

KNOWING PLACE:
EXAMINING THE INTEGRATION OF PLACE-BASED LEARNING
IN K-12 FORMAL EDUCATION

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Abstract

This study examines place-based education and its potential for engaging students and creating more socially-just learning environments that prepare students to think critically and participate in building a better future for themselves and the communities in which they live. It was initiated to contribute to a growing body of research on how place-based education philosophies and processes contribute to facilitating high-quality learning experiences that are socially and ecologically just, as well as to inform improved teaching practice and policy within our public education institutions in order to ensure that classroom environments, instructional methods, and learning content are reflective of and responsive to the diverse worldviews and experiences of all students.

To explore this focus, I used a semi-structured interview format to gain the perspectives of five teacher participants, all residing in Saskatchewan, who use place-based philosophies and methods. I focused on participants' perspectives of the benefits, processes, barriers, and possibilities for broad incorporation of place-based education in order to determine how place-based learning can be integrated into K-12 formal education. I transcribed interviews verbatim and used inductive coding to organize data into themes.

My findings indicate that the teacher participants view place-based education as offering many significant benefits to students, their communities, and themselves, as educators. They believe that, in addition to creating engaging, motivating, and student-centered environments that promote high standards of student growth and learning, place-based education contributes to healthier and more socially and environmentally just classrooms and communities. Despite some barriers associated with facilitating place-based education, such as financial constraints, time limitations, and other institutional norms and structures imposed upon K-12 classrooms, every

participant noted a fervent belief in the possibilities and benefits of the broad incorporation of place-based learning within K-12 formal education. They described examples of how place-based education can be taken up in every classroom as a means to engage all students in meaningful learning to an end of healthier students who imagine and work to realize not only their own potential, but also that of the communities in which they live.

The results of this study contribute to the body of research on place-based education, much of which focuses on rationales for its implementation, by detailing specific guidelines and processes for its effective facilitation. The results offer practical considerations for educators and education policy-makers who wish to adopt and advocate for place-based education philosophies and praxes.

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Preface

Walking across the stage at my high school graduation in Yorkton, Saskatchewan was just as I had imagined it would be throughout my schooling: celebratory, empowering, and inevitable. Completing public education was no doubt an accomplishment, but it was also a given; I loved school and always had. I had little reason not to; the odds were on my side from the beginning. The privilege associated with being a white, able-bodied, heterosexual, cisgender female and a member of a nuclear, middle class family accompanied me from Kindergarten through Grade 12 and beyond. I am grateful for the many opportunities I have been afforded throughout my student life, but I acknowledge that I have thrived in a system that does not present equal opportunities to everyone.

As a child, my identity was validated everywhere I turned: in my classmates, in curricula, in the books I read, on television, and in my community. As a graduate student examining the impacts of colonization I have come to realize that, although I have never thought much about my culture in a historical sense, nor about how my culture impacts my identity, it is everywhere around me. I do not notice it simply because it is everywhere. It is the lens with which I view the world as well as the lens with which decisions are most often made in our public institutions.

Following my largely positive experience as a student attending public school, I became a teacher by profession. For over ten years, I have worked with approximately three hundred students annually as an arts and band teacher. My desire to foster knowledge and skills through song, dance, and play has, I hope, brought joy to many students as well as to myself. I consider myself extremely lucky to work in a field that is inherently creative and playful. However, in my fourth year of teaching I found myself feeling perpetually exhausted and defeated. I had come to the realization that, no matter how much time and care I dedicated to my students, I was unable

to compensate for institutionalized injustices that I perceived as relentlessly chipping away their spirits. The bulk of my teaching experience up to that point had been in the heart of Saskatoon's inner city where approximately 90% of students identify as being Indigenous¹ (Anderson, 2005). While I enjoyed building relationships with and serving the school community to the best of my ability, I came to understand that the institution of our public school system operated within a rigid and colonial structure that was failing to acknowledge the diverse worldviews and narratives of many of the students it presumed to serve. A visiting guest once asked the students, "What are your dreams? Who do you want to be when you grow up?" Their silence was a deafening and heartbreaking confirmation of what I had already suspected about the core of what is wrong with our society: oppression lives. It feeds on superficial celebrations of multiculturalism and proclamations that Canada is one of the best places in the world in which to live. When children, and in this case a specific group of marginalized youth, have lost the licence to dream, something is very seriously wrong.

These children were being systematically worn down. Despite school and school board commitments to serving Indigenous students in a respectful and responsive way by incorporating Indigenous content, methods, and role models in the classroom (see *Treaty Education Outcomes and Indicators*, 2013), these students continued to disengage from school. This disengagement manifested, I conjectured, as the students' violence I witnessed towards themselves, each other, the building, and their teachers. This violence was not committed by *bad students* with *bad intentions*, but rather by those who also approached staff members with hugs, jokes, and insightful observations both in and out of class. The problem, I came to theorize, is that the rigid structure of public education is imposed on students and staff alike, just as it was imposed on

¹ The term, Indigenous Peoples, is used in this study and increasingly in Canada as a collective noun for the First Nations, Inuit and Métis (FNIM) Peoples of Canada (*Indigenous Peoples; A Guide to Terminology*, n.d.).

many of our students' ancestors in Canada's residential schools, perpetuating colonial norms and social inequality. As teachers, we consistently ask how we can help our students to love learning and thrive as the best versions of themselves, yet we fail to address or even recognize the oppressive nature of a public education system that is built on Eurocentrism² and a history of assimilation (Truth and Reconciliation Commission of Canada, 2015). So busy attempting to cope with symptoms of student disengagement, we have not accepted that we are simply asking the wrong questions about what ails public education; we cannot fix our practice until we examine the systems that have remained essentially unchanged since they "came into being in their structure in the 19th century" (Robinson, 2010). It is only once we recognize how our system is essentially flawed that we might envision an alternative.

It is with the realization that something better is both possible and necessary that I began this research journey. I aimed to challenge current practices and explore practical solutions that may re-engage students and contribute to a reimagination of public education that facilitates high quality learning experiences while contributing to a socially just future for all.

² Eurocentrism is focusing on or privileging European or Anglo-American culture, history or knowledge, often to the exclusion of a wider view of the world ("Eurocentric." n.d.).

Chapter 1: Introduction to the Study

We live in an increasingly globalized world; advancements in communication technology and a growing, competitive global market economy are facilitating the development of a homogenous global culture (McMurtry, 1998). Since western-Europeans have colonized much of the globe, Eurocentric culture has spread throughout the world, pressuring “communities and regions to subordinate themselves to the dominant economic models and to devalue their local cultural identity, traditions, and history in preference to a flashily marketed homogeneity” (Lane-Zucker, 2004, p. iv).

Globalization manifests itself in schools as standardized testing and an emphasis on segregated subjects that are believed to prepare students to compete in a global market economy (Gruenewald, 2003). Numerous educational researchers have discussed the increased use of national and international standardized testing as a means to both facilitate and respond to globalization (Carnoy, 2000; Davies & Guppy, 1997; Kamens & McNeely, 2010; Lipman, 2004; McMurtry, 1998). Educational reform that seeks to standardize content, goals, aims, and standards “have the effect of centralizing the administration of education and, to some degree, homogenizing education across regions and nations” (Davies & Guppy, 1997, p. 447). While standardization aims to improve the broad learning community’s access to knowledge and skills deemed necessary to achieve a high standard of living compared with that of previous generations, it is becoming apparent that current methods of standardization may, in reality, contribute to greater inequalities among learners (Davies & Guppy, 1997). In some cases, teachers in low-achieving schools are pressured to spend more time *teaching to the test* as opposed to addressing and building upon students’ unique curiosities, values and skill-sets. According to a 2011 report by the Canadian Teachers Federation, teachers identify the

prevalence of standardized testing as a major area of concern due to its narrow focus and limited ability to assess the full scope of student progress and learning (Canadian Teachers Federation, 2011). If we continue along this path of standardization and homogeneity, we risk denying our students holistic learning opportunities that incorporate local knowledge, the arts, physical activity, health education, ecological education, and student-centered inquiry. Students will be deprived of opportunities to think critically and to become empowered in actively shaping their futures and those of the communities in which they live (Smith, 2006). The standardization of knowledge in our schools can thus undermine the potential of all students.

Canada's education institutions continue to be influenced by their shared history of assimilative policies (Barnes, Josefowitz, & Cole, 2006), exacerbating issues of standardization and homogeneity. Assimilative policies, structures, and behaviours impose colonial norms such as the English language, Christianity, hierarchical, linear ways of knowing (Barnes, Josefowitz, & Cole, 2006), and gender inequality (Bourassa, McKay-McNabb, & Hampton, 2005) upon Indigenous and immigrant populations. For more than a hundred years, the Canadian government participated in operating residential schools as vehicles for the assimilation of Indigenous peoples, resulting in devastating loss of culture and institutionalized inequality of Canada's FNIM communities (Truth and Reconciliation Commission of Canada, 2015). The last Canadian residential schools were closed in 1997 (Truth and Reconciliation Commission of Canada, 2015).

The Canadian government has since issued an apology for its involvement in operating the residential schools (Harper, 2008) and Saskatchewan curriculum guides now promote the inclusion of authentic FNIM content in curricula (*Treaty Education Outcomes and Indicators*, 2013). Teachers and administrators have been exploring appropriate resources and methods for ensuring learning is culturally responsive to all learners. However, the privileging of a

Eurocentric knowledge paradigm in our public education institutions continues to alienate Indigenous and non-western-European immigrant learners (Battiste & Henderson, 2009; Friedel, 2011). This alienation is evidenced by statistics that highlight a stark contrast in academic achievement between self-declared Indigenous and non-Indigenous students (Saskatchewan Ministry of Education, 2011). Canadian schools fail to meet the needs of many students, and there exists within them a residual culture of institutionalized oppression in a country that boasts of its multiculturalism. Oppression exists in schools as appropriation and omission of diverse perspectives and in insufficient efforts to honour and promote meaningful social and intellectual development in all learners (St. Denis, 2007). Despite teachers' and administrators' efforts to address the legacy of colonization in public education, Canadian schools continue to deliver an educational model that, in many ways, assumes and reinforces the idea that Indigenous peoples are inferior to non-Indigenous peoples (St. Denis, 2007).

We can and must do better. The perpetuation of knowledge standardization and institutionalized oppression in our schools situate the following thesis. Using theoretical and empirical research, I aim to reveal how place-based education philosophies and methods can help to reengage students and address social inequalities currently being perpetuated in our public education institutions.

Research Objectives

In contrast to formal K-12 public education's current structures and practices that perpetuate social inequality, place-based education situates learning within students' worldviews, histories, and curiosities. It can improve educational opportunities for a broad range of learners, as well as contribute to the health of the communities in which they live (Battiste, 2002; Gruenewald, 2003; Judson, 2008; Ledlow, 1992; Little Bear, 2009; Smith, 2006; Sobel, 2004).

This research aims to examine how place-based learning can be integrated into K-12 formal education, which serves “about 93 per cent of all students in Canada” (*Education in Canada*, n.d.). To examine this focus, I interviewed teachers who facilitate place-based learning in Saskatchewan’s formal K-12 public education system about their perceptions of the benefits, limitations, logistical considerations, and possibilities for the broad incorporation of place-based learning.

I examined this focus on the integration of place-based learning in K-12 formal education to address the following research questions:

- How can place-based education be integrated into K-12 formal education?
 - How do participants conceptualize the concept of place? (e.g., as local and/or global, in relation to land and colonization, etc.)
 - Why do participants choose place-based approaches to education?
 - What are participants’ processes for incorporating place-based education when planning, facilitating, and assessing their students’ attainment of Saskatchewan curriculum objectives?
 - What do participants perceive as barriers to the broad incorporation of place-based education into K-12 formal education?
 - What do participants view as the possibilities for the broad incorporation of place-based education in K-12 formal education?

Research Significance

Within Canada, public education institutions have recently undertaken initiatives to mandate the inclusion of diverse perspectives in curricula in order to make learning more culturally-responsive, holistic, and equitable. These initiatives include Treaty Education in all

Saskatchewan K-12 classrooms (*Treaty Education Outcomes and Indicators*, 2013) and the creation of the FNIM Unit by Saskatchewan Public Schools. However, deficiencies in knowledge about how to include diverse perspectives authentically and appropriately can prevent educators from incorporating them in their teaching, at all (Aikenhead & Michell, 2011). This suggests a need to move past mere acknowledgement of school-perpetuated social inequality and beyond general mandates for more inclusive education; we must begin conceptualizing, practicing, and recommending specific strategies that can inform pedagogy. Based on the research findings, I recommend instructional processes and designs to guide K-12 formal educators who wish to explore educational philosophies and methods that are distinctly socially just, place-based, and student-centered.

Much of the existing research on place-based education is conceptual and focused on its potential for creating more positive and equitable learning spaces. Researchers have advocated for place-based education because its philosophies and methods encourage the incorporation of diverse worldviews in learning (Battiste, 2002; Little Bear, 2009) as well as opportunities for students to practice community engagement (Gruenewald, 2003), active citizenship (Smith, 2006; Sobel, 2004) and healthy, environmentally-sustainable living (Judson, 2008; Sobel, 2004). This empirical research aims to contribute to research-based understandings of *how* place-based education can be incorporated in the context of public schools, including the specific processes, barriers, and resources associated with its effective implementation.

Thesis Layout

In the remainder of this thesis I explore existing theoretical and empirical research in the Literature Review in Chapter 2, which serves as a conceptual framework for my study, before discussing my research methodology in Chapter 3. In Chapter 4, I present the research findings

based on my analysis of participants' responses. Finally, I conclude with a discussion of the findings and how they contribute to the existing body of research on place-based education, as well as implications for future research, policy, and practice.

Chapter 2: Literature Review

This literature review examines existing research on how place-based education can be integrated into formal K-12 schools. I developed an overview of existing research on place-based education, including the many ways it is conceptualized, a rationale for incorporating place-based education in schools, and existing empirical research models of place-based education, before highlighting a gap in the research that this study contributes to filling.

Perspectives of Place

There exists a diverse body of research conceptualizing place-based education. Place-based education can be understood in a variety of ways and it “lacks a specific theoretical tradition” (Gruenewald, 2003, p. 3; also see Resor, 2010). David Sobel (2004) defines place-based education broadly, incorporating some of its most frequently noted attributes:

Place-based education is the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science, and other subjects across the curriculum. Emphasizing hands-on, real-world learning experiences, this approach to education increases academic achievement, helps students develop strong ties to their community, enhances students’ appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens. Community vitality and environment quality are improved through the active engagement of local citizens, community organizations, and environmental resources in the life of the school. (p. 6)

While a broad understanding of place-based education can be helpful in motivating educators to think outside the walls of the traditional classroom, an examination of how theories about place-

based education are diverse, often mutually supportive, and sometimes contradictory is essential for educators who wish to put it into practice.

There are many dimensions of place beyond the mere physical, which are perceived differently depending on a person's worldview and prior experiences (Friedel, 2011; Gruenewald, 2003; Lim, 2010). McKenzie and Bieler (2016) discuss the "multifaceted dimensions of place, including in relation to considerations of temporality (rhythms of place, events in place), embodiment (hearing, listening, being in place), and power (who occupies, intervenes in, or who has access to place)" (p. 62). Place encompasses "both natural and social history" (Williams, 2008, p. 11) of a space and can be conceptualized beyond "bounded geographical locations" to include "experiences of friendship, art, literature, irony, cultural difference, [and] community" (McKenzie, 2008, p. 361). One's sense of place is about their relationship with that place or their "personal history with a locale" (Williams, 2008, p. 12). We shape our sense of place by interacting with and coming to understand its many dimensions. The process of building a relationship with place is significant in developing one's self-identity (Friedel, 2011); when we strengthen our relationships with and understanding of place, we learn to better understand ourselves.

Gruenewald (2003) asserts, "places are profoundly pedagogical," and "the kind of teaching and shaping that places accomplish . . . depends on what kinds of attention we give to them and on how we respond to them" (p. 621). Smith (2013) describes place-based educators' perspectives of their praxes: "for them, community and place become additional 'texts' for students' learning" (p. 213). Smith (2013) further states that place-based education is "an approach to curriculum development and instruction that acknowledges and makes use of the places where students live to induct them into the discourses and practices of any and all school

subjects” (p. 213). Place-based education seeks a reorientation of pedagogy that “challenges the isolation of schools and classrooms from their social and ecological contexts and the isolation of academic subjects from one another” (Israel, 2012, p. 79). The range of literature surrounding place and place-based education introduces an extensive list of terms that can be daunting to assimilate into one’s pedagogical vocabulary. Three approaches to place-based learning, while not mutually exclusive, have emerged as principal elements of place-based education across the research: land-based education, community-based education, and critical pedagogy of place.

Land-based education. Land-based education or land education is a term that has been used relatively recently in the contexts of Indigenous perspectives in education and education for environmental sustainability. Wilson (1996) explains the significance of human-land relationships for Indigenous peoples:

The land that we live on today is made up of our ancestors; the food that we eat (for the most part) is grown from the soil that our ancestors went back to when they died; and the animals and plants in our world have also grown out of and been nourished by this soil.

We thank the spirits of animals, minerals, and plants, and turn to them for strength and continuity. (p. 308; see also Cardinal, 2001; Deloria, 2004; Ermine, 1999; Michell, 2005)

Place must be foundational in any curriculum that aims to include Indigenous students (Little Bear, 2009); when land and its ability to sustain the people who share it is the focus of education, “students are enabled to understand themselves and made to feel at home in the world” (Battiste & McConaghy, 2005, p. 156).

While a symbiotic relationship with the land is emphasized in ecological education as it is in Indigenous epistemologies (Aikenhead & Michell, 2011; Judson, 2008), Eurocentric and Indigenous ways of understanding nature can differ significantly (Aikenhead & Michell, 2011),

and it is important for place-based teachers to understand these differences so that they can ensure they are addressed in all aspects of pedagogy. Eurocentric concepts of sustainability can derive motivation from “power and dominion over nature for materialistic progress, political power, healthy well-being, and academic curiosities” (Aikenhead & Michell, 2011, p. 119; see also McCoy, 2014). Bowers (2001) cautions that ecological education is often taken up with “an anthropocentric view of human/Nature relationships” (p. 142), thereby reinforcing the perception that humans are responsible for preserving natural systems only to the extent that natural resources can continue to serve human needs and desires. This “eliminates the need for human accountability” (Bowers, 2001) and contradicts Indigenous concepts of reciprocity that are rooted in “relationships with, and responsibilities to, everything in creation” (Aikenhead & Michell, 2011, p. 119).

When considering Indigenous worldviews, particularly in the context of education, it is important to note that an Indigenous knowledge paradigm extends much deeper than mere situational perspective:

Their stories of Creation and their psychological connectedness to their cosmology play a determining role in how Indigenous peoples envision themselves in relation to each other and to everything else. Knowledge is not secular. It is a process derived from creation, and as such, it has a sacred purpose. (Battiste, 2002, p. 14)

Battiste (2002) further explains that current models of formal education ignore “the knowledge that comes from introspection, reflection, meditation, prayer, and other types of self-directed learning” (p. 16). Facilitating learning while incorporating Indigenous cosmologies and worldviews necessitates building meaningful relationships with community members and elders who may help to do so authentically.

Currently, environmental education or land-based education is often facilitated through a Eurocentric or settler colonial lens (Bang et al., 2014; Calderon, 2014; Friedel, 2011, Webber, 2017). Studying land from a Eurocentric perspective ignores if not justifies “settler occupation of stolen land, [or encourages] the replacement of Indigenous peoples and relations to land with settlers and relations to property” (McKenzie & Tuck, 2014, p. 8); it fails to address the past and ongoing processes of colonialism (Bang et al., 2014) and reinforces practices and perspectives that are “only accountable to settler futurities” (McKenzie & Tuck, 2014, p. 8).

In contrast, land-based education must be “accountable to Indigenous futurities,” i.e., Indigenous futures that can exist outside of colonialism (McKenzie & Tuck, 2014, p. 8). McKenzie and Bieler (2016) advocate for place-based learning taken up through critical inquiry, which “offers a way of interrogating the interrelationships between social practices and the eventful unfolding of places in relation to particular social contexts of power (e.g., settler colonialism, globalization, and in relation to the more-than-human dimensions of place)” (p. 63). In practical terms, critical land-based education requires examining the many dimensions of space by addressing the questions, “what happened here? What is happening here? What should happen here?” (Gruenewald, 2008, p. 140). Calderon (2014) asserts:

Land education . . . must start from the supposition that all places were once Indigenous lands and continue to be. While many Indigenous people are removed from their home territories, this does not sever the relationships that Indigenous groups have with their places of origin and their sacred sites. . . . There has to be an acknowledgement of this reality to critically examine what it means to inhabit lands that were once (and continue to be) the homelands of Indigenous nations. (p. 27)

Coming to understand land and place with a decolonizing lens is particularly difficult in settler colonial locales:

One of the notable characteristics of settler colonial states is the refusal to recognize themselves as such, requiring a continual disavowal of history, Indigenous peoples' resistance to settlement, Indigenous peoples' claims to stolen land, and how settler colonialism is indeed ongoing, not an event contained in the past. (Tuck, McKenzie, & McCoy, 2014, p. 7)

Calderon (2014) notes that “a focus on Indigenous realities necessitates the development of relationships between schools and local Indigenous peoples” (p. 28). Land-based education holds potential for addressing the consequences of colonialism, but it must be studied with a critical lens and acknowledge diverse epistemologies and ontologies.

In addition to addressing the legacy of colonialism, land-based education can cultivate a deeper, more comprehensive understanding of the world around us (Aikenhead & Michell, 2011). Bang et al. (2014) argue that science education studied within the contexts of “epistemologies and ontologies of land and Indigenous futurity,” holds potential for addressing “socio-scientific realities (e.g. climate change)” (p. 39; see also McKenzie & Tuck, 2014). These socio-scientific realities are complex in both origin and solution and can be addressed with critical land-based education (Bang et al., 2014; Calderon, 2014), which takes into account diverse perspectives and knowledges.

Community-based education. Community-based education tends to focus specifically on the social and political dimensions of place; it centers learning within the community by incorporating local knowledge, issues, landmarks, and events (Sobel, 2004; Umphrey, 2007). Community-based education is considered by some to be more responsive to students than

classroom-based learning because it is “a leading out . . . a dissemination which is inclusive of communities and validates their concerns and their knowledge” (Battiste, Bell, & Findlay, 2002, p. 179). Michael Umphrey (2007), who advocates for community-based education as a means to re-engage students and re-orient public education to align with the needs and strengths of local communities, states: “one of life’s central purposes is to make the places we live better and it is a purpose that can only be achieved through intelligent communion with reality” (p. xx). Webber (2017) noted that community-based learning is a primary element of place-based learning: “In order to cultivate creative and critical thinkers, learning circumstances must allow for students to contribute to their community. Such meaning will promote deep learning and various interactions with peers and others who live and work around them” (p. 43). In a community-based model, building relationships is not only a by-product but also a driving force of education. The relational aspect of community-based education synchronizes with Indigenous epistemologies and principles of land-based education.

Nespor (2008) cautions that treating the term, *community*, as being synonymous with *place* has the effect of laminating “the attractive connotations of ‘community,’” thereby idealizing community-based education in its own right and possibly failing to “carefully distinguish among different historical, geographical, cultural, political, economic, and other dimensions of place construction, or to look at issues of strategy, power, cooperation, and exploitation in their uses” (p. 478). For community-based education to accomplish its goals of empowering students and communities, then, it must be taken up with a decidedly critical lens.

Critical pedagogy of place. Pedagogy becomes critical when it “not only reveals the shape or nature of what is, but also reveals what is problematic with what is, what calls for reconstruction of position or fact to achieve some more adequate understanding or action” (McMurtry, 1988, p.

31). Several researchers advocate for moving beyond the basic features of experiential place-based learning to include a critical focus (Awad, 2007; Carris, 2008; Cutts, 2012; Donald, 2009; Freire, 1970; Gruenewald, 2003; McKenzie and Bieler, 2016; McMurtry, 1988). Place-based education, which incorporates experiential learning, is effective in enhancing student achievement for two main reasons: it increases engagement due to its hands-on and enjoyable nature, and it increases comprehension because it allows learners to build upon prior experiences and contextualize their attainment of new knowledge. (Dewey, 1925; also see Ives & Obenchain, 2006; Sobel, 2004.) However, Greenwood (formerly Gruenewald) (2013) cautions that place-based education should not be taken up primarily to “improve achievement outcomes,” although this argument is often made by place-based and environmental educators to “demonstrate legitimacy,” because it can then reinforce “the very constraining regularities that make place-study relatively rare” and “mute its political content” (p. 95). Place-conscious education should instead “be framed as a philosophy that challenges educators to rethink the assumptions of schooling in the context of the places we inhabit and leave behind” (Greenwood, 2013, p. 95). Gruenewald (2003) advocates for an amalgamation of critical pedagogy and place-based education to create a critical pedagogy of place:

Acknowledging that experience has a geographical context opens the way to admitting critical social and ecological concerns into one’s understanding of place, and the role of places in education. . . . The goal here is to ground place-based education in a pedagogy that is socially and ecologically critical. (p. 9)

Critical place-based education moves beyond procedural inquiry to expand the scope and impact of education; “human learning . . . develops in proportion to the extent that . . . critical intelligence is able to flourish” (McMurtry, 1988, p. 31).

Place-based experiences can “have the transformative aims of social and cultural change” or “they may function to ‘conserve’ or strengthen existing patterns and relationships” (McKenzie, 2008, p. 363). Gruenewald (2003) suggests that a critical pedagogy of place is integral in processes of reinhabitation or living well in places that have been disrupted, and decolonization, which necessitates recognizing and addressing the disruptions that the colonization of a place has had on its original inhabitants. However, Tuck and Yang (2012) caution against the broad, metaphorical use of the term, *decolonization*, such as when used by non-Indigenous academics to address broader critical issues than actual colonization of Indigenous peoples. Tuck and Yang (2012) suggest that such an approach ignores “Indigenous peoples, their struggles for sovereignty, or the contributions of Indigenous intellectuals and activists to theories and frameworks of decolonization” (pp. 2-3). This reminder highlights the importance of authentically incorporating diverse perspectives and applying a critical lens to place-based learning. McKenzie and Bieler (2016) discuss how a critical lens can be applied to place-based methods such as “mobile learning and wayfinding practices[,] . . . emplaced and embodied practices of observing everyday places[,] . . . and creative ways of narrating experiences with place” in order to “avoid replicating . . . assumptions [of settler colonialism, perpetuated in Eurocentric approaches to place-based education]” (p. 66).

In addition to the problematic overuse of the term, *decolonization*, as it applies to place-based pedagogy, McInerney, Smyth, and Down (2011) caution educators about possible unintended consequences and limitations of critical place-based education. They note that, although it may be “easy to feel a strong sense of attachment to an aesthetically pleasing landscape,” students may be less likely to connect with “a squalid, unsafe, environmentally degraded place or one that is fractured by social, economic or racial divides” (p. 10).

Furthermore, they suggest that “there is always a danger that focusing exclusively on what is wrong with the world will engender feelings of hopelessness amongst young people rather than imbuing them with a sense of agency and possibility” (McInerney et al., 2011, p. 12). To avoid burdening students with worry, educators must encourage students to consider the features of their communities that must be conserved and protected in addition to those that must be transformed; a “critical approach to PBE must combine a respect for, and a critical reading of, the social institutions, histories, cultures and environments that constitute students’ lifeworlds” (McInerney et al., 2011, p. 12). A critical pedagogy of place necessarily incorporates the dimensions of place explored through both land-based and community-based education. While land-based, community-based, and critical place-based education have been conceptualized as distinct approaches to place-based pedagogy, an examination of the three approaches to place-based learning reveal how they are mutually dependent; each necessarily incorporates key features of the others in order to facilitate learning that is comprehensive, engaging, and just. Land-based education, community-based education, and critical pedagogy of place intersect to inform the principles of place-based education as it applies to this study. Conceptualizing place-based education from all three perspectives allows for deeper understanding and increased potential for social and ecological justice, diversification of knowledge, and enhanced student engagement and achievement.

Place-Based Education: A Rationale

Place-based educators “have been drawn to this work for a variety of reasons: the development of more engaging forms of instruction, the cultivation of involved citizens, and the development of people committed to the wise stewardship and protection of natural resources and areas” (Smith, 2013, p. 213). In addition to supporting students in becoming engaged

learners and citizens and fostering their agency to build a more ecologically-sustainable future, place-based education can also address trends of social inequality that are perpetuated by our public education institutions' current practices and structures.

Place-based education has the potential to increase engagement in learning due to its alignment with theories of experience and engagement (Dewey, 1925; Ives & Obenchain, 2006) which advocate that experiential learning “arouses curiosity, strengthens initiative, and sets up desires and purposes” (Dewey, 1925, p. 38). Engagement is integral to academic achievement because students who are engaged are more likely to want to attend school, thereby reducing absenteeism and, consequently, drop-out rates; more likely to integrate new knowledge into their existing knowledge base; and more likely to share their ideas (Umphrey, 2007).

Students whose unique epistemologies and experiences are validated in educational content and processes are more likely to engage in learning and reap the benefits of increased agency and academic achievement (Aikenhead & Michell, 2011; Battiste, Bell, & Findlay, 2002; Little Bear, 2009). This assertion is significant in the context of statistics that reveal stark discrepancies in academic achievement of self-declared Indigenous versus non-Indigenous students (Saskatchewan Ministry of Education, 2010) that warrant a critical examination and rectification of epistemological contradiction and negation in our schools.

Public education does not only fail to realize its reputation as “*the great equalizer*” (Edgerton, Peter, & Roberts, 2008, p. 862) but, instead, perpetuates social inequality (Wotherspoon, 1998). Robertson (2007) states: “child poverty predicts a host of dismal outcomes; wealth confers advantages that schools consolidate” (p. 186). When students enter the classroom they carry with them their prior experiences, cultural values and beliefs, existing knowledge, and access to necessities like food and housing and to those who may help support

their studies. Edgerton et al. (2008) describe these factors of experience, knowledge, values, and situational realities as forming a student's "cultural tool kit – the skills and preferences conducive to successful navigation of a particular institutional terrain" and suggest that "the cultural tool kit of middle-class families has greater currency within formal institutional settings such as the school than does that of working-class families, and the resulting differences in educational and socio-economic outcomes tend to perpetuate this imbalance across the next generation" (p. 865). Cultural tool kits with the greatest currency or that are *worth the most* are those shared by members of the dominant culture³. Consequently, cultural tool kits of remaining members of society are *worth less*. In Canada, like in many colonized regions of the world, members of the dominant culture are often white, English-speaking western-European descendants.

Our modern education system has developed within a socio-political landscape that privileges the worldview of western-European colonizers. Judith Thompson, a researcher and member of the Tahltan First Nation in northern British Columbia, describes her experiences growing up as a student in Canada: "Society . . . saw English as a superior language, as well as their religion and all other aspects of Westernized culture as above all others" (2008, p. 34). Westernized or Eurocentric cultural norms have influenced most aspects of public education: learning objectives, resources, instructional activities, assessment strategies, building design, and organizational structure; knowledge is compartmentalized into isolated subjects and studied by students segregated into grade-alike groups who learn within a top-down model (Berger, Juanita, & Helle Møller, 2006; Fleet & Kitson, 2009).

³ "A dominant culture is one that is able, through economic or political power, to impose its values, language, and ways of behaving. . . This may be achieved through legal or political suppression of other sets of values and patterns of behaviour, or by monopolizing the media of communication" ("Dominant Culture," n.d.).

While empirical research examining the causal effects of culturally-relevant teaching on student achievement is limited and has faced some controversy due to difficulties in controlling variables (Dee & Penner, 2017; Jæger, 2011), several researchers who have sought to investigate the subject have found that learning that is contextualized in students' cultural knowledge and experiences has positive impacts on student achievement and engagement (Bouette, Kelly-Jackson, & Johnson, 2010; Byrd, 2016; Dee & Penner, 2017). In order to address the inequalities that are currently perpetuated in our schools, Indigenous epistemologies must be included in all aspects of pedagogy from planning to assessment (Battiste, 2002) because, "there is a fundamental epistemological difference between Western and Indigenous thought" (Kovach, 2009, p. 29). Indigenous means "'born of the land'. . . which is a context" (Cardinal, 2012, p. 1). Indigenous knowledge, then, is largely contextual. Relationships, holism, reciprocity, and connections with place are central in Indigenous ways of knowing (Kovach, 2009; Deloria, 2004). Since knowledge shared in public schools is largely fragmented and acquired in seclusion from one's place, educational trends towards standardization of curriculum, methods, and assessment (Israel, 2012) contradict relational and cyclical ways of knowing central to Indigenous epistemologies (Kovach, 2009) and deny Indigenous students essential building blocks of culture, identity, and knowledge.

Jæger (2010) states: "Cultural reproduction theory argues that cultural capital should have a direct causal effect on educational success because those who possess cultural capital are positively discriminated against in the educational system and, as a consequence, they develop better skills and fare better in life" (p. 25). If critical place-based learning that makes connections between concepts and students' unique cultural knowledge and experiences can increase student engagement and achievement, then perhaps it can contribute to disrupting trends of social

inequality that are perpetuated by the status quo of public education. In a sense, facilitating learning that incorporates students' diverse knowledges and experiences can give greater currency to every student's cultural toolkit (Edgerton et al., 2008), not just to those of students who belong to a dominant culture.

In addition to making learning more equitable for all students, acknowledging students' unique cultural knowledge and experiences in the classroom aligns with Indigenous cosmology and worldview:

Indigenous teachings provide that every child, whether Aboriginal or not, is unique in his or her learning capacities, learning styles, and knowledge bases. Knowledge is not what some possess and others do not; it is a resourceful capacity of being that creates the context and texture of life. (Battiste, 2002, p. 15)

Teachers can deliberately facilitate student-centered learning that honours students' unique gifts and capabilities as a means to weaving Indigenous worldview throughout students' learning experiences.

The inclusion of diverse knowledge systems in pedagogy would enhance learning opportunities and validate the knowledges and experiences of all students (Aikenhead & Michell, 2011). Cardinal (2001) notes how the incorporation of Indigenous methodologies may broaden the scope of student learning: "Indigenous cultures are rich with ways of gathering, discovering, and uncovering knowledge" (p. 181). Limitations exist when investigating knowledge from any one perspective (Aikenhead & Michell, 2011). Place-based education that is facilitated with a critical lens can bring those with contrasting epistemologies together in the spirit of cooperation, each bringing with them their "distinct history, knowledge tradition, philosophy, and social and political reality" to create a "theoretical space between them" (Ermine, 2007, p. 104). This

ethical space of engagement (Ermine, 2007) is like a trailhead: a meeting place at the beginning of a long, shared journey of growth and reconciliation.

In addition to promoting equality and social justice within schools, place-based learning motivates active citizenship in the wider community because it facilitates opportunities for students and community members to share their voices and address matters pertinent to living well (Freire, 1970; Sobel, 2004; Umphrey, 2007), thereby promoting social justice in the wider community. Ecological justice is likewise facilitated as students more deeply understand the reciprocity that is embedded in human-nature relationships, specifically within the context of their unique places (Gruenewald, 2003; McKenzie, 2008).

The theoretical framework for this research study draws upon a significant body of research that reveals links between place-based learning and the promotion of social and ecological justice, knowledge diversification, and the potential for increased engagement and achievement of all students.

Empirical Research on Place-Based Education

Links between place-based education and its potential benefits for students and the communities in which they live are presented in research literature that dates back nearly one hundred years to when John Dewey discussed the value of experience and nature in education (1925). However, educators wishing to facilitate culturally relevant place-based education will likely experience difficulty finding and referencing exemplary instructional designs or guidelines for how to begin. There are, however, some specific examples of place-based education discussed in existing literature. While previous empirical research offers limited guidance in terms of place-based education processes, some specific examples of place-based learning in

action provide insight into how researchers and educators alike may take up culturally relevant place-based learning.

Twum (2014) discusses the experiences of several teachers in Saskatoon who undertake place-based approaches to facilitating learning. Having interviewed “two teachers from kindergarten, one teacher from the elementary and two teachers from the secondary level, and two teachers from a special place-based education program in Saskatoon” (Twum, 2014, p. 32) about their experiences with facilitating place-based education, Twum discusses several supportive and limiting factors for effective implementation of place-based learning. Twum’s findings indicate that teachers must have “a strong understanding of the local community, diverse teaching and learning methods, how to manage risk, and how to accommodate students with special needs” (Miller & Twum, 2017, pp. 101-102). Twum found that the most significant challenges faced by educators in facilitating place-based learning include “convincing administration and sometimes students of its benefits and helping students make the transition from a model of education where students are produced as passive consumers to one where students are active, creative learners,” as well as responding to extreme weather conditions, which can act as a “deterrent to planning learning activities in the outdoors or travelling to other locations” (Miller & Twum, 2017, p. 100).

Sutherland and Swayze (2012) discuss the importance of place in science education for Indigenous students by referring to examples of place-based science programs in Winnipeg’s inner city, in a small northern First Nations community in Northern Manitoba, and in a rural Indigenous school in Costa Rica. Highlighting the relationships between contextual Indigenous knowledge, nature, and science, Swayze and Sutherland (2012) describe how features of each unique program affected students’ learning and experiences; they concluded that deep

understanding and well-established relationships between educators and students; teachers' flexibility to respond to students' interests; and reference to the curriculum as a support to contextual learning rather than as a foundational guide were instrumental in facilitating meaningful, educative learning experiences.

Miller (2012) examines the contributing factors to the ability of a place-based inner-city after-school program to facilitate engaging, relationship-building, knowledge-enhancing opportunities for student participants. While after-school programming is situated within a significantly different context than that which is facilitated during school hours, Miller discovered that, similar to the programs studied by Sutherland and Swayze (2012), contributors to the program's success included instructors' flexibility to respond to students' direction and immediate needs. In addition, he noted that focusing on building heterogeneous relationships, including those that are multi-generational; working collaboratively to create a shared, positive space; and ensuring activities are high-quality and engaging are all significant features of successful place-based programs.

McInerney, Smyth, and Down (2011) analyze place-based education within a theoretical framework and in reference to place-based learning taken up in an urban secondary school in Australia. The authors recommend that place-based education can and should be incorporated in school programming to enhance academic achievement, self-identity, and community. However, McInerney et al. argue that it is essential that educators understand the pedagogical limitations of place-based education, the various perspectives of place, and the limitations of local activism. They caution that a myopic understanding of the world, focused only in the immediate locale, prevents students from developing a broader understanding of the global community and systems. They also suggest that local activism is limited in that significant change, even within a

local community, can often only be accomplished by networking with larger, nationally active organizations (McInerney et al., 2011).

Howley (2011) discusses a qualitative case study examining the conditions that contributed to the successes and challenges of place-based, environmentally conscious education in a rural community. Howley concludes that collaboration with and a focus on the local community was critical in contributing to the success and longevity of the program. Additionally, strong administrative support and flexible, varied instruction were indicated as supportive to facilitating quality programming.

In addition to the studies described above, Getting Smart, a learning design firm, partnered with Teton Science Schools and a global non-profit, eduInnovation, to release a quick-start guide to implementing place-based education in September, 2017. Getting Smart staff (2017) recommend tips for integrating place-based learning, including drawing on local expertise, planning field trips that ensure experiential learning, incorporating community service projects, facilitating learning activities that focus on local events or histories, incorporating inquiry-based and problem-based learning, and making the community the backdrop and focus of learning as much as possible. While the authors do not discuss specific challenges regarding the facilitation of place-based learning, they recommend that new place-based educators connect with colleagues who already incorporate its philosophies and practices in their teaching in order to learn from their challenges and successes.

Regardless of the context or specific processes used when facilitating or conducting research on place-based learning, existing empirical research on place-based education (e.g. Howley, 2011; McInerney et al., 2011; Miller, 2012; Sutherland & Swayze, 2012; Twum, 2014) suggests that place-based education must be flexible, responsive to and guided in collaboration

with students and members of the community in which they live, and facilitated by teachers who know and care deeply about the unique interests of their students. These features are helpful in situating place-based instructional design for success.

Conclusions from the Literature

Place-based education is conceptualized in many ways, largely because places are understood in as many ways as there are people who inhabit them (Friedel, 2011; Gruenewald, 2003; Lim, 2010). Research suggests it is our relationships with land and place and with those with whom we coexist that define who we are and how we see our role in the world (Friedel, 2011; Williams, 2008). By strengthening those relationships, we strengthen our identities and our abilities to live better.

Current education trends that seek to standardize knowledge as a means to compete within a globalized, Eurocentric society are in danger of disconnecting students from learning, from each other, and from their communities (Gruenewald, 2003; McMurtry, 2008). Standardization of knowledge fails to recognize, let alone help to develop, students' roles in envisioning and working to create better futures for themselves and their communities (Smith, 2006).

Conceptual research suggests that, by using sound pedagogical principles in both research and in practice, place-based education can improve the quality of learning experiences and heighten educational standards while challenging homogenization of knowledge and process (Davies & Guppy, 1997; Gruenewald, 2003; Israel, 2012). While there is some empirical research on this topic, it is limited, particularly in the context of K-12 formal education in Canada. This study aims to address this gap in the literature by offering research-based

understandings of how place-based education programs can be practically integrated within K-12 formal education.

Chapter 3: Methodology

This research aims to study how place-based education can be integrated within formal K-12 education to create meaningful and engaging learning experiences that provide equal opportunity for growth and academic achievement among all students. It endeavours to address social inequalities that are perpetuated by the standardized pedagogy that privileges the knowledge systems of students belonging to a dominant culture. This qualitative study's methods include semi-structured interviews, conducted and analyzed within a critical paradigm.

Empirical research may be conducted with a qualitative or quantitative approach, or a combination of both (Punch, 2009). Qualitative research collects data such as personal stories, accounts, and observations and presents the data in the form of quotations, personal reflections, and pictures (Atkins & Wallace, 2012, p. 22). In contrast, quantitative data includes numbers, percentages, and scores that are presented in the form of graphs, charts, and tables (Atkins & Wallace, 2012, p. 22). Qualitative educational research has been criticized for being subjective since it is based on feelings and personal responses, as opposed to percentages and quantifiable, static figures (Atkins & Wallace, 2012). This subjectivity can be viewed as impacting a study's reliability. Research is considered to be reliable when "the same data would have emerged from the enquiry if it had been conducted by a different researcher, or by the same researcher using different data collecting methods" (Atkins and Wallace, 2012, p. 25). Despite criticisms of qualitative research and its potential for including a degree of subjectivity, "education is concerned with human beings; and human beings are not predictable or static in the same way that inert materials or fixed numbers are" (Atkins & Wallace, 2012, p. 20). This research is situated in a critical research paradigm that acknowledges "a degree of subjectivity in the researcher and other participants" (Atkins & Wallace, 2012, p. 22) while working to maintain

reliability in the findings (Atkins & Wallace, 2012; Punch, 2009). In this study, efforts were taken to improve reliability by mitigating power imbalances between the researcher and participants and attempting to encourage participants' authentic voices to inform the study.

As an educator, I understand that my worldview influences all aspects of my teaching practice just as my students' worldviews influence how they understand and experience the learning that I facilitate. Likewise, I believe that my knowledge paradigm as a researcher will, whether I acknowledge it or not, influence all aspects of this study. A paradigm or worldview is the set of values and beliefs that guide one's actions and thoughts (Wilson, 2001). The values, beliefs, and knowledge that form the foundation of a research paradigm are characterized by one's assumptions about the nature of reality (i.e., ontology), one's understanding of knowledge (i.e., epistemology), the set of morals or ethics that forms the foundation of one's beliefs or actions (i.e., axiology), and the way one goes about learning about reality (i.e., methodology) (Wilson, 2001). While a positivist research paradigm assumes that there is one reality and that knowledge is objective in that it is based on experiences that can be observed and verified (McKenzie & Tuck, 2014), critical research acknowledges that there are "multiple realities shaped by social, political, cultural, economic, ethnic, gender, and disability variables" (Mertens, 2005, p. 9). The transformative paradigm, which Mertens describes as including the critical research paradigm, "arose partially because of a realization that much of sociological and psychological theory had been developed from the White, able-bodied, male perspective and was based on the study of male subjects" and that theories "have been found to reflect a consistent observational and evaluative bias" (Mertens, 2005, p. 17). A critical paradigm acknowledges that some knowledge paradigms are privileged over others and it addresses power imbalances in research by, in some cases, relinquishing control of the research to the research participants

(Mertens, 2005). In this study, for example, data collection, analysis, and presentation were conducted in consultation with research participants in order to ensure the findings are meaningful to and reflective of research participants' authentic voices. This relinquishing of control can help to increase the study's reliability and trustworthiness, or "to what extent we know that what the interviewee is telling us is 'true'" (Atkins & Wallace, 2012, p. 86).

While the nature of qualitative research is prone to some subjectivity, Wellington (2000) notes that qualitative research is valuable if it is ethical, supported by verifiable evidence, systematically planned and executed, and useful in enhancing current practice; it should not be evaluated on its objectivity, alone. This study was initiated to inform teaching practice and policy to improve learning experiences of all students. The research was carried out within a critical paradigm while using methods that were carefully selected and executed to honour participants' authentic voices. Its findings are therefore situated to make valuable contributions to inform educational theory and practice, despite a degree of subjectivity inherent to the nature of qualitative research.

Site Selection

Data collection was situated within both rural and urban communities in Saskatchewan. As a Saskatchewan educator, I recognize the diverse teaching assignments held by teachers in this province, as well as the resources and challenges associated with those assignments. Since all Saskatchewan educators follow the same curriculum, it is essential that any professional development advocating for place-based learning within this province is relevant to educators and their students in both rural and urban settings.

Participant Sample

Place-based learning is necessarily rooted in the interests of and resources available to each school and community. Its practice presents differently in every setting and for every individual involved, but its underlying philosophies and strategies can support meaningful learning for all students. When I identified potential study participants, I considered several factors that can influence the diversity of resources available and responsibilities assigned to educators within Saskatchewan. These factors include subject areas, school locations, and students' ages and socioeconomic and cultural backgrounds. To formulate a list of potential participants I recalled my experiences as a graduate student speaking with and attending presentations by Saskatchewan teachers who facilitate learning with a place-based approach. Additionally, I drew upon connections recommended by my thesis supervisor, Marcia McKenzie. Of the teachers who I contacted, five responded and consented to participating in the study: Cathy, Grace, Emily, Gabe, and Shaun. Names have been changed to protect participants' anonymity.

I would have preferred to include more teachers from rural and First Nations schools in my participant sample in order to include greater diversity of experience and worldview. Unfortunately, there are currently few explicitly place-based educators in the province and I was unable to garner participation from as diverse a sample as I had hoped. However, I believe the participants offer valuable insights regarding the practical integration of place-based learning in a variety of settings with diverse student populations, including students' ages, school and community dynamics, and cultural backgrounds. The practical considerations for place-based education as discussed in the findings can be adapted by any educator.

Educator profiles. Each participant brings with them their own perspectives, narratives, and entry points to facilitating place-based learning. Their unique relationships with place and their perceptions of the philosophies and processes of place-based education highlight how place, identity, and worldview intersect. Recognizing these connections is helpful in understanding participants' perspectives in the context of this research, but also when considering students' unique perspectives of place in the context of the classroom.

Cathy has spent the majority of her teaching career in northern rural Saskatchewan and northern rural Manitoba. She currently works with middle-years and high school students in a variety of subject areas in a northern Saskatchewan village located on the Saskatchewan River within the Mid-Boreal Lowland ecoregion. The community adjoins with a neighbouring Cree Nation, and the majority of residents are Indigenous, including Cree and Métis. The school population is comprised of students in grades kindergarten through twelve.

Her husband is from the community, having been raised on his family's trapline, and identifies as Métis. Cathy, however, is not Indigenous and moved there as an adult. She noted their different ways of understanding and that, as a relative newcomer to the area, she is learning from others as she navigates her roles as a parent, teacher, and citizen in the community. That being said, she noted that land has always been important to her, even within an urban setting, and that "it's even moreso now, as a parent. Living off the land and having the privilege of teaching place and home is really critical to one's identity."

Her relationship with the land, honed by her experiences raising her children off the grid, no doubt positions her to approach education with an emphasis on land being foundational to the curriculum: "We have our textbooks, our place in the classroom, but somehow we've disassociated ourselves from outside and that's where all the stories are: from the place and the

land.” She asserts that learning begins with the land on which she and the students stand, that it begins “where [our] feet are—right here—and it spreads out from there.”

Grace has taught high school and primary students in urban Saskatchewan for nearly 25 years. At the time of our interview, she taught French Immersion in an urban elementary school that is located near the South Saskatchewan River bank and situated within an eco-conscious and arts-friendly neighbourhood. The community is located in Saskatchewan’s Moist Mixed Grassland ecoregion.

She was drawn to teaching primary students when Reggio Emilia’s philosophy of experiential, relationship-based learning became a trend for teachers of young children: “That was my entry point . . . I can do kindergarten because I understand that.” When she began teaching in her current role, she noticed that her school was located near a naturalized area within a “thriving community with all the history and all the people and everything you would want to teach children was there as far as I was concerned.” She began making connections and taking her students out of the classroom regularly: “I try, as much as possible, . . . to get them out and meeting people and not just learning what community is but helping to build it by participating in it.”

Emily has taught in a variety of programs and settings in several locations throughout Saskatchewan during her career that has spanned approximately ten years, thus far. At the time of our interview, she taught in an urban alternative school for students in grades nine through twelve. However, she has drawn on her teaching experiences in an integrated place-based program to inform most of her responses to the interview questions. The outdoor school program is located in an urban center situated in Saskatchewan’s Moist Mixed Grassland ecoregion. It draws high school students from within the entire surrounding community.

She believes that place-based learning can occur in any setting, whether rural or urban, because places are like living documents of the events that have occurred within them: “It’s the ecological things in that place, and it’s also the history and the stories told in that place. There are physical material traces and there are non-material traces which are the stories and the memories and the experiences in those places.” She uses place-based philosophies and methods, not only because she believes that the learning is more meaningful and engaging for students, but because she believes that teaching active citizenship should be a foundational purpose of public education.

Gabe has been teaching for over fifteen years in a variety of roles with students in kindergarten through post-secondary education. At the time of our interview, he had been co-teaching an integrated place-based program to middle-years students in an urban Saskatchewan community.

He began developing his place-based practice in order to make a bigger impact on student engagement and citizenship. He and his colleague sought to create “a classroom that would get everyone engaged and address all of the concerns we were thinking about: issues of power, oppression, the environment, . . . [and] bullying issues. Addressing [them] so that my work is actually useful.”

Shaun has spent his career, which has spanned over thirty years, teaching in a range of assignments with students in middle years through post-secondary. Like Gabe, Shaun has drawn on his experiences co-teaching an integrated place-based program in urban Saskatchewan to inform his responses to this study. The ecological, outdoor adventure program draws middle-years students from around the city.

He developed the place-based program that he co-led for ten years after observing significantly increased student engagement during skill-based outdoor excursions he took with students as part of his regular teaching assignment. He endeavoured to create an immersive program in which place-based learning became the norm rather than the novelty field trip. While developing the program, he “learned about authentic education and . . . how this isn’t just about the environment; it’s about social justice and . . . economic issues and how they’re all connected.” He then created an integrated education program that promotes student engagement through outdoor adventure and exploration of real-world social and ecological justice issues.

Data Collection

Semi-structured individual interviews.

I selected semi-structured individual interviews as the most appropriate method for exploring teachers’ experiences with place-based education. “Interviews provide opportunities to gather rich and illuminative data from groups and individuals,” (Atkins & Wallace, 2012, p. 160) including “factual data, views and opinions, [and] personal narratives and histories” (Atkins & Wallace, 2012, p. 86). I collected data by conducting semi-structured interviews with teachers about their experiences with implementing place-based learning in K-12 formal education (Appendix A). I interviewed each participant individually for approximately 1-2 hours. I audio-recorded our conversations, then later transcribed the interviews verbatim.

While I provided a list of questions for discussion to participants prior to the interviews taking place, I kept the cadence and direction of the interviews intentionally fluid and conversational, thereby skipping, revisiting, and adding questions in response to how participants sequenced their responses. By referring to a list of questions, I was able to collect “reasonably standard data across respondents,” (Gall, Gall, & Borg, 2007, p. 246) yet the open-ended and

conversational nature of our discussions encouraged participants to explain their ideas in full (2007). Participants were considered to be interview informants rather than respondents to a rigid list of questions, thereby “taking the interview beyond the gathering of facts and allowing the participant an authentic voice” (Atkins & Wallace, 2012, p. 88).

It was important to provide participants with opportunities to inform this research with their authentic voices and offer insights beyond the basic interview questions. To further encourage participants to share their full and authentic perspectives on place-based education, efforts were taken to ensure that participants were at ease throughout the interview process, such as by choosing “a comfortable and informal setting” (Atkins and Wallace, 2012, p. 86). Interviews were conducted in coffee shops, a pub, a public library, and over the telephone, all settings chosen by the participants.

Ethical Considerations

Since my research involves human participants, I applied for ethics approval with the University of Saskatchewan research ethics board prior to initiating the study. In order to ensure the findings reflect the interests and ideas of the participants, I invited participants to review and assess findings, interpretations, and conclusions of the research. I asked them to check for clarity and whether they required any data to be omitted. Since participants revealed information about their professional experiences, I created aliases to protect their anonymity and reduce any risks to their professional relationships.

Data Analysis

After transcribing the interviews verbatim, I analyzed data using inductive coding and thematic analysis. The primary purpose of an inductive approach is to “allow research findings to emerge from the frequent, dominant, or significant themes inherent in raw data” (Thomas, 2006,

p. 238). First, I prepared the raw data for analysis by ensuring the interview transcriptions were formatted consistently. Next, I read the transcriptions carefully until I was “familiar with [their] content and [had gained] an understanding of the themes and events covered in the text” (Thomas, 2006, p. 238). I then identified the most common and notable themes that had emerged while reading the text. Finally, I used NVivo 11 software to code the data according to those themes. While coding the data, I refined the themes as necessary when “subtopics, including contradictory points of view and new insights” (Thomas, 2006, p. 242) became apparent. After I completed coding the data, I created a concept map (Appendix C) to reveal connections among the themes. Using the connections revealed with the creation of the concept map, I created an outline to present my findings. Then, I began selecting significant quotations to “convey the core theme or essence of [each] category” (Thomas, 2006, p. 242).

Chapter 4: Results

This study examines the experiences of five educators, all based in Saskatchewan, who facilitate learning using place-based education philosophies and methods. By analyzing participants' responses regarding the benefits, limitations, logistical considerations, and possibilities for the broad incorporation of place-based learning, this research aims to present practical guidelines that can assist educators in facilitating learning that is intentionally and authentically rooted in their students' locales and experiences.

I present the results of this study in five sections. The first section, *Conceptualizing place-based education*, examines participants' perspectives of the purposes and nature of place-based education. Participants' ideas about place, public education, and place-based pedagogy intersect in an examination of how participants conceptualize their place-based philosophies and practices. The next section, *Benefits of place-based education*, examines participants' assessments of the positive impacts of place-based learning on student engagement and development, teacher engagement and efficacy, social justice, and environmental justice. The following section, *Supportive factors for effective place-based education*, reveals the tools, methods, supports, and teacher characteristics that, according to participants, contribute to their abilities to work with students, school personnel, and the greater community to harness the benefits of place-based learning. Next, in the section entitled *Barriers to place-based education*, I discuss the factors that participants cited as hindering place-based learning, with particular consideration of teacher practice, student participation, and institutional barriers. In the final section, *Suggestions for the broad incorporation of place-based education*, I present participants' visions and suggestions for the widespread incorporation of place-based learning in K-12 formal education, including practical considerations regarding its alignment with Saskatchewan

curricula as well as suggested activities that teachers can use to interweave students' places and perspectives within their learning.

Conceptualizing Place-based Education

An examination of participants' conceptualizations of place-based education reveals two central elements of its philosophy and practice: 1) place is foundational to learning; 2) place-based education is experiential and purposeful. The discussion below analyzes participants' conceptualizations of the purposes and nature of place-based education. Understanding participants' motivations for taking up place-based praxis, as well as the connections between their perspectives of place and the ways in which they conceptualize and facilitate place-based education, helps to contextualize research results.

Place is foundational to learning. Participants viewed place as a foundational catalyst for learning, as opposed to, simply, the space in which learning occurs. They discussed how every place tells a story or, rather, many stories; *coming to understand those stories and what they reveal about the past, present, and future frame the processes of place-based learning.* Land is the teacher, and learning is interwoven within the processes of studying the features of and narratives associated with a particular space. Participants' processes of coming to know a place, as well as the ways in which they conceptualize place, influence their perspectives of place-based education.

For Cathy, place-based learning is not simply a method or even a philosophy but, rather, a way of life integral to her worldview. From her perspective, learning from the land reveals stories that are life-giving and critical to one's identity. She stressed the importance of reconnecting with land as a teacher, the process of which has much to offer in terms of our identity and well-being as well as our educational experiences, which become "much more

relevant” because all learning relates to a particular place that carries inherent meaning within students’ own lives.

Emily and Gabe described how the stories revealed when coming to know a place contextualize that place’s past, present, and future, not only in terms of the land itself, but also everything that impacts and is impacted by that place. Emily explained how land is like a living document, impacted by the creatures and forces who have interacted with and upon it:

“Everything is land. . . . Even in an urban place, we’re on land. There’s a history here. There’s a story here. There used to be burrowing owls here. There used to be millions of bison here. There used to be people living here before Columbus came and sought.” Informed by the work of researcher and cultural geographer John Anderson, Emily further discussed her concept of place. She described how every place began as an empty space, and that it is the traces of “people, animals, ecosystems, and weather systems acting on those spaces [that] make a place.” She explained that “it could be a bird pooping, . . . an artist graffitiing a wall, . . . humans building structures, . . . cars, . . . plants growing up through the ground” as well as the “history and . . . stories told in that place” that are the “physical material traces and . . . non-material traces” that contextualize a given place. For Gabe, place-based learning involves coming to understand the different narratives in a particular place in order “to understand what that place means in terms of time and space; what has it meant? What does it mean now? What does the future mean?” By learning about the stories woven into the history of a place, learners can better understand the present and make decisions about what the future should hold for the place and those who share it.

According to participants, place-based education is categorically different from learning that happens to occur outdoors. It involves connecting with and learning from a particular place.

Throughout the processes of coming to know the many dimensions of a place, students work to understand its history and the forces that have acted upon it so they can strive to have a positive impact on that space, as well as on those who share it. Place-based learning incorporates investigation of the past, observation and interpretation of the present, and imagination for the future. Regardless of students' grade level or the topic at hand, learning can be framed within the context of coming to know a place. In place-based education, land is both textbook and teacher, rather than simply a backdrop for where learning takes place.

Place-based education is experiential and purposeful. In place-based education, learning occurs when students uncover the layers and histories wrapped up in the places that are meaningful to them. As students come to understand a place and make decisions about how to best interact with and within those places for a better collective present and future, *they engage in learning that is both experiential and purposeful*. Participants described learning that is both experiential and purposeful as a key element of place-based education.

Shaun began developing his philosophy of place-based education early in his career when he noticed a spike in students' engagement when they participated in hands-on, experiential activities outside of the classroom: "Whether it was paddling down a river for three days or building snow shelters in the winter . . . they'd just be so pumped." Echoing the notion that place-based education must be more than simply learning outdoors, he wished to expand the depth of students' experiences and endeavoured to create an immersion program in which students could go beyond the skill-based learning they had experienced during recreational excursions to explore more interpretive elements. He then developed an outdoor education adventure program for grade 8 students that incorporated "social issues and economic issues and

how they're all connected.” He desired to empower students by helping them to become more informed and engaged citizens.

Similar to Shaun’s path to becoming a place-based educator, Gabe developed an experiential education program for grade 8 students in response to his frustration with the shortcomings of public education in creating purposeful learning opportunities for students:

We were just frustrated that the outcomes we were looking for weren’t applicable to the outside world and the kids were not engaged in a way that they wanted to apply their education immediately outside the door. . . . We wanted to create a meaningful, purposeful, educational platform.

Gabe and his colleague sought to create learning opportunities that would engage students and address issues associated with social and environmental justice while upholding high standards of learning.

Like Gabe, Emily cited a higher purpose of public education as being foundational to her philosophy of place-based learning:

Is [the purpose of education] to help students graduate so that they can get a job and move on doing whatever our global economy is doing? Then maybe I wouldn’t choose this path of education. But I actually view education as teaching citizenship. To be socially and ecologically just. So if I think that that’s what education’s for, then the best approach is place-based education.

Participants noted that a place-based approach to education creates opportunities for purposeful learning at all grade levels, particularly when students form connections with their communities. Cathy highlighted the importance of connecting with community in making learning purposeful for students, citing community outreach as an essential and moral obligation

of any educator: “When we go into a school, we’re there to serve children and community, whatever the dynamics of that community are. It’s my obligation to understand the place or the land from which the children are coming.” Connecting with the communities in which students live is an essential part of place-based education; it is integral in the processes of coming to understand and imagine a place’s past, present and future.

According to participants, place-based education involves two essential elements: place is foundational to learning, acting as a teacher rather than simply the setting in which learning occurs, and learning is inherently experiential and purposeful. Place-based education unveils all of the narratives that interact with and within a space, revealing social and ecological justice issues and community dynamics associated with that place. In the processes of coming to understand the past, present, and future of the places that hold meaning for students, learning becomes purposeful. Participants’ philosophies of place-based education are deeply engrained in not only their teaching praxes, but also in their desires to live well and to contribute to a more thoughtful, just, and environmentally responsible society. Rather than simply changing the location in which learning takes place to allow students to spend more time outdoors, participants view place as a catalyst for learning and for making connections with the world around them, thereby empowering students to understand and respond to the complexities of the places in which they live and learn. Throughout these processes, education becomes more engaging and purposeful for students and teachers alike.

Benefits of Place-Based Education

Every participant reported having begun honing their place-based approaches to teaching because they believed it would serve them in creating higher quality learning experiences for their students. Upon reflecting on their praxes and the observable impacts of place-based

learning, participants cited the most significant benefits of place-based education as being to students and their communities. Benefits to students include learning engagement and achievement, as well as their physical and social development. Community benefits include increased focus on social and ecological issues for a more just and sustainable community.

Benefits to students. Providing high quality experiences and opportunities for students to learn, develop, and strive to become the best versions of themselves should be the central motivating factor for all educators and education policy-makers. Participants cited many examples of how they have observed place-based education affecting student learning and development in significant, positive ways.

Engagement in learning. Participants discussed their students' *increased commitment to regular school attendance* as a direct result of their engagement in place-based learning. Gabe stated, "Unless kids are sick, they're there. And that's telling because they're travelling from all over the city. . . . Attendance is always good." Likewise, Cathy said that she has had the "best attendance of any class in the whole school" because of students' engagement in their place-based learning projects. Emily also noted her students' commitment to attending school: "They would try to arrange appointments so that they weren't missing." Several participants had also heard from students' parents that their children were more enthusiastic about attending school, and that their children were sharing their learning with their families. Grace said:

They're excited to come to class. I have parents telling me constantly they're so excited to see what's going to happen today. And to me, that's the highest compliment: when a parent says they're hearing what's going on in class and the child's eager to come back.

Shaun cited similar conversations in which he had engaged with students' parents:

We had numerous parents that would come to us and say, “My kid hasn’t been this happy since kindergarten in school.” It’s a common theme. “My kids get out of bed on their own, get to school on their own”; all of them rode their bikes for most of the year, or took the bus. So obviously, they were interested in what we were doing.

Regular attendance is a crucial factor in students’ abilities to develop and demonstrate the skills and knowledge necessary for attaining learning outcomes and for investing in themselves as members of a greater learning community (Gottfried, 2010). Educational methods that significantly promote student engagement should, therefore, not be overlooked.

In addition to observing improved student attendance, participants also noted more *positive student behaviour* as an indicator of students’ increased engagement in learning. For instance, Grace’s annual tradition of taking her new kindergarten students, many of whom have never played or learned within the social structure of an institutional setting before, to a community powwow near the beginning of the school year has shown her how place-based activities can motivate students to work as a team to demonstrate positive behaviour:

You show them something of value. Very motivating for them. So they’ll pull it together quite quickly to be involved in something, which . . . speaks to how important that involvement and participating in community is.

Participants also recalled hearing students talk about place-based learning experiences years after they had occurred, indicating how *learning that is engaging is memorable*. Having taught in the same school for several years, Grace talked about witnessing past students’ excitement upon returning as older care partners to her current students, noting: “[The older students would say to one another,] ‘oh yeah, do you remember that time?’ And they would talk about it. It was important to them.”

Students' increased efforts in participating in activities and completing assignments were also cited as a benefit of place-based education. For example, Gabe stated:

They're doing work that's leading to something bigger and better outside of their classroom so they want to create that awareness. So all the time they want to share or question or have a discussion. That's the beauty of it, because the stuff they're doing is related to something that's happening.

Cathy similarly mentioned a noticeable increase in students' willingness to generate and share ideas. For instance, her students built their own solar ovens in preparation for their "Great Canadian Bannock Challenge." She said, "It was a remarkable process. It was probably the most exciting thing—except [one other project]—that I've done." When her class completed their cooking competition, a student approached her about building a large-scale solar oven outside with the goal of demonstrating their learning to the larger community and contributing to food security. Students' desires to apply their learning in new ways and connect it with real events and issues exemplifies their engagement and critical thinking, both of which are highlighted as valuable learning outcomes by educators and education policy-makers.

Not only are students more willing to engage in learning processes by being active participants in discussions and activities, they are also intrinsically motivated to complete and submit assignments. Since Gabe's students engage in projects that directly relate to current community issues or events, "it's very timely and it has that urgency. It's a different feel than just . . . here's your deadline . . . because we have to move on to the next unit." Gabe asserted, "It's your job as an educator to ensure they value what they're doing."

Achievement. Participants defined student achievement in terms of quantifiable grades as well as student growth in developing or refining their knowledge and skills. One could

hypothesize that students' increased motivation for participating in and demonstrating learning should positively influence their achievement. Indeed, several participants discussed how their students' achievement has, in fact, been positively impacted by place-based learning.

Both Gabe and Cathy recalled *students who had drastically improved their grades*. For example, Gabe recalled a student “who is looking at advanced placement for next year. . . . Prior to coming into [the class] he was troubled; he would be a challenge who needed extra support.” One of Cathy's students who had repeatedly dropped out of school “got a 94% on [the solar oven assignment] because he was so engaged.”

Shaun and Emily noted that, although students' grades did not necessarily increase, at least initially, within their programs, students did work to attain *higher standards of learning*. Shaun explained, “We had levels [within formative assessments]: experiencing difficulty, not yet proficient, proficient, and exceptional. And if it didn't meet that proficient level, then it went back to them [to be improved and re-submitted].” Similarly, Emily noted, “The students actually started getting lower marks [at first] because our expectations were really high about how they thought critically and . . . made connections. We wanted to set the stage that this is an academically rigorous program.” In the end, Emily observed “growth within each student in their . . . ability to communicate and express ideas, reflect on issues, and reflect on themselves.”

Several participants noted how the student-centered, responsive nature of *place-based learning enables students to develop and demonstrate their thinking, skills, and knowledge in unique ways that are not typically recognized through standard forms of assessment*. Cathy said, “You have kids whose talents never have the opportunity to be assessed.” She noted that educating with a place-based approach has enabled her to come to know students' unique interests and learning styles and, therefore, to create more variation in instructional methods and

assessments. Cathy also highlighted that, through place-based learning, it is easier to “bridge that gap between western and Indigenous science knowledge.” She explained that western knowledge is privileged, as are western methods of communicating knowledge. Gabe similarly talked about empowering students to communicate their ideas in ways that are comfortable for them and to value and refine those skills, but also to diversify their skill sets: “Some [students] might be very art-based, where they want to create something very visual, and [we’ll encourage them to] . . . add some text to really solidify what [they’re] trying to communicate.”

Student achievement is often a key factor when advocating the perceived efficacy of any particular instructional philosophy or strategy, and it carries weight when attempting to garner support for implementing new programs or ideas. I was therefore eager to learn about participants’ perspectives on the impacts of place-based education on student achievement. It is significant that place-based learning encourages best practice for facilitating high quality student learning experiences, and that participants noticed positive impacts on student engagement and motivation to achieve high standards of learning. However, Emily pointed out that the idea of prioritizing student achievement as the key determinant of meaningful or successful education is problematic:

I know we have to do things in school for academic achievement. Our whole school division’s goal is to increase graduation rates by X and show academic achievement, but I don’t think that place-based education should be a means to an end of higher student achievement. I think it should be a means to the end of a more socially and ecologically just society.

According to participants, place-based education does contribute to positive impacts on students beyond striving for high academic achievement. All participants discussed the ways in which

place-based education benefits students, not only in terms of their quantifiable academic achievement, but also in their growth as learners and critical thinkers.

Student development. Emily asserted, “A teacher of place-based education doesn’t do it to increase grades. . . . It could be for [the students’] mental and spiritual well-being. It should be to develop social relationships . . . or to have time and space to think and relate to identity.”

Whether to improve students’ health, foster a healthy and supportive community of learners, or help students to develop important life skills, each participant shared stories that detail the ways in which place-based education contributes to their students’ development and well-being.

Health. Each participant discussed how place-based learning *facilitates increased opportunities for students to spend time outside and to be physically active* at a time when children seem to have fewer opportunities for unstructured play outdoors. Cathy, who is committed to taking her students outside every day, has noticed a cultural shift in how children spend their time:

[It used to be that] parents would be out calling or you had to be home by dark. Not because I was gaming in somebody’s basement. It’s because I was playing to beat hell. And you were playing outside and you were shot; you got to bed and you were exhausted when you hit the pillow. And with our youth, that’s not happening. We now have shifted it so that our children are safe at home, but they’re gaming until two o’clock in the morning.

Other participants also noted students’ lack of connection with the outdoors, particularly in response to cultural shifts in the freedom they are afforded to explore. Gabe has noticed a decrease in children walking to school as they once did when he was a student:

Growing up, I'd never seen a bus besides [for] the French school. And now I see buses all over the place. And I'm like – what happened to just walking? And parents looked out the window and if someone looked suspicious, everyone as a community was looking out for everyone.

Now, he and his students rely on bike transportation to engage in community-based learning activities. Students' parents often require some reassurance of their children's safety when they join the class:

Later on, they're okay with it. Initially they're like, "I've never let my kid bike around the block before and you're expecting my child to bike from [the east side] to the west side of the city? And . . . what about the west side of the city? I'm pretty sure someone got stabbed there yesterday." So it's breaking down all of those barriers and [helping to build] a skill set in their children but also in the parents to empower [their] kids.

Grace noted that her memories of childhood are of her time exploring the outdoors, and that she now endeavours to foster children's reconnections with nature amid a cultural shift away from time spent outside: "Those images and those smells and those sounds are as fresh as they ever were [in my memory]. And that's what I want to give the kids. Because we aren't doing it so well these days. A majority of kids aren't out there."

Participants advocated for taking students outdoors to support their *well-being*. Cathy further discussed the problematic phenomenon of children's lack of time outdoors with reference to the work of journalist Richard Louv:

Don't be afraid to take your children outside. Because, as he says, our children are suffering from Nature Deficit Disorder. So that's the key to land-based education.

Because we are experiencing this disorder, and we're experiencing disengagement . . .

and you know, when you take kids outside once, you won't turn your back on it. It'll become regular. Because it just feels better. So we need to holistically look at ourselves: physically, mentally, spiritually, [and] emotionally. And our houses are not in order; our bodies are not in order.

A 2015 report by the Joint World Health Organization points to evidence that children's lack of time spent outdoors is having measurable negative impacts on their health. They noted: "The prevalence of myopia [nearsightedness] and high myopia are increasing globally at an alarming rate" (p. 1). The report also stated:

Some initial published evidence indicates that time spent outdoors can delay the onset and perhaps reduce the progression of myopia, although more research is required, as it is also potentially a risk factor. If the evidence is proven correct, it will add beneficial eye care to the list of other health-promoting outdoor activities (e.g. reduction of childhood obesity through exercise, exposure to sunlight for vitamin D production, games for socialization). (2015, p. 3)

Educators know that children whose basic needs are not being met or who feel unwell are less likely to engage in learning. Shaun said, "if the social/emotional doesn't happen, then you can kiss the academic/psychomotor/everything else goodbye. Because the kids aren't happy. That means they're disengaged." If increased time spent indoors is negatively affecting children's health and happiness, then learning activities that enable children to spend more time outdoors could affect not only their educational experiences, but also their overall health, in significant and positive ways.

Social development. Participants noticed the effects of place-based learning on their students' social development, noting that it positively affected their *relationships with their peers*

and community as well as the development of their own identities. By engaging in learning activities that necessitate practicing and understanding both independence and interdependence, students demonstrated improved self-efficacy, cooperative skills, and their senses of social responsibility.

Participants noted their observations of their *students' improved independence*, as well as feedback from students' parents who noticed similar strides in their children's development. For example, Gabe said, "We had parents talking to us and saying, 'our child has totally become a more responsible child. . . . They can pack their own gear. They don't have to be reminded to go to this appointment. They can keep track of things.'" He noted students' reduced dependence on adults, for example by using bike transportation: "It's freedom! It's finding yourself. Finding your independence and learning that you can be on your own two feet and not have to rely on someone else."

Emily spoke about how her students' *self-confidence was positively affected* by place-based learning. By learning to interact with the world in a variety of ways, students learn to recognize and develop their own interests and strengths. She cited a parent's letter that described her child's transition from hating school and even expressing thoughts of suicide to finding joy in something about which he was passionate:

He had a lot of struggles and then . . . we [his teachers] taught him how to use a camera . . . and it totally changed his life. . . . Now he's a photographer and . . . a bird watcher. She talked about how much confidence we gave him and how his identity changed by being around different people that believed in him.

Grace talked about how even young students begin to develop their self-efficacy and *resilience* as a result of participating in place-based learning. By observing natural systems with

her students, she and her young students had opportunities to discuss plant resilience in the face of hardship and disease, which provided a concrete example on which to base future discussions about her own students' resilience:

It's interesting to note that in tough times [the plants are] still producing beans. . . . We got to talk about how it was a failure and kind of disappointing, [but we also] talked about perseverance and keeping going when things are hard . . . , and so it became a good learning point.

Grace said that she was able to encourage students to, like the plants, be resilient when they faced obstacles. She highlighted how place-based learning contextualizes complex and often abstract ideas, like resilience.

Independence, self-efficacy, self-confidence, and resilience are closely linked, and they simultaneously impact and are impacted by a person's *identity*. A person who sets and believes they can achieve specific goals likely has greater confidence in their ability to achieve more general future aspirations. Students who are confident in their ability to realize their goals and who are empowered to act independently are more likely to be resilient when they face hurdles. As students become empowered in recognizing how they can set and achieve goals that positively impact their own lives, they strengthen their identities.

Students' identities are likewise impacted by the opportunities they have to think critically about current issues affecting their society, as well as to challenge and develop their value systems. Gabe noted that he and his teaching partner were committed to covering current and relevant topics in class, even those that were controversial:

If it's a discussion outside the classroom, then it needs to be talked about within the classroom. Because otherwise it's not [understood with] an educational lens; it's one that

will be biased. [We want to provide] that counter-narrative so they can begin to empathize and understand that narrative so they can compare the two and say, this is what needs to happen.

By providing opportunities for students to consider diverse perspectives and to challenge their value systems, students can think more critically about their own identities and become empowered to take a more active role in shaping them. Emily talked about her role in exposing students to many narratives and ways of knowing as well:

One student . . . went home and was like . . . “I learned about political spectrum and about some of the issues around what’s left wing and right wing, and I think when I’m old enough to vote I’m going to vote NDP” . . . And the parents said, “well, no, we’re a conservative family.”

At that point, the student was confronted with conflicting aspects of her identity: her family values and the belief system she was developing based on her experiences and expanding knowledge of the world around her. Ultimately, she was empowered to act and vote in accordance with her developing belief system when the time came. Gabe also encourages students to come to understand their identities and value systems, as well as how their value systems affect their spaces, their experiences, and the experiences of others.

According to Shaun, place-based education methods provide teachers with more opportunities to empower students to learn from *diverse perspectives* as they come to better understand themselves:

So much of place-based education is [about] giving students a voice and trying to listen to everybody’s stories. The stories that our students have are all about the people and places that they come from. And that’s identity . . . [which] is wrapped up in who they

are. A lot of the time, as educators, we don't really [take] the time to find out who they are.

Shaun also talked about cultural responsiveness as a goal of education, and about the significance of learning about every student's cultural story in that process. Regardless of students' backgrounds, he encouraged them to talk about the elders in their families and why they are significant. He said that those family histories can be used to contextualize conversations about colonization and immigration. Exposure to diverse narratives provides students with opportunities to solidify their own identities and senses of independence.

In addition to helping students to strengthen their own identities, learning to consider diverse perspectives also helps to develop their sense of interdependence. In the processes of learning from one another's narratives, students create a community of learners while developing *skills in socialization and cooperation*. Gabe talked about aiming to build a class population with diverse personalities and worldviews and then providing opportunities for them to learn to work together:

We want [diversity among our students] so they learn how to build a skill set to work with . . . together. Because that's going to replicate the workplace in the real world. . . .

So it's creating . . . understanding that you're going to have to break down some of your own value systems that have been instilled in you.

The participants noticed that students built stronger relationships with one another as a result of working together. Emily noted that students who were unknown to one another prior to entering her class have established strong, life-changing relationships as a result of working together and creating a culture of responsibility and interdependence. Grace also noted the impact of place-based learning on students' cooperative behaviours, particularly as a result of place making:

As we [begin to claim our shared] space, making it our own, making it everyone's responsibility to make this a place we want to come to, you start to see them working as a unit. . . . I think that sense of identity and belonging in the classroom does wonders for classroom management and really good solid thinking and supporting each other.

Students benefit from learning in an inclusive, goal-oriented environment. As Shaun said, it is important to question the environments in which our students are learning: "What . . . learning places . . . are actually going to engage our students and [inspire] really authentic learning? . . . Why are these learning places better . . . than these controlled [classroom] environments?" He encourages students to work together to imagine and create their own healthy workspaces, taking ownership of the learning culture they create in the process.

Students who engage in purposeful place-based learning begin to recognize their interdependence beyond their peer group as well. Encouraging students to think critically and to become *empowered as active citizens* was a common theme discussed by participants. With regard to his middle-years students coming to understand their roles as members of their society, Gabe said:

They're identifying who they are and what they stand for. They're beginning to question. It's a great, crucial age of development where they are; you can really have a big impact on someone in grade 8 because they have four years . . . until they are an adult. So you can ask critical questions about their situation and experiences and how they can [make an] impact.

All of the participants discussed specific projects the students complete in which they learn about various areas or aspects of their communities. For example, Gabe talked about studying the history of the students' community and how, through that learning process, students come to

understand the narratives of the various cultural groups who call it home. Ultimately, the conversation leads to racialized oppression:

. . . So that was the Japanese narrative. Let's look at the Jewish narrative. Let's look at the Chinese narrative. Let's look at the Métis. We can look at all the different groups and their histories in [our city], and [the oppression they've experienced]. And now what are we doing with the new situation with immigrants; are we replicating something that we don't want?

When students engage in critical thinking, they often initiate cause-based action projects during which they imagine or even create solutions for issues they see negatively affecting their community. These projects provide opportunities for students to connect with community members and even local government representatives; according to Shaun, "Some of those projects our kids have presented to City Council in City Council chambers because they felt strongly about it." He explained further: "When a [city councillor] does a walk around with [our students] it's all about trying to get [them] involved in the civic process and [teaching them] that [they] actually have a voice. But we need everyone to take advantage of democracy and get involved." Citing "Engaged Citizens" as a broad area of learning highlighted in the Saskatchewan curriculum document, Shaun explained that education becomes authentic when students are allowed to leave the school, make decisions through critical analysis, and then become empowered in having opportunities to express their views.

Cathy discussed the significance of place-based education in helping students to develop their sense of ethical behaviour as individuals and citizens. The largely participatory nature of place-based learning encourages students to practice protocols for interacting with the world around them:

We teach ethics with land-based education. Not just around hunting, fishing, trapping, sharing, and how to use equipment safely, but how we talk nicely with one another when we share a meal. Land is the teacher, and that's what we're missing. . . . In this territory, that's when they taught ethics: working together, cutting wood, sitting and eating together.

She advocated for connecting students with elders from their own communities, noting that opportunities to teach ethics are rare in most classrooms.

As students become more connected and aware of their interdependence with those around them, they become more aware of how they can have an impact on the human and non-human world. Grace problematized children's growing disconnection from nature, saying, "if you're not connected to the [natural world], how can you appreciate [it]? How can we protect [it]?" Place-based learning can empower students as engaged citizens in a variety of ways, whether they volunteer to assist community members with yard clean-up (Cathy), place a waste bin where they have observed an accumulation of litter (Cathy), organize an event to raise money to benefit a local non-profit organization (Grace) or work with an urban planner to reimagine how their community is organized (Shaun). That empowerment begins with the connections students make with their own narratives, their peers, their communities, and with the natural world.

Social and ecological justice. Regardless of one's philosophy of education, one must acknowledge that today's students are our society's future decision-makers. Therefore, our public education system must work to prepare students to not only have the skills and knowledge to succeed (financially) in our future as we imagine it will be, but also to develop the aptitude to think critically, innovate, advocate, and mobilize to work towards a socially and ecologically just

future in which humans, animals and natural systems can thrive. Participants highlighted *working towards a healthy, just society* as being a primary goal of public education. Gabe said that he sees his work as being useful when “[we take up] issues of power, oppression, the environment, all of those social structures that are out there, bullying issues, having all of those [issues] that are interconnected . . . [and] addressing [them].” Each participant highlighted projects and discussions that build students’ understanding, motivation, and agency for working towards social and environmental sustainability.

Participants spoke about class discussions, projects, and values that wove principles of *ecological sustainability* throughout their students’ learning. Waste reduction, active and public transportation, building connections with nature, and food security were considered and practiced regularly. As Cathy explained, “self-sufficiency; that’s what land-based education is.” Some of Emily’s previous students are now attending post-secondary education, and she noted that, while she is unsure about how their time as her students has or has not influenced their paths, “What I’m seeing is some, actually quite a few, went into environmental fields . . . and some went into international development.” Emily’s philosophy of place-based education is that “it should be a means to the end of a more socially and ecologically just society.” Her previous students’ life paths suggest she is being successful in that regard.

The participants spoke about how place-based projects and discussions necessarily *address issues of power*. As Emily noted, “This is a neighbourhood . . . that’s going through gentrification. And that’s really important; . . . all of these things are tied to a colonial legacy. . . . It’s really hard to teach place without talking about colonization.” A significant and often difficult part of examining power issues is reconciling with one’s own perpetuation of injustice; Gabe said, “You have . . . great conversations, but . . . you also have . . . value systems that . . .

come into the classroom.” He talked about how the nature of some students’ parents’ professions were often at odds with social or ecological justice issues discussed in class. Students practiced empathizing with and thinking critically about opposing perspectives; for example, those of anti-pipeline activists and oil workers who work to support their families.

While discussing the process of learning to *recognize one’s own privilege*, Grace cautioned, “you’re just trying to find your place in the world . . . so now [if you have] . . . privilege, you’re sort of in the hot seat. How do you fit in? How do you come to peace with your history and your ancestry? So I think it is a bit of a struggle.” Reconciling students’ own privilege or lack thereof involves recognizing the imbalances, at first, but then also working with intention to make equal space for diverse perspectives and tip the scales of privilege. Teachers must model this process by recognizing their own privilege within the classroom; Shaun, who co-taught with a female educator, talked about the importance of ensuring equality among teachers as role models: “From a gender perspective, you want to see that both leaders are certainly equal.”

Working to *balance the student-teacher power relationship* was a common theme discussed by the participants as well. Cathy talked about how making space for diverse perspectives within the classroom can be scary: “Does it feel like you’re giving up power? You’re darn tootin’ it does. Because you’re actually getting independent thinkers.” Despite it being scary to relinquish the top-down, teacher expert education model, it can actually relieve pressure for the teacher. Every participant advocated for inviting members of the community and students, themselves, to assume roles as leaders and co-learners. Cathy explained, “Being an expert in everything, that’s not a reality, and I set myself up for failure as well. We really need to work to open our eyes and our doors and to say, ‘hey, Janice knows how to do this’. Our local

people know about plants.” Grace also reminded me about the mutual benefits of inviting guests to work with students: “To stand back and let somebody come into your classroom and interact with those kids . . . is a gift not just to the kids but to the person doing that for you as well.”

If one is to facilitate culturally responsive learning that *breaks down systems of institutionalized inequality*, the meaningful incorporation of diverse perspectives and narratives is essential. For example, teaching land-based education to Indigenous students from an unchecked western knowledge paradigm breeds cultural appropriation and reinforces colonial structures. Shaun referenced the book, *Indigenous in the City: Contemporary Identities and Cultural Innovation*, when he talked about the mythologization of urban Indigenous people:

I mean, talking about identity, if they’re in an urban setting, [settlers see them as having] lost their way; they’ve lost their identity and are trying to find it as opposed to a contemporary urban First Nations person who has an identity, and it might look completely different than it did traditionally. And . . . this western European environmental education paradigm where we want to take First Nations youth back to the land, well, we can’t do that as white settlers. . . . So that’s where . . . involving elders and speakers [is important].

Cathy agrees that it is important for teachers to be aware of how western knowledge is privileged. She highlighted that the way we tend to refer to knowledge originating from an Indigenous paradigm is as “traditional knowledge,” insinuating that it is “old, outdated, and not quite as important as contemporary [knowledge].” However, she also asserts that, despite western and Indigenous knowledge paradigms being different and, at times, at odds with one another, teachers must not avoid the incorporation of diverse perspectives for fear of breaking protocols or risking cultural appropriation. Rather, teachers need to find a way to incorporate

diverse perspectives appropriately: “If you don’t feel comfortable, find someone who can do it right.” When teachers relinquish some of their power, they can empower entire learning communities, not only within the educational setting, but also as students go out into the world. Gabe tells his students, upon recognizing their own freedom within their classroom, “with that freedom, what are you going to do with it?”

Supportive Factors for Effective Place-Based Education

Although changing one’s teaching praxis is daunting, participants’ explanations of how they facilitate learning from planning through assessment reveal that many aspects of teaching with a place-based approach support what teachers are already doing and can not only simplify the growing scope of their work, but also make it more enjoyable. Participants’ stories suggest that teaching with a place-based approach engages teachers with a rejuvenated sense of purpose, motivated learners, an extended community of support, and opportunities to utilize techniques that are widely recommended as best practices within the profession. While facilitating place-based education does not occur without challenges, many aspects of its practice can actually reduce some of the more stressful aspects of teaching. Participants highlighted several features as being significant contributors to the success of their abilities to facilitate their place-based programs effectively. These include common strategies for establishing a class culture, teaching with an integrated and cross-curricular approach from planning through assessment, garnering administrative support, and embodying particular attributes as an educator.

Creating a democratic classroom. Participants talked about the importance of *place making*: working with students to imagine and create a learning environment that is a positive space for all learners, and one in which all perspectives are equally valued. As Gabe said, “Teachers [must] create a space that’s open and honest and communal and not about judgement.”

Shaun, who emphasized the importance of healthy learning spaces, advocated the importance of students contributing to the design of their classroom; “They start to research places like Starbucks. Where are people working?” The students then cooperate to envision and create their shared learning space. Grace works with her kindergarten students to build their classroom environment as well: “For me, every year in June I take everything down. Everything is dismantled and I talk to my students who are leaving about preparing it as . . . a canvas for the kids who are coming in September.”

Participants cited the facilitation of *democratic learning processes* as being a supportive factor for effective place-based learning. Emily talked about how she avoids top-down approaches to education: “When I’m out in a place with students . . . I always view us as all learning together at the same time. And not only that but learning from the land itself, . . . from the other people around us, and learning lessons [as a result of] that experience.”

The democratic learning process extends to *inviting students to participate in planning for learning* as well. Gabe described how he involves students in connecting their learning with the Saskatchewan Curriculum:

At the beginning of the year, we open [the curriculum document] and say, these are all of your outcomes. . . . Can we do things you . . . are passionate about and still meet these outcomes? And that’s where it begins.

Gabe refers back to the curriculum document with students during every unit they cover. He has found that, when students are involved in planning their learning, they believe that their work is meaningful and are more likely to invest in the learning processes. Emily also spoke about examining the curriculum with students: “We’d have the big course questions on the whiteboard for every unit that we were doing, and okay, now we’re going to move to these ones. Have we

covered these or not?” Emily prioritizes empowering students by ensuring they are informed participants in planning for and assessing their attainment of curriculum outcomes.

In addition to explicitly asking students to think about what topics they might want to investigate, teachers can *nurture students’ spontaneous curiosities*. For example, Grace recalled a time when students found a large beetle on the playground. She helped them capture it and it became the focus of a day of learning that incorporated art, science, and technology. Place-based learning encourages students to connect with the world around them. By practicing making connections between curricula and meaningful experiences, learning communities are well equipped to maximize the educational quality and depth of impromptu learning opportunities.

Teachers who work to create a democratic classroom environment also establish a *climate of trust and accountability*. Well-established relationships are essential for giving students freedom to explore their world authentically and safely. For instance, Emily spoke about giving students opportunities to explore aspects of a neighbourhood on their own while trusting that they would adhere to established protocols:

Independence was a big thing in our program. A group of students would go to a neighbourhood to do research, we would set up checkpoints . . . , and then we’d go and meet with the groups [throughout] the day. [We’d] check in; “what have you done so far? What’s your next step?”

By structuring activities that afford students progressively greater educational freedom, teachers can provide opportunities for students to develop their self-efficacy and responsibility while they encourage them to connect with their expanding world.

Place-based educators can establish protocols for leaving the safety of the classroom by providing frequent opportunities to do so. Shaun talked about the importance of *frequency* in

terms of leaving the school. He said that students need to leave the school regularly, regardless of the weather, even if just for fifteen minutes. This is because frequency helps to normalize out-of-school experiences, thereby establishing behaviour protocols and allowing deeper learning to take place. He explained:

Building it into your classroom culture is really, really important. And then your kids just go, hey, we're just taking our classroom over there . . . to the park and we're going to walk down the street and take our classroom over there. And then they don't act up, either. They know what the protocols are for the class.

Not only do frequent outings improve student behaviour and opportunities for learning, but they also help to establish comfort and trust among parents who are concerned about their children's safety. Shaun said,

Parents realize it's part of the culture in your classroom, and they're not nervous anymore. It takes us until . . . the first reporting period. Their kids are riding the bus; they never have before. Their kids are [cycling] to school; they never have before. The kids are out and about all the time. And then they're going . . . "these guys can do it."

Integrated curriculum. Grace's story about the beetle highlighted an important feature of place-based learning discussed by every participant: *cross-curricular instruction*. Shaun said, "I'm a project-based learning guy who believes in integrating subject areas and building thematic projects and building some authentic tasks into it." Gabe integrates all subjects except for mathematics, which his school division mandates be taught using a standard program. Emily talked about her frequent use of subject integration and how, even when not teaching within her integrated program, she tries to work with students' other teachers to focus on common themes that allow students to complete one project that can be assessed for credit in several courses.

Cathy talked about not only her frequent use of subject integration, but also about the problematic nature of subject segregation and how it privileges a linear western knowledge paradigm as opposed to an Indigenous knowledge paradigm.

While planning for integrated learning can appear complex, participants ascertained that meeting curriculum outcomes becomes simpler and more organic; Shaun explained:

When we started, there were foundational objectives and common essential learnings which were broad. . . . We weren't so outcome focused. Yet at the same time, we did become more outcome focused because when you integrate projects, you hit a whole bunch of outcomes.

Like Gabe, Shaun talked about the importance of referring back to the curriculum throughout the year to take note of what they had covered and what needed more attention. If they noted any outcomes that would require additional investigation, they would find a way to build them into their inquiry projects. Gabe suggested that meeting curriculum outcomes is more easily accomplished through integrated place-based learning since students are passionate about completing their projects to a high standard:

We focus on a skillset. . . . We found that when kids are engaged and passionate, they're going to be doing their best every time. And you're going to meet those curriculum outcomes at those high standards. They're going to be almost at a mastery level because they love it.

The participants noted *project-based learning* as a favoured teaching method that simplified subject integration and afforded students opportunities to meet many outcomes simultaneously while investigating topics of their choice. Gabe noted how thematic project-based learning allows for individualized instruction. After spending a small amount of time providing

base knowledge through formal instruction, students are granted freedom to explore their own chosen topics, sometimes as part of a team, and sometimes individually. He noted the depth of learning made possible through project-based instruction:

They're going to a level that they're comfortable with. Some will just scratch the surface, and some will be so in depth. At least they're given the opportunity to go that deep.

Whereas, if you're just doing a social studies lesson and you're doing a handout, that is the extent of what you're going to get.

Emily talked about various types of project-based learning she facilitates, all of which involve small amounts of formal instruction and checking in with students and a majority of student-led research:

So we had this thing called an expert project, which we covered most of the biology curriculum with. . . . Students chose to become an expert in plants or birds or mammals or something. And then every time we went out and about they were trying to find plants, name plants, photograph plants, communicate about them.

Throughout completing the expert project, Emily's students studied geography, social studies, ethnobotany, biology, and communications media. Cathy said that her instruction has become more project-based, as well, noting that it "[opens] up more doors" and allows for greater discovery, curiosity, and imagination. Grace noted that students are excited to participate in project-based learning, even when it is peers, not themselves, who initiate a project: "Kids are very excited supporting their friends, and I think that develops some skills that are amazing. Just getting on the bandwagon: knowing something's a good idea and just going with it." Project-based learning can extend beyond students' school experiences, as well; Emily mentioned one student who now works as a volunteer for rehabilitating wildlife, stemming from a volunteer role

he took on with the Saskatchewan Wildlife Rehabilitation Society as part of a school action project.

Formative assessment. Participants discussed their use of formative assessment as a way for keeping learning and assessment tools meaningful and authentic. Shaun described formative assessment as “the feedback you give kids on a day-to-day basis in your class.” Grace noted the considerable task of carrying out standard Language Arts assessments that are expected to be completed outside of her regular curricular instruction and assessment duties. She has consequently learned to streamline her assessment practices, *evaluating students’ work on a regular basis*, considering every product a potential assessment tool and keeping anecdotal records while students complete projects. Cathy also discussed the importance of finding opportunities to assess students on an ongoing basis, listing a variety of outcomes that she can assess throughout project-based learning. Regarding the solar oven project discussed in the *Engagement in learning* section, Cathy said:

They had to do a writing piece. They had to do the research. There was math involved. I would assess—every single day—their teamwork. So I walked around and noted how they worked as a team. You could see them problem solving. . . . [And they were] presenting orally.

Project-based learning allows students to have more unstructured time, and, therefore, more time for teachers to check-in with students to offer assistance and assess their progress. Emily said, “We knew what outcomes we were addressing all of the time and at some points we even put the outcomes/objectives on the wall. . . . 'For the next project . . . pick something from these that you want to study.’” She kept track of students’ assignments and all evidence of students meeting

curriculum outcomes. Emily cited various assessment tools she uses, including rubrics, written feedback, one-on-one interviews, peer evaluation, and self-evaluation.

Gabe also discussed a variety of assessment tools. In addition to writing a personal essay to students about their progress, he uses a variety of formative assessment strategies, many made simpler in the age of *technology*:

Since we're online with our students, we can send them personal messages back and forth and quote the papers they've done. . . . They're getting that constant personal [feedback]. . . . And once you create that relationship with them, they know that their work means something.

He uses the online educational platform, Moodle, to complete the aforementioned formative assessments. Emily, likewise, talked about technology as a means for collecting and assessing students' work, noting student-generated documentaries, online scrapbooks, photography, and websites. She mentioned several online platforms for simplifying technology-based projects and assessments: Microsoft Publisher, WordPress, and "Google-everything."

While teaching an integrated curriculum can be a complex approach to education, it can ultimately simplify planning and assessment by limiting teacher-directed instruction and allowing teachers more time to work with and observe students individually and in small groups. Instruction and assessment can be more meaningful and uniquely tailored to the curiosities, needs, and strengths of each student.

Teacher actions and attributes. Although participants asserted that place-based education could improve experiences for teachers by increasing their own engagement and sense of purpose as well as minimizing issues with student behaviours, there are several aspects of facilitating place-based learning that could present challenges for teachers. Confidence in one's

own professional philosophy and value, flexibility, and commitment to building connections with all stakeholders help place-based educators to facilitate learning most effectively, particularly within integrated programs.

Place-based educators must be *willing to advocate* for themselves and for their philosophies. Emily said:

In terms of my own empowerment, I've decided that if this workplace isn't getting me to where I want, then I'm willing to change workplaces. Because I think there can be lots of barriers to doing meaningful education and if you present in a way that is best for students and best for communities and for the school, then I think usually schools can listen and try.

Self-advocacy can be tiring, and Emily suggested that it is important to continuously revisit one's convictions: "I think [you have to] keep reminding [yourself] what education's for and the best way to [accomplish your goals]." Since place-based learning often reveals controversial issues affecting people and communities in which the learning is taking place, it is essential that teachers are consistently aware of how they are supporting student learning in ways that are reflective of their own philosophies of education as well as mandated outcomes and processes.

Experience and a growing *network of collegial support* can help place-based educators to build the confidence necessary to respond effectively to stakeholders who may question their methods. Gabe stated:

Parents [and] even our own division [have questioned our involvement in controversial conversations and demonstrations]. At the beginning, we probably wouldn't have done some of the things that we've done, but as our confidence has grown and we've expanded our educational connections beyond [our city]—we've connected to places in the United

States, or globally, in New Zealand—or within the University, it gives [us] more confidence in what [we're] doing.

Grace also discussed how her confidence has grown as a result of connecting with other advocates of place-based education. She said that the connections she has made with a university professor and his students have helped her to deepen and broaden her understanding of her place-based philosophy and methods, and that she has been able to refine her practice and strengthen her confidence as a result.

Seeking connections with members of the community can support place-based education in practical terms. Emily talked about the time she had spent working for non-profit organizations prior to beginning her teaching career and how the connections she made as a result has supported her work with students:

Doing conservation and education work within an environmental non-profit, I met a lot of people. And my partner works at the university. . . . So I've had some people from the university come. . . . [And] we'd meet up with bird watchers; we worked with [a local nature conservation organization]. . . . So I think a lot of place-based learning depends on the person facilitating and setting it up. It depends on what your connections are.

Grace talked about connecting with members of the surrounding community as a means for securing resources as well. Of her role as facilitator, she said:

Tons of parents in my class have a business. . . . We went to an architecture firm and found out about how they make buildings. . . . So, it depends on what the dice roll is for the year in terms of what's available. But for me it's making connections and being able to bring those connections around to meet the curriculum objectives.

Cathy, who had talked about teachers' obligations to getting to know and serving the

communities in which they teach, discussed how community mentorship is a necessary and valuable resource for understanding her students and the real issues affecting their community: “We have mentorship programs, [but] they’re always professional. I think it’s much more important as a teacher—new or old—to have mentorship from the community.”

Given that so much of place-based education is responsive to community resources, students’ unique interests, current events, and even weather events, a teacher must be *adaptable*. Grace suggested that the challenges of being flexible as a place-based educator inspire important lessons for students.

[Responding to unforeseen circumstances such as weather events] does teach kids all sorts of things. Resilience: life doesn’t work out perfectly every time so you just run and do something different. But I think this kind of teaching does require improvisation. And that’s something I love. That’s the performance part of myself. . . . You’re always coming up with something new on your feet because things change.

Despite the importance of flexibility in place-based learning, increasingly rigid protocols for taking students outside of the classroom require teachers to plan well in advance of outings. Emily said, “Place-based education is very much about what’s emerging at the moment of learning. But the barriers within our school division are that you have to be planned in advance [for] these experiences.”

Being a place-based educator requires confidence in one’s own professional philosophy, the desire to connect with members of one’s school and community, and a high tolerance for changing well-constructed plans at the last minute. While the demands of place-based education are undeniable, so are the rewards; despite the challenges they face, all participants noted that

they will continue to utilize and refine their place-based philosophies for the remainders of their careers.

Barriers to Place-Based Education

Although place-based education incorporates effective strategies for creating an engaging learning environment in which students can meet and even exceed curriculum goals and outcomes, its teachers frequently find themselves having to advocate for its practice. Place-based learning, particularly when facilitated as part of integrated programs that exist on the fringe of regular K-12 formal education programs, requires additional supports and administrative concessions that can hinder its practice. Participants discussed financial considerations, safety concerns, and the need to push the boundaries of institutional norms as some of the most significant barriers to facilitating place-based education.

Financial considerations. Shaun, Emily, and Gabe referenced their experiences teaching integrated programs throughout our interviews. Each of those programs staffed two teachers. Therefore, they listed *staffing costs* as one of the biggest financial considerations and potential barriers to place-based learning. Both Gabe and Emily reported significant funding cuts to their programs over several years. Gabe said, “We feel like we’re . . . being phased out very slowly.” Cuts to program staffing ultimately ended Emily’s involvement in an integrated program:

I went on maternity leave and they cut the program, which is devastating. But I think they had it in mind to cut it beforehand; . . . They’d cut it to half time so that my teaching partner quit because . . . he knew it needed to be full day to be what he envisioned. So I was going to stick with it for half time and then I left that April and by June they [had] cut it [completely].

In addition to extra staffing costs, integrated programs can *require substantial annual*

budgets, most of which are spent on travel and equipment. Since students spent so much of the year travelling outside of the school and, several times, outside of the city, a significant portion of funding was allocated to travel expenses. The majority of remaining funds was spent on gear. According to Emily, their equipment library included winter sleeping bags, cross-country skis, four-season tents, camp stoves, and fuel bottles; she said, “We had a lot of the gear so it wasn’t such a financial burden for our students to join the program. And that stuff we acquired over [a] 15 year period of having a [substantial] budget.” Participants noted annual budget allotments of \$10 000, which was eventually cut back to \$9000 and then \$5000 (Emily) and \$20 000 (Shaun). Participants noted the challenges of maintaining funding that enabled them to operate programs in the ways they had envisioned. Like Emily, Gabe found that, at the time of our interview, he was operating his integrated program with half of his original budget allocation.

Participants discussed ways in which they worked around budget shortfalls. Emily’s students supplied their own rain gear, hiking boots and a regular backpack. Students also paid a \$300 fee to participate in the program. Shaun’s students payed a \$200 fee to participate in his program. When I asked Gabe how he ensured that students had the gear they required, particularly given their diverse socioeconomic backgrounds, he said:

We make sure they have all of the gear that they need. So either one of us will donate a bike or the classroom will buy a bike. . . . And the classroom is really good at rallying, [for example] to get a gift certificate for [another student] to get a shell. And that’s learning in itself, right? Learning how to be humble. How to give back to your community in a classroom setting. And don’t feel like it’s charity; just do what needs to be done.

Participants listed alternative funding sources as well, particularly for extra opportunities

that arose throughout the year. Those funding sources included applying for grants (Emily) and fundraising with students (Shaun and Gabe). One of the benefits of fundraising, according to both Shaun and Gabe, is that it can be tied to learning opportunities. They said that projects can incorporate a financial component during which students decide on a budget and possible sources of funds or materials.

Cathy and Grace both noted that place-based education does not have to cost any more than regular formal education. They do not teach within specified integrated programs but, instead, utilize a place-based philosophy when facilitating learning within the constraints of a more standard formal education model. Cathy reminded me: “Land-based education isn’t trips. It’s really a philosophy,” and, although travel and “add-ons” are fun, they aren’t necessary for place-based learning to occur; rather, teachers need to take students outside and into their surrounding community. She said that students can fundraise for occasional extra opportunities. Grace said, “I do tons of things and I don’t spend a dime.” She advocated for the importance of working with what was available from the community:

People love to help. I walked . . . to Starbucks, and I asked for 50 wooden stir sticks for a craft project. And they gave me this enormous bundle. . . . People want to be part of raising young minds. . . . And I think that’s where I’d rather spend my time. Because [community members feel a sense of] ownership, then. . . . And [then we write] thank you cards. . . . Talk about an authentic expression of writing.

Although financial resources are not a problem for Grace, she noted that finding *chaperones* for out-of-school excursions can be a problem, particularly because she does not want to overburden the same parents by asking them repeatedly to chaperone her students.

Similar to how she handles materials and projects associated with community volunteers, she works with what is available:

I've accepted that it's not going to look the same [for every class, because parents' availability is different]. . . . I used to do crazy things . . . both classes are going to come in the morning . . . all of these scheduling things. . . . And then I decided, like in life, there are variables and I can't help that. So I do my best to even [it] out.

Institutional rigidity. Ensuring chaperone-to-student ratios is just one example of following school division protocols. Place-based education programs exist within the structures of regular K-12 schools, even if to varying degrees. Every participant talked about how facilitating place-based learning within the confines of institutional structures can challenge their abilities to do so effectively. Scheduling rigidity, safety concerns, and pushing the boundaries of school norms presented as three of the most significant institutional barriers to facilitating place-based learning.

Time constraints. Grace said, "Even half-day kindergarten, that's not much time to run the kinds of things that I'd like to do, particularly when they're pulled out for gym and various things." Shaun similarly talked about issues associated with rigid schedules, especially in a high school setting:

[Elementary teachers] have the luxury of not having to teach fifty minutes or one-hour periods. . . . [My wife] is a [secondary] teacher . . . [and] you've really got to break things up. . . . She looks back and thinks she could have combined an English and an art and then you'd have an afternoon block of two hours and integrate the two subjects and do some things, but . . . she didn't, and school divisions are still reticent to let that happen to a large degree.

Safety protocols. In addition to time constraints, increasingly rigid field trip protocols can be difficult to meet: Emily said:

We can't just kind of pick up and go on an outing that's outside of the city. We have to have travel forms six weeks in advance. . . . We've gotten students to fill out a blanket permission form with their registration form so we can transport them anywhere within the city, so we dealt with that barrier easily.

Cathy takes a similar approach to overcoming barriers around permission to travel. She said, "We're so uncomfortable, all policy makers and administrators, with allowing our kids outside of the safety of the school, that you need to have those protocols in place." She explained further:

I think that one of the challenges is just getting, sadly, permission for any outdoor activities. That means even going out on a daily basis. . . . I like to apply the year ahead of time. Just getting blanket permission forms all lined up so that you have blanket forms for the whole year.

In addition to securing parental permissions for students to leave the school, place-based educators must be aware of parental concerns and division *safety* protocols, particularly when students are participating in activities that pose increased risk to their personal safety, such as canoeing and hiking. Place-based educators who plan to take students into potentially risk-enhanced situations must be aware of and fulfill all safety precautions, including becoming certified instructors in those areas. Participants cited some of their required certifications: wilderness certification (Gabe and Emily), canoe instruction (Emily), First Aid (Gabe) and a 12-passenger van licence (Emily).

Pushing boundaries. Even when all safety protocols are followed, school divisions may halt learning projects that they deem risky from a public relations perspective. For example,

Gabe was denied permission to have students partner with a university to replicate a study that highlighted issues of racism when researchers observed crosswalks and found that vehicles were more likely to stop to allow white pedestrians to cross. Although students would not be put in physical danger by simply observing the crosswalks, the school division deemed the project “too controversial and too risky in this case . . . it was more of an image thing.”

Administrative support: make or break. Participants cited *administrative support* as paramount to their ability to facilitate place-based education. According to Shaun,

Your school-based administrator can be one of your biggest barriers to place-based education. They can be a complete enabler or a complete veto person. . . . So much of anything that you do, you need to find somebody in your school division in a power position that’s going to advocate for you.

Gabe also talked about the importance of having administrative support when addressing controversial issues:

[It’s important to have authentic] support from the powers at the top. It’s things like addressing racism; how far can we go? Will you let us get there? For some of the things we don’t ask, we just do. And they realize the outcome and they don’t argue with it. They know that the end result was worth it. So sometimes, it’s a better approach.

As public education institutions adopt increasingly top-down approaches, which Shaun described as “this gradual creep towards downtown telling administrators what they’re going to tell their teachers, as opposed to administrators deciding in their own schools what the school’s going to look like,” administrators find themselves in a difficult position when advocating for breaking structural barriers.

Standardized assessment. Directly correlated with top-down administrative protocols is a top-down approach to *standardized assessment*. Participants problematized the mandated use of standardized assessment, but they also reported varying degrees of impact on their own practice. Shaun and Grace both discussed the complexity of standardized assessments. Shaun said, “more and more data, more and more micromanaging . . . it just makes things more complex and it was already complex enough.” Grace noted, “sometimes [completing] the assessments that are required of you . . . becomes pretty difficult. When I’m trying to test 46 kids on alphabet upper and lower case and a bunch of posters and that vocabulary, how do you do anything else? That’s kind of a full time job.” Teachers who are over-tasked with completing standardized assessments, notably in just one or two subject areas, are at risk for omitting other curriculum outcomes or opportunities for more student-centered learning projects and activities. Shaun observed, “Now . . . all of the in-house administrators have to come around to all of you guys and do assessments that follow this model that a guru wrote and they’ve adopted. So then you have a monoculture.”

As I discussed previously in the section entitled *Supportive Factors for Effective Place-Based Education*, the participants asserted that they find student assessment to be much simpler and more authentic as a result of their place-based praxes. While participants’ experiences with mandated standardized assessments vary, they all reported finding creative ways to assess students’ learning on an ongoing basis. By using authentic, formative assessment strategies, they reduced the time they needed to spend administering less meaningful summative assessments in addition to any other standardized assessments required of them.

The potential advantages of increasing student engagement and facilitating high quality learning experiences through place-based education are helpful for garnering administrative

support. Gabe frequently invites senior administrators to witness his students' learning in action. He tells them:

You're invited to everything we do. You have access to all of our online files and the blogs the kids are creating. . . . And we wish they take the opportunity to see the magic that these kids are creating on their own accord. What they've done all this year, the richness and diversity of all the things: social justice and environment and humanitarian things they've done for each other and the community and, you know, extended community as well.

Still, Gabe noted that administrators tend to place more weight on easily quantifiable assessments than on students' achievements and development: "I wish they can find value in that and [I] say, 'how come that's not quantifiable? Why does it have to be this standardized number that we keep pressing that we . . . as teachers and as students, really don't care about?'"

However, in a hierarchical education system, everyone answers to someone. Despite trends in education that advocate for formative *assessment for learning*, which directly contradicts overuse of the standardized summative test, the numbers collected in those assessments are most easily presented in policy-makers' board rooms.

Broad Incorporation of Place-based Learning in K-12 Formal Education

This research was initiated, in large part, to make practical recommendations for how place-based education can be integrated into public education within all subject areas and grade levels. Regardless of whether the participants' place-based teaching experiences discussed in our interviews took place within alternative programs or within a standard organizational and funding model, every participant offered suggestions and hope for its widespread integration within K-12 formal public education.

Keep it local. Every participant noted that, by *keeping learning localized to within walking or biking distance* of the school, place-based education can be facilitated within any grade level or subject area. Emily said, “Incorporating a walk around your school yard as part of your class. . . . It doesn’t cost anything. Students can basically wear whatever they have. They should be coming to school with winter coats and stuff like that.” During these walks, teachers can facilitate learning about weather and seasons (Emily and Cathy), community engagement (Grace, Cathy, and Gabe), mapping (Cathy), physical activity (Cathy), counting (Cathy), amenities (Shaun), organization (Shaun), safety (Shaun) and socio-ecological issues (all participants). These walks often act as catalysts for student discussions and projects. Shaun explained that his role was to engage students “in field experiences outside of school that were authentic, connected to the community, that had ecology, the environment, and social justice issues. Then we pieced them together, and the more we explored, the more we put different projects together.”

Invite guests to share their knowledge. In addition to taking students on learning walks within their community, the participants suggested *connecting students with community members, political leaders, and organizations*. Shaun said:

They need some other role models. And place-based education is about bringing people in, but it’s also taking them out. And you can just go out on the street. You can [connect with a city councillor] or town Reeve. So that’s the doable piece.

Grace sends notes to her students’ families inviting them to share their knowledge: “[It’s] realizing that an expert doesn’t have to be somebody who’s got a university degree or something. I put a note out to my families saying, ‘here’s what we’re looking at. Cultures. Would anybody like to share something?’” She also noted that, when students have opportunities to learn from

someone new, “it’s a great opportunity to sit back and really watch [how they learn and participate].” Emily further simplified the idea of connecting with place within the confines of the classroom, saying, “even bringing in a poem . . . like we said, place is also local culture and local current events. So even if you can’t go out of the city or out to a wilderness area or into a community centre, you can still bring that to your classroom.” Community events can include powwows (Grace), art exhibitions (Grace), and even political demonstrations (Gabe).

Start with a garden. Emily and Grace both talked about growing a school garden to facilitate place-based learning. Emily noted its ties with the curriculum:

Our curriculum has changed a lot. . . . In Environmental Science 20 it says, grow a garden. And that’s something that we’ve done at my alternative school. . . . We planted a garden last year and we’ll plant it again this year. That’s something you can do locally at any time. You can just go out for fifteen minutes, do some weeding, and then go back in and learn something about what you did.

Grace said that growing a garden is quite simple, and it is a way to entice other classes to incorporate place-based learning without much input: “I can very easily invite other classes to use that resource because I’ve already set it up.” She said that, by setting up a garden and inviting other classes to use it, she feels that she can offer an entry point to place-based learning for those educators who may consider its methods to be out of their comfort zone.

Incorporate technology to broaden connections. Gabe and Shaun discussed incorporating communications media and technology as a means to broaden the scope of students’ learning and connections. Gabe said, “I think those opportunities are there, through technology, to connect with an entirely different continent, with a classroom that can share their narrative. And it would be a very special, sacred time and space that they create. And I think it’s

free, right? Just coordinating your time zones.” Shaun talked about a program in Saskatoon Public Schools, Collective Voice: “They’ve actually got an article every week in the paper; . . . every student writes an article about a different place. . . . It’s amazing . . . because they’re writing on controversial issues.”

Engage in place-based professional development. Adopting new methodologies and philosophies can be challenging for teachers; change requires a lot of work and even the challenging of one’s own belief system. It can be particularly difficult when that change may attract skepticism or backlash. In order to prepare teachers to embrace a place-based praxis, participants said that ample teacher training and professional development in its methods are paramount. Emily advocated for the development of a place-based education course at the University of Regina, similar to one that is currently taught in Saskatoon: “Education students [should] . . . get a taste for what goes into . . . place-based education so that they’re more confident. Because . . . if teachers aren’t confident about doing something, they’re going to just stick to what they are confident doing [already].” Cathy likewise recommended that universities offer place-based education courses. She said:

It needs to be from teacher education down. . . . Philosophically, teachers [should come] out of the U of S, U of A, U of M, with absolute understanding . . . of what land-based or place-based education is, and the critical importance that Indigenous people are to Canada. . . . And it needs to filter to the principals. To policy makers. . . . You need to have land-based PD days.

Shaun, who teaches a post-secondary course on place-based learning, works with teacher candidates to find learning spaces within a 1 or 2 km radius of the schools at which they are doing their field experiences. He also hoped to teach a summer course to show teachers how to

design multi-day nature trips for greater emphasis on student learning and responsibility. It is fathomable that a small team of staff members from several schools could engage in similar professional development, then use half of a school-based professional development day to engage other staff members in finding alternative learning spaces within the community. Within my own school division, for example, resources have been made available for teachers to work in collaborative teams to practice strategies to improve student learning.

Every participant was adamant that, regardless of what their future teaching assignments may hold, they would always facilitate learning using a place-based philosophy and practice. As Gabe said, “there’s no turning back.” Participants advocated for the benefits of place-based education, not only to student learning and engagement, but also to their own sense of purpose and ability to work towards a more socially and ecologically just future.

Conclusion

The research findings reflected participants’ perspectives on the purposes and benefits of place-based education, their views on the supportive factors and potential barriers to its effective implementation, and their perspectives of the possibilities for its broad incorporation within formal K-12 education.

In the first section, *Conceptualizing Place-Based Education*, I discussed participants’ responses regarding what they understand to be the nature and purpose of place-based education. I considered participants’ philosophies of education in general, as well as their perspectives of place as a concept, itself, and how those perspectives intersect to inform their place-based praxes. According to participants, place-based education involves investigating the many dimensions of a particular place while incorporating learning outcomes and issues of social and ecological justice along the way. While engaging in purposeful learning, students connect with

their communities, with one another, with concepts taken up, and with their own power as they discover the impact they have on their locales and on those with whom they share their spaces.

In the next section, *Benefits of Place-Based Education*, I examined what participants considered to be the most significant benefits of place-based education. Increased student engagement emerged as the primary positive impact of place-based education, evidenced by improved student achievement, attendance, enthusiasm, behaviour, and effort while participating in learning processes.

Participants also highlighted the positive impacts that they view place-based education as having on their students' overall development, particularly in terms of their health and social development. They problematized society's trends towards keeping children indoors for longer periods and argued that place-based education promotes physical activity and allows them to *feel better* by having increased opportunities to breathe fresh air and connect with the natural world.

As a result of students' commitment to making positive contributions to their communities, participants cited current and potential impacts on society-at-large as benefits of place-based education. They noted increased opportunities for students to gain understanding and agency to address issues affecting the social and ecological sustainability of their communities.

In the third section, *Supportive Factors for Effective Place-Based Education*, I explored the supportive factors that the participants perceived as contributing to their ability to facilitate place-based learning effectively. These factors included establishing a democratic classroom culture, utilizing an integrated approach from planning through assessment, and exemplifying professional confidence, flexibility, and cooperation.

In the fourth section, *Barriers to Place-Based Education*, I explored participants' feedback regarding the factors that limit their ability to facilitate place-based learning. These

factors include financial barriers and the rigidity of institutional structures. Financial barriers exist due to additional program costs that include extra staffing, purchase of outdoor gear, and travel expenses. Financial considerations were the most significant potential barriers that arose from my discussions with participants; however, they were only listed as limiting factors by Shaun, Gabe, and Emily, all of whom were discussing their roles as facilitators of integrated programs that existed as alternative programs outside the regular K-12 classroom model. Grace and Cathy, both who facilitate place-based learning as part of their teaching assignments in regular formal K-12 classrooms, noted that they do not require any funding beyond what a standard classroom is allocated from their school divisions. Rather, they work with the resources that are available to them and keep place-based learning close to their schools, thereby eliminating the need for a transportation budget or the purchase of special gear.

Participants discussed institutional rigidity as a barrier to place-based learning as well. They noted the challenges of operating within the time constraints of a segmented school day, adhering to increasingly rigid protocols around safety and school trips, and addressing controversial issues with permission from those who manage public relations on behalf of their school divisions. For these reasons, participants also cited administrative support as being paramount to their ability to facilitate learning effectively. Imposition of standardized assessments is another example of institutional rigidity that illustrates trends towards top-down models of education. While all of the participants censured trends towards standardization, they also discussed how they are able to meet the demands of standardized assessment practices imposed upon them by incorporating regular formative assessment throughout students' learning processes to avoid the need for conducting summative assessments in addition to mandated standardized tests.

In the fifth and final section, *Broad Incorporation of Place-Based Learning in K-12 Formal Education*, I consolidated participants' responses regarding what they consider to be the possibilities for integrated place-based education in every classroom. All of the participants responded positively, saying that they believe that all educators can easily integrate place-based philosophies and methodologies within their practices. Every participant suggested that keeping place-based learning localized by staying near the school, inviting community members into the classroom, and even using literature or art created by members of the community are simple ways to facilitate place-based learning while working within budgetary and time constraints. Completing projects that are authentic and that can involve many members of the learning community and not just one classroom, such as a school garden, was listed by two participants as another way to facilitate place-based learning. Finally, optimizing the use of technology and communications media to connect students and share their thinking with a far-reaching community of learners and audience was advocated as a way for all educators to facilitate place-based learning.

In order to prepare educators to recognize the possibilities for place-based education, several of the participants advocated for professional development that supports teachers in incorporating it into their practices to improve their own sense of purpose and high quality learning experiences for students.

In the final chapter, I will discuss my insights regarding how my findings contribute to the existing research literature. Additionally, I will discuss this study's implications for future research as well as for educational policy and practice regarding the integration of place-based learning in formal K-12 public education.

Chapter 5: Discussion

This study contributes to the existing empirical research examining processes of broadly incorporating place-based education in K-12 formal education, including how it can be conceptualized and facilitated to improve student learning while disrupting institutionally perpetuated social inequality. Its findings also reveal implications for further research into the impacts and logistics associated with the broad incorporation of place-based education, as well as how it might influence educational policy and practice.

Contributions to the Research Literature

The findings support much of what was discussed in the literature review, particularly in terms of the many ways place-based education can be conceptualized and the potential benefits of place-based education to students and communities. The most notable differences were revealed in participants' perspectives regarding practical considerations for facilitating place-based learning.

Conceptualizing place-based education.

Participants' descriptions of how they conceptualize the purposes and methods of place-based education aligned with common conceptualizations discussed in the literature review. For example, the literature revealed that place-based education "lacks a specific theoretical tradition" (Gruenewald, 2003, p. 3; also see Resor, 2010) and can be considered as incorporating principles of land-based education, community-based education, and critical pedagogy of place. All participants described elements of land-based education, community-based education, and critical pedagogy of place in their discussions about how they conceptualize place-based learning. Citing Greenwood's critical theory of place conscious education where place is investigated in terms of "what happened here, what is happening here, and what could happen

here,” Emily described place-based education as an intersection of “ecological land-based education and community education. . . . Place is that intertwined spot where you [necessarily have to] do both.”

Echoing Gruenewald’s assertion that places are pedagogical (2003), Cathy said that land is where the stories are. Spending the majority of her career living and teaching in a remote northern community inhabited by mostly Cree and Métis people, she echoed the common sentiment revealed in the literature review that land must be foundational in any curriculum that aims to include Indigenous students (Battiste & McConaghy, 2005; Cardinal, 2001; Deloria, 2004; Ermine, 1999; Little Bear, 2009; Michell, 2005; Wilson, 1996), but she also noted that land-based education should be integrated everywhere, not just in Indigenous communities. She asserted that land means something to everyone and that learning must begin “where [our] feet are. Right here.”

Similar to the cautionary statements against teaching land-based education through a colonial lens (Bang et al., 2014; Calderon, 2014; Friedel, 2011; McKenzie & Tuck, 2014), Shaun agreed that Eurocentric environmental education imposes colonial values, and Cathy noted that it is important for teachers to be aware of how western knowledge is privileged.

It is notable that participants’ experiences with place, as well as their teaching assignments, impacted their philosophical and methodological approaches to facilitating place-based education. Place-based learning incorporates elements of land-based, community-based, and critical place-based education. While Cathy is not an Indigenous person, she has lived in a community inhabited by mostly First Nations and Métis people for much of her adult life. Her approach to place-based learning is largely land-based, which has distinct ties to Indigenous worldviews and approaches to learning. Grace, on the other hand, teaches in an urban

community that is largely made up of small business owners. Drawing on neighbourhood resources and values, her practice focuses largely on the community-based element of place-based education. This distinction highlights how educators' diverse narratives and worldviews can impact the ways in which they conceptualize and facilitate place-based learning.

Benefits of place-based education. Participants cited benefits to students, such as engagement in learning, achievement, social development, and opportunities to practice healthy living as paramount to the goals of place-based education. Additionally, participants advocated for place-based education as a means to contribute to social and ecological justice in the wider community. The literature review likewise revealed that the objectives of place-based education are to create more equitable and engaging learning experiences for all students, as well as to help build more connected communities that are socially and ecologically just (Battiste, Bell, & Findlay, 2002; Gruenewald, 2003; Judson, 2008; Little Bear, 2009; Smith, 2006; Sobel, 2004).

Participants discussed how place-based education methods create spaces for more integrated, and therefore deeper, learning. Israel (2012) also asserted that place-based education provides opportunities for students to form deeper connections by challenging “the isolation of schools and classrooms from their social and ecological contexts and the isolation of academic subjects from one another” (p. 79). Participants observed that, as a result of students' engagement in deeper, more meaningful learning, they demonstrated improvements in their academic achievement and development, a connection that also appeared throughout the review of conceptual research (Aikenhead & Michell, 2011; Battiste, 2002; Dewey, 1925; Little Bear, 2009; Umphrey, 2007).

Participants recognized the capabilities of place-based education to address social inequalities within the classroom as well as on a larger societal scale, not only in their professed

philosophies about the purposes of place-based education, but also in their observations of the evidence of the benefits that place-based education has had on their students. The theoretical framework for this study also suggested that place-based education could promote social justice in its ability to create learning environments and communities that redistribute the power imbalances perpetuated by Eurocentric norms that permeate public education (Edgerton, Peter, & Roberts, 2008; Robertson, 2007; Wotherspoon, 1998). Additionally, the literature review revealed that place-based learning motivates active citizenship because it facilitates opportunities for students and community members to share their voices and address matters pertinent to living well (Freire, 1970; Greenwood, 2013; O’Sullivan, 2001; Sobel, 2004; Umphrey, 2007), thereby promoting social justice in the wider community.

Supportive and limiting factors for effective place-based education. The literature review for this study revealed a limited body of empirical research on specific models or practical guidelines for facilitating place-based learning. Specific examples of place-based learning models included in the review of empirical research included science programs for Indigenous students in Manitoba and Costa Rica (Sutherland and Swayze, 2012), an inner-city after-school program (Miller, 2012), a program integrated within an Australian secondary school (McInerney et al., 2011), environmentally-conscious education in a rural community (Howley, 2011), and several place-based programs in Saskatoon (Twum, 2014). These studies revealed some key attributes that contribute to effective place-based education, all of which were echoed in my findings. Participants discussed several factors that they consider to be essential for supporting effective place-based education: creating a democratic and cooperative learning environment, providing opportunities for deeper, student-directed learning, being flexible, and

building a collegial network. Limiting factors included time constraints, budget limitations, and institutional rigidity.

Creating a democratic learning environment in which students are provided opportunities to set meaningful goals and work cooperatively to achieve them was discussed by participants as an important element of effective place-based education. Cooperative learning and relationship building were also listed as supportive factors for place-based education in the literature review (Miller, 2012; Sutherland & Swayze, 2012). Participants noted the importance of working to reduce power imbalances in the classroom by making space for diverse epistemologies and narratives. Aikenhead and Michell (2011) advocate for the inclusion of diverse perspectives as well, because it enhances learning opportunities and validates the knowledges and experiences of all students.

According to participants, teachers must invite students to explore their own curiosities to achieve course outcomes. They noted that, while tailoring units of study to respond to every student's unique interests may appear daunting within a classroom that follows the top-down model of the teacher disseminating information to the students, place-based educators can efficiently accommodate all learning styles and interests by integrating subject areas as much as possible and utilizing project-based learning during which students work collaboratively and individually to explore topics, working towards meeting several curriculum objectives from different subject areas and allowing for greater depth of learning. Students' opportunities to explore topics that interest and challenge them help to foster what participants cited as one of the most significant benefits of place-based education: student engagement. These findings are supported by the views of Sutherland and Swayze (2012), who advocate for using the prescribed

curriculum as a secondary resource to support contextual learning that is more meaningful to students.

Participants discussed several teacher attributes that contribute to facilitating place-based learning effectively. Flexibility to respond to students' curiosities as well as to changing learning conditions and real-world events was revealed as being one of the most important attributes of a place-based educator. Sutherland and Swayze (2012), Miller (2012), and Howley (2011) also listed flexible instruction as an important factor in facilitating quality place-based learning. Participants noted that building a collegial network that includes supportive administrators, teachers, and community members is significant for building their own confidence in facilitating and advocating for place-based learning, as well as for securing resources to do so effectively. Existing empirical research by McInerney et al. (2011), Miller (2012), Howley (2011), Swayze and Sutherland (2012), and Twum (2014) supports these perspectives.

This study's findings reveal several barriers to place-based education. Participants recommended that any teachers who are planning to utilize place-based methods should be aware of these barriers and prepare to address them. Barriers include financial considerations and the imposition of institutional norms such as time constraints, safety protocols, resistance against teaching controversial topics, and instructional mandates such as standardized assessments. The existing empirical research that helped to provide the conceptual framework for this study revealed some insights regarding potential barriers to place-based education, such as lack of administrative support and limitations of local activism.

Emily, Gabe, and Shaun highlighted budgetary issues as being of a primary concern to place-based educators. They cited extra staffing, travel expenses, and gear such as camping equipment as the most significant costs that inflate a place-based educator's budget. It is notable

that the three aforementioned participants were discussing the budgets of their integrated programs, which operate as specialized programs within their school divisions. Grace and Cathy, both who use place-based philosophies and methods within the confines of their more typical assignments, noted that they are able to facilitate quality place-based learning with no additional operating budget.

Participants noted that institutional constraints such as increasingly strict safety protocols, time constraints, and standardized assessments could be barriers to place-based education. However, they offered suggestions for how educators can overcome those barriers. For example, Emily and Cathy both collect blanket permission forms for students to travel within a small radius at any time during the year. In addition, Gabe and Emily listed certifications that teachers can acquire in order to ensure safety regulations are met. According to Gabe, the study of controversial topics is more likely to be supported by administrators who are kept informed about high standards of meaningful learning typically upheld within a teacher's classroom; administrators who trust a teacher's methods and motives are more likely to be flexible in empowering them to use their own professional discretion. Finally, participants highlighted the importance of ongoing formative assessment in alleviating the pressures of completing standardized assessments; in addition to offering students more timely and meaningful feedback, formative assessment strategies can be completed quickly, especially if for only a few students per class at a time, and provide a comprehensive overview of each student's learning that can help teachers to tailor future topics and teaching strategies to meet students' needs.

In contrast to the barriers and solutions discussed by participants, the literature review revealed limited insights regarding the potential barriers to place-based education. Twum (2014) discussed several factors that may impede place-based learning. For example, Twum noted that

garnering administrators' support for place-based learning can be difficult. Gabe and Shaun also discussed the significance of an administrator's support in ensuring projects can go forward. Twum noted the potentially daunting process of helping students to become more critical and creative participants in their learning after having been stifled within a traditional formal school setting. This study's participants did not consider this to be a barrier, but they did discuss it as a consideration for working with students who are new to a place-based classroom; participants noted the importance of helping students to become more independent and active participants in learning by using a scaffolded approach in which students are gradually granted more freedom to make choices about how and what they learn.

McInerney et al. (2011) cautioned place-based educators about several pedagogical limitations of place-based education. They suggested that, by focusing on local activism, students could gain only a myopic understanding of the world and therefore be prevented from understanding the dynamics of a global community. Additionally, they cautioned that real change, even at a local level, is difficult to achieve and may only be realized by networking with larger, national organizations. Fortunately, the factors described by participants as supporting effective place-based education, such as building a strong network from which to solicit support and resources, can help to overcome the barriers discussed by McInerney, Smyth, and Down.

The supportive and limiting factors for facilitating place-based learning discussed by participants help to contextualize and expand upon those that were revealed in the existing empirical research discussed in the literature review. These findings therefore help to build a framework for the practical implementation of place-based education.

Suggestions for the broad incorporation of place-based education. While there were many similarities between this study's findings and those that were revealed in the empirical

research discussed in the literature review, this study helps to fill a gap in existing empirical research by examining specific processes for integrating place-based learning in K-12 formal education. By gathering and consolidating what participants described as the key contributors to their effectiveness as place-based educators, including specific examples of how they plan, facilitate, and assess learning, I presented several key instructional guidelines for educators who wish to embrace a place-based practice.

Participants' first recommendation for the broad integration of place-based education was to keep learning local. By exploring learning spaces within a short distance from the school yard, additional gear, safety precautions, time, and transportation are unnecessary. Inviting community members to the classroom to share their knowledge was another common recommendation that not only requires few additional resources beyond student-generated thank-you cards, but also allows for greater variation in the expertise, perspectives, and teaching strategies shared with students. Grace and Emily both recommended building a school garden, which is a simple way to integrate curriculum and experiential learning. It also provides opportunities to invite other teachers and classrooms to engage in place-based learning. Most of the participants advocated for integrating technology in place-based learning as a means for connecting with individuals and communities beyond the confines of the school or even the province, as well as for simplifying the processes of providing timely formative assessment on students' work. Finally, the participants noted the importance of professional development, whether through a university or facilitated within school divisions, in helping educators to understand the value of place-based learning and build their confidence to facilitate it effectively.

Beyond the general recommendations for facilitating place-based education listed in the empirical research conducted by Howley (2011), McInerney et al. (2011), Miller (2012),

Sutherland and Swayze (2012), and Twum (2014), the existing research on place-based education offered few practical considerations that can serve as guidelines for educators who wish to plan, facilitate, and assess place-based learning. The findings of this study help to fill a gap in the research by providing practical considerations for the facilitation of place-based education in a Canadian context.

Limitations of the Study

While this study's findings can be used to inform educational theory, practice, and policy in order to improve students' educational experiences, thereby largely fulfilling the research objectives, several factors limited the scope of the study. Most notably, the participant sample lacked in cultural diversity. While participants' perspectives no doubt varied due to their unique narratives, teaching experiences, and relationships with place, the participant sample consisted mostly of educators who are of western-European descent. A more diverse sample, particularly one that included more non-western-European and Indigenous educators, would have broadened the study's scope and impact by incorporating multiple worldviews. This would have been particularly valuable given that the study's research objectives included informing educational practice that honours the unique worldviews of all students.

To attract a larger participant sample, I could have sent invitations to be disseminated among educators within the province's various school divisions, including band operated schools located on First Nations throughout Saskatchewan. This might have garnered participation from educators who teach according to place-based philosophies and procedures but who are not otherwise connected to the growing network of place-based educators within the province's larger cities.

The study is also limited in its discussion of gender issues in education. Interview questions regarding gender diversity in place-based education could have been included to address these important issues with relation to place-based learning and honouring students' unique narratives.

Implications for Further Research on Place-Based Education

Although there exists a large body of research theorizing a strong correlation between place-based education and positive student outcomes, further empirical research is required to examine that relationship in practical, quantifiable terms. Below are some suggestions for how place-based education might be taken up in research and practice in order to contribute to a more comprehensive understanding of place-based learning and how to best maximize its benefits to students and the communities in which they live.

Action research in place-based learning. Current empirical research examining the impacts of place-based education on students focuses largely on facilitators' perspectives. Studying the perspectives of students regarding their experiences with place-based learning within the structures of formal K-12 public education would contribute significantly to a more comprehensive understanding of the impacts and shortcomings of place-based learning, which could then inform future practice.

Reason and Bradbury (2007) describe action research as follows:

Action research is a participatory, democratic process concerned with developing practical knowing in pursuit of worthwhile human purposes, grounded in a participatory worldview which we believe is emerging at this historical moment. It seeks to bring together action and reflection, theory and practice, in participation with others, in the

pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities. (p.2)

Teachers often use action research as a means to reflect on and improve upon their practice in order to better meet students' needs (Caro-Bruce, 2000). Action research is process-oriented and pedagogical in nature; knowledge is a "living, evolving process of coming to know rooted in everyday experience" (Reason & Bradbury, 2007, p. 3). The flexible and responsive nature of action research reflects the processes inherently integrated within place-based education; not only do action research and place-based education necessitate flexibility of facilitators and participants, but they are also both collaborative, action-oriented towards the overall well-being of the participants and the communities in which they live, reflective, and based in principles of reciprocity. These similarities demonstrate the appropriateness of action research as a methodology for examining place-based education and its impacts on students. Supported by student perspectives and quantifiable data regarding the impacts of place-based learning on students, the findings of a place-based action research project could be used to affect pedagogical trends significantly.

In 2014, Karen McIver published the findings of her action research study entitled *Places of Activism: Engaging Youth to Explore the Places that Maintain Communities of Activism*. The study involved using "action research with youth to investigate and create radio shows about the role place has played in maintaining the identities of activists committed to social and ecological issues" (McIver, 2014). While the research explored youth perspectives of place using action research as a methodology, it was conducted with youth during the summer of 2013, outside of the context of a formal K-12 classroom. Additional research should be conducted in order to understand students' perspectives on the impacts of the integration of place-based education

within formal K-12 education. Additionally, action research on the integration of place-based learning within formal K-12 education should be conducted to include the experiences of other stakeholders that existing research suggests are potential beneficiaries of its practice, such as members of the community and students' parents and caregivers.

Implications for Educational Policy and Practice

Research and reflection are essential aspects of pedagogy that truly aims to respond to students' needs. Widespread cultural and educational shifts necessitate a deliberate, reciprocal relationship between educators and education researchers, which should include not only strictly academic researchers but also practicing teachers; theory informs practice, which then informs theory. However, as teachers' responsibilities such as extracurricular commitments, differentiated instruction for diverse learners, and standardized assessment data collection increase, opportunities for individual and collaborative reflection decrease.

I began pursuing a master's of education because I knew I was not fully meeting the needs of my students. My peers expressed similar concerns, and although plans were consistently made to come together as colleagues to address overarching problems causing the bulk of stress among staff, students, and families alike—truancy, violence, a lack of evidence of students' progress, and insufficient instructional time to meet learning outcomes—these issues were consistently set aside in order to discuss implementation of new assessment strategies that informed us of what we already knew; we were not truly meeting the needs of our students. There simply was not enough time to address core issues during our limited staff development time.

The Saskatoon Public School Division has taken steps to facilitate teacher-directed research with the creation of Collaborative Inquiry Teams. These school-based inquiry teams

allow teachers to work in grade-alike, school-based teams to link theory and practice while exploring new teaching strategies in order to better meet students' needs. While Saskatoon Public Schools teachers have, until recently, been permitted to investigate mostly literacy-related topics, the process has been evolving to make room for inquiry in other subject areas. I believe this evolution will increase opportunities for meaningful, critical research by teachers. I hope to integrate this research study with my Collaborative Inquiry Team work as much as possible to not only support what I believe is an important initiative undertaken by Saskatoon Public Schools, but also to demonstrate how the initiative can be expanded to support the diverse educational needs and visions of Saskatoon Public Schools staff and students.

Dissemination of Findings

I initiated this research study to investigate how public education might be reformed to engage all students in meaningful and critical learning, particularly those who are statistically at risk for being alienated from the Eurocentric processes and structures that currently permeate our schools. Audiences who may be empowered to utilize this research to inform practice include teachers, school administrators, school division officials, education researchers, and the Ministry of Education. School communities that include students, caregivers, and neighbourhood residents are also essential in facilitating any solution for making positive changes that allow schools to better connect with and serve the communities in which they are located.

I will submit my findings to academic journals such as *The Canadian Journal of Education (CJE)* and the *Canadian Journal of Environmental Education (CJEE)* as well as the open-access and peer reviewed publication forum offered through the University of Regina Faculty of Education, *inEducation*. I will seek opportunities to present findings at local events such as the University of Saskatchewan STARS conference, the Saskatchewan Teachers

Federation SAFE conference, the Celebration of Research conference at the University of Saskatchewan, and the Canadian Society for the study of Education.

Weber-Pillwax (2004) suggests that “the researcher is accountable for the effects of the research project on the lives of the participants” and that “the purpose of research is to benefit the community and the people of the community” (p. 4). I began this research with the intention to improve my own teaching practice so that I can better meet the needs of my students. Since I began working on this study, I have changed my approach to teaching drastically; despite working as an arts educator and band teacher and therefore working with students for short bursts of time throughout the week, I remain committed to finding new ways to take students outside, connect with the school community, and make learning experiences authentic. For example, last year I participated in a city-wide sustainability program with one of my middle years Arts Education classes. Students connected with local experts to perform audits to measure biodiversity and water usage within our school building and grounds. As a result of their learning, students worked with a local landscape designer to design and build a school permaculture garden that incorporates natural learning spaces while increasing biodiversity and significantly reducing the school’s water consumption from April through October. We explored and communicated our learning through music, dance, drama, and visual art, as well as by integrating units of study with their Science, English, and Mathematics teachers. The garden installation occurred with meaningful contributions from every class in our school, as well as from community members. This spring we continued to expand our garden, for example by inviting local experts to engage us in learning about Indigenous knowledge of plants and ecosystems.

Since initiating this project nearly six years ago, I have become a mother. I walk a narrow line between hope and dread when I think about what my children's futures may hold as I am constantly bombarded with reminders that the ecosystems we depend upon and the ascending staircase towards a socially-just world that I once thought was unshakable are not certainties. My belief in the power and necessity of education to create a more socially and ecologically just society, and the inspiration that I have garnered while learning from a network of educators who are already making leaps in working towards that better future, have me leaning a bit more towards hope. Since beginning this work I am frequently surprised and reassured by the many exciting educational initiatives that are being undertaken by individuals and institutions within Saskatoon and across the globe. Having shared in the joy, curiosity, and sense of purpose awakened in students and in myself as a result of our adventures in place-based learning, I am convinced that my own praxis is forever changed for the better. Every participant in this study indicated that they will remain committed to place-based education for the remainder of their careers. Place-based learning is compelling in its potential for creating positive impacts on students and the societies in which they live. An educational shift towards its widespread practice would be unstoppable.

I hope that this research helps to define a path towards educational reform led by teachers, students, and community members who are rejuvenated and empowered to envision and motivate positive change.

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Appendices

APPENDIX A: Interview Protocol with Teacher Participants

Interviews will be conducted with teacher participants individually. Teacher participants will be invited to bring samples of planning documents and students' work for reference.

- What has your teaching experience been thus far? (e.g., urban/rural, students' ages, specialist vs. generalist, etc.)
- What is your teaching assignment currently?
- How do you conceptualize place?
 - How does land relate to place?
 - How does community relate to place?
 - Does your conceptualization of place expand to include more general or specific spaces?
 - Can place include both local and global space?
 - How does colonization impact place and our sense of place?
 - What impact does a growing global culture (i.e. globalization) have on place?
- Why do you choose place-based approaches to education?
- How do you approach place-based education?
 - How do you view your role in facilitating place-based learning?
 - How do students' backgrounds, interests, learning needs, and conceptualizations of place factor into planning, instruction, and assessment?
 - Is it more or less challenging to accommodate individual students with place-based education methods? Why?

- How do local events (e.g. weather, community celebrations or challenges, etc.) influence place based learning?
- What resources do you draw upon to facilitate place-based learning? (E.g. local experts, parent/caregiver support, etc.)
- Is learning done mostly individually or in collaboration with others?
- Are there opportunities for multi-generational learning or learning that is done in collaboration with other students of various ages?
- Are subjects kept separate or are they integrated?
- How do you plan units or lessons in advance considering the responsive nature of place based education?
- How do you incorporate the SK curriculum document?
- How do you typically assess students' learning?
- Teachers and students face increasing requirements for standardized assessment supported by quantitative data. How do you account for this in your planning?
- How do financial considerations differ in place-based learning as opposed to traditional learning?
- What challenges do you face when facilitating place based education?
- What supports do you require?
- What impacts does place-based education have on your students?
 - How is their participation in learning activities affected?
 - Are students more likely to share their ideas?
 - Do students feel that place-based learning is more enjoyable?

- Have you noticed changes in student attendance?
 - How is their academic achievement affected?
 - Do you believe your students' self-identities are impacted by place-based education? How and why, do you think?
 - How do you feel students' relationships with peers, teachers, and communities are affected?
- What do you consider to be the barriers to the broad incorporation of place-based education into traditional education programs?
- What do you view as the possibilities for the broad incorporation of place-based education into traditional education programs?
- How will your experiences with place-based learning impact your future teaching practice?

Appendix B: Teacher Participant Consent Form



Place-Based Education

Research Participant Consent Form

You are invited to participate in a study entitled “Knowing Our Place: Examining the Integration of Place-Based Learning in K-12 Formal Education”. Please read this form carefully and feel free to contact me, the researcher, if you have any questions.

Researcher: Heather Lake (Master of Education Candidate), Department of Educational Foundations, University of Saskatchewan. E: lake.heather@gmail.com Ph: (306) 653-2602

Research Supervisor: Marcia McKenzie (Associate Professor, Educational Foundations; Director, Sustainability Education Research Institute [SERI]; Project Director, Sustainability and Education Policy Network [SEPN]), University of Saskatchewan. E: marcia.mckenzie@usask.ca Ph: (306) 966-7551

Purpose and Procedures: The purpose of this research is to examine how place-based education can be integrated into K-12 formal education. Teacher participants will provide information about their experiences with facilitating place-based education.

Teacher participants will participate in one interview lasting approximately two hours (or, at participant’s request, two individual interviews lasting approximately one hour). Questions will be forwarded to participants in advance. Discussions will be recorded and then transcribed. Participants may review the transcripts and ask to omit, add, or change their remarks.

Participants will also be invited to present archival data such as planning documents and samples of student work for reference during interviews.

Research Funding Source: Joseph-Armand Bombardier Canada Graduate Scholarship – Master’s

Potential Benefits: While there are no direct personal benefits associating with participating in the study, it is anticipated that, with the help of research participants, the results of this study will aid in advocating for a broader integration of place-based learning in publicly-funded schools, thereby expanding a network of educators who choose place-based approaches to education and improving meaningful educational experiences for all students.

Storage of Data: Data collected in connection with this study will be stored and kept secured by Marcia McKenzie, research supervisor, for a period of five years post-publication.

Confidentiality: Research findings will be communicated in a Master’s Thesis. They may also be published in scholarly journals, presented at a scholarly conference, or shared with educators at a local teachers’ convention. Though data collected from participants will be included in research findings, participants’ identities will be kept confidential if they wish; they will provide a pseudonym that will be used in transcripts, the thesis, and any subsequent publications or presentations. In addition to providing pseudonyms, participants will be invited to review transcripts and findings in order to ensure data accurately reflects their perspectives while allowing them to maintain anonymity.

Right to Withdraw: Participants may withdraw from the study for any reason at any time and without penalty of any kind. Participants may also choose not to respond to certain interview questions. If participants withdraw from the study, they may request that data up to the point of withdrawal be destroyed.

Questions: Please contact me at any time with questions regarding this study. This project was reviewed on ethical grounds by the U of S Behavioural Research Ethics Board. Any questions regarding your rights as a participant may be addressed to the Research Ethics Office toll free at 1-888-966-2975 or ethics.office@usask.ca.

Consent to Participate in the Study

I have carefully read the description provided and understand my rights and responsibilities as a research participant. I have had an opportunity to ask questions regarding the study. I consent to participate in the research study entitled “Knowing our place: Examining the integration of place-based learning in K-12 formal education”. I understand that I may withdraw my consent at any time. A copy of this Consent Form has been provided to me for my records.

_____	_____
Name of Participant	Date

Signature of Participant	
_____	_____
Name of Researcher	Date

Signature of Researcher	

Appendix C: Concept Map



