“SOMETIMES I LIKE TO SEE WHAT I AM DOING.”:
CHILDREN’S VOICES IN OUTDOOR PLAY
PEDAGOGICAL DOCUMENTATION

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Abstract

“Sometimes I Like to See What I am Doing.”:
Children’s Voices in Outdoor Play Pedagogical Documentation

This qualitative research was designed to explore how children respond to and think about their outdoor play pedagogical documentation, and how they engage in outdoor play experiences after they have conversations about their outdoor play pedagogical documentation. The purposive sample of six children was bounded in a single-case program in Nova Scotia, Canada. Six children were directly observed during their outdoor play time, and were individually interviewed face-to-face. A typological analysis model was used to analyse the collected data (Hatch, 2002). The research questions predetermined three typologies, children’s reaction, children’s perceptions, and children’s outdoor play engagements. These typologies were examined to determine themes for each typology. The final data analysis concluded with four generalization statements and a case study report.

The children perceived their outdoor play pedagogical documentation as a tool where they can revisit, interpret, and reflect on their previous outdoor play experiences. The children believed that the purpose of outdoor play pedagogical documentation is for sharing with their families, friends, or other people who visit their child care centre. It was also found that the children demonstrated their confidence after their outdoor play pedagogical documentation was provided. Merely displaying outdoor play pedagogical documentation outside did not influence the children’s outdoor play experiences; however, having conversations about outdoor play pedagogical documentation allowed the children to express their emotions, articulate their thoughts about previous outdoor play experiences, and provoke and implement outdoor play ideas.
This case study revealed children’s understanding about their outdoor play pedagogical documentation and this understanding can be incorporated in the practice of early childhood education in order to increase access to outdoor play and enhance the quality of outdoor play. This case study is limited to one-single case with a focus on each individual child rather than a group of children. This case study yields some implications for early childhood educators, educational institutions, and the community. Recommendations for future research are discussed.
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CHAPTER I

Introduction

"The delights of the outdoors are among the deepest, most passionate joys of childhood" (National Association for the Education of Young Children, 1998, para. 1). Today, children spend only half as much time outdoors compared to 20 years ago (Maclean, 2010). One of the reasons that children’s physical movement and exercise have been diminished is due to the decreased opportunities for them to play outdoors (Maclean, 2010). The study of Maynard and Waters (2007) suggests important aspects that explain a decline in outdoor play and physical activity in childhood: issues about various weather conditions and appropriate clothing for weather, complaints from parents and families, and fears about child’s safety. The educators in their study express their concerns about receiving complaints from parents in regards to going outside during poor weather conditions due to the children and their clothing getting wet or dirty. They also identified their fear of using the outdoor play environment because of the children’s safety and the possibility of litigation in the case of a child being hurt during outdoor play.

McCurdy, Winterbottom, Mehta, and Roberts (2010) also report that the rise in electronic media, decreased time for unstructured free outdoor play, and various environmental barriers describe the reduction of children’s physical movement and outdoor play. In fact, “The diversity and intensity of activity surrounding the childhood obesity and inactivity ‘epidemic’ in Canada is encouraging” (Tremblay, 2012, p. 168). As a result, increasing children’s physical activity and access to outdoor play opportunities for children’s health becomes an important theme that some provincial governments across Canada are addressing.

The annual Report Card on Physical Activity for Children and Youth was recently released by ParticipACTION (2015), a national non-profit organization. The report card
emphasizes the dire need of outdoor play for Canadian children and youth by presenting evidence of different behaviours that contribute to overall physical activity, highlighting the benefits of outdoor play, and providing recommendations for all of the parties that have an impact on increasing outdoor play opportunities for Canadian children and youth. The report indicates that children in Canada aged three to four were engaged in sedentary lifestyles for 7.5 hours a day and children’s overall physical activity was graded as D-, A+ being the highest. Unfortunately, in an effort by adults to try to keep children safe, healthy and happy may have resulted in unexpected and involuntary outcomes and the report card addresses this issue as a “protection paradox” (ParticipACTION, 2015, p. 7). In other words, adults’ exertions to keep children inside all the time stifle children from being outdoors where children can be more active, and resilient (ParticipACTION, 2015).

The findings of the report card align with the findings of study that was conducted within the Province of Nova Scotia, Canada. A few years ago, the Province of Nova Scotia (2012) noted that one in three children and youth in Nova Scotia are overweight or obese and rates of sedentary behaviour and physical inactivity are much higher than that. In particular, the Province of Nova Scotia has acknowledged the growing tendency of inactivity, obesity, and sedentary behaviour of children and youth in Nova Scotia by conducting The Keeping Pace study (Thompson, & Wadsworth, 2012). The findings of the Keeping Pace study illustrate that the majority of children and youth are not satisfied with the standard for physical activity even though they are engaged in physical activities. In the project, the standard for physical activity for children and youth determined that they accumulate a minimum of 60 minutes of physical activity at a moderate or greater intensity level per day, at least 5 days of the week (Thompson, & Wadsworth, 2012). Furthermore, the data from the Keeping Pace study demonstrate that up to
one in three Nova Scotian children and youth are overweight or obese. It is also concerning that
the rates of chronic disease within all of Canada are the highest in Nova Scotia (Province of
Nova Scotia, 2012). Due to these health concerns, the Province of Nova Scotia launched a
Thrive! initiative in 2012. One of the main goals of this initiative is to “increase physical activity
and decrease sedentary time in child care settings and schools” (Province of Nova Scotia, 2012,
p. 47). This provincial interest is focused on supporting children in accessing more outdoor play
opportunities during their daily lives so that they can increase their physical activity levels and
gain the benefits associated with outdoor play.

Similar to Thompson and Wadsworth (2012), more researchers (Dyment & Coleman, 2012; Sugiyama, Okely, Masters and Moore, 2012) begin with focusing on the level and the
amount of children’s sedentary behaviours and intensity of physical activity while attending
child care facilities. One of the drivers for this increase in research on outdoor play is because
“Although adequate time for outdoor play is important, the quality of outdoor activity itself is
critical” (Burriss, & Burriss, 2011, p.11). For example, Sugiyama et al. (2012) studied 89
children aged between three to five years old from 10 childcare centres in Brisbane, Australia in
order to examine the children’s level of physical activity and sedentary behaviour while they
were in the child care setting. The study revealed that the participating children were being
sedentary 80% of their time in the child care setting. Another surprising finding is that children
tended to be sedentary even when they were playing outside, more particularly, the children
showed sedentary behaviours during 60% of their outdoor play time. The findings of their study
posed a few questions: What level of physical activity do children experience during their
outdoor play time? What encourages children to be engaged in sedentary outdoor play
behaviours? The answers for those questions seemed to be explored by Dyment and Coleman (2012).

Dyment and Coleman (2012) conducted a study to examine the intensity of children’s physical activity during their outdoor play time. Sixteen preschoolers were observed during their outdoor play time from four different preschools in Australia in order to discover the intensity of physical activity into three levels – sedentary, moderate, and vigorous. The results of the study illustrated that almost half of the children (46%) appeared to be involved in sedentary physical play (Dyment, & Coleman, 2012). 30% of the children were observed being engaged in moderate physical activity, and only 23.9% of the children were involved in vigorous physical activity. Nevertheless, the majority of the early childhood educators regarded that the children were experiencing ample amount of opportunities for physical movement during outdoor play time (Dyment, & Coleman, 2012). The early learning practitioners in the study were less likely to be viewed as outdoor play activity facilitators and their fundamental outdoor play concerns – the concerns about children’s safety and supervision were found to be the reasons for that.

Another recent study shows the importance of exposure to quality outdoor environments. In their study, Söderström et al. (2013) discovered that children who were engaged in high-quality environments were found to retain healthier body shapes, sleep longer at night, and maintain better well-being. “There was a strong positive correlation between environment quality and outdoor stay, indicating that quality affects the time spent outdoors which in turn affects children’s health” (Söderström et al., 2013, p. 88). This clearly supports the notion that a quality outdoor environment is closely associated with children’s health (Söderström et al., 2013). Also, the findings of the research indicate that spending time outside is not necessarily linked to physical development and quality outdoor play experiences (Sugiyama et al., 2012). What these
Research findings demonstrate that the current outdoor play issues are not merely about having children outside for longer periods; rather it is about providing stimulating and interesting outdoor play environments, materials, and activities that will lead children to experience different types of learning opportunities (Burriss & Burriss, 2011; Söderström et al., 2013; Waters & Maynard, 2010). Harte (2013) continues to emphasize quality outdoor environments for children because letting children play outside is only the first step. Children benefit from playing in high-quality outdoor environments that provide developmentally appropriate experiences, and because of this, all children need to have access to high-quality outdoor environments (Harte, 2013). When children are frequently given unproductive and uninteresting outdoor environments, they may miss opportunities to test their new skills, and challenge themselves (Little & Eager, 2010).

Statement of the Problem

The decline in outdoor play and low quality outdoor play experiences have many negative effects on children’s health and wellness including how it fosters children’s sedentary life style. Many researchers including Dwyer et al. (2009) identify that children’s lack of physical activity strongly predicts obesity and insulin resistance in their adulthood. Furthermore, the high rate of sedentary behaviours during the early years is a serious concern because various researchers have made the link between an increase in sedentary lifestyles to childhood chronic conditions such as childhood obesity, asthma, attention-deficit/hyperactivity disorder (ADHD), and vitamin D deficiency, all of which have increased in prevalence in Canada and the United States over the past few decades (Perrin, Bloom, & Gortmaker, 2007; Mithal et al., 2009). Health Canada (2011) also declared that physical inactivity can result in premature death, chronic disease, and disability.
Especially, childhood obesity requires special attention since it is regarded as ‘one of the most serious public health challenges of the 21st century,’ according to World Health Organization (WHO) (2010). Obesity can be described as “the development of excess body fat, which occurs when energy intake is disproportionate to energy expenditure” (McCurdy et al., 2010, p. 104). Currently, the rate of childhood obesity has greatly escalated (WHO, 2010). In detail, 42 million children from birth to five years old around the world appear to be overweight and/or obese (Dyment, & Coleman, 2012). This high rate of childhood obesity threatens not only children’s health, but also health in their adulthood. Numerous research studies have discovered the link between childhood health to adulthood health by stating that physical patterns that children develop are retained through their adulthood (Cashmore & Jones, 2008; De Onis & Blössner, 2002; Oliver, Schofield, & Kolt, 2007; Trost, Sirard, Dowda, Pfeiffer, & Pate, 2003). Particularly, children who are obese may suffer from diseases such as hypertension, cardiovascular disease, non-alcoholic fatty liver disease, and obstructive sleep apnea in their adulthood (Dietz, 1998).

In order to promote healthy development for children, children’s outdoor play at both the home environment and in child care settings is vital (Garrick, 2004; Louv, 2008; Rivkin, 1998). However, child care programs have become the most crucial environment for young children (Cosco, 2007; Nedovic & Morrissey, 2013). Children today spend most of their time at child care settings and the amount of time that they spend in child care is expanding, which indicates that most of their outdoor play time also occurs in child care systems (Little & Wyver, 2008; Nedovic & Morrissey, 2013). Accordingly, child care facilities are an appropriate setting to track the issues about children’s outdoor play and issues about childhood health (Dyment, & Coleman 2012). Given this information, “The expanded time spent in child care amplifies the importance
of outdoor play as it may be the only opportunity a child has to experience the outdoor setting (Mcclintic, & Petty, 2015, p. 29). Therefore, the key component is that early childhood educators are responsible for allowing children to play outside, facilitating outdoor play activities (Mcclintic, & Petty, 2015), and intentionally planning and designing outdoor environments (National Association for the Education of Young Children, 2009) based on children’s interests, needs, and capabilities. Namely, early childhood education classroom teachers ought to continuously design and support appropriate and stimulating outdoor environments in order for children to gain learning experiences as well as physical development that is satisfying and enjoyable (Brown et al., 2009; Dowdell, Gray, & Malone, 2011; Wilson, 2008). Outdoor play experiences need to be enjoyable, free, spontaneous, and enthusiastic (Maynard & Waters, 2007). In order to proceed with this, early childhood educators benefit from comprehending the importance of outdoor play experiences in childhood, and the connection between individual development and outdoor play (Chawla, 1999, 2007).

Typically, indoor environments receive more time, attention, and resources than outdoor environments when environments are created at child care settings (DeBord, Hestenes, Moore, Cosco & McGinnis, 2002; Dighe, 1993; Hendricks, 2011) even though outdoor environments provide children with much more diverse and profound learning and play opportunities compared to what indoor environments can offer (Bilton, 2010; Garrick, 2004; Maynard & Waters, 2007; Wardle, 1997; White, 2011). In spite of the significance of children’s outdoor play and outdoor environments, prejudice against children’s outdoor play exist. Such prejudice includes the ideas that outdoor environments do not require as much attention as indoor, outdoor play is seen as a break time for educators, and educators’ only role is to supervise children while the children consume their energy during their outdoor play time and these prejudice have
become common practice in early childhood education (Brown et al., 2009; Davies, 1997; Dowdell et al., 2011). Nonetheless, adults’ interactions, involvement, and excitement appear to encourage children to more appreciate outdoor settings, according to Kernan (2010). “Young children need practitioners who value and enjoy the outdoors themselves, see the potential and consequences it has for young children’s well-being and development, and want to be outside with them” (Playnotes, 2008, p. 1). Many early childhood educators may not fully grasp the potential of outdoor play and outdoor play environments for children’s well-being and healthy development. As a result, children’s outdoor play is less likely to be prioritized in the child care programming (Brown et al., 2009; Davies, 1996; Maynard & Waters, 2007). Correspondingly, educators pay less attention to evaluating and reflecting on outdoor play activities and outdoor learning opportunities than indoor activities (Wellhousen, 2002). In order to comprehend the full potential and values of outdoor play, early childhood educators benefit from viewing outdoor environments as having “equal status with the indoors as a place of learning and development” (White, 2011, p. 7) and as an important part of early childhood education (Maxwell, Mitchell, & Evans, 2008; Thomas & Harding, 2011). It is critical to effective outdoor play and learning opportunities is early childhood professionals who make consistent efforts in responding to children’s outdoor experiences, needs, and interests by providing inspiring outdoor play spaces, more access to outdoor play, stimulating outdoor play materials, and a variety of learning opportunities for children (Bilton, 2010; Blanchet-Cohen & Elliot, 2011; White, 2011). Children thrive in environments where educators provide children with varied outdoor play opportunities that employ cognitive, social, and physical development and learning opportunities regardless of weather conditions (ParticipACTION, 2015).
Based on this research, the following concerns were identified: “How can the value of outdoor play be promoted among early learning practitioners?” “What can help early childhood educators continuously study children’s outdoor play?” and “How can children’s outdoor play learning experiences be continually supported?” Pedagogical documentation is one way to explore outdoor play from children’s perspectives.

Documentation in the broad sense refers to the ongoing, collaborative process of listening, observing and recording children’s work (Edwards, 2002; Gandini & Goldhaber, 2001). Pedagogical documentation, however, is much more in-depth and complicated than this simple definition. For this reason, pedagogical documentation can be defined in a number of ways. For example, pedagogical documentation can be described as a tool that traces children’s play, work, interactions, and learning processes by visualizing them with video clips, photographs, or other media (Rinaldi, 2006). According to Alcock (as cited in Dietze & Kashin, 2011),

Pedagogical documentation can be defined as all documentation that has pedagogy as its focus. The documentation may be thought of as content and the pedagogy as process. In this way pedagogical documentation can be used as a tool for mediating the understanding of both adults and children. By making children’s thinking visible, documentation facilitates teaching and learning. (p. 76)

“[Pedagogical documentation] is not a real-time movie or a record of events, but a subjective set of frozen moments that provoke, inform, record, and provide opportunities for further thinking, wonder, able to be offered back to children for comment and reflection” (Fleet, Patterson, & Robertson, 2012, p. 7). Meanwhile, Gandini and Kaminsky (2004) illustrate pedagogical documentation as a “pedagogy of listening” (p. 9). This means that educators and children
embrace a variety of collections of visuals such as notes, video recordings, photos, slides so as to reconstruct children’s learning processes, and to create an authentic record for dialogue, reflection and analysis. Rinaldi (2006) emphasizes that pedagogical documentation not only visualize children’s learning experiences but extends the learning process of both children and teachers. Rinaldi (2006) states that:

Documentation, therefore, is seen as visible listening, as the construction of traces (through notes, slides, videos, and so on) that not only testify to the children’s learning path and processes, but also make them possible because they are visible. For us this means making visible, and this possible, the relationships that are the building blocks of knowledge. (p. 68)

The contents of pedagogical documentation usually represent children’s current work, experiences, interests, conversations, discussions, engagements, and curiosity (Dietze & Kashin, 2011) as pedagogical documentation occurs through a variety of visualized mediums such as photographs, video recordings, audio recordings, transcribed conversations, the notes from educators, children, and their families, illustrations, and children’s visual work. These types of media can appear through a variety of techniques such as pedagogical documentation panels, portfolios, and web postings. It is also important to report that pedagogical documentation requires analytic commentary since pedagogical documentation without an analysis is equivalent to a mere record (Fleet, et al., 2012).

“A particular piece might be brief or unfold into a very long narrative but, regardless of length, it is always only a fragment of the whole, the pieces that were seen or grabbed or held up to the light for further consideration” (Fleet, et al., 2012, p. 6).
Therefore, the audience of pedagogical documentation including educators themselves, other educators, children, children’s guardians, and the community are able to understand children’s interests, needs, abilities, skills, learning experiences, and expressions at a profound level (Yu, 2008). Consequently, in this study, pedagogical documentation is integrated with children's outdoor play.

**Purpose of the Study**

In order to foster children's healthier life styles in Nova Scotia, a shared understanding of how important outdoor play is for children needs to be established and possible actions and solutions of how to increase children’s outdoor play access in child care settings need to be created (Province of Nova Scotia, 2012). Early learning practitioners’ roles in recognizing outdoor play time and environments as critical parts of their early childhood program, providing quality outdoor play environments and engaging in children’s outdoor play are supported by numerous researchers. In order to provide the most appropriate and effective outdoor play environments and experiences for children in the local area, early childhood educators also need to understand children’s experiences, interests, needs, and capability during their outdoor play time. Without this understanding, it may be difficult to reflect on children’s outdoor play experiences and therefore, support them in furthering their outdoor experiences and learning processes.

As one possible action for enhancing the quality of outdoor play experiences in Nova Scotia, pedagogical documentation is selected for this study. For this reason, this study is designed to explore children’s voices in outdoor play pedagogical documentation so as to understand how children respond to and perceive pedagogical documentation that focuses on their outdoor play pedagogical documentation. This understanding may illuminate if the use of
outdoor play pedagogical documentation can be incorporated in early childhood programs for the purpose of increasing more access to outdoor play and improving the quality of outdoor play in Nova Scotia. Hence, my research purposes are the following:

1. To discover if children’s examination of pedagogical documentation influences or reflects in their outdoor play.

2. To explore a child’s perspective on pedagogical documentation that reflects on their outdoor play.

3. To gain insight into whether conversations with children about their outdoor play experiences through pedagogical documentation panels influences children’s outdoor play experiences.

This study is necessary as it will shed light on how the use of pedagogical documentation may be used by children and early learning practitioners as a way to increase an access to children’s outdoor play and improve the quality of outdoor play experiences in local regions. Research is required because it will add to the body of research on the use of outdoor play pedagogical documentation as a strategy in supporting children’s ideas, perspectives, and opinions for advancing their outdoor play experiences. There is currently a lack in literature on pedagogical documentation specific to children’s outdoor play experiences. This would suggest that it is unclear if children’s outdoor play would be increased in terms of their experiences and time spent outdoors if they had access to pedagogical documentation as a way to reflect on their play experiences and imagine new or expanded ideas. For this reason, it is possible that by conducting this research, new insights and information on the connection between pedagogical documentation and outdoor play may be revealed.
Lastly, this study can be used for future educational purposes. The qualitative data and results of the research will become useful resources in the education of new early learning practitioners as well as professional development for practicing early learning practitioners. The study will provide insight into children’s perceptions on pedagogical documentation that focuses on their outdoor play, which is not yet plentiful in the literature. In addition, the findings of the study could provoke an interest in using more pedagogical documentation as a way to gain information on the importance of outdoor play to children’s development and learning while encouraging early learning practitioners, children, and their families to have more play opportunities outdoors. The study has the potential to provide insights into the emerging dialogue on pedagogical documentation from the perspective of children’s outdoor play among early learning practitioners.

**Research Questions**

From the review of the literature and the researcher’s own experiences as an early childhood educator and as a researcher, a wonderment about if pedagogical documentation that reflected on children’s outdoor play would trigger children’s interests, physical movements, various learning experiences, sense of curiosity, and sense of wonder during their outdoor play emerged. Then, this became an interest in knowing if pedagogical documentation would trigger children to engage with more outdoor play opportunities, and lead them to further explore, discover, and experience different types of outdoor play, particularly when children and early childhood educators engaged with pedagogical documentation. This particular interest encouraged the researcher to question how children would react to pedagogical documentation that visually reflects on their outdoor play when it is provided for the first time. Furthermore, the researcher became curious how pedagogical documentation that focuses on outdoor play would
be viewed from a child’s perspective. Exploring children’s perspectives and understanding their points of view is grounded in the sociology of childhood, which studies children in their own right (Christensen & James, 2000; Corsaro, 1997; James & Prout, 1990) and to the constructivist view of childhood and children where children are regarded as individuals who actively think with their own interests and views (Bruner, 1996; Dahlberg, Moss, & Pence, 1999). A child’s perspective on pedagogical documentation will be revealed by having conversations with children about pictorial representations and literacy of their previous outdoor play experiences.

Further question arises from this point. The researcher wondered whether children’s conversations about outdoor play pedagogical documentation would influence their outdoor play experience in any way. Hence, my research questions that explore children’s voices in outdoor play pedagogical documentation are the following:

1. How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?

2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?

3. After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?

Conceptual Framework

This study is informed and guided by a theoretical perspective, Bioecological systems theory.

Bioecological systems theory
Researchers’ ontological and epistemological beliefs inherently refine research because every researcher carries a set of assumptions to a study (Schram, 2006). A researcher’s own theoretical beliefs guides and influences the entire research process, including forming research questions, designing the research, collecting data and analyzing data (Kilbourn, 2006). Therefore, it is crucial that researchers clarify their theoretical framework for an inquiry (Kilbourn, 2006). This study is grounded on Urie Bronfenbrenner’s (2005) bioecological systems theory. The theoretical framework of this study is a bioecological systems theory. Bioecological systems theory, formerly known as ecological systems theory (Bronfenbrenner, 1979), was developed by Urie Bronfenbrenner. The ecological systems theory can be defined as the following:

Human development is the process through which the growing person acquires a more extended, differentiated and valid conception of the ecological environment, and becomes motivated and able to engage in activities that reveal the properties of, sustain, or restructure that environment at levels of similar or greater complexity in form and content. (Bronfenbrenner, 1979, p. 27)

According to Bronfenbrenner (2005), the name of this theory changed to the bioecological systems theory because a child’s biology has to be emphasized as a primary environment that influences his/her development.

Phelan (2004) identified that “Bronfenbrenner mapped the key circles of influence that surround each child” (as cited in Brendtro, 2006, p. 163). Individual children may be directly influenced by family, siblings, classroom, and peers, which are also closely connected to each other. Bronfenbrenner referred to this as the microsystem. Outside of the microsystem lies another circle, called the exosystem. The exosystem includes influences such as the extended
family, school, the neighborhood, events in the community, camps, or volunteering.

Furthermore, outside of the exosystem lies the macrosystem which includes other elements that influence children such as the economic system, social conditions, and culture.

Bioecological systems theory highlights the intimate correlation between human behaviour and the social environment (Wormer, 2007). A child’s development cannot be understood without examining the external social environment of the child (Tharp & Gallimore, 1998; Wertsch, 1991). Bioecological systems theory holistically examines whole situations because it recognizes the vital role of the environment in a child’s life and the interconnected relationship among different systems (Bronfenbrenner, 2005).

Conducting genuine bioecological research is extremely complicated and it can take several years to complete (Bronfenbrenner & Morris, 1998). For this reason, Bronfenbrenner’s bioecological systems theory will serve as a broad framework to guide and influence my research. Using the bioecological systems theory will enable me to examine the contextual aspects of the participants’ experiences. I will gain a better understanding of the participants’ lives and experiences by attempting to comprehend the interdependent systems where they have developed.

**Definition of Terminologies**

Based on my review of the literature, the following terminologies have been developed:

*Outdoor play pedagogical documentation* is a documentation that shows children’s outdoor play experiences, interests, questions, interactions, and needs, and the researcher’s questions and wonderment through photographs of the children and notes from the children and the researcher (Rinaldi, 2006; Stacey, 2009).
Pedagogical documentation panel is one of the kinds of pedagogical documentation. Pedagogical documentation can be created in different forms such as classroom books, documentation panels, school logs, children’s portfolios (Stacey, 2009), and web postings. In this case study, a pedagogical documentation panel refers to a poster that has printed photographs and notes.

Children’s voices in outdoor play pedagogical documentation refer to children’s response to, understanding about, and perception on their outdoor play pedagogical documentation.

Child care settings, child care facility, and child care centre are a licensed place that offers care for children.

Early childhood educators, early learning practitioners, and early childhood professionals refer to educators who work with children and their families at child care settings, child care facility, child care centre, or other educational settings.

Outdoor play environments and outdoor play settings are synonymously used with outdoor playgrounds at a child care centre.

Summary

Children in this generation spend less time outdoors than in previous generations due to a variety reasons. This tendency of children’s inactivity negatively affect children’s health and overall development. Since children’s attendance at child care facilities are increasing, the necessity of outdoor play at early childhood program is escalating. However, outdoor play time is not considered as important as the indoor part of the early childhood program. Therefore, the role of early childhood educators is to understand the value of children’s outdoor play and to contribute to quality outdoor play experiences for children. This qualitative case study will
explore children’s voices in outdoor play pedagogical documentation in a child care centre as one strategy to enhance the quality of outdoor play in a local area. The proposed research questions guided the researcher through the whole process of the study.
CHAPTER II

Literature Review

This chapter contains a review of the related literature pertaining to the current research on children’s voices in pedagogical documentation that display their outdoor play experiences. The chapter consists of the following areas related to this research: 1) children’s outdoor play, and 2) pedagogical documentation.

Children’s Outdoor Play

“‘The best classroom and the richest cupboard is roofed only by the sky’” (McMillan, c 1925, as cited in Ouvry, 2003, p. 5). Children that were illustrated by Margaret McMillan in the early 20th century correspond to children in this generation (Ouvry, 2003) even though countless innovations in technology and social changes have occurred through the 20th and 21st century. Margaret McMillan identified the need for children to have access outdoor play and its environment in early years (Ouvry, 1992, as cited in Ouvry, 2003). Indeed, the value of children’s outdoor play has been studied and discussed by numerous researchers. Outdoor play provides children with various learning opportunities that are not experienced in the traditional indoor classroom. Outdoor play spaces, materials, and nature based environments contribute differently to the ways in which children play, explore, discover, and learn outside (Burriss & Burriss, 2011). The value of outdoor play has been long recognized by theorists such as Dewey, Froebel, Piaget, and other (Dietze & Kashin, 2015). Dewey immensely valued the outdoors:

No amount of object lessons, got up...for the sake of giving information, can afford even the shadow of a substance for acquaintance with the plants and animals of the farm and
garden acquired through actual living among them and caring for them. (as cited in Rivkin, 1998, p. 199)

When adults are asked to recall their childhood and to find where their favourite childhood place was, the outdoors will be the answer for the majority of them (Chawla, 1999; Louv, 2008). Bilton (2010) identify that playing outside “is of mind and body benefit” (p. 11). This is reinforced by Wilson (2008). He notes that “Children have an inborn sense of wonder and a strong desire to explore the world around them …” (p. 35). In order to satisfy their inborn curiosity, children benefit from being outside to have the opportunities to explore, experiment, and discover new learning from the experiences that they engage in. The literature demonstrates the importance of outdoor play for children's developments and these developmental attributes are crucial for children’s healthy development and later school academic success (Pellegrini & Bohn, 2005). In particular, a review of the literature on children’s outdoor play demonstrates the importance of outdoor play for children’s as follows: 1) brain development, 2) cognitive development, 3) language development, 4) social and emotional development, 5) physical development, and 6) connection to nature. Each will be examined.

**Brain Development**

Outdoor play research appears to enhance children’s brain development. According to Wellhousen (2002), brain development is more productive during the first three years of life than it will ever be again. For this reason, this phase of development is regarded as a critical period for learning (Wellhousen, 2002). Piaget (1962) also claimed that the quality and the types of experiences children receive during their first three years are key factors that impact on brain growth and development. During this critical period, the people who interact with and the materials that children play are important components that stimulate children’s brains (Piaget,
In fact, numerous researchers identify outdoor play as an essential part of young children’s healthy brain development (Deitze & Kashin, 2011). Physical activities, which are fundamentally generated during outdoor play, have been found to arouse natural chemicals that promote a great number of connections between neurons (Healy, 1998). Burriss and Burriss (2011) support this idea by stating that when children are physically active by running, jumping, kicking, rolling, and climbing, their brain can receive “a renewed supply of blood” (p. 3). Thus, physical outdoor play helps with stimulating brain development.

Wellhousen (2002) emphasize the importance of stimulating experiences on brain development because stimulating experiences ensure that brain cell connections are developed, protected, and preserved. Nature-based outdoor play environments offer children a stimulating environment that supports them with new ideas and leads them to develop a sense of curiosity, wonder, and freedom (Dowdell, Gray, & Malone, 2011; Fjørtoft & Sageie, 2000). Effective and inspiring outdoor play environments also offer children stimulating experiences and diverse resources for learning opportunities, as suggested by Alexander (n.d.). Furthermore, children perceive different information by engaging with outdoor environments. For example, when children observe moving sunspots and shadows, they have opportunities to notice different colours on trees, bushes, and surfaces as seasons change. Children’s perception on outdoor environments may directly provoke hormone production and immune stimulation through the psychoneuro-immunological system (McEwen, 2008). Accordingly, outdoor physical activities, and interesting outdoor play environments can contribute to children’s healthy brain development.
Cognitive Development

Outdoor play is closely associated with children’s cognitive development. Typically, outdoor play is viewed only as a source of physical development. However, children are able to gain various intellectually stimulating learning moments through outdoor play. Outdoor play offers children a variety of opportunities to experiment with concepts and knowledge about the things, places, and ideas within their world. For instance, children are able to construct and refine meanings in their world by engaging with outdoor play environments (Aasen & Waters 2006; Rogoff, 1990). Bailie (2010) similarly notes that questions about the outdoor world consistently arise with children when they are outdoors. If the adults are attuned to children, there are opportunities to continuously explore and examine answers to their questions through outdoor experiences. More importantly, providing children with unstructured free outdoor play and unrestricted choices during outdoor play is an important requisite for decreasing the interference of children’s cognitive learning (Pellegrini & Bohn, 2005). In other words, free outdoor play not only offers great cognitive learning moments but also enhances the ability to focus and learn.

Diverse hands-on outdoor play experiences such as unstructured nature-based play involving water, sand, construction, and mud offer children an opportunity to test existing science and math concepts and skills around their world (Stone, 2005), and allows them to take ownership of these knowledge. For example, “In mud play, the children develop concepts of mass, volume, and the nature of change” (Stone, 2005, p. 42). Water play is another example. As children engage in splashing and jumping in water such as a puddle, this type of water play encourages children to develop questions about their curiosity and sense of wonder such as: What makes rain? Where does water come from? What makes mud? (James & Granovetter, 1987, as cited in Dorrell, n.d., para 4) What makes a puddle? What makes a stream? And what
are the differences between mud, puddles, and streams? These types of interactions lead children to further explore and cognitively learn. Water play also is a part of the foundation for scientific learning – physics – because it enables children to test different sorts of physics principles such as “the effects of force (increasing the water flow through increased force); effects of gravity (water runs downhill); and changes in states (solid, liquid, gas)” (Dorrell, n.d., para 4). Another way of understanding the concept of physics is for children to utilize their own body during outdoor play. “[By climbing up], children develop their bodies and experience basic physics – gravity, pendulums, inertia, the optics of being upside down” (Rivkin, 1995, p. 25). Outdoor environments offer children a place to experience hands-on examination of living things around them (Harte, 2013). This leads children to discover different aspects of scientific skills and knowledge such as seasonal living creatures, and wildlife habitats (Gaylen, 1998). Nature based outdoor environments when used as a teacher allows “heightened awareness of the life around us, empathy for living things and calm reflection” for educators and children (Barlow, 2010, p. 24).

In addition to the scientific learning, “… Outdoor play is a natural site of rich potential mathematical learning” (Lee, 2012, p. 36). Lee’s (2012) research explores if children between 13 months and three years of age experience mathematical concepts during their outdoor play. The case study discovered that foundational mathematical knowledge was evident during toddlers’ unstructured outdoor play (Lee, 2012). Lee (2012) classifies the foundational mathematical knowledge into six categories: space, numbers, measurements, patterns, shapes, and classifications. In addition, Lee (2012) notes that problem solving skills were observed during children’s outdoor play on a variety of occasions. Even though some categories (space, numbers, and measurements) were more frequently observed than other categories (patterns, shapes, and
classifications), the findings illuminate clear evidence of children’s mathematical learning experiences during their outdoor play and reinforce how these experiences are expanded during their outdoor play. Harte (2013) also noted that children’s mathematical skills such as counting, patterns, and shapes are exhibited through outdoor play learning. The findings of Lee’s (2012) study, and Harte (2013) clearly support the notion that children have the capability of understanding mathematical knowledge and skills at their birth (Anthony & Walshaw, 2009). This understanding of mathematical knowledge and skills is further established and improved through various outdoor play experiences (Lee, 2012). It is vital for children to investigate different ideas and acquire intellectual knowledge through hands-on outdoor play experiences and it is because this is how they acquire knowledge. As Wilson (2008) asserts that, “Young children don’t learn by having someone telling them about the world around them. They learn and construct meaning through their own physical and mental activities” (p. 35). An outdoor setting is perfectly suitable for offering these activities due to the larger space, a wide range of materials, and access to nature (Burriss & Burriss, 2011).

**Language Development**

In the 21st century, competent communication skills and social interaction are indispensable for all children in their daily lives (Bercow, 2008). If children do not have capacity to communicate, “… Children will struggle to learn, achieve, make friends and interact with the world around them” (Bercow, 2008, p. 3). The problem is that lots of children suffer from learning and achieving communication skills due to a lack of language development (Bercow, 2008). Indeed, it is evident that the number of children who face difficulties with their speech and language is increasing; hence, they are not able to perform the expected level of communication skills when they start school (Playnotes, 2009).
Outdoor play settings can be particularly important for developing language skills including communication, and expressing opinions. The outdoor environments can provide a variety of opportunities for children to interact with other peers, adults, and environments, and to express their thoughts, and learning through a synthesis of mediums such as telling a story, communicating, reading, writing, and drawing (Playnotes, 2009). The outdoor environment is a place where children can experience a wide range of these kinds of activities in a larger scale and with more diverse options than the indoor environment (Playnotes, 2008). These experiences can offer varied situations where children are able to practice and develop their communication and literacy skills.

Children show their curiosity and sense of wonder by continually exploring their surroundings and their curiosity leads to exploration and discoveries of any number of natural phenomena (Gaylen, 1998) and leads to experiments with science and math concepts. Through these processes, children are able to gain skills in such areas as “language, creative expression, observation and the ability to draw conclusions” (Gaylen, 1998, p. 24). For example, children are able to learn about different types of trees by exploring bark or leaves, and they can learn to understand different habitats of wild animals while discovering the outdoors (Gaylen, 1998). These sorts of experiences facilitate learning opportunities for a wide range of vocabularies. Harte (2013) supports these perspectives as well. He suggests that the outdoor environment is where children can satisfy their curiosity by acquiring words about the outdoor world as they become knowledgeable about “the geography of their communities” (p. 18). Another example can be drawn. from Dorrell (n.d.) Outdoor water play provides an opportunity to expose to new vocabularies such as “sieve, funnel, eggbeater, stream, bubbly, moisture, and evaporation”
(Dorrell, n.d., para 7). As a result, outdoor environments support children in building communication skills, and becoming aware of new vocabularies about outdoor world.

**Social and Emotional Development**

Outdoor play contributes to children’s healthy social and emotional learning and development (Dietze & Kashin, 2011). Physical outdoor play significantly influences on not only retaining a healthy weight, but also children’s social and psychological development (Ward, 2010). Children tend to interact more with peers and adults when they are outdoors than indoors due to the fact that outdoor environments and spaces allow children to feel more comfortable and obtain a feeling of joy (Dietze & Kashin, 2011). Moreover, when children are outdoors, they have more opportunities to explore new ideas, experiment with them, refine new learning and express new emotions that may not be captured indoors (Dietze & Kashin, 2011). In fact, research has demonstrated that the lack of free outdoor play time is linked with the prevalence of emotional disorders, including anxiety and depression (Ginsburg, 2007). Outdoor play experiences support children in the development of positive self-concepts and greater self-confidence about what they are capable of performing (Frost, Wortham, & Reifel, 2001). Also, nature based outdoor environments appear to alleviate young children’s stresses, especially those who live in relatively deprived areas compared to those who live in affluent areas (O’Leary & Covell, 2002; Wells & Evans, 2003).

Outdoor play is a place where children can learn how to communicate, share, negotiate, solve problems, resolve conflicts and collaborate (Burriss & Burriss, 2011). There are indispensable skills that are vital for children to explore and test their social and emotional skills and to develop their social relationships (Burriss & Burriss, 2011). In particular, engaging in outdoor play provides children with various opportunities to exchange ideas with peers and
adults, express their feelings, and examine the world surrounding them (Guddemi, Jambor, & Moore, 1999). Throughout this process, children learn how to be socially competent. More than fifteen years ago, Katz and McClellan (1997) identified that children develop feelings of satisfaction and social competence as they support and help others through different ranges of pro-social behaviours. More recently, Burriss and Burriss (2011) supported this idea by noting that “The point is the outdoor area serves as a natural environment to nurture pro-social behaviours and diminish bullying…” (p. 3). Unstructured outdoor play enables children to approximate, analyze and evaluate their social skills including how to work in groups, how to share, how to advocate themselves, how to negotiate, and how to solve problems and conflicts (Ginsburg, 2007). These experiences require skills to analyze and evaluate situations which encourage children to develop, reconstruct, and promote pro-social behaviour.

According to Burriss and Burriss (2011), children’s abilities of testing, and examining their social skills and efforts to retain those skills are maximized when they are in settings of unstructured outdoor play in nature. By experimenting with their social skills during outdoor play, children are able to gain the ability to perspective-take, which refers to a child’s skill that comprehends that their own perspective is different from others, and others’ are different from their own (Kostelnik, Soderman, Stein, & Whiren, 1993). Children begin to realize that each individual has different thoughts, and feelings, and their own thoughts can have an impact on others’ thoughts, behaviours, relationships, and emotions. This is significant for developing and maintaining children’s social relationships because “Children’s ability to perspective-take ensures effective interactions with others” (Burriss & Burriss, 2011, p. 3). Thus, playing outside is a valuable factor for children to contemplate, test, modify, and develop their social and emotional skills.
Physical Development

Research findings demonstrate that the more children play outdoors, the more time they spent engaging in physical activities (McCurdy et al., 2010). Parents of preschool children view outdoor play as the time when physical activity usually occurs as opposed to indoor play (Burdette, Whitaker, & Daniels, 2004). In conjunction with good nutrition, children’s physical development significantly contributes to their healthy weight maintenance, bone development, and psychological well-being (Burriss & Harrison, 2004). In particular, regular physical activity fosters the promotion of healthy bones and muscles, curtails the likelihood of obesity and chronic diseases including diabetes and cardiovascular disease, diminishes the risk of feeling depressed and anxious, and enhances overall psychological well-being (US Department, 2008). Health Canada (2011) also states that the significance of physical movement by declaring that regular physical activity is crucial for children because it contributes to their healthy growth and development. More benefits of childhood physical development were studied and discussed in the study of Strong et al. (2005) and Janz et al. (2009). Exposure to physical activities is associated with enhanced bone density, blood lipids, lipoprotein profiles, and glucose metabolism, and lower adiposity and blood pressure (Strong et al., 2005), and lower levels of body fat mass in later life (Janz et al., 2009).

Furthermore, physical development is associated with physical health as well as with other developmental domains, including competence, self-esteem, and knowledge about the environment and the world surrounding children (Bilton, 2002). As maintained by Moore and Wong (1997), physical diversity and movements increase the possibilities for learning and development simultaneously. Dyment and Bell (2008) claim that when children have more opportunities to engage in physical movement, the quality of their play and learning experiences
are enhanced as well. This highlights that children’s physical movement through their outdoor play not only enhances their physical health but also fosters other developmental areas.

**Connection to Nature**

A naturalist, Robert Michael Pyle, asks “[What is the] extinction of a condor to a child who has never seen a wren?” (as cited in Louv, 2008, p. 146). This quote criticizes the missing link between children and nature. When children’s social and emotional developments are discussed, the aspects of social relationships and interactions between their peers, and adults are usually explored and focused. However, nature-based outdoor play not only encourages children to develop pro-social behaviours but also provides children with opportunities to reconnect with nature, which has significant impacts on children. “Firsthand experiences in the natural world are valuable, perhaps crucial, in children’s developing environmental values” (Rivkin, 1995, p. 13).

Cheng and Monroe (2012) enlighten a significant relationship between children and nature through their research. Their study was designed to examine how children’s pro-environmental choices can be influenced by children’s connection to nature. Cheng and Monroe (2012) reveal that children appreciate their connection to nature as “enjoyment of nature, empathy for its creatures, sense of oneness, and sense of responsibility” (p. 38). These findings suggest that children’s connection to nature allowed them to better understand the natural world, and to adapt and practice environmentally friendly behaviours. Kenney, Militana, and Donohue (2003) also claim that the pro-environmental behaviours and attitudes most likely occurred when children were involved in outdoor play and activities. This reinforces that it is significant for children to be exposed to nature so as to establish and enhance their affective attitudes towards preserving natural world. “Unless we are willing to encourage our children to reconnect with and appreciate
the natural world, we can't expect them to help protect and care for it” (Suzuki, & Moola, 2010, para 10). This emphasizes the importance of children’s exposure to outdoor play and nature.

In addition to pro-environmental behaviours, accumulated research evidence suggests that the possibility of children’s health directly benefiting from their connection to nature (McCurdy et al., 2010). For instance, some research demonstrate that children’s attention can be advanced while their stress can be diminished by engaging in natural environments (McCurdy et al., 2010). Moreover, nature based outdoor play can also be a buffer to deal with children’s chronic diseases such as childhood obesity, and mental health (McCurdy et al., 2010). Accordingly, outdoor play in nature is a useful suggestion that can be used by those who are in the field of pediatric health care in order for them to effectively and appropriately acknowledge and address issues about children’s health (McCurdy et al., 2010). Indeed, Louv (2008) coined the term “nature-deficit disorder” in order to explain the impact on children who lack exposure to children’s outdoor play. Nature-deficit disorder describes alienation from the natural world results in a wide range of problems among humans, especially children (Louv, 2008). Such problems contain “diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses” (Louv, 2008, p. 36). Therefore, loss of nature endangers children’s overall health and development.

Natural outdoor play settings appear to trigger children’s curiosity, wonderment and freedom as they provide interesting and challenging opportunities to explore and learn (Dowdell et al., 2011; Fjørtoft & Sageie, 2000). Louv (2008) reinforces this notion by saying “Natural play strengthens children's self-confidence and arouses their senses—their awareness of the world and all that moves in it, seen and unseen” (p. 186). Another gift from outdoor play in nature is natural sunlight. Children’s exposure to sunlight is essential because natural sunlight provides them with
sufficient vitamin D. In order for children to absorb vitamin D, abundant amounts of sunlight is required (Dietze & Kashin, 2011). More importantly, the lack of outdoor play in nature may result in vitamin D deficiency due to a lack of exposure to natural sunlight. Childhood vitamin D deficiency may cause “rickets, heart disease, depression, autoimmune diseases, chronic fatigue, and possibly autism” (Dietze & Kashin, 2011, p. 137). Thus, children’s connection to nature becomes a key component of their daily lives. Pedagogical documentation will be explored in the next section as a possible tool to maximize these benefits of outdoor play for children.

**Pedagogical Documentation**

Pedagogical documentation will be outlined in this section. In order to fully grasp what pedagogical documentation is and how it is utilized in the field of early childhood education, theoretical frameworks of pedagogical documentation will be explored. Then, strengths and challenges of utilizing pedagogical documentation will be discussed.

**Theoretical Frameworks**

After the end of World War II, a group of parents and families in Reggio Emilia, a northern Italian city, started a movement in creating preschool programs (Schroeder-Yu, 2008). They sold old tanks in order to financially support establishing a quality preschool system for their children (Schroeder-Yu, 2008). The whole community’s dedication and commitment to their children’s education inspired and motivated Loris Malaguzzi, an Italian educational leader, to begin working with the community so as to develop enriched educational programs for children (Schroeder-Yu, 2008). Accordingly, Loris Malaguzzi established the Reggio Emilia approach based on fundamental values of who children are, how they learn, and what roles adults play, and thus became the founder of the Reggio Emilia approach.
The Reggio Emilia approach is one of the world-renowned approaches to education. The Reggio Emilia approach views every child as an autonomous individual who is capable of initiating learning, exploration, and relationship building with peers, adults, environments, and communities (McKenna, 2005). Educators at the Reggio Emilia approach become researchers as well as partners in children’s learning paths because it is believed that children have the abilities and skills to formulate and test hypotheses, find and enter relationships, and explore and experiment with their surroundings (McKenna, 2005). Malaguzzi (1993b) clarifies the image of children from the perspective of the Reggio Emilia approach as the following:

Our image of children no longer considers them as isolated and egocentric, does not see them only engaged in actions with objects, does not emphasize only the cognitive aspects, does not belittle feelings or what is not logical and does not consider with ambiguity the role of the affective domain. Instead our image of the child is rich in potential, strong, powerful, competent, and most of all connected to adults and other children. (p. 10)

Another core value of the Reggio Emilia approach is that children are regarded as those who have capacities to communicate with others and express their thoughts with a wide range of expressions (Edwards, Gandini, & Forman, 2011). For this reason, the Reggio Emilia approach to early childhood education emphasizes creating educational environments that will encourage children to utilize the synthesis of a variety of languages in order to enhance children’s thinking skills (Edwards et al., 2011). More importantly, within the Reggio Emilia approach, children and adults are equal participants in the learning journey, which implies that children and adults have an equal voice (Yu, 2008). One way that children’s voices are evident in their educational settings is demonstrated through the use of pedagogical documentation. Pedagogical
documentation becomes an effective technique that captures and documents the various means of how children exercise their curiosities, communicate with others, and express their opinions (McKenna, 2005). Therefore, pedagogical documentation stays at the heart of the Reggio Emilia approach because it is a strategy that early learning practitioners utilize in their research to document children’s voices (Fawcett & Hay, 2004).

An emergent curriculum is credited to the Reggio Emilia approach to early childhood education. An emergent curriculum is understood as one of the educational curriculums that builds upon children’s interests that are generated during their daily lives. Hence, emergent curriculums thrive based on observations that consist of children’s interests and learning experiences (Cassidy, Mims, Rucker, & Boone, 2003). Nonetheless, according to Jones, Evans, and Stritzel (2001):

People who hear the words emergent curriculum may wrongly assume that everything simply emerges from the children. The children’s ideas are an important source of curriculum but only one of many possible sources that reflect the complex ecology of their lives. (p. 5)

Cadwell (1997) states that what makes emergent curriculum complex and time consuming is that educators need to comprehend child development to the fullest and possess an ability to develop and retain partnerships with children during an ongoing learning process. The College School in Missouri studied children’s dialogue in order to use it for planning curriculum (Cadwell, 1997). The educators capture, document, and investigate children’s daily conversations during their play time (Cadwell, 1997), which are the fundamental principles of pedagogical documentation. It appears that children were encouraged to gain critical and creative thinking skills, and to freely examine the environments around them when educators embraced
the children’s discussions and communications in planning for curriculum, as noted by Cadwell (1997). Simultaneously, documenting children’s dialogue assists educators in learning more about individual child’s capabilities in how they communicate, negotiate, solve problems, and collaborate with other (Cadwell, 1997). As a result, pedagogical documentation lays heavily in the basis of emergent curriculum.

**Strengths**

Pedagogical documentation is an integral part that exhibits children’s learning experience (McKenna, 2005). Indeed, creating and sharing formatted documentations encourage educators and children to realize what the essential part of learning is (Suarez & Daniels, 2009). The very nature of the pedagogical documentation process yields ongoing interpretation (Suarez & Daniels, 2009) and reflection. Since pedagogical documentation based on the Reggio Emilia approach enables educators to pay more attention to what children experience, learn, express, and contemplate, the practice of pedagogical documentation has inspired numerous educators worldwide (Kline, 2008). Pence and Pacini-Ketchabaw (2008) continue on articulating the use of pedagogical documentation by noting “Those who have reconceptualized early childhood practices by using pedagogical documentation as a revolutionary tool are not fixed in guidelines that provide one view of the child; rather, they are opened to multiple voices, multiple interpretations – opened to diversity” (p. 248). Concretely, researchers have identified the strengths of pedagogical documentation as: 1) children as an active participants, 2) children’s memory, 3) learning about individual child, 4) reflection, 5) professional development, and 6) involving parents, families, and community.

**Children as an active participants.** Pedagogical documentation is comprised of children’s work, photos, discussions, videos, and other visuals. This may convey to children that
their work, ideas, plans, and efforts are seriously acknowledged by others and encourages them to expand their learning experiences. Research illuminate that children were more likely to be an active participant in their own learning process when portfolios are continuously provided and utilized in their environment (McKenna, 2005). Pedagogical documentation entices children to take a leading role in their learning journey is because they were able to increase their confidence and curiosity by revisiting their work and thinking about what they have been doing through pedagogical documentation (Malaguzzi, 1988). More specifically, the use of pedagogical documentation scaffolds children’s ideas, and learning, and the process of scaffolding helps children to expand their interests, take a more active role in their learning, and promote self-awareness (Buldu, 2010). Another benefit of revisiting children’s learning moments through pedagogical documentation is that children can revise previous theories that were established by them and/or supplement different thoughts while cooperating with other peers, and early childhood educators (Kim & Darling, 2009). Thus, pedagogical documentation plays a crucial role in having children as active and motivated participants in their learning process.

**Children’s memory.** Pedagogical documentation increases children’s memory. The study of Fleck, Leichtman, Pillemer, and Shanteler (2013) reveal that children develop their memory when they are exposed to documentation that captures their learning experiences that occurred three weeks ago. Also, it is evident that when documentation is provided, more children demonstrate better memory skills for factual information, which leads children to talk more about factual information that was associated with their learning experiences (Fleck et al., 2013). Photographs, especially, appear to entice children to promote their memory of their learning events; consequently, the likelihood of conversation with their families about their learning
experiences was increased (Boardman, 2007). Therefore, children’s memories can be sparked by reviewing pedagogical documentation (Kim & Darling, 2009; Suarez & Daniels, 2009).

**Children’s curiosity.** Children are born with curiosity and this curiosity leads them to continually raise questions, and examine the questions by exploring their surroundings (Wilson, 2008). Through the use of pedagogical documentation, children “become even more curious, interested, and confident as they contemplate the meaning of what they have achieved” (Malaguzzi, 1993a, p. 63). Kim and Darling (2009) further explains that since pedagogical documentation encompasses evidence of children’s own work, ideas, experiences, and interactions, children can revisit work that they were engaged in previously and generate ideas that trigger their curiosity through pedagogical documentation. The study of Kim and Darling (2009) also reveals that pedagogical documentation provides children with an opportunity to modify their theories by recalling their previous experiences, and exchange information with their peers, which encourages children to comprehend different perspectives that other people have and therefore, to provoke a variety of different curiosities. Thus, pedagogical documentation is a means to inspire children to be curious about what they experience.

**Learning about individual child.** The National Association for the Education of Young Children (2009) suggests that “effective teaching of young children begins with thoughtful, appreciative, systematic observation and documentation of each child’s unique qualities, strengths, and needs” (p. 13). Educators in the Reggio Emilia approach are expected to make an attempt to comprehend the process of children’s work, experiences, capabilities, and learning through the use of pedagogical documentation that does not have predetermined expectations for children (Dahlberg et al., 1999). The study of MacDonald (2007) uncovers that not only educators but also parents can gain more enriched and comprehensive insights of individual
children by engaging in pedagogical documentation. The important aspect of pedagogical documentation is that it allows educators to continue on planning for “meaningful follow-up lessons” (MacDonald, 2007, p. 241).

Additionally, Buldu (2010) suggests that producing pedagogical documentation yields profound information on children’s thinking processes, learning stories, and any misinterpretations that they had. For this reason, pedagogical documentations serve as an informative tool (Buldu, 2010). Jablon, Dombro and Dichtelmiller (2007) support this idea by stating that documenting and interpreting children’s learning experiences allow early learning practitioners to have a richer and deeper understanding about what and how children think. It is because continuous documentation that incorporates children’s engagement in diverse experiences generates an authentic picture of children’s different development levels, skills, curiosity, personalities, and strategies that they use for accomplishing tasks (Forman & Hall, 2005). The process of creating pedagogical documentation prevents educators from perceiving children as decontextualized individuals (Fleet, et al., 2012). Namely, as educators dedicate themselves to observe and document children in different contexts, they are able to better understand individual children (Cadwell, 2003; Forman & Hall, 2005). With this understanding, educators can support children to “… climb their own mountains, as high as possible” (Malaguzzi, 1988, p. 77). Consequently, the use of pedagogical documentation provides educators with a better understanding of individual children.

Reflection. Another core contribution of pedagogical documentation for educators is that it offers practice that can be built on reflection. Dahlberg and Åsen (1994) assert that ongoing documentation and records of pedagogical work provoke reflection among educators. In particular, Dahlberg and Åsen (1994) explain that:
A reflective dialogue and a reflective practice presupposes material to reflect on, material that is visible for all whom it concerns. Another presupposition is that the pedagogue and the child are given a voice in this process, a voice that can be communicated to others. (p. 167)

Khan and Begum (2012) reveal that one of the critical roles that pedagogical documentation plays is to accumulate visual data of children’s learning through reflection. In particular, a portfolio, one of forms of pedagogical documentation, allows teachers to raise questions, critically think about their practice, and therefore, reflect on their practice (Khan & Begum, 2012). Educators can obtain information and knowledge about appropriate teaching philosophy, planning curriculum, and identifying desirable learning outcomes through listening, observing, documenting, and interpreting children’s learning experiences (Khan & Begum, 2012).

Dahlberg et al. (1999) saw great potential in pedagogical documentation for shared reflection. They note that:

Content is material which records what the children are saying and doing, the work of the children, and how the pedagogue relates to the children and their work.... This process involves the use of that material as a means to reflect upon the pedagogical work and do so in a very rigorous, methodical and democratic way. That reflection will be done both by the pedagogue alone and by the pedagogue in relationship with others - other pedagogues, pedagogistas, the children themselves, their parents, politicians. (p. 147-148).

Pedagogical documentation becomes a great evaluation tool in early childhood education as it facilitates a reflective dialogue (Dahlberg et al., 1999). This reflective dialogue about visual evidence of children’s learning experiences, and discussions encourages educators to
contemplate about where to go from there and appropriately prepare for future activities and
experiences (Suarez & Daniels, 2009; Yu, 2008). McLachlan (2006) notes that “… following the
interests of children is not a predictable process … walking beside children, rather than leading
them, requires constant and committed reflection with every step” (p. 27). Therefore, sustaining
reflective teaching processes that are generated from pedagogical documentation is a crucial part
of a Reggio Emilia inspired early childhood program.

**Professional development.** According to Buldu’s (2010) research, pedagogical
documentation appears to ignite “a professional learning community” that creates opportunities
for educators to collaboratively analyze what children have been learning, and share their
opinions on teaching methods with their colleagues (p. 1445). The findings of the study suggest
that pedagogical documentation has evolved educators’ thoughts about the image of children, the
role of the teacher, and the environment around the children (Lyon & Donahue, 2009). The
practice of pedagogical documentation allows educators to recognize children as capable
individuals, view themselves as researchers, and realize the importance of the environment as a
third teacher (Lyon & Donahue, 2009). These changes contribute to a developed and advanced
practice as educators were able to intensely focus on children’s voices, and variables that
influence on children’s experiences (Lyon & Donahue, 2009).

Flannery Quinn and Schwartz (2011) explore the perceptions of early childhood pre-
service teachers on the use of pedagogical documentation. Their findings suggest that
pedagogical documentation plays an effective role in gaining not only children’s learning but
also their own professional development. Similarly, Picchio, Giovannini, Mayer and Musatti
(2012) demonstrate that early childhood educators’ ongoing professionalism can be developed
and enhanced by implementing documentation in their educational settings. Particularly, this
study highlights the high demand of utilizing documentation for supporting educators’ professional development since the process of producing, interpreting, and utilizing documentation assists educators in collaborating with their colleagues by sharing their reflections and feedbacks (Picchio et al., 2012), formulating teaching hypotheses, and transferring theories into their practice (Gandini, 1993). Consequently, during documentation procedures, “teachers preserve the most interesting and advanced moments of their professional growth” (Kline, 2008, p. 72).

Involving parent, families, and community. One of the primary functions of using pedagogical documentation is that it invites parents, families and the community into children’s learning process. Through the practice of pedagogical documentation, teachers are able to engage in and reinforce emerging dialogue and interactions with parents and families (Buldu, 2010). Particularly, the use of photographs in pedagogical documentation appeared to foster active interactions between educators, children, and parents (Boardman, 2007). Pedagogical documentations act “as a vehicle for developing a joint understanding” (Cave, Connerton, Honig, & Robertson, 2012, p. 60). Pedagogical documentation encourages each audience member to produce perspectives and these multiple perspectives contribute to constructing the meaning of the experience (Cave et al., 2012). Communication among children, parents and early childhood educators is substantial as parents and families become aware of children’s learning processes, and teachers’ teaching strategies, which can possibly support the parents and families in seeking for proper ways to contribute to improve learning experiences for their children (Buldu, 2010). By exchanging information among parents and educators, parents can be educated on appropriate approaches that support their children in furthering and deepening their learning experiences (Buldu, 2010). Pedagogical documentation also reinforces communication between children and
their families (Buldu, 2010). Thus, pedagogical documentation is beneficial to educators as well as children and their parents and families (Buldu, 2010).

Likewise Buldu’s (2010) study, Suarez and Daniels (2009) identify that pedagogical documentation facilitated communication among educators, children, and their families, and more importantly, these communications improved thought provoking processes, strengthened planning procedures for the future, and increased reflection. For this reason, the educators indicate that the pedagogical documentation provides “the richness of such work through collaborative inquiry” (Suarez, & Daniels, 2009, p. 187). Implementing pedagogical documentation is useful and practical because it yields “shared awareness of all our learning” (MacDonald, 2007, p. 239), which is a key component for a collaborative learning environment.

Pedagogical documentation launches a great opportunity not only for creating dialogue among educators and families but also for building a relationship with the wider community. This is possible due to the fact that displaying visual work of what children and educators do constructs legitimacy and trust with the public (Dahlberg et al., 1999). As visual displays of children’s learning experiences becomes informative to parents as well as the community members including outside stakeholders, it generates productive dialogue among those who have direct or indirect impacts on children’s experiences (McKenna, 2005). In fact, in McKenna’s (2005) study, the educators perceive pedagogical documentation as a great mechanism to propagate a public voice. It is vital to create a public voice for children, early learning practitioners, and child care facilities as a public voice brings contributions from diversified perspectives to early childhood education, which cultivates a democratic environment (McKenna, 2005). Hence, pedagogical documentation encourages parents, families and the
community to be engaged in children’s experiences through communication, and ensures that this involvement and contribution continues.

**Challenges of Using Pedagogical Documentation**

Regardless of the great potential of pedagogical documentation, some educators report that they confront some challenges in utilizing pedagogical documentation. One of the biggest challenges is time consumption as an ample amount of time is required for listening to children, observing children’s learning, analyzing collected visual evidence, interpreting what it means, and reflecting on it (Boardman, 2007; McKenna, 2005). Technical issues are another challenge in using pedagogical documentation. Even though video recordings were found to be more effective to obtain a better understanding of children than other mediums, the data demonstrated that early childhood pre-service educators favoured to utilize photographs over video recordings (Flannery Quinn & Schwartz, 2011). Video recordings were much more intricate and difficult to examine (Flannery Quinn & Schwartz, 2011). It was also highlighted that educators found it challenging to capture children’s action shots in order to document their physical development and motor skills (Boardman, 2007). Nonetheless, McKenna (2005) identified that when educators recognized the value in pedagogical documentation, they were more likely to invest their time in the process.

**Summary**

The literature review of children’s outdoor play provided a variety of benefits of outdoor play for children. Children benefit from engaging in outdoor play experiences, interacting with outdoor play environments, and being outside. Research supports that outdoor play promotes children’s brain, cognitive, language, social and emotional, and physical development and
increases exposure to nature. These benefits are vital for children’s overall health, development, and health in their adulthood. Therefore, this literature review suggests the significance of outdoor play for children.

The literature of pedagogical documentation was also reviewed in order to understand its functions and strengths. Pedagogical documentation is a tool that encourages children to play an active role in their learning process, and promotes their memories because it contains their own visualized work. Pedagogical documentation also serves as a mechanism that assists early childhood educators in better understanding individual children, reflect on their practice, developing professionally, and inviting parents, families, and communities to their program. No research that focused on outdoor play pedagogical documentation was found.
CHAPTER III

Methodology

More than one century ago, a philosopher Wilhelm Dilthey asserted that science was not the right mechanism to assist human beings in comprehending themselves (Richman, 1976). Dilthey further argued that:

Only from his actions, his fixed utterances, his effects upon others, can man learn about himself; thus he learns to know himself only by the round-about way of understanding.

What we once were, how we developed and became what we are, we learn from the way in which we acted, the plans which we one adopted, the way in which we made ourselves felt in our vocation, from old dead letters, from judgments on which were spoken long ago… We understand ourselves and others only when we transfer our own lived experience into every kind of expression of our own and other people’s lives. (as cited in Richman, 1976, p. 163)

It is not “the uniqueness of individual lives” that scientists focus on, instead the entirety of the population is usually emphasized by scientists even though science can reveal matters that are related to people’s lives (Stake, 1995, p. 36). This different focus is what discriminates quantitative research and qualitative research (Stake, 1995). This study places high priority on interpreting individuals’ unique experiences instead of investigating measurement data, as practiced by other qualitative advocates such as Elliot Eisner and Alan Peshkin (1990). As a result, this study is designed utilizing a qualitative research.

Qualitative research believes that interpreting people’s interactions and perceptions is the most effective way to understand reality that the people are involved in (Merriam, 1988). This
interpretation needs to be examined through qualitative research because it cannot be easily measured and captured, understood from the existing literature, or extracted from results from other research (Creswell, 2013). “Current emphases in qualitative research methodology acknowledge the importance of configuration and matters of context ... [and] pay special attention to subtleties of practice as well as to the uniqueness of outcome” (Eisner, 1993, p. 53).

Accordingly, qualitative research is utilized to answer research questions, which enables researchers to explore the complexities of social interactions in richer details and greater depth (Huberman & Miles, 2005; Meloy, 2002; Paul, 2005; Schram, 2003; Shank, 2002). In particular, qualitative research explores phenomena or events in their natural settings in order to discover the “local meaning” (Merriam, 1988; Miles & Huberman, 1994). Studying the “local meaning” corresponds to this study as it explores children’s voices in their outdoor play pedagogical documentation in local outdoor play environments.

Another core characteristic of qualitative research is that it inquires as to what certain experiences mean to those who are involved (Erickson, 1990). Corbin and Strauss (2008) continue to support this idea by noting that researchers obtain qualitative data by collecting participants’ contributions, which helps the researchers understand the participants’ inner voices, experiences, and opinions. In other words, qualitative research yields “a complex, detailed understanding of the issue” (Creswell, 2007, p. 40). Indeed, qualitative research allows researchers to obtain this enriched understanding of events by empowering individual participants to share their understandings, perceptions, stories, and knowledge about specific phenomena (Creswell, 2007, 2013). This empowerment is key to minimizing the authority that researchers may possess over participants (Creswell, 2007, 2013) and therefore, assists in allowing researchers to obtain genuine data from participants. Exploring children’s voices in
their outdoor play pedagogical documentation is about seeking to understand children’s perceptions and ideas about pedagogical documentation that focuses on their outdoor play experiences. For this reason, emphasis on gaining participants’ inner voices is well-suited for this study of children’s understandings about pedagogical documentation through their outdoor play experiences.

According to Creswell (2013), there are five qualitative research approaches to inquiry: Narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research. What differentiates all of these methods is “the way in which the researcher thinks about the data and subsequently conceptualizes – that is, “think up” from data” (Richards & Morse, 2007, p. 48). The products of a research study depends on what kinds of approaches are employed in the study (Richards & Morse, 2007). Among these five qualitative research approaches, the case study research approach is selected for this study.

Merriam (1988) defines the case study research method as “an intensive holistic description and analysis of a single entity, phenomena, or social unit” (p. 16). Merriam (1998) further describes the case study as being "particularistic, descriptive, and heuristic" (p. 29); particularly, particularistic because the case study emphasizes a particular program, event, or phenomenon; descriptive because the case study yields a description of a certain phenomenon; and heuristic because an understanding of the phenomenon is illuminated by the case study. Yin (1984) describes a qualitative case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (p. 23). Case study researchers aim to “construct descriptions of total phenomena within their various contexts and to generate from these descriptions the complex interrelationships of
causes and sequences that affect human behavior toward, and belief about, phenomena” (LeCompte & Preissle, 1993, p.3).

Merriam (1998) states that case study research focuses on “discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education” (p. 1). Accordingly, one of the main tasks of a case study is to yield “an invaluable and deep understanding – that is, an insightful appreciation of the case(s) – hopefully resulting in new learning about real-world behavior and its meaning” (Yin, 2012, p. 4). Conducting a case study produces insight into the cases or connections among multiple cases in great details (Creswell, 2007). The case study strategy is utilized to explore complex situations that do not hold a clear set of results (Yin, 1994). Merriam (1998) further notes, “a case study design is employed to gain an in-depth understanding of the situation and the meaning for those involved” (p. 19). Case study methodology optimizes in-depth participants’ perspectives as it encourages researchers to utilize multiple sources of data; thus, a case study is ideal for discovering a holistic examination (Feagin, Orum, & Sjoberg, 1991). However, the ability to generalize from one case is limited due to the fact that it is not always possible to duplicate social settings that individuals are involved in (Lee, 2012). Nonetheless, a growing body of literature indicates that theoretical perspectives can arise from the depth of a case study and this is remarkable as the theoretical perspectives can be applied to other similar social settings (Merriam, 1998; Mutch, 2005).

According to Yin (2012), either a descriptive research question or an explanatory research question is pertinent to the case study method since the insightful explanations of case(s) arise by carrying out a case study. This also falls into Merriam’s (1998) understanding of the case study, which is that the “interest is in process rather than outcomes, in context rather
than a specific variable, in discovery rather than confirmation” (p. 19). Merriam (1998) and Yin (2003) recommend that research questions within a case study are designed to provide a clear picture of the participants’ experiences surrounding the study’s events because the focus of case studies is to accumulate individuals’ experiences and understanding (Gomm, Hammersley & Foster, 2000). “How” or “why” questions fit well with case study research because they seek contemporary phenomenon within a real-life context (Yin, 2009). Also, when “how” and “why” questions are asked, researchers possess less control over the phenomenon (Yin, 2009).

Consequently, this qualitative case study was guided by the following research questions.

1. How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?

2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?

3. After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?

The “case” that I am studying needs to be defined because having a clear definition of the “case” systematizes case studies, according to Yin (2012). A case refers to being “separated out for research in terms of time, place, or some physical boundaries” (Creswell, 1998, p. 485). Likewise, Yin (2012) defines a case as “a bounded entity” (p. 6). A case can be a person, an event, an incident, a social phenomenon, an entity, or a community (Merriam, 1988; Patton, 1990; Yin, 2012). Yin (2012) suggests that a case becomes significant and critical when it encompasses a unique and distinctive event or subject. This study will be focused on one case of children’s voices in outdoor play pedagogical documentation.
In addition to defining a case, it is vital to establish the boundaries of a case study (Creswell, 1998; Hatch, 2002; Yin, 2003). This case study is bounded to one child care setting with an outdoor play environment and concentrates on studying children’s understandings about the outdoor play pedagogical documentation that takes place in the outdoor play environment. The size of the boundaries distinguishes types of qualitative case study methods, such as whether or not the case involves one individual, several individuals, a group, or an activity (Creswell, 2013). Yin (2012) divides case studies into two designs based on how many cases are incorporated: single-case designs, and multiple-case designs. Whether it is single-case or multiple-case, case(s) can involve either a holistic design or embedded subcases (Yin, 2012). The embedded, single case study with one bounded case is adopted for this study. Hence, this single case study developed one case of children’s voices in outdoor play pedagogical documentation that employs six embedded examples to exemplify the case.

**Researcher Role**

In qualitative research, appreciation of researcher perspectives strengthens the research instrument as researchers become the research tool (Patton, 2002). In particular, the “demands of a case study on your intellect, ego, and emotions are far greater than those of any other research strategy. This is because the data collection procedures are not routinized” (Yin, 2003, p. 58). Yin (2003) presents a list of skills that case study researchers are required to possess. Such skills include asking good questions and interpreting answers, keeping an open-mind, being a good listener, profoundly understanding the issues being studied, eliminating any biases or prejudice that are generated from researchers’ preconceived notions, and sensitively coping with conflicting data (Yin, 2003). Stake (1995) also classifies case study researchers’ roles. One of the roles that Stake (1995) states that a case study researcher has is an interpreter:
The case researcher recognizes and substantiates new meanings. Whoever is a researcher has recognized a problem, a puzzlement and studies it, hoping to connect it better with known things. Finding new connections, the researcher finds ways to make them comprehensible to others. Research is not just the domain of scientists, it is the domain of craftspersons and artists as well, all who would study and interpret. (p. 97)

Thus, during this study, I placed a high priority on being a good listener, and interpreter as a case researcher while attempting to retain other necessary skills for the case study methodology.

**Population and Sample**

Even though it does not usually take large samples of people when qualitative research is implemented (Miles & Huberman, 1994), an appropriate sampling strategy is needed in order to recruit individuals who are best suited for the purpose of the study (Patton, 1990, 2002). In this study, purposeful sampling was selected for recruiting a child care centre and the participants who are registered at that child care centre. Purposeful sampling lays on an assumption that an issue needs deeper insight and understanding (Merriam, 1988). “The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth” (Patton, 2002, p. 230). Purposeful sampling aims at yielding an information-rich case which illuminates the research questions (Patton, 1990, 2002). Accordingly, a sample that would produce the most powerful evidence can be formed by utilizing purposeful sampling (Merriam, 1988). For this reason, Merriam maintains that purposeful sampling is identified as an ideal sampling strategy in the case study design.

This study was bounded by one child care setting where the phenomena of outdoor play pedagogical documentation was explored. The case study was carried out at a non-profit child
care centre in Nova Scotia, Canada. During face-to-face meetings with the researcher, the Director of the child care centre was provided with a Letter of Introduction and Consent for Director (see Appendix B) that describes the purposes and procedures of the study. The Director’s consent to have the child care centre participate in the study was received. The child care centre offers programs for children whose ages are from 18 months to 5 years old.

The sample group consists of six children. Half of the participants are girls and the other half are boys. The participating children were carefully selected for the study based on the following criteria:

1) Those whose ages are ranged between four to five at the time the study was conducted
2) Individuals who are registered at the child care centre full time
3) Children who are able to communicate in English
4) Those who receive permission to participate in the study from their guardians

Protection of Human Rights

It was inevitable to obtain permission from the participants’ guardians due to the fact that the participants’ age is under the legal age of majority. The participants’ legal guardians were fully informed about the study and their child’s voluntary participation by receiving Introduction Letter for Guardian (see Appendix C) and Parental Consent Form for Participation (see Appendix D). Additionally, participants’ and their guardians’ right to withdraw from the study was clarified in the letters. Confidentiality of individual child’s personal information was protected by using code names for data analysis. This case study and all of the letters and forms were reviewed by Research Ethics Board of Mount Saint Vincent University.
Building Trust and Rapport

Building trust and rapport between qualitative researchers and participants is essential because it produces an access to key information that the participants have (Feldman, Bell, & Berger, 2003). Feldman et al. (2003) identify that “commitment acts help foster rapport” (p. 36). Commitment acts refer to researchers’ acts of dedication on learning about the people or community that they study by investing their time and energy so that researchers and informants can establish stronger trust and rapport (Feldman et al., 2003; Glesne, 2006). In other words, spending time with informants helps researchers to get to know them (Stoller, 1989). Since this case study incorporates face-to-face interviews with six individuals, commitment acts were applied. In order to build and increase trust and rapport between the researcher and the children, the researcher spent some time playing with each child during the outdoor play time or free play time prior to the formal data collection. This process received a permission from the Director of the child care centre. The researcher intensely spent approximately 1 hour with each participant by engaging in the child’s play and conversations. Each child’s unique personalities created a distinction in the different level of rapport and comfort that they built with the researcher. Overall, the commitment acts appeared to result in introducing the children to the researcher’s name, increasing the children’s awareness of the researcher, developing their comfort level towards the researcher, and therefore, establishing rapport between themselves and the researcher.

Data Collection Instruments

Data can be defined as “the rough materials researchers collect from the world they are studying; they are the particulars that form the basis for analysis” (Bogdan & Bilken, 1992, p. 73). Case study research benefits from utilizing multiple sources of evidence because it is not
restricted to a single source of data (Creswell, 2007; Yin, 2012). Patton (2002) further states that case study researchers are able to minimize the weaknesses of each instrument while maximizing the strengths of each instrument by utilizing multiple instruments for data collection. Specifically, Yin (2003, 2012) recommends that case study researchers use any combination of the six types of information: documents, archival records, interviews, direct observations, participant-observations, and physical artifacts. Even though it is not necessary to use all of the sources, using a variety of sources of evidence can increase the reliability of the study (Stake, 1995; Yin, 1994). In this study, two primary instruments - direct observations and interviews - are organized in order to construct an in-depth and rich detailed grasp of children’s voices in outdoor play pedagogical documentation.

**Direct Observations**

“Qualitative inquiry means going into the field – into the real world of programs, organizations, neighborhoods, street corners – and getting close enough to the people and circumstances there to capture what is happening” (Patton, 2002, p. 48). In order to closely approach children’s outdoor play experiences in the local area, direct observation of six children took place at their outdoor play environment. Direct observation allows researchers to focus on “human actions, physical environments, or real-world events” (Yin, 2012, p.11). Hatch (2002) similarly remarks that when observation is adequately carried out “it allows access to participants’ experiences of their worlds” (p. 82). Becker and Geer (1970) illustrated the advantage of observing individuals that are involved in the study:

Because he sees and hears the people he studies in many situations of the kind that normally occur for them, rather than just in an isolated and formal interview, he builds an ever-growing fund of impressions, many of them at the subliminal level, which give him
an extensive base for the interpretation and analytic use of any particular datum. This wealth of information and impression sensitizes him to subtleties which might pass unnoticed in an interview and forces him to raise continually new and different questions, which he brings to and tries to answer in succeeding observations. (p. 32)

Accordingly, the participants’ outdoor play experiences and their initial reaction to pedagogical documentation that demonstrates their previous outdoor play experiences were directly observed and captured while they were in their outdoor play setting. The participating children’s photographs were taken. During the direct observation, descriptive information including dates and the time of the observation, outdoor play environments, children’s outdoor play experiences, any kinds of children’s interactions, expressions, and conversations that occurred were recorded on written field notes. Later, the photographs and the field notes were used to create pedagogical documentation. The purpose of this direct observation was to gain a better understanding about children’s outdoor play experiences in their natural outdoor play context as it enabled the researcher to pay more attention to how children engage in their outdoor play and interact with others during their outdoor play. Within the outdoor play setting, the role of the researcher is a non-participant observer in order to avoid generating possible interruptions and aberrations in the children’s behaviours, and/or outdoor play experiences.

**Interviews**

In addition to the direct observations, face-to-face and one-to-one (the researcher-the child) interviews were utilized as a tool to collect information in the study. Interviews can elicit information that cannot be observed or replicated (Merriam, 1988) because interviews provide more extensive data than other instruments such as a survey (Yin, 2012). Patton (1990, 2002) classifies three different types of interviews: the informal conversational interview, the general
interview guide approach, and the standardized open-ended interview. More specifically, in this study, standardized open-ended interviews were incorporated in order to curtail possible variations in interviewees’ responses, and to create an easy access to find and compare the data (Patton, 2002). It is because having “a set of questions carefully worded and arranged” reduces such variations in interview questions posed to respondents (Patton, 1990, p. 280). Facilitating open-ended interviews was attainable in this study as interviews focused on one single topic (Patton, 1990), which was interviewees’ thoughts and emotions about pedagogical documentation that visualized their outdoor play experiences. A set of open-ended questions were asked so as to hear respondents’ own words and their own personal perspectives. During the interviews, the participants were also free to ask emerging questions about the outdoor play pedagogical documentation to the researcher. The purpose of these open-ended interviews is “not to put things in someone’s mind… but to access the perspective of the person being interviewed” (Patton, 1990, p. 278). In other words, conducting the qualitative interviews assists in learning about the world in which the interviewees live in, the meaning of terminology that they use, and the complexities of the experiences that they undergo (Patton, 2002). Through interviews, researchers can finally discover information that cannot be directly observed such as the informants’ feelings, thoughts, and intentions (Patton, 1990, p. 278). As Yin (2012) continues to support this, interviews with the participating children offered an abundant amount of evidence about their emotions, perspectives, and opinions on outdoor play pedagogical documentation. During the interviews, the role of the researcher was to be a good listener and to ensure the interviewees were comfortable in the circumstances.
Data Collection Procedures

The process of data collection for this qualitative case study is accomplished by the following procedures:

1. On the first visit, the researcher directly and intensively observed one child for approximately 40 - 50 minutes during his/her outdoor play time while taking photographs of him/her engaging in outdoor activities, and taking field notes about the explanations of what he/she does, and says, and my wonderment and questions about the play experiences. The observation took place at the child care centre’s outdoor play ground. The photographs were taken with the researcher’s digital camera and they were permanently deleted from the digital camera after they were transferred to the researcher’s password-protected laptop, which had been kept in a locked cabinet. The written field notes were typed into the password-protected laptop within 24 hours of the observation. Then, the written field notes were shredded.

2. On the second visit, which occurred approximately three to five days after from the first visit, pedagogical documentation was displayed at the outdoor play ground at an accessible height for the child. The researcher carefully chose what to document from the 40 - 50 minutes of direct observation. Such criteria for choosing what to document included: 1) certain focus that a child was greatly interested in (Fleet et al., 2012); 2) “potential meaning [and learning] arising” for a child (Wien, 2013, p. 2-3); and 3) the researcher’s curiosity of the child’s outdoor experiences. The pedagogical documentation contained the child’s words, descriptions of the researcher’s observations, questions, and analytic commentary, and photographs of the child’s outdoor play engagements that took place on the first day. The researcher selected a place that was associated with the previous outdoor play experiences to display the pedagogical documentation. For example, if a child was engaged in climbing up a tree, his/her outdoor play
pedagogical documentation would be displayed near the tree. The child’s first reaction to his/her outdoor play pedagogical documentation was observed for nearly 15 – 20 minutes. The researcher shadowed the child while taking photographs of him/her, taking field notes, and dictating his/her conversations about the pedagogical documentation, if necessary. The size of the pedagogical documentation was either 18 inch by 24 inch or 20 inch by 30 inch. The pedagogical documentation was printed at a print store and the researcher ensured that the print store permanently destroyed the pedagogical documentation once it was printed. The pedagogical documentation had been kept in a locked cabinet during the travel. The photographs were permanently eliminated from the digital camera after they were successfully transferred to the researcher’s password-protected laptop. The laptop had been kept in a locked cabinet. After the written field notes were typed into the password-protected laptop within 24 hours of the observation, they were shredded.

3. On the third visit, which happened approximately two to three days after from the second visit, the standardized open-ended interviews were conducted by utilizing the guided interview questions (see Appendix A). The interviews proceeded one child at a time. The interviews took place in a staff room during the child’s free play time, which was right before the outdoor play time. The outdoor play pedagogical documentation was displayed at the child’s eye-level on the wall in the room where the interviews were carried out. The researcher and the child were in the same room and one of the early childhood educators at the child care centre was in a different room. The child knew that his/her teacher was in the other room. The child sat on a chair across from the researcher. The child was asked open-ended questions and he/she was free to respond to them. When the child was distracted during the interviews, the interviews ceased for a while and resumed a few minutes later. The interviews that consisted of one session
consumed approximately 15 – 20 minutes in length. The interviews were recorded and transcribed within 24 hours of the interviews. After the recordings were transcribed, they were permanently deleted from the recorder. The interview questions focused on children’s emotions, perceptions, and thoughts about the pedagogical documentation.

4. On the same day the child had the open-ended interviews, the child was intensively observed again at the outdoor play environment for approximately 20 – 30 minutes. Right after the open-ended interviews, the direct observation was implemented in order to explore the connection between the interviews and sequent outdoor play experiences. During the observation, the outdoor play pedagogical documentation was displayed again. The researcher took the child’s photographs and took field notes during the second direct observation. The photographs were permanently removed from the researcher’s digital camera after they were moved to the researcher’s password-protected laptop, which had been stored in a locked cabinet. The written field notes were typed into the password-protected laptop within 24 hours of the observation. Then, the written field notes were shredded.

This procedure of data collection repeated per child. Time periods between visits were slightly varied among the participating children even though the researcher attempted to minimize the different time periods. It was due to the child’s absence, different printing times for pedagogical documentation, and extreme weather conditions. The overall research plan is illustrated in Table 1.

**Data Analysis**

“The purpose [of case study data analysis] is to gather comprehensive, systematic and in-depth information about each case of interest” (Patton, 2002, p. 447). Analysis within the case
study method is based on how “the researcher wants a better understanding of this particular case” (Merriam, 1998, p. 437). Data analysis began during the data collection process as

Table 1

*Research Plan*

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Purposes</th>
<th>Data Collection Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?</td>
<td>To recognize children’s examination of outdoor play pedagogical documentation.</td>
<td>Data from direct observation and field notes</td>
</tr>
<tr>
<td>2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?</td>
<td>To discover children’s perceptions on pedagogical documentation that reflects on their outdoor play.</td>
<td>Data from direct observation and interviews</td>
</tr>
<tr>
<td>3. After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?</td>
<td>To gain insight into whether conversations with children about their outdoor play experiences through pedagogical documentation panels influences children’s outdoor play experiences.</td>
<td>Data from direct observation</td>
</tr>
</tbody>
</table>

qualitative research inherently means that data collection and analysis occur simultaneously (Shank, 2002; Merriam, 1988). The collected data was analyzed with the typological model (Hatch, 2002). LeCompte and Preissle (1993) illustrated typological analysis as “dividing everything observed into groups or categories on the basis of some canon for disaggregating the whole phenomenon under study” (p. 257). According to Hatch (2002), “Typologies are generated from theory, common sense, and /or research objectives, and initial data processing happens
within those typological groupings" (p. 152). Typological analysis is useful when a study appears to have fairly obvious and logical categories or typologies (Hatch, 2002). The typological analysis procedure as described by Hatch (2002) was adopted.

The first step of the data analysis began with thoroughly reading the data from observations, field notes, and interview transcripts in order to identify the typologies. The specific typologies for this study were derived from the research questions and the collected data, e.g., children’s reaction to outdoor play pedagogical documentation, children’s perceptions on outdoor play pedagogical documentation, and children’s outdoor play engagement. Then, the data was disaggregated from the whole data set based on main ideas (typologies) (Hatch, 2002). The focus of this second step was whether or not the data was associated with the certain typology. For this reason, the question “Does this information relate to my typology?” (Hatch, 2002, p.154) needed to be consistently asked at this point. If the data correlated to the specific typology, entries were marked and excerpts of the data were copied to a separated word file, as recommended by Hatch (2002).

Next, a summary sheet was written for each participant. A brief statement of each typology was written on the summary sheet while the selected data excerpts were read (Hatch, 2002). The focus of this step was to write summaries rather than interpreting or assuming. These summaries were helpful to identify and manipulate the selected data (Hatch, 2002). The fourth step in the typology analysis involved searching for any patterns, relationships, or themes within the typologies that were recorded on the summary sheets (Hatch, 2002). Patterns have different forms such as “similarity (things happen the same way), difference (they happen in predictably different ways), frequency (they happen often or seldom), sequence (they happen in a certain order), correspondence (they happen in relation to other activities or events), and causation (one
appears to cause another)” (Hatch, 2002, p. 155). Relationships refer to links between data elements including “strict inclusion (X is a kind of Y), rationale (X is a reason for doing Y), cause-effect (X is a result of Y), and means-end (X is a way to do Y)” (Hatch, 2002, p. 155).

Themes, which are integrating concepts, can be searched by asking “What broad statements can be made that meaningfully bring all of these data together?”, according to Hatch (2002, p. 156). During this step, a variety of themes for each typology were identified and developed.

The next step embraced reading through the selected data for the typologies and coding information according to the themes identified. Data excerpts were selected to support each theme. Whether or not the themes were supported by the data needed to be determined at this point. This was necessary as not all of data excerpts fitted into the typologies. Then, possible connections between, across, or among themes identified were investigated. Lastly, the data analysis concludes by writing the themes as generalized statements which are defined as “special kinds of statements that express relationships found in particular contexts under investigation” (Hatch, 2002, p. 159). Significant findings and relationships between the themes were explored to generate generalization statements for this case study.

Summary

This study seeks to describe children’s understanding about their outdoor play pedagogical documentation. In addition, this study explores the link between children’s outdoor play experiences and their outdoor play pedagogical documentation. It requires a methodology that can explain children’s inner thoughts, perspectives, and experiences; therefore, qualitative case study was employed in this study. Six children were recruited from a child care centre in the local region for the study. Multiple sources of data were collected and the typological model (Hatch, 2002) was utilized to interpret and analyze the collected data.
CHAPTER IV

Analysis of Data

This study explored children’s reaction to and perceptions on pedagogical documentation that visualized their outdoor play experiences and their outdoor play engagements after having a conversation about outdoor play pedagogical documentation. The researcher observed six children between the ages of four to five at the time of the study during their outdoor play time in order to discover their initial reaction to outdoor play pedagogical documentation and their play experiences. Six children shared their thoughts about outdoor play pedagogical documentation through standardized open-ended interviews guided by the researcher. Data from the interviews and the researcher’s observation field notes were analyzed using the typological analysis model (Hatch, 2002). Three predetermined typologies were derived from the research questions: Children’s reaction to outdoor play pedagogical documentation, children’s perceptions on outdoor play pedagogical documentation, and children’s outdoor play engagement. These typologies were analyzed to identify and determine themes within the typologies. The data was thoroughly read in its entirety for each of the three typologies and entries that were related to the typologies were marked. The researcher focused on one typology at a time. Next, the marked entries were read and the main ideas were recorded on summary sheets, as suggested by Hatch (2002). The typology themes were developed from the summary sheets. The selection of excerpts from the interviews and direct observation supported the themes. If any relationships were found among the themes, the relationships were determined. Finally, the typology analysis concluded with one-sentence generalizations. Even though typological generalization statements do not intend to imply generalizability, data excerpts were selected to support the generalizations. The steps of the typological analysis model is shown in Figure 1.
Description of Sample

A childcare centre in the local area was selected for the study and the director’s permission to have the childcare centre participate was received. Six children were the focus of this case study, and all the children’s guardians agreed to have their child participate in the study. Ages of the participants ranged from four to five at the time of the study. All of the participants were attending a child care centre full time and were capable of communicating in English. Three of the children were boys and the other three were girls. Due to confidentiality, all of the children’s names remain anonymous and were altered for the case study analysis.

Findings

This case study is based on the cases of children’s voices in outdoor play pedagogical documentation at a local childcare centre. Understanding children’s reaction to, and views on outdoor play pedagogical documentation through multiple sources contributed to a solid
description of the case study. The typological analysis utilized the research questions to determine three predetermined typologies.

The first research question in this case study was, “How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?” This question is associated with children’s initial reaction to their outdoor play pedagogical documentation panel that was displayed in their outdoor play playground. Three major themes were identified in relation to the children’s reaction. The primary reaction themes include 1) silence, 2) comments, and 3) questions.

The second research question for this study was, “How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?” Four major themes were identified through the children’s answers to the guided interview questions. The four main themes in regards to children’s perceptions on outdoor play pedagogical documentation are: 1) revisiting previous experiences, 2) brainstorming ideas, 3) awareness of letters, and 4) positive traces.

The last research questions in this study was, “After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?” This research question was posed to find out how children would engage in outdoor play after they were interviewed about the outdoor play pedagogical documentation. This research question identified four main themes: 1) no relation, 2) repeating experiences, 3) implementing ideas, and 4) look what I can do. The researcher’s observation and field notes revealed the themes. All of the typologies and the themes that are presented in Table 2.
Table 2

Themes of Research Questions

<table>
<thead>
<tr>
<th>Research questions</th>
<th>Typology</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?</td>
<td>Children’s reaction to outdoor play pedagogical documentation</td>
<td>a. Silence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Comments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Questions</td>
</tr>
<tr>
<td>2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?</td>
<td>Children’s perceptions on outdoor play pedagogical documentation</td>
<td>a. Revisiting previous experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Brainstorming ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Awareness of letters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Positive traces</td>
</tr>
<tr>
<td>3. After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?</td>
<td>Children’s outdoor play engagement</td>
<td>a. No relation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Repeating experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Implementing ideas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Look what I can do</td>
</tr>
</tbody>
</table>

Presentation of Themes

The three research questions for this study were designed to understand children’s understanding about pedagogical documentation that visualized their outdoor play experiences. More specifically, the first research question investigated children’s initial responses to their outdoor play pedagogical documentation. The second question explored insights to the perceptions children have about their outdoor play pedagogical documentation. The third question was intended to discover how children would engage in outdoor play after having a conversation about their outdoor play pedagogical documentation. Data from children’s
interviews, the researcher’s observation and field notes that is related to the themes of the research are presented next.

The first typology pertains to children’s initial reaction to their outdoor play pedagogical documentation. The data was collected through direct observation and field notes. The researcher selected excerpts from the observation in order to support the themes.

*Research Question 1 (RQ1): How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?*

*RQ1 - Reaction - Theme 1: Silence*

The children remained silent when they first time saw their outdoor play pedagogical documentation displayed at their outdoor play environment. Casey found the outdoor play
pedagogical documentation at the playground while walking by the documentation during his outdoor play. Then, he stood in front of the documentation and gazed at it for approximately 25 seconds without saying any words. Then, Casey left the spot and continued on engaging in what he was playing with before he found the documentation. Rowan showed a very similar reaction. After Rowan initiated an outdoor play activity with her peers, she set her eyes on the outdoor play pedagogical documentation. Rowan ceased playing and sat on the bench that was located by the documentation and gazed at it for about one minute. Then, she got up and went back to her play while keeping silent.

**RQ1 - Reaction - Theme 2: Comments**

Photograph 2.

The children stated some comments on their outdoor play pedagogical documentation
when they observed it for the first time during their outdoor play time. The comments correlated
with explanation of who the children see in the photographs, what kinds of play they were
engaged in, and how they feel. Charlie and two other peers closely approached the
documentation and Charlie started to say “That’s me. There is no picture of you and Ethan.”
When one of his peers asked him a question while pointing at one of the pictures on the
documentation “Why is Quinn crying?” Charlie corrected his peer by explaining what exactly
happened. “He is not crying he is smiling. Quinn was saying wee-woo wee-woo. Just that’s it.”
More comments were offered which included “There is picture of me,” “There is three of me on
the top, middle, in the bottom. I like that time,” “Let’s play with the pictures,” and “This is what
I was doing.” The children spent some time gazing at the outdoor play documentation after they
left the comments. Then, all of the children moved to a different spot to play with something

Photograph 3.
else in their outdoor play environment.

**RQ1 - Reaction - Theme 3: Questions**

Questions about the pictures on the outdoor play pedagogical documentation were aroused as an initial reaction to it. When Quinn raised the question “Why do I have my eyes closed?” there were two people around him, his peer and the researcher. No one replied to his question so he decided to ask the same question again and this time he ensured that the researcher was looking at him. The researcher re-asked the question to Quinn “Why do you think your eyes were closed?” Then, Quinn responded “Maybe I was saying Ah~.” Then, he walked away and began playing in way that was not related to the outdoor play pedagogical documentation.
The second typology relates to children’s perceptions of their outdoor play pedagogical documentation. The data was revealed through the standardized open-ended interview. Direct excerpts from the interview were selected to support each theme.

*Research Question 2 (RQ2):* 2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?

*RQ2 - Perceptions - Theme 1: Revisiting previous experiences*

All of the children revisited their previous outdoor play experiences while describing the photographs that were on outdoor play pedagogical documentation. The children explained what activities they were engaged in, why they were engaged in that kind of experience, who they were playing with, and what words they were saying. All of the children remembered exactly what happened by looking at the photographs because the children’s description of their previous outdoor play experiences matched with the notes that appeared on the pedagogical documentation. Charlie illustrated his previous outdoor play experiences:

Um, that’s when we are in the fire truck. That’s the fire truck. But it’s just a toy fire truck. I am just saying Wee-woo. It’s just us laughing and we were talking. And that’s us. I was talking about I need the rope and Quinn said “I need the rope.” And I said I need it for safety hazard and Quinn said no. Then, he just got on his bum and then he, um, I tried to pull him.

Rowan revisited her previous outdoor play by stating what she was doing:

Well, I was taking pictures of some people like skating on the ice and Carson likes diving in it. I was trying to get pictures of Audrey swirling around on the ice but she did it faster. And then she did it fast so I couldn’t take photos of Audrey because she left like so
quickly there was only tiny short minute because she kept swirling around and just stopping.

*RQ2 - Perceptions - Theme 2: Brainstorming ideas*

All of the children brainstormed more outdoor play ideas and play materials they could add to their outdoor play experiences in the future while talking about their outdoor play experiences and looking at the outdoor play pedagogical documentation. Finley explained that she was trying to make the snow ball fly by placing the snowball on the shovel and jumping on the other side of the shovel. She articulated that “I was trying to make the snow ball fly so that it can roll easier because it was really heavy that snow ball. I wanted to roll it into the air.” Finely further noted that the snow ball was too heavy so it stayed on the shovel. Then, she brainstormed other methods, and she came up with the idea to use sticks to roll the snow ball. When Charlie

*Photograph 5.*

Image © Bora Kim
who used a rope for his play was asked about the other uses of ropes, he suggested various ideas for using ropes for different outdoor play activities:

You can pull people up the slide but only when it’s slippery. When it’s slippery on the slide, you can pull people up. But only when it’s slippery, I think. Um, tie people around it and take them. I have a good idea. You could sit on a paper at the back playground but that’s only for sitting and sliding and you could do that on the ice and you can hold on to the rope, and a teacher or a kid can pull you.

RQ2 - Perceptions - Theme 3: Awareness of letters

The children wondered about what the notes on the pedagogical documentation said and recognized their names and that of some peers. Charlie continuously raised questions about what
certain words and phrases were and what they meant. Charlie’s questions about his interests in letters include “What does that say?”, “Is that all my name?”, “Can you read all of them (the notes)?”, and “Why is there a question mark there (on the documentation)?”, which were properly answered by the researcher. The child’s and peers’ names were acknowledged as well. Jaiden was wondering if her name was on the pedagogical documentation. She said “I can tell which one is J and my name.” Then, she looked for her name and when she found it, she spelled her name out loud “J, A, I, D, E, N.” Then, she started to trace the letter A on the documentation with her finger while commenting “A, capital A is a straight line.” While gazing at the documentation, Quinn discovered that his name was also on it. “That says my name. This is my name, Q, U, I, N, N.”, stated Quinn. Then, he recognized Charlie’s name as well by noting that “And that spells Charlie, C, H, A, R, L, I, E.”

**RQ2 - Perceptions - Theme 4: Positive traces**

The children illustrated positive comments about the outdoor play pedagogical documentation and these comments were exhibited through the interview about how they feel about the pedagogical documentation, what they would like to do with it, and what other people would say about it. All of the children expressed positive emotions about looking at their own outdoor play pedagogical documentation, and embraced such emotions as “happy” and “good”. These positive feelings were related to what they thought about their experiences being displayed on the pedagogical documentation and looking at themselves in the printed photographs. Jaiden liked looking at her documentation and explained the reason by stating that “sometimes I like to see what I am doing.” Quinn explained that he felt good looking at the documentation and his reason was “because it look good when I was doing things.” Both Casey and Charlie responded that they like the photos of themselves on the documentation.
The children’s thoughts on what they would like to do with the outdoor play pedagogical documentation further supports outdoor play pedagogical documentation as a tool to positively trace previous outdoor play experiences. All of the children wanted to show the outdoor play pedagogical documentation to their families, peers, or other people. The majority of the children wanted to take the pedagogical documentation to their home. Rowan wanted to show her pedagogical documentation to everybody at her home. Finley wanted to take it to her parents and she further noted that “I think they want to put it up on the wall because they usually put things up on the wall what’s cool.” The other children wanted to share the pedagogical documentation with other people and their peers. When asked why the children think the outdoor play pedagogical documentation was created, Jaiden stated that “So another people come in and they can see what I did.” Jaiden further explained that “Sometimes in the summer some people don’t know about the poster so sometimes in the summer you can put it outside so other people can see it.” Quinn elaborated that “We could hang it up at other 4 years room because the picture will be beautiful. We could put that in the block area because that’s the best spot.”

Lastly, the children’s thoughts on what their families and friends would say about the outdoor play pedagogical documentation show how they perceive their outdoor play pedagogical documentation. When asked what their family and friends would say when they see the outdoor play pedagogical documentation, some responses included “My mommy and daddy would say ‘Great job Casey’”, “I think they would say awesome”, “They would say cool and beautiful because it’s pretty neat.”, and “Beautiful because they think it will be cool.” Jaiden commented:

I want my family to make a poster like this. Whenever they forget, they can look at it. Sometimes my dad, he takes of himself smiling and saying good job and he puts it up
and sometimes he puts it outside so I know. And it says what it is. So I think they are going to say good job.

The last typology is associated with children’s engagement in outdoor play experiences after they participated in the interview. Direct observation and field notes revealed the data. The selection of excerpts from the observation support the themes.

*Research Question 3 (RQ3): After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?*

*Photograph 7.*

*Image © Bora Kim*

**RQ3 - Engagement - Theme 1: No relation**

A few children participated in outdoor play experiences that had no relation to the content of the interview nor outdoor play experiences that were visualized on the pedagogical
documentation. Even though they looked at their outdoor play pedagogical documentation at the outdoor play setting after the interview, they were involved in different outdoor play activities.

**RQ3 - Engagement - Theme 2: Repeating experiences**

After the interview, the children repeated their outdoor play experiences that were documented in the outdoor play pedagogical documentation. Rowan saw her outdoor play pedagogical documentation at the outdoor play ground and told one of her peers “Remember? I was taking photos over there” as she took her peer to the play area that she was taking photos. Then, Rowan continued on engaging in taking photos of her peers with a lump of ice, which she called an ice crystal.

![Photograph 8](image)
Several children implemented new play ideas and added more materials to their outdoor play. During the interview, new outdoor play ideas and possible play materials were discussed. Those outdoor play ideas were implemented to the children’s outdoor play experiences that occurred right after the interview. During the interview, Quinn had mentioned that he wanted to run really fast with the rope. As soon as Quinn entered the outdoor play ground, he grabbed the piece of rope that he was using during his previous outdoor playtime and started to run fast. When Quinn saw a teacher using a shovel, he asked for it as adding a shovel to his outdoor play was his idea. Moreover, Finley’s peer asked her a question about her outdoor play pedagogical documentation, “How did you make the snow ball?” Finley pointed at the photographs on the
documentation and replied to her peer “There are the pictures of what I make.” Then, Finley suggested an outdoor play idea by stating that “Let’s have a snow ball fight.”

Photograph 10.

**RQ3 - Engagement - Theme 4: Look what I can do**

The children were engaged in outdoor play activities that could demonstrate their skills and abilities. Jaiden ensured that the researcher was taking photos of her by asking “Were you taking pictures of me?” When the researcher nodded her head, Jaiden commented “I want to show you something over there.” Jaiden and the researcher walked together to a place where a big tree was. Then, Jaiden showed her capability to climb up and down the tree by herself to the researcher. While Quinn was playing on a hammock, he realized that the researcher was nearby
because he was gazing at the researcher. Quinn stood up on the hammock and began shaking the hammock side to side while saying “Look what I can do” to the researcher.

Photograph 11, 12.
Generalization Statements

Final step of the typological analysis model includes constructing one sentence generalization statements (Hatch, 2002). Generalization statements are unique statements that convey interpretation and relationships derived from the study (Patton, 2002). The following generalization statements were incorporated within and across typologies, themes, and observations:

1. The children perceived that outdoor play pedagogical documentation is a reflective tool where they can revisit, interpret, and analyze their previous outdoor play, which yielded new ideas about the outdoor play.
2. The children believed that outdoor play pedagogical documentation is for sharing with their families, companions, or other people.

3. The children became more confident with their outdoor play experiences when they knew that their effort, skills, and work were acknowledged through the use of pedagogical documentation.

4. The children expressed more profound thoughts, ideas, and emotions during the conversations about the outdoor play pedagogical documentation than having the pedagogical documentation merely displayed at the outdoor play environment.

The generalization statements are supported by the selected data excerpts and relationships between the themes.

**Case Study Report**

All of the information from the data brings forth a readable narrative (Patton, 2002). This descriptive narrative becomes the case study report that produces all of the information to better understand the unique case of a person, program, or organization (Patton, 2002). This case study report provides a holistic portrayal of the children’s voices in outdoor play pedagogical documentation in the context of their outdoor play environment.

**Entry**

The research site was a non-profit child care centre in Nova Scotia, Canada. The director of the child care centre provided the researcher with signed consent to have the child care centre participate in the study. The child care centre provides programs for toddlers, preschoolers, and children aged four to five. The child care centre has one outdoor play ground where all of the children can play. The children at the centre go outside twice a day, every day unless there are extreme weather conditions. Six children aged between four to five centres were selected for the
case study through purposeful sampling. Children who were between four to five years old at the
time of the study, were registered at the child care centre full time, and were able to
communicate in English were chosen. Among those children, only those who received written
permission to participate in the study from their guardians were able to take part in the study.
Purposeful sampling helped yield in-depth information and insight about the children’s
understanding on their outdoor play pedagogical documentation.

**Purpose and Method**

In order to increase children’s access to outdoor play experiences and enhance the quality
of the outdoor play in Nova Scotia, Canada, the use of pedagogical documentation that visualizes
children’s outdoor play learning experiences was studied. The main research purposes of the
study are the following:

1. To discover if children’s examination of pedagogical documentation influences or
   reflects in their outdoor play.

2. To explore a child’s perspective on pedagogical documentation that reflects on their outdoor play.

3. To gain insight into whether conversations with children about their outdoor play
   experiences through pedagogical documentation panels influences children’s outdoor play experiences.

A qualitative case study method was employed in the study so as to understand outdoor
play pedagogical documentation from children’s perspectives with great detail. Case study
research focused on gaining the meaning of outdoor play pedagogical documentation from the
perspectives of children. In particular, a case of children’s voices in outdoor play pedagogical
documentation was studied with six embedded examples. Case study research maximizes the strengths of different types of data collection instruments as it benefits from using multiple sources for data collection. In this study, direct observations, field notes, and the standardized open-ended interview were the data collection sources. Direct observation that yielded field notes enabled the researcher to comprehend and capture the children’s outdoor play experiences without disrupting their outdoor play setting. Moreover, the standardized open-ended interview with each child helped with discovering children’s thoughts, ideas, and experiences that could not be observed.

**Reflective Tool**

All of the children perceived the primary role of the outdoor play pedagogical documentation as a reflective tool because it encouraged them to reflect on their outdoor play experiences. Throughout the interview, the children were engaged in active conversations on their outdoor play pedagogical documentation and reflective thoughts emerged during the conversations. Reflective thoughts included interpretation and analysis of their previous outdoor play experiences such as what kinds of outdoor play experiences they were engaged in, who the children were interacting with, what else they could do related to their previous outdoor play experiences, what they would do differently next time, and what other materials they could add in the future outdoor play. The process of reflecting on their previous outdoor play experiences yielded some new ideas and these plans included different uses of the materials, new materials that can be incorporated into outdoor play, or possible solutions for problems that the children were facing. As a result, outdoor play pedagogical documentation scaffolds the children’s outdoor play learning process (Buldu, 2010).
Sharing

When the purpose of outdoor play pedagogical documentation was discussed, the children agreed that the outdoor play pedagogical documentation is for sharing with their families, companions, or other people. When asked what they wanted to do with the outdoor play pedagogical documentation, the children wanted to take their outdoor play pedagogical documentation to their home or the classroom to show it to their families or their companions respectively. The children also commented that the outdoor play pedagogical documentation was for other people who came to the childcare centre so that they can see what they did.

Confidence

The children were confident with their outdoor play experiences when they understood that their effort, skills, and work were acknowledged through the pedagogical documentation that contained the photographs of them and notes on what they were doing. Revisiting their outdoor play experiences through the use of outdoor play experiences helps children increase their level of confidence (Malaguzzi, 1988). At first, the children were introduced to outdoor play pedagogical documentation that was merely displayed at the outdoor play environment. Then, the children were engaged in conversations that focused on the outdoor play pedagogical documentation with the researcher. After these processes, it was found that the children intentionally gazed at the researcher and tried to interact with her during their outdoor play time so as to ensure that the researcher was taking photographs of them, and therefore, to demonstrate new skills to her by saying “I want to show you something over there,” and “Look what I can do.”
Having a Conversation

Having a conversation about the outdoor play pedagogical documentation provided the children with an opportunity to express their thoughts, ideas, questions, and emotions about it with in-depth details. These expressions were more profound than comments and questions that were made during the initial reaction to the outdoor play pedagogical documentation that was merely displayed at the outdoor play setting. Asking open-ended questions about the outdoor play pedagogical documentation helped the children convey their perspectives, opinions, thoughts, emotions, and curiosity about the outdoor play pedagogical documentation. Communication that is facilitated by pedagogical documentation provokes a thinking process that reinforces planning for the future (Suarez & Daniels, 2009) as children’s outdoor learning and experiences gain awareness and are shared (MacDonald, 2007). Therefore, the real meaning of children’s outdoor play experiences was revealed through having a conversation about outdoor play pedagogical documentation.

Summary

This chapter summarized the data analysis procedures and themes that were discovered through the data analysis. Data was collected from direct observation on six children, the researcher’s field notes, and interviews of six children. Three research questions yielded three typologies, children’s reaction to outdoor play pedagogical documentation, children’s perceptions on outdoor play pedagogical documentation, and children’s outdoor play engagement. The typological analysis provided various themes and concludes with four generalization statements. The case study was reported to describe holistic portray of the children’s voices in outdoor play pedagogical documentation.
CHAPTER V

Summary, Implications, and Recommendations

This study employed a qualitative, case study method to discover children’s voices in the pedagogical documentation that visualized their outdoor play experiences. Direct observation, interviews, and field notes revealed children’s initial reactions to outdoor play pedagogical documentation, perceptions on it, and outdoor play experiences after the interview. The typology data analysis provided themes around three research questions for this study. The research questions are:

1. How do children initially react to the outdoor play pedagogical documentation panels placed in the outdoor play environment?

2. How do children describe their perceptions of their outdoor play experiences as made visible through pedagogical documentation panels?

3. After children participate in conversations about the information from the pedagogical documentation panels, how do they engage in outdoor play?

In this chapter, a summary of the study will be provided along with discussion of the case analysis that was developed from the researcher’s observations, field notes, and interview transcripts. Limitation of the study will be discussed and recommendations for future research will be also suggested.

Summary of the Study

The purpose of the study was to explore children’s voices in their outdoor play pedagogical documentation. The case study approach asks “How” questions since their focus is
to seek contemporary phenomenon within a real-life context (Yin, 2003). Exploring children’s reactions to outdoor play pedagogical documentation, perceptions on it, and engagements during outdoor play after the interview was intended to provide an insight into how this particular group of children respond to their outdoor play pedagogical documentation within the context of their real life. Understanding the children’s experiences with outdoor play pedagogical documentation can develop and expand an awareness of the significance of outdoor play for children and the use of outdoor play pedagogical documentation in child care facilities. Six children from a child care centre in the local area participated in this study. The researcher observed the participating children during their outdoor play time, recorded field notes of children’s interactions, provided outdoor play pedagogical documentation, and conducted an interview with each participant.

The collected data was analysed utilizing the typological analysis model (Hatch, 2002, see Figure 1). The research questions predetermined three typologies, children’s reaction to outdoor play pedagogical documentation, children’s perceptions on outdoor play pedagogical documentation, and children’s outdoor play engagement. An analysis of typologies provided themes for each typology and four generalization statements. The case study report illustrated the contextual elements of the study and generalization statements.

Discussion of Findings

The typologies of children’s reaction to outdoor play pedagogical documentation, children’s perceptions on outdoor play pedagogical documentation, and children’s outdoor play engagement revealed various themes (see Table 2). The typology analysis derived themes from the research questions, and provided the generalization statements that embrace the relationships between the themes, and the researcher’s observations. Four generalization statements for this case study are:
1. The children perceived that outdoor play pedagogical documentation is a reflective tool where they can revisit, interpret, and analyze their previous outdoor play, which yielded new ideas about the outdoor play.

2. The children believed that outdoor play pedagogical documentation is for sharing with their families, companions, or other people.

3. The children became more confident with their outdoor play experiences when they knew that their effort, skills, and work were acknowledged through the use of pedagogical documentation.

4. The children expressed more profound thoughts, ideas, and emotions during the conversations about the outdoor play pedagogical documentation than having the pedagogical documentation merely displayed at the outdoor play environment.

The focus of this case study was to understand the details of how children express their feelings and opinions about outdoor play pedagogical documentation within the context of their child care environment. Specifically, the interest of the study was how these children explained or articulated their thoughts about pedagogical documentation that visualized their outdoor play experiences. All of the children articulated their outdoor play pedagogical documentation with positive comments that included positive feelings about looking at the photographs of them playing outside, desires to show the pedagogical documentation to their families, friends, or other people, and positive assumptions of what their families and friends would say when they saw the pedagogical documentation. However, these findings were not revealed from merely observing the children responding to their outdoor play documentation but were instead discovered from having the children engage in profound conversations about the pedagogical documentation, where the children were asked open-ended questions and were able to freely ask
questions about the pedagogical documentation. Therefore, facilitating a discussion on outdoor play pedagogical documentation can evoke the children’s memories about their previous outdoor play experiences, and allow them to reflect on their previous outdoor play experiences, present their thoughts and viewpoints about the outdoor play pedagogical documentation, and contemplate different ways to explore, examine, learn, experience, and therefore, further expand their outdoor play learning process.

Furthermore, when the children were observed for their first reactions to their outdoor play pedagogical documentation, a few comments and questions about the pedagogical documentation were captured. These comments and questions were not further investigated. Indeed, merely displaying outdoor play pedagogical documentations at the outdoor play ground encouraged the children to produce some simple comments and questions about the photographs. However, after the children participated in intense conversations about the outdoor play pedagogical documentation with the researcher, they showed different kinds of play experiences that were associated with the contents of the conversations, and the outdoor play pedagogical documentation that was displayed at their outdoor play setting. These experiences included revisiting the previous outdoor play experiences by repeating them, implementing new ideas into their outdoor play experiences, and demonstrating their skills and ability to the researcher. Thus, having the children engaged in conversations about outdoor play pedagogical documentation can promote children’s thoughts that their outdoor play work, ideas, and experiences are acknowledged, which assists children in experimenting new outdoor play ideas, further developing connections between previous outdoor play and the future outdoor play, and therefore, expanding their outdoor play learning processes, and playing a more active role in their outdoor play learning journey.
Although the majority of the children demonstrated different kinds of outdoor play engagements after they participated in the interview, a few children did not show any relation to outdoor play pedagogical documentation nor the previous outdoor play experiences that were visualized on the outdoor play pedagogical documentation. These few children suggested different outdoor play ideas, and plans during the interview; however, it was observed that they were engaged in outdoor play with peers who were not participating in the study, and therefore, did not appear on pedagogical documentation.

Limitation of Study

Through this qualitative case study, children’s voices in the outdoor play pedagogical documentation was explored by one bounded, child care facility. The findings of the study yielded insights about children’s reactions to outdoor play pedagogical documentation, understandings about outdoor play pedagogical documentation, and outdoor play engagements after the interview, and what these insights mean to children, early childhood educators, and parents/families. This study is limited in the following ways:

1. The sample size was bounded by one child care centre with six children.
2. Outdoor play pedagogical documentation only focused on one participating child at a time when the child was involved in a group play with non-participating children during the outdoor play time. This may have influenced the children’s outdoor play engagements after the interview because the children were still playing with the non-participating children; however, the non-participating children were not aware of any of the conversations about outdoor play pedagogical documentation that the children were engaged in with the researcher.
Implications

Outdoor play and its significance for children tend to be underestimated in the field of early childhood education, home settings, and communities. Nonetheless, outdoor play is essential for children’s psychological and physical health, and appropriate development. As there is a currently a tendency for more children to be attending and spending most of their days within a child care setting (Little & Wyver, 2008; Nedovic & Morrissey, 2013), child care centres have become the most crucial environment for children outside of their own home. What this indicates is that children receive most opportunities to play outside when they are at a child care facility. Therefore, providing a quality outdoor play environment as well as outdoor learning opportunities to children is vital. This qualitative case study was designed in order to seek children’s voices in outdoor play pedagogical documentation, and therefore, to understand the use of outdoor play pedagogical documentation within the context of child care settings. The implications of this study are divided into three categories: Implications for early childhood educators, implications for educational institutions, and implications for the community.

Implications for Early Childhood Educators

It is crucial that early childhood educators are closely observing children’s outdoor play learning processes, providing ongoing outdoor play pedagogical documentations in practice, and facilitating conversations about outdoor play pedagogical documentation in order to effectively and consistently respond to children’s outdoor play interests, and needs. By studying children’s outdoor play through the use of pedagogical documentation, teachers can fully grasp what kinds of activities the children are engaged in, what/how they learn from those activities, how they use the outdoor play environments, who/how they interact, what they are capable of, what changes need to be made in outdoor play environments based on their needs, how to support them in
expanding and deepening their outdoor play learning process. However, most importantly, it is not merely about creating outdoor play pedagogical documentation and passing it to children. As illustrated in this study, when outdoor play pedagogical documentation was provided to the children without teachers’ interactions or involvement, the outdoor play pedagogical documentation did not play any role in the children’s outdoor play experiences. Only after the children had an opportunity to think about their previous outdoor play experiences through pedagogical documentation and were able to express their ideas and opinions about them, the children were able to further expand their outdoor play, scaffold their learning by testing new ideas in their outdoor play, and demonstrating different skills at the outdoor play ground. Therefore, early childhood professionals are encouraged to strive to not only study children’s outdoor play through the use of pedagogical documentation but also facilitate conversations about outdoor play pedagogical documentation. Namely, pedagogical documentation that provides a better understanding of children’s outdoor play should be a tool for inquiry and communication for asking open-ended questions and gaining real meanings of children’s outdoor play from their perspectives.

Early childhood educators need to recognize the importance of outdoor play to children’s healthy development as well as the value of the use of outdoor play pedagogical documentation in their practice. Pedagogical documentations usually occur inside of the classroom and one of the reasons for this is because outdoor play is not considered as a part of the regular program or curriculum (Maxwell et al., 2008; Thomas & Harding, 2011). Indeed, the child care centre that this case study was conducted in has never utilized outdoor play pedagogical documentation at the outdoor play environment. Early childhood educators need to understand that outdoor play time is not a break time but a part of the program (Dowdell et al., 2011). This understanding will
help early childhood educators incorporate the use of outdoor play pedagogical documentation into their routine. Assimilation of outdoor play pedagogical documentation could take lots of time and effort since it is not a simple process. It could also depend on educators’ willingness to learn, and the availability of existing training or professional developments that focus on outdoor play pedagogical documentation. Thus, this case study suggests several topics that early childhood educators training or professional developments could incorporate for educators’ continuous growth. The possible training topics were revealed in the case study. Educator’s training/professional development needs to:

a. Demonstrate the value and importance of outdoor play for young children’s developmental domains such as cognitive, social, emotional, and physical development.

b. Provide education on how to assess different elements in current outdoor play environments for self-evaluation as well as the development of high quality outdoor play environments.

c. Recognize educators’ own beliefs and philosophies about children’s outdoor play, the roles they think they play, and should play in outdoor play, and how their practices differ from their own beliefs and philosophies about children’s outdoor play.

d. Offer fundamental information about pedagogical documentation. Such information can contain theoretical framework, roots, and the nature of pedagogical documentation. Educators need to fully comprehend what pedagogical documentation is before studying it.
e. Focus on the practical use of outdoor play pedagogical documentation. Beginning with how to begin with outdoor play pedagogical documentation, and how to incorporate outdoor play pedagogical documentation into their practice.

f. Provide information about how outdoor play pedagogical documentations can be used to communicate with children, parents/families, other educators, and community members in order to maximize outdoor learning opportunities and optimize outdoor play environments for children.

Each child care setting is unique; therefore, each early childhood educator need to develop their own ways to incorporate outdoor play pedagogical documentation as a part of their programming. Nevertheless, the value of outdoor play and outdoor play pedagogical documentation need to be grasped in order to promote the importance and benefits of outdoor play and the use of outdoor play pedagogical documentation, to effectively respond to the children’s needs and interests regarding outdoor play, and therefore, to support the children in furthering their outdoor play experiences.

**Implication for Educational Institutions**

Educational institutions are where preservice early childhood educators can acquire and develop broad knowledge and skills about children and early childhood education in general. In other words, learners who want to become early childhood professionals receive appropriate and necessary education on early childhood education and young children from educational institutions. However, when current courses at local educational institutions are analyzed, no specific courses that offer children’s outdoor play and/or pedagogical documentation exist. There are a variety of theories, benefits, issues, and challenges that need to be understood and discussed regarding children’s outdoor play. For instance, when students discuss the importance of the link
between children and nature as a part of their outdoor play course, they become aware of the current situation in children’s lack of connection with nature, why this matters to the children, and what they can do to enhance the situation. Thus, without having an opportunity to learn and contemplate about children’s outdoor play as college or university students, it will be unlikely that they will consider children’s outdoor play as a critical part of the programming (Brown et al., 2009; Davies, 1996; Maynard & Waters, 2007), which can result in diminishing various benefits of outdoor play for children.

When the Reggio Emilia approach, emergent curriculum or overall curricula for early childhood education are discussed during related courses, pedagogical documentation may be introduced and discussed since pedagogical documentation lies in the heart of Reggio Emilia approach. However, the process of understanding and implementing pedagogical documentation is complicated, which indicates that the use of pedagogical documentation cannot be fully grasped through one or two classes. Furthermore, when current literature on pedagogical documentation was reviewed, the majority of the literature emphasized and included the use of pedagogical documentation inside of the classroom. If preservice early childhood professionals can obtain an opportunity to learn children’s outdoor play and pedagogical documentation, and prepare for the use of outdoor play pedagogical documentation, they will be able to contribute to a quality outdoor play program and environment in their future practice.

**Implication for Community**

Less children spend their time outside due to many reasons such as parents’ concerns about unsafe neighborhoods, the rise of technology use including television, and structured routine of child care centres and school systems. The need for outdoor play at child care setting is magnified because the majority of children spend their early childhood at child care settings
(Little & Wyver, 2008; Nedovic & Morrissey, 2013). Collaboration among early childhood educators, parents/families, policy makers, community members, and stakeholders is essential in order to maximize outdoor learning opportunities for children, further expand their outdoor play experiences, provide efficient outdoor play materials, and design a high quality outdoor play environment for them. As a result, early childhood educators have a tremendous responsibility to reframe the significance of outdoor play, and invite other parties to children’s outdoor play as partners through the use of outdoor play pedagogical documentation. The outdoor play pedagogical documentation that was used in this case study enlightened children’s interests and needs in their outdoor play. If the outdoor play pedagogical documentation is shared with others as the children suggested, they will understand what is going on with children’s outdoor play experiences and why that is important. Therefore, early childhood educators can demonstrate the great value of outdoor play to families and their communities through the use of pedagogical documentation for the purpose of educating them, communicating with them, seeking for support and/or any kinds of donations that could be assets for children’s outdoor play experiences.

**Researcher’s Reflections**

Researchers are the research instrument in a qualitative case study and self-reflection of the researchers improves the instrument (Patton, 2002). During the process of creating outdoor pedagogical documentation, I felt strongly that utilizing outdoor play pedagogical documentation required me to develop strategies and skills in questioning and to consistently use these skills during children’s outdoor play. As Stacey (2015) states, “A teacher’s question is a perfect place to begin documenting. A question creates the opportunity to frame the documentation as a response to this query – as a way of researching the answer” (p. 12). The researcher continuously wondered about the children’s learning, engagements, and conversations before, during, and
after documenting – during the whole process of producing pedagogical documentation. In other words, the use of pedagogical documentation helped the researcher formulate and shape her questions about children’s outdoor play experiences. Some of the questions include: “What is it that makes them keep laughing and screaming?”, “What triggers her to stop from her play and gaze at other peers?”, “How aware is he of the concept of mixing colours?”, “Why did they choose to incorporate ropes into their play?” and “What experiences has she already had regarding physical activities?” These questions led to different questions which encouraged me to contemplate, investigate, and research them. This also offered me an opportunity to profoundly think about children’s current outdoor play experiences and how they use their outdoor playground and outdoor play materials. Therefore, the practice of pedagogical documentation appears to support educators in provoking and formulating questions, and seeking appropriate responses to the questions (Kim & Darling 2009; Stacey, 2015).

In addition, conducting interviews with children enlightened me on how significant it is for early childhood educators to ask good questions to children so as to fully gain their outdoor play experiences and perspectives, and to support them in continuously exploring their thoughts and ideas. Asking good questions is one of the skills that qualitative researchers need to possess in order to obtain rich information from participants Yin (2003). This applies to not only researchers but also early learning professionals as well. As this case study revealed, having conversations with the children about outdoor play pedagogical documentation panels has influences on different kinds of outdoor play engagement. This also means that the quality of conversations may have an impact on how children further develop their thoughts, plans and ideas for their future outdoor play. When good questions are asked, it encourages children to profoundly reflect on their outdoor play experiences, construct meaningful answers and expand
their knowledge. As a result, early learning professionals may need to learn more about asking good questions to children as well as reflecting upon the types of questions that are selected to support children in expanding their thoughts, and further investigating their ideas.

Lastly, I spent plenty of time considering the most efficient way to display outdoor play pedagogical documentations on the play equipment, shed, and the fence at the outdoor play environment. There was no problem with displaying them at child’s eye-level and near a space where the previous outdoor play occurred; however, the emerging issue was that pedagogical documentations panels did not always stay on the surfaces. I examined this situation and determined a few reasons. First, when the study was carried out, the temperature usually ranged between 0 degrees to -15 degrees Celsius and sometimes it felt much colder due to wind chill. Due to the weather condition and the icy surfaces of the play equipment and the shed, regular packing tape and wooden strings were not strong enough to adhere the documentations on different surfaces. Second, even though I was attempting to use different adhesives to display the documentations outside, there were limitations in the types of adhesives that would not damage the play equipment, the shed, fence, and the outdoor play pedagogical documentations. Even one of the participants showed her concern about displaying her outdoor play pedagogical documentation outside in the winter by stating that “In the winter, snow will just cover it so we would have to uncover the snow.” Finally, there were no specific boards or frames that could be used to display documentations at the outdoor play ground. Inside of the classrooms, spaces for displaying documentations can be usually easily found such as bulletin boards, empty walls, or frame holders. For this reason, I chose to use the play equipment, shed, and the fence to exhibit the outdoor play pedagogical documentation panels. Consequently, it would be efficient and effective if child care centres had certain methods to display and keep outdoor play pedagogical
documentation panels safe and dry outside by using such materials as plexiglass to build a sheet that can hold documentation panels behind it.

**Recommendations for Future Research**

Future research is needed to continue to examine outdoor play and the use of outdoor play pedagogical documentation in the local area. The following recommendations for future research are suggested based on the findings and implications of the study:

1. Replications of this case study method could be used to examine a group of children’s outdoor play engagements after having conversations about the outdoor play pedagogical documentation, as discussed in this case study. This case study focused on children’s voices in outdoor play pedagogical documentation by interviewing one individual child at a time. A group of children can be interviewed together at the same time in order to explore if including a group of children in a conversation about outdoor play pedagogical documentation would have different influences on the children’s outdoor play engagements after the conversation.

2. It is recommended that a study of preservice early childhood educators’ perception on the use of outdoor play pedagogical documentation be analyzed. Preservice early childhood professionals’ current understanding about the use of outdoor play pedagogical documentation could be explored in order for local institutions to fully investigate and implement the most appropriate and effective education about outdoor play and the use of outdoor play pedagogical documentation.

3. A study focusing on early childhood educators’ perception on the use of outdoor play pedagogical documentation could be conducted in the local area in order to reveal possible challenges and obstacles of applying outdoor play pedagogical documentation to
practice, and therefore, to seek for ways to minimize and overcome them, and improve the awareness of using outdoor play pedagogical documentation.

4. Further research could be designed to study the understanding of parents/families about outdoor play pedagogical documentation so as to examine how they perceive their child’s outdoor play pedagogical documentation and if this perception will have an impact on the child’s outdoor play learning process.

5. A study investigating how children respond to different formats of outdoor play pedagogical documentation could be carried out in order to discover the most effective way to format outdoor play pedagogical documentation. For example, different formats such as pedagogical documentation panels, utilizing video clips, and portfolios can be explored to discover the most effective way to use outdoor play pedagogical documentation.

6. A further study on exploring how children’s involvement in producing outdoor play pedagogical documentation influences their engagements with outdoor play pedagogical documentation and outdoor play experiences could be conducted. Children’s involvement indicates that children are invited to participate in the process of creating outdoor play pedagogical documentation by articulating their outdoor play experiences through the photographs, expressing their emotions, reflecting on their experiences by discussing what they may do differently next time, selecting what photographs they would like to use on the pedagogical documentation, and any other inputs such as drawing, and writing.

Summary

The chapter reported a study of children’s voices in their outdoor play pedagogical documentation at one child care centre in Nova Scotia, Canada. Findings of this study were
discussed. Implications for early childhood educators, educational institutions, and communities were provided. The researcher’s self-reflection was discussed in order to provide further insights on the research findings. Recommendations for future research were presented including a replication of this case study, a study that explores perceptions of early childhood educators, preservice early childhood educators, and parents/families on outdoor play pedagogical documentation, and studies of different formats of outdoor play pedagogical documentation.
References


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APPENDIX A

Guiding Questions for Standardized Open-ended Interview
Guiding Questions for Standardized Open-ended Interview

1. Who do you see in this poster (pedagogical documentation panel)? What were you doing?
2. What other things can you do with [whatever the child was using to play in the poster]? Tell me more about _______ (the issues).
3. What other materials can you add to this outdoor play? Why?
4. Why do you think I have all of your photos and notes on what you were doing in this poster?
5. How do you feel about looking at your pictures on the poster? Why?
6. This time, I created this poster for you. Would you like to help me make this poster next time? Why or why not? If you want to be involved in making this poster, how would you like to make it?
7. What would you like to call this poster? Can you explain it please?
8. What would you like to do with this poster? Tell me more about it.
9. What would you like to tell your family about this poster?
10. What do you think your family would say when they see this poster?
11. What do you think your friends would say when they see this poster?
APPENDIX B

Letter of Introduction and Consent for Director
Dear Director:

My name is Bora Kim and I am a graduate student in the department of Child and Youth Study at Mount Saint Vincent University. I am currently conducting research on children’s voices in outdoor play pedagogical documentation. I would like to invite your child care centre to participate in this study.

Outdoor play tends to be underestimated in the field of early childhood education and fewer children play outdoors than they did in the past. The reduction of outdoor play has many negative effects on children’s health and wellness because it encourages children to maintain sedentary life styles indoors.

In order to increase outdoor play opportunities for children’s health, developmental milestones and wellbeing, I am engaging in outdoor play pedagogical documentation at a child care centre in the Halifax Regional Municipality. Pedagogical Documentation is a visual record that includes a collection of various types of children’s experiences. Pictures and notes from children and early childhood educators, illustrations, transcribed conversations, and children’s visual work can be used to create Pedagogical documentation. For example, if a child is playing in a mud puddle at the playground, I will record what the child says and does with the mud puddle by taking some photos of him and writing down what he says. The child’s photos, the child’s transcribed conservations, and the way the child played will be in the pedagogical documentation. Pedagogical documentation represents children’s current work, their interests, their conversations, their discussions, their engagements, their needs, and their curiosity. By creating pedagogical documentation, children’s learning becomes visible. In the pedagogical documentation panel that I will create for the study, children’s photos of playing outside, transcribed recordings of the children, explanations of the outdoor play that the children was engaged in and my reflective questions will be shown.

I am exploring the link between children’s outdoor play and pedagogical documentation in order to discover if outdoor play pedagogical documentation influences children to engage with more outdoor play opportunities, and leads them to further explore, discover, and experience different types of outdoor play.
The process for the study is outlined below:

If you, as the Director, agree to have children at your child care centre participate in this study, I will ask for your help in the following areas:

1. Please distribute the PARENT INFORMATION LETTER and INFORMED PARENTAL CONSENT FORM to four to eight parents of children who are between four to five years old at the time of the study, and are attending the child care centre full time.

   ✓ I will provide you with paper copies of these documents.

   ✓ In order to have in-depth and rich data for the study, more than 4 and less than 8 children attending the child care centre full time will participate in this study. Please select four to eight children whose dates of birth are between December 1, 2009 and December 1, 2010 after consulting with your staff.

   ✓ I ask that the parents return the signed INFORMED PARENTAL CONSENT FORM to the child care centre within 3 days if they wish for their child to be involved in the study.

   ✓ I will follow up with your child care centre to obtain the number of returned INFORMED PARENTAL CONSENT FORMS and schedule a time to pick up the forms.

2. Please distribute the CLASSROOM TEACHER INFORMATION LETTER, which introduces the study to your early childhood educators and/or staff.

3. Once I have four to eight INFORMED PARENTAL CONSENT FORMS, I will start the data collection at your child care centre. Prior to the formal data collection, I will visit your centre during the outdoor play time for a week in order to build rapport between the participating children and myself. After these visits, the data collection part will start and it includes the following steps:

   ✓ **First visit of data collection**: I will observe one participating child playing outdoors during outdoor play time, approximately 40 - 50 minutes, by taking photos of the child and taking field notes.
✓ **Second visit of data collection:** I will provide pedagogical documentation at an outdoor play environment at your child care centre. The participating child’s initial reaction to pedagogical documentation will be observed.

✓ **Third visit of data collection:** I will visit your child care centre to conduct open-ended conversations with the participating child before the outdoor play time. Before the open-ended conversation, each participant will be verbally asked if they want to talk to me about their pictures and outdoor play because no child will be forced to participate in the study even with their parent’s/guardian’s permission. This open-ended conversation will proceed with a child’s verbal consent to participate. If any of the children do not want to participate in the open-ended conversation or do not want to continue the open-ended conversation, I will immediately stop the session. Then, I will consult with one of the Centre’s Early Childhood Educators to ensure the children are alright. It will take approximately 20 – 30 minutes.

✓ **Fourth visit of data collection:** The participating child will be observed during outdoor play time.

This process of data collection will repeat for each child and this process will occur for a week.

All information collected for the study will be kept confidential. Every effort will be made to exclude non-participating children; however, if there are any non-participating children in a photo, they will be blurred so there can be no identification of the children. The photos, transcribed conversations of children, and the field notes will be kept for future publications, public presentations, and disseminations for 5 years after the successful defence of the thesis research. The photos or parts of the transcripts from the recordings used for any type of publication and/or presentation become permanent but all remaining pictures and transcripts will be destroyed after the 5 years. However, you need to be aware that if there is any information causing the researchers to feel that anyone is the subject of abuse or neglect or is engaged in illegal activities, the researchers will have the responsibility to report this information to the proper authorities. If at any time children are uncomfortable with the picture taking or engaging in conversations with me, I will stop the process and consult with one of the Centre’s Early Childhood Educators to ensure the children are alright.

If you have any questions or comments, please don’t hesitate to contact myself, Bora Kim, (Student Researcher) by phone (902-xxx-xxxx) or email (Bora.Kim@msvu.ca) or Dr. Mary Jane Harkins (Thesis Research Supervisor) by phone (902-457-6595) or email (MaryJane.Harkins@msvu.ca). If you have questions about how this study is being conducted
and wish to speak with someone not involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research Office, at 457-6350 or via e-mail at research@msvu.ca.

This portion of the letter is yours to keep for future reference.

Sincerely,

Bora Kim
A Student Researcher
Masters in Arts of Child and Youth Study
Mount Saint Vincent University

Signing below indicates I understand the information on this form, and am willing to give permission on my child care centre’s participation.

_________________________________  ______________________________
Director Signature                    Researcher Signature

_________________________________  ______________________________
Date (day/month/year)                Date (day/month/year)

Please check one of the following:

_____Please send me a summary of the results at the end of the study

_____Do not send me a summary of the results at the end of the study

________________________________________________________
Email Address of Director
APPENDIX C

Introduction Letter for Guardian
Dear Guardian:

My name is Bora Kim and I am a graduate student in the department of Child and Youth Study at Mount Saint Vincent University. I am currently conducting research on children’s voices in outdoor play pedagogical documentation. I would like to invite your child to participate in this study as the Director, _____________ (name) of _________________ (name of child care centre) has given me consent to conduct the study in the Centre.

Outdoor play tends to be underestimated in the field of early childhood education and fewer children play outdoors than they did in the past. The reduction of outdoor play has many negative effects on children’s health and wellness because it encourages children to maintain sedentary life styles indoors.

I want to better understand how outdoor play pedagogical documentation can influence children’s outdoor play and opportunities to encourage them to further explore, discover, and experience different types of outdoor play. Pedagogical Documentation is a visual record that includes a collection of various types of children’s experiences. Pictures and notes from children and early childhood educators, illustrations, transcribed conversations, and children’s visual work can be used to create Pedagogical documentation. For example, if a child is playing in a mud puddle at the playground, I will record what the child says and does with the mud puddle by taking some photos of him and writing down what he says. The child’s photos, the child’s transcribed conservations, and the way the child played will be in the pedagogical documentation. Pedagogical documentation represents children’s current work, their interests, their conversations, their discussions, their engagements, their needs, and their curiosity. By creating pedagogical documentation, children’s learning becomes visible. In the pedagogical documentation panel that I will create for this study, children’s photos of playing outside, transcribed recordings of the children, explanations of the outdoor play that the children was engaged in and my reflective questions will be shown.

I would like to invite your child to take part in this study if your child is between four to five years old at the time of the study and attends the child care centre full time. If you wish for your child to participate in the study, you will be asked to provide me with a PARTICIPANT INFORMED PARENTAL CONSENT FORM, a CONSENT FORM FOR AUDIO RECORDNG, and a CONSENT FORM FOR PHOTOS that are attached to this letter.

If you agree to let your child participate in the study, your child will be observed by me during the outdoor play time. I will be taking photos of your child playing outdoors and will take field notes on what your child plays with, who he/she interacts with, and what your child says. Then, pedagogical documentation that focuses on your child’s outdoor play will be posted at the
outdoor play ground at your child’s child care centre. In the pedagogical documentation that I will create, photos of your child playing outside, transcriptions of recordings of your child, explanations on the outdoor play that your child is engaged in and my reflective questions will be shown. Your child’s initial reaction to the pedagogical documentation will be observed by me. Your child will have an open-ended conversation about the pedagogical documentation with me for about 20-30 minutes. Before the open-ended conversation, your child will be verbally asked if h/she wants to talk to me about their pictures and outdoor play because no child will be forced to participate in the study even with your permission. If your child does not want to participate in the open-ended conversation or to continue the open-ended conversation, I will immediately stop the session. Then, I will consult with one of the Centre’s Early Childhood Educators to ensure the children are alright. The conversation will take place at your child’s child care centre and will be audio recorded. If at any time your child is uncomfortable with the picture taking or engaging in conversations with me, I will stop the process and consult with one of the Centre’s Early Childhood Educators to ensure your child is alright.

The result and data of the study may be used for future presentations as well as submissions to peer reviewed journals for publication. The audio recordings will be permanently erased after the thesis has been successfully defended. A part of the transcribed conversations about the exact words of the child may be used for the thesis research, future public presentations, future publications, and disseminations. However, your child’s personal information including name, gender, and age will not be identified. All transcriptions (audio recordings and field notes), and the photos will be stored electronically on a password protected computer for five years after the successful defence of the research. The electronic files not used in the thesis research, any other types of publication and/or public events will be deleted five years after successful defence of the thesis. It is possible that your child’s photos may directly link to what h/she says during outdoor play in the thesis research, future public presentations, future publications, and disseminations. However, all of your child’s personal information will not be identified.

All information collected for the study will be kept confidential. If you give your written permission, selected photos of children will be kept for future publications. Rest assured that participation in this study is completely voluntary and any information which your children will give me will be kept confidential. Your child will also not be identified by name and none of the comments which he/she will give me will be attributed to any one, individual child. The photos or parts of the transcripts from the recordings used for any type of publication and/or presentation become permanent but all remaining pictures and transcripts will be destroyed after the 5 years. However, you need to be aware that if there is any information causing the researchers to feel that anyone is the subject of abuse or neglect or is engaged in illegal activities, the researchers will have the responsibility to report this information to the proper authorities.

You may withdraw your child from the study or any part of the study at any time prior to the successful defence of the thesis. Please note that withdrawing from the study will not negatively affect your relationship with the child care centre.
If you are interested in this study and wish to allow your child to take part, please sign the consent form. Once I receive your consent form, the data collection will start with your child. Please return the consent form to your child care centre by:

**Date: Wednesday, January 14th, 2015**

If you have any questions about the research study please speak with me in person or contact Bora Kim by phone (902-xxx-xxxx) or email (Bora.Kim@msvu.ca) or Dr. Mary Jane Harkins (Thesis Research Supervisor) by phone (902-457-6595) or email (MaryJane.Harkins@msvu.ca). If you have questions about how this study is being conducted and wish to speak with someone not involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research Office, at 457-6350 or via email at research@msvu.ca.

This letter is yours to keep for future reference.

Sincerely,

Bora Kim
A Student Researcher
Masters in Arts of Child and Youth Study
Mount Saint Vincent University
APPENDIX D

Parental Consent Form for Participation
PARTICIPANT INFORMED PARENTAL CONSENT FORM
FOR
A THESIS RESEARCH
– CHILDREN’S VOICES IN OUTDOOR PLAY PEDAGOGICAL DOCUMENTATION

Student Researcher:
Bora Kim
A Graduate Student
Masters in Arts of Child and Youth Study
Mount Saint Vincent University
Telephone: (902) xxx-xxxx
Email: Bora.Kim@msvu.ca

Contact Person:
Dr. Mary Jane Harkins
An Associate Professor
(Thesis Research Supervisor)
Mount Saint Vincent University
Seton 538
Telephone: (902) 457-6595
Fax: (902) 457-4911
Email: MaryJane.Harkins@msvu.ca

Halifax Nova Scotia B3M 2J6 Canada
Tel 902 457 6321 • Fax 902 457 6134
www.msvu.ca
Introduction

My name is Bora Kim and I am a graduate student in the department of Child and Youth Study at Mount Saint Vincent University. I am currently conducting research on children’s voices in outdoor play pedagogical documentation. Your child is invited to take part in a thesis research study being conducted by me at Mount Saint Vincent University. Participation in this study is completely voluntary and your child does not have to answer any questions that he or she does not want to answer.

Purpose of the Research

The purpose of this study is to discover the role of pedagogical documentation on children’s outdoor play and play opportunities that lead them to further explore, discover, and experience different types of outdoor play. Pedagogical documentation will be explored to discover if it can improve the quantity and quality of children’s outdoor play by providing opportunities to enhance children’s health, developmental milestones, wellbeing and learning.

The Process of the Research

I will observe your child playing outdoors during the outdoor play time, for approximately 45 minutes. While your child is observed, the researcher will take some photos of him/her and take field notes about what your child plays with and with whom he/she interacts. Then, pedagogical documentation will be created based on the photos and field notes. In the pedagogical documentation that I will create, photos of your child playing outside, transcribed conversations of your child, explanations of the outdoor play that your child is engaged in and my reflective questions will be shown. This pedagogical documentation will be posted at the outdoor play environment at your child’s child care centre. Your child’s initial reaction to pedagogical documentation will be observed and if necessary, your child will be audio recorded. A part of the transcribed conversations about the exact words of the child may be used for the thesis research, future public presentations, future publications, and disseminations. However, your child’s personal information including name, gender, and age will not be identified.

Then, your child will have an open-ended conversation with the researcher about pedagogical documentation that focuses on your child’s outdoor play. Before the open-ended conversation, each child will be verbally asked if they want to talk to the researcher about their pictures and outdoor play because no child will be forced to participate in the study even with your permission. If your child does not want to participate in the open-ended conversation or to continue the open-ended conversation, I will immediately stop the session. Then, I will consult with one of the Centre’s Early Childhood Educators to ensure the children are alright. The open-ended conversation will be audio-recorded for data analysis and it will proceed for about 20 minutes. A part of the transcribed conversations on what your child says during the open-ended conversation will be used for the thesis research, future public presentations, future publications, and disseminations. However, your child’s personal information including name, gender, and age not be identified. After the open-ended conversation, your child’s outdoor play will be observed again during the outdoor play time. The result of the study may be used for future presentations.
as well as submissions to peer reviewed journals for publication. The electronic files not used in the thesis research, any other types of publications and public events will be deleted five years after the successful defence of the thesis research. It is possible that your child’s photos may directly link to what h/she says during outdoor play in the thesis research, future public presentations, future publications, and dissemination. Though, all of your child’s personal information will not be identified. The photos or parts of the transcripts from the recordings used for any type of publication and/or presentation become permanent but all remaining pictures and transcripts will be destroyed after the 5 years.

Who Can Participate in the Study?

A child who is between four to five years old at the time of the study and is attending the child care centre full time, and whose parents or guardian are aware of the study and are invited to participate. It is necessary that the child can speak and understand English.

Possible Benefits

Allowing the researcher to observe your child playing outdoors may help you understand what your child does during outdoor play time, what he/she is interested in, what he/she is capable of, what he/she learns and what his/her needs are by reading through pedagogical documentation. This information may help you to support your child’s exploration and learning at home environments.

Your child, as a participant, will potentially develop positive self-concepts and greater feelings of his/her work and abilities by looking at and talking about pedagogical documentation panels that focus on his/her outdoor experiences. It is because pedagogical documentation panels are created using children’s work, photographs from projects, and examples of dialogue, and these documentation panels will convey to the children that their ideas, work, efforts, and intentions are seriously acknowledged by others.

Pedagogical documentation panels that focus on the participants’ outdoor play have the potential to encourage your child to further explore, discover and experiment their ideas during outdoor play time. This may lead your child to experience different types of outdoor play, which will result in various learning opportunities as well as physical movements. In addition, your child will benefit from having a dialogue about pedagogical documentation. It has the potential to increase your child’s literacy skills because pedagogical documentation involves writing about what your child said and did. By recognizing the letters, your child will be exposed to different words. Also, by talking, reading, and listening about pedagogical documentation, your child will be able to increase their language skills.

Possible Risks

It is possible your child may express feelings of discomfort with me taking his/her photos. If your child expresses feelings of discomfort with anything, I will immediately stop the data
collection and consult with the early childhood educators at the Centre. I will continue the data collection only when everyone feels comfortable with my presence and picture taking.

Confidentiality and Anonymity

All information that you provide will be kept confidential. All information will be stored in a secure laptop where only the researcher and researcher’s supervisor will have access. You and your child will not be identified by name in any reports, presentations or publications. However, you can ask that all of your child’s information including photos, audio recordings, transcriptions of recordings, and observation notes be removed from the study, up until the successful defence of the thesis.

Withdrawal

Participation in this study is completely voluntary and your child does not have to answer any questions that he/she does not want to answer. Also, you may withdraw your child from the study or any part of the study at any time prior to the successful defence of the research. Please note that withdrawing from the study will not negatively affect your relationship with the child care centre.

Questions

Please feel free to contact Bora Kim (Student Researcher) by phone (902-xxx-xxxx) or email (Bora.Kim@msvu.ca) or Mary Jane Harkins (Thesis Research Supervisor) by phone (902-457-6595) or email (MaryJane.Harkins@msvu.ca) if you have any questions about this study.

Questions and/or Concerns

If you have any questions about how this study is being conducted and wish to speak with someone not involved in the study, you may contact the Chair of the University Research and Ethics Board (UREB) c/o MSVU Research Office, at (902) 457-6350 or via email at research@msvu.ca.

If you wish to allow your child to take part in this study, please fill out and provide the following formal consents to the Director of your child’s child care centre.

This portion of the letter is yours to keep for future reference.
A THESIS RESEARCH
– CHILDREN’S VOICES IN OUTDOOR PLAY PEDAOGGICAL DOCUMENTATION

Participant Informed Parental Consent Signature Page

I, ___________________________ (the participant’s parents/care giver), have read the explanation about this study. I hereby consent to my child ___________________________ (the participant) to take part in this study. I understand that my child’s participation is completely voluntary and that I am free to withdraw my child from the study at any time prior to the successful defence of the research without penalty. I understand that the data collected for this study is to be used for thesis research and for up to five years after the successful defence of the thesis for future publications and/or public presentations. Five years after the successful defence of the thesis, all of the original data not used for the thesis research and/or publications and presentations will be destroyed. At any time during the data collection and up until the thesis defence I can contact the researcher to request that my child be removed from the study and the data relating to my child be destroyed. I understand that the personal information collected for this study will remain confidential.

Signing below indicates I understand the information on this form, have considered the implications of my child participating and am willing to give a permission on my child’s participation.

_________________________________  ___________________________
Participant’s Parents/Guardian Signature  Researcher Signature

_________________________________  ___________________________
Date (day/month/year)  Date (day/month/year)

Please check one of the following:

_____ Please send me a summary of the results at the end of the study

_____ Do not send me a summary of the results at the end of the study

_________________________________________________________
Email Address of Participant’s Parents/Guardian

_________________________________
Participant’s Name (please print)  Participant’s Age

*If you fill this form out, please provide the consent forms for audio recording and photos that are attached to this letter.*
APPENDIX E

Consent Form for Audio Recording
Consent Form for Audio Recording

As a participant’s parent/guardian in this thesis research, I am giving my consent for my child to be audio recorded for the purpose of understanding how my child views the pedagogical documentation that captures his/her outdoor play. I am fully aware that I am able to withdraw my child from this consent at any time prior to the successful defence of the thesis research without penalty or consequence.

I realize that once the recording is completed the recorder will be transported in a locked carrier to the researcher’s residence and then transferred to password-protected computers. I understand that the audio recordings will be kept confidential and personal information about my child’s recordings will not be released to anyone. I realize that the audio recordings will be permanently erased after the thesis has been successfully defended. I understand that a part of the transcribed conversations about the exact words of the child may be used for the thesis research, future public presentations, future publications, and disseminations while my child’s personal information including name, gender, and age are not being identified. I understand that the transcription of the recordings on what my child says that are not used in the thesis research, any types of publications, and/or public events will be destroyed five years after the successful defence of the thesis research. I am aware that the parts of the transcripts from the recordings used for any type of publication and/or presentation become permanent but all remaining transcripts will be destroyed after the 5 years.

I understand that if I have any comments or concerns resulting from my participation in this study that I can contact the Research Ethics Coordinator, Office of Research Ethics, at (902) 457-6350 or research@msvu.ca.

Signing below indicates I understand the information on this form and give my consent for my child to be audio recorded in this study.

_________________________________  ________________________
Participant’s Name (please print)      Participant’s Age

_________________________________
Participant’s Parents/Guardian Signature

_________________________________
Researcher Signature

_________________________________
Date (day/month/year)                 Date (day/month/year)
APPENDIX F

Consent Form for Photos
**Consent Form for Photos**

As a participant’s parent/guardian in this thesis research, I am giving my consent for my child to be photographed for the purpose of creating pedagogical documentation and understanding how my child plays during the outdoor play time. I understand that photos of my child may be used for the thesis research, public presentations, future publications, and disseminations for up to five years after the successful defence of researcher’s thesis. It is possible that my child’s photos may be directly linked to what s/he says about their outdoor play in the thesis research, future public presentations, future publications, and dissemination. I understand that all of my child’s personal information will not be identified in any publications. Photos of my child not used in the thesis research publications, and/or public events will be destroyed five years after the successful defence of the thesis. I understand that the photos from the recordings used for any type of publication and/or presentation become permanent but all remaining pictures will be destroyed after the 5 years. I am aware that I may withdraw my child from this study at any time prior to the successful defence of the thesis research without penalty or consequences.

Signing below indicates I understand the information on this form and give my consent for my child to be photographed for the thesis research, public presentations, future publications, and disseminations for up to five years after the successful defence of the thesis.

_________________________________  _____________________
Participant’s Name (please print)  Participant’s Age

_________________________________
Participant’s Parents/Guardian Signature

_________________________________
Researcher Signature

_________________________________
Date (day/month/year)  Date (day/month/year)
APPENDIX G

Introduction Letter for Classroom Teachers
Dear Classroom Teachers:

My name is Bora Kim and I am a graduate student in the department of Child and Youth Study at Mount Saint Vincent University. I am currently conducting research on children’s voices in outdoor play pedagogical documentation. I will conduct my research at your child care centre as the Director, __________ (name) of ________________ (name of child care centre) has given me consent to conduct the study in the Centre.

I am exploring the link between children’s outdoor play and pedagogical documentation in order to discover if outdoor play pedagogical documentation influences children to engage with more outdoor play opportunities, and leads them to further explore, discover, and experience different types of outdoor play. Pedagogical Documentation is a visual record that includes a collection of various types of children’s experiences. Pictures and notes from children and early childhood educators, illustrations, transcribed conversations, and children’s visual work can be used to create Pedagogical documentation. For example, if a child is playing in a mud puddle at the playground, I will record what the child says and does with the mud puddle by taking some photos of him and writing down what he says. The child’s photos, the child’s transcribed conservations, and the way the child played will be in the pedagogical documentation.

Pedagogical documentation represents children’s current work, their interests, their conversations, their discussions, their engagements, their needs, and their curiosity. By creating pedagogical documentation, children’s learning becomes visible. In the pedagogical documentation panel that I will create for the study, children’s photos of playing outside, transcribed recordings of the children, explanations of the outdoor play that the children was engaged in and my reflective questions will be shown.

While I am at an outdoor play environment at your child care centre, I will be observing participating children’s outdoor play by taking photos of them and taking field notes. My role as a researcher is shadowing the participating children. I will also have a conversation with each participating child.

Rest assured that I am only here to learn from the children. Please do not feel you need to change the way you do things during outdoor play time. I really appreciate the great work you do and I value the care you provide to the children.

I want to ensure that you feel informed about this study. If you have any questions about the research study please speak with me in person or contact Bora Kim by phone (902-xxx-xxxx) or email (Bora.Kim@msvu.ca) or Dr. Mary Jane Harkins (Thesis Research Supervisor) by phone (902-457-6595) or email (MaryJane.Harkins@msvu.ca). If you have any questions about how this study is being conducted and wish to speak with someone not involved in the study, you may
contact the Chair of the University Research and Ethics Board (UREB) c/o MSVU Research Office, at (902) 457-6350 or via email at research@msvu.ca.

Sincerely,

Bora Kim
A Student Researcher
Masters in Arts of Child and Youth Study
Mount Saint Vincent University