Outdoor and Play-Based Education: Bridging the Gap Between the Classroom and the Forest

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Abstract

Recent years has shown a rapid upward trend of a decline in students overall well-being and academic output in elementary education. Physical health is declining and students are more frequently being diagnosed with anxiety, depression, behavioural, and attention disorders. Children spend most of their developmental years in school and education plays a large role in cultivating child development and academic success. Traditional teaching frameworks largely focus on children's academic output, often paying less attention to their developmental needs. Through my experiences as an elementary educator, I have witnessed the positive impacts of facilitating outdoor and playful learning experiences that focus on developmental needs and academic success for a more holistic learning approach. Outdoor and play-based education are powerful teaching pedagogies that enrich and provide a more meaningful learning experience that cultivates whole child development; physical and mental health, cognitive development, and social emotional learning (SEL). Being outdoors and using play as a learning tool provides students with whole body development, because they are exposed to fresh air, hands-on learning experiences, and creative thinking opportunities. My paper will advocate that outdoor and play-based education is an important method of curriculum delivery as students receive an enriched and holistic learning experience. For educators to support students personal and academic growth, we must advocate for the implementation of outdoor play-based education through exploring the benefits and practical applications.

Keywords: outdoor education, play-based learning, child development, academic achievement, holistic learning, nature*, elementary education*

Contents

Chapter One: Introduction

In this chapter, I begin by reviewing how I began my journey into the Master of Education program and how it helped cultivate and refine my teaching practice and my capstone project topic. I then explain how my interest in outdoor and play-based learning was developed through my life and my teaching experiences. I will then review the significance of outdoor and play-based learning for elementary students and teachers. To conclude the chapter, I will present my argument.

Educational Journey

As an educator who demonstrates daily learning practices with my students, I firmly believe in a lifelong learning journey. Knowledge is beautiful and is constantly changing. I encourage my students always to be curious about the knowledge around them, reflecting my eagerness to learn new things constantly. Five years ago, I graduated with my Bachelor of Education degree and began my career as an elementary educator. As a brand-new teacher, I knew that one day I would like to advance my professional career by taking my master's, but I assumed this would be in five or ten years after gaining some teaching experience. However, Circumstances changed quickly for me when a global pandemic hit six months into my teaching journey. I suddenly found myself in an empty classroom with more time on my hands than I liked. I was eager to fill my time productively and in a way that expanded my knowledge to serve my students better. This marked the beginning of my journey in the Master of Education program. Reflecting on my practice at the time, I was eager to develop new skills, understandings, and awareness that would develop growth in myself as an educator and reflect on my students for their growth.

Reflecting on the program I immersed myself in, many aspects aided my personal growth as an educator. They also connected the dots of the capstone topic I am passionate about. The reoccurring themes throughout the course that I resonated with the most and found myself weaving into all my assignments were having a reflective practice, encompassing a holistic learning approach, cultivating a

caring mindset, and being a transformational leader. Having a reflective practice is something that every course in the Master of Education program has encouraged. However, the Diversity: Constructing Social Realities and Principles and Processes of Educational Leadership courses solidified this. As an educator, having a reflective practice has always been important to me to adjust and grow to best meet my student's needs. These two courses allowed me to solidify this importance and dive deeper into reflecting on ways that I could best help my students learn in a meaningful way.

Through the Philosophy and History of Education, Learning Through Play, and the Curriculum, Teaching and Learning courses, I was provided with different perspectives and lenses of teaching, which helped solidify my theoretical teaching foundation and cracked open the door towards my capstone topic. These courses encouraged me to refine my teaching pedagogies and assess the effectiveness of my teaching by applying the new knowledge. I found myself aligning with Nel Nodding's (2005) caring practices, finding ways to shift towards a teaching approach that was holistic and student-led, embracing play-based learning and taking my learning outdoors. Looking back on the progress of my work in the program, I see my educational philosophy weaving its way through and recognize the important role I play as an educational leader in finding the best practice to help my students learn holistically.

Interest in My Topic

Growing up, I have always had a love for nature. I was lucky enough to grow up on a large property that was situated against endless forests with a few spread out neighbours. My childhood was during the late 1990’s and early 2000’s, which meant minimal screen time. Television was saved for sick days or family movie nights. Our household did not have any form of video games until 2010 when we got a WII. The WII was treated like the television, and it was only used for special occasions. My brother and I spent all of our free time running freely on our property and throughout the forest behind our house with the other neighbourhood children. We were allowed to be outside without adult supervision

if we periodically checked in. This experience really allowed my brother and I to grow up experiencing risky play and getting to be ourselves. We were outside no matter the season and always had endless activities to do and the imagination to want to do them. We built forts out of sticks or snow, built rafts to float on a nearby lake, road our bikes, played in the mud, invented games, and got acquainted with bugs and local wildlife. On the weekends with our parents, we explored the forest on quads and snowmobiles. We also spent a lot of time camping in the many beautiful places in and around our home in the Cariboo. Looking back on my childhood, many of my happiest memories are from these outdoor experiences. When I met my husband, he grew up with a similar lifestyle, and we knew that was something we wanted to continue for ourselves and how we wanted to raise our children one day. We purchased our first home on a beautiful forty-acre property that shares the space with a forest, ponds, and marsh. We can walk out the backdoor onto Crown Land, where we spend lots of time exploring with our dogs and daughter. Spending time outside grounds me. I feel happy and relaxed. If I have had a stressful day, I can reset myself by immersing myself in nature. With my traditional experience of indoor schooling growing up and my teacher training and practicums also focusing on traditional pedagogies of learning, it never occurred to me that I could instil my love of nature into my teaching practice until my experiences with the pandemic and the master's program ignited a flame for me.

My interest in outdoor and play-based learning as a teaching practice first sparked when I took the course Learning Through Play. During this time, I was in my second year of teaching, my third semester in the Master of Education program, and the pandemic was still in full swing. I was on a four-month temporary contract in a grade three-four split class in one of the inner-city schools. This class had many students who were struggling with aggressive behaviours, which created a learning space that was negative for them, the other students, and myself. Many of these students witnessed an extreme disconnect from wanting to learn. These students consistently put each other down, were unwilling to cooperate as a team, and displayed low academic scores. This shocked me, coming from such a young

age of students. To top off this hard situation, this class was also situated in a section of the school that had no windows and no natural light coming in. This environment was not conducive to adequate learning. I was struggling to connect with this class, and I could see that the students were struggling academically and emotionally. The combination of these situations, alongside the pandemic, had my mental health at an all-time low, and I was rapidly facing burnout. My confidence in my teaching practice to help these students learn needed to be improved. I constantly asked myself what I could do differently. How can I best help these students want to learn and help them self-regulate? I blamed myself and thought that I was not a good teacher. I considered taking a leave to reassess my situation.

During this teaching experience, I took the special topics elective course Learning Through Play, which focused on playful learning in nature. This was a lightbulb moment for me, and I thought, why are we spending all our time in a space that was impacting the students learning and my ability to teach? I started bringing this class outside as much as possible to be in natural light to help myself teach and encourage them to engage in their learning. When going outside, I faced a lot of pushback from many students and heard phrases such as 'I am bored,' 'There is nothing to do outside,' 'I hate outside,' etc. Despite this, I continued to take the class outside. This shift in my teaching practice was nearing the end of my contract with this class, but I noticed a change in the brief time we did this. I noticed a shift in myself and felt refreshed and ready to tackle another day with this class. I noticed my students starting to get engaged in the learning we did, and their behaviours became more manageable outside. This change made me excited and curious about outdoor and play-based learning. Since then, I have dived deep into research and found ways in the rest of my courses to weave these teaching pedagogies into my assignments to deepen my knowledge and reflect on my teaching.

The following year, I took a job in a multi-grade rural school, where I implemented outdoor learning into my teaching practice more regularly. Instantly, I felt happier, and my confidence as an educator was coming back. I initiated Ferguson's Forest Friday; every Friday, I take my class outside for

the whole day. Some examples of what this learning has ranged from are physical exercise when snowshoeing, seasonal-themed science lessons, nature journaling, math lessons, and Applied Design, Skills, and Technology (A.D.S.T.) challenges through habitat and fort building. My students demonstrate a hunger for learning through my teaching program, and their academics reflect this. We can focus on our learning when inside the classroom and can apply the knowledge to real-world experiences when we go outside.

Through both teaching experiences, I saw the benefits and success of outdoor learning with play-based approaches on the student's health and academics. My courses in the Master of Education program allowed me to realize further that I wanted to incorporate outdoor learning meaningfully and authentically into my teaching practice. I have not been trained in outdoor and play-based learning, and I only sometimes feel well-equipped or knowledgeable. To change this, I have been continuously researching, taking related professional developments, and following and getting inspired by other outdoor educators to improve my practice. Outdoor and play-based education has been my professional growth goal for the past three years, and I have never looked back.

Topic Importance

Educators have an important job to provide students with authentic and meaningful learning opportunities that enrich their personal and academic growth. I believe that to do this, educators need to teach the whole child through a holistic approach that nourishes curious, engaged, happy, and healthy learners to ignite their love of learning and ultimately benefit their academic growth. For centuries, important philosophers and theorists such as Socrates, Aristotle, Fredrich Frobel, John Dewey, and Maria Montessori – to name only a few – have argued for learning to take on nature and play inspired pedagogies because of the multitude of benefits it has on human health and development (Cree & Robb, 2021). Despite the profound research on these teaching practices, education has shifted away from this, and a more formal and indoor approach has been instilled in the education system. This shift

has been largely influenced by the urbanization and technology-driven world today (Cree & Robb, 2021; Hanscom, 2016; Monkman & Rodenburg, 2018).

The effect of this societal shift is emerging in our students, and there is an astronomical number of students struggling with mental health and behaviours, ultimately affecting their personal growth and academic output (Barton & Pretty, 2010; Cree & Robb, 2021; Coe, 2016; Dettweiler et al., 2021; Dyment, 2005; Hanscom, 2016; Kuo et al., 2018; Kuo et al., 2019; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). During the COVID-19 pandemic, schools briefly saw a push to take learning outdoors for safety reasons regarding virus transmission. Since the dust has settled on the pandemic, indoor learning has mostly fallen back into old habits. In my experience, the main push back to outdoor education is access to nature, curricular demands, lack of training and resources for educators, and safety concerns. My paper will show that these barriers can be navigated that that we can help students who are continuing to struggle with development and learning. By implementing outdoor and play-based education pedagogical practices in elementary schools, students' well-being and academic needs will be met in a meaningful and holistic way.

Presenting the Argument

In this paper, I claim that supplementing an outdoor and play-based pedagogical approach alongside classroom learning in elementary education is the best practice because it improves students' engagement through increased overall wellness and appreciation of nature. Which, in turn, results in greater academic achievement. Supported by the following evidence as my literature review will show, learning in nature is essential in facilitating diverse learning opportunities that foster and develop cognitive and social competence and support physical and mental health (Gilbertson et al., 2006; Hanscom, 2016; Moss, 2012). Facilitating outdoor education with a playful approach provides a more stimulating environment where children find learning more enjoyable, motivating, and memorable, resulting in longer attention spans and greater academic success (Harris, 2023; Monkman & Rodenburg,

2016; Sandseter et al., 2020). Further, children are born loving nature, but if children are not provided with rich and repeated experiences in nature, they will likely lose their sense of belonging to nature (Monkman & Rodenburg, 2016). My application chapter will be supported by showing the need for appropriate educator training and access to resources to allow for more nature and play-based approaches to create meaningful student experiences. Based on the following evidence, this paper will argue for implementing outdoor and play-based learning in elementary classrooms as they provide important benefits for students' academic achievement.

Paper Overview

With my paper I will continue to explore outdoor and play-based learning in chapter two with an in-depth literature review. Both pedagogical practices will be defined, and their histories will be explored. The various benefits on health, development, academic, and nature stewardship will be discussed. Further, the different barriers and fears surrounding outdoor and play-based learning will be explained too. In chapter three, I will demonstrate how theory will be put into practice through the context of shifting perspectives. The different barriers will be explored through the application of ways to overcome them to help educators. The final chapter will summarize and review the implications. My closing thoughts and steps I will be taking to continue my implementation of outdoor and play-based education will conclude my paper.

Chapter Two: Review of Literature

This chapter reviews the current literature on outdoor and play-based education. It explains the benefits for students' healthy development and learning and educators' barriers to implementing these pedagogies. To begin the literature review, outdoor and play-based education will be defined, and the history of these pedagogies will be explored. The benefits on students' physical and mental health, cognitive and social-emotional development, and becoming nature stewards are then discussed. How these benefits lead to engagement in learning and academic improvement is addressed. The challenges and barriers teachers often face with outdoor and play-based education will be explored. A chapter summary and connections to the argument will conclude the literature review.

Definition of Outdoor and Play-Based Education

Within the literature, terms such as outdoor education, outdoor learning, play, play-based education, play-based learning, and playful learning repeatedly come up. I will begin this chapter by defining these terms to support the literature review.

Defining Outdoor Education

Throughout the paper, outdoor education will appear as this or outdoor learning. In its simplest form, outdoor education is any learning experience outside (Cree & Robb, 2021). Outdoor education is the umbrella for various outdoor learning experiences (Robertson, 2014). It is a flexible and broad teaching method encompassing different focus areas, including adventure education, team challenges, international expeditions, field trips, and environmental education (Cree & Robb, 2021; Robertson, 2014). Outdoor education is a powerful teaching tool that offers many different potentials to its learners and educators. It emphasizes multisensory learning experiences that involve a holistic learning approach through the natural, community, and individual environments (FNESC, n.d.; Gilbertson et al., 2006). Outdoor education can be a way to learn about nature by being outside, but it can also be the physical space for non-nature-related learning (Cree & Robb, 2021; Teaching the Primary Curriculum, 2022). Using

the outdoor environment as an educational location facilitates diverse learning opportunities and implies specialized knowledge and skills (Gilbertson et al., 2006).

Defining Play

The definition of play is diverse. However, there is a growing consensus that it is an intrinsically motivated activity that entails active engagement and results in joyful discovery (Sahlberg & Doyle, 2019). Play is voluntary and often has no extrinsic goals; it is fun and often spontaneous. Early Childhood Education theorist Friedrich Froebel defined play as "the highest expression of human development in childhood, for it alone is the free expression of what is in the child's soul" (p. 49). Like outdoor education, play-based learning creates open and flexible real-life bodily experiences that connect to a child's abilities, needs and interests (Van Dijk-Wesselius et al., 2020). Play is a concept that focuses on a child's own activity that is intrinsically motivated, and the activity itself is more important than the outcome (Sandseter et al., 2020). Further, play teaches children to socialize, develop independence, improve physical coordination, and enjoy themselves without adults' direction (Robertson, 2014). How children play and what play consists of will vary from culture to culture, but the one universal principle of play is that it is fundamental to human nature (Cree & Robb, 2021; Hanscom, 2016).

Defining Play-Based Education

Play-based learning, play-based education, or playful learning is a pedagogical approach where children guide their learning through playful experiences (Cree & Robb, 2021). Through these playful experiences, children connect to curricular goals and build a natural intrinsic motivation and curiosity to learn (Krogan, 2022). Playful learning integrates the activity of play with knowledge and skills and is the purest form of learning (Cree & Robb, 2021). There are different types of playful learning experiences, and these include free play, risky play, inquiry play, collaboratively designed play, and learning through games (Cree & Robb, 2021; Robertson, 2014; Sahlberg & Doyle, 2019; Sandseter et al., 2020).

The History of Outdoor and Play-Based Education

The natural world has been infused into human life for as long as humans have walked this earth (Cree & Robb, 2021). Evolutionary biologist E O Wilson argues that "we are hard-wired into nature as such our well-being, indeed our poetry and creativity, is dependent on it" (p. 23). In the 17th to 20th centuries, pioneers of nature-based education emerged. Philosophers such as Socrates, Aristotle, Comenius, Johann Pestalozzi, Friedrich Frobel, Lev Vygotsky, Jean-Jacques Rousseau, Maria Montessori, and John Dewey – to name a few, all laid the groundwork for child-centred and playful learning in the outdoors (Cree & Robb, 2021; Peckover, 2012). Socrates and Aristotle believed that children should make meaning of the world around them through inquiring and questioning (Cree & Robb, 2021). Comenius later expanded on this idea and believed that objects within the natural world should be explored and used to make meaning and knowledge pleasurable. Inspired by the philosophers before him, Froebel began the first kindergarten system and saw "playing in nature as the key to developing children's creativity, their love of nature and a sense of place and unity in the world" (p. 24). Vygotsky extended Froebel's theories and believed that learning in nature is holistic and community-driven, meeting children's truest potentials when exposing them to the natural world. When Montessori and Dewey's time came, they supported nature-based practices and advocated for learning and playing in the real world to be immersed in experiential learning. Through the perspectives of Jean-Jacques Rousseau, he believed in education supporting the child's natural realization of self through the connection with nature (Peckover, 2012). The groundwork for outdoor learning was laid through these great educators and thinkers. However, as society became more urbanized and technology-driven, this connection to nature diminished (Monkman & Rodenburg, 2016).

Urbanization has led to a significant change in educational perspectives, and the important pedagogical philosophies from earlier centuries got put on the back burner. Social trends have increasingly prioritized the supervision and protection of children and education and families shifted to the indoors (Canadian Pediatric, 2024; Waite, 2009). As a result of this urbanization and framework of

education, it is no wonder that exposure to child-led nature and play experiences is diminishing. Studies indicate that play and nature experiences have decreased by 50 per cent in the last 50 years (Cree & Robb, 2021; Hanscom, 2016; Sandseter et al., 2020; Teaching the Primary Curriculum, 2022; Wilson, 2022). This decrease has negatively impacted children as they struggle to play independently and creatively, and their well-being suffers (Hanscom, 2016).

These negative impacts saw outdoor and playful learning returning in the 1970s as forest schools emerged in the United Kingdom and Scandinavian countries (Cree & Robb, 2021, Harris, 2023). Forest schools were designed to occur within the context of "teaching defined curricula to achieve higher attainment while nurturing children's physical health and social well-being" (Harris, 2023, p. 279). Along with forest schools, different organizations started popping up worldwide to advocate for children to return to learning and playing in nature for their well-being and academic needs. Some of these organizations include the International Institute for Earth Education, the Sharing Nature Movement, the Natural Start Alliance, and Learning Through Landscapes (Cree & Robb, 2021). In Canada, the Child and Nature Alliance, Take Me Outside, Green Teacher, the Canadian Pediatrics Society, and Outdoor Play Canada are just some of the organizations that have emerged with research and programs to advocate for learning and play in nature (Canadian Pediatric, 2024; Coe, 2016; Outdoor Council, 2024). Many of these movements emerged with the growing concern of screentime, disconnect from ecological systems, and declining health that today's children face (Cree & Robb, 2021; Teaching the Primary Curriculum, 2022). Another contributing factor to shifting teaching back to the outdoors was the COVID-19 pandemic that the world recently endured. The pandemic saw many educators thinking outside the box, moving out of their comfort zone, and getting outside with their students (Barfod & Bentsen, 2018). I saw this push from my school district during the pandemic. We were encouraged to take free workshops to help educate ourselves on outdoor learning, and our school grounds were provided with a learning shelter to use. There was great hope for outdoor education during COVID, but sadly most

returned to the way it was. Educators must know the many benefits of outdoor and playful learning to help encourage their students to get back outside. The next part of the literature review will examine these benefits and how they impact children's development and overall academic success.

Benefits of Outdoor and Play-Based Education

Spending time outside immersed in nature can be a fun and relaxing experience. For many people, including myself, getting outdoors is a space to spend quality time exploring interests and hobbies (Robertson, 2014). Beyond this, spending time outdoors is also incredibly beneficial for human development (Aviana, 2021; Barfod & Bentsen, 2018; Coe, 2016; FNESC, n.d.; Van Dijk-Wesselius et al., 2020). More and more children are experiencing difficulties with poor attention skills, controlling their emotions, declining fitness, increased aggression, lack of creativity, lack of compassion and empathy, and weakened immune systems (Aviana, 2021; Barton & Pretty, 2010; Cree & Robb, 2021; Hanscom, 2016). With students struggling to cope with daily life, social skills and their well-being, students are underprepared for academics, and there is an overall impact on children's academic achievement (Coe, 2016; Cree & Robb, 2021; Dymet, 2005; Van Dijk-Wesselius et al., 2020; Waite, 2009). Outdoor and play-based learning is beneficial because it is a holistic approach where all areas of a child's development are promoted (Aviana, 2021; Coe, 2016; Barfod & Bentsen, 2018; FNESC, n.d.; Van Dijk-Wesselius et al., 2020). Spending time in nature benefits students' physical and mental health, cognitive and social-emotional development and creates a sense of belonging to the land.

Student Emotional and Physical Health

As mentioned in the importance of my topic section, physical and mental health are rapidly declining among school-aged children (Barton & Pretty, 2010; Cree & Robb, 2021; Coe, 2016; Dettweiler, 2021; Dyment, 2005; Hanscom, 2016; Kuo, 2018; Kuo, 2019; Louv, 2008; Sandseter, 2020; Van Dijk-Wesselius et al., 2020). This decline is largely connected to children's sedentary and technology-driven indoor lifestyles (Aviana, 2021; Monkman & Rodenburg; Sandseter et al., 2020). Children thrive and

develop when challenging their bodies and minds (Hanscom, 2016). With children spending most of their day in school, school naturally needs to be a space that provides ample opportunities for movement to benefit children's health and learning needs.

Physical Health. Outdoor and play-based education provides children with opportunities for whole-body learning experiences that challenge their bodies to be active (Hanscom, 2016). Green schoolyards and the forest provide diverse and challenging landscapes, which help motivate children to be physically active (Coe, 2016). When children live inactive lifestyles, their risk for weak immune systems, obesity, diabetes, and high blood pressure is greater (Barton & Pretty, 2010; Hanscom, 2016; Louv, 2008). Spending time in nature exposes our bodies to the changing seasons, which promotes the healthy development of our immune system (Hanscom, 2016; Teaching the Primary Curriculum, 2022). The earth has a diversity of microbiomes necessary for helping our bodies build immunity against natural allergies (Cosco, 2016). Children who grow up immersed in nature are usually unaffected by seasonal allergies, whereas children with limited exposure to nature can suffer from these allergies (Robertson, 2014). Spending more time indoors also leads to vitamin D deficiency, resulting in disease or asthma (Moss, 2012).

Human being's physical health is improved when spending time in nature because children's bodies are moving rather than sitting (Barfod & Pretty, 2018; Canadian Pediatric, 2024; Coe, 2016; Dymet, 2005; Hanscom, 2016; Lou, 2008; Monkman & Rodenburg, 2016; Robertson, 2014; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). Children ages three and up are in a critical time for healthy development, and moving and being outdoors helps keep children active (Cosco, 2016). When children's bodies are consistently exposed to movement, their risk for obesity, diabetes and high blood pressure are lowered (Barton & Pretty, 2010; Dettweiler et al., 2021; Hanscom, 2016). Playing and learning outdoors is often associated with walking, climbing, jumping, swimming, and running, which helps develop children's bone strength, gross motor skills, and stamina. If children are exposed to enough movement opportunities to

challenge and strengthen their bones, their bone load-bearing capacity increases (Hanscom, 2016). Another risk to children's physical development is weak gross motor skills. Gross motor skills are the whole-body movements and coordination of body parts, such as legs and arms. Children with weak gross motor skills struggle to sit upright, show poor endurance during physical activities, have inefficient body conditioning, and encounter more injuries (Hanscom, 2016; Louv, 2008). Gross motor skills can develop with exposure to physical activity and sensory activities through outdoor and playful learning opportunities. Increased physical activity also influences children's academic achievement. Children only learn when they are paying attention; to pay attention, they need to move (Hanscom, 2016). When children's bodies are sedimentary for too long, they lose focus and begin to fidget, which impacts their ability to retain the knowledge being taught. Lastly, research has shown that when children's physical health is cared for, it also helps improve their mental health (Dettweiler et al., 2021; Louv, 2008).

Mental Health. With the rapid decline in experiences with nature and play, there has been a significant rise in students being diagnosed with stress, anxiety, depression, and behavioural and learning disabilities from just thirty years ago (Cree & Robb, 2021; Dettweiler et al., 2017; Dettweiler et al., 2021; Hanscom, 2016; Louv, 2008; Sahlberg & Doyle, 2019). This increase is an alarming statistic that appears to be a growing trend. Research shows that one in ten children between the ages of five and sixteen lives with a diagnosed mental health disorder and are on prescribed antidepressants (Louv, 2008; Moss, 2012). One study from the United States reported a rising rate of kindergarten students being stressed out and displaying problems, including uncontrollable anger and aggression, leading to suspensions (Sahlberg & Doyle, 2019). Another alarming statistic is the growing rise in children's suicidal thoughts or attempts. In the United States, between 2008 and 2015, this statistic doubled in children aged five to seventeen. Children should not have to be worried about mental health and should only have to focus on being children. From a developmental standpoint, childhood and adolescence are vital and vulnerable times for

brain development (Dettweiler et al., 2017). When children experience stress-related experiences, their chances of increased poor mental health as adults increase.

The association between spending time outside and improved mental health is significant (Barfod & Bentsen, 2018; Barton & Pretty, 2010; Canadian Pediatric, 2024; Coe, 2016; Dettweiler et al., 2017; Hanscom, 2016; Louv, 2008; Robertson, 2014; Sahlberg & Doyle, 2019; Sandseter et al., 2020; Teaching the Primary Curriculum, 2022; Van Dijk-Wesselius et al., 2020). Connection to nature helps decrease anxiety, depression, and stress by minimizing everyday pressures children face today (Coe, 2016; Dettweiler et al., 2021; Louv, 2008). Allowing children to play in nature is a developmentally appropriate way to reduce stress and anxiety (Hanscom, 2016). Achieving good mental health improves self-satisfaction, independence, capability, and competency, resulting in achieving academic potential and coping well with stress (Barton & Pretty, 2010; Louv, 2008). Studies have shown that children living in and near nature suffer less from poor mental health than those living in urbanized settings (Dettweiler et al., 2021; Louv, 2008; Sahlberg & Doyle, 2019). One reason is that playing in green spaces fosters social interactions, which promotes social relationships and support networks (Dettweiler et al., 2017; Louv, 2008). Another contributing factor is that spending time in nature directly affects brain development and regulation of stress by lowering cortisol levels (Dettweiler et al., 2021). When cortisol levels are low, stress levels are also lowered. Spending time outdoors also increases physical activity, reducing stress and anxiety. When students are experiencing poor mental health, their academic achievement is impacted negatively.

Cognitive Development

Along with physical and mental health, outdoor and play-based education positively influences children's cognitive development (Coe, 2016; Dymet, 2005; Van Dijk-Wesselius et al., 2020). Cognitive development is developing skills that help humans pay attention, retain memories, and use thinking skills to evaluate, analyze, make comparisons, and learn cause and effect (Hanscom, 2016). Some students in a

classroom struggle with concentration as they seek ways to have direct experiences in their learning (Waite, 2009). Learning outdoors and playful learning are often more memorable experiences, giving students the hands-on approach they are after (Hanscom, 2016; Robertson, 2014; Waite, 2009). Increased concentration and attention improve academic learning outcomes and skills (Coe, 2026; Dymet, 2005; Hanscom, 2016; Sandseter et al., 2020). Playing in nature can positively develop and deepen cognitive skills as it enhances creativity, sparks curiosity, stimulates imaginative play, helps with self-regulation, and teaches children to solve problems independently (Hanscom, 2016; Monkman & Rodenburg, 2016). Children are given a chance to learn about themselves and others more meaningfully when outdoors. Learning outdoors provides learners with experiences of success, failure, adventure, and risk-taking (Hanscom, 2016). These experiences require the learner to take the initiative, make decisions, reflect, and analyze, which results in deeper thinking (Gilbertson et al., 2006). As with physical development, daily practice is needed to strengthen cognitive skills, and children must have ample outdoor and play-based experiences to practice these complex cognitive skills needed for successful academic and intellectual capabilities (Hanscom, 2016). Spending time outside awakens and rejuvenates our minds and engages our senses, ultimately benefiting cognitive development.

Social Emotional Learning

Social emotional learning (SEL) is another important development children need to thrive in childhood and adulthood. Healthy social-emotional development consists of learning the skills to deal with feelings of anger and frustration in a healthy way (Hanscom, 2016). SEL also develops empathy, emotional intelligence, communication skills, and the ability to make new friends (Coe, 2016; Dettweiler et al., 2017; Harris, 2023). With sedentary indoor time increasing, children show a decline in self-control, self-esteem, independence, and problem-solving (Coe, 2016; Dymet, 2005; Hanscom, 2016; Robertson, 2014; Van Dijk-Wesselius et al., 2020). With this correlation between increased indoor time and decreased SEL skills, providing more outdoor and play-based opportunities is vital. In outdoor learning and play-

based experiences, children are provided with social opportunities to learn how to work with others, take turns, negotiate, listen, help each other, and cooperate (Harris, 2023; Barfod & Bentsen, 2018; Coe, 2016; Hanscom, 2016; Monkman & Rodenburg, 2016; Robertson, 2014). Further, outdoor activities encourage children to feel at ease, resulting in more openness and being able to communicate through expression of their own opinions (Aviana, 2021; Dymet, 2005; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). Studies have shown that when students spend time outdoors, they can also demonstrate an increased ability to think creatively and critically (Dymet, 2005). Learning empathy, curiosity, and self-control skills are just as important, if not more, than the fact-based curriculum (Cree & Robb, 2021). When children are given opportunities to learn and experience positive SEL skills, ultimately, they will be better equipped for school readiness and lifelong achievement (Canadian Pediatric, 2024).

Learning to Love the Land

The above benefits of outdoor and play-based learning are prominent and clearly show that these teaching pedagogies are vital for the whole child's development. Along with these benefits, children learn to love the land that they are playing and learning on and in, which fosters environmental stewardship and a sense of belonging (Aviana, 2021; Coe, 2016; Cree & Robb, 2021; Harris, 2023; Monkman & Rodenburg, 2016; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). With today's society becoming increasingly urbanized and technology-driven, children grow distant and detached from the natural world (Coe, 2016; Monkman & Rodenburg, 2016). Research is coining new terms such as 'de-natured childhood' (Coe, 2016) and 'nature-deficit disorder' (Louv, 2008). Both refer to a childhood with limited outdoor play, a childhood becoming increasingly sedentary, a childhood with more electronic interactions than the natural world, resulting in diminished use of the senses, attention difficulties, higher rates of physical and emotional illness, and a complete disconnect from the environment (Cree & Robb, 2021; Louv, 2008). Children are born loving nature, but if children are not provided with rich and repeated experiences in nature, they will likely lose their sense of belonging to nature (Monkman & Rodenburg, 2016). Studies

have shown that children who do not connect with nature by age twelve are less likely to be interested in it as a teenager or an adult (Moss, 2012). This next section of the literature review will explore how outdoor and playful learning helps children connect to the world around them and become environmental stewards.

A Sense of Belonging. All children should be allowed to recognize that they are part of a broader community of other living things. Through implementing outdoor and playful learning experiences, children are given opportunities to see the interconnections between their learning, their home, their lives, their environment, and their future in both local and global contexts (Dymet, 2005; Teaching the Primary Curriculum, 2022). These interconnections create a socially connected community, and having a community helps children thrive and learn (Aviana, 2021). In schools, a sense of belonging comes from building social relationships with others when children can share and learn together (FNESC, n.d.; Monkman & Rodenburg, 2016). Equally important is the sense of belonging that arises from immersion in the natural world when implementing outdoor education pedagogies (Coe, 2016; Monkaman & Rodenburg, 2016; FNESC, n.d.). Being a part of a community creates a sense of responsibility for children, which helps children have a purpose in their learning when they can connect it to their lives meaningfully (Aviana, 2021; Coe, 2016; Sandseter et al., 2020). Unfortunately, for some children, their only opportunity to engage with nature is through school activities (Harris, 2023). Thus, another important reason why education should support children's natural exposure. When children develop a sense of belonging to the natural world, they are more inclined to be curious about protecting it (Coe, 2016; Sandseter et al., 2020).

Environmental Stewardship. By providing students with opportunities to be in nature at school, students connect to nature with a respectful curiosity about local histories and create a desire to learn how to protect their green spaces (Government of British Columbia, 2023). For students to want to be environmentally conscious, they need to learn how to care for the environment by creating a sense of belonging to the land. Children who learn through an inquiry-and-experience-based process can ask

meaningful questions and learn to problem-solve directly in their local environment (Government of British Columbia, 2023; Robertson, 2014). They will be encouraged to be involved in collaborative and action-based projects within the community to protect the world around them (Robertson, 2014). Children are full of imagination and ideas and will always be society's future leaders, and creating a sense of curiosity and love for nature can help re-create society's perspectives about nature in the future (Government of British Columbia, 2024).

With the increased emphasis on the standardization of the curriculum, outdoor education has lost its first-hand experiences and has become a pedagogical approach of ingesting facts and concepts rather than direct hands-on learning experiences (Coe, 2016; Dettweiler et al., 2017). Fact-based learning experiences do not cultivate direct appreciation or stewardship of the land. By providing children with positive hands-on learning experiences in nature early on in life, children are much more likely to cultivate an appreciation for nature and environmental consciousness as they grow up (Coe, 2016; Dettweiler et al., 2017; Harris, 2023; FNESC, n.d.; Van Dijk-Wesselius et al., 2020). Education must be a resource that prepares children with the necessary skills and desires to "sustain [the] cultural and ecological integrity of the places they inhabit" (Coe, 2026, p. 8). Environmental stewardship creates renewed enthusiasm for learning that can be directly connected to the curriculum to increase academic achievement (Dymet, 2005).

Bridging the Two Pedagogies Together: Are Students Playing or Learning?

Finding the balance between instruction and play is a struggle that some educators, children, and parents may encounter. There is a view that this type of learning is not 'real' learning (Teaching the Primary Curriculum, 2022). Even though play-based approaches have grounded education for thousands of years, the last few hundred years, schooling has taken on a standardized approach and education is struggling to find its way back (Harris, 2023). More recently, though, the education system has begun encouraging more student-led learning, a concept that outdoor and playful learning theorists have

encompassed for centuries (Cree & Robb, 2021). Although direct instruction is still an important part of teaching, play-based learning and learning in nature support the development of the whole child. They are great opportunities for students to inquire and take ownership of their learning (Horstmann, 2022). This ownership raises enthusiasm, increases vitality and motivation for learning, and increases knowledge attainment (Louv, 2008; Robertson, 2014; Van Dijk-Wesselius et al., 2020). Research has shown that in the first few years of a child's life, only three to five per cent of the information learned is retained (Cree & Robb, 2021). However, when learning is experienced with all parts of the child's being, this retention is increased by up to 95 per cent. This gap in learning retention is enormous and vital for educators to understand to help best foster children's learning. When children connect with something that interests them, they are far more likely to engage with all their senses (Hanscom, 2016). When their senses are engaged, "they are strengthening their sensory skills, and strong sensory integration results in a higher incidence of learning" (p. 59).

While children need structured and unstructured learning, playful learning in nature is essential to children's development as "play lays the foundations for all later forms of intelligence" (Cree & Robb, 2021, p. 118). When students are playing, inquiring, and exploring, teachers can pull small groups aside to provide important direct instruction as needed to help enhance their learning (Barfod & Bentsen, 2018; Barton & Pretty, 2010; Dymet, 2005; Van Dijk-Wesselius et al., 2020; Waite, 2014). When children are deprived of child-led and play experiences in nature, this results in struggles with higher-level thinking skills, such as problem-solving and creative expression (Hanscom, 2016; Louv, 2008). By integrating play-based learning, educators can begin to target academic and social-emotional needs, which are often pushed aside to curricular demands (Horstmann, 2022). Outdoor and play-based learning addresses broader learning beyond the curriculum, and can range from teacher-directed play to student-led free play (Waite, 2014). For a more effective educational reform, teachers should free kids from the classroom (Louv, 2008).

Barriers to Outdoor and Play-Based Education

The benefits of taking students outside the classroom to learn have been highly documented and plentiful for decades, as shown in this literature review. Yet, engagement in outdoor learning still needs to be improved in British Columbia due to the different competing challenges that teachers face (Harris, 2023; Coe, 2016; Dymet, 2005). As shown in the importance of my topic, the main challenges to outdoor education are access to nature, curricular demands, lack of training and resources for educators, and safety concerns. This next section of the literature review will explain these barriers.

Where is the Green Space?

Most Canadian school grounds tell a similar story. A small area consists of a parking lot, the school, and one or two bare and flat fields where a jungle gym is set up and a space for sports (Dymet, 2005; Sandseter et al., 2020; Waite, 2014). Some school grounds will have the occasional hill or tree. However, with a lack of inspiring natural green space, it is hard for educators to see this space as a learning tool, limiting outdoor and playful learning experiences (Dymet, 2005). With poorly designed school grounds providing limited green space, going off-grounds can provide children with a richer outdoor learning experience. However, while many educators agree that there is potential to enhance outdoor and playful learning through field trips, they feel hindered in facilitating and improving children's access to nature because of transportation and cost (Coe, 2016; Dymet, 2005; Van Dijk-Wesselius et al., 2020).

An Already Full Curriculum

Another barrier educators encounter is pressure from lack of time in the school day and an already full curriculum. This pressure to teach a full curriculum alongside working with students with a range of abilities contrasts with outdoor and play-based approaches (Barfod & Bentsen, 2018; Harris, 2023; Robertson, 2014; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). There are also the pressures of standardized testing and meeting curricular requirements that do not leave room for outdoor and playful activities (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Sandseter et al., 2020; Van Dijk-Wesselius et

al., 2020). Another barrier teachers face is the lesson planning aspect. Some teachers feel that it is too time-consuming to create outdoor lesson plans (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). Further, time is a big barrier. With how the school structure is set up, many teachers feel there needs to be more time to fit these learning pedagogies in (Bardod & Bentsen, 2018; Dymet, 2005; Van Dijk-Wesselius et al., 2020). One study from Barfod and Bentsen (2018) found that teachers felt

> limited by the traditional planning of the school day with one teacher, one lesson, one subject, and one class for everyday teaching. Besides this, structured breaks, lunchtime, and other activities, such as presentations, special education, library, etcetera, [fill up] a tightly regulated schedule (p. 153).

There is also concern that the transition time needed to get ready for outdoor learning, such as gearing up and gathering supplies, further impacts curricular teaching (Van Dijk-Wesselius et al., 2020).

Lack of Resources and Training

Along with the lack of green space and curriculum and time constraints, many educators feel limited by their expertise (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). Most postsecondary teaching programs do not address outdoor and playful learning approaches (Barfod & Bentsen, 2018; Dymet, 2005). Instead, they focus on traditional indoor teaching pedagogies, which results in teachers using them when they begin their teaching careers.

With outdoor learning not being formalized in the curriculum (Van Dijk-Wesselius et al., 2020), it is challenging for teachers with little to no experience to formulize outdoor and playful learning. A tight school district budget makes providing educators with resources and training opportunities challenging, as outdoor education is not considered a priority (Barfod & Bentsen, 2018; Dymet, 2005). Educators may want to integrate outdoor learning meaningfully into their practice, but this is difficult to do when they need more knowledge, inspiration, and hands-on experience (Van Dijk-Wesselius et al., 2020).

It is too Risky

One last barrier that prevents outdoor and playful learning is the perception that it is too risky. Elements of risk that pose a challenge are erratic weather, liability issues, and concerns for accessibility for all (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Harris, 2023; Monkman & Rodengurg, 2016; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020; Waite, 2014). In Canada, the climate can make it difficult to get outdoors consistently in certain seasons (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Sandseter et al., 2020). Educators also express a concern that some children come to school ill-dressed, causing a safety issue to bring them outside (Barfod & Bentsen, 2018). Liability concerns have also pressured institutions to keep children safe (Barfod & Bentsen, 2018; Dymet, 2005.; Sandseter et al., 2020). As a result, school play areas have removed any potential bit of nature that could cause harm to children (Monkman & Rodenburg, 2016). Unsupervised play can be seen as socially unacceptable, which puts pressure on educators to balance between warning and protecting children on the one hand and, on the other hand, allowing children the space to explore and take risks (Monkman & Rodenburg, 2016; Van Dijk-Wesselius et al., 2020). Lastly, there is concern for accessibility for all. Educators express concern about managing challenging behaviours in a larger space with less access to quick help if something goes wrong (Van Dijk-Wesselius et al., 2020). The natural outdoor space may also be challenging for students living with disabilities to move around in (Wilson, 2022). All these different challenges have many educators feeling apprehensive about leaving their classroom's comfort and not seeing outdoor and playful learning as a priority. As a result, education at times is "perceived as a set of dichotomies: in the classroom or outdoors; teacher led or child led; outcome oriented or process oriented" (Harris, 2023, p. 282). This causes tension between meeting the demands of the curriculum and creating activities that enrich children's development and learning experience. The question that needs to be asked is, why cannot teaching be both? This question will be explored in depth in chapter three.

Summary

A thorough examination of research on outdoor and play-based pedagogies shows a clear and positive correlation between whole-child development and academic achievement. Education should always strive to teach children meaningfully through experimenting, investigating, and inquiring (Government of British Columbia, 2024). Outdoor and play-based education provides children with these learning opportunities because there is a focus on hands-on 'doing' experiences (Waite, 2014). Thus, ultimately creating enjoyment and engagement for the whole child as their physical, personal, social, and curricular learning are engaged (Coe, 2016; Van Dijk-Wesselius et al., 2020; Waite, 2014). However, these pedagogical practices are often not used, and many classrooms primarily see traditional sedimentary learning still as a reflection of teacher's concerns for barriers associated with these learning practices. This lack of exposure to nature, combined with unrealistic sitting expectations in schools, is wreaking havoc on children's minds and bodies, and it is cause for great concern (Cree & Robb, 2021; Hanscom, 2016; Louv, 2008). A vital need to see changes implemented in elementary educational systems is a must. Chapter three will discuss how outdoor and play-based pedagogies can be implemented to overcome barriers and ultimately create healthier and more academically successful children.

Chapter Three: Application of Strategies to Overcome Barriers for Implementation

The application chapter will continue to guide my claim that supplementing an outdoor and play-based pedagogical approach alongside classroom learning in elementary education is best practice because it improves students' engagement through increased overall wellness and appreciation of nature. I will illustrate how outdoor and playful pedagogical approaches can be practically applied in elementary classrooms. I will begin this chapter by discussing the need for a shift in perspectives towards outdoor and play-based education to bridge the gap between the classroom and the forest. Through this, I will demonstrate different strategies that educators, the education system, and teaching programs can use to overcome the barriers presented in Chapter Two. By connecting my personal experience and practical application to my literature review and argument, my chapter will conclude with a summary of the significance of outdoor and play-based pedagogical practices.

Shifting Perspectives: Applying Outdoor and Play-Based Learning to Practice

As evident in the literature review, outdoor and play-based pedagogical approaches significantly benefit children's wellbeing and academic achievement (Aviana, 2021; Barfod & Bentsen, 2018; Coe, 2016; Dymet, 2005; FNESC, n.d.; Hanscom, 2016; Robertson, 2014; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). It is clear from the research that educators recognize these benefits, but the barriers outweigh their ability and willingness to use them; "we know what we know, and yet we keep doing what we are doing" (Cerhit, 2016). The various concerns for barriers to outdoor learning should be used as a foundation to develop authentic strategies to connect children to nature. These strategies will reflect not only the school but also the environment and community in which they are implemented (Coe, 2016). With nature often being viewed as something to be learned about rather than something to learn from and within, this is one of the first perspective shifts needed to bridge the gap. Another shift in perspectives is rethinking the idea that outdoor and play-based education is only a unique form of teaching and learning alternative to the norm. Outdoor activities can instead be used alongside

classroom teaching as a lead into higher-quality outputs in lessons that follow, a way for students to demonstrate a learnt classroom concept in real life, and even a space to spark curiosity around a new concept (Harris, 2023; Teaching the Primary Curriculum, 2022) Educators and the educational system must change their perspectives from a culture of excuses to a model of encouragement (Coe, 2016). Concerns and apprehensions that act as obstacles preventing outdoor learning can then become foundational in the creation of a safe and holistic educational program. Resulting in a new pedagogical space connecting theory and practice.

Within this shifted perspective, the barriers to outdoor and play-based learning within elementary schools can be overcome. Outdoor and play-based learning is necessary for a truly balanced childhood (Hanscom, 2016), and with the next sections in chapter three, my paper will demonstrate how this can happen practically.

Strategy One: Where is the Green Space?

As mentioned in the literature review, with most Canadian schools comprising of flat and bare landscapes, it is hard to feel inspired to use this space beyond recess, lunch, and physical education (Dymet, 2005; Sandseter et al., 2020; Waite, 2014). With outdoor education at its simplest being any activity outside (Cree & Robb, 2021), educators can take their teaching outdoors, even if it is on the smallest patch of asphalt (Teaching the Primary Curriculum, 2022). There is a myth surrounding nature that it is only a landscape untouched by human life, a space somewhere beyond the school grounds (Coe, 2016). This is not true. Nature is, in fact, everywhere, and it comes in all shapes and sizes. Nature is anything from loose parts in the backyard to a vast mountain landscape. Of course, the more variety there is on the school grounds, the greater the range of activities can be, but this is where the importance of shifting perspectives comes in. This next section will explore ways that the already available spaces can be used, what can be done to revamp the school grounds, and why this is needed.

Using the Space Already Available. To initiate outdoor and play-based education, only a designated space is needed to bring a class together. Creating a designated outdoor meeting space can help elevate the importance of outdoor learning (Teaching the Primary Curriculum, 2022). This space could be a corner of the field, around the one tree on the grounds, or perhaps even along a school wall (Coe, 2016). The important part is that this is the same space used for outdoor classes' initial meet-ups. In my practice, we have a patch of grass below my classroom window, where we meet at the beginning of Forest Fridays. I go over our lesson with the class, and then we head off to the forest across the road to put learning into practice.

The current schoolyard space can also be utilized better by simply moving around things already there to prioritize students' learning, for example, by utilizing vertical spaces such as walls, fences, and hedges for chalkboards and storage sites. Creating outdoor storage sites to keep supplies easily stored and avoiding having to pack too much in and out of the classroom can make getting outdoors quicker. In my outdoor program, I have a wagon, which my class calls the nature wagon. Everything we need is in there, and we grab it and go. These are simple ways to utilize the space already available.

Accessing Nearby Space. Another option for educators is to use nearby landscapes easily accessible on foot (Cree & Robb, 2021; Teaching the Primary Curriculum, 2022). However, this will only sometimes be an option depending on the educational setting. The school I work at is in a rural setting, and I am lucky to have a forest to explore in every direction. Some other town schools in our district have a small, wooded area on their grounds or just on the other side of the fence that can be easily accessed. Others are beside the community park, which offers different landscapes to explore. I love my school's location and am very lucky to expose my students to a rich natural environment. Using space on the property or nearby areas is a simple way to utilize the existing spaces, but not every educational setting can offer this. Thus, schools across British Columbia must look at the bigger picture and revamp their grounds to be greener.

Revamping the School Ground. Children will naturally seek out different ways to interact with the natural environment that they are in (Robertson, 2014). However, school playgrounds with asphalt, fixed equipment, and bare flat fields rarely offer a diverse range of play environments to interact with. One initiative that school grounds can take to support outdoor education is building an outdoor structure. For these structures to be useful, some seating options, such as logs, benches, or sit spots (foam cushions), should be available for flexible seating. These learning pedagogies mostly involve movement, but having some flexible seating is ideal for some bookwork, especially if the ground is wet or cold. Another addition to the shelter would be a whiteboard or chalkboard to help the teacher deliver lessons which require showing examples. During COVID, my school district was given a grant to build every school a wooden shelter for outdoor education. I have worked at two schools with these shelters. At one school, the shelter is built on grass with bench seating. The shelter offers no seating at my current school, and the grass has been removed and replaced with sand. I enjoyed using the shelter at the first school, but my class and I do not use the one at my current school because it has nowhere to sit and is incredibly dusty. These shelters can be very useful for outdoor learning, but only when adequately set up.

Beyond the school grounds and urban centres, the outdoors offers a diverse ecosystem with many play and learning spaces, experiences, and opportunities (Cree & Robb, 2021). School grounds can change in a few ways to mimic these natural play and learning spaces, experiences, and opportunities. Redesigning the grounds to have gardens, planting more vegetation, developing some hills to diversify the landscape, and bringing in loose parts will benefit not only the ecosystems but also students' development and learning. School gardens offer many cross-curricular learning opportunities, engage students in their learning, and are also beneficial to preserving the environment as they bring in pollinators (Hanscom, 2016). Planting more trees and vegetation on the school grounds will also inspire more diverse learning opportunities and is ecologically important for creating habitats, shade, and

sustainability (Canadian Pediatric, 2024; Teaching the Primary Curriculum, 2022). The playground areas could also have small hills developed to diversify the landscape. Providing loose parts will enhance children's imagination through playful learning experiences (Canadian Pediatric, 2024). Loose parts offer endless possibilities for discovery, but this is directly proportional to the variety and amount available (Cree & Robb, 2021). A loose parts environment contains anything from branches from trees, stumps, cones, stones, mud, sticks, and even leaves. Loose parts allow children to freely explore with all their senses, use their imagination through exploration and experimentation, and be themselves in a flexible learning space. This type of self-directed learning is crucial to their development. Today's unimaginative and restricted spaces of schoolyards shut down extraordinary potential found only in the natural and flexible environments beyond the school. Why would we not want to create spaces like this for our children when it is clear that the benefits outweigh the barriers?

In 2022, I attended the Classrooms to Community Education Network professional development conference in Revelstoke, British Columbia. The conference was held on the shared grounds of the brand-new Revelstoke Secondary and Begbie View Elementary Schools. Both buildings and their grounds were a breath of fresh air. I have never seen a more beautiful space completely in tune with incorporating the natural world. I witnessed small rolling hills on the playground, plenty of trees and bushes, loose parts everywhere, and play structures that encouraged risky play. Every school in British Columbia should reflect this type of space for the betterment of children's development and academic success.

What About the Cost? It will be potentially costly, and it will be a time-consuming project to revamp school grounds completely. However, school grounds should have the same priority, thoughts, and assets assigned to them as the school building itself, and creating a space with nature in mind should be mandatory as a long-term goal. Sourcing out equipment and resources can be hard when the budget is small, but there are ways around this (Teaching the Primary, 2022). Teaching outdoors can be

kept simple by using what is already provided by the natural world, such as finding and collecting loose parts. Across Canada, many different grants and funding options are available to help schools bring back their green spaces. These programs include *Farm to School BC*, *Whole Kids Garden Grant Program, Community Spaces Funding, BC Hydro, Greenbelt Biodiversity, Jane Goodall Institute, and Tree Canada* – to name a few. The benefit of using these programs is that they will not interfere with school budgets and will help schools become greener spaces. With classrooms built to keep nature outside and playgrounds eliminating their greenspaces, a change is needed to provide more opportunities for whole-body development, learning, playing, and connecting with nature (Peckover, 2012).

Strategy Two: An Already Full Curriculum

As discussed in the literature review, another barrier that educators often encounter is the pressure from lack of time in the school day and an already full curriculum (Barfod & Bentsen, 2018; Harris, 2023; Robertson, 2014; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). From a pedagogical perspective, teaching and learning must meet curriculum requirements, but how and where this learning occurs is open-ended (Gilbertson et al., 2006). Outdoor education does not have to be an entirely new subject to add to a teacher's plate. Outdoor learning can be as simple as just moving the location of the current lesson outside (Coe, 2016; Dymet, 2005; Teaching the Primary Curriculum, 2022; Van Dijk-Wesselius, 2020). An important shift in perspective is seeing how the school curriculum can be taught outside and how it can be integrated into the curriculum by blending subject-specific knowledge with context-specific experiences (Teaching the Primary Curriculum, 2022). Educators must adopt a minds-on learning approach that extends beyond the formal curriculum to encourage multidisciplinary learning across subjects (Van Dijk-Wesselius, 2020). Outdoor and playful learning can easily support and complement a classroom-based learning model as complex concepts can come alive with hands-on learning, and being in a different space can also help to make learning stick (Cree & Robb, 2021; Teaching the Primary Curriculum, 2022; Waite, 2009).

Another barrier is the concern that the transition time needed to prepare for outdoor learning, such as gearing up and gathering supplies, further impacts curricular teaching time (Van Dijk-Wesselius et al., 2020). An easy solution to this is planning outside time around times students are already outside, such as before school, recess, and lunch. When my class does Forest Fridays, we start outside when the morning bell goes. If we do any additional outdoor education, I plan to begin after recess so my students are already dressed and ready to go. Another solution is to ensure all supplies and equipment are ready to go ahead of time, such as utilizing outdoor storage bins or having a grab-and-go wagon.

Curriculum and the Core Competencies. When educators can connect children's learning across disciplines in a local and global context, this helps adapt students to the ever-changing world around them and creates life-long learners. Using outdoor and play-based approaches increases children's engagement as they seek out knowledge, ultimately increasing their academic output. While there are many examples of connecting concepts across the curriculum, here is one that connects back to greening the schoolyards. Students can be directly involved in this planning and implementing process by developing blueprints. It can foster a sense of ownership and responsibility and offers excellent curricular content in math, writing, science, and social studies (Dymet, 2005; Waite, 2009). Another quick example of how to integrate the curriculum into the outdoors is in math. For example, a measurement unit can easily be taken outside, and students can spend time measuring objects in nature.

With outdoor and play-based learning, students are also provided with many opportunities to connect their learning to the core competencies – critical and creative thinking, personal and social, and communication. Outdoor and play-based learning directly connects learning in all three areas across the curriculum as instructions become hands-on to acquire knowledge and skills (British Columbia Curriculum, 2023). As documented and grounded in the literature review, these learning activities exercise and restore attention capabilities as students are encouraged to explore, experiment, and

analyze. Creative and critical thinking can occur without the attention exhaustion that a classroom setting usually encounters. Personal and social competencies encourage children to take pride in their work and feel a part of a community they want to protect. Environmental stewardship comes into play as children think about their ecological impact and how actions can positively and negatively affect nature. Outdoor and play-based pedagogies also encompass the skills of collaboration and sharing, which engages communication skills.

Curriculum barriers can be reduced when outdoor and playful learning are incorporated into the curriculum rather than seen as something extra. Teaching outdoors allows teachers to cover a much wider range of school subjects, creating a richer learning environment for children (Aviana, 2021; Dymet, 2005). Thus, searching for opportunities to connect outdoor learning to existing lessons and subjects will help overcome the barrier of lack of time and worrying about adding a new subject.

Strategy Three: Lack of Resources and Training

Another barrier that was discussed in the literature review was how educators do not feel they have the confidence or expertise to take their teaching outdoors (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020). Two strategies to overcome this barrier are the need for all post-secondary teaching programs to incorporate these two pedagogies and for resources to be available for current educators.

Post-Secondary Training. Most Canadian teaching programs only teach about outdoor and play-based pedagogies if they are specialized programs (Barfod & Bentsen, 2018; Dymet, 2005). Canadian educator programs primarily embody an indoor-centred perspective, claiming that unless otherwise instructed, teacher candidates learn to plan and deliver lessons indoors (Coe, 2016). Going through my teacher training program at Thompson Rivers University, I had an experience like this and agree that my training was classroom-based. With attitudes and training experiences often preventing teachers from realizing the potential of outdoor learning (Waite, 2009), it is understandable that some educators

within contemporary Canadian schools may feel ill-equipped to take children outdoors (Coe, 2016). One way to get educators willing and excited to incorporate these teaching practices into their careers is by exposing them to them during their training. The potential may be diminished without a strong personal motivation to offer outdoor and play-based contexts (Waite, 2009). Educators must be excited to take their teaching outdoors to model excitement for themselves and their students.

Resources. Beyond teacher training programs, teaching outdoors will require repeated effort. Experiences can be gathered directly and indirectly to help educators. These experiences can be through direct contact and practice teaching in nature or watching movies, reading, or observing (Barfod & Bentsen, 2018). There is an abundance of books and online blogs/web sources to aid in developing teachers' confidence. Some examples of resources I use in my classroom are *The Big Book of Nature Activities* (2016)*, Dirty Teaching* (2014), *The Walking Curriculum* (2018*), Wild Learning (2023), and Teaching the Primary Curriculum Outdoors* (2022). Further, educators can utilise their colleagues' expertise to help guide outdoor learning in their practices (Coe, 2016). Teachers can lean on one another by collaborating and sharing ideas and experiences. The social media platform *Instagram* is another excellent resource for teachers to become inspired. There are many outdoor and play-based teacher accounts that share lesson plans and resources for other teachers to be inspired. This inspired the creation of my own account *@fergusonforestfridays* (2021). Some of my favourite accounts that I would recommend are *@latteslashesandlearning* (2017)*, @nature.immersion.ab* (2019)*, @teacheradventuresthroughmylens (2018), @inspiredlittlelearner* (2018)*, @createplaygrow (2018), and @storyworkshopcollective* (2020) – to name only a few.

Beyond the school, educators can draw on the knowledge and expertise of people who work at local conservation areas and wildlife centres, museums, outdoor camps, Elders, etcetera. School leaders can also play an important role in supporting their teachers. Creating school policy, providing learning opportunities, and showing persistent encouragement can be key steps towards instilling an outdoor

teaching pedagogy (Barfod & Bentsen, 2018). School districts, on a larger scale, can provide professional developments that support outdoor and play-based learning to give more access for educators. *Classrooms to Community* is a fantastic network for professional development, and they often have free online workshops. Research has shown that teachers feel more inspired when they can be trained and have hands-on experience (Van Dijk-Wesselius, 2020). For my practice, I have been experimenting with outdoor and play-based education for over two years now, and the repeated hands-on practice has helped me become more confident. This hands-on experience lowers the threshold to start using outdoor learning practices. The important part is for teachers to start small. By easing in, they are less likely to become overwhelmed and can instead create positive experiences. Positive experiences with outdoor learning motivate teachers further to explore outdoor learning and their capabilities as outdoor teachers. Lastly, teachers can use reflective practices to help build their confidence and create lifelong learning experiences with outdoor and play-based education for themselves and their students.

It is important to acknowledge that teachers are the gatekeepers to outdoor practices but need support to open that gate (Barfod & Bentsen, 2018). Educators can still support students learning in nature without being experts, environmentalists, or naturalists, as they can take on roles of facilitators, advocates, role models, allies, and members of the learning community (Coe, 2016). Nonetheless, teachers need to be supported in developing their confidence and ability to use the outdoors meaningfully as a teaching and learning space.

Strategy Four: It is too Risky

The last barrier to which my paper will give strategies for is that outdoor learning and play are too risky. As mentioned in the literature review, elements of risk that pose a challenge are erratic weather, liability issues, and concerns for accessibility for all (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Harris, 2023; Monkman & Rodengurg, 2016; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020; Waite, 2009). Risk is a natural part of the human experience and can never be fully eliminated

(Teaching the Primary Curriculum, 2022). Children must grow up knowing how to assess and deal with risk safely rather than being taught to avoid and fear risk (Teaching the Primary Curriculum, 2022).

Seeing Risk as a Benefit. As mentioned in the literature review, green schoolyards and forests provide diverse and challenging landscapes that motivate children to be physically active and provoke children's engagement in risk-taking experiences (Coe, 2016). These experiences are important for a few different reasons. Children need to be independent, own a sense of responsibility, be adaptable, and challenge themselves (Hanscom, 2016). Most children will know how far they can push themselves as risks are in the environment, not in the child (Teaching the Primary Curriculum, 2022; Van Dijk-Wesselius, 2020). Risk elements should be seen as acceptable and a positive force to create more independent and socially responsible learners (Waite, 2009). Experiencing risks allows children to develop social emotional learning skills (SEL) because they are given a chance to negotiate problem-solving skills (Monkman & Rodenburg, 2016). Risky learning and play allow children to experience emotional responses to failure and success and gain triumph when they successfully overcome a challenge (Teaching the Primary Curriculum, 2022). Educators and society must trust our students and give them the time and freedom to try new things and experience risk (Hanscom, 2016). By providing students with outdoor and play-based experiences, children can be directly exposed to risky play.

Risky Play. This year, the *Canadian Pediatrics Society* released an article urging for a shift in strategies to keep children 'as safe as necessary' rather than 'as safe as possible' (2024). They are calling for a more balanced approach to healthy and active living that encourages the benefits of risk-taking. Risky play is any thrilling and exciting form of free play that involves uncertain outcomes and may lead to possible physical injury. Risky play is categorized as great height and speed, with tools, potentially dangerous elements, rough-and-tumble play, with the risk of disappearing or getting lost, with impacts and vicarious play. Any of these types of risky play is usually strongly discouraged on school grounds for liability issues around injury. However, removing what is deemed risky on school grounds

has the opposite effect and discourages children from safely navigating risk (Monkman & Rodenburg, 2016). There is a difference between a risk and a hazard, and societies' perspectives need to shift to recognize this. We need to protect our children, but there needs to be a balance. Proper communication and language around risk-taking is an important strategy to support risky play (Canadian Pediatric, 2024). Phrases such as 'be careful,' 'slow down,' and 'not too high' end up inhibiting children and creating a sense of fear, and they do not feel trusted in their actions. These 'watchwords' do not offer guidance in risk management, and a change is needed. One example of this change is pausing, taking a step back, and just observing to see what the child will do. When intervention is needed, it should create learning opportunities to help the child manage and problem-solve the risk rather than 'do not do that.'

To help shift the perspectives of risky play towards greater risk tolerance, education about the benefits must be provided to educators and families (Canadian Pediatric, 2024). In a broader context, public health authorities and government policymakers should support education by funding and building opportunities on the school grounds for risky play, as discussed in ways to revamp the school grounds. These public authorities also need to help school settings comply with mandatory safety standards while improving opportunities for risky play for every student.

Accessibility for All. In the literature review, research showed that educators have expressed concern about outdoor and play-based learning not being accessible to all (Wilson, 2022; Van Dijk-Wesselius et al., 2020). As with regular classroom learning, outdoor and playful learning should be available and accessible for every child in every school (Teaching the Primary Curriculum, 2022; Wilson, 2022). This does not mean every child can access every learning activity provided in the same way, but it does mean they can participate positively in outdoor learning. Educators use Universal Design for Learning and Differentiated Instruction in the classroom to help all their learners. These learning models can also be transferred to outdoor and play-based learning.

There are two strategies to overcome the worry about managing difficult behaviours outside. First, in the classroom, teachers spend time setting up routines and expectations throughout the year. This consistency helps teachers manage classroom behaviours, and these routines and expectations can be transferred to an outdoor setting. Second, as reviewed in the literature review, one of the benefits of being outside is that it lessens certain behaviours that a classroom setting may encourage as it grabs student's attention better (Coe, 2016; Dymet, 2005; Hanscom, 2016; Robertson, 2014; Van Dijk-Wesselius et al., 2020).

All students' abilities must be considered when redesigning school grounds to create greener learning environments. Risky challenges and realistic obstacles to moving around still need to be offered to everyone (Teaching the Primary Curriculum, 2022). Pathways and routes can be found or created around the school grounds to allow everyone to reach different parts of the outdoor space. Sensory overload can occur in the classroom but can be limited outdoors. However, teachers need to be mindful of this, and visual and auditory clues must be considered when picking where to conduct their outdoor learning. Any outdoor seating set-up also needs to be inclusive of everyone. Lastly, adapt tools and equipment that may be used for outdoor play and learning.

The weather is also a concern for outdoor accessibility**.** However, the changing seasons can provide rich and real-world learning experiences, and teachers should use this to their advantage (Teaching the Primary Curriculum, 2022). Regular outdoor education classes must address this with caregivers and send home reminders about appropriate outerwear to match the weather. Since Fridays are our designated nature day in my outdoor education program, I send a letter home at the beginning of the year explaining this to caregivers and reminding them to send their child with appropriate outdoor clothes as we go outside in most conditions. Most schools have extra clothes in the lost and found for students whose caregivers may not have the means to dress their children appropriately for the weather. Grants can also come into play as some will help provide a school with extra winter gear,

for example. Revamping the school grounds, building a shelter, and planting more trees become important for allowing access to seasonal outdoor learning as they provide some shelter from the elements.

When outdoor education is first introduced to students, there will be excitement and energy that need to be recognized and released. Students need to be given time in the beginning to release some of their excitement to be ready to learn (Teaching the Primary Curriculum, 2022). Let students have a moment to run and explore independently, and then let the teaching begin. With repeated exposure to outdoor learning, this new space will become just another place to learn. Outdoor education can be introduced gradually to allow time for teachers and students to become comfortable with the routines and risks.

Summary

The literature supports the above strategies for successfully implementing outdoor and playful learning. These strategies offer educators and educational organizations various starting points and reiterate the importance of the benefits that these learning pedagogies provide children. My experience with outdoor and play-based learning further confirms the benefits of using these pedagogies outlined in this paper's argument. Learning through outdoor and play-based pedagogies alongside classroom learning is, in turn, best practice for elementary students. A shift in perspectives is needed to bridge the gap between the classroom and the forest, ultimately benefiting students' whole-body development and overall academic success. The final chapter will summarize my argument, literature review, and application and provide further implications for outdoor and play-based learning.

Chapter Four: Conclusion

With this paper, I have successfully demonstrated that implementing an outdoor and play-based pedagogical approach is ideal within elementary classrooms. These learning frameworks are best practices because they promote the development of the whole child, which increases their academic output as learning is done in a meaningful way. This final chapter will connect my argument to the research and ideas this paper laid out to describe the success of my paper in advancing my argument. I will then review the implications of my paper and how they relate to practical, real-world contexts. My goals to continue promoting and implementing outdoor and play-based pedagogies will be laid out, and my closing thoughts will conclude this paper.

Paper Review

My paper began with my examination and discussion of the different factors in my life that influenced my passion for outdoor and play-based learning and, ultimately, laid the foundation for my argument. Through my free-spirited outdoor childhood, my initial love of nature was ignited and played an important role in shaping the person and educator I am today. The Master of Education program provided me with key learning moments that helped enrich my teaching practice and helped influence the humanistic and progressive pedagogical teaching approaches that I align with. Through my personal and professional experiences with outdoor and playful learning, I have seen first-hand the benefits of being in nature. These experiences have made me fundamentally believe that learning and playing in nature is a necessity in education for human development, preservation of our world, and academic success.

The Research in my paper shows that through instilling nature and playful pedagogies, students' development on every level would thrive as the benefits are prominent. Several recurring benefits emerged from the research. The literature presented strong evidence that there is an increase in children's physical and mental health, cognitive development, social emotional skills, and provides

opportunities to be connected to the land in a way that creates a sense of belonging (Aviana, 2021; Barfod & Bentsen, 2018; Coe, 2016; FNESC, n.d.; Van Dijk-Wesselius et al., 2020). My paper further demonstrated that these many benefits to child development ultimately increase academic engagement, which improves overall output (Louv, 2008; Robertson, 2014; Van Dijk-Wesselius et al., 2020).

The literature also revealed the concerns of barriers around the lack of available green space, the current standardized demands of the curriculum, the lack of training and experience, and the logistics of risk (Coe, 2016; Barfod & Bentsen, 2018; Dymet, 2005; Harris, 2023; Monkman & Rodengurg, 2016; Sandseter et al., 2020; Van Dijk-Wesselius et al., 2020; Waite, 2014). However, as grounded in the research, outdoor and play-based learning pedagogies have been around for centuries because of their immense benefits to child development (Cree & Robb, 2021). This fact cannot be ignored because of the barriers, as the implications for students' healthy development must outweigh them. The strategies laid out in this paper will help evoke action among educators to overcome the barriers. These research-based strategies can be practically used at any school, from my experience with outdoor and play-based implementation.

Through this sufficient evidence and various implementation strategies that my paper has provided, I am confident that students' development and engagement in the classroom are increased when outdoor and playful learning is implemented in elementary education.

Theoretical Implications

With this paper, I have successfully laid out a foundation of theoretical and practical implications. As mentioned in the paper review, I have advanced my argument by providing vivid evidence of the benefits and need for elementary schools to implement outdoor and play-based learning for healthy child development and engagement in learning. I have outlined throughout my paper that exposing children to nature with a playful learning approach has vital long-term benefits.

When education is done outdoors, the activities engage students much more, motivate and excite them, challenge them to find discoveries, identify problems, and adapt to new situations (Aviana, 2021). It is through these hands-on experiences that learning becomes embodied. Learning and playing in nature can exist cohesively when integrated into formal education, resulting in a much more valuable educational system. This integration, alongside a shift in perspectives, will make a difference in learning and child development in elementary education. These implications must be considered by teachers, educational leaders, curriculum designers, and post-secondary teaching programs.

Practical Implications

My intention with this paper is to provide the necessary research and resources to help support teachers, educational leaders, curriculum designers, and post-secondary teaching programs to change their perspectives on outdoor and play-based learning. Ultimately, to create broader approaches that enrich students learning by creating a positive learning environment that cultivates curious, creative, and kind individuals through understanding and connection to the natural world. My hope is to see post-secondary programs creating courses that provide pre-service teachers with experience and resources to implement these pedagogies. I want to see curriculum designers for post-secondary programs and the BC curriculum incorporate nature and playful learning throughout the different subject fields, going beyond the core competencies. I would like to see educational leaders embody these learning pedagogies to help create a school culture that encourages this learning style.

Further, I hope teachers realize that implementing nature and playful learning does not have to be intimidating and can be achieved simply by just doing it. I hope my paper continues to add to the conversation that there is a need for a change in teaching practices and the development of schoolyards. Teachers should not need to change their entire teaching practice; they should instead be encouraged to add to it and grow to help their students best.

My Goals Moving Forward

My aspiration to continue supporting this learning in my classroom and raise awareness for other educators to do the same is grounded in my paper. Through continued professional learning and research, I can increase my understanding and continue to apply what I have learned to support my work as an elementary teacher. Moving forward in my career, I want to continue growing and learning about outdoor and play-based education through continued research, professional development, and through practicing ideas to implement more into my practice every year. Further, I have some big goals that I want to work towards. I want to initiate the reconstruction of my school's greenspace to incorporate these learning pedagogies better. I will continue to research and apply for grants that I can bring to my administrator as proposals. I want to add a school garden, different loose parts, a mud kitchen, and more vegetation, such as trees and shrubs. I would also like to expand Ferguson Forest Fridays so that my program is every day of the week. I am committed to promoting the benefits of learning in nature through a holistic learning approach that encompasses student-led learning. Everything outside is full of potential and experience for children; we need to open the door and step outside for the magic to begin.

My Closing Thoughts

As educators, the main goal for our students should be to help cultivate productive, healthy, and happy individuals. I believe educators can achieve this when they choose teaching methods that enhance children's overall development and academics. My paper has vividly expressed that outdoor and play-based learning will cultivate productive, healthy, and happy individuals. Too many children are struggling in school, and this is a concern that needs to be addressed promptly. Nature is a true gift that gives life to humanity and is the most natural way to connect to oneself and explore our curiosity to learn and grow (Peckover, 2012). Education has an incredible and vital opportunity to foster real intelligence in students through providing the knowledge that one might imagine the earth teaches us – humility, connectedness, curiosity, beauty, celebration, giving, restoration, obligation, and wildness (Orr,

2004). Education needs to get back to this. Through my paper and my continued work in my practice, I hope the gap between the classroom and the forest will be closed.

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