Inspiring Places:
Exploring Outdoor Learning Spaces with Young Children

by

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Abstract

The purpose of this project is to explore young schoolchildren’s involvement in selecting and creating outdoor learning spaces. The question leading this investigation is, “how can Canadian educators involve young children’s voice in the development of inspiring outdoor learning spaces?”. The review of the literature examines emergent curriculum and outdoor play, finding that these approaches to educating young children are complimentary. Multiple factors impacting children’s engagement in outdoor learning will be examined, indicating that duration, frequency, proximity, availability of engaging materials, and an invested adult all play a part. As the studies discussed in this project will demonstrate, there is a gap in the Canadian literature involving young children in research. A future study using a mixed methods approach, combining the Mosaic approach and case study analysis, is proposed, involving young children in designing outdoor learning spaces on school grounds in Canada.

Keywords: emergent curriculum, outdoor play, nature, loose parts, learning, case study, Mosaic approach
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Chapter 1: Introduction

Background

Unlike many other adults interested in educating children outdoors, I grew up disliking being outside. Most of my fond childhood memories took place indoors with friends or a book. Once in a while, I would venture off with friends on my bike or would play in the cul-de-sac near my house, but I always felt more comfortable and happy playing indoors. I lived on the corner of a very busy street in a fairly large city, so outdoor play was restricted by fear and rules that made it unappealing. I did not develop strong attachments to my surroundings, nor did I feel any pull to spend time in nature.

As I grew older, however, I came to truly appreciate my natural surroundings. After moving from a large city in southern Ontario to a rural community in southeastern British Columbia, I became very interested in hiking, camping and just generally being outside. A whole new world had opened up to me: beautiful forests and hills, towering mountains, serene lakes and flowing rivers. I wanted to explore it all! I began spending a lot of time in nature with others and on my own, exploring spaces small and large. Nature became my retreat, calming me when I felt stressed and energizing me when I felt tired. Even just stepping out the door and walking for a few minutes helped to restore clarity and happiness.

However, it was not until I took part in the Developing Ecoliteracy in Early Childhood course at the University of Victoria that I thought about engaging my students in learning outdoors. I had been teaching Kindergarten for three years at the time, but aside from occasional gym classes in the field on beautiful spring days, most of our time had been spent inside the classroom. I had spent a great deal of time and energy creating various materials for self-paced learning in small groups. Although my efforts paid off in some ways, these activities did not
spark curiosity and joy. I knew that sitting at tables with worksheets was not the ideal way for young children to learn. I also knew that talking at a group of students, providing facts about the environment and how to take care of it, was not the way to teach children about their surroundings. I did not teach this way all of the time, but somehow, despite my excitement to engage children in learning, I had reverted back to some of the ways I remembered being taught.

**Motivations and Relevance of this Project**

When I had first become interested in working towards a Masters degree, I wanted to learn more about teaching practices that were developmentally appropriate, inspiring and enjoyable. I wanted to make learning come alive, and truly foster a love for learning. I wanted to find ways to reduce my own stress as an educator, and find ways to create flow in our school day. Most of all, I wanted to find ways to support the whole child, accommodating for needs my students had, and making them feel heard and valued.

I challenged myself to move away from my past practices after reading Orr's (1992) statement that, "the crisis [of sustainability] cannot be solved by the same kind of education that has helped create the problems" (p. 83). I realized that repeating history does not change the future. I eagerly read the works of Louv (2005), Sobel (2008), and Carson (1956), all of whom informed me of the lack of time children spend in nature, and the important role adults have in connecting children with nature. While taking part in the Developing Ecoliteracy in Early Childhood course, I pushed myself to take my students outside often, and was amazed by the drastic differences I saw in their behaviours, abilities and attitudes. Each week, I read about the value of spending time in nature, and then would watch the living proof unfold before my eyes.
Reflections based on readings and my own observations became a base for conversation with anyone who would listen.

Information about the physical, social, and emotional benefits of outdoor play was fairly simple for me to digest. What challenged me was the research investigating the importance of risk and challenge outdoors. Having been a child who was fairly sheltered from taking risks, I found myself very worried about the possibility of children being injured. Phrases such as, ‘be careful!’ and ‘watch out!’ were part of my daily vocabulary. However, intrigued by what I was reading about risk, I spent time closely observing how my students’ navigated our schoolyard, and was surprised to see children taking calculated risks. Reading about the differences between harm and risk helped me further understand how important risk-taking is for children (Little & Wyver, 2008). The work of the Green Hearts Institute for Nature in Childhood (2012) also pushed me to provide opportunities for children to assess risk in order to develop good decision-making skills.

It was at this time that I also started to explore the idea of my students guiding our learning. I allowed myself to step back from my past practices and reflect on my beliefs about educating young children. I became very interested in the Reggio Emilia approach to education (Edwards, Gandini, & Forman, 2012) and Stacey’s (2009) work on emergent curriculum. Instead of following the plans laid out in my daybook, I tried listening carefully to my students and honouring their ideas and interests by exploring by their side. The practice of careful listening greatly strengthened the relationships between my students and myself. However, while exploring the research, I found that the voices of children in school-based nature programs were missing.
I was overjoyed when I came across the Alison Clark’s Mosaic approach (2005), which provides developmentally appropriate ways of involving children’s voice in research. Methods used in the Mosaic approach (2005), such as photography, drawings, maps and slideshows, made their way into my daily practice. I began to question rules and routines that I had established regarding behaviour, seatwork, writing practice, and other teacher directed practices. I found that my students and I were far more engaged and enthusiastic when the learning was child-initiated. I also found that my students were learning far more than they had learned completing my preplanned activities. Each time I looked back to the curriculum expectations, I was amazed at how many prescribed learning outcomes had worked their way into our daily lessons.

I began making a point of taking my students outside on a daily basis, allowing their varying interests to guide our journey. I was inspired by Friedrich Froebel’s (1887) work, which encouraged educators to allow time and space for children’s self-guided exploration. He argued that independent exploration allows children to create knowledge for themselves, to develop strength and confidence, and to make sense of the world and the connections between all individual things (Froebel, 1887). Froebel (1887) also encouraged adults to allow children to explore in spaces they have chosen themselves, which led me to wonder how my students viewed our outdoor space, and what changes they would make if given the opportunity.

Statement of the Problem

I became very curious about the impact that following children’s lead may have on their engagement in learning outdoors. I wanted to instill an early love for learning, and wondered if involving children in the process of choosing outdoor spaces for learning would help. Specifically, I wondered how children’s ideas about their natural surroundings could be used to
assess the value of, and make changes to, our schoolyard. However, I found that there was not enough known about the impact that children’s involvement in the planning process had on creating inviting spaces when learning outdoors in Canada.

**Purpose of the Project**

While observing and listening to my students outside, I began to wonder more about the outdoor space and how it was being used. My colleagues and I discussed the possibility of creating an outdoor classroom like the aesthetically pleasing ones we had seen in books and online. Although I was excited by the ideas we discussed and pictures I saw, I wanted to ensure that my students were involved in this process. I turned to the literature, asking the question, ‘how can Canadian educators involve young children’s voice in the development of inspiring outdoor learning spaces?’. In order to fully explore this question, I used a number of related questions to guide my search:

1. What is emergent curriculum?
2. What are the benefits of play in natural settings for young children?
3. What is required for optimal outdoor experiences?
4. How can educators best support children in the planning for play outdoors?

**Inspiring Places Project**

In my review of the literature, I will find that research involving children in assessing their outdoor environments is limited, especially in Canada. This finding will lead me to outline a potential future study involving children in designing their own outdoor learning spaces. I will combine the research and my personal observations to investigate the value of conducting future
research using a blend of case study research and the Mosaic approach. Based on studies conducted in other countries, I will identify considerations for the researcher, and potential steps one would follow in order to conduct this research study in Canada.

**Summary**

During my time studying at the University of Victoria, I have become increasingly interested in the value of learning outdoors with young children. I believe that children benefit greatly from time spent in nature, and that I can provide rich, authentic learning experiences in the natural environment. I have observed positive changes and growth in my students when engaged in learning outdoors. I have also examined a number of articles, books and websites focused on outdoor play, and have found a lack of Canadian research outlining how to involve children in planning for play outdoors.

In Chapter two, I will present the literature supporting both emergent curriculum and play outdoors, setting a foundation for this project. Literature pertaining to the type of space, and how much time, is recommended for optimal outdoor experiences will also be explored, as well as the importance of an observant educator in following children’s interests. From here, we will explore the literature pertaining to the involvement of young children in planning and research, identifying a gap in the Canadian literature.

The findings from the literature will then be used in Chapter three to create an outline for future research in this area. A combined methods approach will be suggested based on studies conducted in other countries. This outline will walk future researchers through the steps necessary for conducting research involving young children in creating inspirational learning spaces outdoors.
Chapter 2: Literature Review

Introduction

Young children are active citizens, capable of constructing their own learning (Gandini, 2008). They understand the world by investigating, manipulating, and negotiating within it (Gandini, 2008). Although these are beliefs I have held for many years, my actions as an educator have not always reflected this. Over the past two years, reading about the Reggio Emilia approach (Edwards, Gandini, & Forman, 2011) and emergent curriculum (Stacey, 2009) has helped me form new ideas about what it looks like to respect children. During this time, I have gained a better sense of the importance of building upon children’s ideas and interests. I have read a great deal about co-constructing knowledge with children, and the importance of listening and reflecting as an educator. I have taken this knowledge and applied it to my practice within my classroom, watching in wonder as children engage wholeheartedly in projects that have stemmed from their own ideas.

I have also gained a great deal of knowledge about the importance of taking children outdoors. Contact with nature over the last forty years has decreased significantly (Louv, 2005; Rivkin, 1997), and the role that nature plays in children’s development has become a growing area of interest for many educators. Access to outdoor play is disappearing quickly, and we do not yet fully understand the repercussions this lack of exposure to nature will have on children (Rivkin, 2014). According to the existing research, however, the potential impact is immense. With children spending less time outdoors than ever before (Louv, 2005), the concern regarding the potential impact for children is justified. After being inspired by the readings and discussions within an eco-literacy course at the University of Victoria, I began taking my students outdoors on a regular basis. Although I did not spend a lot of time outside as a child, I have come to
greatly value exploring and learning outdoors. I began to merge my beliefs about child-directed learning with my beliefs about the value of outdoor play. I had witnessed such great success with co-constructing learning indoors, and wanted to see how this approach would work outside. Observing positive changes in my students when I allowed their interests to guide our outdoor experiences sparked further research and interest in this area. The more I read and the more time spent in nature with my students, the more motivated I felt to take them outside.

As I observed my students in nature, I began wondering about how the roles that my students and I played may be altered outdoors. I wanted to make changes to our outdoor learning space in order to create spaces that sparked wonder and excitement, and became interested in involving my students in this process. I wanted to know more about how children’s ideas about their natural surroundings could be used to assess the value of, and make changes to, our schoolyard.

In this chapter, I will begin by examining the concept of emergent curriculum, and why we should involve children in planning and learning. Practices from Reggio Emilia will be highlighted as successful ways to implement child-driven planning. With the belief that following children’s interests makes learning more enticing in all environments, I will turn my attention to the outdoor learning environment. With the limited exposure today’s youth have to nature (Louv, 2005), and the suggested impacts of this, I have become more aware of the importance of incorporating outdoor learning into my practise. I will provide some context in terms of the benefits of outdoor play, and risky play in particular. These benefits frame the importance of playing and learning outdoors, which has challenged me to question my former teaching practices. I will also explore the criteria for successful learning outdoors, focusing on the time and space children are provided with in natural settings. I will then investigate the role
of the educator when following children’s lead in outdoor settings, and the findings from research conducted with children in outdoor settings. However, as the review of the literature will reveal, most of the research available is based in the UK, with little research conducted anywhere else.

Based on the limited findings in the literature, I will propose the need for further research regarding children’s involvement in planning and designing outdoor learning spaces in Canadian schoolyards. In Chapter 3, I will examine two potential methods to guide this research, the Mosaic approach and case study analysis. By exploring the purpose, benefits, steps involved, and limitations to both of these methods, I will reveal the similarities between these approaches. My curiosity about the best method for researching this topic and presenting the findings in a user-friendly format for educators will lead to the examination of the potential for combining these methods in future research.

**Involving Children**

Over the years, there has been very little focus on actively involving young children in planning and research (Boileau, 2013; Smith, Duncan & Marshall, 2006). As Smith et al. (2006) explain, “[i]t is uncommon for children’s knowledge and understanding of their own learning to be used to improve teaching and learning” (p. 474). Often times, we do not value children’s opinions because we see them as underdeveloped adults, innocent and not yet able to make decisions (Boileau, 2013). However, there has been a very slow shift towards involving children’s voice in education and research (Greenfield, 2004). This shift is evident in the growing popularity of the emergent curriculum approach and the Reggio Emilia approach, which I will now further explore.
Emergent curriculum. Emergent curriculum is one of the few approaches to education that relies on the voice of the child. Emergent curriculum is child initiated, responsive, and flexible (Stacey, 2009). Stacey (2009) writes that children are viewed as, the ultimate researchers, for they are finding out how the world works. To do this, they engage in experiences with their minds and bodies, experiment using trial and error, ask questions, watch others carefully and imitate their actions, and attentively watch life unfold (p. 129).

The purpose is to, “help children see themselves as thinkers, inventors, and theory makers” (Curtis & Carter, 2008, p. 42). Children are learning all the time and they extend their learning when given choices and opportunities to actively participate (Oltman, 2002). Learning becomes more hands-on when we empower children and release some of our control (Oltman, 2002). By allowing children opportunities to explore and test theories themselves, learning becomes more meaningful (Stacey, 2009). Educators guide this learning by providing a variety of open-ended materials, space, and time. They also carefully observe children in order to guide their planning and provision of materials (Stacey, 2009). Within emergent curriculum, children initiate learning while the teacher collaborates, responds and supports (Greenfield, 2004; Nelson, 2012; Stacey, 2009). An example of this emergent approach comes from Stacey’s (2009) book, *Emergent Curriculum in Early Childhood Settings: From Theory to Practice*:

In a preschool program, one child has begun, on a small scale, to build with recyclables in the art area. He talks with a teacher about an idea he has for creating a playground, and later in the day she ensures that a greater variety of building materials (cardboard, clay, pipe cleaners, spools, empty film canisters, materials from nature, and
so on) is accessible in this area. Also, so the structure can be moved and saved as needed over a long period of time, she provides a large piece of cardboard to build on. Over a period of several days, the child constructs a complete playground with swings, slides, and climbing structures. Other children come and go as he works, and although they don’t want to build a playground themselves, they do watch carefully, ask questions, and gather ideas about how to use loose parts that later appear in their own constructions (p. 89).

In this emergent approach, children’s words are valued, and decisions are made based on student engagement, interests, and energy levels (Stacey, 2009). Children are not rushed to fulfill a curriculum outcome, but rather are given ample time and space to follow their interests.

There are many benefits related to the use of emergent curriculum. Waters and Maynard (2010) have found that, “(t)here is valuable learning potential in the child’s self-initiated engagement with aspects of the environment that prompt some expression of awe, wonder, excitement and/or questioning” (p. 480). By allowing children to direct learning, they develop independence, social competence, resourcefulness, and problem-solving skills (Stacey, 2009). This practise also improves children’s self-esteem and confidence (Stacey, 2009). An example of a project that has fostered the development of these skills is The Doll Project (Wein, Stacey, Keating, Rowlings, & Cameron, 2002), where educators followed a group of children’s interest in dolls over a six-month period. After observing children incorporate dolls within their play in various ways, the teachers provided each child with a simple, handmade doll consisting only of a head, body, legs and arms. Guided by children’s initial reactions to the lack of eyes on the dolls, the teachers provided opportunities to talk about eyes, look at each child’s eyes, explore possible eye colours for the dolls, and even visit an optometrist. When children added eyes to their dolls,
the teachers fostered independence by not stepping in to correct children that may have had the eyes in the wrong place. The teachers had thought that children would want to create glasses for their dolls after the visit to the optometrist, but let this idea go when children did not take an interest in this. After weeks of eye exploration, children’s interests turned to hair, so the teachers arranged for a visit to a salon and for a hairstylist to visit the center. They also provided various hair options for the dolls, exploring texture and colour. After spending some time exploring hair, the group turned their attention to noses and mouths, incorporating baking and sampling different food items, as well as investigating their own noses and mouths more closely through photographs. During this project, children also experimented with clothing for their dolls and with creating beds for them. The teachers used children’s conversations to determine when it was time to move on from each focus area within the project. Materials were provided for children in case they wanted to explore their thoughts through drawing, but the use of these materials was left open-ended. As the project progressed, the teachers noticed that children’s drawings of faces, and the details included in these drawings, improved dramatically. Throughout the project, children discussed, questioned and experimented with their dolls and with each other, working together to gain knowledge.

As we see in this example, program planning is flexible and develops as the learning takes place. As Stacey (2009) explains, “[e]mergent curriculum is not linear- it is organic, constantly growing and evolving. Sometimes it is even circular, as we observe, discuss, examine documentation, raise questions, and observe again” (p. 13). This reflective process sets emergent curriculum apart from traditional curriculum planning, involving children as active participants in determining next steps for learning (Stacey, 2009).
The Reggio Emilia approach. A similar approach to emergent curriculum that involves empowering children is the Reggio Emilia approach. Reggio Emilia, a small city in Northern Italy, has become world renowned for its inspirational approach to education (Edwards, Gandini, & Forman, 2012). This city boasts low crime and unemployment rates, as well as high-quality social services and strong financial support for their early childhood system. Shortly after the Second World War, a small group of dedicated individuals in Reggio Emilia set about to building a school for young children. This group believed that educating children was of utmost importance, and despite a lack of materials and resources, they were determined to build a school where children were valued. These first schools were mostly parent-run, with the first city-run school starting up in 1963. Until this time, schools in Italy had been controlled by the Catholic Church, and were often of low quality and were discriminatory. Although there was a great deal of uncertainty about these city-run schools in the beginning, educators worked hard and fast to establish a philosophy to base their practise upon. Edwards et al. (2012) states,

Over the past 50 years, this system has evolved its own distinctive and innovative set of philosophical and pedagogical assumptions, methods of school organization, and principles of environmental design that, taken as a unified whole, we are calling, ‘the Reggio Emilia experience’ (p. 6).

Drawing on a strong tradition of participatory democracy, Reggio educators strongly believe that children have civil rights (Edwards et al., 2012). Children are at the centre of everything that happens (Gandini, 2008). Children are viewed as, “active, competent, and strong, exploring and finding meaning, not as predetermined, fragile, needy, and incapable” (Rinaldi, 2012, p. 234). Children construct their own understanding about the world by interacting with, and manipulating it. They are encouraged to use various methods to demonstrate their learning,
supported by the idea that they will usually surprise adults if we allow them to have a voice (Gandini, 2008). Children notice so much, and they need a variety of ways to demonstrate what they have found out about their surroundings. Using a variety of methods to represent ideas, such as drama, stories, drawing, and sculpting, is highly recommended (Curtis & Carter, 2008).

The Reggio Emilia approach also involves children learning through communication and hands-on experiences with others (Gandini, 2012). Vygotsky’s theory of scaffolding is built upon the idea that children learn more from working with adults or peers who are functioning at a higher cognitive level (Vygotsky, 1978). Interactions between children play a very important role in their development, as children make meaning by working with others and coming to a shared understanding (Vygotsky, 1978). As Curtis and Carter (2008) state, “(c)hildren are compelled to connect with one another, and genuinely fascinated with one another’s words, ideas and actions” (p. 104).

Encouraging children to learn with and from their peers can open the doors to unpredictability. Often times when using the Reggio Emilia approach to education, things happen that were not predicted by the educator. Planning follows children’s interests, rather than a pre-set plan created by the educator. Children engage in learning through projects that usually evolve from student interest, and can last anywhere from a few days to a few months (Gandini, 2008). This approach to education has many benefits for children, including fostering a sense of belonging and building self-confidence (Gandini, 2012).

Without taking children’s ideas and thoughts into consideration, we cannot realize the full potential of the learning environment (Blanchet-Cohen & Elliot, 2011). Many educators have used these emergent approaches within their classrooms with great success, but there are other learning spaces to be explored. In order to realize the full potential of the outdoor learning
environment, I would like to apply this emergent, child-led approach outdoors. I agree with Lynne Brill and Ripley (2008) that the outdoors is the perfect environment for emergent curriculum. Ryder-Richardson’s (2006) statement that the, “outdoors should be a dynamic, flexible, versatile place where children can choose, change, and be in charge of their play environment” (p.8) has validated my beliefs about the potential of merging emergent curriculum and outdoor learning. With the desire to create outdoor learning spaces that inspire children, I agree that it is best if children can be involved in the process when planning and implementing projects (Lundy, McEvoy, & Byrne, 2011; Nicholson, 1971; Rivkin, 1997). Children’s time spent outside is rapidly declining (Rivkin, 1997), which makes the benefits of this space even more worthy of further exploration. In order to support the decision to engage in learning outdoors, I will turn my attention now to the research investigating the various benefits of time spent outside.

**Benefits of Play in Natural Settings**

Research has revealed a number of benefits of children’s play in nature (Carson, 1956; Faber Taylor, Kuo & Sullivan, 2001; Faber Taylor & Kuo, 2009; Fjortoft, 2004; Kaplan, 1995; Kirkby, 1989; Louv, 2005; Sobel, 1996). Since children’s physical health has become a growing concern (Cleland, Crawford, Baur, Hume, Timperio, & Salmon, 2008; Dyment & Bell, 2008; Kimbro, Brooks-Gunn, & McLanahan, 2011; Vandewater, Shim, & Caplovitz, 2004; Wheeler, Cooper, Page, & Jago, 2010), I will first examine the physical benefits of play outdoors, and how increased screen time has jeopardized children’s time outside. I will then explore the benefits of time outdoors for children with attention-deficit-hyperactivity disorder, and the impact on cognitive development. This will lead to a discussion about the social and emotional benefits of
time outdoors. A comparison of risk and harm will follow, illustrating both the urgency for reducing chances of harm, and increasing opportunities for taking and assessing risks.

**Improves physical health.** Encouraging children to spend time outdoors can promote physical activity and reduce the risk of obesity (Cleland et al., 2008; Wheeler et al., 2010). Increasing time outdoors by even just an hour a day can contribute to overall physical activity levels (ParticipACTION, 2015). With the space available outside, young children can move about freely, gaining awareness and control of their own body (Rivkin, 2014). Physical activity outdoors also improves motor skills, balance, and coordination (Fjortoft, 2004). However, childhood obesity and various other health problems are on the rise (Salo, 2009), and a number of researchers have begun to look at the link between increased sedentary time and decreased time spent outdoors as a possible explanation.

Children spend a lot more time with screen media now than ever before (Common Sense Media, 2013). Common Sense Media’s (2013) recent publication, *Zero to eight: Children’s media use in America 2013,* looked at the increase in young children’s time spent with tablets, cell phones, television, video games, and computers. Based on survey results from 1463 parents of children ages 8 and under, this report revealed that young children spend an average of two hours per day with screen media (Common Sense Media, 2013). Using data collected in 2004, Statistics Canada found that 36% of children between the ages of 6 and 11 spent more than two hours per day with screen media (Statistics Canada, 2006). Since this data is almost ten years older than the data used for the Common Sense Media’s (2013) report, it would be interesting to see how this Canadian statistic may have changed during that time.
These statistics tell us that children have become dependent on screen time as a leisure activity, which has led to a decrease in physical activity levels (Salo, 2009; Statistics Canada, 2006). Statistics Canada (2006) reported that 35% of children who spent two or more hours in front of a screen were overweight or obese, compared to 18% of children who spent an hour or less on the same activities. Salo (2009) reports that, “90% of children and youth do not meet Canada’s Physical Activity Guidelines” (p. 28). Sedentary activities, such as video game playing, have been found to be related to higher obesity levels, and time spent playing video games has replaced time spent outdoors (Vadewater, Shim, & Caplovitz, 2004). Vadewater et al. (2004) also found that the time spent watching television was positively associated with children’s body mass index (BMI). Kimbro et al. (2011) found that children’s BMI was negatively associated with time spent outdoors, indicating that physical activity levels are impacted by decreased time outside. Therefore, it is imperative to find ways to decrease screen time and increase physical activity time for Canadian youth (Salo, 2009).

**Reduces symptoms of attention deficit-hyperactivity disorder.** While children’s time spent outdoors has significantly decreased, the number of children diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD) has risen (Louv, 2005). Research suggests that less exposure to nature might be what is causing the symptoms of ADHD in the first place (Louv, 2005). Researchers Andrea Faber Taylor and Frances Kuo have conducted a number of studies focused on the impact that natural settings have on the symptoms associated with ADHD, such as hyperactivity, impulsiveness and inattentiveness, and have found that time spent in nature reduces these symptoms (Faber Taylor, Kuo, & Sullivan, 2001; Faber Taylor & Kuo, 2011; Kuo & Faber Taylor, 2004).
**Improves cognitive development.** Faber Taylor and Kuo (2009) have also found that natural settings help children regain focus. Since one of the main goals of schools is academic success, it would be beneficial for teachers to look into the green spaces available to help children focus. Educators can benefit from knowing that the natural environment recharges children, whereas other environments fatigue them (Faber Taylor & Kuo, 2009; Nelson, 2012; Rivkin, 2014). After spending time outdoors, children are able to recall more, and transfer learning easier, than if they had remained inside (Yeong, Kahlid, Ong, Tan, Lim, Wong, & Higgins, 2012). Therefore, according to this research, children should spend time outdoors before engaging in activities demanding attention (Faber Taylor, Kuo, & Sullivan, 2001).

**Improves social and emotional development.** In addition to these benefits, researchers have found a positive link between healthy social-emotional development and direct exposure to nature (Bennett, 2009; Brown, Sutterby, Therrell, & Thornton, 2001; Nabhan & Trimble, 1995). Children really enjoy, and are deeply engaged, in play outdoors (Blanchet-Cohen & Elliot, 2011). Children are more cooperative (Dyment & Bell, 2008), empathetic, and willing to help others outdoors (Bennett, 2009; Brown et al., 2001). Children develop and practice a variety of positive social skills when engaged in outdoor play (Kuo, 2010; O’Brien, 2009), and also exhibit greater self-worth and self-regulation (Yeong et al., 2012). In addition, children’s level of stress and anxiety is also severely reduced when they spend time outside (Burdette & Whitaker, 2005; Kaplan, 1995; White & Stoecklin, 1998). Children experience freedom outdoors that differs greatly from indoors (Rivkin, 2014; White & Stoecklin, 1998).
All of the benefits outlined above are important for children’s healthy development. By viewing these benefits as potential outcomes for learning outdoors with young children, one may begin to see why the schoolyard could be viewed as an ideal learning environment.

**Provides opportunities for risk.** To add to this list of benefits, natural outdoor spaces also provide children with opportunities for choice, challenge and risk (Dyment & Bell, 2008; Gill, 2007). Research has revealed that many parents and educators are fearful of the potential harm children may experience outdoors (Little & Wyver, 2008; Stephenson, 2003). Much of this fear is related to ‘stranger danger’ and the potential for injury, despite the fact that the incidence rate of either has not increased since 1990 (Gill, 2007; Little & Wyver, 2008). Gill (2007) provides examples of children who have been punished for climbing trees, playing chasing games, and using found materials as guns to demonstrate how averse to risk we have become.

These fears provide the basis for why we must identify the difference between harm and risk. Researchers argue that all outdoor spaces for young children must be free from known hazards—things that children may not see or things that may take them by surprise (Little & Wyver, 2008). Greenfield (2003) argues that adults need to take safety into account and be ever mindful of the safety risks associated with any activity.

Risks, on the other hand, are opportunities for children to see, calculate and make a decision about doing something or not (Little & Wyver, 2008). Natural environments provide opportunities for open-ended play that can be risky, and opportunities for development and mastery of new skills (Greenfield, 2004). Children are more likely to seek out and deal with physical challenges outside (Blanchet-Cohen & Elliot, 2011; Stephenson, 2003). Rivkin (2014)
has found that, “in a well-designed outdoor play area, children can safely experiment with taking risks, which helps them see themselves as powerful and competent” (p. 6).

Removing risks also makes play boring (Mitchell et al., 2006). Without balanced risk, children may find their own ways to make things challenging, sometimes in ways that are unsafe (Blanchet-Cohen & Elliot, 2011; Curtis, 2010; Little & Wyver, 2008). By limiting children’s exploratory play in their natural environment, we reduce their chances for valuable risk-taking opportunities (Maynard & Waters, 2007). As Greenfield (2004) writes, “[t]oo little risk and challenge in a playground leads to inappropriate risk-taking and the seeking of thrills in a fearless and destructive manner. Too much can result in children feeling threatened, unsafe and unhappy” (p. 5). Gill (2010) agrees that a balance is required, stating that an activity with too little risk loses its significance, and an activity with too much risk can be emotionally and/or physically scarring.

Dealing with challenging situations, learning to problem solve, working collaboratively with others, and testing limits are all part of healthy child development. By engaging in outdoor play, children become more resilient, persistent, and able to deal with confusion, difficulty, and failure (Stephenson, 2003). If children are to develop the skills necessary for success later in life, we need to provide them with opportunities to assess and take risks when they are young (Blanchet-Cohen & Elliot, 2011; Gill, 2010). As adults, we use judgment to assess risk every day, but children need real life experiences to develop and practice these skills (Finch, 2012). Children learn about, “their capabilities, their vulnerabilities, and their good decision-making skills through real life experiences- sometimes happy, sometimes harsh, but always instructive” (Finch, 2012, p. 2).
Rather than removing all risk from children’s play, we need to find ways to manage these risks (Finch, 2012; Gill, 2010). A balance can be found by assessing the level of risk before taking children outside (Little & Wyver, 2008; Mitchell et al., 2006; Stephenson, 2003). Robertson (2014) has found that it is helpful to record the benefits, along with the risks, in order to ensure all invested parties are aware of the benefits of any risky play. As stated by Robertson (2014), “a risk-benefit assessment is an approach to risk management which considers the benefits of any activity alongside the risks” (p. 25). Assessing and documenting potential risks ensures that spaces are free from hazards (see Appendix A for sample risk assessment worksheets). Discussions amongst facility staff regarding supervision, safety and zoning for various levels of risk are required in order to ensure staff feel comfortable, and children’s development is supported (Curtis, 2010). These discussions will allow staff to examine their own disposition towards risk, their comfort level, and their view of children, all of which play a role in risk assessment (Curtis, 2010).

Children themselves should also be involved in the risk assessment process (Robertson, 2014). Since children often self-assess risks by stopping an activity when they feel uncomfortable, it is important to value their capabilities related to risk management (Robertson, 2014). Robertson (2014) reminds educators to conduct risk-benefit assessments with children in developmentally appropriate ways, focusing on what children can do, the benefits of a particular activity, and the need for specific safety measures. She also emphasizes the importance of allowing children to ask questions and share their thoughts and feelings about a particular activity before taking part in it (Robertson, 2014). Taking these measures to involve children can contribute to their increased confidence and independence outdoors (Robertson, 2014). This
independence helps children gain the confidence and self-esteem required to meet a challenge and overcome it (Curtis, 2010; Stephenson, 2003).

In this section, various benefits of outdoor play have been explored. Increased physical activity levels outdoors have contributed to lower BMIs and better motor development in children. However, children’s time outdoors is at risk, largely due to increased screen time. Research related to the cognitive, social, and emotional benefits of outdoor learning was also explored, outlining many similar benefits to those found in child-driven planning. The benefits of risk were then examined, taking into account the difference between risks and hazards, and ensuring children are involved in assessing risks associated with their play spaces outdoors.

With these benefits of outdoor play in mind, questions arise related to requirements for outdoor play, such as time, space and materials. The following section of this paper will address these questions.

**Requirements for Optimal Outdoor Experiences**

There are certain criteria for successful outdoor play that must be met before the above-mentioned benefits can be realized. I will first explore the time spent in nature, with a focus on the importance of frequency. Direct, hands-on experiences in nature will then be examined, followed by the importance of emotional connections to place. Since many teachers feel as though they do not have the space to teach outdoors, I will examine the literature pertaining to the physical space required for outdoor learning, illustrating that vast areas of land are not necessarily required. Finally, I will look at the materials best suited for this learning environment.
**Frequency of time spent in nature.** Children need frequent opportunities to explore and manipulate outside (Freeman, 1995). It is important for outdoor experiences to become a part of children’s daily life (Dyment & Bell, 2008; Forest School Canada, 2014). Regardless of the space available on school grounds, it is better to expose children to this space on a regular basis than to take them on field trips away from the school a couple of times a year (Dyment & Bell, 2008; Finch, 2012b; Louv, 2005; Wilson, 1996). Taylor and Kuo (2011) found that spending time outside doing simple activities on a regular basis was more beneficial than weekend camping trips or kayaking an hour away from home.

**Direct exposure to nature.** Kuo (2010) stresses that children need as much exposure to nature, and in as many forms, as possible. Although there is a place for indirect and vicarious experiences, these experiences simply do not provide the same opportunities for challenge, problem solving and adaptation that direct experiences in nature offer (Nabhan & Trimble, 1995; White & Stoecklin, 1998). Limited hands-on exposure to nature can cause children to become fearful or uncomfortable outdoors (White & Stoecklin, 1998). Alternatively, direct experiences with nature encourage interest and engagement (Duerden & Whit, 2010; Rosenow, 2011). Louv (2005) argues that with physical contact in nature decreasing, hands-on experiences in nature are vital.

**Connecting through the heart.** Frequent, hands-on experiences in nature will lead to connections to the land (Louv, 2005). Children need to have an emotional connection to the earth first before we ask them to protect it (Sobel, 1995). Oltman (2002) states that, “if you want something to stick in the brain, it must first go through the body and heart” (p. 10). Similarly,
Rachel Carson (1956) writes, “it is not half so important to know as to feel” (p. 56). Louv (2005) argues that children need a lot of unstructured time to explore and learn about their natural surroundings. Connections to the land require a great deal of time (Rosenow, 2011). In order to allow for deep exploration and wonder, it is important for children to know that they are supported and are not rushed (Clark, 2008). Children need to develop a sense of wonder, a joy of discovery, and a closeness to nature (NAAEE, 2010; Wilson, 1996). We need to see time spent in nature not simply as leisure time, but as an important investment in our children’s future (Louv, 2005).

**Outdoor space.** As Constable (2012) simply defines,

An outdoor classroom is a space, as its name suggests, that is outside. It can be interpreted and created in a way that suits each individual establishment, and the children who visit. No two outdoor classrooms will ever be the same and on each visit the environment will have changed (p. 5).

This definition encompasses a wide variety of outdoor spaces as possible learning environments. However, differences in outdoor spaces require some definition, so as not to confuse all spaces as equal.

The Forest School Canada guide (2014) states that Forest and Nature School, “takes place in a variety of spaces, including local forests, creeks, meadows, prairie grasses, mountains, shorelines, tundra, natural playgrounds, and outdoor classrooms” (p. 21). Natural settings, complete with green spaces and trees, have been found to elicit more positive responses from children than built environments (Faber Taylor & Kuo, 2009; Fjortoft, 2004; Freeman, 1995). Seminal work conducted by Ulrich (1979) explored the responses people had to different
environments. Ulrich (1979) compared responses to pictures of natural scenes, including mountains, trees, plants, and bodies of water, with responses to pictures of urban scenes, including retail and industrial buildings. He found that the individuals exposed to pictures of natural scenes were happier, friendlier and more affectionate, whereas individuals exposed to urban scenes were more likely to feel sad (Ulrich, 1979). Research conducted by van den Berg and van den Berg (2010) also showed that children are able to concentrate better in the woods than in towns, and that they are more social, attentive, and calm in the woods. They found that problematic behaviours, aggression, and concentration problems were exhibited more often in built environments (van den Berg and van den Berg, 2010). Similarly, Faber Taylor and Kuo (2009) found that children were better able to focus after a walk in a park than a walk through a neighbourhood.

Natural settings provide, “a stimulating and challenging playground for children” (Fjortoft, 2004, p. 36), encouraging creative, open-ended, unstructured, diverse play (White & Stoecklin, 1998). Kirkby’s (1989) research found that children preferred refuges or enclosures to playground equipment. Since playgrounds include safer equipment than they did in the past (White & Stoecklin, 1998), they often do not provide a challenging enough play space for children (Freeman, 1995; Gill, 2007).

Therefore, outdoor play needs to incorporate as much nature as possible (White & Stoecklin, 1998). Since researchers have found differences in reactions to natural settings specifically, I will use the description of spaces provided by Forest School Canada to define natural space, separate from other outdoor spaces void of these features. By defining natural space this way, the term can be used to describe the open fields, forests, and gardens that may come to mind immediately, while spaces that are less frequently thought of, such as ditches,
overgrown pathways, or abandoned woodlots, still have value as outdoor spaces. Creativity may be required, but it is likely that all educators can find some way to provide their students with meaningful outdoor experiences, even if it is through a simple planter box or small patch of grass.

**Considerations when choosing an outdoor play space.** When considering the suitability of a space, it is important to choose a space that is free of hazards, inviting, stimulating, flexible, accessible and challenging (Wilson, 2007). A variety of spaces for rich, imaginative play form the ideal outdoor learning environment (White & Stoecklin, 1998).

There is a need for informal green spaces and for spaces of various sizes (Freeman, 1995). Children benefit from varied play zones, such as open spaces, quiet small spaces, spaces for group play, and space for solo play (Wilson, 2007). These varied play spaces encourage children to engage in many different forms of play and interactions with others (Dyment, Bell, & Lucas, 2009; Fjortoft, 2004).

Small, varied landscapes, such as dirt piles, ponds, berry patches, butterfly gardens and logs, also provide suitable spaces for learning outdoors (Finch, 2012b; Fjortoft, 2004). Outdoor spaces can be improved with fallen logs, trees, bushes and long grass (Clark, 2008). Adults often forget that children focus on the small world around them (bugs, dirt, sticks), rather than the vistas that we seek out. As Clark (2008) writes, “well-intentioned and impressive design projects can inadvertently ride roughshod over young children’s existing uses of a space. This places particular importance on making careful observations and providing time for young children to share what is important” (p. 361). Children simply experience nature differently than adults- they assess their space based on how they can interact with and manipulate it, rather than viewing it as
a background (White & Stoecklin, 1998). They need space for mucking about, and opportunities to explore the land with all of their senses (Rivkin, 1997). Children’s appreciation for the wild and unmanicured can make provision of outdoor space simple and inexpensive.

**Loose parts.** Within these outdoor spaces, children benefit greatly from engagement with loose parts. Loose parts, a term coined by Simon Nicholson (1971), describes materials that are open-ended, manipulative, and empower creativity. Natural spaces with loose parts are very appealing to children (Waters & Maynard, 2010). Some natural loose parts include sticks, rocks, shells, driftwood, sand, seedpods and leaves. They allow children to create, experiment, and invent, and can be used on their own or in combination with other materials (Nicholson, 1971). Children benefit from play with these authentic materials that do not require instructions (Finch, 2012b; Oltman, 2002).

Bundy, Naughton, Tranter and Wyver (2009) found that introducing loose parts to playgrounds improved children’s social interactions, resiliency, and creativity. This study looked at twelve children between the ages of five and seven in Australia (Bundy et al. 2009). Teachers reported that these children seemed to bond over loose parts, such as tires, planks, and balls, engaging in more cooperative play than they did without these materials (Bundy et al., 2009). Aggressive behaviours were reduced on the playground by providing children with more loose parts than teachers had originally provided (Bundy et al., 2009). In terms of resiliency, teachers also noticed that children were more likely to get up and try again after falling from structures they built using loose parts than they would have been before these materials were introduced to their playground (Bundy et al., 2009). Teachers reported that children’s creativity was enhanced using loose parts, such as boards and balls, to build structures and develop new games. Children
in Bundy et al.’s (2009) study also used these materials as props to support imaginative play. Setting up boards as planks to walk along (Bundy et al., 2009), hanging sheets over branches to serve as a tent (Wilson, 2007), and stacking tree cookies and pebbles to create a castle (Daly & Beloglovsky, 2015) are a few examples of ways children use simple materials to enhance outdoor play.

Children prefer to use loose parts over toys, and these materials help children develop more varied skills than traditional toys (Wilson, 2007). Children use loose parts to create authentic learning opportunities and enhance all play, making them an essential component of an engaging outdoor play space (Wilson, 2007). The spaces children like most involve materials that are messy and commonplace (Freeman, 1995). However, adults often avoid loose parts because they often prefer spaces to be neat and orderly (Nicholson, 1971; Wilson, 2007).

The Shifting Role of Educators in Learning Outdoors

A reoccurring theme in the literature thus far is the educator’s role in facilitating learning. The adult must assess and balance harm and risk, must provide frequent opportunities for play in nature, and must view available space and found materials as meaningful components of learning (Forest School Canada, 2014). For these reasons, it is worth investigating the role of adults in emergent curriculum and learning outdoors more closely. Here I will explore how the role of the educator, and relationships between children and educators, may change outdoors.

Educator as partner. The relationship between child and adult needs to be a powerful partnership (Gandini, 2008; Waters & Maynard, 2010; Yeong et al., 2012). In her book, A Sense of Wonder, Carson (1956) wrote,
If a child is to keep alive his inborn sense of wonder without any such gift from the fairies, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in (p. 55).

When examining the childhoods of adult environmental stewards, Chawla (1988) found that the two things that they all had in common were many hours spent outside as a child, and frequent interactions with an adult who taught them to respect nature. Educators play the important role of bringing children, the curriculum and the environment together (Yeong et al., 2012). The success of outdoor programming with children depends on the investment and enthusiasm of the facilitator (Forest School Canada, 2014; Yeong et al., 2012). Adults play a vital role in creating and maintaining engaging opportunities for children (Blanchet-Cohen & Elliot, 2011). As Wilson (1996) believes, “[i]t is the teacher’s own sense of wonder, more than his or her scientific knowledge, which will ignite and sustain a child’s love of nature” (p. 4). It is easier to teach outdoors if one is willing to be open and guiding, rather than directive and controlling (Yeong et al., 2012). Since educators are less able to control the environment outdoors, and often experience natural phenomena with children by their side, educators find it easier to be co-learners outdoors (Blanchet-Cohen & Elliot, 2011).

**Educator as facilitator.** Teaching outdoors may require the educator to change their existing pedagogical approach. Educators following an emergent curriculum, “take on the role of facilitator, taking what she sees and hears, and bring[s] to children the opportunity to discover more, dig deeper, and construct further knowledge” (Stacey, 2009, p. 5). Building on the interests of their students, teachers provide provocations, items or questions that will produce a response from the child (Gandini, 2008; Stacey, 2009). These provocations evoke wonder and
deep thinking. The challenge for educators here is to keep uncovering what children are interested in and following that interest, rather than jumping in too quickly or providing their own ideas (Curtis & Carter, 2008).

When outdoors, teachers need to play the role of facilitator, following student interest as they engage in hands-on learning opportunities (Forest School Canada, 2014; Wilson, 1996). Outdoor play is most successful when adults step back to support play rather than direct it. Educators must be willing to be responsive and fluid (Edwards, 2012). Outdoors, “children regain control over their activities and become responsible for their own learning and growth, supported by attentive adults who ensure safety and stimulation. Teachers relinquish control to become observers and supporters” (Nelson, 2012, p. 13). Adults must respond to the actions of a child, taking on the roles of monitor, intervener, information provider, mentor, provocateur, supporter and organizer (Nelson, 2012). As stated in the Forest School Canada guide (2014), “(t)he educator both leads (invites, nudges, pulls) students beyond their comfort zones and misconceptions into deeper thinking and understanding, and follows their interests” (p. 18).

Maynard and Waters (2007) examined teachers in Wales who took the same activities and learning goals used indoors outside, and found that they failed to gain the many benefits of teaching outside. They found that these teachers did not make use of the natural environment, and did not provide students with authentic learning activities outdoors. Many of the teachers involved in this study reported that the space and location of the outdoor environment did not serve as an appropriate learning space. They also felt challenged by scheduling and not having easy access to the outdoors from their classrooms. Maynard and Waters (2007) found that these teachers did not see a connection between learning and free exploration outdoors, evidenced by the priority given to curriculum content and factual knowledge. However, some of these teachers
did provide a ‘special’ time outside once a week, where rules were relaxed and more child-initiated play was permitted. This ‘special time’ suggests that these teachers may have felt that free, child-driven play is beneficial to children’s overall development. Maynard and Waters (2007) point out the tension educators in Wales must experience, being pulled between requirements to meet specific outcomes, while attempting to incorporate informal approaches to learning. I would argue that many educators in other countries also feel this tension, but that this tension only makes the need for authentic learning opportunities outdoors more worthy of deeper exploration.

An example of educators successfully exploring potential learning opportunities outdoors is provided by Blanchet-Cohen and Elliot (2011). Blanchet-Cohen and Elliot (2011) conducted a multisite case study involving four children’s centers, and examined how preschool-aged children and their educators engage outdoors. Each of the centers in this study wanted to increase opportunities for outdoor play by following children’s interests. Participant observations and interactive activities were conducted with the children, in addition to focus groups and discussions with the educators. Observational methods proved to be the most effective way of collecting data from these young children, as these methods provided a safe, comfortable environment for the children. The researchers and educators involved in the study formed a learning community, meeting six times throughout the study to discuss visions, ideas, and next steps for each site. Blanchet-Cohen and Elliot (2011) found that the children involved in this study were very engaged in play outdoors. They found that the educators valued outdoor learning experiences as well, and felt as though they had a better relationship with their students outdoors. These educators also gained a great deal from working with the other members of their newly
established learning community. Working with this group allowed individuals to share their thoughts and observations with others, which led to changes at each facility.

**Educator as observer.** Observation plays a significant role in child-led learning (Gandini, 2008; Stacey, 2009). Observation provides teachers with insight about children’s thinking and intentions (Stacey, 2009). It is the key to understanding children (Gandini, 2012). Observations can include, “anecdotal recordings, narratives, digital photography, videotaping [and] audiotaping” (Stacey, 2009, p. 37). Teachers need to observe carefully in order to connect what they have seen to what the next steps might be. Listening needs to be an act conducted by all of the senses in order to hear all of the ways children communicate their thoughts and ideas (Rinaldi, 2012). Observing and listening carefully during the process provides educators with so much more information than simply viewing the final product (Gandini, 2008). Educators understand that learning takes time, and that they need to slow things down so as not to miss important moments. Educators also have to be open to the possibility of uncertainty and trust that everything will be ok, despite not being able to predict the outcome of a situation (Curtis & Carter, 2008).

Children’s learning and teachers’ thinking is brought together through documentation and reflection (Stacey, 2009). Documentation is created with the view of the child as a researcher (Gandini, 2012). It can include children’s work, written reflections, classroom books, and portfolios (Stacey, 2009). Transcripts and photographs are studied carefully, and help both with planning next steps and displaying children’s learning (Gandini, 2008). Reflecting upon children’s experiences is one of the most important roles of outdoor educators (Forest School Canada, 2014). After carefully observing children’s interactions with the land and with others,
the educator is responsible for interpreting these actions and communicating about them in a meaningful way (Forest School Canada, 2014).

Altering the role of educators in these ways certainly comes with challenges. Most educators have moved through the school system in a way that differs greatly from an emergent approach, and are still expected to continue some restrictive practices (Stacey, 2009). For example, many teachers are still asked to submit a detailed overview of their plan for the school year in advance, leaving little room for following children’s interests (Stacey, 2009). Moving from a system where educators are in charge and hold power, to a system that releases power to children, is a lot to ask from educators.

However, as Stacey (2009) writes, “when teaching methods are held over from previous teachers and remain unexamined, curriculum becomes stale” (p. 2). With recent changes to British Columbia’s curriculum, there is hope that our education system is changing (Province of British Columbia, 2013). In BC’s 2013 curriculum drafts, communication, thinking, and personal and social competencies have been identified as core proficiencies students need to develop (Province of British Columbia, 2013). As the literature discussed in this paper has illustrated, child-driven planning and outdoor play provide rich opportunities for children to develop all of these competencies. The curriculum drafts also identify a number of ‘Big Ideas’ and have less specific outcomes than the previous curriculum document, leaving the specific route teachers take to achieve the expected outcomes flexible and open-ended (Province of British Columbia, 2013). The Ministry of Education has attempted to define, “the ‘what’ to teach but not the ‘how’ to organize or teach it” (“Learning Standards and Flexible Learning Environments”, 2013, p. 1). The goal for the renewed curriculum document is to, “enable and support the development of learning environments that foster creativity and the interest and needs of the learners” (“Learning
Standards and Flexible Learning Environments”, 2013, p. 3). The curriculum drafts are learner-centered, flexible, and support inquiry and problem solving, which are the important components of both emergent curriculum and outdoor education. With curriculum documents rooted in these goals, there is sure to be many educational resources and professional development made available to support teachers in making appropriate changes to their practise.

The concept of involving children in their learning has now been explored, as has the benefits of learning outdoors. Ideal timing and space for outdoor learning has also been examined. Exploring the changing role that the educator plays in child-led planning outdoors has brought us to the idea of involving children’s voice in planning for play outdoors. With the desire to involve my students in creating outdoor spaces they will enjoy, I will now examine the literature supporting this endeavor.

**Involving Children’s Voice Outdoors**

The idea that initially sparked my interest in involving children in designing spaces outdoors was White and Stoecklin’s (1998) statement that, “[r]esearch on children’s preferences shows that if children had the design skills to do so, their creations would be completely different from the areas called playgrounds that most adults design for them” (p. 1). I had originally planned on using photographs of inspiring outdoor classrooms to create a plan with other teachers in my school. However, after reading this quote, I began wondering how children’s ideas and preferences would differ from those of adults. My thoughts returned to White and Stoecklin’s (1998) statement that children assess space based on how they can interact with and manipulate it, rather than viewing it as a background. I thought about children’s ability to engage
with materials, often coming up with ways to use materials that educators had not considered (Stacey, 2009). Since the space was to be created for the children, I questioned why they wouldn’t be involved in this process.

With the knowledge that children’s involvement in planning increases their engagement (Stacey, 2009), and the knowledge that outdoor learning spaces significantly impact children’s healthy development (Louv, 2005), I wanted to merge the practise of child-driven planning and learning outdoors. Driskell (2002) writes, “the most reliable way for ensuring that project objectives and activities are age-appropriate is to involve the children themselves in defining the project’s objectives and determining its activities” (p. 27). As Nicholson (1971) explains,

Children greatly enjoy playing a part in the design process: this includes the study of the nature of the problem; thinking about their requirements and needs; considering planning alternatives; measuring, drawing, model-making and mathematics; construction and building; experiment, evaluation, modification and destruction (p. 12).

The authors of the Forest School Canada guide (2014) also recognize the benefits of children choosing their own outdoor space, stating that, “(t)his is the first step for a child or youth to direct their learning experience, to feel a sense of relationships and responsibility to place, and how we begin to empower them to become active, engaged, and capable learners” (p. 39). For these reasons, I turned to the Forest Schools approach and research stemming from the UK, supporting children’s involvement in choosing outdoor learning spaces.

**Forest Schools.** Forest Schools were first established in Denmark and other Scandinavian countries, and spread quickly to the UK. Although the Forest Schools movement is still most
prominent in these areas (Constable, 2012), a number of educators have been working hard to bring this movement to Canada. These educators have produced a guide entitled, *Forest and Nature School in Canada: A Head, Heart, Hands Approach to Outdoor Learning* (Forest School Canada, 2014). This guide addresses many of the questions and concerns Canadian educators may have about Forest Schools, and provides examples of how these programs may look in this country. Forest School programs across the participating countries range from providing outdoor experiences a few times a week all the way to programs that are entirely outdoors. As Gordon (2013) writes, “forest kindergarten isn’t about moving classroom dynamics outside. It’s a different way of teaching and learning, a process driven by children” (p. 44). Forest Schools already involve children at every level, as described by Constable when she says, “children are asked what they want to do in their space, what resources they want, what games they should play and how they should play there” (p. 89). Children lead the activities in these spaces, which makes them feel like the space is special (White & Stoecklin, 1998).

**Identifying spaces children enjoy.** A few researchers in the UK have conducted studies in order to learn more about the outdoor spaces children enjoy most (Burke, 2005; Clark, 2005; Waller, 2006).

Burke’s (2005) research involved two groups of 20 children from Leeds, ages 7-11. These children were given the opportunity to collect data investigating the spaces, places, and objects they enjoyed. Over a one-week period, children used cameras to document where they played. Children were allowed to take pictures indoors or outdoors, but each child interviewed was asked about one indoor and one outdoor picture. Adults removed themselves from the study for the most part, trusting the children to take care of the cameras and to document where each
picture was taken. All pictures were analyzed, and 22 students were also interviewed. The researchers used exploratory research and a simple structure for the interview. Children that were interviewed were asked to choose a picture and describe why they liked it, and then were shown a picture of the researchers' choice and asked for their view on that one as well. The analysis revealed children's preference for outdoor play, open spaces mixed with closed spaces, and the use of natural materials.

Looking at a much younger group of children, Waller (2006) investigated young children's views regarding their outdoor environment. His study included 80 children attending nursery school on a part-time basis in England. He used questionnaires, observations, interviews, videos, drawings and photographs to study children's views of their outdoor environment. Using a participatory approach, he brought small groups of children to a country park weekly, and asked them to photograph their favourite places. He also interviewed adults and asked parents to complete a questionnaire. After conducting this study, Waller (2006) felt as though children are more than capable of selecting favourite places outdoors and communicating the reasons behind their selections. He stressed the need to ensure children are involved at all levels, having their voice heard (Waller, 2006).

Although these studies focus on improvements being made to outdoor spaces, and even allow children to lead the play within these spaces, they do not deal directly with children creating the space themselves. Since it is the selection and creation of the space that I am most interested in, this is a limitation to the research. These studies have also involved children that are either younger or older than the children I would want to study. However, I was sparked by both researcher’s selection of developmentally appropriate methods of data collection, and
investigated these methods further. This investigation led me to Clark’s (2005) work, which focused on exploring children’s perspectives outdoors.

Clark’s (2005) study, entitled *Spaces to Play*, focused on involving young children and adults in redesigning an outdoor play space. This study, conducted in England, involved 28 children ages 3-5. Clark (2005) used the Mosaic approach to answer the questions, ‘which place do children see as important in this outdoor space?’ and ‘how do the children use these places?’ to guide her study. The Mosaic approach uses multiple methods to honour the many voices of children, and to bring together the pieces of data to create a whole picture from the child’s perspective (Clark, 2005). Methods used in this study included interviews, photography, book making, map making, tours, and conversations. I will further explain and investigate the Mosaic approach in Chapter 3.

The group of children involved in Clark’s (2005) study took part in deciding on outdoor places they should keep, expand, change, and add. Their ideas were respected and acted upon, and helped create change in the yard of their preschool. Investigating this topic further brought me to a UK-based organization, Learning through Landscapes, that provides educators with tools for involving children in creating outdoor spaces. Learning through Landscapes is a charity that encourages educators to involve children in making better use of school space. Their website (http://www.ltl.org.uk/index.php) features a section titled, *Transforming Spaces*. This section walks educators through the steps one might take in order to involve children at every stage of the development process. They suggest finding out how children feel about the space using tours, photography, maps, surveys, and voting before making any changes. The next suggested step is creating a report justifying why the space needs to be changed. It is then suggested to involve children in model making to share what they think is important for the outdoor space, and talking
to them during this process to find out more about their thinking. Educators are then encouraged to ask for feedback based on the plan, and then actively involve children in any building or creating that needs to be done.

The process described in Clark’s (2005) study and on the Learning through Landscapes website are the closest examples of what I am interested in doing with my students. However, since this work is based in the UK, I still see a gap in the Canadian literature.

**Summary**

With a growing movement towards involving young children in planning and decision-making, there is a need to explore how educators can support this change in various environments. The existing literature on emergent curriculum focuses greatly on child-driven learning indoors, but is missing the link to outdoor learning. This review of the existing literature provides background on many of the benefits of learning outdoors, including improved physical, cognitive, social, and emotional development, as well as providing opportunities for risk and challenge. The literature also revealed the importance of close proximity and frequency in nature for young children, indicating that small, simple spaces that are close by, allow direct contact with nature, and provide opportunities to engage with loose parts are suitable learning spaces.

With an understanding of the various benefits of, and requirements for, outdoor play, it can be understood why I have increased the time my students spend outdoors. Exploring the role that adults play in following children’s interests outdoors reveals how important adults are in this process. I have felt my role as an educator shift, and questioning my role based on the findings in the literature has helped me re-examine the level of involvement my students have in planning. With a greater understanding of the importance of outdoor spaces that spark children’s curiosity,
I examined the research for studies involving children in creating these spaces. However, I found that this area of research was very limited, especially when exploring the involvement of young, school-aged children in Canada.

This gap in the literature leads to my proposition for further research regarding school children’s involvement in creating outdoor learning spaces. In Chapter three, I will combine the knowledge gained from the literature with my own observations to explore research methods best suited to answer the question, ‘how can educators involve children’s voice in the development of inspiring outdoor learning spaces around their schoolyard?’ The Mosaic approach and case study analysis will both arise as a potential ‘best fit’, so I will examine the commonalities and differences between these methods. With the common goal of deepening understanding about a group of individuals, I will demonstrate how the Mosaic approach and case study analysis can be combined to gain valuable insight from children when creating learning spaces outdoors. I will propose that future research using these methods be conducted in Canada in order to clearly illustrate to educators the benefits of involving young children in creating inspiring outdoor spaces.
Chapter 3: Involving Children in Outdoor Planning

Introduction

Throughout this Masters program, my goal has been to become a more observant, open-minded, reflective educator. With this goal in mind, I have spent the last two years immersed in literature describing emergent curriculum and ways to make my program more authentic. During the first year of the program, I also took part in an eco-literacy course that sparked my interest in literature supporting outdoor play. Since that time, the desire to engage my students in directing learning outdoors has grown, and I have come to really value their opinions and ideas shared in our outdoor space.

Although our schoolyard provides many great learning opportunities for my students, reading about incredible outdoor classrooms made me curious about ways that our school grounds could be improved. When members of my staff discussed ways to create an outdoor learning space, however, it seemed as though our ideas revolved around bringing the indoor classroom outside. One of our discussions included the need for picnic tables or a circle of log stumps, creating sitting areas for students that resembled the desks and the meeting area on the carpet inside. This just did not feel right.

When engaged in play with my students outdoors, I talked to them about how, and what, they play outdoors, and their ideas often differed from my own. While exploring outdoors with my students, I also noticed that some of them choose large, open spaces to play with lots of other kids, and others choose quiet nooks to play on their own. There were some days that children enjoyed building forts, and others that the forts were ignored. These children played tirelessly on a large fallen tree, pretending it was everything from a diving board to a spaceship. My students also used found materials in ways that I had never thought of. Piles of pine needles became cat
beds, and rocks could be used to represent any food imaginable. Through these experiences, I came to realize that children do not always use space or materials the way adults expect them to, and should therefore be involved in creating outdoor learning spaces.

After reviewing the literature and finding a gap in the Canadian research investigating children’s involvement in planning for outdoor play, I propose a need for research in this area. In this chapter, I will explore the possibility of using case study analysis and the Mosaic approach to study children’s involvement in planning for outdoor learning spaces in Canada. Although conducting a research study using these methods is beyond the scope of this capstone project, I will provide support for why these methods would serve as the best choice for future studies in this area. I will begin by outlining the purpose, benefits, and limitations of both case study research and the Mosaic approach. After describing both research methods, I will provide reasoning for why these methods should be paired for the purpose of this proposed study. Using studies conducted in other countries as models, I will then put forth a potential outline that could be used for a future research study in this area.

**Exploring Potential Research Methods**

**Case study analysis.** A case study is a qualitative research method (Creswell, 2003; Hamilton, & Corbett-Whittier, 2013). As Creswell (2003) defines, “[a] qualitative approach is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives or advocacy/participatory perspectives or both” (p. 18). It is descriptive, rather than predictive, and is based on meanings that are socially and historically constructed (Creswell, 2003). Cook and Hess (2007) explain that, “qualitative research offers, through the use of multi-method research frameworks and a more naturalistic approach to working, opportunities to
engage with those who may not speak the language of researchers, of policy-makers and officialdom” (p. 30). Although case study analysis usually involves a variety of qualitative data collection methods (Stake, 1995), it occasionally incorporates quantitative methods as well, in order to better understand particular problems (Hamilton & Corbett-Whittier, 2013; Yin, 1984). Quantitative research, involving variables and measurement, “employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data” (p. 18). For example, one may combine quantitative methods, such as a survey or questionnaire, with qualitative methods, such as observations or journal analysis, to strengthen the data collected (Creswell, 2003).

Case study research involves in-depth exploration of an event, process, activity, individual or group of individuals (Hamilton & Corbett-Whittier, 2013; Stake, 1995; Zainal, 2007). This method is used to deepen understanding about a specific individual or group within a small geographical focus, allowing the researcher to understand a situation from the participants’ perspective (Hamilton & Corbett-Whittier, 2013; Yin, 1984; Zainal, 2007). Case studies “explore and investigate contemporary real-life phenomenon through detailed contextual analysis of a limited number of events or conditions, and their relationships” (Zainal, 2007, p. 2). This method of research is also used to investigate a problem or to understand processes, practices, and relationships over time (Hamilton & Corbett-Whittier, 2013). A case study allows the researcher to capture complexity, collecting rich data to analyze, and then present the findings as a narrative that tells the story of the case under investigation (Hamilton & Corbett-Whittier, 2013; Stake, 1995). This research method provides great detail and explains complexities that are difficult to capture using other methods (Zainal, 2007).
In order to decide which methods should be used, the researcher needs to decide on the methods that best suit the research questions (Hamilton & Corbett-Whittier, 2013). Selection of data collection methods must be purposeful, and should include multiple perspectives to fully address the issue (Hamilton & Corbett-Whittier, 2013; Pollard & Filer, 1996). The qualitative methods often used in case study research include observations, interviews, journals, field notes, photographs, and video recordings (Hamilton & Corbett-Whittier, 2013). Using a combination of these data collection methods, referred to as triangulation, adds to the quality of the research by filling in the gaps that may exist if only using one method (Hamilton & Corbett-Whittier, 2013). Each method has benefits and drawbacks, and using multiple methods is a way that researchers can give a richer, fuller account of the research topic. These qualitative research methods also allow for more creativity and innovation than traditional quantitative methods (Creswell, 2003).

The literature describing case study analysis indicates that this type of research can be structured many different ways. Yin (1984) argues that there are three forms of case study—exploratory, descriptive and explanatory. Exploratory case studies look at a specific phenomenon within the data, while descriptive case studies seek to describe what naturally happens within the data, and explanatory case studies try to answer the why or how of a situation being studied (Yin, 1984). Stake (1995) has identified three different types of case study research, including intrinsic (researcher looks at case for their own sake), instrumental (looks at pattern of behaviour in small group of individuals), and collective (looks at data from a number of different sources). Hamilton & Corbett-Whittier (2013) add reflective case studies to this list, which they describe as an opportunity for researchers to look at their own practice, evaluate their success, and identify changes that need to be made.
Case studies can also be designed as single-case, which allow researchers to look at an event that only takes place once, or as multiple-case, which looks at a number of individual case studies in order to find patterns (Zainal, 2007). The multiple-case design allows researchers to conduct studies that are cumulative (building a study similar to ones that already exist in order to build a body of evidence), collective (multiple case studies being conducted simultaneously to examine a similar topic), or collaborative (working with colleagues conducting similar studies to generate evidence) (Hamilton & Corbett-Whittier, 2013). However, despite research methods being carefully chosen, the tools and structure may change through the duration of the study, as the researcher cannot necessarily predict what will be needed for the case study before hand (Hamilton & Corbett-Whittier, 2013).

This need for flexibility can make this research challenging (Hamilton, & Corbett-Whittier, 2013). Although the case study method has many benefits, there are a few limitations specific to this type of research. Case study research takes a lot of time, and produces a great deal of data to sift through (Hamilton & Corbet-Whittier, 2013; Yin, 1984). Due to its reliability on researcher observations, it can also be accused of being biased and lacking precision (Yin, 1984). For this reason, it is very important that researchers using case study research methods manage their data well (Yin, 1984), including keeping all field notes in order for information to be verified (Hamilton & Corbett-Whittier, 2013). Due to its limited scope, the most common criticism of case study research is the difficulty in making generalizations based on the findings (Hamilton, & Corbett-Whittier, 2013; Harland, 2014; Yin, 1984). However, since case study research is one of the only ways to deepen our understanding of certain phenomena, I agree with Spinder’s (1982) statement that, “it is better to have in-depth, accurate knowledge of one setting than superficial and possibly skewed or misleading information about isolated relationships in
many settings” (p. 8). With the research study I am proposing, it is best to study a small group of children carefully, interacting with each one personally and observing their process for creating outdoor learning spaces themselves. This approach would be much more likely to produce descriptive, rich data than trying to look at multiple groups of children. It would also defeat the purpose of trying to involve children in the research if the researcher were to conduct surveys or questionnaires with the educators of multiple sites in hopes of getting more data. Studying this one small group of children may not produce data that can be generalized to all children, but would provide a detailed example for other educators to use as inspiration. Although case studies cannot be replicated, we can learn from the experiences of others, which is what makes case study research so valuable (Harland, 2014).

**The Mosaic approach.** Incorporating many of the qualities of case study research, Clark and Moss (2001) developed the Mosaic approach as a way to involve young children in the research process. Their book, *Listening to Young Children: The Mosaic Approach*, offers a creative framework for listening to young children’s perspectives through talking, walking, making and reviewing together (Clark, 2001). The Mosaic approach is multi-method, participatory, reflexive, adaptable, and is embedded in practice (Clark, 2005). This method is based on the understanding that children are experts in their own lives (Clark, 2001), and that their lived experience is important and relevant (Boileau, 2013; Clark, 2005). Researchers using this method view children as competent, social actors, capable of expressing their interests, priorities and concerns (Clark, 2005; Lundy et al., 2011; Smith et al., 2006). This method is based on the belief that if children are seen as important in the research process, they will, “participate as documenters, photographers, initiators, and commentators. Children play an
active role, taking the lead in which ideas, people, places and objects are given significance” (Clark, 2005, p. 25).

This approach involves a variety of tools that allow children to express themselves in age-appropriate ways (Boileau, 2013). These tools include photography, book making, tours, drawings, maps, slide shows and on-the-go interviews (Clark, 2008). Einarsdottir, Dockett and Perry (2008) also suggest the use of props, such as toys, clay, sand, dolls and puppets. Many of the strategies used in research with young children need to be visual and kinesthetic (Lundy et al., 2011). The tools suggested here allow children to express meaning in a way that is non-confrontational, and allow for co-construction of meaning. This vast collection of tools is based on the belief that the more options we provide for children to demonstrate their ideas, the more children we will hear (Clark, 2005). By using a variety of methods to capture the many languages of children, we create a clearer picture of the child’s worldview (Clark, 2005).

As was discussed in Chapter 2, this is very similar to the approach proposed by Forest School Canada (2014). Their handbook, *Forest and Nature School in Canada: A Head, Heart, Hands Approach to Outdoor Learning* (Forest School Canada, 2014), discusses the importance of children being supported by educators who observe and listen carefully, providing many opportunities for choice and hands-on experiences. As is written in the handbook, “[a]n educator cannot ‘draw out’ what they cannot hear, see or understand in a child” (Forest School Canada, 2014, p. 25). The outdoor educator allows children to engage and interact with nature, watching to see what unfolds in order to gain insight about each child. Although the outdoor educator may not see these actions as research methods, they use the information gathered from the children to influence planning and ‘next steps’ (Forest School Canada, 2014).
In addition to the research conducted by children, interviews are also conducted with adults involved in the project, such as parents and educators. As the word mosaic suggests, this approach attempts to combine various methods and perspectives to create a whole picture of the child. As such, the researcher combines the data collected from the children and adults to gain a deeper understanding of young children’s lives (Clark, 2008).

In order to make the most of the Mosaic approach, educators need to focus on the process rather than the product (Oltman, 2002). For example, educators and researchers can get a lot more out of analyzing the drawing process (discussion, details added during process) than focusing on the drawing as a final product (Einarsdottir et al., 2008). By looking only at the final product, we miss so much of the thinking involved in the drawing. The narrative produced while drawing is just as important, if not more important, than the drawing itself.

For this reason, observation also plays a significant role in the Mosaic approach (Clark, 2008; Greenfield, 2004). Careful observation can be conducted through timed observations and narrative accounts (Clark, 2008). Children often do not voice their thoughts and feelings as adults do, so observation provides a glimpse into their thinking that is difficult to capture otherwise (Boileau, 2013). Listening is used for self-reflection, to hear other voices, for documentation, and for interpretation (Clark, 2005).

Reflection is also an important component of the Mosaic approach, allowing time to look at meanings and reassess understanding (Clark, 2005). To facilitate the reflection process, the researcher using the Mosaic approach often creates a book of comments and pictures from the research project to discuss with children (Clark, 2005). This type of research should not be viewed simply as creative, but rather as a way of providing alternatives to the dominant research
methods based on reading and writing (Clark, 2005). Research methods should be fun for children, but need to present their ideas as relevant and important (Lundy et al., 2011).

Since the Mosaic approach incorporates many of the components found in case study research, this approach has many of the same limitations as case studies do. Most often stated, the Mosaic approach takes a great deal of time and effort (Clark, 2005; Oltman, 2002). This approach is also most conducive to work with small groups, which can be very challenging in a classroom setting (Clark, 2005; Lundy et al., 2011; Smith et al., 2006). Flexibility is very important because educators cannot know ahead of time which way children will take their learning (Blanchet-Cohen & Elliot, 2011). However, with demands for pre-planned curriculum in schools, flexible planning can prove to be very difficult.

Additionally, co-creating learning and conducting research with children has its own challenges. Child-directed learning can get messy, loud and chaotic (Oltman, 2002). As is the case with all individuals taking part in a study, research with children needs to include informed consent, anonymity, and confidentiality (Gallagher, 2009). Children need to know about the purpose of the study, having it explained in a way that is developmentally appropriate (Hamilton & Corbett-Whittier, 2013). Permission to take part in the study from both the parents and the child is required, but it can be hard to know whether children truly understand the study and what they are agreeing to (Hamilton & Corbett-Whittier, 2013). Children must voluntarily participate, without coercion, and must be able to back out of the study at any time (Gallagher, 2009; Hamilton & Corbett-Whittier, 2013). This can be particularly challenging, as children may not see participation as voluntary when being asked by an adult to participate (Gallagher, 2009). Children also must not have their real name revealed in the study, but may feel upset that their name is not being included if they do not understand the reasons behind this (Gallagher, 2009).
Above all, it is the researcher’s responsibility to ensure that children are not harmed during the study, but as we see here, this can be difficult to ensure (Hamilton & Corbett-Whittier, 2013). Despite these challenges, many educators who value young children’s voices and hands-on experiences realize that involving them in the planning process is a way to truly honour children.

Case study research and the Mosaic approach have now been described in detail, including the benefits and limitations to both research methods. Viewing these methods as complimentary, I will now explore the potential for these methods to be combined for my proposed research study.

**Methodology**

Due to the lack of Canadian research involving child-driven planning of outdoor learning spaces, I propose the need for research in this area. In an effort to select a research method that best suits this study, I will now explain the suggestion for a combination of case study analysis and the Mosaic approach as a best fit.

Case study analysis and the Mosaic approach are both used to deepen our understanding about a group of individuals (Clark, 2005; Hamilton & Corbett-Whittier, 2013; Stake, 1995; Zainal, 2007). These methods involve small groups of individuals, often actively participating in the research and using a variety of data collection tools (Clark, 2008; Hamilton & Corbett-Whittier, 2013). Case studies rely heavily on the power of observation, documentation, and reflection (Hamilton & Corbett-Whittier, 2013), as do studies conducted using the Mosaic approach (Clark, 2005; 2008). Both research methods require flexibility, as the structure of the study may change over time (Blanchet-Cohen & Elliot, 2011; Hamilton & Corbett-Whittier, 2013).
A number of studies involving young children in Britain (Burke, 2005; Clark, 2008; Clark & Moss, 2001, 2005; Waller, 2006), Iceland (Einarsdottir, 2005), New Zealand (Greenfield, 2004; Smith, Duncan & Marshall, 2006; Stephenson, 2009), and Northern Ireland (Lundy, McEvoy & Byrne, 2011) have cited Clark’s (2001) Mosaic approach. Although there is a lack of research explicitly stating the use of both methods, important features of case study analysis appear in all of the research using the Mosaic approach. For example, many of these studies have focused on one group of children, and have aimed to gain insight about experiences from the participant’s perspective (Clark, 2008; Clark & Moss, 2001, 2005; Einarsdottir, 2005; Greenfield, 2004; Lundy, McEvoy & Byrne, 2011; Smith, Duncan & Marshall, 2006; Stephenson, 2009). These studies also include a variety of data collection methods that have been selected purposely for the study, and together provide a better picture of what the participants are thinking and experiencing.

Fittingly, the aim of the proposed research study would be to deepen understanding about how young school children can be involved in planning outdoors. This could be accomplished by providing a select group of children with tools that would allow them to share their thoughts and ideas. Since the children I am most interested in looking at are between the ages of four and six, considerations must be made to ensure that the research tools chosen for this study are developmentally appropriate (Hamilton & Corbett-Whittier, 2013). I propose the primary use of qualitative methods when studying the opinions of young children, as written responses to surveys and questionnaires are not developmentally appropriate for children under the age of six. Observational notes alone would be subject to the researcher’s interpretation, which may lead to misinterpretations of what the children were doing and thinking. Data collection methods used within the Mosaic approach, such as photographs, drawings, tours, and map-making, would
serve as much more appropriate tools for research with this age group (Clark, 2001). By providing a variety of ways for children to communicate thoughts, these research methods fit well within the Reggio Emilia approach that I have tried to incorporate into my practice.

In order to grasp how children interact within the space, the researcher working with these young children would also need to closely observe and document what children do and say throughout the project. Reflection would also play an important role, as this guides the researcher to other questions or areas within the research study they had not thought about previously (Harland, 2014). This flexible approach towards the research process would ensure that children’s voices were respected and taken into account. We as adults cannot know for certain what children are going to say or think (Blanchet-Cohen & Elliot, 2011), so researchers must be willing to adjust their methods to fit the direction children take the project.

Most importantly, educators, inspired by reading the narrative and reflections illustrated using a case study format, could easily take findings from the study, and apply the knowledge gained to their own programs. Involving children in planning is complex, and as Harland (2014) writes, “understand[ing] complex real-life social situations requires either (a) experience or (b) learning from specific cases” (p. 1116). Harland (2014) continues by stating that case study research, “…firstly benefits the researcher undertaking the project and then, when new learning and knowledge are applied to practice, it can have utility for others” (p. 1114). Providing a clear case study of what child-driven planning for outdoor spaces may look like will allow educators to learn from others before tackling this type of project themselves. Harland (2014) explains that with case studies, “the unexpected should emerge and when it does, there is potential to make a useful contribution to knowledge, theory and practice” (p. 1120). A number of texts provide case studies or vignettes to illustrate a situation and spark change for educators. These books include,

The influential power of descriptive case studies about projects conducted with young children is clearly illustrated in The Hundred Languages of Children: The Reggio Emilia Approach to Early Childhood Education. This collection of writing describing the Reggio Emilia approach does not do so by listing the steps educators must take, nor does it analyze the statistical findings from studies they have conducted. Rather, these educators provide a detailed narrative describing various scenarios that illustrate the experiences of children. One such example is provided in Rankin’s (1993) chapter describing a long-term project about dinosaurs. Rankin (1993) provides the framework for the study, outlining for the reader the phases of the project, and how each phase played out with the children involved in the project. Excerpts from discussions with the children are included, bringing the project even more to life for the reader. Reflections are clearly illustrated throughout the chapter, adding depth to the research project and allowing it to read much like a story. There is a reminder at the end of this chapter that there is not one right way for a project to go, but this narrative provides a detailed example that may inspire other educators to engage in similar project work.

Capturing the voice of young children and involving them in planning a project is time consuming. Both proposed methods of research take a lot of time and effort, but it can be argued that if time is spent on showcasing the benefits of involving children in decision-making now, we may create powerful changes for the future of education across Canada. For this reason, I will
now explore a plan for future research in this area using case study analysis and the Mosaic approach.

**Planning for Research**

As I have previously outlined, Canada is lacking research with young children. In my search for studies investigating children’s involvement in planning for outdoor learning spaces on school grounds, I discovered this was an area that has not been studied. In an effort to close the gap in the research, I will provide an outline for future research in this area. Since there have been a number of studies involving children in research about outdoor spaces conducted in Britain, New Zealand, and Iceland, I will use these studies to create and support my framework. The purpose of this project is to provide a clear description of the next steps necessary in answering the question, ‘how can Canadian educators involve young children’s voice in the development of inspiring outdoor learning spaces?’.

Before the study can commence, the researcher will need to consider a number of factors, including participants, ethics, location, and timeline.

**Participants.** I propose that this study involve children aged four to six, attending Kindergarten in a public school in Canada. Since the space will ideally be used afterwards as a learning space for a whole class, this research would best be conducted with an entire Kindergarten class (up to 22 participants in British Columbia).

**Ethics.** Ethics would also need to be considered. Before beginning any research, ethics approval must be requested and granted. As has been previously mentioned, involving children
in research also requires additional steps to ensure children understand what the study is about, and that they know that they can withdraw from the study at any time (Hamilton & Corbett-Whittier, 2013; Einarsdottir, 2005). A number of studies have gathered consent from children and their parents, viewing children as capable of giving consent to participate in research (Blanchet-Cohen & Elliot, 2011; Einarsdottir, 2005; Waller, 2006). Especially since children would be actively involved in collecting the data for this study, it would be important for the researcher to gain their consent. The researcher would need to explain that the study’s focus was investigating outdoor learning spaces in order to make improvements. The researcher would explain that they would be observing children engaging in outdoor spaces in order to gain understanding about how they use the space. They would also explain that children will be involved in collected the data for the study using a variety of methods.

**Location.** Since case studies are site specific, it would be recommended for this research to be conducted in various parts of Canada. Weather varies greatly across this country, as do values and accessibility to outdoor space. It would also be useful to conduct research in large city centers, as well as rural areas, and compare the findings in each case study. For this study in particular, I propose that it is conducted in a small, rural community in British Columbia. The only two studies that I found that involve children’s voice regarding outdoor activities were conducted on Vancouver Island (Blanchet-Cohen & Elliot, 2011) and in Southern Ontario (Boileau, 2011). By conducting more research in British Columbia, it may be possible to compare the findings for similarities across the province.
Timeline. After investigating the existing literature, I propose a short-term, longitudinal study. Although a few of the existing studies consisted of a limited number of sessions (Boileau, 2011; Cook & Hess, 2007; Greenfield, 2004), studies that aimed to develop relationships (Clark & Moss, 2001, 2005; Smith, Duncan, & Marshall, 2006; Stephenson, 2009) or included any potential opportunity for changes to be made to their space (Clark, 2010) required much more time. The timelines for these studies ranged from five months (Stephenson, 2009) to 36 months (Clark, 2010). For this proposed research, I suggest that the study is set up to last approximately seven months. This timing would allow researchers to get to know students well and would allow time for ideas to grow from the students. This would also allow time for suggested changes to be considered by the school board. However, if changes were to be made involving an architect, building permits, and fundraising, more time may be required.

Once the researcher has a plan for participants, ethics, location, and timeline, they would be able to move forward with data collection.

Data collection methods. As has been previously mentioned, methods for data collection need to be well thought out, ensuring the methods chosen best match the research focus (Hamilton & Corbett-Whittier, 2013; Pollard & Filer, 1996). When using a variety of methods, each method compliments each other and helps the reader see the whole picture (Einarsdottir, 2005).

A popular tool used in the research conducted with young children has been photographs (Boileau, 2011; Burke, 2005; Clark, 2010; Clark & Moss, 2005; Cook & Hess, 2007; Einarsdottir, 2005; Greenfield, 2004; Lundy et al., 2011; Smith et al., 2006; Stephenson, 2009; Waller, 2006). Cook and Hess (2007) explain that they used photography with children because
this method is quick, easy, something kids enjoy, helps focus attention, gives kids control, showcases interest, and can be used in a report. Most researchers using this method have found that photographs really help guide conversation (Einarsdottir, 2005; Greenfield, 2004, Lundy et al., 2011; Stephenson, 2009). When given a camera to take pictures, children have often been asked to take pictures of things they enjoy or are interested in, and then discuss these photographs with the researcher (Boileau, 2011; Burke, 2005; Clark, 2010; Clark & Moss, 2005; Cook & Hess, 2007; Einarsdottir, 2005; Greenfield, 2004; Lundy et al., 2011; Stephenson, 2009; Waller, 2006). I have really enjoyed reading the descriptions and reflections researchers have included in their studies that involve children taking photographs, so I think this would be an insightful tool to include in this proposed research study.

However, photography has not been used alone. As previously mentioned, combined methods used with young children include observations, individual interviews, group discussions, tours, drawings, interviews with parents and educators, and book making (Clark, 2010; Clark & Moss, 2005; Einarsdottir, 2005). Some of the more uncommon data collection methods included games (Einarsdottir, 2005), model making (Clark, 2010), learning portfolios, unfinished storybooks, and picture questionnaires (Stephenson, 2009).

As Stephenson (2009) has found, using various methods allow more children to be heard, and can allow children to choose their preferred research method. Since Clark’s (2010) study, Transforming Children’s Spaces: Children’s and adult’s participation in designing learning environments, is very similar to the design I wish to propose for a Canadian study, I will suggest using the same data collection methods as were used in this study. These methods include cameras, verbal descriptions, tours, maps, books, interviews, model making, magic carpet, and a photo book (Clark, 2010).
Additionally, Lundy et al. (2011) tried an interesting approach to data collection that I would like to propose for this research study. These researchers described each of the methods they had decided on using with the students, and then asked the kids if they could think of any other forms of data collection they might want to use. Involving the children in the plan for research tools would give them an added sense of ownership, which I view as valuable.

Risk assessment. While the researcher is deciding on participants and methods, they will also need to be conscious of any potential for harm in this study. The researcher needs to ask themselves what could be potentially problematic and how they could deal with these problems. In order to ensure that children are not harmed during this study, the researcher will need to conduct a full risk assessment (see Appendix A) before beginning the study.

Proposed Research Project

I will preface the following description of the steps suggested for future research with a warning related to research with children. As I have mentioned earlier in this paper, research with young children needs to be flexible. When taking an emergent approach with children and allowing their voices to be heard, research will not always follow the path the researcher has laid out. By providing an outline of the steps one might take in conducting this research study, I aim to make this process less onerous on the researcher, but want to avoid doing the process a disservice by simplifying it into concrete steps. I will use the steps proposed in research in other countries to guide my decisions about potential steps a researcher would take in conducting this study.
Stages within the Mosaic approach. Clark and Moss (2011) outline a set of three stages that are typically followed in research using the Mosaic approach. The first stage is where children and adults gather the materials and documentation. This stage involves the use of data collection methods selected for the study. The second stage involves piecing together information for dialogue, interpretation, and reflection. This stage involves discussions about the data collected, confirming meaning with the child researchers. The third stage involves deciding on continuity and change. Clark and Moss (2011) suggest that four categories may emerge, including places to keep, expand, change, and add.

This third stage is one that is not included in all research with young children, as many of the studies have simply attempted to understand what children like and dislike, and have not involved the additional step of creating change based on these findings. For example, studies conducted by Burke (2005), Einarsdottir (2005), Lundy et al. (2011), Stephenson (2009), and Waller (2006) all began with children taking pictures of spaces they like outside and how they play outside. Some of the children in studies conducted by Einarsdottir (2005), Lundy et al. (2011), and Waller (2006) also took photographs while conducting a tour of their favourite places outside. The children in all of these studies then discussed the photographs with an adult, and the pictures were reviewed for themes. Although the purpose of Burke’s (2005) study was to influence planning and strategies at the government level, discussion about these changes was not included in this study.

In Clark’s (2010) work with transforming children’s spaces, children were first given cameras and asked to take pictures, and then also took part in tours, map-making, creating books, making models, and a picture slideshow. Six months later, children were asked to review the documents they created the first time through, confirming that these documents still represented
their thoughts. Children and the researchers then worked together to decide what to keep and what should be changed.

Using these studies as a guide, I suggest that children in a Canadian study follow a similar format. In particular, Clark’s (2010) research includes all of the elements I feel would be important for further research in this area.

**Stages of proposed study.** Throughout this entire research process, the researcher will be taking careful observational notes and photographs, and analyzing these pieces of documentation for themes and new ideas. In an effort to ease future research, the stages proposed in detail below have also been recorded in a simplified table (see Appendix B).

During the first stage in this proposed research project, children should have time for free exploration in their existing spaces around the schoolyard. This will allow time for them to connect with different areas, and find special places that mean something to them.

After a time period of 2-3 weeks of daily outdoor exploration, children will be given cameras. Giving children the simple guidance that they are to take pictures of areas of interest will provide some framework without limiting their choices too much. Five or six digital cameras will suffice, allowing children to take many pictures before passing the camera to another child. If the researcher finds that children within the study are taking too many pictures, they may decide to set a limit, but this will depend on the group of children. Children’s work with the cameras will span over a week or so. During the next week, children will work together with the researcher to select 2-3 photos on the computer that they would like printed to help facilitate further discussion. Once the pictures are printed, the researcher will meet with children in pairs to discuss why the child chose each picture. As suggested by Smith et al. (2006), paired
discussions are the most effective because, “friends can provide language support, mutual interest and a knowledge of shared activities” (p. 485).

After these pictures are taken, children will provide the researcher with a tour of their favourite spaces, and create maps of these spaces. Tours have been used in a number of studies in other countries as a way to further understanding about children’s connections to space (Clark, 2010; Clark & Moss, 2005; Einarsdottir, 2005; Waller, 2006). While children are working on their maps, they will be given an opportunity to look at other children’s maps for inspiration and add to their own. Once the maps are finished, children will discuss their map in small groups with the researcher. Rinaldi (2001) has found that discussion in groups of five maximizes cognitive learning processes, so I would suggest that the maps are analyzed in groups this size. The tours, map-making, and discussion with the researcher will take approximately two weeks to complete.

Children will then have an opportunity to look at pictures from other outdoor spaces using a slideshow format. Pictures will include ideas for small spaces, open spaces, spaces with plants, and spaces with trees. They will also include ideas for play with various natural materials that are available locally. The researcher will show the pictures to small groups of children, taking note of reactions to each of the pictures. Viewing the slideshow with small groups will take 2-3 days. Once children have viewed the slideshow, they will be provided with another week of free exploration outdoors to see how their play changes. During this time, children will be reminded that they have the opportunity to identify spaces they enjoy, and spaces they wish to change. The researcher will want to pay close attention to places children choose to play during observations and what they play with, experimenting with adding some new natural materials and seeing how they react.
Working in small groups, children will also be asked to draw a picture of their dream space outdoors. During this drawing process, the researcher will observe closely, viewing this process as important in understanding children’s thinking (Einarsdottir et al., 2008). Working with small groups on their drawings will take place over the span of one week.

The researcher will then present their findings thus far with the children, asking for feedback to ensure they have understood the children correctly. They will share the likes and dislikes that have been expressed, as well as the suggestions for change. As a group, the class will brainstorm all of the possible changes they could make to the school grounds, and the researcher will record these ideas by drawing a picture of each idea on a separate piece of paper. These pictures will then be spread out on a table in the classroom, and students will be given three tokens each to be used for voting on their favourite suggestions. The pictures and token system for voting provide young children with a developmentally appropriate way of voting. This process of brainstorming suggestions for changes and voting will take another week.

Once the votes are tallied, the children will work with the researcher to explore the possibility of making their suggested changes a reality. At this point, school board members, architects, building inspectors, and landscapers may need to be involved.

Up until this point in the project, the researcher will have been working with the children for approximately 10-11 weeks. It is at this point that meetings will occur, and decisions will need to be made about changes. This process may take several months, which is why the proposed timeline for the project was fairly long. However, if there are changes that can be made by the children, they will begin at this point. During this development phase, children will also be given a camera again to document changes from their point of view.
If simple changes are suggested, the project may conclude within a month from deciding on the changes, reducing this project to approximately four months. However, if structural changes were suggested, this stage may take much longer. When the suggested changes to the school grounds are complete, children will have another opportunity to reflect upon this experience using a variety of methods. Reflection may be guided by questions such as, ‘what was your favourite part of this project?’ or ‘what is your favourite outdoor space now?’ Children will be provided with the materials to express their thoughts in a variety of ways—building with blocks and playdough, drawing on paper, writing on whiteboards, acting with finger puppets, or talking with a partner. The researcher will also conduct a final individual interview (or in pairs if children are particularly shy), asking each child about their feelings and thoughts throughout the project.

Finally, students will be involved in deciding how to inform others of the stages of this project, and the changes to the schoolyard. The photographs, maps, slideshow pictures, drawings, and reflective creations will then be displayed as a way to showcase the stages of this project. The planning for showcasing the project will require a couple of weeks working with the children. Children may then decide to invite other classes, parents, or community members to their new space, and to view their documentation throughout the project. In the end, the researcher will need to tell the story of what happened (Hamilton & Corbett-Whittier, 2013). The final stage of presenting the reflections based on the findings will include children’s ideas about the changes created during the project. This story, or case study, will then be provided to educators as a model they may want to follow. It will provide educators with valuable information about how to involve children in project planning. As of right now, we are basing decisions about involving children in planning for outdoor learning on research conducted in
England, New Zealand, and Iceland. However, our schools differ in many ways, and the best way to inspire teachers in Canada to change is to provide local success stories.

Summary

Throughout these chapters, I have walked readers through my journey in investigating children’s involvement in planning for outdoor learning spaces. I began in Chapter one with a self-reflection, looking at my interests and beliefs to guide my work in this area. I identified my desire to know more about how children’s ideas about their natural surroundings could be used to assess the value of, and make changes to, our schoolyard. I also revealed the question guiding my project, ‘how can Canadian educators involve young children’s voice in the development of inspiring outdoor learning spaces?’ In Chapter two, I reviewed the literature pertaining to emergent curriculum and the value of outdoor play. I investigated the criteria for suitable outdoor learning spaces, and the role educators play within these spaces. I identified a gap in the Canadian literature pertaining to children’s involvement in planning for outdoor learning on school grounds, and proposed the need for further study in this area. In Chapter three, I then laid out a potential plan for future research, justifying the choice to use case study analysis and the Mosaic approach. Understanding that this research study would need to read as a clear, inspiring project for educators, I explored the possibility of including various research methods and described a potential structure for the study. My hope is that this work may inspire a Canadian researcher to use this structure to shape a study in this area. With the many benefits of time spent outdoors identified in this paper, I trust that this structure may be useful in future research exploring ways to encourage educators to take learning outside.
Chapter 4: Reflection

It is incredibly rewarding to reflect on all that I have gained throughout this Master’s program. My ideas and attitudes have shifted over the past two years, and I have grown in ways that I never expected. In this chapter, I will reflect on the impact that the Masters of Education (Early Childhood Education) program has had on me personally and professionally. I will begin with discussing how my beliefs and actions as an educator have changed while taking part in this program, reflecting on experiences gained through each course. I will then address how I plan on applying what I have learned to my future as an educator of young children, and how I will share my knowledge with others. Finally, I will conclude with recommendations for educators interested in learning with children outdoors and involving them in creating outdoor learning spaces.

My Transformative Journey

I recently met with a colleague that I taught with before beginning this Master’s program. She asked me many questions about past practices and beliefs, and it was during this discussion that I realized just how much I had changed as an educator. I feel fortunate to have had the opportunity to work towards my Masters degree now, having spent a few years in the classroom already, but with many more years ahead of me. After a few years in a Kindergarten classroom, I have now had my mind and heart opened to alternative approaches to teaching. Over the past two years, I have allowed myself to question and experiment, opening myself up to change and the unknown. Many of these courses forced me out of my comfort zone, stretching my thinking and understanding. Until this time, I had felt many moments of uncertainty, which had caused anxiety and worry. I made many decisions based on books I read about teaching, past practices
of other teachers, and my own educational experience. This program gave me confidence as an educator- I certainly still question my practices, but I now approach these questions with wonder and excitement.

**Changes in Beliefs and Actions**

Some of the most common questions I have asked myself over the past two years have been in reference to my beliefs about educating young children. I realized early on in this program that I no longer saw my role as solely a teacher of the mind, but also an educator of the heart. As a result of this realization, a number of my beliefs and actions have shifted.

**Connections.** Above all, I believe in connections; connections between adult and child, between child and nature, and between children themselves. Although each of the courses within this program was different, they all explored the importance of relationships and connections in some way. In the course, *Emerging Trends and Topics in Curriculum Studies*, the term ‘ecology’ was related to education, described as the study of interactions amongst organisms and their environment. I began to understand my classroom in a new way, seeing my students and their interactions within this space in a new light. Reading Margaret Wheatley’s work on relationships helped me move away from thinking about relationships hierarchically to viewing them as connected like a web. I started thinking a lot more about relationships and their impact on individuals, and began analyzing them closely. My observations within the classroom were defined during our *Qualitative Research Methods* course, when I read Angrosino and Rosenberg’s (1998) words about observation.
Rather than attempting to describe the composite culture of a group or to analyze the full range of institutions that supposedly constitute the society, the observation-based researcher will be able to provide a rounded account of the lives of particular people, focusing on the lived experience of specific people and their ever-changing relationships (p. 170).

I started to see myself as a researcher as well as an educator, invested in finding out more about my students and the relationships between them. As I continued to watch the interactions between my students, I realized much of their learning came from coaction, a term described by Martin and Towers (2009) as understanding that comes from the shared action of the group, rather than from any one individual. Dr. Thom’s *Early Numeracy* course taught us about the enactive perspective, viewing children as working towards collective understanding. Her course expanded my thinking about relationships to incorporate connections between objects as well. She planned many activities for this course with a focus on finding connections or relationships between materials, explaining that this is the best way to understand mathematical concepts.

As I observed children’s interactions with each other and their environment, I began to look closer at the relationship between my students and myself. Although we learned a great deal about best practices through readings and assignments from our *Early Literacy* course, what stuck with me most was the relationship Dr. Tobin created with each of us. Her patience and kindness and the effort she put into connecting with each student every day was felt by all. She communicated her expectations clearly, and was willing to answer any questions students had. She made each of us feel important, and I will continue to try to replicate her practices in my own classroom.
The connections we made with professors like Dr. Thom and Dr. Tobin would not have been possible if their courses were online. Reflecting on this, I realize just how much value face-to-face interactions have. The experiences with these professors were enriched by their presence, and I have tried to apply this knowledge to my interactions with parents. Although communicating news or information to all of my parents has been simplified by email, I have found that there is great value in taking those extra few moments to connect in person as well.

**Meaningful engagement.** The focus on observation in many of the courses also helped me to become more present with my students. Although I have believed in hands-on, authentic experiences for some time, my actions did not always reflect this belief. During the *Primary and Kindergarten Institute*, Dr. Anna Kirova’s assignments related to play encouraged me to reflect on my own memories of play and understand that these memories and experiences impact my teaching. She also encouraged us to take another look at play and how it might be woven into the classroom in more authentic ways. At the beginning of my teaching career, I thought I was supporting hands-on learning by providing file folder games and matching card games. I figured that since I was not putting a worksheet in front of my students, I had provided a meaningful learning activity. This thought was supported by so many teacher resource companies, advertising these activities as fun and engaging. Inquiry learning was just a buzzword for me before this program, but the value of this type of learning was reiterated throughout many of the courses. Peter Johnson’s *Opening Minds* taught me to value the process rather than the product. I began to reevaluate the activities within my day-to-day routine, asking myself whether they represented a belief that the process was important. We learned about the power of drawing, opening my eyes to the value that drawings have as a communication tool. I
wanted to create learning opportunities that were meaningful to my students, and realized that differentiation was required. I watched for moments when my students were most engaged, and tried to recreate more of those moments throughout our day. I tried to take out many activities that were simply routine, and fill these time slots with activities my students found meaningful.

**Child-led planning.** From here, I became very interested in the Reggio Emilia approach and emergent curriculum. I dove into books such as, *The Hundred Languages of Children, Learning Together with Young Children: A Curriculum Framework for Reflective Teachers* and *Emergent Curriculum in Early Childhood Settings*. The words on the pages spoke so loudly to me, describing the value of children, their ideas, and their way of expressing themselves. I felt empowered by the rich descriptions of long-term projects, such as the dinosaur project, hoping that I might provide these rich experiences for my students. For an educator such as myself, who has been used to planning, making lists and organizing in advance, the idea of flexible planning was very frightening at first. Having the support from articles read throughout the first few courses of this program helped me take these chances. Teachers with set routines and lessons planned weeks in advance were no longer enviable in my eyes. I now believe wholeheartedly that great teachers listen well and follow student interests. These teachers allow time for changes to their plan, and reflect on their practices in order to make improvements. While reflecting after a lesson, I used to feel as though I should have changed course or allowed children to direct our learning rather than pushing through to do what I had planned, but I find myself following my students interests much more easily now. My actions are aligning with my beliefs!
**Learning outdoors.** The belief I am most proud of developing over the past two years, the one that I feel encompasses all of the previously mentioned beliefs within it, is the value of time spent outdoors. I used to view time outside as a break, a space for ‘free time’, without giving any thought to the learning that takes place in this space. Dr. Filler’s *Developing Ecoliteracy in Early Childhood* course changed all of that. When I first found out I was required to take this course, instead of the *Guns and Barbies* course that was only being offered to students on campus, I was very upset. Gender studies had been a major focus of my undergraduate degree, and it was an area I felt comfortable and was interested in. I had forgotten about the incredible power of stepping out your comfort zone. Although my interest in taking my students outside had already been sparked by Lisa Lockerbie’s description of the Nature Kindergarten program during the *Primary and Kindergarten Institute*, I only wanted to dip my toes into these unknown waters. At that time, I worried that I would need to learn names of various plants and insects, and did not enjoy the prospect of memorizing these names over the next few months.

However, the readings and discussions for this course encouraged me to take my students outside and see what happened. O’Brien (2009) and Finch (2012) introduced me to the idea of Forest School and Nature-focused preschools, followed with Bentsen, Mygind and Randrup (2009) with a description of udeskole and Kane and Kane (2011) discussing WaldKindergarten. I began exploring forest schools and how to adopt some of these methods in my classroom. Rachel Carson’s *Sense of Wonder* (1956) was read repeatedly, as was Richard Louv’s (2005) *Last Child in the Woods*.

During our first trips outside, I began to feel the calm and peace that comes from being outside. I was immediately transported to Finnerty Gardens, a place that now held very special
meaning after Dr. Thom had hosted our *Emerging Trends and Topics in Curriculum Studies* course there. I had tried for flow in my classroom, trying to arrange my daily schedule in different ways, but was never able to achieve the flow that I felt outdoors. The hurried feeling that I had in the past all but disappeared outside. I watched each student find their place—the busy, active children had a place, but the quiet, thoughtful children had a place too. Communication and problem solving improved, and children became resilient, confident individuals. I had previously thought that children would be wild and unsafe outdoors, but letting go of my control had opened an exciting world of wonder and learning for me as well.

I do realize that many of the teacher training programs push the importance of technology and its use within the classroom. However, I do not believe that time spent with Smart Boards or in our computer lab is going to help children in their future. We understand that creative thinking, cooperation, communication, problem-solving skills, stress management, and self-regulation are important skills for children to practice, so what better environment than following their interests outdoors? The descriptions of professional development for teachers are filled with words such as, ‘self-regulation’, ‘mindfulness’, ‘differentiated instruction’, and ‘behaviour management’, and I see the outdoors as the most successful environment for working on all of these skills.

Now that I have given the idea a lot of time, thought, and research, I see time spent outdoors as an important part of educating children. I can say confidently that I believe in the benefits of outdoor education for all children. Choosing to investigate the idea of having children choose outdoor learning spaces as my final project topic was fueled by this belief. I have always wanted to create an environment that was safe and engaging, providing opportunities for children
to develop a love for school, and I finally feel as though I can do this by taking learning outdoors.

**Reflection.** As is evident throughout this chapter, I believe in the value of reflection. I valued many of the speakers for the *Primary and Kindergarten Institute 2013*, who pushed me to reflect on past practices concerning communication with parents and documentation. I thoroughly enjoyed keeping a reflective journal in our *Developing Ecoliteracy in Early Childhood* course, and looking back on those entries is energizing, inspiring me to continue this journey with my students. Reflecting each day on the discussions from Dr. Thom’s *Early Numeracy* course made my head spin for hours, but I am so thankful for the way that these lessons expanded my thinking. Thom (2012) describes the four R’s as reflect, review, relate, and renew. I have gone back to these four R’s many times throughout this program, and know that I will continue to use them in my future.

Having the opportunity to take part in the *Comparative ECE: Curriculum, Context and Culture* course near the end of our program encouraged me to investigate a number of topics I was still invested in (i.e. gender studies, the role of technology in children’s lives), but also helped me narrow my project focus. I realized that outdoor education and children’s involvement in planning simply is not an area of focus for many education courses, and I felt like it should be. I thoroughly enjoyed the mind mapping exercise, recording all of the ideas I could think of that were linked to using the natural environment to inspire young learners. This form of written reflection about this topic helped me organize my thoughts about why outdoor education is important, and also fueled me to encourage other educators to get kids outside.
However, until taking part in this program, I did not give my students frequent opportunities for reflection. The idea of providing time for reflection was always at the back of my mind, but I rarely acted upon it. I have now matched this belief with action, making time for reflection and sharing my reflections with my students. Listening to my students’ reflections has given me great insight into their interests and understanding, and reflecting on my own practice has helped me become the educator I wish to be.

**Future Impact on Professional Career**

Going forward, I feel ready to continue experimenting with new ideas in my classroom and sharing my ideas with colleagues. I have been asked many times about my plans for administration or further education, but I do not have a desire for either path at this time. Instead, I am now eager to get back into the classroom and continue changing and learning. I have learned to embrace change, and wish to share my changes in thinking with others. As I see articles related to the importance of time in nature and children’s lack of exposure to nature, I feel as though I have an informed opinion about this topic, and can discuss it comfortably with others. I thoroughly enjoy sharing my strengths and passions with colleagues, and look forward to learning more from them as well. I have learned a lot from colleagues in our cohort, and sincerely hope to stay in touch with them.

Last year, one of my colleagues, Sandra, and I worked together on a project titled, *Greening the Curriculum*. Our goal was to connect the 2013 BC curriculum drafts to learning outdoors. We were very excited to see how many ways the new curriculum could be linked to outdoor learning, and pulled many ideas from various resources describing activities that educators could do outdoors. Although the binders of ideas need some organizing, I really look
forward to putting this project into practice in my classroom, and seeing how I can adjust it to meet my desire for child-led learning.

During my first year in this Master’s program, I also became involved in a local organization called the Columbia Basin Environmental Education Network (CBEEN). I attended a number of workshops focused on getting children outside in nature, and really valued this team of dedicated individuals. I did not feel as though I had time to take part in as many of their events this past year, so I really look forward to getting involved again in the future.

**Key Recommendations**

Over the course of this Master’s program, I have come up with a few recommendations for other educators interested in emergent curriculum and outdoor learning. A quick Internet search for emergent curriculum will provide educators with informational text, photographs of spaces supporting this type of learning, and wonderful resources to help get started. For educators interested in taking their students outside, the Internet is also loaded with support for this decision. Articles discussing the importance of nature, free play, risky play, and time outside are easily found. As soon as one begins to look, many documents supporting outdoor play for young children will spring up.

**Forest Schools Canada handbook.** I found The Forest School Canada website to be an incredible resource, with many links supporting curriculum development. The most valuable resource that I have found along the way was the Forest School Canada handbook, *Forest and Nature School in Canada: A Head, Heart, Hands Approach to Outdoor Learning*. Even for
educators interested in getting their students outside a couple more times each week, this
document provides incredible support to all educators.
This document provides quotes that speak to why I teach children, provides examples of what
learning outdoors may look like, and answers many of the frequently asked questions about
learning outside. I think it would be challenging to read this document and not be intrigued by
this approach to education.

**Listen carefully.** Educators need to observe and listen to children carefully, reflecting on
what they see and hear. We rarely take time for this in our daily lives, but when we stop and
listen carefully to children, magical moments arise. During one of the magical conversations I
had with my students this past year, one of them casually said, “you’re not really an adult,
right?” When I asked what she meant, she explained that adults don’t play, and although they
might listen sometimes, they don’t really hear.

**Trust the process.** The absolute best recommendation I can give to anyone interested in
learning beside young children comes from a five-year-old student who was in my class this past
year. While exploring leaves by piling them up, jumping in them, and throwing them in the air,
this little girl burst out gleefully with, “Mrs. Burgess, take a chance!”. I had been standing on the
sidelines, observing and taking photos of the students, thinking I was engaged. However, this
comment made me realize that I was on the outside of this experience, and I needed to jump in.
Trust in the process usually involves moments that are frightening and uncomfortable. Despite
these challenges, the changes and growth that come from trusting the process make the decision
worthwhile. The words, ‘take a chance’ can be applied to any part of an educator’s journey, and I strongly suggest taking these precious words and applying them right away.

**Conclusion**

As I take the next step forward on my educational journey, my practice is now more in line with my beliefs. My strong beliefs about the value of connections, meaningful engagement, child-driven learning, outdoor experiences and reflection have been demonstrated in this chapter, along with the actions that now align with each belief.

All of the courses, readings, discussions, and assignments certainly did contribute to my learning, but it was even more than that. Being back in school gave me the confidence to question, wonder, and research areas of interest related to teaching young children. In an assignment for the *Developing Ecoliteracy in Early Childhood* course, I described the educator’s role as, ‘a provider of opportunity’. I am very happy to say I have worked on performing this role throughout the past two years and will continue to work on doing so in the future. I now so look forward to bringing my knowledge and experience back into my classroom, continuing to build and grow as my learning continues.
References


designing learning environments. Abingdon: Routledge.


London/Paris: Earthscan/UNESCO.

Duerden, M. & Witt, P. (2010). The impact of direct and indirect experiences on the
development of environmental knowledge, attitudes and behavior. *Journal of
Environmental Psychology, 30,* 379-392.

promoting physical activity. *Health Education Research, 23*(6), 952-962.

Dyment, J. E., Bell, A. C., & Lucas, A. J. (2009). The relationship between school ground design

Edwards, L. Gandini, & G. Forman. (Eds.), *The hundred languages of children: The
Reggio Emilia experience in transformation, 3rd edition* (pp. 147-172). Santa Barbara,
CA: Praeger.

C. Edwards, L. Gandini, & G. Forman. (Eds.), *The hundred languages of children: The
Reggio Emilia experience in transformation, 3rd edition* (pp. 5-26). Santa Barbara, CA:
Praeger.

Einarsdottir, J. (2005). We can decide what to play! Children's perception of quality in an


Faber Taylor, A. & Kuo, F. E. (2009). Children with attention deficits concentrate better after
walk in the park. *Journal of Attention Disorders, 12*[5], 402-409.


of teachers and children from North America (pp. 24-27). Worchester, Massachusetts: Davis Publications.


young children’s perspectives on outdoor learning. *Children, Youth and Environments, 16*(2), 75-104.


Appendix A

Risk Assessment Sample 1


Example:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Commentary</th>
<th>Information Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits of allowing self-built structures</td>
<td>Children greatly enjoy building, using and modifying structures. Such structures signify a strong sense of ownership by children. Their presence can enrich play spaces and make them locally distinctive, at little or no cost.</td>
<td>Numerous studies on children’s outdoor play. Everyday experience and observation.</td>
</tr>
<tr>
<td>Risks</td>
<td>Built structures may present some bad risks. Their location may increase risks of falls. Rope swings may break unexpectedly, they have a risk of strangulation, and they may be located near or above hazardous objects. Structures may encourage inappropriate behaviour, or generate litter or food debris. Concentrated use may add wear and tear.</td>
<td>Everyday experience and observation. Experience of play inspectors. Principles of BS EN 1176</td>
</tr>
<tr>
<td>Expert views</td>
<td>Play and child development experts assert the developmental value of self-built structures. Concerns from safety experts about the</td>
<td>Rope swings, dens, tree houses and fires: A risk based approach for managers facilitating self-built play structures and activities in</td>
</tr>
<tr>
<td>Relevant local factors</td>
<td>presence of self-built structures in dedicated play provision.</td>
<td>woodland settings. (Harrop, 2006)</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td>The nature and types of self built structures present, their locations and levels of use.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Where self-built structures are located within play areas, parents and children may have higher expectations of their structural soundness.</td>
<td></td>
</tr>
<tr>
<td>Options and their pros and cons</td>
<td>1. Remove/destroy structures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Modify structures (with or without input from children).</td>
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<td></td>
<td>3. Leave structures alone.</td>
<td></td>
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<tr>
<td></td>
<td>4. Attempt to create comparable play experiences in a different way.</td>
<td>No new information: options need to be discussed and pros and cons weighed up.</td>
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<tr>
<td></td>
<td>5. Allow self-built structures only in staffed provision.</td>
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<tr>
<td></td>
<td>Removal of structures will upset and potentially alienate users. Modification with children’s input could be time-consuming, but may encourage them to take a more responsible approach.</td>
<td></td>
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<tr>
<td></td>
<td>The merits of different approaches will be highly dependent on location of structure.</td>
<td></td>
</tr>
<tr>
<td>Precedents/comparisons</td>
<td>Some park managers routinely remove self-built structures, especially from play areas. The Royal Parks allow dens to be built in Richmond Park. The Forestry Commission has published guidance on managing risks relating to self-built structures in its own woodlands, although this guidance is not intended for application to public play areas. Other guidance specifically for adventure playgrounds also exists.</td>
<td>Forestry Commission guidance Rope swings, dens, tree houses and fires: A risk based approach for managers facilitating self-built play structures and activities (Harrop, 2006). This applies to Forestry Commission land specifically. Risk and Safety in Play (PLAYLINK, 1997).</td>
</tr>
<tr>
<td>Risk-benefit judgement</td>
<td>Dependent on the policies, values and objectives of the provider, and on local</td>
<td></td>
</tr>
</tbody>
</table>
Implementing judgement locally

Local attitudes may vary widely: in some areas there may be some hostility, in others there may be a longstanding local tradition of structure building.

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<table>
<thead>
<tr>
<th>Issue</th>
<th>Commentary</th>
<th>Information sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td></td>
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<tr>
<td>Risks</td>
<td></td>
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<tr>
<td>Expert views</td>
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<tr>
<td>Relevant local factors</td>
<td></td>
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<tr>
<td>Pros and cons of options</td>
<td></td>
<td></td>
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<tr>
<td>Precedents/comparisons</td>
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<tr>
<td>Risk-benefit judgement</td>
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<tr>
<td>Implementing judgement locally</td>
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</tbody>
</table>
Risk Assessment Sample 2


Checklist for Evaluating an Outdoor Play Setting for Young Children

The Environment Is Safe
- Free of toxins, free of allergenic, poisonous, and spiky varieties of plants
- Fall-absorbing surfaces in all equipment settings
- Free of steep slopes and sudden drop offs
- Well-maintained equipment
- Well-supervised
- Hard surface paths separated from other play areas
- Play area securely separated from traffic
- Provides hand rails and non-skid surfaces where needed
- Properly drained clearly-defined boundaries between play settings
- No visual barriers for supervision
- Adequate space around swings and climbing equipment

The Environment Is Comfortable
- Provides shade
- Features sunny areas
- Protects from cold wind
- Features places to sit (for children and adults)
- Provides access to fresh drinking water
- Includes small spaces for quiet play (by 1 to 5 children)
- Includes a variety of well-defined zones to accommodate different groupings of children and different activities
- Features transition areas between buildings and outdoors (e.g., terraces, decks, patios, etc.)

The Environment Is Interesting and Inviting
- Features attractive plants includes a variety of surfaces and terrains
- Attracts wildlife
- Offers a variety of social spaces (for different size groups & different types of activities)

The Environment Is Stimulating
- Features different colors, scents, and sounds
- Provides for a variety of activities
- Offers high places from which to view the area
- Offers different-sized spaces to crawl in, under, over, or through
- Invites interaction with the natural environment

The Environment Is Flexible
- Includes “loose parts” which can be moved about
o Includes access to elements which can be changed or moved about (sand, dirt, vegetation, water)
o Includes undefined spaces and objects which children can use for creative & fantasy play

The Environment Is Accessible

o Includes child-sized tables and benches
o Offers several skill levels or levels of difficulty (e.g., high, higher, highest)
o Includes wheelchair accessible entrances, ramps, paths, tables, playground equipment

The Environment Is Challenging

o Provides opportunities for healthy risk taking for children with varying abilities
### Appendix B

**Research Question:** How can Canadian educators involve young children’s voice in the development of inspiring outdoor learning spaces?

**Stages of Research Study**

Proposed by: Natasha Burgess

<table>
<thead>
<tr>
<th>Stage</th>
<th>What This Looks Like</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Exploration Outdoors</td>
<td>Allow time to connect with different areas; find special places</td>
<td>2-3 weeks</td>
</tr>
<tr>
<td>Take Photographs</td>
<td>Using a digital camera, children take photos of areas of interest outdoors</td>
<td>1 week</td>
</tr>
<tr>
<td>Select Favourite Photos/Discuss</td>
<td>Children work with the researcher to select 2-3 photos they would like printed to help facilitate further discussion. Discussion would then take place in pairs to find out why the child chose each picture.</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>Tour and Map Making</td>
<td>Children provide researcher with tour of favourite places, and create maps of these spaces. Once complete, children will discuss map with researcher in groups of up to 5 children.</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Slideshow</td>
<td>Children look at pictures of other outdoor spaces in small groups. Pictures will include small spaces, open spaces, spaces with plants and with trees. Researcher takes notes on reactions to pictures.</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Free Exploration Outdoors</td>
<td>Researcher observes closely to see if/how play has changed. Children will be reminded at this time that they have the opportunity to identify spaces they enjoy and spaces they wish to change.</td>
<td>1 week</td>
</tr>
<tr>
<td>Drawing</td>
<td>Working in small groups, children draw a picture of their dream space outdoors. Researcher observes closely during drawing process.</td>
<td>1 week</td>
</tr>
<tr>
<td>Sharing and Discussion</td>
<td>Researcher presents findings thus far to children about likes, dislikes, and suggestions for change. As a group, children brainstorm possible changes while researcher records their ideas as drawings.</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Vote</td>
<td>Children will receive three tokens to use to vote on the drawings representing their ideas about change.</td>
<td>2-3 days</td>
</tr>
</tbody>
</table>

Once the votes are tallied, children will work with researcher to explore the possibility making their suggested changes a reality. School board members, architects, building inspectors, and landscapers may need to be involved. Meetings necessary to bring about change may take several months. However, if there are changes that can be made by the children, they will begin at this point.

<table>
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<tr>
<td>Photograph changes</td>
<td>In order to record changes being made by children, they will be given digital cameras to document changes from their point of view.</td>
<td>During changes</td>
</tr>
<tr>
<td>Reflection</td>
<td>Using a variety of methods, children will reflect on this process. Methods may include answering discussion questions, building with blocks and playdough, drawing on paper or on whiteboards, acting with finger puppets, or talking with a partner.</td>
<td>1 week</td>
</tr>
<tr>
<td>Individual interview</td>
<td>Researcher asks each child about their feelings and thoughts throughout the project, using printed photographs from project to aid discussion.</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>Display documentation</td>
<td>Children will be involved in deciding how to inform others about this project. The photographs, maps, slideshow pictures, drawings, and reflective creations will be displayed as a way to showcase the stages of this project, and children may decide to invite other classes, parents, or community members to their new space.</td>
<td>2-3 weeks</td>
</tr>
<tr>
<td>Case Study Formation</td>
<td>Researcher will record the whole project in case study format, including children’s ideas about changes, as well as their reflections. This case study will be provided as a model that other educators may wish to follow.</td>
<td>4-5 weeks</td>
</tr>
</tbody>
</table>

*Researcher to be taking careful observational notes and photographs throughout, analyzing documentation for themes and new ideas*

*These are potential steps for study; subject to student interests*