schools. Results from this study have substantial implications for systemic changes in education for Indigenous students in reserve schools and new insights into boundary crossing from an Indigenous perspective. From my time with Tsuut'ina Elders, I have identified four main components of land-based learning: creating community, experiential learning, learning to care, and spiritual guidance. Community creates a sense of belonging; it unites people and uses everyone's knowledge and strengths. Community is identity. Experiential learning is the way Tsuut'ina elders were taught. Experiential learning connects people to the land. Learning to care creates responsibility. Spiritual guidance maintains balance and harmony with self, others, and the environment.

Keywords: Indigenous Métissage, Funds of Knowledge (FoK), Boundary Crossing Tsuut'ina Ninisha (ways of knowing).

Introduction

There have been historical tensions between Indigenous peoples of Canada and Canadian settlers when it comes to the curriculum that is taught to Indigenous peoples in Indigenous-run schools. Indigenous Métissage "honours and explores that tension, allowing researchers to mindfully and strategically choose from both Indigenous and Western research methods to craft frameworks that enable them to conduct research in a way that genuinely honours their lived realities" (Burke & Robinson, 2019, p. 152). Throughout this study I will be drawing upon understandings of ethical space (Ermine, 2007) and ethical relationality (Donald, 2016), braiding personal experiences, Tsuut'ina Elders perspectives, and Western ideologies of boundary crossing and funds of knowledge to honour our lived realities towards educational practices. As an Indigenous educator, I can speak to the trials and tribulations I have experienced in my learning journey. Elder perspectives are crucial to understanding land-based education. Tsuut'ina Elders learned from the land as a child. The first language they knew was Tsuut'ina, which holds the teachings. Their knowledge and stories continue to impact how schools should be run. These Elders laid the groundwork and created the vision of Tsuut'ina education when Tsuut'ina Nation schools opened in 1993. These Elders were the Tsuut'ina instructors, curriculum creators, and part of the Tsuut'ina Language and Culture Committee. Tsuut'ina Elders continue to influence and share their teachings with the Tsuut'ina Nation to benefit Tsuut'ina children. The research question guiding this study is, what is required to sustain, validate, and legitimize Tsuut'ina ninisha uwa gunaha and restore land-based practices to revive a diminishing way of life crucial for identity and survival, within Tsuut'ina Nation schools, as perceived and advocated by Tsuut'ina Elders?

An Indigenous Theoretical Orientation

The theoretical orientation that guides this research is based in ideas of ethical space (Ermine, 2007) and ethical relationality (Donald, 2016). As a Tsuut'ina woman I am grounded and immersed in a distinct orientation, which offers a unique lens through which to view the Western world. This viewpoint emerges from the collective memory and ongoing narrative of my community, embodying their social, political, and historical consciousness. It emphasizes the intrinsic validity and purpose of the First people in Canada within the universe. This perspective recalls a pre-colonial era and asserts the Indigenous community's belief in its own humanity. The challenge lies in reconciling diverse worldviews. An orientation to ethical space (Ermine, 2007), acknowledges the necessity of dialogue and negotiation between contrasting worldviews. By creating a space for engagement and dialogue, the ethical space offers the potential to shift from asymmetrical power dynamics to a more equitable partnership between Indigenous and Western societies (Ermine, 2007). Within Indigenous ways of knowing, Elders and knowledge keepers speak about the “space” of learning. It is important to remember that the “Indigenous space,” as Leroy Little Bear (2009) calls it, is a space in constant flux where the spirit of knowledge is transferred through ceremony, songs, and stories.

Ethical relationality (Donald, 2016) embodies an ecological perspective of interconnectedness that becomes evident when the sacred balance supporting all life is respected. “Ethical relationality does not deny difference, nor does it promote assimilation of it” (Donald, 2016, p. 11). Rather, ethical relationality supports the conceptualization of difference in ecological terms as necessary for life and living to continue. He contends that rather than negating differences, ethical relationality views difference through an ecological lens as vital for the continuity of life. Donald (2012) explains, “the term ecological in association with the concept of ethical relationality draws attention to the complex interrelationships that comprise

the world as it is understood in Plains Cree and Blackfoot wisdom traditions” (p. 535). Ethical relationality encourages deeper exploration of how our diverse histories, memories, and experiences shape our relationships, highlighting these differences as essential for reciprocal relationships and interconnectedness. Donald (2016) states,

ethical relationality is tied to a desire to acknowledge and honour the significance of the relationships we have with others, how our histories and experiences position us in relation to one another, and how our futures as people in the world are similarly tied together. It is an ethical imperative to remember that we as human beings live in the world together and also alongside our more-than-human relatives; we are called to constantly think and act with reference to those relationships. (p. 11).

Ethical relationality, as articulated by Donald, underscores the interconnectedness of all beings, and emphasizes the ethical imperative to acknowledge and honor the significance of our relationships with others, shaping our actions and interactions in the world.

The two orientations grounding this study, ethical space (Ermine, 2007) and ethical relationality (Donald, 2012, 2016) complement each other in fostering dialogue, understanding, and mutual respect between different perspectives and communities. Ethical space as conceptualized by Ermine (2007) provides a framework for creating a space where diverse voices and viewpoints can come together. It emphasizes the importance of dialogue and negotiation between contrasting perspectives, aiming to transition from asymmetrical power dynamics to more equitable relationships. By establishing parameters for interactions based on ethical and human principles, ethical space sets the stage for meaningful engagement and collaboration. On the other hand, ethical relationality, as articulated by Donald (2012, 2016) highlights the interconnectedness of individuals and communities. It underscores the ethical imperative to recognize and honor the significance of relationships with others, understanding

how our histories and experiences shape our interconnectedness. Ethical relationality emphasizes the importance of acknowledging and respecting diverse perspectives and experiences, recognizing that our futures are tied together as people sharing the same world.

Together, these two Indigenous orientations work synergistically to promote understanding, empathy, and cooperation across cultural, social, and political divides. Ethical space provides the structure and context for dialogue and negotiation, while ethical relationality reminds us of the fundamental interconnectedness of all beings and the importance of honouring and respecting our relationships with others. By integrating these ideas, I can create space for meaningful engagement and collaboration that fosters mutual understanding and respect between Indigenous and Western worldviews.

Literature Informing Western Attempts

Funds of knowledge represents a qualitative, collaborative, and reciprocal approach to teaching that places a strong emphasis on building relationships between educators and the communities they serve, including the invaluable insights of Elders. This approach acknowledges that these relationships can serve as fertile ground for the exchange of knowledge, spanning both familial and educational realms. As articulated by Moll et al. (1992), these relationships offer a means to bridge the gap between the classroom and the broader community, thereby enriching academic content and lessons. By valuing and tapping into the diverse funds of knowledge present within the community, educators can foster a more inclusive and culturally responsive learning environment that honors the lived experiences and expertise of all stakeholders.

Incorporating funds of knowledge into educational practice entails recognizing the wealth of knowledge embedded within the community and actively engaging with it in a collaborative manner. This involves forging meaningful connections with community members, particularly

Elders, whose wisdom and experiences serve as invaluable resources. By fostering reciprocal relationships and inviting the sharing of knowledge, educators can leverage the diverse funds of knowledge present within the community to enrich teaching and learning experiences. As highlighted by Moll et al. (1992), this approach not only breaks down the barriers between the classroom and the community but also contributes to the development of more culturally relevant and contextually grounded pedagogical practices. Ultimately, embracing the concept of funds of knowledge empowers educators to create learning environments that are reflective of the cultural wealth and expertise inherent within the communities they serve.

Boundary crossing represents a dynamic process through which stakeholders can facilitate meaningful change by navigating the juncture where diverse perspectives intersect. This concept emphasizes the creation of space within educational practices that encourages dialogue and collaboration across multiple social worlds. As articulated by Akkerman and Bakker (2011), boundary crossing entails engaging in dialogue and interaction between various perspectives and parties without seeking to homogenize or erase differences. Rather, it acknowledges the richness of diversity and encourages individuals to explore learning experiences that transcend traditional boundaries. By embracing boundary crossing, stakeholders can harness the power of dialogue and exchange to foster greater understanding and innovation within educational contexts.

Incorporating boundary crossing into educational practices involves actively navigating the intersections where different perspectives converge. This entails fostering an environment that encourages dialogue and collaboration across diverse social worlds, allowing for the exchange of ideas and perspectives. By embracing the principles of boundary crossing, educators and stakeholders can create inclusive learning spaces that honor the diversity of experiences and perspectives present within the community. As emphasized by Akkerman and Bakker (2011),

this approach promotes dialogue and interaction between multiple perspectives, enriching the learning process and fostering a deeper understanding of complex issues. Ultimately, boundary crossing serves as a catalyst for meaningful change, empowering stakeholders to navigate the complexities of diverse perspectives and engage in collaborative efforts towards collective growth and innovation.

An Indigenous Research Praxis

This study uses Indigenous Métissage as a research praxis that supports an Indigenous research approach to understanding land-based learning drawing upon ethical space (Ermine, 2007) and ethical relationality (Donald, 2016). Ethical space provides the structure and context for dialogue and negotiation, while ethical relationality reminds us of the fundamental interconnectedness of all beings and the importance of honouring and respecting our relationships with others. By integrating these ideas, I can create space for meaningful engagement and collaboration that fosters mutual understanding and respect between Indigenous and Western worldviews. Aligned with the principles of ethical space (Ermine, 2007) and ethical relationality (2016), through the act of braiding within Indigenous Métissage, I am able to grasp the intricacies and necessities of land-based learning and the intertwining narratives emphasizing the textural qualities of the braid.

Indigenous Métissage “requires dedication to the reciprocating interpretive process and attentiveness to the insights that arise from it” and “*aokakio 'ssin*, or careful attention to the details of the research context with the hope that a story will arise that will need to be told” (Donald, 2012, p. 544). Indigenous Métissage is a story approach to curriculum. Dwayne Donald states that “land and place [are] key aspects of Indigenous Métissage and decolonization of curriculum and pedagogy” (Donald, 2009, p. 19). These stories or life-writing in Indigenous

Métissage will be used as I seek to understand how the land, and stories of Tsuut'ina Elders are braided/woven together to reclaim Tsuut'ina ninisha within Tsuut'ina education.

When Métissage is used as a research praxis, it "seeks cross-cultural, egalitarian relations of knowing and being. It respects historical inter-relatedness of traditions, collective contexts, and individual circumstances while resisting 19th-century scholarly conventions of discrete disciplines with corresponding rhetorics for conducting and representing research" (Chambers et al., 2008, p. 142). Dwayne Donald (2012) identifies Indigenous Métissage as a "theory that will enable a deeper understanding of the complex, nature of the relationships connecting Aboriginal peoples and Canadians and that will foster the creation of more ethical terms for extending these relationships" (Donald, 2012, p. 541). These place stories encourage people to rethink and reframe their received understandings of the place now called Canada and thus better comprehend the significance of Aboriginal presence and participation today" (Donald, 2012, p. 542). The use of an Indigenous artifact from a particular place provides a lens of seeing "into the unique character and complexity of the particular place of concern in the inquiry" (Donald, 2012, p. 542). The act weaving/braiding in Indigenous Métissage "provides means for researchers to express the convergence of wide and diverse influences in an ethically relational manner" (Donald, 2012, p. 544). Indigenous Métissage aims to "attend to the complexities of colonial and neo-colonial engagements in a reciprocal manner and find ways to write about those complexities using a language that sparks shifts in historical consciousness and enacts ethical relationality" (Donald, 2012, p. 544).

I have used Indigenous Métissage as my research praxis for many reasons. I wanted to use a methodology that respects and honours Indigenous ways of knowing. I wanted a theoretical framework that honours Indigenous epistemologies and is not bound or restricted by guidelines around how to go about conducting my research. Indigenous Métissage is meant to "interweave

different, even contradictory, realities, and lived experiences and to explore and challenge dualistic notions" (Burke & Robinson, 2019, p. 152). Indigenous Métissage is a reflective process that honours my values, beliefs, and understandings and those of my community.

Indigenous Métissage is a braiding/weaving of different perspectives, stories, histories, and memories shared to learn from those stories to create a new story. The braiding/weaving process of Indigenous Métissage is a relational process that resonates with my belief system. Therefore, the braiding process in Indigenous Métissage is essential to my research. In the braiding process of my research, I bring together three strands interweaving Teena's story with the Elders' stories, with Western attempts drawing upon funds of knowledge and boundary crossing as the three strands of the braid. The first strand tells of my lived experiences as an Indigenous educator. The second strand are the Tsuut'ina Elders' stories of land-based learning. The third strand will be Western ideologies of Funds of Knowledge and Boundary Crossing as attempts to enter the ethical space needed for Indigenous knowledges to inform, be accepted, recognized, and legitimized as valid knowledge systems. The third strand holds the ideas of boundary crossing and funds of knowledge which can potentially provide the scholarly support teachers insist on having to justify and legitimize local Indigenous ways of knowing. Boundary crossing is sharing different perspectives of education and curriculum that collide, creating a possibility for transformation, change, and new understanding. Funds of Knowledge theory requires teachers to become researchers and seek knowledge from the students' families and community. Then, use that knowledge of the family and community to create lessons, units, and learning experiences that are relevant, relational, and applicable to the student, family, and community. Funds of knowledge and boundary-crossing theories can be used as a stepping stone for teachers in understanding Indigenous paradigms and the importance of creating that transformational space/constant flux in their teaching practices. The braid cross four times, once

in coming to understand what it means to create community, the second time in understanding experiential learning, the third time in examining what it means to learn to care, and lastly, seeking spiritual guidance.

Seeking Wisdom and Understanding from the Elders

When I began working for Tsuut'ina Department of Education as a curriculum developer I consulted frequently and worked alongside Tsuut'ina Elders. Our interactions lead to the work they contributed to Tsuut'ina language, culture, and education. For this study, I recruited Elders that were once the Tsuut'ina language instructors when Chiila Elementary School first opened in 1993 or taught the language in the city of Calgary schools where there were a high population of Tsuut'ina students. One of these Elders sat on council when the school opened and supported the vision of the schools at that time. Another Elder ran the Tsuut'ina Museum since 1984 and worked alongside council and education regarding the Tsuut'ina culture. Most of the Elders that I recruited also were members of the Tsuut'ina Language and Culture Committee that worked together to formalize, teach, and support the creation of Tsuut'ina language and culture resources for the whole community. All the Elders recruited are fluent Tsuut'ina speakers and are still currently in the schools at some capacity teaching, creating resources, supporting language and culture instructors and educators. Most of the Elders recruited were day school survivors. They all grew up in a fluent Tsuut'ina speaking home and worked and played on the land daily as a child. They were hunters, gathers, ranchers, craftsmen, traveled by horse and buggy, participated in rodeos, powwows, and ceremonies throughout their lives. They grew up living off the land and being an active participant in their ecosystem.

When stating the intention of my study and asking if they would be willing to participate, I followed protocol of offering tobacco to each Elder. I was clear with my ask, my study, and the intentions I had with the information they would be willing to share with me. Each Elder

accepted my offer, and a date was set to do the recording. I offered tobacco to six Elders, three female and three males. One Elder kept changing the dates, or forgot, and wanted to be recorded in a group. After three attempts to sit with this Elder and to accommodate their request, I arrived at the conclusion that this Elder was not meant to be part of this study and let it be. There were no hard feelings expressed.

Each Elder agreed to be interviewed at a place they preferred and were comfortable, most in their homes. All Elders agreed to be recorded. Before the recording began, I went through consent form thoroughly, they agreed to the study and gave verbal and written consent. Each interview I would start by asking one of my interview questions. Once we started, the conversation became more personal and less scripted. Elders shared story after story and experiences learning on the land and working in the schools. They all believe that the foundation of Tsuut'ina schools was and still should be Tsuut'ina language and culture. I took their recordings and put ran it through a voice to text app. Because they often used Tsuut'ina words and phrases, and their accent was strong, the app did not translate from sound to written word as easily as I had hoped. I had a good laugh reading what the app predicted or autocorrected what it thought it heard. It was a tedious job going back to make sense of and write the Tsuut'ina words properly. The Elders reviewed their recordings and did not change anything. They mentioned to rely on the sound recording more than the written transcription.

I read through the transcripts and highlighted keywords that would be repeated frequently in all the transcripts. They all spoke of community, their experiences, caring, and spirituality. I listened intently to the recordings, making notes, and summarizing what was shared with me for each recording. I paid close attention to the stories and what their stories were trying to tell me. I was stumped and overwhelmed navigating through my data. One meeting I had with my supervisor, she said, all you did was make notes and summarize. Stop what you are doing. And

she asked me, in your own words what are the main points you found in the Elder's stories. I said community, their experiences, caring, and spirituality. Anything else she asked. No, I said. Then start there. I was dumbfounded on how easy it was to sort what I learned from their stories from there. Because each story had many teachings embedded within them, I used the key words to organize the parts of the stories that now evolved to creating community, experiential learning, learning to care, and spiritual guidance. I felt these headings identified the core messages and teachings that the Elders felt were necessary in Tsuut'ina language and culture curriculum. Then I began taking excerpts and let their stories speak for themselves.

My research took a bit of an unexpected turn. I initially wanted to interview teachers as my study was intended to support teachers. That did not happen. It is the Elders that hold the knowledge, and I wanted to use my study to create a pathway for teachers to connect to Tsuut'ina Elder's knowledge, so I ended up changing the study to involve Tsuut'ina Elders. I knew I wanted to use Indigenous Métissage but determining what each strand of the braid would be also changed. I realized the importance of Tsuut'ina Elder's stories as well as my own. I struggled with my own identity as a Tsuut'ina woman, educator, and researcher. It is my struggle and experiences that brought me to what I believe is a pivotal change in education. My own experiences have shaped my teaching practices and by sharing my journey, maybe I too can guide educators in creating meaningful curriculum that includes land-based learning. My journey also has crossed boundaries and involved my funds of knowledge to improve my teaching practices. So, each strand of the braid weaves Tsuut'ina Elders stories, my story, and stories of Western attempts of connecting and creating a space for change through boundary crossing and funds of knowledge that is needed to create new meaningful Tsuut'ina curriculum.

Creating Community

Teena's Story

How do I tell my story when I have been unheard for so long? I have spent much time trying to fit in and belong to a community. I know what it is like to feel like you do not belong; I understand and have lived the effects of being an outsider. As an Indigenous mother and educator, I wanted to create spaces for children to feel they belonged in their community and school. I took it upon myself to learn the culture of my children's people, the Kainai. I listened to the elders, knowledge keepers, songs, stories, and language as best I could. My engagements and experiences within Kainai gave me the most robust sense of belonging I have ever felt. I was part of the Kainai community. I wanted to create that same sense of community for my students, so I began bringing that knowledge into my classroom and lessons. I worked closely with the Blackfoot language and Tsuut'ina gunaha instructors to better understand the language and culture. The more years I taught, the more I found myself putting the textbook aside because the textbooks and curriculum did not provide relevant information nor proper representation of Indigenous people, Kainai people, my people, the Tsuut'ina. In doing so, I would share stories and history of our Indigenous peoples that connected me with my students and the curriculum in a different way, a better way. The Indigenous space, as Leroy Little Bear (2009) calls it, is a space in constant flux where the spirit of knowledge is transferred through ceremony, songs, and stories. I knew I was on to something, but I also knew I needed support. This also began my journey with Blackfoot and Tsuut'ina Elders in my quest to have Siksikaitsitapisinii and Tsuut'ina ninisha understood as a valuable way of educating our children in our schools.

Tsuut'ina Elders' Stories

When our Elders went on a walk, they would sing a song, but when they were hunting, they kept quiet. I learned how to hunt from my grandfather and uncles. They spoke only Tsuut'ina. Water was necessary; you learned where the springs were when hunting. You knew

where to camp because you knew where the water was. I also learned a lot from making wood. We helped one another and took care of one another.

We used to sit on the ground with my granny; she would explain a bit about her life, the truth. We learned through her body language. We need to come together as a community with compassion and understanding. That is how a nation survives by strengthening our youth from within. Their heart should be as a community, think about their community, and take care of one another. Make sure they are taken care of. We get stronger as community members. Teachers should become part of the community.

We cannot be in silos; that was the vision to have everyone involved. It must take the whole [education] department to ensure our students are learning from the time they start kindergarten to achieve their goals. The things we went through to get that school off the ground, we did it to volunteer. People did not get big bucks to do this work. Take the students out and tell the stories of Tsuut'ina. Take them out on the land and teach them about the medicines. I teach my grandchildren; we visit the traditional sights where these stories happened. It takes working with the chief and council, community members, INAC (Indigenous and Northern Affairs Canada), and funders to achieve our vision of saving our language and culture for our children. It would help if you had chief and council support, community support, and support from the city and the parents.

Bring the language and culture back because that is our identity; that is how we self-identify through Tsuut'ina gunaha. It must be a collective effort as a Nation. Individual families, the Nation itself, the staff and principals, the board of directors, the chief and the council must work together. If you have support, it will happen positively; if there is no support, it will take

longer. When you teach them how to believe in themselves, then they will learn. That is what was taken away from us; that is what we need to teach.

The teachers should be told what the customs are of the reserve and what to expect when they want to work for the reserve. It is different from the city. It is very rare to find a teacher who is invested in the community, one who will help us teach the language to our children. One student asked why we must know about our land base. In the future, one of you will become a leader, and you will have to know what land belongs to us and what land you are fighting over. We talked to the child right from when the child was in the womb they would be talked to. There was a custom long ago that when I was born, my uncle went up to my mom and said I want to borrow your son. He meant that he would have the right to scold and discipline me if he saw me misbehaving. Your language gives you your identity, giving you more pride in your identity.

Stories of Western Attempts

The foundations of funds of knowledge conducted and continued by Moll (1992) allow teachers to engage and incorporate the student and family's lived experiences, values, and cultural ways of knowing, being, and doing. Educational researchers Luis Moll, Cathy Amanti, Deborah Neff, and Norma Gonzalez developed the concept of funds of knowledge. Moll and Greenburg (1990) described funds of knowledge as "the essential cultural practices and bodies of knowledge and information that households use to survive, to get ahead, or to thrive (p. 321). Funds of knowledge is based on the idea that the knowledge that students are exposed to and immersed in at home is directly related to a student's identity and success. Funds of knowledge is a "reciprocal practice[that] establish[s] serious obligations based on the assumption of ... (mutual trust), which is reestablished or confirmed with each exchange, and leads to the development of long-term relationships" (Moll et al., 1992, p. 134).

Boundary crossing shows "how both school and work have a potentially similar interest in educating students, yet each have different cultures" (Akkerman & Bakker, 2011, p. 139). The boundary in-between school and work is the "cultural difference and the potential difficulty of action and interaction across these systems but also represents the potential value of establishing communication and collaboration" (Akkerman & Bakker, 2011, p. 139). This communication and collaboration involve both cultures to create a new community that includes both cultures. Hopkins et al. (2019) define boundary crossing as a dialogical research-practice partnership to address educational practice problems. Boundary crossers, in this case, educators are "individuals who cross boundaries between research and practices... [that are] well positioned to facilitate research -practice connections, creating a "third space" where the scope and goals of collective work are jointly negotiated" (Hopkins et al., 2019, p. 2). Boundary Crossing and Funds of Knowledge allow educators to engage and be part of the community.

Experiential Learning

Teena's Story

My life has had many challenges and many successes. Each of my experiences has contributed to who I am today. In education, I have earned my teaching degree, a master's degree, and a language revitalization certification and am working towards my education doctorate. My Indigenous accomplishments include transfers of names, songs, sacred items, stories, and knowledge through ceremony. Both have required listening, time, and patience. I've used my trials and tribulations and ways of learning in my teaching practices. The master's program I was engaged in changed my teaching practices and ways of doing. Many of my courses involved Kainai Elders and being on the land. The land offers experiential learning, allowing students to test theories, identify with stories, and understand ceremonies and practices of why we do things the way we do and how everything is interconnected and dependent on one another. We went to traditional Blackfoot sites where each site's songs, stories, language, and ceremonies were shared. We engaged with Elders in knowledge transfers and shared what and how we learned with each other. We heard our Elder panel's stories and experiences on specific ways of learning and then had to reteach them back to the panel. As Duane Mistaken Chief reminds me, "You do not know anything unless you experience it" (personal interview, November 22, 2022). Those experiences helped me to understand ways of combining Western and Indigenous ways of knowing, being, and doing. Many Elders have told me that you take what you share and make sense of it for yourself. They also explained to me that once you receive knowledge, it is your responsibility to pass it on and not be stingy. These experiences and stories connect us with our ancestors. If I do not pass that knowledge on, it dies with me and that is on me. When I moved home to Tsuut'ina, I shared my experiences, and they shared theirs. To be respectful, relevant, relational, and responsible for the knowledge I gained, and to honour

their experiences, I worked with Tsuut'ina Elders to create spaces for these types of land-based experiences to happen for Tsuut'ina students that included the songs, stories, language, and traditional sites. It was not always easy; many educators and administrators, both Indigenous and non-Indigenous, did not value a different way of teaching if it was not mandated, documented, or approved by a higher governing education authority. So now I must go back to the elders for guidance and work towards supporting documentation and approval.

Tsuut'ina Elders' Stories

That is how important the land is to us; we came from the land. Tsuut'ina people treasured the land and were told by Bullhead not to give it away. Bullhead borrowed the land from the Creator for us to live on. We need to protect our land. Our grandfathers said the land is important because it holds the medicines that care for us. The elders of my time knew what herbs to get and what they were used for. Our grandparents did not speak English. The teachings were held in the language. No one was taught this because it was taken away from us through residential schools. We could not practice it anymore. By understanding the language, I could understand some of these teachings; I was shown different medicines but not what they were used for. I learned everything from hunting and making wood. We need to speak Tsuut'ina everywhere, in the halls, all the time, as much as we can. During the holidays, the students should be helping to pick berries and medicines with the older ones. Get them on the land. Get others who hold the teachings to share with the younger ones. You will learn more about the medicines and berries when you find the ones with the knowledge. How to harvest them, how to store them, and what they are used for.

You must have the spirit of the word within you to say it correctly. I find and feel the spirit of the word so that I can say it and use it properly. Our young people need to understand where our elders came from. They need to understand what we went through. We should start

from the beginning, be honest about everything that has happened to us and have them defuse their thoughts and understanding of these things. They need to know so that they can continue. To me, to understand, we listened to our granny when I was growing up. She used body language. The cultural way is to do it silently with body language. Our past learning was with our hands and body language. They must be working with their hands and doing craft work. As they are working, you talk to them, tell them stories, tell them they are doing a good job, and they will carry on these teachings. The books are romanticized, and they think that is how we live. They do not know because they have not lived it. They cannot put their ideas on us; they must sit, listen, learn, and not know everything. If they are willing to learn, then they are willing to understand. They should sit in a circle and listen. We must return to the grassroots and the land to truly understand.

Take the students out and tell the stories of Tsuut'ina. Take them out on the land and teach them about the medicines. Take them picking for choke cherries and how to pound them. We must teach our children our old ways where women were the leaders in everything. Young people were taught to respect women and our bodies and to respect our land.

For over 150 years, the settlers have been here and taken our language and culture away; it will take another 150 years to return all that language and culture. The vision of our schools before was more language-based; now, it should be more land-based learning. We need teachers who can teach land-based learning and do a hands-on approach. We still have a long way to go. It is up to us to piece the land-based learning back together and make it enjoyable. We first started building the land-based curriculum based on the 13-moon calendar and different cultural topics. We must bring back our inherent rights, beliefs, and ways of knowing by creating lessons as we go along. It is critical that we do this for the children. Go out to elders, offer tobacco, and record them. Go into the museum's Glenbow and the archives to get the recordings and share

those with students. This will reconnect our youth with the land. We need to create those situations for our students. If we teach our children that this is our land and our country and we are sovereign, they can say, hey, why are you digging that oil and gas and cutting down the trees and coal mining? They will know that everything has a spirit. If we teach our children that, then the grandchildren and great-grandchildren are going to know that. We are putting our footprint down for the future towards sustainability. The atmosphere is alive; it is a spirit. The ozone layer is where greenhouse effects are created, which melts the glaciers that feed the water systems that give life. We need to teach that culture to the kids right to grade 12 plus adult education; they need to know, too.

Sometimes, we would take them outside the school to pick sweetgrass or sage, whatever was out there. In the winter months, we did beading and crafts, simple tasks. They learned how valuable beads were to the old people long ago. When they spilled the beads, they would have to pick them all up because we told them that Granny had difficulty getting them. So, when they spilled the beads, we asked them what happened, and they said granny had a tough time getting the beads, so we followed in her footsteps and picked up all the beads because they were so valuable to them. One student asked why we must know about our land base. In the future, one of you will become a leader, and you will have to know what land belongs to us and what land you are fighting over. They need to learn how to survive off the land, herbs, and plants, to know the different types of trees, the spruce, the pine, the poplar trees, what they are good for, and their purpose. Like the spruce is good for tipi poles, the time to cut them, a particular time of the month you peel them, nobody knows that. In time, you will know how to take care of yourself, have all these necessities, and survive. Hunting is important, too. When food was scarce, and you could only afford so much for groceries because people did not have much money, they depended on wild game like rabbits.

Stories of Western Attempts

Funds of knowledge include three elements: (1) Research in the households where teachers and colleagues uncover cultural family resources to build rapport and trust between families and teachers; (2) Classroom analysis of new classroom practices; and (3) Study group meetings to discuss theory, methods, and data. The study group consists of teachers and researchers “that connects the household analysis and classroom activities... and explore how household data can become resources for teaching: (Llopart & Esteban-Guitart, 2018, p. 146). Moll et al. (1992) explored how families developed social networks and how these social relationships developed knowledge, skills, resources, and labour that are exchanged to enhance a household's ability to strive and prosper. Teachers create innovative, relevant curricula and learning experiences using the information gathered. FoK has “special relevance to teaching, and contrasts with the more general term “culture,” or with the concept of a “culture sensitive curriculum” (Moll et al., 1992, p. 139). Moll et al.’s (2018) FoK will improve the “relationships between families and schools... by designing culturally sensitive and contextualized curricular activities” (Moll et al., 2018, p. 145).

Education researchers such as “Star (1989), Star and Griesmer (1989), Suchman (1994), and Engestrom et al. (1995) found that various types of professional work (science, technology design, and teaching) are heterogeneous in that they involve multiple actors representing different professional cultures” (Akkerman & Bakker, 2011, p. 134). Gorodetsky and Barak (2008) investigated boundaries “between teacher education and teacher practices in schools” (Akkerman & Bakker, 2011, p. 138). These studies “denote how students need to relate to different values and norms and find their own position” (Akkerman & Bakker, 2011, p. 138). Hopkins et al. (2019) define the boundary as a dialogical research-practice partnership to address educational practice problems. Research practice partnerships are “spaces for researchers and

practitioners to engage in long-term collaborations aimed at addressing pressing problems of practice” (Hopkins et al., 2019, p. 1) in education. Boundary crossers are “individuals who cross boundaries between research and practices [that are] well positioned to facilitate research practice connections, creating a “third space” where the scope and goals of collective work are jointly negotiated” (Hopkins et al., 2019, p. 2).

When educators engage in funds of knowledge and boundary crossing, learning from other perspectives, and admit to entering an unfamiliar domain with open hearts and minds, then meaningful work in addressing the deficits in education that the Western education system has created.

Learning to Care

Teena’s Story

I did not attend school in Tsuut’ina. I received all my Western education by attending institutions in the city. I did not see myself in the curriculum; no Indigenous teachers existed. I was only offered Tsuut’ina classes in grades six and up to grade nine. Tsuut’ina language speakers taught the class. I was always happy to attend the classes; we learned Tsuut’ina, made crafts and listened to stories. I wanted more classes, and I wanted to learn more about Tsuut’ina. That was the only class where there was an Indigenous person. However, the non-Indigenous students at the school made fun of our classes and often called them "special" classes, like "special education" pull-out classes made for those who were different.

I felt different about language and culture classes after that. I started to avoid attending because I did not want to be made fun of or be seen as less than or incapable of learning like the mainstream students. I would ask the Tsuut’ina instructors (they could not be called teachers) why they did not teach the other classes like social, math, etc. I did not understand. One day, my

aunt, the Tsuut'ina instructor, sat me down because she noticed I was not attending Tsuut'ina classes. She said never mind what they say and what the other students think. This class is for you. It was then that I decided I would become a teacher who could teach all the subjects, and I would teach Tsuut'ina to all my students. I began to care more about what our Tsuut'ina peoples experience in schools, about the proper representation of Indigenous peoples in the curriculum, and about creating the education experience that I wish I had. I wish I could have learned to speak Tsuut'ina fluently, work with my hands on the land harvesting, building, and creating, have Tsuut'ina teachers and Elders in my classroom sharing stories, and learn how to be Tsuut'ina. Through ceremonies, stories, engaging with Elders and knowledge keepers, working with the land, and my life experiences, I learned to care about myself, my family, my community, and my environment.

Tsuut'ina Elders' Stories

When we were younger, all the young men were assigned an Elder to make [chop]wood for. It became your responsibility. They were too old to make wood. We took care of the wood; it was necessary. If you did not make wood, that Elder might die. It has happened. You became responsible for caring for the Elders and checking on them, especially in the winter. We helped one another and took care of one another.

Children learn to sit, be quiet, and concentrate on what they are doing as they are being talked to softly. Talk to them with kindness and love in your voice and from your heart. Make allies with parents, sit, and converse, and have an Elder or someone to sit with you. I learned about patience from them. I learned from how they interacted with me and how they interacted with each other.

I did not have a curriculum, but I did know how to teach, so I started teaching the children songs in Tsuut'ina. We did the song the hokey pokey song in Tsuut'ina. (A song still being used to teach the body parts in Tsuut'ina today). I got all the students hyper, and a teacher asked what you were doing to the children, and they came back all hyper. I said they were having fun; that's what I wanted the language to be, to be fun. You need to know where you came from before you know where you are going. We were very proud and noble people. We should share where we come from; we are all related.

The seventh generation is here; they will make a difference in returning all our teachings. They will either make it or break it; we must help them make it. Teach the young people to believe in themselves, do all these things, hunt, make bows and arrows, and take care of the land. Everything has a spirit. If we teach our children that, then the grandchildren and great-grandchildren are going to know that.

It is too bad that our families do not have livestock anymore. If families had livestock, the kids would not be getting into the troubles they are in today. They would be looking after their animals and have chores to do. If parents disciplined their children from the time that they arrived in this world right about what is right and wrong till they were speaking, it would be in their heads. We were disciplined; we had to take care of the live stalk. Many people who owned cattle built their corrals by a spring so they could pump water. When people would head their cattle, they would have to keep track of the springs and know the land well and where the water was so they could get their cattle safely across the land.

Stories of Western Attempts

As teachers spent more time with families gathering their history, activities, and values, they "started to see beyond stereotypes making connections to instructional activities [they]

wanted to develop" (Moll et. al., 1992, p. 136). The home visits allow teachers to gain knowledge of students and families to "establish rapport" (Moll et al., 1992, p. 135). Using the funds of knowledge approach, "teachers assume the role of the learner, and in doing so, help establish a fundamentally new, more symmetrical relationship with parents and students" (Moll et al., 1992, p. 139). Gaining knowledge and building relationships with the child, family, and community helps teachers look beyond the idea of self as an individual and respect community contributions to learning.

An in-depth study on the use of boundary crossing and boundary objects in education and work was conducted by Akkerman and Bakker (2011). Reviewing the literature that used the terms boundary crossing and boundary objects as an educational theory helped identify potential learning mechanisms that can occur at boundaries. The review identified four learning mechanisms at boundaries: identification, coordination, reflection, and transformation. When working with boundaries and boundary objects, the "mechanisms show various ways in which sociocultural differences and resulting discontinuities in action and interaction can come to function as resources for development of intersecting identities and practices" (Akkerman & Bakker, 2011, p. 132). Crossing boundaries transforms knowledge, skills, and attitudes through the intersection of understanding from a different perspective.

Spiritual Guidance

Teena's Story

Whenever I hit roadblocks, challenges, or uncertainties, I reached out for help and guidance. When my physical, emotional, spiritual, or mental being was out of balance, I was instructed to smudge and pray to those whom we draw our strength and guidance from. I was encouraged to give my feelings, worries, thoughts, and the situation to the creator and let the Creator take care of things. I was told that life is about harmony and balance. As human beings,

we must maintain that harmony and balance within ourselves, with others, and our environment. Harmony and balance are maintained through ceremony. Experiencing ceremony moves theory into practice. My sacred objects, their stories and songs were transferred to me through ceremony. It is through ceremony your responsibility is upheld. Each time I graduated, there was a ceremony; when my children and I met different milestones, there was a ceremony; when we hurt or were sick or celebrated, there was a ceremony. Everything has a spirit.

Siksikaitapipiipaitapiysiin and “much of Niitsitapi Life is spent in the process of trying to understand the spiritual existence etc. and all that is related to ontology” (Bastien, 2004, p. 226).

Tsuut’ina Elders’ Stories

When we pray, we should seek guidance from the mountains. Our Elders told us that they live in the mountains when they die. If you listen to the stories of people who became sick, the ones we almost lost, they talk about how their parents or loved ones visited them. They wanted to go with them but were told that they still had work to do on the land, and when they left, they headed back to the mountains. That is how we know our ancestors are in the mountains. When we pray, we should pray to the mountains. It is through the ceremonies that you understand. Our ceremonies belong to everyone; they are meant to be shared with the people.

Please do not take our way out of the child because you do not understand. That energetic work is about the spirit of the child. Language is imperative. The spirit of the language needs to be taught.

The teachings of when we were first invaded must be shared from our perspective and how we were brainwashed by igoholi (white) religion because they thought their religion was superior to our religion.

Have a sweat bring in the teenagers, which should be allowed in the schools. The only thing I disagree with is the recording of the ceremony and the songs because that is where the sacredness is; in the language, it is a spiritual language. Sun dances are in the summer, and the students miss out on that. They can have naming ceremonies and pipe ceremonies in the schools.

One time, in a sweat, we were told, your children will be the ones teaching the parents our language, not the other way around, where the parents teach the children the language. That was an important thing that we realized. During parent-teacher interviews, parents told the teachers that their children were teaching us the language; it reminded me of what was foretold in that sweat. The parents did not know the language and could not support their children with the language. This made us realize it would take time to develop the language fully. When the spring would thaw out in the springtime, the old people would take an eagle feather and put it right in the middle of that spring as an offering and a prayer to give thanks to that spring for still running.

Stories of Western Attempts

On the matter of spirituality, there is silence. The main insight from Elders “teachings is that a purely human understanding of ethical relationality is a significantly impoverished version of those teachings in that it disregards sacred ecology” (Donald, 2016, p 11).

Tying of the Braid

When a mother braids her child’s hair it is out of love, respect, and kindness. This is a time where mother and child bond, when teachings can be shared, where you are making time to nurture, groom, share stories. Looking back and reflecting on the strands of the braid I can appreciate how each strand has lived and survived separately. By braiding Tsuut’ina Elder’s perspectives, Teena’s journey of bouncing back and forth between two ways of knowing, and

theories of boundary crossing and funds of knowledge, they can support and strengthen a pathway for educators in creating a curriculum that is respectful, relevant, reciprocal, and responsible for Tsuut'ina Nation schools.

At the tying of the braid, Tsuut'ina Elder narratives are interwoven and enmeshed, creating an ethical space where knowledge, wisdom, and stories blend seamlessly. Within this shared space, my personal experiences, stories, and funds of knowledge converge, transcending boundaries and intertwining with the teachings and experiences of the Elders. It is within this relational space that the foundation for the development of a land based Tsuut'ina curriculum is laid, grounded in the principles of ethical space and relationality, guided by the wisdom and teachings of Tsuut'ina Elders.

From the stories of the Tsuut'ina Elders, the essence of Tsuut'ina ninisha extends beyond mere presence on the land and language acquisition. True understanding and application of Tsuut'ina ninisha now necessitates the incorporation of elements such as creating a sense of community, facilitating experiential learning opportunities, engaging in activities centered on nurturing and care, and integrating spiritual guidance. These foundational principles, rooted in the teachings of the land, language, and Elders, serve as guiding tenets for the development and implementation of a holistic Tsuut'ina curriculum. Within this framework, which emerges from the fundamental pillars of Tsuut'ina education as articulated by Elders, meaningful engagement and collaboration are fostered, nurturing a space where ethical relationality thrives.

My journey has come to a place where change is needed. I have learned and taught in two worlds separately long enough. Since contact, Indigenous people have bent their ways of knowing; "It is time now where both sides need to bend" (Duane Mistaken Chief, personal interview, November 22, 2022). In this "space" my story and journey of crossing back and forth

between boundaries, using both Western and Indigenous funds of knowledge to support my teaching practices collide to make headway for new understanding, new relationships, and a new curriculum without having to use one or the other, but together.

Ethical relationality underscores the intrinsic interconnectedness of all beings and emphasizes the significance of honouring and nurturing our relationships with others. Drawing upon stories of Western attempts, boundary crossing brings different perspectives to the table to learn from one another, see and consider a different perspective to do things differently. This means intentionally making “space” to bring Western curriculum and Tsuut’ina ninisha perspectives together to navigate in relation through the tough and murky waters of curriculum, a curriculum that has the foundations of land-based learning, language, and culture. While funds of knowledge honour and respect the knowledge brought by both Indigenous and non-Indigenous. By integrating this principle alongside the concepts of Creating Community, Experiential Learning, and Learning to Care—fundamental pillars of Tsuut’ina education as articulated by Elders—a framework begins to emerge that fosters meaningful engagement and collaboration.

However, you will notice this curriculum is not complete. There is a missing component. The Elders were clear, this curriculum needed to be infused with the spirit. Spiritual guidance is needed.

Opening A Different Space

The tying of the braid creates a “space” for change to happen. This space is also called the transferring of knowledge or coming to know from an Indigenous perspective. It is also referred to as a third space where individuals “cross boundaries between research and practice” (Hopkins et al., 2019, p. 2). This space, or tying-off process, can be used to create a new land-based curriculum guided by Tsuut’ina Elders. Boundary crossing, as defined by Akkerman and

Bakker (2011), is "sociocultural differences leading to discontinuities in action and interaction" (p. 152). These discontinuities in actions and interactions are needed to make systemic changes in Tsuut'ina educational practices. Combining Akkerman and Bakker's (2011) definitions of boundary objects and Donald's (2012) articulation of ethical spaces have the potential of "showing how Aboriginal and Canadian perspectives of the artifact [the land] and place are rooted in colonial histories and logics that are both simultaneously and paradoxically antagonistic and conjoined" (Donald, 2012, p. 11). Continuing and braiding in the work of Moll et al., (2018) funds of knowledge will improve the "relationships between families and schools... by designing culturally sensitive and contextualized curricular activities" (Llopart & Esteban-Guitart, 2018, p. 145). This study has shown how Tsuut'ina ninisha is a holistic way of learning that nurtures the whole child, including the spirits of the language, the land, and the child beyond self. Western's education falls short of tending to the child's spirit.

At the culmination of this braiding process, Tsuut'ina Elder teachings are interwoven and enmeshed, creating an ethical space where knowledge, wisdom, and stories blend seamlessly. Within this shared space, my personal experiences, stories, and funds of knowledge converge, transcending boundaries and intertwining with the teachings of the Elders. It is within this relational space that the foundation for the development of a land based Tsuut'ina curriculum is laid, grounded in the principles of ethical space and relationality. It is also within this relational space, infused with ethical relationality, that the central tenets of boundary crossing are infused with the spirit, giving them new meaning, and opening a different space.

From the perspective of Tsuut'ina Elders, the essence of Tsuut'ina ninisha extends beyond mere presence on the land and language acquisition. True understanding and application of Tsuut'ina ninisha necessitate the incorporation of elements such as creating a sense of community, facilitating experiential learning opportunities, engaging in activities centered on

nurturing and care, and integrating spiritual guidance. Most notably, I have come to understand that the concept of boundary crossing from an Indigenous worldview encompasses the spirit, infusing it into the ethical space and enabling the two worldviews to enter into ethical relationality. In this context, spiritual guidance from Elders becomes not just a cultural practice, but a vital aspect of education, providing guidance and wisdom imbued with spiritual significance.

These foundational principles, rooted in the teachings of the land, language, and Elders, serve as guiding tenets for the development and implementation of a holistic Tsuut'ina curriculum. Within this framework, which emerges from the fundamental pillars of Tsuut'ina education as articulated by Elders, meaningful engagement and collaboration are fostered, nurturing a space where ethical relationality thrives. Tsuut'ina ninisha outcomes and Western curricular outcomes are now recognized as relational and can form a curriculum that honours and values both worldviews as equal, valued, and honoured.

Most importantly, I have learned that creating a land-based curriculum for Indigenous peoples must include creating a sense of community, experiential learning on the land, learning to care beyond self, and spiritual guidance from Elders is essential. I have also learned that the concept of boundary crossing from an Indigenous worldview includes the spirit, so spiritual guidance can be provided to children and youth. Tsuut'ina ninisha outcomes and Western curricular outcomes are relational and can be braided into a curriculum that includes two worldviews as equal, valued, and honoured.

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Chapter 5: Research Summary and Researcher Reflections

Introduction

Using a manuscript thesis allowed me to trace my journey of coming to know through my own stories. The manuscripts travel through my understanding of the importance of learning from the land, spiritual connections, responsibility to the land through reciprocal practices. Then understanding how land-based culture camps express the importance of deep listening when Elders engage us in storytelling, ceremonies, songs, and the role Indigenous languages have in decolonizing Western processes of coming to know. That lead me to the Elders who stress the importance of creating community, experiential learning, learning to care, and spiritual guidance within land-based curriculum. Key findings of the manuscripts include the importance of Elder involvement, being on the land, and spiritual connections which is ethical relationality in practice.

Key Findings

In manuscript one the focus was on reconnecting and engaging with the land as an important and key connection for students and teachers to understand Indigenous ways of being, thinking, and doing. This manuscript was based on my experiences after receiving my master's and applying what I learned into my practices as a curriculum developer. As the culture calendar formed and implementation was bringing more students, teachers, and Elders on the land I found myself becoming more responsible as a steward and keeper of the land. I learned more about the protocols, ceremonies, song, stories, and responsibilities of the land. I reflected on my journey learning from the land, going beyond Western science and the spiritual connection with the land, responsibilities of land learning, reciprocal land practices, and how funds of knowledge could aide in the process. The funds of knowledge would come from Elders and knowledge keepers that hold the stories, songs, ceremonies, and speak the language.

Manuscript 2, the focus was on being responsible for the land as a response to climate change. The manuscript employed a decolonial and land-based theoretical framework that prioritized Indigenous knowledge, perspectives, and connections to the land. This decolonial framework challenges and reshapes the conventional research paradigm. Indigenous land-based camps were used as a source for constructing a meaningful bridge between Indigenous and Western worldviews that present opportunities for non-Indigenous scholars to reshape their perspectives and actions into responsibilities. We conducted a land-camp in June 2023 and invited Indigenous Elders, knowledge keepers, and keepers of the land to share their perspectives of Climate Change. What I learned from this camp was what has often been overlooked, the importance of ceremony, stories, songs, and language. To understand requires deep listening and being on the land. I learned so much about the important role of the beaver, buffalo, water, land, and ceremonies that contribute to the care of the land. This was made possible by participating in a land-camp with Elders and knowledge keepers.

Manuscript 3 focused on Tsuut'ina Elders stories about their experiences with Tsuut'ina language and culture curriculum and their perspective of land-based learning. Not only have the Elders survived many challenges as survivors of day school, but they also taught and aided in the development of Tsuut'ina language and culture curriculum and laid the groundwork for language and culture to exist in Tsuut'ina schools. As they shared their stories of how they came to know, it became apparent that they were telling me land-based learning must include creating a sense of community, experiential learning, learning to care beyond self, and spiritual guidance. Elders have crossed boundaries bringing conceptual ecological terms necessary for deeper understanding of how their stories and experiences position us in relation to one another and the land.

Overall, the foundation of Indigenous education must include these three key elements which are present in the findings: the Elders' involvement, being on the land, and spiritually connecting.

Elder Involvement

To initiate the decolonization process withing the Alberta curriculum, it is essential to delve into effective approaches. One promising avenue involves exploring traditional teaching methods of the Tsuut'ina people through direct engagement with Tsuut'ina Elders. Elders serve as crucial facilitators who bridge the gap between traditional and Western teaching practices. Research indicates that comprehending the concept of boundary crossing can be instrumental in driving meaningful change at the critical juncture where diverse perspectives intersect. Boundary crossing creates a space withing educational practices that encourages the examination of learning across and between various social contexts, fostering dialogues among multiple perspectives and stakeholders while avoiding the pursuit of uniformity (Akkerman & Bakker, 2011, p. 150).

Elders lived through and survived residential school and day school, seeing firsthand changes in how education has been delivered in their communities. The Tsuut'ina Elders in my study have been and continue to be instrumental in providing language curriculum, cultural teachings, and guidance to Tsuut'ina education. They teach the language to the community and school language instructors; they are members of the Tsuut'ina language and culture committee for Tsuut'ina Nation, driving policy and mandates for the survival and integrity of Tsuut'ina language and culture. These Elders were also part of chief and council and cultural and language instructors when Tsuut'ina Nation took control of their education in the 1990's. They were consulted when the vision and mission of Tsuut'ina Education was created for their schools. In

1993, when Chiila Elementary School opened, Tsuut'ina language and culture was the foundation of Tsuut'ina Nation schools. Therefore, Elders must be in our schools.

Being on the Land

Elders also have a long-time relationship with the land. They have interacted daily with traditional teachings from their elders that were present at the signing of Treaty and didn't speak English. As we call these days, the horse, and buggy days. These Elders primary way of life still involved communal hunting, gathering, harvesting, and ranching. They grew up in a close-knit family where grandparents were involved in their daily activities and upbringing. They were responsible for caring for siblings, elderly members in the community, and livestock. They interacted with the land, animals, water, and seasons intimately and purposefully. There were fewer outside influencers, they didn't travel to the city on a regular basis, they still gathered as a community on ration day. They knew all the creeks, hills, medicines, willows, berries, underwater streams, meadows, and trails like the back of their hands. They followed the moon cycles, knowing how and when to interact with their environment. They are our connection, our doorway to the teachings of the land. There were many times where I have involved these Elders in our land camps. The more they interacted with the land at these camps, the more memories, stories, and language they remembered and shared. For Tsuut'ina language and culture to survive, our Elders must be present and participate in the process.

During and after each study, the Elders that participated stressed the importance of Indigenous languages. The language teaches us how to engage and interact with the land, water, animals, and cosmos. The language holds the songs, ceremonies, and stories. I was encouraged each time I sat with these Elders to learn the language, to use the language as much as possible, especially when we are out on the land. The English language does not translate concepts easily in Tsuut'ina. Tsuut'ina and many other Indigenous are verb based and situational languages.

They describe movements and interactions as opposed to labeling and defining items and concepts as a person, place, or thing. Indigenous languages are relational and descriptive, they are complex systems of knowledge central to identity and worldview of Indigenous peoples. Our Elders hold the language, therefore hold the knowledge, stories, ceremonies, and spiritual connections.

Spiritual Connections

Spiritual connections are guided by prayer, ceremonies, languages, and reciprocal practices. Elders are our gatekeepers and help us to cross boundaries into ethical relationality. Spiritual guidance done with the knowledge of the Elders leads learners through the gate into sacred ecology that is currently missing in education.

So, when we look at transformational changes in education that is respectful, relevant, responsible, and reciprocal to Tsuut'ina Nation, land-based experiences, Elder involvement, and spiritual connections must be at the foundation of Tsuut'ina curriculum. Funds of knowledge ideologies allow teachers to interact with Elders that hold the experiences, language, stories, songs, and stories that are to be implemented into curriculum, teacher practices, and daily lessons. When seeking advice and wisdom, Indigenous people sit with elders and knowledge keepers to guide them through their troubles, worries, questions, and understanding of different situations. When Indigenous people are seeking transfers of knowledge, sacred items, or ceremonial advice, protocols are followed when engaging with Elders. Intentions are made to be in relation with the Elder, the community, the language, the teachings to apply to one's learning or purpose of engagement. Funds of knowledge is a western way of validating the importance of engaging with parents, elders, and community to create relationships and lessons for students that embed Tsuut'ina cultural practices, bodies of knowledge, and routines of families into the

classroom to ensure cultural relevant programming. Taking funds of knowledge one step further in Indigenous communities means that teachers are also tending all the 4R's in the process.

Elders as boundary crossers, ensure that relationships are grounded in the 4R's. Boundary crossing allows educators to be in relation, to learn from and co-create new curriculum with Tsuut'ina Elders that respectful, relevant, responsible, and reciprocal.

The Implications of Boundary Crossing from an Indigenous Perspective

The implications from within the learning sciences. The study that involved the Elders pushes the boundaries of the concept of boundary crossing.

As I was reflecting on boundary crossing with my partner, I was reminded of Scarface's journey to meet with Creator. He went with intention to an unfamiliar space to seeking something new. He was guided by animals, spirits, the morning star, and the moon. Scarface was given protocols to follow to be able to enter this space with Creator. Once protocols were followed, putting his journey into a spiritual realm, he was able to crossover into the space where Creator was waiting. Scarface was given gifts to take back to the people for the betterment and survival of the Blackfoot people. This ethical space included the foundations of being.

There have been many times in my life that the process Scarface initiated has been followed in my journey of coming to know and crossing boundaries of my own. The most meaningful and life altering boundaries I have crossed were guided by Elders and were in ceremony that follow the protocols given to Scarface. Today, we share a space with others that do not understand the sacred ecology included in the process of coming to know. It is vital to understand that "Ethical forms of relationality are emphasized as most important because doing to supports life and living for all perspective beings in organically generative ways" (Donald, 1016, p. 10).

As I sat with the Elders their stories all alluded to the spirit or to the spiritual responsibilities we have when learning, being, and doing. It is that spiritual guidance that brings learning from theory into practice, that bring concepts from head to heart to embodiment. The Tsuut'ina Elders provided new insights into boundary crossing. Within the much-needed ethical space of boundary crossing, the funds of knowledge of Elders are critical in the process of understanding Tsuut'ina ninisha. Tsuut'ina ninisha is best learned on the land, creating a sense of community, experiential learning opportunities, caring beyond self, and spiritual guided by Elders. Without the notion of ethical relationality that includes a spiritual dimension, boundary crossing will continue to be impoverished of what could be and what should be in land-based curriculum.

Akkerman and Bakker have something to learn from Elders as well. They would have to consider the pivotal “space” to include a dimension of spiritual in it to show a new orientation to boundary crossing. Positioning boundary crossing with Dwayne Donald’s (2016) ethical relationality becomes a new insight and way of understanding boundary crossing. Boundary crossing needs to be infused with the spiritual in order enter a space of ethical relationality where Indigenous and non-Indigenous can work together so that a program of studies Tsuut'ina need to live in that space. Currently the Alberta curriculum is silent about the spiritual.

Researcher Reflections

When I was a curriculum developer, I pushed as hard as I could with Tsuut'ina Elders, Tsuut'ina Gunaha Institute and Tsuut'ina Department of Education for Tsuut'ina ninisha to be a shared responsibility of all educators. I created a curriculum calendar with Tsuut'ina Elders that outlined important concepts and teachings Tsuut'ina Elders felt students to needed to learn. That grew to including more land-based experiences with the Elders in various settings. I offered hunting camps, ice fishing camps, nature walks, fire teachings, teepee teachings, and visits to

traditional sites to name a few, that involved the Elders. I provided opportunities for teachers to learn alongside their students, professional development days with Elders, and spaces for teachers to engage and learn from the Elders. But I faced a lot of resistance from principals and teachers. I couldn't understand why there was so much resistance. This is where my study originated.

My study was meant to support teachers. My initial study had three parts. A survey, a sharing circle, and a ceremony. In part one, I would survey ten teachers teaching within Tsuut'ina Department of Education, five of whom were first- or second-year teachers, and five of whom had more experience teaching more than ten years. My survey was going to question if their teacher degree program included an Indigenous Perspectives course or some sort, if they completed the required TQS #5 training, and to what degree have they been involved with Indigenous ways of knowing. I was testing to see if newer teachers were more willing to implement Tsuut'ina ninisha as a of the 94 Calls to Action and if Indigenous courses in teacher's degree program attributed to teacher's readiness, confidence, and competence in applying Tsuut'ina ninisha into their lessons.

Part two of my study would offer the ten surveyed teachers' tobacco and ask if they would be part of a sharing circle to share their personal experiences with Indigenous ways of knowing and implementing Tsuut'ina ninisha into the curriculum. In the circle I would ask teachers what personal experiences with Indigenous peoples and how they felt about that experience. I would ask how confident and competent implementing Tsuut'ina language and culture into their daily teaching practices and why. Did they feel supported by Tsuut'ina education in the process of implementation, why or why not. Did they have the resources they needed to support implementation, if yes, what are those resources, if no, what types of resources are they wanting.

Part three of my study was asking teachers in part two if they were interested in attending a beaver bundle ceremony with me. The beaver bundle ceremony is one of the oldest Blackfoot ceremonies that pay homage to the land, water, animals, spirits, and cosmos. The spring's rebirth of the wetlands is celebrated with rituals, songs, dances, and prayers as the bundle is opened. The beaver bundle ceremony is an example of people crossing over into the spirit world using the traditional knowledges passed down and gifted from Creator, the land, animals, and Elders. My participation in Beaver ceremonies have been life altering. I was wanting to share a spiritual crossing over into Siksikaitapiisinii and have a sharing circle afterwards with participants to gain insight of how this experience may have changed their perspectives on land-based learning, Indigenous ways of learning, being, and doing.

Unfortunately, Tsuut'ina Board of Education denied my proposal to interview or engage in asking questions to teachers within Tsuut'ina Nation schools. I wrote a letter to the board asking to present my study to the board and get permission to conduct my study. I was denied in an email, saying it was by unanimous decision by quorum that I the board declined my request. If I wanted information as to why I was to contact by email. I did contact them by email to ask them why and was never given a response. I felt my study had such potential in bridging the gap between Tsuut'ina ninisha and Alberta curriculum for the benefit of teachers teaching within Tsuut'ina Education. My next attempt was to ask Kainai Board of Education.

I have been engaged with Kainai since I was sixteen, I worked with Kainai children for fourteen years, went to ceremonies, participated in community events, lived, and raised my Kainai children as an accepted community member of Kainai. Therefore, as a way of giving back to Kainai and out of respect for all they have done for me and my family, I changed my study from Tsuut'ina to Kainai teachers, Kainai Board of Education, and Siksikaitapiisinii as the

focus of my study. I presented to my study to Kainai board and was also denied by email. I asked for details of why my study was rejected and again was not given a response.

To say the least I was upset. On the brink of tears, I was on the phone with my supervisor ready to give up. I told my supervisor, all I wanted to do was give back to the Elders that have influenced me in making changes in education, in curriculum, in myself, and uphold the importance of land-based education for our children's survival and well-being. My supervisor said then why don't we change the study to learn from the Elders. As soon as I heard the word Elders, I felt a weight lift off my shoulders, I was beaming with excitement, and realized that this path was always intended to be for the Elders, not teachers. After that everything fell in place.

Another challenge I faced was the ethics process. I am still trying to make sense of what I had to endure to get my ethics approved. My understanding of community engagement, and how Tsuut'ina knowledges will be protected were being questioned. Being from Tsuut'ina and having direct engagement with my community, getting approval from Tsuut'ina Elders on protecting Tsuut'ina Elders knowledge was not being recognized. I was informed that community engagement meant how I was engaging with others, not the community of Tsuut'ina in my research and I had to state how I was tending to OCAP principles, not Tsuut'ina Elder principles in protecting the knowledge that was shared by Tsuut'ina Elders. I felt disrespected and misrepresented as an Indigenous scholar that was raised, lived, worked, celebrated, etc. within Tsuut'ina and Treaty 7 communities my entire life.

I shared my frustrations with the Indigenous research ethics approval process advisors, stating that I will jump through one more required colonial hoop to validate my own Indigeneity and responsibility to my nation to complete my project. And that I hope that they change their Indigenous ethics approval process to be respectful, relevant, and responsible of Indigenous scholars that live in and alongside their Indigenous nation. And how I hope that they screen non-

Indigenous people as thoroughly as I was screened because a thorough screening where applicants were directly responsible to the Indigenous community, they are involving could prevent the increase of pretendians and researchers that use Indigenous communities for their research and then move on.

My mother would be so proud of my work, of me. She knew before I did that, I could do this. Since I was a child, my mother always said I should become a lawyer because I liked to argue. I beg to differ, since the age of five I wanted to be a teacher to teach others, I only agree in defense of fairness and justice but if I was a lawyer, I would be arguing to change laws not just policies in Indigenous education. In honour of my mother, Tsuut'ina and Kainai Elders I thank you for knowledge, support, and guidance in this journey. May the spirit of Tsuut'ina nishina live on.

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Appendices

Appendix A. A Review of the Literature Informing This Thesis

In my literature review I introduce the concepts of boundary crossing and funds of knowledge. I have found that these concepts can support educators in understanding, appreciating, and connecting with Tsuut'ina way of knowing. Building on Akkerman and Bakker's (2011) work on boundary crossing and boundary objects I chose this theory to show the connection and potential it has with the Indigenous conceptual work on ethical relationality conducted by Donald (2012) and ethical space by Ermine (2007). Building on the foundations of Funds of Knowledge conducted and continued by Moll (1992) of getting teachers to engage and incorporate the student and family's lived experiences, values, and cultural ways of knowing, being, and doing, I would like to show the relevance it has in creating meaningful lessons that promote marginalized and under privileged students' academic growth. Donald (2012) identifies Indigenous Métissage as "a research sensibility that imagines curriculum and pedagogy together as a relational, interreferential, and hermeneutic endeavour" (p. 5). Indigenous Métissage is a weaving of different perspectives and concepts to create something new, like curriculum and to things differently that what has been. The braiding of Tsuut'ina Elder's stories, theoretical concepts of boundary crossing and funds of knowledge, and my personal journey can be used as steppingstones for validating and coming to know Tsuut'ina ninisha knowledge to create meaningful curriculum for Tsuut'ina schools.

Boundary Crossing

An in-depth study on the use of Boundary Crossing and Boundary Objects in education and work was conducted by Akkerman and Bakker (2011). The purpose of this review of the literature is to understand boundaries as dialogical phenomena. Reviewing the literature that used the terms boundary crossing and boundary objects as an educational theory helped to identify

potential learning mechanisms that can take place at boundaries. The review identified four learning mechanisms that take place at boundaries: identification, coordination, reflection, and transformation. When working with boundaries and boundary objects, the “mechanisms show various ways in which sociocultural differences and resulting discontinuities in action and interaction can come to function as resources for development of intersecting identities and practises” (Akkerman & Bakker, 2011, p. 132).

According to Akkerman et al., (in press); Daniels et al. (2010); Ludvigsen et al. (2010), a “challenge in education and work is to create possibilities for participation and collaboration across a diversity of sites, both within and across institutions” (Akkerman & Bakker, 2011, p. 133). For decades scholars like Bernstein (1971), Engestrom et al. (1995), Star (1989), and Suchman (1994) studied these challenges using the term boundaries. They indicated “a boundary can be seen as a socio-cultural difference leading to discontinuity in action or interaction” (Akkerman & Bakker, 2011, p. 133). Teacher education programs had examples of boundaries in their schoolwork. Scholars such as R. Edwards and Fowler (2007), Tsui and Law (2007), and Alsup (2006), showed “sociocultural differences in values between a teacher education program and a secondary school can cause discontinuity” (Akkerman & Bakker, 2011, p. 133). Because of the “challenges of facing boundaries, education scholars have become interested in the ways in which continuity in action or interaction is established despite sociocultural differences” (Akkerman & Bakker, 2011, p. 133). Thus, the concepts of boundary crossing, and boundary objects have become central “in describing potential forms of continuity across sites” (Akkerman & Bakker, 2011, p. 133). The Akkerman and Bakker (2011) study revealed that “since 1995... the concepts of boundary crossing and boundary objects have been used in complementary ways by many scholars in educational sciences and educational psychology” (Akkerman & Bakker, 2011, p. 133). With all the different work that has been done on boundary crossing and

boundary, these concepts have now become part of two learning theories: cultural historical activity theory (CHAT) and situated learning theory.

Education researchers such as “Star (1989), Star & Griesemer (1989), Suchman (1994), and Engestrom et al. (1995) found that various types of professional work (science, technology design, and teaching) are heterogeneous in that they involve multiple actors representing different professional cultures” (Akkerman & Bakker, 2011, p. 134). The professional work of Phelan, Davidson, and Cao (1991) found how adolescents cross boundaries, in their case among family, peers, and school. Hence, working and learning are not only about becoming an expert in a particular bounded domain but also about crossing boundaries. (Akkerman & Bakker, 2011, p. 134).

Thus, boundary crossing became known to professionals at work as entering unfamiliar territory and are therefore professionals became unqualified due to the lack of knowledge. They face the challenges of negotiating and combining different contexts/perspectives to create hybrid situations. Boundary objects were introduced by Star (1989); Star and Griesemer (1989) “to indicate how artifacts can fulfill a specific function in bridging intersecting practices” (Akkerman & Bakker, 2011, p. 134).

The results Akkerman & Bakker’s study (2011) revealed four specific domains of how boundaries are encountered in domains of work, school, and everyday life. Most of the studies “focused on boundaries within work, discussing how groups and individual professionals with different expertise, tasks, or cultural backgrounds collaborate during work” (Akkerman & Bakker, 2011, p. 138). The study showed that the most dominantly represented professional domains were “science and academia, health care, technology and design, and teaching” (Akkerman & Bakker, 2011, p. 138). Boundaries are expected because of the high degree of specialization and cross-sectional interdisciplinary work in these domains. Studies done by

Gorodetsky & Barak (2008) investigated boundaries “between teacher education and teaching practices in schools” (Akkerman & Bakker, 2011, p. 138). The studies “denote how students need to relate to different values and norms and find their own position” (Akkerman & Bakker, 2011, p. 138).

The literature indicates the nature of boundaries found a central feature, “that boundaries are always conceptualized in between two or more sites” (Akkerman & Bakker, 2011, p. 139). An example of this is “how both school and work have a potentially similar interest in educating students, yet each have different cultures” (Akkerman & Bakker, 2011, p. 139). The boundary in-between school and work is the “cultural difference and the potential difficulty of action and interaction across these systems but also represents the potential value of establishing communication and collaboration” (Akkerman & Bakker, 2011, p. 139). Thus, boundaries are defined “as sociocultural differences that give rise to discontinuities in interaction and action” (Akkerman & Bakker, 2011, p. 139). The people that encounter these discontinuities at the boundaries and do the crossing are known as “brokers, boundary crossers, and boundary workers” (Akkerman & Bakker, 2011, p. 140). The study analyzed the learning processes and distinguished four dialogical learning mechanisms boundaries: identification, coordination, reflection, and transformation. Characteristic processes of identification include othering and legitimating coexistence. Character processes of coordination include communicative connection, efforts of translation, increasing boundary permeability, and routinization. Reflection character processes are perspective making and perspective taking. Transformation characteristic processes include confrontation, recognizing shared problem space, hybridization, crystallization, maintaining uniqueness of intersecting practices and continuous joint work at the boundary. The characteristic process of “these four mechanisms allow us to think in a more fine-

grained way about boundary crossing and boundary objects” (Akkerman & Bakker, 2011, p 151).

Hopkins et al. (2019) define boundary crossing as a dialogical research-practice partnership that is aimed at addressing problems of practice in education. Research-practice partnerships (RPP) are “spaces for researchers and practitioners to engage in long-term collaborations aimed at addressing pressing problems of practice” (Hopkins et al., 2019, p. 1) in education. Brokers or boundary crossers are “individuals who cross boundaries between research and practices... [that are] well positioned to facilitate research -practice connections, creating a “third space” where the scope and goals of collective work are jointly negotiated” (Hopkins et al., 2019, p. 2).

Within Indigenous research, boundary crossing resonates most strongly with the concept of ethical relationality (Ermine, 2007; Donald, 2012). Ethical relationality is an ecological understanding of human relationality that does not deny difference but rather seeks to understand how different histories and experiences position people more deeply in relation to one another. Donald (2012) states that “this form of relationality carefully attends to the particular historical, cultural, and social contexts from which a person or community understands and interprets the world” (p. 536). The concept of ethical space constitutes the area between two entities. For Donald (2012) “these points of contact hold the potential of becoming a meeting place where Indigenous and nonindigenous peoples can “revisit and deconstruct their shared past and engage critically with the realization that their present and future is similarly tied together” (p. 44). It is at these boundaries that educators can build an ethical relationship to unlearn colonial logics using boundary objects that bridge gaps between Indigenous and non-Indigenous curriculums.

As I began researching more about boundary crossing, I was able to reflect on how I came to know *Siksikaitsitapiipaitapiysiin*. Boundary crossing from my understanding and

experience has a deeper meaning and involves a deeper process of coming to know. When I received my first Indian name, it was in a night lodge hosted by Joe Roan. My Cree name translated to English means Sky Walker or one that walks amongst the sky. With my name, I was given certain protocols to follow. By using my name, especially in prayer and following the protocols outlined, I have come to know and experience that I cross a boundary into ancestral connections of feeling and knowing. When I was transferred to my Iniskim I had my face painted following protocols. Again, I crossed a boundary into another more natural, ancestral way of knowing. When I was transferred my Beaver bundle bracelets during the ceremony and followed protocol, again I crossed into a higher level of ancestral knowing, being, and becoming. These are some examples of times I crossed boundaries through experiential learning into my traditional ways of knowing. Siksikaitsitappiipaitapiysiin and “much of Niitsitapi Life is spent in the process of trying to understand the spiritual existence etc. and all that is related to ontology” (Bastien, 2004, p. 226). Crossing boundaries from an Indigenous perspective is done through experiential learning on the land, through ceremony, and by following protocols that is guided by Elders.

Funds of Knowledge

The fund of knowledge approach (FoK) originated in the 1980’s in Tucson Arizona. It “was aimed at countering what was described as deficit thinking in education (Llopart & Esteban-Guitart, 2018, p 145) for underrepresented Hispanic and Latino students. Gonzalez et al., (2005) identified “that schooling practices are related to issues of power and racism” (p 276) and that Hispanic and Latino “intellectual and educational resources were essentially invisible in school practice and curricular structure due to asymmetric power relationships” (Llopart & Esteban-Guitart, 2018, p 146). The Funds of knowledge concept was developed by educational researchers Luis Moll, Cathy Amanti, Deborah Neff, and Norma Gonzalez. Moll and Greenburg

(1990) described funds of knowledge as “the essential cultural practices and bodies of knowledge and information that households use to survive, to get ahead, or to thrive (p. 321). Funds of knowledge is based on the idea that the knowledge that students are exposed and immersed in at home is directly related to a student’s identity and success.

The FoK approach includes three elements: (1) Research in the households where teachers and colleagues uncover cultural family resources, build rapport and trust between the families and teachers; (2) Classroom analysis of new classroom practices; and (3) Study group meetings to discuss theory, methods, data. The study group consists of teachers and researchers “that connects the household analysis and classroom activities... and explore how household data can become resources for teaching” (Llopart & Esteban-Guitart, 2018, p 146).

In an anthropology and education study was conducted by Luis et al. in 2009 where teachers as co-researchers “utilizing ethnographic observations, open-ended interviewing, life histories and case studies” (Moll et. al, 1992, p 140). Moll et al. (1992) further clarified the relationship between funds of knowledge and culture, stating, “Although the term *funds of knowledge* is not meant to replace the anthropological concept of culture, it is more precise for our purposes because of its emphasis on strategic knowledge and related activities essential in households’ functioning, development, and well-being” (p. 139). The study explored how families develop social networks and how these social relationships develop knowledge, skills, resources, and labour that is exchanged to enhance a household’s ability to survive and prosper. Home visits and interviews were conducted by the teacher with an accompanying researcher. During the home visits and interviews “teachers assume the role of the learner, and in doing so, help establish a fundamentally new, more symmetrical relationship with the parents of the students” (Moll et al., 1992, p. 139). The information gathered allowed the teacher to know more about the child and family. FoK is a “reciprocal practice[that] establish[s] serious obligations

based on the assumption of ... (mutual trust), which is reestablished or confirmed with each exchange, and leads to the development of long-term relationships” (p. 134). Through the interview process teachers came to understand how “we carry with us cultural and emotional baggage that tends to color our understanding of interviews and observations” (Moll et. al, 1992, p .135). As teachers spent more gathering information about the family, their history, their activities, and values they “started to see beyond stereotypes making connections to instructional activities [they] wanted to develop” (Moll et. al, 1992, p. 136). Using the information gathered teachers create innovative, relevant curriculum and learning experiences. FoK has “special relevance to teaching, and contrasts with the more general term "culture," or with the concept of a "culture sensitive curriculum," and with the latter's reliance on folkloric displays, such as storytelling, arts, crafts, and dance performance” (Moll et al., 1992, p 139). With FoK “much of the teaching and learning is motivated by the children's interests and questions; in contrast to classrooms, knowledge is obtained by the children, not imposed by the adults” (Moll et al., 1992, p 134).

There was a conceptual critique done by Oughton (2010) on FoK in adult literacy and numeracy in classrooms. She shares her concern “that the concept has not always been subjected to sufficient critical reflection” (Oughton, 2010, p 70). She identified 3 problematic aspects of FoK: 1. The stereotyping of ethnic and cultural groups. 2. The metaphor of “funds”. She would prefer village or pool because a village or pool “is a source which is filled without intention or directed effort on anyone’s part, yet which can be drawn upon by any member of the community and is not diminished through use” (Oughton, 201, p. 72). 3. The imposition of cultural arbitraries. Oughton concludes by stating that teachers and researchers that use the FoK should “proceed with critical self-consciousness... and not allow the ideological attractiveness of this concept to blind them to its potential pitfalls” (Oughton, 2010, p. 75).

Hoggs (2011) researched the coherence and incoherence literature that has been written in the field of FoK. She found that the literature “illuminates the considerable diverse resources of ethnic minority students and their communities, and offers compelling arguments for a FoK approach to bring theory into practice for the achievement of culturally responsive pedagogy” (Hoggs, 2011, p. 675). FoK framework need to situate the student at the center of teacher planning. Teachers need to build on what the student already knows. This can be done with a constructive teacher training model. By building relationships with students, “stereotypes and deficit thinking are unsettled” (Hoggs, 2011, p. 674). Thus, making room for teaching practices that are relevant and tailored to the students’ needs and identities. Exposure, modeling and demonstrating FoK applications in teacher course work is powerful and affirming for teacher trainees.

In 2013, Rodriquez researched the pedagogical dimensions of the FoK approach and framework. She explored the role of power and agency in education. She found there was a “need for deeper examination of the positionalities of scholars who seek to engage in educational research as allies to marginalized communities” (Rodriquez, 2013, p. 115). She believes that “combating the persistence of cultural deficit-based explanatory models in education requires... [a] multilayered development of consciousness regarding power and agency to... fully realize the vast potential that counter-hegemonic theory and practice[s]” (Rodriquez, 2013, p. 115) that FoK represent.

In 2015, Subero et al., reported on two research projects conducted on FoK and social justice in schools with students with disadvantaged students from diverse ethnic groups. There findings found three major challenges for the FoK approach. First, they identified a need for “empirical analysis of the new relationships of power and agency that have arisen from the implementation of school practices based on funds of knowledge” (Subero et al., 2015, p.49).

Secondly, the need “to design and exemplify teaching and learning procedures that place the learners’ funds of identity at the heart of educational activity, and to recognize the multiple literacies that emerge from using different semiotic resources in different contexts of life and activity” (Subera et al., 2015, p. 49). Finally, a critical analysis to deal with the adversity that also ensures student well-being and quality of life.

Moll (2019) has developed a sociocultural approach known as funds of knowledge where the emphasis has been to develop theory and methods that educators can use to gather a families’ social, history, and cultural practices to create an environment that is academically sound. FoK works at “establishing strategic alliances for teaching and learning, developing new capacities and capabilities, and engaging pedagogically in ways that respect the students’ social history and intellect” (Moll, 2019. p. 137). Llopart & Esteban-Guitart (2018) concluded in their study that FoK continues to be a valid approach and has evolved to include an element of analysis that enriched the theoretical and educational model that also benefits people with learning difficulties.

Funds of knowledge have been the focus of several education studies. Denton and Borrego (2021) conducted a scoping review of the prevalence of funds of knowledge in the STEM (Science, Technology, Engineering, and Mathematics) education literature. Of the qualifying 42 studies, most of them used a qualitative research methodology. Results from the scoping review indicated research on funds of knowledge took place in classrooms and after-school programs. Denton and Borrego (2021) conclude that gaps and opportunities existed in the application of funds of knowledge interventions which need to include “assessing the efficacy of funds of knowledge interventions on students by connecting to student learning outcomes or theories of identity, self-efficacy, and belonging” (p. 20).

Hogg and Volman (2020) conducted a synthesis of funds of identity research. Funds of identity complement the concept of funds of knowledge. Funds of Identity complements FoK's conceptual framework and work towards "breaking down deficit thinking and enhancing the inclusivity and equity of education" (Hogg & Volman, 2020, p. 862). The theory of Funds of Identity "focuses on funds that are personally meaningful for students" (Hogg & Volman, 202, p. 862). Funds and artefacts are not always positive, these are considered dark FoK. The dark FoK presented challenges of safety and ethical responsibility that teachers felt they "lack the resources or training to support the students in life struggles that are revealed" (Hogg & Voman, 202, p. 884).

Anderson et al., (2017) asserted that "although there was a time when European settlers depended on Indigenous funds of knowledge to survive, Indigenous knowledge systems continue to be actively dismissed and marginalized" (p. 21). Their analysis of a video, which the researchers call a "telling case" (p. 21) demonstrates the ways in which cultural practices and funds of knowledge are leveraged. Bastien (2004) stressed the ways that Eurocentric knowledge systems actively dismiss and marginalize Indigenous knowledge systems. "Eurocentred perspective denies other forms of knowledge, other forms of knowing, and thus other forms of humanity" (Bastien, 2004, p. 161). Within a school context, it is rare that Indigenous knowledge systems are legitimized; rather, school and district leaders.

Therefore, gaining knowledge and building relationships with the child, their family, and their community helps teachers and school leaders look beyond the idea of self as an individual and respects community contributions to learning. Indigenous ways of knowing are based on relationships and reciprocity. Indigenous ways of knowing are "Contrary to Eurocentred perspectives, Niitsitapi's conception of self is intricately linked to alliances. Self exists only in relationship." (Bastien, 2004, p. 160). Indigenous people are immersed in many relationships.

These relationships are directly correlated to the student's identity and success. Using FoK in and Indigenous school builds relationships between the teacher and community, has reciprocal learning opportunities, and respects Indigenous ways of knowing as equal and relevant curriculum.

Indigenous Métissage

Métissage originated in 1989 from Caribbean Creole geo-cultural and linguistic contexts. It was used to explore ideas of mixed identities, languages, and ideas of a certain space/place. Edouard Glissant (1996) “analyzed the cultural hybridity of Caribbean peoples dislocation, and lack of shared collective memory that those populations have experienced as a result of slavery and colonialism” (Burke & Robinson, 2019, p. 151). He described or used Métissage as a way to build harmony between cultures and peoples that were usually at odds with each other. Glissant saw Métissage as a shifting of consciousness through a willingness to negotiate and work past racial differences that segregate identity. Worley (2006) explored Métissage in an educational context to create empowering conditions that recognized the diversities of people. Haug et al. (1987); Linnoet (1989); Zuss (1997) declared Métissage is also a praxis, addressing the gap between theory and practice. As a political praxis it resists “the fear of mixing and the desire for a pure untainted space, language or form of research” (Chambers et al., 2008, p. 2). As a reading praxis “engages the world as a dialogical an heteroglossic (Bakhtin, 1981) invites readers to attend to the interreferentiality of texts” (Chambers et al., 2008, p 2). Métissage as a writing praxis “enables researchers and their audiences to imagine and create plural selves and communities that thrive on ambiguity and multiplicity” (Chambers et al., 2008, p 2). Lionnet 1989 uses Métissage to affirm differences, rather than polarizing them. Zuss (1997) states that Métissage as s conscious textual act “resists fixed categories and ideological closure of racial, ethnic, and gender identities and their performance within a culture” (Zuss, 1997, p 168).

Métissage as research praxis it “seeks cross-cultural, egalitarian relations of knowing and being. (Chambers et al., 2008, p 2).

Chambers et al. (2008) bring Métissage into Indigenous and Canadian context clarifying that:

Métissage comes from the Latin word *mixtus* meaning “mixed,” primarily referring to cloth of two different fibers. Its Greek homonym is *metis*, a figure of skill and craft, as well as wisdom and intelligence (Harper, 2001). *Metis*, the wife of Zeus, was gifted with powers of transformation. Thus, *métissage* carries the ability to transform and, through its properties of mixing, opposes transparency and has the power to undo logic and the clarity of concepts. In various colonial contexts, such as Canada, *métis* became a racial category translated as “mixed-blood” or “half-breed” with the negative connotations of animals (and humans) breeding across species. (p 2)

Indigenous and Metis scholars use Métissage because “It respects the historical interrelatedness of traditions, collective contexts, and individual circumstances while resisting 19th-century scholarly conventions of discrete disciplines with corresponding rhetoric's for conducting and representing research. It is committed to interdisciplinarity and the blurring of genres, texts, and identities” (Chambers et al., 2008, p 2).

Metis scholar Kelly (2013) used Métissage as an invitation for educators to participate and explore Indigenous ways of knowing to inform their teaching. Theorists Hasebe-Ludt, Chambers, and Leggo (2009) used Métissage as a literacy strategy that honours traditions and reveals and affirms differences “while allowing for new understandings of individual’s subjective locations” (Burke & Robinson, 2019, p 152). When Métissage is used as a research praxis it “seeks cross-cultural, egalitarian relations of knowing and being. It respects historical

inter-relatedness of traditions, collective contexts, and individual circumstances while resisting 19th-century scholarly conventions of discrete disciplines with corresponding rhetorics for conducting and representing research” (Chambers et al., 2007, p 142). Métissage weaves “the vernaculars (particularly incorporating autobiographical material and local oral traditions and stories) with dominant (often colonial) languages of literacy (Chambers et al., 2007, p 142). The weaving collectively highlights differences of culture, traditions, history, sociopolitical and perspectives. They braid “in such a way that retains the integrity and distinctiveness of the individual texts/voices and at the same time creates a new text, one that illuminates the braided, polysemic, and relational character of our lives, experiences, and memories” (Chambers et al., 2007, p 142).

Dwayne Donald (2012) identifies Indigenous Métissage as a “theory that will enable a deeper understanding of the complex, nature of the relationships connecting Aboriginal peoples and Canadians and that will foster the creation of more ethical terms for extending these relationships” (Donald, 2012, p 541). Indigenous Métissage is about particular places in Canada they have “contentious histories in that the stories that Aboriginal peoples tell of them do not seem to coincide with Canadians’ histories and memories of those same places” (Donald, 2012, 242). The goal “is to bring Aboriginal place-stories to bear on public policy discussions in educational contexts in appropriate and meaningful ways” (Donald, 2012, p 542). These place-stories encourage people to rethink and reframe their received understandings of the place now called Canada and thus better comprehend the significance of Aboriginal presence and participation today” (Donald, 2012, p 542). The use of an Indigenous artifact from a particular place provides a lens of seeing “into the unique character and complexity of the particular place of concern in the inquiry” (Donald, 2012, p 542). The tangible artifacts must have symbolic meaning or significance that embody attitudes and behaviours of the past. Donald uses “artifact

in a socio-cultural and historical sense to denote a vestige fecund with contested interpretations of culture and identity” (Donald, 2012, p 542). Therefore, “doing Indigenous Métissage involves interpretation of the significance of an artifact to a place by showing how Aboriginal and Canadian perspectives of that artifact and place are both rooted in perspectives of colonial constructs and histories” (Donald, 2012, p 543). The act weaving/braiding in Indigenous Métissage “provides means for researchers to express the convergence of wide and diverse influences in an ethically relational manner” (Donald, 2012, p 544). Indigenous Métissage aims to “attend to the complexities of colonial and neo-colonial engagements in a reciprocal manner and find ways to write about those complexities using a language that sparks shifts in historical consciousness and enacts ethical relationality” (Donald, 2012, p 544).

I have chosen to use Indigenous Métissage as my research praxis for many reasons. I wanted to use a methodology that respects and honours Indigenous ways of knowing. I wanted a theoretical framework that honours Indigenous epistemologies and is not bound or restricted by guidelines around how to go about conducting my research. Indigenous Métissage is meant to “interweave different, even contradictory, realities, and lived experiences and to explore and challenge dualistic notions” (Burke & Robinson, 2019, p 152). There have been historical tensions between Indigenous peoples of Canada and Canadian settlers when it comes to curriculum that is taught to Indigenous peoples in Indigenous run schools. Indigenous Métissage “honours and explores that tension, allowing researchers to mindfully and strategically choose from both Indigenous and Western research methods to craft frameworks that enable them to conduct research in a way that genuinely honours their lived realities” (Burke & Robinson, 2019, p 152). Indigenous Métissage is a reflective process that honours my values, beliefs, and understandings and those of my community.

Indigenous Métissage is a weaving of different perspectives, stories, histories, and memories that are shared with a shared purpose of learning from those stories to create a new story. The braiding/weaving process of Indigenous Métissage is a relational process that resonates with my belief system. I was raised with teachings of the history and ceremonial values of why we braid that comes from the story of Scareface. I was taught the nurturing and teaching process of braiding a child or my spouse's hair. I participate annually in harvesting and braiding sweetgrass that re-enacting the braiding rituals, teachings, and processes. Therefore, I find the braiding process in Indigenous Métissage essential to my research. In the braiding process of my research, I will have three strands. The First strand will comprise of Tsuut'ina Elders' lived experiences and stories land based learning. The second strand consists of my story and experiences as a Tsuut'ina student, teacher, and curriculum developer. The third strand will be stories of Western attempts of understanding Indigenous worldviews through ideologies of Funds of Knowledge and Boundary Crossing. I choose to use land as a tangible artifact. The land has "subtle and abstract meanings and concepts – metaphysicalities – inseparable from their physical matter that emanate from their history, their use, and the ways in which they are presently conceptualized based upon this history" (Donald, 2012, p 542). The land holds the histories of Indigenous ways of knowing. Our stories, ceremonies, language, and ways of surviving come from the land. Sacred bundles and teachings come from the land and animals. Our food, tools, weapons, clothing, and shelter all come from the land. Having a personal connection with the land allows one to understand the "reciprocal nature-culture relations that emerge from the land (Cajete, 2000; Deloria, 1979; Kawagley, 1995)" (C. Tzou et al., 2019, p. 310). Indigenous people are interconnected to the land, water, animals, plants where "many Indigenous cultural practices, technologies, and understandings of self-emerge from the land, from particular places and landscapes (Deloria & Wildcat, 2001)" (C. Tzou et al., 2019, p. 310).

The land offers experiential learning, allowing students to test theories, identify with stories, understand ceremonies and practices of why we do things the way we do and how everything is interconnected and dependant on one another.

When these strands are braided together the process of creates a space for change and new understanding. This space is also referred to as the transferring of knowledge or coming to know from an Indigenous perspective. It is also referred to as a third space where individuals “cross boundaries between research and practice” (Hopkins et al., 2019, p 2). It is in this space or tying off process that new land-based curriculum that is respectful, relevant, reciprocal, and responsible to Tsuut’ina Nation and valued, honoured and equal to Alberta curriculum.

Boundary crossing as defined by Akkerman and Bakker (2011) are “sociocultural differences leading to discontinuities in action and interaction” (p. 152). These discontinuities in actions and interactions are needed to make systemic changes in Tsuut’ina educational practices. Boundary objects create an ethical space for “different groups to work together based on a back-and-forth movement between ill-structured use in cross-site work and well-structured use in local work” (Akkerman & Bakker, 2011, p. 141). When educators engage in boundary crossing, learning from other perspectives, admit to entering into Tsuut’ina ninisha that they are unfamiliar with open hearts and minds, then meaningful work in addressing the deficits in education that the Western education system has created. Combining Akkerman and Bakker’s (2011) definitions of boundary objects and Donald’s (2012) articulation of ethical relationality have the potential of “showing how Aboriginal and Canadian perspectives of the artifact and place are rooted in colonial histories and logics that are both simultaneously and paradoxically antagonistic and conjoined” (Donald, 2012, p. 11). Continuing and braiding in the work of Moll et al.’s (2018) Funds of Knowledge will improve the “relationships between families and schools... by designing culturally sensitive and contextualized curricular activities” (Moll et al., 2018, p. 145).

Indigenous Métissage creates a space for braiding and weaving boundary crossing, funds of knowledge, and Tsuut'ina ninisha in a respectful, reciprocal, and relational way where educators become responsible for creating relevant and meaningful curriculum.

Appendix B. Methodology Guiding Manuscript 3

The purpose of this study is to understand what is needed to sustain, validate, and legitimize Tsuut'ina ninisha uwa gunaha to restore a dying way of being that is essential for identity and survival. To do this, I need to learn from Tsuut'ina Elders' regarding land-based learning, teaching, and educational practices. Moreover, in learning from Elders I will learn how Tsuut'ina ninisha should be recognized as an equal and legitimate way to educate Tsuut'ina children in Tsuut'ina Nation schools. My primary research question guiding this thesis is: What is required to sustain, validate, and legitimize Tsuut'ina ninisha uwa gunaha and restore land-based practices to revive a diminishing way of life crucial for identity and survival withing Tsuut'ina Nation schools, as perceived and advocated by Tsuut'ina Elders". This question is addressed in various ways through the three manuscripts.

In this chapter I explain why I have chosen to use Indigenous Métissage as a research praxis and methodology that supports my research approach. I draw upon the ideas of ethical space and ethical relationality to understand the ways that Tsuut'ina and Western approaches might be brought together to create a relational framework of Indigenous curriculum for Tsuut'ina schools. I use Kovach's (2010) conversational Indigenous research method, including semi-structured interviews and observations. I use these methods to converse with Tsuut'ina Elders. My roles as an Indigenous teacher, mother, grandmother, and curriculum coordinator are deeply influenced by my upbringing and personal experiences of Tsuut'ina ninisha (ways of being). Therefore, I position myself pragmatically within a Tsuut'ina paradigm/worldview. This chapter will explain why I have chosen to use Indigenous Métissage as a research praxis and methodology that supports the qualitative research approach through land-based learning. I have chosen Indigenous Métissage as my methodology because it "requires hermeneutic imagination directed towards the telling of a story that belies colonial frontier logics and fosters

decolonization" (Donald, 2012, p 533). Indigenous methodologies like Indigenous Métissage rely "heavily on concrete actions most often known as, but not limited to storytelling, ceremony, and protocols to communicate an Indigenous belief system" (Kovach, 2018, p 224). I use the ideology of boundary crossing and funds of knowledge to create a relational curriculum for Tsuut'ina students, provide scholarly support teachers insist on, and provide a means to justify and legitimize Tsuut'ina ninisha through a land-based orientation in our schools. I use conversational methods to gather information. I use these methods to research Tsuut'ina Elders working within the Tsuut'ina Department of Education. I collected their lived experiences of boundary crossing into Tsuut'ina ninisha.

My Indigenous Worldview

I come to my research through a Tsuut'ina worldview. Evaluating theories through a pragmatic lens is not an arbitrary decision. My worldview is Tsuut'ina grounded epistemology in ninisha; where the land, language, and ceremony guide us. Where we are responsible for our families, community, environment, and cosmos. I will be following Wilson's (2008) approach of seeing epistemology, ontology, axiology, and methodology in a circle where "the entire circle is an Indigenous research paradigm" (p. 70) and not viewed as separate entities. As all entities in life are circular, the earth, sun, moon, cycles of life, seasons, etc., my research methodology must be true to Tsuut'ina ninisha. Indigenous methodologies have an "emphasis on the need for a higher education system that respects them for who they are, that is relevant to their view of the world, that offers reciprocity in their relationships with others, and that helps them exercise responsibility" (Kirkness & Barnhardt, 2001, p. 1).

Research Practice

I use Indigenous Métissage as a methodology to explore Tsuut'ina Elders' lived experiences and stories that have influenced them to cross boundaries between the Alberta

curriculum and Tsuut'ina ways of learning. Sharing the story of lived experiences, "braid parallel perspectives together to show through our individual preoccupations with certain artifacts, places, and colonial constructs are part of a larger collective" (Donald, 2012, p. 548).

Hermeneutics in Indigenous Métissage engages participant tensionalities caused by colonial constructs between Aboriginal and Canadian relations with the "desire to remain amidst the messiness and difficulties of a situation or context that creates opportunities for new knowledge and understanding to arise" (Donald, 2012, p 545). The intention "is to inspire readers and listeners to examine the routes of their own interpretations - to see themselves implicated in the stories told - and make critical connections to teaching, learning, and public policy issues today" (Donald, 2012, p 548).

I have chosen Indigenous Métissage because of its capacity to weave together the repressed languages and traditions of local cultures and vernaculars, particularly incorporating autobiographical material and local oral traditions and stories (Chambers et al., 2007, p. 142). Employing Indigenous Métissage provides Tsuut'ina people with a voice, thereby authenticating as a valid and legitimate way of knowing in the creation of a new relational curriculum.

Similarly, I have opted for an Indigenous methodology because it places Indigenous perspectives, values, and protocols at the forefront of knowledge construction. Indigenous methodologies are rooted in Indigenous language and meaning-making processes and hold a decolonizing aim. Moreover, Indigenous methodologies emphasize the relational nature of meaning creation and are inherently place-based. As outlined by Indigenous scholars such as Wilson (2008), Smith (2009), and Kovach (2010), Indigenous methodologies recognize and respect Indigenous sovereignty and seek to benefit Indigenous communities. Indigenous Métissage directly aligns with my worldview as a *dina-tii* (real human), honoring the values and protocols of Tsuut'ina *ninisha*, *nisk'a* (land), *uwa* (and), and *Gunaha* (language).

I used the conversational method (Kovach, 2010) as my primary method. The conversational method is a "dialogic approach to gathering knowledge that is built upon an Indigenous rational tradition" (Kovach, 2010, p 44). The conversational method in Indigenous research "utilized open-ended, semi-structured interview questions to prompt conversation where participant and researcher co-create knowledge" (Kovach, 2010, p 44). Using Indigenous methods in the research process of decolonizing validates Indigenous ways of knowing, being, and doing. Where "Decolonization... is about centring our concerns and world view and then coming to know and understand theory and research from our own perspectives and for our own purposes" (Smith, 2012, p. 39). Using a conversational method shows how participants' stories and experiences are valued, including those of the researcher. Storying and re-storying coincide with one another. Using stories, participants "become conscious of the ways in which their autobiography influences how they make sense of their lives and experiences" (Donald, 2012, p 548). Re-storying plays a considerable role in decolonization because it:

has respect for the tenets of Indigenous epistemology of how knowledge arises from an Indigenous perspective; is grounded in Indigenous theory-principles (teachings) such as those pertaining to relationality, ethics, protocols, reciprocity, and respect; is highly contextualized within the experiences of the Indigenous communities of which the research is involving itself (i.e., socioeconomic, political, cultural, religious, kinship, etc.); arises from embodied experience and story; acknowledges the conditions of Indigenous societies, including colonialism, neocolonialism, and resistance; and is accessible to the people and community it seeks to represent. (Kovach,2018, p. 227).

We as Indigenous researchers "are re-storying through our own lens, gaze, and perspective" (Kovach in Denzin & Lincoln, 2018, p. 227). Storytelling and restorying "will help deconstruct the colonial frontier logics of inside/outside and facilitate meaningful reconstruction

through sustained engagements that traverse perceived civilizational divides" (Donald, 2019, p 549). Thus, bringing one's story/lived experience into a meaningful space where restorying of ways of doing can create systemic changes for all.

When I came to know Tsuut'ina ninisha and Blackfoot ways of knowing it was in a safe space that was not pressured by time or structure. Gatherings of people who shared their stories, individual experiences, spiritual connections, and interpretation were encouraged to make sense of the teachings for themselves. Sharing circles "provides a forum for people to relate their stories in a holistic fashion that was not fragmented by a structured interview process" (Kovach, 2010, p. 99). I use an Indigenous conversational method of storytelling to gather the individual experiences of those participating. The sharing of individual experiences allowed me to interact with participants and elicit context-rich personal accounts, perspectives, and perceptions. The conversational method allows for flexibility to be structured, unstructured, or semi-structured and helps to explain and describe complex interactions and processes.

Conversations help facilitate discoveries in cultural nuances. Protocols are followed during the process. Starting with a prayer and smudge commits participants to be ethical, have cross-cultural boundaries, and be responsible for what they are sharing and their teaching practices. The Indigenous researcher acknowledges that spirituality is not separate but is an integral part of the whole in the Indigenous worldview (Wilson, 2009, p. 89). Therefore, offering tobacco to participants is essential in sharing stories.

However, the Indigenous conversation method can be time-consuming, cause biases, and provide less anonymity. I used the conversation method to gain perceptual and contextual information on participants' lived experiences of boundary crossing from the Alberta curriculum to Tsuut'ina ninisha. I use personal reflection to detect meaningful connections, experiences, and interpretations of boundary-crossing. Finally, I used the information gathered from the

conversational method to answer my research questions: a) From your perspective, can you share what you envisioned the Tsuut'ina curriculum that would be taught when Tsuut'ina schools opened in 1993? b) Do you feel Tsuut'ina Department of Education has succeeded in upholding the vision set in 1993? Why or why not? c) What types of land-based learning should be in Tsuut'ina Nation schools? d) What Tsuut'ina teaching practices should be recognized as equal and legitimate ways to educate Tsuut'ina children within Tsuut'ina schools?

Data Collection and Instruments

My primary data collection was using Indigenous conversational methods to gain contextual, perceptual, and theoretical information on the sample group. Using in-depth interviews observations will allow me to record behaviour and provide data in a natural setting.

Sampling

My research sampling strategy was a subset of purposive sampling called critical/crucial case sampling. Critical case sampling is selecting a few participants who are likely to yield the most information and have the most significant impact on knowledge development. My sample was drawn from Tsuut'ina Elders that have taught at Tsuut'ina Nation schools, are members of the Tsuut'ina language and culture committee, and are fluent Tsuut'ina speakers.

Therefore, to better understand what teachers need to teach and sustain Tsuut'ina land-based practices in Tsuut'ina schools, my sample group included six Tsuut'ina Elders, three males and three females.

Data Processing and Analyses

During the data processing and analysis stage, I braided/weaved data gathered inherent in Indigenous Métissage. Indigenous Métissage that requires a braiding of something to become something new or valuable. One strand of the braiding is the Tsuut'ina Elder's lived experiences gathered through open-ended semi-structured interviews and sharing of stories. The second

strand of the braid represents me as a Tsuut'ina student, teacher, and curriculum developer perspective. The third strand of the braid is a place where Western attempts of creating connections between Tsuut'ina ninisha through stories of FoK, and boundary crossing. The tying of the braid consists of ways the Tsuut'ina Department of Education can support the process of mixing/blending/braiding new curricula through Indigenous land-based learning.

Braiding sweetgrass was taught to Scarface when he visited Creator. Creator had given Scarface gifts of knowledge to bring back to the Blackfoot peoples when he saved his son, Morning Star, from death. As a result, Blackfoot people were taught to not only braid sweetgrass but how to braid their hair. A woman is taught to braid her husband's and children's hair. The act of braiding is a time when a woman grooms her family members, nurturing their spirit with love and care as each strand is weaved. Women teach, comfort, and support family members as she is braiding. Braiding hair is a time to connect and nurture the relationship between braided and braider. Braiding teachings have been passed down to me from Tsuut'ina and Blackfoot women. I am responsible for nurturing my family and teaching my children and grandchildren about braiding hair and sweetgrass. Indigenous Métissage braiding and my Tsuut'ina/Blackfoot knowledge of braiding coincide with blending and weaving both ways of braiding to create new ways of knowing for my children, students, and teachers moving forward.

Trustworthiness

In doing Indigenous research, Kirkness and Barnhardt (1991) have laid the foundations for valid, credible research with Indigenous peoples. My research project is to improve educational frameworks in First Nations schools, particularly Tsuut'ina schools, so that Tsuut'ina students can and will achieve higher education. Kirkness and Barnhardt (1991) state how Indigenous people's education must have an "emphasis on the need for a higher educational system that respects them for who they are, that is relevant to their view of the world, that offers

reciprocity in their relationships with others, and that helps them exercise responsibility over their own lives." (p. 1). In doing so we need to do research and develop "an education that respects them for who they are, that is relevant to their view of the world, that offers reciprocity in their relationships with others, and that helps them exercise responsibility over their own lives" (Kirkness & Barnhardt, 1991, p. 15). Other Indigenous scholars, Smith (2013), Kovach (2010), & Wilson (2009) have emphasized and validated the importance of attending to the five 5 Rs in the Indigenous research process. The 5 R's include respect, relevance, reciprocity, relationships, and responsibility.

To honour my communities of Tsuut'ina and Kainai, my elders and knowledge keepers, my family, and my research, Respect, Relevance, Reciprocity, Relationships and Responsibility will be evident throughout my study. I respect Tsuut'ina ninisha and Siksikaitapiisinii and their "meaning, value and use [that] are bound to the cultural context in which it is situated, it is thoroughly integrated into everyday life, and it is generally acquired through direct experience and participation in real-world activities" (Kirkness & Barnhardt, 1991, p. 7). Tending to the five Rs of Indigenous research coincides with Tsuut'ina ways of knowing, being, and doing, showing respect by following protocols of offering tobacco, smudging, and listening to understand. I have reconstructed myself to be more relevant and accepting of the community's and participants' perspectives and experiences and be responsive to the needs of both. I strongly emphasized making learning and teaching a two-way process creating reciprocal relationships position "to create a new kind of education, to formulate new paradigms or explanatory frameworks that help us establish a greater equilibrium and congruence" (Kirkness & Barnhardt, 1991, p. 12). Because I used an Indigenous research paradigm, it is my responsibility to assist participants and "engage knowledge as a border-crosser, as a person moving in and out of borders constructed around coordinates of difference and power" (Kirkness & Barnhardt, 1991, p. 12).

Ethical Considerations

Ethical considerations require researchers to minimize the potential harm to those involved in the study. There are different levels of ethical considerations involved in my research. Therefore, I received approval from my research committee and Tsuut'ina Elders.

Because "Indigenous protocols are ethics" (Kovach in Denzin & Lincoln, 2018, p. 224), I let Tsuut'ina Elders know what I am doing and what my intentions are. I followed the Tsuut'ina protocol, offering tobacco to Tsuut'ina Elders to discuss my intentions and get approval. Many ethical considerations depend on the position one holds within the community. Archibald's (1997) seven principles of storywork were part of the ethical considerations. Showing respect, reciprocity, reverence, responsibility, synergy, holism, and interrelatedness throughout the research process indicates that the researcher was ethically responsible to the people, land, language, and cosmos.

Potential Limitations and the Delimitations of the Study

Elder participants can get lost in the wording of the study and not completely understand what is being asked. Participants may not be sincere or honest in answering the questions. The participant may choose to opt out of the research altogether. The researcher to honoured the participant's choice and did not apply pressure or ask to justify their decision.

Limitations of the conversational method vary depending on the participant's attitudes and feelings that may change during each interaction. How a participant processes the questions and information may affect their attitude and feelings and may require support in processing after the conversation or story sharing. In using an Indigenous method, "the nuances and complexities of an Indigenous paradigm may not be fully understood (or viewed as legitimate) by" (Kovach, 2010, p 42) the participants. Participants may not be able to put themselves in relation to every step of the process. Participants or other researchers may want to put Western ways that conflict

with Indigenous methods of gathering knowledge. Participants may rush the process or feel it is too time-consuming to sit and make relationships. Participants or the researcher may have difficulty listening to understand.

When using an Indigenous conversational method, participants may be unfamiliar with the method and refuse to share. The tobacco offering also assumes the person will share their truths, but participants may feel they need to answer questions to appease the researcher. In addition, participants may not accept the offering tobacco or smudging.