

Early Childhood Teachers' Perspectives of Outdoor and Nature Play  
in Seoul, South Korea and Montreal, Canada

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## Abstract

This qualitative study explores educators' perspectives of outdoor and nature play in Seoul, South Korea and Montreal, Canada. The study was divided into two parts, focusing on the research questions: (1) What are the characteristics of existing forest schools and settings in Seoul, South Korea and Montreal, Canada?, and (2) What are the perspectives and beliefs of the teachers in these settings in terms of the benefits and challenges of forest schools? Observational data were gathered from visits to six outdoor play settings in Seoul and four outdoor settings in Montreal. Semi-structured interviews were conducted with 11 educators at these sites: seven educators from Seoul and four educators from Montreal.

This study describes each setting's unique characteristics. Findings from educator interviews suggest that there are more similarities than differences in perceived benefits and challenges on outdoor and nature play between the two countries. In analyzing the Canadian and Korean observations/interviews, six subthemes were found in terms of benefits: (1) *Accessibility*, (2) *Children's ability/development*, (3) *Meeting children's needs*, (4) *Pedagogy*, (5) *Positive support*, and (6) *Teacher's growth*. Five subthemes were found in both cities in terms of challenges: (1) *Accessibility*, (2) *Weather*, (3) *Safety*, (4) *Negative condition*, and (5) *Teacher*. The current research conveys valuable implications for educators interested in forest schools in that it compares two international cities and includes diverse participants within the field of education.

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엄마, 아빠, 할머니, 성열이! 너무 너무 사랑해! 앞으로 내가 더 잘 되어서 보답할 수 있는 딸, 누나, 손녀딸이 될게!

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## Early Childhood Teachers' Perspectives of Outdoor and Nature Play in Seoul, South Korea and Montreal, Canada

The purpose of this paper is to understand forest school educators' perspectives in outdoor and nature play-based settings in terms of early childhood education and child development and compare those within two different cultural contexts: South Korea and Canada. Outdoor and nature play is promoted and more prevalent in certain societies and seen as one of the solutions to resolve the social problems that the current generation's children are facing, such as a general lack of movement and high stress levels. A cross-cultural examination across two different societies offered opportunities to explore forest schools and educators perspectives from different cultures. The characteristics of each example from different cultures can guide future directions for forest schools, which can be applied globally and help future educators who are willing to contribute to this outdoor and nature play movement. Additionally, this study can offer further understanding of the benefits of outdoor and nature play, not only for children but also for the healthy development of a future generation.

### **Literature Review**

#### **Statement of the Problem**

Many influential people in human history have highlighted the importance of the relationship between humans and nature. For example, Albert Einstein said, "Nature is not an engineer or a contractor, and I myself am a part of Nature" (in Dukas and Hoffman, 1979, p. 92). Jean-Jacques Rousseau also described a world, in his book *Emile* (1762), in which children should freely explore nature, such as the woods and fields, and learn through play. However, for the sake of economic growth and without consideration of the natural environment, much of

modern society seems to offer less and less nature and more artificial environments which lack fresh life vitality. Children in this generation may not have many opportunities to feel the beauty of natural surroundings such as wild flowers and trees, whereas others do. They seem to be separated from nature and may receive an unbalanced education, one that is not focused on holistic development but is more cognitively centered, with children being trapped indoors most of the day (Bento & Dias, 2017). Likewise, the highly structured environments and expectations of the twentieth-first century are likely to cause children stress by forcing them to take in an abundance of information and expecting them to compete with their peers (Alsop & McCaffrey, 1993). Modern education is immersed in maximizing children's development through enhancing academic abilities. The outdoor education movement argues that early childhood education environments, where children experience less stress and connect with the natural environment, are extremely important for the holistic development of children.

In the early twentieth century, children's rights to play were not fully respected and the number of child laborers peaked. Thanks to advocates' endeavors on behalf of children, these numbers gradually decreased to reform child labor and ban the employment of children in the workforce (Frost, 2009). Finally, the United Nations Convention on the Rights of the Child (UN General Assembly, 1989) indicates clearly that children have the right to play. Compared to the twentieth century, the current situation for children seems to be different; however, it is not necessarily true that all of the current generation's children enjoy their right to play in the sense that play has been replaced with a focus on learning literacy and academic skills (Miller & Almon, 2009). Miller and Almon (2009) argue that the trend away from play seems to happen at a very young age. This current generation of children is involved in more scheduled, stressful,

and adult-directed activities than ever before, resulting in their being referred to as the “play deprivation” generation (Belknap & Hazler, 2014). Similar to the movement to save the children who were employed in factories and to ensure the right to play for them in the twentieth century, today’s forest school movement aims to preserve children’s right to play outdoors (Frost, 2009).

Having more time for outdoor play in early childhood education settings is a core of the movement. Children experience lower levels of stress and anxiety when they play outside more often (Bento & Dias, 2017; James, Hess, Perkins, Taveras, & Scirica, 2017). The World Health Organization Global Recommendation on Physical Activity for Health (2010) suggests that children and youth aged 5 to 17 should accumulate at least 60 minutes of moderate-to-vigorous physical activity per day to improve cardiorespiratory and muscular fitness, body composition, bone health, and cardiovascular and metabolic health biomarkers. In Canada, national data from the Canadian Health Measures Survey present that only 7% of children meet the current regular physical activity recommendation, and 62% of children’s activity is sedentary (Active Healthy Kids Canada, 2013). According to Stone and Faulkner (2014), 55.1% of children played outdoors for less than 1 hour per day, 37.2% spent 1-2 hours outdoor per day, and only 7.7% spent more than 2 hours outdoors.

These statistics representing the low activity level, especially outdoors, in early childhood result in serious and various public concerns. Jo (2012) insists that the toys of childhood have been changed from natural and loose materials to constructed and close-ended ones using technology such as computer and video games, or television, and that these could have an impact on children’s emotional, physical, and moral development. A sedentary lifestyle is one of the factors most significantly linked to obesity. The prevalence of obesity in the United

States increased by 2% with an additional one hour of television per day (Anderson & Butcher, 2006). In order to counter these developments, forest schools that highlight the value of outdoor and nature play have seen a global initiative. Forest schools are created to provide education environments that put less stress on children and promote more physical activities and outdoor and nature play. Because it is a novel concept in North America, it is salient to understand the benefits and challenges of this new educational movement in order to promote forest schools in effective ways. Current studies focus on educators' beliefs or practices towards outdoor play (Dietze & Kashin, 2018; McClintic & Petty, 2015); however, there is a limited research that addresses cross-cultural differences in educators' perspectives regarding the benefits and challenges of outdoor and nature play.

### **Definition of Terms**

Outdoor and nature play allow children to experience nature, face challenges, and in the process develop team work and negotiation skills, engage in creative thinking, critically analyze situations, and develop problem-solving skills (Frances, 2015). For the purpose of this study, both outdoor play and nature play are so intertwined that they are taken to mean the same thing, which is play that young children spend engaged in the outdoors, including in forest and woodland settings. Additionally, many articles use different terms such as forest kindergarten, forest daycare, and forest preschool to define this type of education setting. Lerstrup and Refshauge (2016) define forest preschools as “[p]reschools where forest sites play an essential role in daily life” (p. 388). According to Leather (2015), a forest school is “a form of outdoor education that is particularly associated with early years education wherein young children spend time in forest or woodland settings” (p. 2). Forest education is defined as “woods-related

environmental education in the context of education for sustainable development” (Lindermann-Matthies & Knecht, 2011, p. 153). Therefore, for the purpose of unification, the term “forest preschool” is mainly used in this thesis. The age range of children who are attending forest schools that this study is concentrating on is 2 to 7 years.

### **Key Theorists and Historical Foundations: Play and Outdoor Environments**

While researchers oppose too strict a focus on academics in early years (Belknap & Hazler, 2014), play is considered a vehicle for young children’s learning, and increasingly early childhood educators understand their roles to support children’s play-based learning (Dietze & Kashin, 2018). This belief in the value of play for young children was not suddenly built for the current generation, but throughout history, many theorists have been influencing early childhood education and insisting on the importance of play and the environment (Dietze & Kashin, 2018). Still, this transition continues with many researchers and practitioners trying to promote more play-based learning and outdoor nature play in children’s everyday life. It is important to know who the giants are whose shoulders our current generation stands, in order to understand outdoor and nature play philosophies.

John Comenius (1592-1670) was an ancestor of outdoor and nature play. He was a Czech philosopher, pedagogue, and educator. He was the first philosopher to explore the relationship between human beings, nature, and education and systemically established the concept of natural education (Solly, 2015). He believed that human beings can be educated and developed by adapting themselves to the surrounding nature (Jin, 2006). Pansophism is the core of his educational theory, which influenced Johan Pestalozzi and Johann Friedrich Herbart. Pansophism refers to universal wisdom, that is, that all of knowledge is interrelated and can be

learned through nature (Jin, 2006). Comenius was focused on teaching this universal wisdom to develop a democratic society (Jin, 2006).

Jean-Jacques Rousseau (1712-1778) was an eighteenth-century philosopher from Geneva, Switzerland. His philosophy affected the Enlightenment era across Europe and had immense impact on modern political and educational systems (Solly, 2015). In his book, *Emile* (1762), in which his fondness and love of children is so naturally expressed, he suggested the ideal world for children was to play outside freely so that they could use play as an instrument for the development of the senses. His view of children was novel in the way that he saw children as having their own spontaneity, compared with the pervasive idea at that time that children were immature and that the adult's care and guidance were of primary necessity (Jo, 2012). Rousseau's work influenced not only many philosophers such as Pestalozzi, Froebel, and Montessori, but also many advocates these days.

Based on Comenius and Rousseau's theories, Johann Pestalozzi (1746-1827), a Swiss educational pioneer, insisted on a holistic and general education for everyone no matter their status or wealth (Jin, 2006). The aim of education for him was not simply the acquisition of knowledge and skills but the development of critical thinking, and this, he argued, should be carried out according to nature and a child's development (Dietze & Kashin, 2018). As a radical philosopher and a defender of the poor, he valued both indoor and outdoor play as the main vehicles to human fulfillment and achievement (Dietze & Kashin, 2018).

Friedrich Froebel (1782-1852) was a German educator who put the idea of nature play into practice in early childhood education, based on his belief from his own childhood that human beings and nature are intertwined. He had studied natural science and engineering;

however, after meeting Pestalozzi he began to awake to education and tried to understand human nature by cognizing nature (Jo, 2012). Compared to Pestalozzi, Froebel highlighted the importance of nature on early childhood education and the base of his educational curriculum was the child's first-hand experience with nature, music, spirituality, and mathematics (Solly, 2015). Because the environment plays a critical role in children's learning and development and nature is considered the same as human nature, "the educator only has to learn how to provide the widest opportunities and means, as well as the fullest freedom for such play" (Froebel cited in Lawrence, 1952, p. 192).

John Dewey (1859-1952) was an important educational theorist from Vermont, United States. Dewey expressed that nature, encountered through scientific experiences and everyday routines, is truly salient for children (Jo, 2012). He introduced the progressive constructivist theory based on child-centered and experience-centered education (Pappas, 2016). In his book *The Child and the Curriculum* (1959), he insisted that the curriculum needs to be based on children's interests so that the interaction between thinking and action occurs naturally. Similar to Rousseau and Froebel, an educator is not just a supervisor who uses conventional curricula but a guide and a friend of the student, and the object of education is the child's holistic development through scientific and nature experiences (Dewey, 1959). Dewey (1980) wrote that:

The life of the child would extend out of doors to the garden, surrounding fields and forests. He would have his excursions, his walks and talks, in which the larger world out of doors would be open to him. (p. 35)

Maria Montessori's (1870-1952) influence continues to be experienced through the many Montessori programs around the world today. She was an Italian physical anthropologist and a

doctor of medicine who played a critical role in early childhood education by introducing a scientific approach that emphasized observation and experimentation (Dietze & Kashin, 2018). She believed that children were natural workers and producers because of their ability to learn through absorbing experiences and adapting to the environment with an unconscious and conscious mind (Montessori, 1966). This idea led her to build her famous materials, known as apparatuses, for children to learn not only language and mathematics but also culture and customs (Tovey, 2014). These days, the majority of Montessori programs take place in controlled indoor environments (Elkind, 2015). However, Montessori herself emphasized the importance of outdoor environments in that human beings were part of the universe, that is, related systemically, and that children were expected to have open access indoors and outdoors throughout the day (Tovey, 2014).

Jean Piaget (1896-1980) was born in Switzerland and has enormously impacted not only early childhood education but also natural science, psychology, and philosophy. As an environmentalist, he is called the father of constructivism (i.e., children follow certain stages of cognitive development by interacting with the surrounding environment and through the processes of assimilation and accommodation) (Cole & Wertsch, 1996). He also insisted that because play is a vehicle for children to fulfill cognitive developmental processes, hands-on exploration of their environment is critical for children's learning (Cole & Wertsch, 1996). This is why he believed that limiting learning to an indoor environment was not enough for children to construct knowledge, as the outdoors nourished, stimulated, and challenged children (Dietze & Kashin, 2018).

In contrast to Piaget, who focused more on individual children's cognitive development

through their actions, Lev Semenovich Vygotsky (1896-1934), a Russian psychologist, emphasized the influence of culture and society on human development, explained through this theory of social constructivism (Cole & Wertsch, 1996; Dietze & Kashin, 2018). Through the use of scaffolding, a process where an adult or a more skillful peer supports a child in solving a problem that the child may have otherwise been unable to carry out, the teacher's role and perspectives can be seen as significant for children's development, including their development during outdoor and nature play (Cole & Wertsch, 1996).

### **Developmental Benefits of Outdoor Environments**

Based on these pioneers' beliefs, many contemporary researchers have indicated that the design of preschool-level, green, outdoor spaces impacts not only children's activity levels and physical health (Baranowski, Thompson, DuRant, Baranoswski, & Puhl, 1993; Fjortoft, 2004; Martenesson, Jasson, Hohansson, Raustrop, Kylin, & Boldemannm, 2014; O'Brien & Murraray, 2007; Stone & Faulkner, 2014) but also their cognitive (Burdette & Whitaker, 2005; Davis, Rea, & Waitem, 2006; Schilling, McOmber, Mabe, Beasley, Funkhouser, & Martinez, 2006; Zamani, 2016) and social development (Bradley & Male, 2017; Kim & Lee, 2013; Rivkin, 2000).

As mentioned earlier, more and more children spend less time in outdoor play and engage less in vigorous activities. Children who play outdoors for less than one hour per day are more likely to be overweight and have lower physical activity levels than normal-weight children (Stone & Faulkner, 2014). This implies that outdoor and nature play can take on a critical role in addressing the current society's obesity problem in early childhood. More interestingly, Fjortoft (2004) studied the effects of natural environments compared to traditional playgrounds on children's play and motor development. She found that children who played in the natural

landscapes showed increases in motor skills, such as balance, agility, and co-ordination (Fjortoft, 2004). Even though there were gender differences found in activity levels, in that boys were observed more likely to engage in physical outdoor play than girls, greenery settings were found to attract girls as much as boys and younger as well as older children (Martensson et al., 2014). Therefore, outdoor and nature play is salient in terms of offering ways for children to be physically active (Baranowski et al., 1993).

Studies that focus on children's cognitive development often examine children's imagination and creativity development (Burdette & Whitaker, 2005; Davis et al., 2006; Zamani, 2016). According to Burdette and Whitaker (2005), a child is likely to encounter opportunities for decision making and creative thinking while playing outdoors. This might be because the characteristics of outdoor spaces are often more varied and less structured than indoor spaces. Zamani (2016) also concludes that four to five-year-old children's imaginations are inspired by the accessible loose materials in natural and mixed nature preschool environments. A forest environment builds on innate motivation and positive attitudes to learning and offers children the opportunities to take risks, make choices and initiate learning for themselves (Davis et al., 2006). In addition, language skills can be developed through outdoor and nature play (Schilling et al., 2006) as children share naturally-occurring initiatives. Being active and moving during outdoor play boosts a child's attention span and may make it easier for children to retain concepts such as colors, shapes, ABCs, and movement terms (Schilling et al., 2006).

In addition to the positive effects of outdoor and nature play on children's physical and cognitive development, outdoor and nature play is also beneficial in fostering children's social-emotional domains. According to Dolling, Nission, and Lundell (2017), children's health and

sleep, levels of fatigue, stress, and burnout are improved by time spent in a forest environment. By nurturing a connection with the environment, children are likely to enjoy their play and experiences (Cumming, 2015). Children can have opportunities and challenges to interact with different and various people and animals while they are playing outdoors (Rivkin, 2000). Additionally, children can develop self-efficacy through the risky and adventurous aspects of outdoor and nature play (Gardner, 2011). Self-efficacy is a belief in one's capacity to perform a task or manage a situation, which refers to children's estimation of their ability to be successful (Gardner, 2011). There is also a connection between risk-taking and self-regulation (Kleppe, Melhuish, & Sandseter, 2017). Children use self-regulation when they respond to adults, other peers and their environment, and Kleppe et al. (2017) found a relationship between children's self-regulation skills and their frequency of involvement in risky play. Children build their confidence by taking risks through play (Kleppe et al., 2017).

According to Bradley and Male (2017), nature play also positively affects the social development of children with special needs. The researchers found that unforced opportunities to make friends are the most important benefits of forest schools, particularly for children with Autism Spectrum Disorder (Bradley & Male, 2017). They also described how parents and professionals pointed out that experiencing success, learning, and challenges as well as risk-taking are the most relevant benefits of forest schools for children with Autism Spectrum Disorder. This implies that nature play has the potential to offer positive academic, social and practical experiences to young children with ASD (Bradley & Male, 2017). Similarly, Kim and Lee (2013) elucidate that outdoor and nature play encourages children to find their identities through natural interaction with peers. Furthermore, educators of children with special needs

experience feelings of pride when teaching at forest schools compared to educators in traditionally structured environments. Not only do educators get to witness the changes in their students physically and socially, they also provide environments where their students are able to freely be themselves (Kim & Lee, 2013).

### **Materials in Outdoor Environments: Loose Parts**

Loose parts are materials that are open-ended, variable, unstructured and can be used in multiple ways (Dietze & Kashin, 2018). The term ‘loose parts’ was coined by architect Simon Nicholson who believed that children are all creative and that loose parts in an environment will empower their creativity through play, discovery, invention, and experimentation (Dietze & Kashin, 2018). Additionally, Sutton (2011) defined loose parts as “any collection of fully movable elements that inspire a person to pick up, re-arrange or create a new configuration, even realities, one piece or multiple pieces at a time” (p. 409). Loose parts can be categorized as (1) manufactured: boxes, buckets, blocks, clothes, balls, and baskets, (2) natural: bark, sand, seeds, stones, mud, vines, leaves, and tree stumps, and (3) recycled: cardboard boxes, tires, plastic bottles, felt, old pots, milk crates, and rope (McClintic, 2014) (see *Figures 1 and 2*).



*Figure 26.* Loose parts in outdoor setting 1 (2017)



*Figure 27. Loose parts in outdoor setting 2 (2017)*

When children are playing with loose parts, they are engaged physically, cognitively, socially, and emotionally. For example, Houser, Roach, Stone, Turner, and Kirk (2016) found links between play with loose parts and the development of physical literacy, which refers to motivation, confidence, physical competence, knowledge, and understanding to be physically active for life. Children become more physically active and competent when playing with (i.e., re-arranging, creating, engaging with) loose parts and they learn to problem-solve in their own ways (Houser et al., 2016). In addition, Barbour (1999) observed physical activity behaviors of elementary school children with high and low physical competency on two types of playgrounds. She noted that children's social as well as physical skill development were influenced by playground design, especially in the playground design providing various play options through loose parts (Barbour, 1999).

### **Challenges of Outdoor Environments**

Despite the advantages of outdoor and nature play for children's development, there are hindrances and concerns that outdoor and nature play raise. First, there is the pervasiveness of

‘surplus safety,’ which means overprotectiveness and concerns of safety, which adults carry towards young children’s outdoor play (Wyver, Tranter, Naughton, Little, Sandseter, & Bundy, 2010). It is true that outdoor and nature play supports riskier play and that playgrounds are a common arena for risky play (Dietze & Kashin, 2018). In Canada, on average 250 children ages 14 and under are hospitalized as a result of playground falls each year between 1996 and 2005 (Safe Kids Canada, 2007). Parents often fear possible accidents, lack of hygiene, or disease (Wyver et al., 2010). Even though safety concerns, such as injury, limits risky outdoor play, there is an association between risky outdoor play and children’s health and development (Brussoni, Gibbons, Gray, Ishikawa, Sandseter, Bienestock, Chabot, Fuselli, Herrington, Janssen, Pickett, Power, Stanger, Sampson, & Tremblay, 2015). However, many researchers insist that parents in today’s society are concerned more than they realistically need to be. Researchers believe that, due to this surplus safety concern, children are provided with fewer chances to explore the outdoors today (Bento & Dias, 2017; Brussoni et al., 2015; Wyver et al., 2010).

Paradoxically, this parental restriction prevents children from opportunities for healthier development by exposing children to more serious short and long term threats of illness, namely that the more often children play outside, the less likely children get sick (Wyver et al., 2010; Yilmaz, 2016). Therefore, instead of trying to remove all risk in children’s play to create a safe environment, it is important for educators and parents to support the creation of environments that are “safe enough for children to act on, transform, seek out challenges and take risks” (Tovey, 2017, p. 179). Recently, the idea of keeping children “as safe as necessary, not as safe as possible” is promoted by both injury and play organizations, such as the U.K.’s Royal Society for the Prevention of Accidents and Play Safety Forum (Brussoni et al., 2012). Similarly, Brussoni

and her colleagues (2012) argue that risk benefit analysis is needed to consider optimal strategies for providing children with outdoor risky play opportunities that promote children's healthy and active lifestyles while minimizing dangers.

Interestingly, this safety factor is the main difficulty that both Canadian and Korean educators point out (Coe, 2017; Kim & Lee, 2013). In Canada, parents and educators are more likely to be worried about risk-taking in forest environments through activities such as rough-and-tumble play, playing near dangerous or harmful elements and tools, or being lost (Coe, 2017). According to Kim and Lee (2013), Korean forest kindergartens describe that the dynamic environment and unexpected circumstances are two of the main obstacles. In other words, when outdoors, the educators need to pay continual attention to the children's activities and stay alert to the children's needs, which demands emotional and physical energy (Kim & Lee, 2013).

Lindermann-Matthies and Knecht (2011) found that a main hindrance to provide outdoor and nature play in urban environments is the distance between school buildings and forests. Schools in more rural areas (mean distance .9 km  $\pm$ .09) are closer to the nearest forest than those in a more urban areas (mean distance 1.4 km  $\pm$ .09). Bad weather and the presence of ticks are also challenges faced in forest education and educators are required to ensure appropriate clothes for students and themselves, and provide sufficient parental information (Lindermann-Matthies & Knecht, 2011). According to Ihmeideh and Al-Qaryouti (2015), in Oman, teachers consider hot climates, a shortage of materials and equipment, and travel distance to natural environments to be the main difficulties for outdoor and nature play. These findings on teacher perspectives regarding outdoor play are supported by Ernst (2013) and McClintic and Petty (2005). Furthermore, teachers believe forest environments could make children more easily distracted

and create more discipline problems (Lindermann-Matthies & Knecht, 2011).

According to Kim and Lee (2013), Korean teachers describe their lack of knowledge in forest environment to be a challenge. This is represented similarly in Canadian educators (McClintic & Perry, 2015). Korean teachers have a higher tendency to reproach themselves for their lack of knowledge, and pay for their own workshops and expenses because of insufficient governmental supports and financial subsidies, such as for attending various workshops about forest environments (Kim & Lee, 2013). Moreover, dealing with parents (i.e., over safety issues) is another hardship for Korean teachers (Kim & Lee, 2013). Even though at the beginning of the semester, parents may be supportive of unexpected incidents – and because of the dynamic characteristics that outdoor and nature environments have, there are more accidents with bug bites, bruises, or other injuries (McClintic & Perry, 2015) – parents sometimes blame the teachers or even comment about the qualifications of teachers when accidents actually occur (Kim & Lee, 2013). To improve and promote outdoor and nature play environments in any country, it is obvious that teachers' roles in this special environment are critically salient.

### **Teachers in Outdoor and Nature Play**

A common dilemma in teaching is that teachers are faced with multiple and, at times, contradictory roles, for example, teachers are the executive (supervisory, directive, critical) and the counselor (supportive, advisory) (Helsing, 2007). In addition, they have to balance the needs of individuals and a larger group (Helsing, 2007). Interestingly, during outdoor and nature play, teachers are less likely to have this dilemma because of the loose characteristics of the environment and curriculum compared to indoor play, and they perceive themselves as facilitators of learning rather than direct instructors (Kim & Lee, 2013).

The ideas of Pinar (1975) and Palmer (2007) are also relevant. Both influential curriculum theorists discuss the importance of teachers' self-reflection. The method of *currere* describes an ongoing project of teacher self-understanding through autobiographical narratives, positioning educational experience within the person who lives it (Kanu & Glor, 2006). This experience can be investigated for "latent and manifest meaning and the political implications of such reflection and interpretation" and by doing so teachers can be enlightened about the actual and individually lived experiences that curriculum offers (Kanu & Glor, 2006, p. 105). Correspondingly, Palmer (2007) emphasized the importance of teachers being self-reflective people. He articulates that "teaching holds a mirror to the soul. If I am willing to look in that mirror, and not run from what I see, I have a chance to gain self-knowledge and knowing myself is as crucial to good teaching as knowing my student and my subject" (Palmer, 2007, p. 1).

In Kim and Lee's (2013) study, 11 Korean teachers from daily forest schools described through interviews that unlike the traditional school environment that divided the children by their ages, teachers in forest schools can often observe Zone of Proximal Development interactions between children of different ages. It might be easy for the teachers to be engaged and to facilitate these interactions by utilizing scaffolding (Kim & Lee, 2013). That is how the teachers are supporting children in their construction of knowledge for themselves, rather than teachers instructing by delivering knowledge. Learning is through play and peer-led rather than teacher-led in both nature play and Vygotsky's theories.

On the other hand, according to McClintic and Petty (2015), teachers working at several kindergartens in Southern American states saw their roles with children in outdoor play as supervisory. Teachers believed outdoor play was critical for the development of children but

encountered obstacles in the school culture or a “philosophy-reality conflict”. This refers to the incongruity experienced when teachers have their philosophy and belief that outdoor and nature play is beneficial, but their school reality emphasizes traditional indoor cognitive play (Hatch & Freeman, 1988, p. 158). Furthermore, the school culture encouraged teachers to consider their roles in indoor environments to be more important than outdoor (McClintic & Petty, 2015). On the other hand, McClintic and Petty (2015) also found that early childhood educators’ recollections of their own outdoor experiences influenced the ways they approached their classes’ outdoor play, specifically in the way that the educators valued the freedom outdoor play provides. This is connected with Pinar’s (1975) and Palmer’s (2007) views that teachers’ own experiences and self-reflections impact their teaching philosophy and style. Clearly, in a knowledge society, teachers encounter a professional paradox in which their personal beliefs in the value of outdoor play conflict with the school’s reality, and conditions of fragmentation often result (Kanu & Glor, 2006; McClintic & Petty, 2015). To connect practice and belief without a “philosophy-reality conflict,” further research on the value of outdoor and nature play in society is required (Hatch & Freeman, 1988).

### **The Current Study**

This study explores educators’ perspectives of outdoor and nature play in two cultures: Seoul, South Korea and Montreal, Canada. South Korea already has experienced a dramatic increase in the number of forest schools since 2008 with the government’s lead (Lee, Lim, Kim, & Song, 2015). On the other hand, Canada has been currently accepting the concept of forest school, although with the lack of governmental support (Dietze & Kashin, 2018). In South Korea, forest schools are more likely to be offered as daily care programs (Lee et al., 2015),

whereas Canada offers more weekend and extra-curriculum programs (Dietze & Kashin, 2018). By analyzing forest school educators' perceptions of the educational settings in these different cultural contexts, my goal is to develop a better understanding of the different approaches to forest schools in each culture. As the importance of outdoor and nature play increases, the study aims to bring enhanced understanding for providing opportunities for children to engage in outdoor and nature play.

### **Research Questions**

This research study explored the following questions:

- (1) What are the characteristics of existing forest schools and settings in Seoul, South Korea and Montreal, Canada?
- (2) What are the perspectives and beliefs of the educators in these settings in terms of the benefits and challenges of forest schools?

### **Methodology**

#### **Research Design**

This study's design was a qualitative, exploratory study of forest schools in two countries, focusing on the perspectives and beliefs of the educators in these settings. The research process involved collecting, organizing, and analyzing: (a) observational data during visits to a total of ten forest school programs and (b) interviews with a total of 11 educators in Seoul, South Korea and Montreal, Canada.

#### **Sampling**

Stratified purposeful sampling was used in this study, which allowed the researcher to examine the distinguishing features of subgroups of the phenomenon of interest (Hays & Singh,

2012). In this study, my sample included six Korean settings and four Montreal settings, representing early childhood education institutions or programs where outdoor and nature play is valued. With the exception of one school (Orange School in Seoul), the selected schools and programs provided at least three hours of outdoor play in green spaces per week. Each participant school or program considers itself to be a forest school where outdoor and nature play is the main vehicle for children to develop, or to provide a high level of outdoor and nature activities. As well, outdoor and nature play is mentioned on the school's philosophy or vision statement. In Korea, only schools and programs that are members of the Korea Association of Forest Kindergarten were recruited. A total of 11 educators were interviewed: seven South Korean educators from the six settings and four educators from the four settings in Montreal, Canada. An ethical approval of the current study was obtained before the participants recruitments (see Appendix E).

## **Procedures**

**Part 1. Observations of Forest Settings.** In order to explore the characteristics of forest schools and settings in South Korea and Canada, the researcher completed observations of the individual environments. The observations lasted from 30 minutes to 2 hours according to the conditions the participants offered. All Canadian participants and three Korean participants provided approximately two hours of observations and allowed the researcher to be a part of their activities. Pictures and videos of play spaces and materials, and field notes were taken during and after the observations (see Appendix C). After the observations, around 15 minutes of short interviews with educators or directors were undertaken to gain demographic information of the participants and the settings. Based on the data collected throughout this stage, the researcher

gained a sense of the environment and teacher-child interactions, which helped to assess the coherence between the statements in the educator interviews and the actual practice of the educators. This also allowed the researcher to integrate the background information for Part 2. By observing the settings prior to each individual interview, the researcher was able to better individualize the interview questions.

**Part 2. Educator Interviews.** The second set of data in this thesis project took the form of individual educator interviews. Through semi-structured interviews with one or two educator(s) in each setting, narrative data were collected, which allowed the researcher to develop a wider understanding of the participants' perspectives and experiences with forest schools. One hour face-to-face interviews were audio-recorded and then transcribed. Coffee and snacks were provided to the interviewed participants (see Appendix A and B for examples of interviews) .

*Sample elicitation questions.* Semi-structured interviews included the following elicitation questions: (a) What is your opinion of forest schools? (b) Why did you decide to teach at a forest school? (c) What are the challenges of the forest school? (d) What are the benefits of the forest school? (e) How does society (general citizens and parents) react to the forest school? (f) What are the teacher's roles in the forest school? (g) What are the governmental supports or regulations? (h) What would you like people to know about teaching in a forest school? These core questions were explored further through the use of "why" and "how" prompts.

### **Role of the Researcher**

As an observer and interviewer, building a rapport with the participants was important. I visited the forest schools before the data collection and, if possible, had short conversations with

the educators. Following the data collection, and again if possible, I reviewed the research process and results with each school supervisor or an educator in a debriefing session. The potential bias of the researcher would be my enthusiasm and belief in the value of outdoor and nature play. It is important that I acknowledge my experiences of highly structured environments focusing only on cognitive development and my love of nature and passion towards hiking and mountain biking, as well as my belief that outdoor nature play is beneficial to children's holistic development. Peers of the researcher were involved also in reviewing the coded data through peer review procedures. Specifically, the coding for one of the interviews, line-by-line, was discussed with a peer of the researcher for the purpose of ensuring reliability. In this way the researcher's bias could be noted and the research could be conducted as transparently as possible.

### **Data Analysis**

Follow-up questions were conducted via e-mails, calls, or social media messengers. Member checking and debriefing sessions with participants were followed to enhance the trustworthiness of the study. In-vivo coding was mainly used for the first stage of data analysis in order to represent the actual voice of participants (Saldaña, 2009), and some descriptive coding was used. In the second stage, categorizing codes and generating themes were based on (a) relationships between codes, (b) code frequencies, and (c) underlying meaning across codes (Ford, 2014). Finally, axial coding was used in the third stage to develop clearer themes with subcategories in a more organized order.

### **Protection of Participant Rights**

All the participants were informed about their rights and the procedure of the study before their participation. They signed the consent form, which provided procedural information

and an ethical consent form. The copies of the signed consent forms are protected by keeping it in encrypted files on the researcher's laptop (see Appendix E for an ethics approval and Appendix F for a consent form).

### **Significance of Study**

In today's educational setting where outdoor and nature play is often undervalued, this study provides an opportunity to listen to educators who are currently working at education settings heading in a different direction from the mainstream and making critical changes throughout society towards outdoor and nature play. This study contributes to children's rights to play (Alsop & McCaffrey, 1993), and to children interacting rigorously and freely with nature. Outdoor and nature play can be one of the keys to improving many aspects of children's well-being: physical, emotional, social, and cognitive. Noticing the benefits and challenges that educators encounter in this educational situation can alert policymakers, parents, and practitioners to the importance of outdoor and nature play for children's holistic development. Moreover, forest school educators can suggest, as facilitators, how children develop an interest in and engagement in the natural environment, and this may lead to a desire for the next generation to protect the natural environment.

## **Findings**

### **Part 1. Observations of Individual Environments**

**Demographic information of the educator participants.** The demographic information about the educator participants and the schools and programs were collected during and after the observation sessions. The data from South Korea and Canada are documented separately in two tables (Table 1 for participants and schools in Seoul; Table 2 for participants and schools in

Montreal). Please note that, to ensure privacy, pseudonyms are used for all participants and settings. Maps of the two cities indicate the geographical location of each participating setting (*Figures 3 and 4*). In coding the data from the observations and initial interviews, two categories and nine sub-categories were revealed: (a) Demographic information of individual participants (gender, position, total years of experience in early childhood education, total years in forest schools, level of education), and (b) School and program information (targeted age of children in the setting, type of the setting, number of workers, number of children, location of the setting, subsidy information).

Name	Demographic Information of Individual Participants	Schools and Program Information
1. Red school Adrian	Female (Director) Years of experience in ECEE: 40 years Years of experience in forest school: 12 years Highest degree: Master	Targeted age of children: 3-5 Program type: Forest school daily The number of workers: 14 The number of children: 23 Location: Forest Government subsidy: no subsidy
2. Orange school Rachel	Female (Teacher) Years of experience in ECEE: 6 years Years of experience in forest school: 2 years Highest degree: College	Targeted age of children: 3-5 Program type: Regular daycare daily; Forest experience program: twice a month The number of workers: 15 The number of children: 72 Location: Public parks Government subsidy: subsidy
3. Yellow school Barbara	Female (Director) Years of experience in ECEE: 25 years Years of experience in forest school: 9 years Highest degree: Master	Targeted age of children: 0-2 Program type: Regular daycare daily; Forest experience: once a week The number of workers: 9 The number of children: 47 Location: Public park Government subsidy: subsidy
4. Green Program Elizabeth	Female (Forest expert) Years of experience in ECEE: 5 years Years of experience in forest school: 5 years Highest degree: Bachelor's	Targeted age of children: 3-10 Program type: Forest experience weekend only The number of workers: 2 The number of children: Fluctuates Location: National Children's Park Government subsidy: subsidy
5. Blue school Catherine	Female (Teacher) Years of experience in ECEE: 9 months Years of experience in forest school: 9 months Highest degree: Bachelor's	Targeted age of children: 3-5 Program type: Forest school daily The number of workers: 9 (F:4 M:5) The number of children: 48(Daily) Location: near a forest
6. Blue school Davi	Male (Director) Years of experience in ECEE: 16 years Years of experience in forest school: 4 years Highest degree: Bachelor's	Government subsidy: no subsidy

<p>7. Purple school Hanna</p>	<p>Female (Teacher)          Years of experience in ECEE: 5 years          Years of experience in forest school: 2 years          Highest degree: Bachelor's</p>	<p>Targeted age of children: 3-5          Program type: Waldorf daycare daily          The number of workers: 12          The number of children: 184          Location: near a forest          Government subsidy: subsidy</p>
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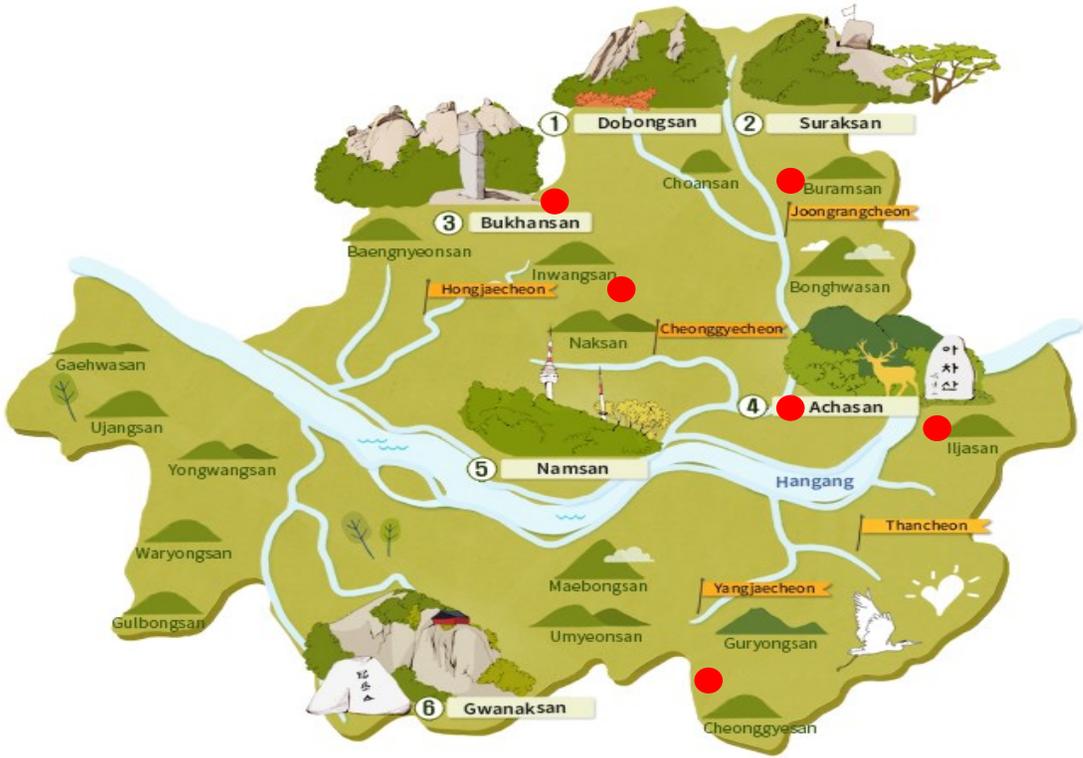


Figure 28. The location of the settings and mountains in Seoul, South Korea

Name	Demographic Information of Individual Participants	Schools and Program Information
1. Circle school Jenny	Female (Head teacher) Years of experience in ECEE: 10 years Years of experience in forest preschool: 6 years Highest degree: Bachelor's	Targeted age of children: 3-5 Program type: Forest School daily The number of workers: 5 The number of children: 12 Location: Public parks Government subsidy: no subsidy
2. Triangle school Gina	Female (Director) Years of experience in ECEE: 3 years Years of experience in forest school: 1 year Highest degree: Master	Targeted age of children: 3-5 Program type: Regular Daycare daily; Forest experience: daily The number of workers: 2 The number of children: 6 Location: Public parks Government subsidy: no subsidy
3. Rectangle program Susan	Female (Educator) Years of experience in ECEE: 10 years Years of experience in forest school: 4 years Highest degree: Bachelor's	Targeted age of children: 3-12 Program type: Forest experience weekends only The number of workers: 8 The number of children: 150 (including the whole program) Location: public parks Government subsidy: subsidy
4. Hexagon program Alex	Male (Director) Years of experience in ECEE: 8 years Years of experience in forest school: 2 years Highest degree: Bachelor's	Targeted age of children: 2-12 Program type: Forest School once a week The number of workers: 6 The number of children: 25 Location: Public parks Government subsidy: no subsidy



Figure 29. The locations of the settings and landmarks in Montreal, Canada

**Characteristics of each school in Seoul, Korea.** The different schools presented varied characteristics throughout the observations and short interviews the researcher undertook during the observation sessions. These characteristics are described in this section. Photos taken of materials and spaces provide illustrations.

*Korean School #1: Red School.* Red School is a private school located in one of the wealthiest areas in Seoul. The school does not receive any subsidy from the government, but is supported by the tuition fees that parents pay to the school. It is privileged as the very first private forest school program built in about 50,000 m<sup>2</sup> (534,000 SqFt) of forest space. A playground named ‘Sparrow Forest (참새숲)’ is the largest and most frequently used outdoor

space among eight playgrounds visited by the children who attend Red School, where children can interact with natural components (see *Figure 5*).



*Figure 30.* A sign for the Sparrow forest playground. January 24, 2019.

The playground is organized by a male principal, who integrated diverse loose parts, such as tires, branches, strings, ropes, and nets, into the environment, using safety belts and bolts to hold parts in place. He added fabrics on numerous places to protect not only the children but also the trees (See *Figure 6*). The director mentioned that teachers should only intervene in the children's activities when the children's safety is threatened.



*Figure 31.* Organized playground with loose parts (1). January 24, 2019.



*Figure 32.* Organized playground with loose parts (2). January 24, 2019.



*Figure 33.* Organized playground with loose parts (3). January 24, 2019.

As seen in *Figure 7* and *Figure 8*, natural components are provided with a low level of teacher direction. While the teacher is responsible for accompanying the children to Sparrow Forest, once there, the children can explore freely with little teacher supervision in the open-ended environment (see *Figure 9*).



*Figure 34.* A child exploring freely by going on frozen ice. January 19, 2019.



*Figure 35.* Logs on the playground as loose parts. January 23, 2019.

Another important characteristic of this school is the integration of indoor space with nature. The tables and chairs are mostly made of wood, and the lights, wall decorations, and cubbies are built with natural components (see *Figures 10 and 11*). On the left side of the entrance, various types of houseplants are located.



*Figure 36.* Inner space with natural components. January 19, 2019.

*Korean School #2: Orange School.* Unlike the previous private forest school, this public daycare started their forest experience program with government support and recommendation. It is located in the middle lower SES region and far from the mountains. The school and parents are subsidized by the government.

Because the principal and teachers were not familiar with the concept of forest schools and the forest experience program is a governmentally-led project, several educational seminars were provided by the government. It is worth noting that the observation was very limited in Orange School, as the forest experience program is held only twice a month. The short interview with teachers revealed that the government provides a ‘forest expert’ teacher for the forest experience day and the forest expert teacher leads the program. Based on the educational seminars, the interviewed teacher and director of the school mentioned that they tried to integrate nature within the traditional school setting (see *Figure 12* and *Figure 13*). However, in the short preliminary interview with the director and a teacher, it was stressed that the teachers’ supervision is highly needed in reality because of parents’ negative feedback after their children got hurt – despite the fact that the teachers were told during the seminars that a child is capable of encountering risks competently. This supports what Kim and Lee (2013) stated in that forest school teachers in Korea tend to be afraid of safety issues, which are often raised through parents’ negative reactions.



*Figure 37.* Nature related decorations in the inner space. February 11, 2019.

Orange School's philosophy seems to be more focused on traditional cognitive development than play-based and child-led learning. For example, the forest expert teachers prepared the curriculum before the actual activity and were focused on providing knowledge about plants instead providing free play time with natural components.



*Figure 38.* Plant pots in front of the Orange School. February 11, 2019.

The educator and the director highlighted the children's safety the most of all the schools during the short observation and interview sessions.

*Korean School #3: Yellow School.* This school is private, however, the government provides subsidy to both the school and the parents who send their children to this school because it follows the same governmental education curriculum as Orange School (public). It is located in the middle low SES region in Seoul, and in front of a large public park next to Bukhan Mountain, which is one of the biggest mountains in the city. The public park provides natural components in a similar way as Red School, and provides a mixture of structured and less-structured play experiences (see *Figure 14* and *Figure 15*). The director mentioned that a number of parents support the forest experience program because of the location of the school. Many parents are exposed to the natural environment and are fond of hiking themselves. She also

expressed that outdoor and nature play can play critical roles in the development of children after she visited Germany and saw the children playing freely outdoors.



*Figure 39.* The less structured playground in the public park. February 7, 2019.



*Figure 40.* A more close-ended structure in the public park. February 7, 2019.

As with Orange School, a forest expert teacher always accompanies the forest experience program, once a week for Yellow School. Based on the director's belief in constructivism, this school offers lower supervision, and child-led, play-based learning. The director mentioned that the forest expert teacher was more familiar with providing knowledge to children. To help children play and mitigate the director's safety concerns, she hired a male worker who is knowledgeable in safety issues just for the forest experience program. She mentioned that this

teacher's interventions are only needed for three situations: (1) when children are at risk, (2) when children ask the teacher to help, and (3) when a child cannot involve himself/herself in any play.

*Korean School #4: Green School.* This public program, associated with the Seoul Children National Park, provides what are called after-school programs, on weekends, by two forest expert teachers who are certified from the government. The goal of the program is to provide knowledge about nature to students, especially about the fauna and flora in the Children National Park, so the teacher lectures to the students using a traditional teaching method (see *Figure 16*).



*Figure 41.* A forest expert explaining about a nest to the students. February 9, 2019.

After this lecture, the students came back to the classroom to make crafts that teachers prepared beforehand. This session and the craft project were close-ended in the way that the students needed to follow what the teacher showed them and the materials were already colored

and prepared (see *Figure 17*). In terms of safety issues, the students were not exposed to risky situations. For example, the materials were already cut by teachers so that students only needed to glue the materials together, and the students were not allowed to run or play freely during either session.



*Figure 42.* A paper about ladybugs and crafts with natural components. February 9, 2019.

In the short interview after the observation, the forest expert teacher expressed her frustration that even though the program is supported by the government, the budget is too limited to maintain the class, especially to prepare the materials for the craft sessions, but she did not mention concern over the lack of free play being offered. In addition to this, she also stressed that she cannot understand why the government pays minimum wage to the certified forest experts.

*Korean School #5: Blue School.* This private forest school is located in the Southern part of Han River, where there are many families with higher SES backgrounds, similar to Red School. Blue School receives no financial support from the government. The school uses a huge public park located five minutes away from the school. The setting includes its own small playground and indoor classroom (see *Figure 18*), however, most of the time the students are

outside at the larger public park (see *Figure 19*), except during their lunchtime.



*Figure 43.* The playground in front of the classroom and the entrance. February 12, 2019.



*Figure 44.* The public park and its facilities. February 12, 2019.

The director wrote the philosophy of the school, which is based on Froebel and Pestalozzi's work, and he stated that he believes that "play-based and child-led learning is the best way" for children to learn. There are several types of playground areas in the public park, from an organized and structured space to nature-centered and less structured ones. The school uses mostly the nature-centered space and does not emphasize supervision by teachers. Teachers offered loose parts such as strings, paper cups, and colored papers so that the children could utilize them in conjunction with natural components freely. The teachers and the director

perceive their roles as observer, helper, and facilitator.

*Korean School #6: Purple School.* Due to the restricted time schedule of the Purple School program with the school being off-season, the researcher could not observe this school setting. The face-to-face interview with the teacher was replaced by email interviews. According to her answers, it is revealed that the setting is close to the Buram Mountain, and their program is based on Wardorf's philosophy, which also values outdoor and nature play. It is a daily program and the government supplies limited subsidies to parents, although the school is private. The educator stated that the parents are supportive of outdoor and nature play because they already recognized the pedagogy of Wardorf school, which highlighted an integrated and holistic manner rather than a traditionally taught cognitive education. They have their own outdoor space albeit they often go to the mountain parks.

**Characteristics of each school in Montreal, Canada.** As with the Korean settings, the Canadian schools presented different characteristics throughout the observations. The special aspects of each setting will be described below.

*Canadian School #1: Circle School.* This school is located in the Plateau area, an upper middle class area in Montreal. The school provides not only a daily nature and outdoor play-based daycare program but also a summer camp. The school also offers a Forest and Nature School Practitioners Course to adults who are interested in working with children in nature in connection with the Child & Nature Alliance of Canada.

The school uses both outdoor and indoor spaces, however, children and educators spend most of their days outside even if weather is extreme, such as at -35 degrees Celsius. The classroom is one room and a wooden-built adventurous area fills half of the classroom (see

*Figure 20*). This supports the importance the school places on movement even in the indoor environment. Because of a lack of space, the reading area and drawing area are smaller than the gross-motor skills area. The outdoor space includes public parks, which surround the indoor setting. The educators built wooden stages (see *Figure 21*) and provided small domestic toys such as kitchen sets, plastic musical instruments, and plastic wagon toys. As well, loose parts like tires, laces, and muffin pans were provided during the observation. The educators only engaged with the children when the children asked questions or initiated the dialogue. Only during the circle time did the educators take the lead, which was a total of 30 minutes out of a four hour day.



*Figure 45*. The indoor classroom. March 9th, 2019.



*Figure 46.* A class reading books on the wooden stage. March 11th, 2019.

*Canadian School #2: Triangle School.* The school is directed by an Iranian immigrant who has a background in environmental technology and is currently completing her Master's degree in Child Studies. She is passionate about outdoor and nature play. However, there were aspects observed that contradicted what she explained to the researcher during the interviews. For example, they stayed indoors because of the cold weather (-20 degrees Celsius) on the first observation session and the second observation was conducted at an indoor playground. All six students in this program are of Iranian background. The school is a home-based private daycare located in a middle lower SES area. The outdoor space is modified according to children's preferences of the day and the weather conditions. She stated in the preliminary interview that the closest public park, which takes about 15 minutes to access by foot, is the main playground for the children and going to the park is also "a process of learning by playing and being outside."



*Figure 47.* Children playing outside in Montreal. March 11, 2019

The educator did not carry any loose parts or materials such as books or toys to the park.

The students used the trees, snow, leaves, and grass for their play. When some of the children got bored, the educator initiated a game of crawling up a rock and jumping to the ground (see *Figures 22 and 23*).



*Figure 48.* A child jumping on the rock with the educator's supervision. March 11, 2019.

*Canadian School #3: Rectangle School.* This program is created from government and the city's support. They offer a weekend program for outdoor and nature play, rather than a daily program. The program is not expensive compared to other private programs (i.e., six sessions of Saturday Family Activity costs \$54 for a family with one child, \$80 for a family with two or more children), so most children and families are able participate regardless of their SES. The observation session was not available because it was off-season for the program during the study's data collection period. A short interview with a educator who showed the outdoor sites to the researcher was conducted. The program meets in the center of Montreal, on Mount-Royal Park, which is one of the most touristy places in the city. Because it is not an everyday program and children are expected to be outside all the time, there is no integration between indoor space and the outdoor park. The program's goal seems to be to provide biological environment

knowledge to the students, however, the educator mentioned that she is willing to “go further... by providing more opportunities for children to decide.” The materials that the educator provides are mainly little encyclopedias about trees and birds that children can see on Mount-Royal Park.

*Canadian School #4: Hexagon School.* This setting provides similar programs with the Rectangle Program. On the other hand, it is not funded by the government but by an individual business. Hexagon School operates every Tuesday at the large local public park. Interestingly, most of the students who were attending were homeschooled. It might be because the program starts at 8:30 a.m. in the morning. There was one circle time which took about 30 minutes. Most of the day consisted of free play, however, the activities were not necessarily child-led. Educators suggested games for everyone to get together, which the children seemed accustomed to do. This is different from what the educators mentioned during the preliminary interview about their roles in the outdoor and nature play, which they described as “facilitator, observer, and supporter based on what children choose.”

For the activities, educators and children utilized natural components and loose parts such as handkerchiefs, pine cones, branches, and snow in creative ways. For example, the two male educators prepared an activity with snow and branch sticks (see *Figure 24*) for the children. When children showed up with their parents, they were observed to play quickly with other children and have little difficulty detaching from their parents. One of the educators has a background in biology, which allowed him to explain the plants and animals to children when they were curious. However, he also highlighted that “this is not the main goal,” which is different from Rectangle School.



*Figure 49.* Snow dart activity with wooden sticks. March 12, 2019.

## **Part 2. Individual Educator Interviews**

Both Korean and Canadian educators articulated their perceptions of the benefits and challenges of outdoor and nature play in each setting during the in-depth, face-to-face, individual interviews. Tables 3, 4, 5, and 6 summarize the main themes, sub-themes, and categories from the interviews, and respond to the second research question, namely: what are the perspectives and beliefs of the educators in these settings in terms of the benefits and challenges of forest schools? Excerpts from educators' actual words are included for illustrative purposes. Peer review was used whereby a colleague, who is not aware of this area of study, read through a whole interview. She and the researcher then checked the coding line by line to test reliability in this study. It was found that 96% of coding was under concordance. The tables present the educators' responses in the order of Korean perspectives (Table 3. Benefits; Table 4. Challenges) and Canadian perspectives (Table 5. Benefits; Table 6. Challenges).

Table 3

*The Benefits of Outdoor and Nature Play that Korean Educators Perceive*

Theme	Sub-theme	Categories	Illustrative in-vivo quotes
Benefits	Accessibility	Accessibility/Distance	“the forest is right here” “bought this location for the forest”
	Children’s ability/development	Physical development	“fine and gross motor” “gross motor” “strengthen the level of immunity” “Parents accept that their children’s immune system is way better than before and I also see it” “health” “recovery”
		Cognitive development	“their concentration is very good” “imaginary play” “everything in the nature ground is open, so children can do imaginary play unlimitedly” “Children who can play in this wide place can utilize their imagination” “I can feel they grow their creativity”
		Emotional/social development	“the children changed to enjoy challenges” “play, solve the problem, face the risk on their own” “getting more friendly” “behaviors were getting better” “they feel comfortable there”
		Holistic development	“holistic development, and integration” “children’s [holistic] changes are observed easily”
		Spontaneity	“spontaneity”, “voluntary power” “internal ability” “The most different value with conventional education is spontaneity” “on their own” “they do whatever they want to do within own freedom”
	Meet children’s needs	Constructivism	“the view on a child has been changed”, “a person of full capacity” “children’s eye level” “what they want to do” “their own pace” “they select”
		Children’s motivation/Fun	“The interest in forest environments” “a child cried because he was too sick to go out, but he wanted to go out” “if they want to go in the pool, they can go” “What children want” “we often do campfire, which children love. It’s risky, but they have so much fun”
		Release children’s emotions/stress Free exploration	“if they don’t go out, they get distracted” “less conflict with each other” “Children are free” “free play” “they do whatever they want to do within own freedom”
	Pedagogy	Emergent curriculum	“I didn’t plan it, children found it naturally” “many things without planning” “there is no curriculum for children, that is for the teachers” “there are no rules, no force”

	Respect individual	“respect individual characteristics” “treat them differently” “it is different for each child” “different by children’s age and development” “each child has their own expression and they are all different” “according to their individual pace and activities”
	Loose parts	“it’s not good playing in this regulated environment and with plastic toys” “in the fall, they pretend to prepare a meal with berries” “natural element” “nature toy”
Weather	Good weather/ Manageable weather	“summer and fall are amazing” “the weather can be controlled” “there is no bad weather, but there is inappropriate clothing”
Positive Support	Governmental support	“Toilet is really well maintained because of a government support” “the government provided the forest expert” “the government sent us a document about the forest experience program. That is how we started this.” “government suggested it”
	Society’s positive affect	“society’s perception is changed” “the participants are even from the different province because they are interested in it”
	Parent’s support	“cooperate with parents” “most of parents are supportive” “They found this school because the parents like mountains and nature”
Teacher’s growth	Teacher’s health	“I get less stressed and I’m able to sleep really well after I quit my previous job and start working as a forest expert” “teachers say that they can feel teachers’ own health have been improved”
	Rewarding feeling	“I can sacrifice myself for the happy children” “I felt so happy” “they’ve changed so much” “I feel delight to see their change”

Table 4

*The Challenges of Outdoor and Nature Play that Korean Educators Perceive*

<u>Theme</u>	<u>Sub-theme</u>	<u>Categories</u>	<u>Illustrative in-vivo quote</u>
Challenges	Accessibility	Distance	“I want to shorten the distance” “some playgrounds are too far to have toilet”
		Weather	Micro dust
	Extreme weather		“we wanted snow, but this year there were no snow” “it was really difficult for me to bear the cold weather, personally” “not much nature toys because it is winter” “students do not come to the program when it is snowy, rainy, or dusty”
	Safety	Bug bite	“it’s often mosquito bites in the summer” “I’m worried if mosquitoes bit us a lot in the summer”
		Safety	“When we started this daycare in 2011, I was worried of children’s safety, I always felt nervous” “if a child gets hurt” “safety is the very first concern” “The first thing to talk in the meeting is always about who got hurt and the reactions of the parents” “hope they don’t get hurt” “a child got out of the fence”
	Negative conditions	Overprotective parents	“parents have a few children”, “sheltered life” “the parent asked to please make sure that their child does not get hurt” “they raised their children over protective” “I have trauma with overprotective parents”
		Parents’ negative responses	“parents don’t like that” “messy” “the parents give feedback” “there is a parents participant program, however, the ones who need it are always busy” “parents aren’t interested in nature” “mothers compare their children to other’s”
		Society’s negative responses	“Prejudice in Social Media” “this forest school is not taking care of children”, “stigma” “social media is subjective” “he scolded the mother, saying ‘you are not a mother! You aren’t a mom! How can you be a mother (if you let your children to be

		in danger)?”
	Governmental regulation/ lack of support	“I’d like the society to ignore us” “if I violate the regulation and do it without the governmental support, I’d pay more than 100 per month” “some places want to get out of the public education and charge tons of money for parents” “curriculum of national level” “regional [economical difference]” “the problem is the money” “more teachers are needed” “payment for forest experts” “the material” “minimum wage”
Teacher’s burden	Teacher’s workload	“teacher’s workload” “after the activity, lots of work” “so it just makes teachers work twice” “I get tired to prepare the whole thing!”

Table 5

The Benefits of Outdoor and Nature Play that Canadian Educator Perceive

Theme	Sub-theme	Categories	Illustrative in-vivo quote
Benefits	Accessibility	Accessibility/Distance	“We're really like lucky to have Mount Royal, right in the middle of the city” “Close” “public parks”
	Children's ability/development	Physical development	“Physical resiliency”, “They get strong” “Many opportunities to develop their physical ability” “I haven't any children who didn't come three days because of sickness.” “the children are really stronger, so they won't be sick at all” “I describe to them (parents) that children will be stronger if they go out frequently even in winter,”
		Cognitive development	“Have to pay attention” “This grass is different from the dried grass? The color is different, the texture is different, even the smell is different.” “Big, small, tall, short, scientific, cold, and hot.” “I saw that it will be more development[al], of course, cognitive development.” “they started to learn about how to count and to learn about mathematical concepts” “they become aware of everything surrounding them”
		Emotional/social development	“emotional resiliency” “being able to work in a group” “challenges with other children” “Just living in the community and the ability to empathize that comes just naturally” “the child has more of capacity to empathize with others” “What do you think? Let's think together.” “I asked them could you share what you learned about? Do you share with the circle?” “it's another moment to share how we're feeling” “they started to talk to each other about the phenomena”
		Empowerment/Resiliency	“Think about the pride and the empowerment of I know how to take care of myself” “so the physical resiliency, and emotional resiliency” “okay being uncomfortable with the weather, with physical challenges, with being able to work in a group” “to understand not every moment has to be enjoyable in life”
		Spontaneity/Autonomy	“We frame it as like a reflection experience about their growing autonomy.” “They grow autonomy and like getting into thinking about how they wanna step up in life.” “It helps them to become more autonomous” “play is a spontaneously child-initiated work”
Meet children's needs	Constructivism	“explore directly, self-initiated, child-initiated” “I mean every child is different” “depending on their interests in the moment” “they figure out the lesson on their own”	

		<p>“I like this approach, the forest and nature school, because it let them discover things by themselves”</p> <p>“Value their journey on figuring out the answer for themselves rather than their ability to repeat what we told them the answer was.”</p> <p>“the point is just follow them and accompany them”</p> <p>“the kids are really really liking to do something different”</p> <p>“[children] are very happy, very active, and very excited in nature”</p> <p>“When they were out, they were happier, much happier, they're more excited”</p> <p>“for them it's magical” “to manage and entertain themselves”</p> <p>“They are not bored and they are happy too”</p> <p>“It's super fun to play in snow”</p>
	Children's motivation/Fun	
	Express children's energy and stress	<p>“They are conflicting [between children] if I don't take them out”</p> <p>“When we are going out, everything is okay.”</p>
	Being free/ Free exploration	<p>“let children be free in the environment” “in the nature children are free” “free learning”</p> <p>“the same like let them discover and curiosity and play outside”</p> <p>“The routine is just gonna be the frame for that to discover. it's supposed to be as free as possible”</p>
Pedagogy	Emergent curriculum	<p>“Time is not organized because we go out and we may come back later”</p> <p>“In a school term, it's loose” “It's a lot of questioning to kids like improvised”</p> <p>“Sometimes we use stories or we know that we are going to the nest that we observed, so we modify a little bit”</p>
	Respect individual	<p>“We talk to them like [they are an] adults.”</p> <p>“The point there is to let them discover by.. with their own rhythm”</p> <p>“children found the opportunity to follow their interest”</p>
	Loose parts	<p>“we give some loose part things” “in winter, we play many with snow”</p>
	Integrating family	<p>“we ask the parents how are you gonna support your kids now that they are becoming more autonomous.”</p> <p>“we tried to involve the parents in other ways like we send them stories, talked to them when they dropping or picking their kids up, we are starting to do raise up the passage”</p> <p>“Integrating family is a big thing”</p>
Support	Governmental support	<p>“Some of the schools are located far away from the park. If the government did not pay for it they couldn't do it.”</p>

	Society's support	<p>“people walking with their dogs asked, and there are mostly good response”</p> <p>“we've got generally, really positives”</p> <p>“people just walking by who are just like smile and really like happy to see the kids”</p> <p>“everyone knows kids need to get out more and when they see that people are really encouraging it”</p>
	Parent's support	<p>“Some parents are like "yes! let them be resilient, let them grow””</p> <p>“The parents are like: "oh, great! What did you learn? what are you gonna do different next time?" they are very supportive”</p> <p>“generally, parents are super super supportive”</p> <p>“What I like about the program is that it is also going to the parents.” [The parents used the information from the program later on for the continual education for their children.]</p>
Teacher's growth	Teacher's rewarding feeling	<p>“You feel [the fact that the children are developing] over the years.”</p> <p>“She understood everything, how the guide book works, but by herself!”</p> <p>“How can I best support this unique person on his journey?”</p> <p>“Forest school is a way to understand yourself, more and more. For children and for educators.”</p> <p>“at some point I wanted it to push a bit more into the classroom cause I feel that it is necessary”</p>

Table 6

The Challenges of Outdoor and Nature Play that Canadian Educators Perceive

<u>Theme</u>	<u>Sub-theme</u>	<u>Categories</u>	<u>Illustrative in-vivo quote</u>	
Challenges	Accessibility/Distance	Accessibility/Distance	“There are lots of challenges too about transportation” “There are lots of kids who don’t live close to the mountain, and just to come to the mountain”	
	Weather	Extremely cold weather	“gets really cold” “With the cold, for sure, with the young kids, I think -23, -25 is a border line” “you might feel uncomfortable with weathers and situations” “because of the cold weather, I cannot take them out” “When the weather is really cold they can't tolerate.”	
	Safety	Safety/ bugbite/allergy(1time)	“dangerous” “how to deal with insects” “we do use knives sometimes and they're not following the knife safety rules” “in some places like on days that are super windy, I'm always paranoid about trees falling” “they can fall” “bitten by a bug” “sometimes they don't know that they are allergic” “I'm worried about their security. They can be lost. It's much more dangerous than a little injury.”	
	Negative conditions	Hygiene		“dirty” “messy things become out of control”
		Lack of governmental support		“Their rules are very strict about children's safety and security” “there are few rules from the city” “we're not supposed to [use] fires” “that's an important part for forest schools but you cannot do it” “It's a tricky situation cause like I really want to be involved with conventional schools.” “Sometimes you'd like to let kids just climb a tree that you are not supposed to allow them. Here is not the place to do it”
		Limited place		“the problem is that all play grounds are closed in the winter” “I wanna be able to have cool forest schoolish kinda camp inside city parks that we can use.” “In city parks, you can't go off trail, you can't touch plants, you can't have fires, so it's very limited.” “there is like an outdoor center in that west-island that is very expensive to rent and we can't afford it” “It's right in the middle of the city. we have 4 million visitors”
		Negative social responses		“positive but most of them [are] negative” “when we take a bus to go to a park, sometimes people told me that it's not okay that to take children out in this way without a rope holding them” “people tell me that it's not okay, it's dangerous”
	Role of teacher	Children’s test		“every child is gonna test you at some point in their own unique way” “even the quiet kids, it is so easy to neglect them cause they are so easy”

## Discussion

According to the Tables 3, 4, 5, and 6 above, there are similarities and differences between educators' perspectives in terms of perceived benefits and challenges on outdoor and nature play in Seoul, Korea, and Montreal, Canada. Interestingly, there are more similarities than differences between these two cities in that the six sub-themes (accessibility, children's development, children's needs, pedagogy, support, and teacher's growth) are the same for benefits, and the five sub-themes (accessibility, weather, safety, negative conditions, role/burden of teacher) are the same for challenges.

### Accessibility

*Accessibility* was described as a benefit and challenge in settings visited in both Seoul and Montreal, which suggests that accessibility depends more on each setting's geographical characteristics or each educator's perspective. For example, the two Korean staff members from Blue School perceived the distance from the public parks differently even though the distance was exactly the same. The director of Blue School mentioned that they "bought this location for the forest," however, the other interviewed teacher said, "I want to shorten the distance" because there is "a crosswalk in order to go to the forest from the school." This provides partial support for the finding of Lindermann-Matthies and Knecht (2011) that distance to forests is the main hindrance for teachers. There are more educators interviewed who considered the accessibility to forests to be a beneficial aspect rather than a hindrance to outdoor and nature play. This could be because many schools are designed and built near parks intentionally. Responses may vary between elementary school teachers who teach a general curriculum and teachers who are specialized in outdoor and nature play. For example, the teacher from Yellow School, where the

program was not originally designed for outdoor and nature play, did find access to the public parks to be challenging.

## **Weather**

For Korean educators, good weather played a positive role in outdoor and nature play. Not only the children but the teachers as well enjoyed outdoor and nature play when the weather was agreeable, especially during “summer and fall.” On the other hand, weather seemed to be considered more of a challenging factor for Canadian educators. Every Canadian educator brought up the extremely cold weather in winter. Nevertheless, most of the early childhood teachers in both countries suggested their own solutions to overcome the cold weather, such as walking and running together with the children, providing hot packs, and preparing warmer clothes. Interestingly, the quote “there is not bad weather, but there is inappropriate clothing” was mentioned in the same way by teachers from Yellow School (Korea) and Circle School (Canada), which suggests that the forest school educators share similar approaches to weather in Korea and Canada, that is, focusing on proper clothing for cold weather. Although the cold weather is still a challenge for Korean teachers, extreme weather for Korean teachers is more diverse in terms of a cold winter and hot and humid summer, compared to Canadian educators’ singular focus on extreme cold weather.

A salient hindrance for Korean forest schools that teachers reported was *micro dust*. Micro dust (or fine dust) refers to “particles smaller than 10 micrometers in diameter” (Lee, 2017). The micro dust problem is a serious issue on a national level and the government alerts people in Korea to refrain from being outside via media, because it is said by experts that micro

dust accumulates directly in the lungs and could result in breathing difficulties or seizures with long-term exposure (Lee, 2017).



*Figure 50.* Micro dust blocks out the sky in central Seoul (Yonhap, 2017).

All the Korean participants highlighted how micro dust impacted outdoor and nature play negatively in recent times. They were worried that children would be exposed to the micro dust while outside, and one teacher mentioned that it is such a tragedy to have this environmental concern and there is nothing she can do.

### **Children's Ability/Development**

All the educators strongly highlighted the advantages of outdoor and nature play for children's abilities and *physical, cognitive, emotional* and *social development*. More specifically, fine and gross motor skills and a stronger immune system were highlighted for the physical development of children. Concentration, imagination, creativity, and understanding of scientific and mathematical concepts in natural contexts were the main focuses for cognitive development. Lastly, educators believed that children's emotional and social development were improved in

terms of facing challenges and risk, problem-solving, being friendlier, and developing empathy. *Holistic development* appeared as an important child benefit for Korean educators; on the other hand, Canadians emphasized *individual empowerment and resiliency*. This difference may reflect the cultural differences between the two countries in terms of collective versus individual centeredness. In addition to this, spontaneity was frequently mentioned and accentuated by both Korean and Canadian educators. Educators in both countries expressed that building children's spontaneity and autonomy was the strongest benefit of the forest school program. This is connected with the next sub-theme.

### **Meeting Children's Needs**

In terms of *constructivism*, forest school programs tend to consider children's motivation and needs as important factors for outdoor and nature play regardless of cities' or schools' characteristics. The forest schools visited almost all emphasized the importance of the program being based on the children's abilities, not on the program teaching directly to the children. However, one teacher from Korea did not mention the importance of children's interests. She works for the program (Green School) where instructing knowledge of the forest is weighted more heavily than children's motivation. Nevertheless, it is worth noting that the educator from Rectangle School in Canada, which contains very similar characteristics in terms of providing knowledge of the environment, still mentioned the concept of constructivism and she was also "willing to push a bit more" to make the program consider children's interests and motivation. This Canadian educator also expressed that they have observed children enjoying and having more *fun* during outdoor and nature play gradually compared to the times when the children were

first exposed to the program. In all, constructivism values children's abilities and most of the forest school programs observed are based on this concept.

Some teachers pointed out that children release their stress, emotion, and energy by being free outside and in nature. Teachers from the settings where the conventional classroom is the main environment (such as Orange School) expressed how fewer conflicts occurred not only during the outdoor play but also in the classroom after her students were involved in the forest experience program. The teacher also found the forest school program allowed children to explore the environment with fewer restrictions compared to traditional education settings.

### **Pedagogy**

No matter which settings the teachers worked in, they considered the pedagogy of the forest school program to be advantageous in terms of its *emergent curriculum*, its respect for the individual child, and its use of loose parts. Based on the flexibility of the curriculum, teachers said they could listen attentively to the individual child's needs and recognize their individual characteristics. All the teachers mentioned words such as "their own," "own rhythm," "individual characteristic," etc. several times throughout the interviews.

Although it is observed that most of the forest schools provided loose parts naturally in the observation sessions, as mentioned above in Part 1, the term of "loose parts" itself is more of an academic term and used only by Canadian educators. Three out of four Canadian educators mentioned the term. On the other hand, even though Korean educators seem to recognize the notion, no one actually used the term. They used similar terms, however, or examples of loose parts such as "natural toy," "natural element," "snow," and "tires," or they proposed an opposite notion such as "plastic toys."

Moreover, the Canadian educators seemed to be more open to integrating family into the program than Koreans. Three Canadian educators articulated that they have “tried to involve the parents” in the process of their children’s learning and to teach them how to “support [their children] so that they are becoming more autonomous.” However, the Korean teachers expressed fear of *parents’ negative feedback*, which could hinder requesting the participation of parents. This will be further discussed under *negative conditions*.

### **Positive Support & Negative Conditions**

It was found that teachers perceived three main agents (government, society, and parents) to both provide positive support and exert limitations on their forest school programs.

**Government.** For the Korean school settings, the government played a leading part in spreading outdoor and nature play to the public school system by “provid[ing] the forest expert [teachers],” and “sen[d]ing a document about the forest experience program to public schools.” The teacher from Orange School, who initially did not have a deep understanding or interest in outdoor and nature play, took several workshops that the government provided and “realized how important it is to children.” On the other hand, private forest schools received support from the government in the maintenance of its public parks and facilities, but the factors mentioned above for public schools were not provided to private schools.

Even though governmental supports were provided, there were also diverse regulations and limitations from the government. The director from Yellow School specified the hardship of following a national level curriculum pertaining to the forest experience program, remarking that:

The forest experience program with the governmental financial support has to be done after 12 p.m. so that the national level curriculum has been accomplished first. This results in inefficient workflow and teachers' double workload because when the children arrive at the school and leave to the park right away, teachers don't need to make children [put outdoor] clothes on one more time. If we want to do whatever we want to do like the private school where the parents are paying a lot, we need to spend more than 1,000,000 *won* (approximately CA\$ 1,142) per month without governmental support, which is impossible to afford for us. (Barbara, Yellow School)

As she said, the two private schools interviewed for this research did not get any financial support from the Korean government. However, it is worth noting that both schools are located in the high SES regions in Seoul, Korea, and their school fees are about five to six times higher per month compared to the public schools. In contrast to these two schools, financial difficulties prevent many schools (Yellow, Green, and Purple Schools from Korea and Triangle, Rectangle, and Hexagon Schools from Canada) from maintaining their curriculum properly. For example, Elizabeth, a Korean teacher from Green School, complained that she has spent her own money to maintain the curriculum because the natural materials for crafts are expensive, but there is minimal financial support from the government.

In Canada, only one program (Rectangle School) said the program gets enough governmental support, whereas the other three programs noted that there is a lack of such support. Nevertheless, all four Canadian educators interviewed agreed that the government and city should relax safety regulations in order to enhance the quality of outdoor and nature play. For example, three of the four educators mentioned that making fires and climbing trees, which can be a critical part of the forest school activities, are not allowed in the public parks in Montreal. Gina from Triangle School, who is the only immigrant educator interviewed in either country, was surprised when she had to take the children out with a rope. She said, "I never tied

children with a rope [...]. They're free. This will never happen in my country [Iran]. The children are not pets." Likewise, three Canadian educators found there to be limited space for outdoor play. In the winter, some public parks are closed, whereas Mount-Royal park has too many visitors to implement the outdoor and nature play in the summer. One Canadian educator (Alex from Hexagon School) tried to find a private outdoor center, however, the space was too expensive to afford.

**Parents.** Parents were perceived as a supportive agent in terms outdoor and nature play by Canadian educators. Interestingly, none of the Canadian educators described negative responses from parents to their programs, whereas all seven Korean educators interviewed brought up various examples of *parents' negative reactions*. A large portion of the negative comments consisted of concerns over children's safety. Although the teachers understand what the parents' concerns are, they described the parents as being overprotective by saying "parents have few children," and "more parents tend to put children in sheltered lifestyles." Regardless of the settings where the teachers worked, public or private, they spoke frankly about these experiences with parents. No matter whether the government supports the school financially or not, both Adrian (Red School) and Rachael (Orange School) used the same phrase: we "have traumas with overprotective parents." As Kim and Lee (2013) found, most of the Korean teachers in this study also encountered situations where the parents had been supportive at first, yet, when the children got hurt they tended to blame the teachers. It is important to note that despite the negative experiences from overprotective parents, all teachers still recognized positive and supportive parents. However, a few experiences with a minority of parents were so

severe that they felt forced to repeatedly consider “what the parents would think with this activity.”

**Society.** All the participants talked about positive and negative societal responses. Canadian educators were more likely to perceive the society’s responses as positive compared to Korean educators, through comments such as “we’ve got the [responses from society]. Generally, [they are] really positive.” “People just walking by, smil[ing] and really happy to see the kids,” and “everyone knows kids need to get out more and, when they see that, people are really encouraging it.” In Korea, only two teachers described having experienced positive responses from society. Likewise, four out of six educators in Korea presented their negative experiences with strangers when they were outside. For example:

One elderly man had a condescending attitude to the teachers by asking if the mother knew the child[ren] play this dangerous activity and threatening that he would call the cops. We tried to explain to him that she wanted this and how important these types of play were for the children, however, he was upset and yelled that parents these days were messed up and had no responsibility for their children (Barbara from Yellow School, Korea).

Only one educator of four Canadians (Triangle School) brought up the experience of negative comments from outsiders regarding the children’s safety. It seems that the level of severity of the feedback was also more aggressive toward Korean educators.

## **Safety**

Safety concerns by parents was mentioned above, and previous studies indicate that safety is one of the salient challenges to outdoor and nature play for both countries (Coe, 2017; Kim & Lee, 2013). It was also found in the current research that most of the teachers in both countries perceived outdoor and nature play to be linked to various safety issues, such as *bug*

*bites, allergies, and hygiene.* Interestingly, only Korean teachers connected safety issues with parents' negative feedbacks. Canadian educators were more likely to mention the safety issues as inevitable characteristics of outdoor and nature play.

### **Teacher's Growth and Burden**

It was found, in both countries, that not only the children but also the teachers developed personally through outdoor and nature play with feelings of being rewarded in their work. All the educators expressed pride in themselves as early childhood teachers or forest experts and their abilities to "support the children's unique journeys," and "see children's changes [or developments]." While the Canadian educators talked about teachers' feelings of being rewarded, Korean educators also discussed teachers' health. By connecting with nature and being outdoorsy, two Korean teachers stated that their health was better than before, both physically and mentally. Despite the teachers' growth, there were some negative impacts on educators from outdoor and nature play. Korean educators were more likely to state the increased workload from cleaning messes or preparation of emergent curriculum, and one educator in Montreal mentioned the children's increased testing attitudes outdoors towards their teacher, noting "every child is going to test you at some point in their own unique way."

### **Limitations and Future Research**

There are several limitations that should be taken into consideration when interpreting the results of this study. Even though both observations and interviews were used as methodology to explore the teachers' perspectives of benefits and challenges on outdoor and nature play, 11 participants from ten settings cannot represent the whole community of educators' perspectives. In addition to the small sample size, even though the first intention of the current study was a

comparison study of two countries, South Korea and Canada, the study developed into more of an exploratory focus on two different cities Seoul, South Korea and Montreal, Canada rather than a comparison. Different settings in both countries convey their own environmental and cultural characteristics. Extra caution needs to be in place when generalizing the finding of this study to the broader population.

The short period of time allotted for observations and interviews restricted the data collection process with only one or two session(s) of observation and one hour of interviews. If the time was permitted, it would have increased the study's reliability in that the researcher would visit the settings a few more times before the actual interview sessions to build strong rapport with the participants, so that the participants could be more comfortable. It would also be possible for the researcher to observe the actual teacher-child interactions, as well as parents and behaviors of nonparticipants during the observation sessions. The researcher did visit some settings before the observation sessions were conducted to build rapport with the participants, which allowed the researcher to be accustomed to the setting. Nevertheless, one or two visits beforehand and one interview would not be enough to build close relationships with the participants. It is possible that this might cause the participants to feel like they are being tested and become nervous during the interview.

The bias of the researcher and participants could be also a limitation. With the researcher's genuine interest and own experiences of outdoor and nature play and activities, educators could have been led to express advantageous sides rather than hindrances. To prevent the researcher and participants' bias, peer review was placed with a peer who is not studying in

the area. Also, it is meaningful that traditional daycare and preschools settings that have recently accepted the forest experience program were included to acquire balanced views.

The limitations of the study suggest some improvements for future research. Larger samples with diverse cultures are needed to gain diversified understandings of outdoor and nature play. The current study was limited to research between two cities, however the different cities are also in two countries. For example, the Western part of Canada is distinguished by having many mountains and a rugged natural environment along with the various Canadian Rocky Mountains parks. Although Quebec, in the central-eastern part of Canada, also has beautiful national parks and nature, most of large parks are located farther from the main part of the city's core (Montreal) than cities in the Western part of Canada. This can play a critical factor on outdoor and nature play for children, affecting the educators' perspectives. Furthermore, adding a variety of different countries would be interesting. Previous studies show that many nations, such as Oman (Ihmeideh & Al-Qaryouti, 2014), Turkey (Yilmaz, 2016), Switzerland (Lindermann-Matthies & Knecht, 2011), etc., are increasing their attention toward the effects of outdoor and nature play on children. Based on this rising recognition, it would be interesting to explore these more diverse settings.

The current study touches on how private and public settings, and different regions with diverse SES standards play important roles in providing outdoor and nature play. Future research can probe more into how these factors affect teachers' perspectives. Furthermore, while the educators were the main focus of this study, it was revealed that different agents such as government, society, and parents can critically impact outdoor and nature play. Further investigation of these different factors is warranted.

Finally, future studies to ascertain governmental perspectives on enhancing the time allotted to outdoor and nature play in public school systems may promote environmental citizenship and behavior. Will this have an impact on children's future careers when they have experienced outdoor and nature play positively in their childhoods? Will children be influenced by their environmentally friendly lifestyle choices? Outdoor and nature play may make a contribution towards a more environmentally friendly and conservation aware future generation.

### **Conclusion**

The current research offers unique findings to contribute to previous studies. Not only does this research address the perspectives of educators on outdoor and nature play, but it also explores two countries in Western and Eastern cultures by looking at the settings in Seoul, South Korea and Montreal, Canada. This study reveals that there are more similarities than differences in terms of educators' perceived benefit and challenges on outdoor and nature play between the two countries. Both Canada and Korea show six of the same subthemes in terms of benefit: (1) *accessibility*, (2) *children's ability/development*, (3) *meeting children's needs*, (4) *pedagogy*, (5) *positive support*, and (6) *teacher's growth*. Nevertheless, four main differences were found. First, in the category of children's ability and development, children's holistic development was highlighted for Koreans and empowerment/resiliency was highlighted for Canadian teachers. This could be due to cultural attention to collectivism versus individualism in that the Korean educators emphasize the harmony of children's development, whereas Canadians were proud of the growth of individual power. Second, Korean educators considered *weather* as an advantageous factor for outdoor and nature play unlike Canadian educators. Third, *teacher's health* was also recognized as an additional perk in Korea, but not in Canada. Lastly, Canadian

educators were more willing to integrate families into their programs, while Koreans were more reluctant to include parents in their programs, which may be related to their fear of parents' negative feedback.

In the theme of *challenges* that educators face for outdoor and nature play, five of same subthemes were represented in both cities: (1) *accessibility*, (2) *weather*, (3) *safety*, (4) *negative condition*, (5) *teacher*. Although the subthemes are revealed as being the same, three main differences in the categories under the subthemes need to be specified. First, micro dust was the main hindrance to Korean teachers for children to be outside and they seemed to be frustrated about the fact that they cannot control the situation because it is the nature of air pollution. The Canadian educators, however, did not raise any concerns about pollution as an obstacle. Second, educators from both countries mentioned that extreme weather is disadvantageous; however, Korean teachers stated diverse factors such as both hot and cold extreme weather, less snow, heat waves, etc., while Canadian educator simply highlighted cold weather, especially severely cold temperatures. Third, many Canadian educators complained of the lack of governmental support, but noted that parents were very supportive of what the teachers were doing with their children. In contrast, Korean educators noted that their government was more supportive to their program's outdoor and nature play, albeit governmental regulation played a role as a hindrance. The Korean educators tended to fear parents' negative comments and what they considered their overprotective reactions.

The current study contains several critical implications. It was found that most of the relevant previous studies' participants were limited to female preschool teachers from one culture. This research went a step further by exploring two different countries based on Western

and Eastern cultures. In addition to this, the researcher tried to balance both genders by including male educators' perspectives despite the fact that the majority of educators in early childhood education are female. Some forest experts and directors were also included as participants to include diverse views on outdoor and nature play in different settings. This study might also convey insights on the different aspects of forest school education to someone who wants to start a forest school or to future educators who are willing to work for programs where outdoor and nature play is highly valued. They can take the findings of this research into consideration as guidance, particularly in terms of what educators consider benefits and challenges of forest school programs.

The main purpose of the study was to explore the perspectives of educators in the forest school settings. Even though there are many challenges that the teachers must handle for outdoor and nature play, it was impressive how passionate teachers were about the value and mission of their schools. While it is impossible to generalize the attitudes of the teachers because of the small sampling, I greatly admire these teachers who accept the limitations, and try to find their own solutions to providing better environments for children. Although there is a long way to go to make outdoor and nature play permeate into public early childhood education systems as a generalized program or activity, the passion found in these teachers' perspectives offers hope for positive changes for future generations.

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## Appendix A

### Short selection of teachers' interview of South Korea

#### # 1. Red School

S: 그런데 숲 유치원에 위험 부담감에 대해서 동의를 하셨다가 나중에 막상 아이들이 다치면 선생님께 책임을 전가시키는 적은 없었는지?

T: 있죠. 그래도 그걸 담대하게 견뎌야지. 그걸 우지좌지 끌려다니면 안되고. 우리가 그런 신뢰 때문에 그에 따른 상여보험도 하고 있어요. 가장 기본적인 우리가 감당해야하는 그런 치료비 같은 건 기본적으로..부모님들이 요구를 하던 안하던 우리는 그걸 전제로 보험이 들어진 거니까, 그 기본적인 것은 하지만. 그 이상에 대한 예를 들어 정신적인 보상이라던가 이런건 할 수가 없죠. 그게 이제 이 자존심이지. 이렇게 해서 좋게 하려고 했던 문젠데 그런 경우가 생긴다고 해서 우리가 거기서 약자가 되어서는 안된다.

S: 멋있는 말이네요. 약자가 되어서는 안된다. 우리가 미세먼지도 문제가 되었지만, 안 좋은 날은 진짜 안좋잖아요.

T: 그래요. 그 미세먼지 문제는.. 그거는 피치못할 세계적인 산업화의 영향이니까. 어디서나 앞으로도 그 일은 지속적으로 일어날 일인데, 가능하면 최소화할 수 있는 길을 찾아야겠죠? 근데 이 최소화의 길이 나는 숲이라고 생각해요. 일단은 환기에 대한 걱정을 할 필요가 없고, 그리고 미세먼지를 그나마도 이 숲이라는 공간에서 막아줄 수 있다 라고 하는.. 물론 실내보다는 막히는 게 덜하겠지. 하지만 실내에서 일어나는 또다른 부유먼지나 이런 일산화탄소나 이런 것 때문에 이중고 삼중고를 겪을 텐데 이 숲이라고 하는 것은 다만, 그 미세먼지 하나. 그런데 그게 이 나무에서 나오는 잎들이나 그게 방어를 해줄 것이다. 그런 논문도 있어요. 나무들이 미세먼지를 처리를 해줘서 오히려 더 안전하다 하는 논문에도 있다. 한가지의 문제만이 있는데 실내는 그 더 여러가지 요소들을 가지고 있다.

S: 혹시 또 다른 문제들, 불편함은 없을까요?

T: 아이들을 정적인 안정감, 동적인 안정감 병행이 되어야 해요. 숲이라고 해서 실 수 있는, 때에 따라서는 누워서 잠도 자야하고, 이런 수시 상황에 대처할 수 있는 그런 공간을 마련해 줄 수 있어야지.

S: 날씨에 대해서는 어떻게 생각하세요?

T: 날씨는 이거는 우리가 피할 수 없는 그러니까 특별한 날씨라고 하더라도 사람은 그거를 감당하고 나가야 하거든. 그런데 일찍부터 이런 것을 날씨에 의한 피부가 면역력이 생긴다면 어떤 상황에서도 그걸 반응을 잘 한다는 거죠. 더우면 더운대로 피부에 적응력이 생겨야 되고, 추우면 추운대로 적응력이 생겨야되고. 그래서, 이 날씨에 관계없이 내 몸을 생체리듬에 맞추어 나갈 수 있는 그런 사람이 되어질 수 있어야한다.

S: 그럼 숲 유치원에서 선생님의 역할은 뭐라고 생각하세요?

T: 어. 다른데는 잘 모르겠어요 다른 데는 모르지만 나는, 이, 선생님이라고 하는 사람이 이 어린 아이들을 이끌고 가서는 안된다고 생각해요. 뒤에서 그 아이를 지지해주는 관찰자가 되어주어야 하고, 미숙함에 대한 것을 조금만 보완만 해주면, 어려움을 극복하는 그 조력자만 되어주면 되지. 앞에서 이끄는 건 숲에서건 어린이집이건, 가정이건 모든 사람들이 자기의 잣대로 알기로 그 기준으로 이끄려고 하는 것은 잘못되었다. 조력자, 관찰자. 그런 역할 정도.

S: 저도 선생님이로 일하다보니 그게 정말 힘들더라고요. 어디까지가 조력자인지, 관찰자인지.

T: 그 발달에 있는 아이들이, 자기의 생체 리듬을 잘 이끌어 갈 수 있는지 없는지에 대해, 그것만 지지를 해주면 돼요. 예를 들어서 미숙한데 자기가 지금 먹은 것을 막 토했어. 그런데 그 문제를 토했을 때 어떻게 처리를

해야하는지. 그 소화가 안되어서 꺽꺽거리는 걸 어떻게 해야하는지, 그런 것을 도와주고 그 문제를 해결해 줄 수 있는. 그리고 함께 “아, 니가 왜 이래서 이렇구나” 라고 하는 걸 함께 알아가게 해주는 것, 그리고 다음 상황에 그런 일이 왔을 때 어떻게 해나가는 것이 좋을 것이다. 알려주는 것. 그걸 앞에서 이렇게 해야 돼 라고 지시적으로 한다하면 그 아이는 절대로 다음에 그 문제 해결을 못해. 그러니까 어려운 길을 가려고 그러는데, 그 길을 오르막이 너무 심해서 올라가기가 힘들 때, 어떻게 발을 디디고 가면 그 길을 잘 갈 수 있을 거야. 라고 한 번만 딱 터치를 해주면 그 아이는 요령을 알아서 해낼 수 있을 것이다. 근데 그것을 다 손을 잡고 끌고 올라가 준다면, 그 아이는 다음에 다시 또 올라가지 못할 것이다. 그러니까 그러한 게, 앞에서 경험하지 못한 일들로 인해서 미숙함을 가질 때 경험한 사람이 그 기준을 한 번만 알려주면, 그러면 수월하게 진행해 나갈 수 있다.

S: 국가에서 지원을 해주어야 한다고 생각하시는지 아니면 규제가 있어서 이걸 풀거나 도와줬으면 좋겠는데. 이런점은?

T: 아, 국가의 역할은. 그렇게 직접적으로 개입을 하려고 하기 보다는. 욕구자, 수요자가 다양성을 가지고 그 수요자에 맞추어서 선택할 수 있는 다양한 기회를 주는, 그런 쪽을 선택해서 해야지. 다 정해놓고 이리로 가라 저리로 가라 하는 것은 옳지 않다고 생각해요. 그러니까 어떤 선택의 폭을 넓힐 수 있는 기회를 주고, 무엇이 다 옳고, 어떤 것만이 다 좋다 이렇게 볼 수 없다. 그러니까 사람에 따라서는 그런 환경에 적합할 수도 있고 적합하지 않을 수도 있고 하니까 다양한 아이들이 발달기를 경험할 수 있는 기회를 만들려고 하는 노력을 해줘야하고 그 중심에는 대상이 성장하고 있는 아이들이다, 이런 발달의 특성을 맞추어서 그리고 운영하는 사람들의 철학을 존중해주는 게 필요하지 않을까.

S: 그럼 주변 사회에서나 SNS 홈페이지 같은 곳에서의 반응이 있잖아요. 원래 많은 사람들이 하지 않는 길이니깐요. 반응들은 어땠는지?

T: 그러니까 그런 것들을 냉철하게 볼 수 있는 안목이 있다면 좋은데, 그 주관적 생각을 가지고 전체를 표현하는 일은 참 잘못된 일이다. 그런데 그런 SNS 에서나 그런 곳에서는 어떤 편견을 가지고 이야기하기 때문에 그런 곳에 노출 되어지는 것도 그렇게 원하지는 않고 있어요. 그런 노출이 되어져서 타격을 입은 경험도 있죠.

S: 어떤..?

T: 여기에 왔던 아이가, 부모는 그 아이의 모든 정보를 정확히 주지를 않았어요. 우리도 그 아이를 일반 아이로 생각을 했는데, 그 아이는 자기의 어떤 감정이나 행동을 통제할 수 없는 아이였어요. 그러니까 그러한 아이가 그냥 이 그 일반아이들과 똑같이 생활을 해야하는데 이탈 행위를 해가지고 그냥 대문을 순식간에 나가 버렸어요. 그래서 나가버려서 길을 혼자 막 앞을 안보고 가는데 다른 사람이 데려온 적이 있어요. 아주 잠깐 사이에 일어난 일이니깐. 그런데 그 부모는 그런 것에 흥분을 해가지고, 관리를 잘 못했다. 그래서 일방적으로 SNS에 올려버리니까 거기는 뭐 관리 안하는 나쁜 곳. 이런 인식을 받게 그렇게 됐죠. 그 문제는 이미 떠들어서 거기서 그렇다니까 하니까 회복할 길이 없는거예요. 근데 부모도 그게 아니다 라는 생각을 가지고 있으면서도 자기 감정을 그렇게 표출해 버린거예요. 그러니까 이거를 전후 상황도 모르는 사람들에게는 그런 나쁜 인식이 있어요. 그러니까 이런 주관적인 것들이 얼마나 이런 객관적인 상황으로 전개가 되어질 수 있느냐. 그렇게 노출이 되어진다면.

S: 마지막으로 결론적 한말씀?

T: 결론으로는 사람의 그, 행복을 추구한다라고 하면, 그 개인의 본성부터 존중을 해주고 본성이 그 그대로 드러날 수 있는 조건이 만들어져야 되는데 이 태교에서 보고나면 출생하고나서부터 너무 이 인격적 존중을 하지 않고 막 함부로 그 아기가 잘 모른다고 해서 함부로 대한 그것을 인해서 평생 가지고 갈 수 있는 트라우마가 생겨질 수 있는데, 어릴 수록 그게 굉장히 심하다 이거지. 자기가 선택되어진 본성의 삶을 그대로 누리고 살 것이다. 그건 일차적으로 부모가 존중해줘야하고 사회가 지켜줘야하고. 그 삶이 7살 까지 지속되어지고 10살까지 유지 되어진다면 그 다음은 나머지 삶은 스스로 살아갈 수 있는 것이다. 여기에 답이 있다.

## # 2. Yellow School

T: 제가 아까 얘기했듯이, 24-5 년 정도 보육 경력이 있는데, 뭐 교사 생활부터 시작해서 이렇게 했는데 여러가지 유아교육 프로그램들을 접했잖아요. 워, 레지오 에밀리아도 좀 해봤고, 몬테소리도 조금 해봤고, 워 깊이는 아니어도 구성주의에 의한 거. 워 이런 것들을 많이 이렇게 했는데 그런 것들에 비해서 이 숲이 다르다고 제가 생각했던 거는 아이들 내부에서 나오는 어떤 능력들을 끌어낼 수 있는, 그러니까 예를 들면 자발적인 힘? 이런 것들을 아이들한테 끌어낼 수 있는 가장 좋은 프로그램이라고 생각이 들었어요. 하면서. 점차. 그래서 다른 프로그램 같은 경우는 외부에서 내부로 아이들에게 어떤 것들을 넣어주는 거라면, 숲이라는 건 아이의 안에서 아이의 있는 능력들을 이렇게 끌어내는 그래서 생각했던 것보다 아이들의 능력이 굉장히 능력이 있구나 라는 것들을 하면서 많이 깨달았고, 사실은 개인적으로는 2011 년도에 시작할 때는 정말 불안했어요. 제가 개인적으로 신앙인인데, 새벽예배를 가지 않으면, "오 아이가 다치면 어떡하지?" 이런 생각들에 잠을 못 이룰 정도로 이렇게 걱정이 되었는데, 하루하루 이렇게 1년 2년 이렇게 지나면서, 어 아이들을 기다려주고 믿어주니까 저렇게 할 수 있구나, 이런 믿음이 생기니까 요즘엔 하나도 안.. 애들이 굴러 넘어져도 자기가 스스로 이렇게 조절할 수 있는 능력들이 있는 것들을,, 그러니까 넘어져도 별로 안 두렵고. 또 실제적으로 만 3,4년 숲 지금 8년 그 정도 하면서 워 꼬메는 사건들이 2-3, 3-4 건 정도 있었는데, 3,4년 정부터는 거의 사고가 없었어요. 그렇다고 우리가 워 손 붙잡고 가는게 아니라 자일 타고, 바위 올라가고 막 이러면서 가는데도 불구하고, 그렇다는 거는 **아이들에 대한 어떤 믿음 신뢰**, 이런 것들이 가더라구요. 아 정말 이 4차 산업혁명 시대는, 아이들한테 어떤 **자율적인 자발적인 힘을 끌어내는** 거다. 라는 이야기를 많이 하는데, 아 이거야 말로 아이들의 능력을 끌어낼 수 있는 그런 가장 좋은 프로그램이라는 생각이 들더라고요.

S: 혹시 보람을 느끼신 예시같은 것도.. 있을까요? 이렇게 이끌어냈구나, 하셨던 예시나..

T: 구체적으로 매년 어떤 증거들, 증거라기보다는 예시들이 참 많은데, 요즘 엄마들이 하나 둘이니까 아이들이, 굉장히 이렇게 아이들이 온실 속의 화초처럼 굉장히 그.. 그렇게 키우잖아요. 너무 과잉 보호에, 이렇게 하는데, 저는 그래서 부모 교육을 계속 일 년에 4 차례, 6 차례 이렇게 어머니교육을 중간에 이렇게 많이 해요. 그래서 그렇게 하면서 엄마들의 의식도 전환이 되고 이러는 것들을 보고 또 숲에, 저희처럼 숲을 좀 과감하게 이렇게 시행을 하려면 부모의 동의가 없으면 안되거든요. 그러니까 부모한테 그런 부분들을 계속 교육시켜서, 그런 부분들을 같이 끌어내고 같이 협력하고 이렇게 해야 숲이 활성화가 되잖아요. 엄마들이 숲에 나가서 조금 굶었다고 컴플레인 들어오고, 이러면 못하거든요. 그래서 계속 부모교육하면서 그런 것들에 대한 효과, 이런 것들을 계속 얘기하고 교육시키고 하는데, 그러면서 엄마들도 굉장히 많이 변화된 것을 느끼구요. 또 아이들도 정말 만 2세 정도 되면 정말 과잉보호 하는 애들은, 요기 이렇게 우리는 바로 여기 숲이 옆에 있어서 나가면, 요기서 몇 발자국 걸어서 못가. 그리고 안아달라고 그래요. 3월 정도는 거의 대두분의 아이들이 그렇게 시작을 하거든요. 근데 지금 정도 거의 1년, 10개월 정도 하면서 애네들이 바위를 올라가고 자일을 타는 아이들로 되거든요. 그런 것들이 증거인거예요. 와 저렇게, 그냥 눈에 보여. 엄마의 저런 과잉보호에서 컸으면, 아이들 정말 아직도, 넘어져서 울고, 일으켜 세워달라 그러고, 자기 스스로 이렇게 할 수 있는 것들이 굉장히 제한 되었을 텐데. 우리가 저렇게 과감하게 키우고, 지금은 뭐 이렇게 막 때굴때굴 굴러도 별떡 일어나고 이러는 거 보면 그런 데에서 막 희열을 느끼고, 아 저렇게 아이들에게 능력이 있구나. 그런 게 막 생기고 그래요. 거의 매년, 지금 쬐이면 만 2세의 능력있는 아이들을 보면, 그런 것들이 거의 증거죠. 그죠? 숲의 그거는 거의 숲에서 밖에 스스로 자기가 놀아보고 스스로 어떤 문제를 해결하고 위기를 대처해보고, 이러면서 생긴 능력들이라고 생각이 되죠.

S: 그럼 이런 자발적인 능력 말고도 어떤 발달적, 신체적, 인지능력적으로..

T: 가장 크게 느끼는 건 뭐냐면 엄마들이 얘기하는 건, 뭐냐면 **면역력**이 강화되었다. 애들이 감기가 굉장히 안걸렸다. 그, 신종플루가 막 유행할 때 있잖아요. 막 그 때 신종플루가 유행할 때, 어떤 어린이집은 50% 아이들이 신종플루가 뭐.. 저희 조카가 그 때, 이제 그 시내에서 직장어린이집 교사였는데 거기는 뭐 90% 아이들이 안 나왔다는 거예요. 거기는 숲유치원 아니고 그냥 직장 어린이집, 그 중구에 있는 아주 큰 대형 회사의 직장 어린이집이었는데 거기서는 90% 아이들이 안 나왔는데, 우리 아이들은 2명 빼고 다 나왔어요.

아 이런 부분들이 꼭 그거다 라고는 확신할 수 없지만, 어쨌든, 저는 그거라고 확신하고 있거든요. 그래서 엄마들이 면역력이 강화되었다고 그러는 거구요.

실제로 제가 이렇게 보면 과학적으로 뭐 데이터를 수치화 할 수는 없지만, 창의력이 굉장히 발달되는 것도 느껴지거든요. 우리가 뭐 숲의 그런 효과에서, 좋은 점들이 숲에 가면 놀이감들이 구조화되지 않고, 다 자기가 이름을 붙여서, 자기가 그런 기능을 부여해서 놀이를 하기 때문에, 창의력이 발달된다 이런 얘기를 하잖아요. 실질적으로 그런 것들이 많이 보여지거든요. 근데 그건 어떻게 수치화가 안되잖아요. 그런데 아이들이 정말 숲에 가서 놀이를 하면서 보면, 이렇게 입에서 툭툭 나오는 말들이 너무나 기가 막힌 말들이 많이 나오는 것들.. 어떻게 아이가 저런 얘기를 하지 하는 것들을 굉장히 많이 느끼거든요. 그런 부분이 저는 그런 효과라고 그래서, 요즘에 그 창의적인거, 아이들 자율성, 자발성 이런 것들이랑, 면역력 강화되는거.

면역력 강화되다는 게 또 신체가 발달한다는 거잖아요. 또 대소근육이 발달하고, 피아제는 요 시기가 감각운동기인데 그쵸? 만 2세까지가, 우리가 피아제는 감각운동기라고 얘기를 했잖아요. 요 시기에, 아이들이 만져보고 냄새맡고 이렇게 스스로 몸을 부딪혀 보고 이렇게 사지가 다 발달하고 뇌가 발달하고 이런 것들을, 느낄 수 있다.

[...]

S: 그러면 또 다른 실내 유치원에 비해, 이제 숲 유치원을 특별 활동을 하시면서, 또 다른 힘든 점은...? 지금 말씀하신 건, 부모님의 반발까지는 아니지만 걱정 우려, 이런 것이 나왔고, 선생님의 지도 이런 것들도 있었고. 혹시 또 다른 점도..

T: 요즘같은 경우에는, 저희가 완전, 그 제어할 수 없는 그. 미세먼지. 미세먼지는 어떻게.. 저희가 항상 부모교육 할 때, "숲 활동 하기 나쁜 날씨는 없다. 다만 준비되지 않은 복장이 있을 뿐이다."

저희는 올해는 너무나 아쉽게, 올해는 눈이 안와서 그런데 저희는 눈오면 여기가 다 썰매장이 되거든요. 다 개인 썰매가 다 있어요. 근데 올해는 눈이 거의 다 안왔잖아요. 눈썰매를 타야, 1번인가 탔었어요. 그래서. 그렇게 날씨는 다 통제가 되거든요. 다 제어가 되잖아요. 뭐 중무장, 장갑끼고 그러면 되니까. 그러니까 저희는 최고 -13도에도 나왔어요. 엄마들이 다 왜 안나가냐고 다 준비되었다고 하실 정도로.

S: 아 부모님들이 먼저 가자고 하셨어요?

T: 네, 그렇게 해서 -13도에서 나가서 막 놀고 이랬는데, 미세먼지는 뭐 어떻게 제어가 안되잖아요. 근데 불과 한 3-4년 전부터 문제가 생겼잖아요. 저희가 미세먼지는 어떻게 제어가 안되는 상황이어서, 너무나 안타까워서 정말 1-2월에는 거의 못나갔죠. 나갈 수가 없을 정도로. 그래서 그 부분이 지금은 정말 가장 큰 복병이에요. 미세먼지가 이렇게 심각하게 대두된거는 불과 3-4년 전.. 초반기에는 미세먼지이런거 전혀 없었고, 이렇게 활동에 제약이. 지금은 아주 복병이잖아요. 어떻게 할 수가 없는.. 거니까 앞으로 이렇게 해서 계속 숲 활동을 할 수 있을까 할 정도로. 그런 고민이 될 정도로.

그래서 올해같은 경우는, 저같은 경우엔 그래서 실내에서 할 수 있는 자연 생태 같은 것들을 숲 활동과 함께 조화를 해야겠다 하는데, 어쨌든 이게 뭐 생태라고 할지라도 뭐 숲에서 하는 것만큼 효과나 기능이나 이런것들은 못하잖아요. 그리고 어쨌든 인지적인 부분이 조금 들어갈 수 밖에 없고. 영아는 마냥 자기가 뛰어놀고, 놓고 그러면서 자기가 이렇게 해야하는데 아무래도 자기가 교실에서 하다보면 그런 부분에 굉장히 아쉬운 부분들이 많이 있죠. 그럼에도 불구하고, 이런 부분을 보완해야하는 어떤 대안들을 고민하고 있어요.

S: 대안으로 말씀하신 게 실내에서 숲 생태를..

T: 뭐, 화초 키우기를 한다거나, 뭐 이런 부분들을 도입을 알아보고 있는 상황이에요.

S: 그런데 훨씬 제약적인...

T: 그렇죠. 제약적이죠. 특히나 영아한테는 그렇게 바람직하지 않은 상황인데도, 그럼에도 불구하고, 뭐 아쉬운대로 그렇게 해야하지 않을까.

[...]

S:마지막으로 좀 한 말씀 정리해서..

T:제가 20 몇 년동안 교육을 하면서, 항상 약간의 어떤 갈급함들이 있었어요. 그거는 뭐였냐면 아이들에게 어떤 능력이 있는 것 같은데, 내가 어떤 교수 방법을 써야 저런 것들이 나오지 라는 것들이 항상 갈급함이 있어서 그동안 공부를 하고 막 이랬었는데, 그런데 숲을 하면서 아 이거구나 라는 생각이 많이 들었어요. 그래서 그러면서 제가 아이에 대한 관점이 조금 바꼈던 게 아이는 굉장히 능력자다. 능력자고 내가 여태까지 그걸 몰랐구나. 몰랐기 때문에 뭔가를 아이들에게 넣어주려고 했고, 그 다음에 아이들이 어떤 행동 하려고 하면 제한을 했어요. 위험하다. 하지마라. 이랬는데 제가 바깥에 나가서 자유롭게 풀어놓다 보니까 아이들에게 굉장히 자기를 조절할 수 있는 능력, 내부에서 끌어 나오는 창의성 이런 것들이 굉장히 있구나 라는 걸 느꼈거든요. 그래서 아 나는 이거다. 내가 앞으로 얼마나 이런 교육을 더 할지 모르지만, 제가 이제 한 70 까지 한다그러면 뭐 한 15년 정도 더 있는데, 내가 끝까지 한다고 그러면 이거다. 이거로 밀고 나갈거다라는 생각을 가지고 있어요. 그렇게 생각을 가지고 있는데, 생각지도 않던 복병. 미세먼지라는 것 때문에 제약이 생기고, 앞으로 이런 것 복병들이 더 생길지 모르겠어요. 그런 부분에 대한 것들을 계속 고민을 하고 있어요. 고민을 하고 있고. 바깥에 나가서 놀지 못하면 어떻게 되지, 아이들은 어떻게 해야 하지 라는 고민들을 계속 하는데 내가 여태까지 25년동안 24년동안 유아교육을 하면서 가장 좋은것은 숲이다. 숲체험이다. 그런 것들에 대한 확신을 가지고 있습니다.

## Appendix B

### Selection of teachers' interview of Canada

#### # 1. Rectangle Program

S: Have you ever seen that it is really beneficial for children to be outside and play with nature? is it really good for children?

M: From what I've been observing, I've been working for an environmental educator for more than 10 years. here in Canada, and in Mexico. Most of my career is from here in Canada, but I started environmental education in Mexico. Yes, everything that I see is when kids are outside even if you are doing like a normal class, just teaching something. They become more interested in, and they become aware of everything surrounding them that could be a distraction too. So, I like this approach, the forest and nature school because it let them discover things by themselves, but the role of the educator, of the teacher, is more like to support them in those discoveries. And also it helps them to become more a.. autonomous. and become more umm.. aware of those. those. aa.. things that they like. you know. cause you use, think about nature like.. it's savage and it's dangerous or dirty, and when you take the time, you can learn a lot. so yes, my observation had told me. and it's interesting how kids get changed the way to see the world.

S: YEAH. CAN YOU SPECIFY HOW THEY CHANGE IT? LIKE.. SEE THE WORLD..

M: Yeah, we work with different publics. we had kids from 0 to 12 years old in our forest school here at Mont Royal, and those kids we have different approaches with them. Well the same like let them discover and curiosity and play outside, but we know that it is not the same for 0 to 12 years old, like 9 to 12 years old. you know? so we have some guidelines for us, for forest school. and we decide like at least what we want with 0 to 3. Well, they are there with their parents, so we want to awake the sense of discovering nature thing like that, and we want to do it through nature. so we do little activities and we open like we give some loose part things like that to play and we invite parents to do it and everything. so it's not just for the kids, it's also for the parents because sometimes you want to do it, but you don't know how to do it. so the educator is there to accompany to parents and kids in the discovery. For example, kids from 5 to 12, they are only with educators. Parents are not there anymore.

S: OHH..

M: So, those kids, we need one or two educators depending of the size of the group. and the point there is to let them discover by.. with their own rhythm. So, for example, 5-7years old, you never know where you are starting. you know. with any kids. you never know where we are starting cause it could be a kid that comes from a family that they're always outside and they like to play outdoors and everything, but it could be also like a urban kid. you know, it's not out that much, and at the beginning, they could be like a little bit afraid of what they can expect and also another thing could be the origin. there's a lot of immigrants here in Montreal, so parents want them to integrate better, so they send them to those activities and they are not that outdoorsy. you know. but they become a little bit more than the beginning. it depends. where the kid is. but we try to follow them in those paths and what we do it is listening what they are interesting in, so we have all that kind of routine in between like to have. to. like have a frame around our programs, but all of that, the routine is just gonna be the frame for that to discover. it's supposed to be as free as possible.

S: WHAT ARE THE ROUTINES?

M: A routine is.. like. for example, we visit always the same place, and we have the reception of the welcoming moment at the same spot, and that way, it's normal for us to meet there, and after parents are gone and all the kids are there, well we have a little activities like loose part, things like that and play a little bit, before activitie's started. and that's when they know we are gonna do the circles to open our session and everything. it usually opens the circle. it's like a moment to see to tell "what would you like to do that day?" and always the educator has like an idea about the day because you know the place, weather, and everything, so at some point, you have to have something in mind to suggest at some point, but if it doesn't come out and the kids are really really liking to do something

different. well the point is just follow them and company them. So, you need to be ready to throw away your plan, but if it's not and sometimes kids are like, "well, i don't know and i don't feel like" etc. so we just like give something and what kind of activity you could think. or we tell a story or something like that. After that, some times and it depends on the group, but we have always in mind the exploration time, it could be right after the circle or maybe later, if the kid doesn't have a game already or play in mind. and we want always like to have time explore nature and to play nature. so it could be either or both at the same time depending on their interests in the moment, but we tried to have a routine like.. they have time to play and explore. sometimes the time to explore is less cause they are really really into playing, but it doesn't mean that they are not exploring. you know. and at the end, we close the circle to say good bye and thank you to nature for adventure and that's like the routine and activities. we also drink some tea together and it's another moment to share how we're feeling, what we were being discovering or like slowdown a little bit and try to go the end of the day. but it becomes like a routine for us.

S: WHAT IS AN EXPLANATION TIME?

M: Explanation to explore nature, so it's more like what kind of activity would you like to do? I want to look around and try to see, it becomes more like natural when we give some like missions. we give them when they are asked for them like. eh.. grow. older kids, we used to, we need to walk a lot for the older kids to go to the meeting point, the basecamp. so, the walk could be long so give them like a few missions just to observe a nature. Once we get there they know that they can keep going and exploration or we're gonna right to the play, but as the walk is long, we tried to do it like more interesting and yeah, it's urban walk. it's to be into a nature but we need to walk about 25 minutes or more, depending on their rhythm too. The weather too and everything, but it helps.

S: WHAT ARE THE DIFFERENCES BETWEEN CHILDREN INDOOR AND CHILDREN OUTSIDE LIKE DEVELOPMENTALLY?

M: What do you mean like in school?

S: YES, IN SCHOOL. IN THE KINDERGARTEN OR DAYCARE, KIDS ARE ALWAYS IN THE INSIDE. SOME KIDS. AND THEY DON'T GO OUT. WHAT COULD BE DIFFERENCE BETWEEN THE CHILDREN INDOOR AND OUTDOOR PLACES?

M: for me environment makes a lot of difference. When I am thinking about environment, environment can be a classroom too. so it depends how you want to like awake

the sense of discovery cause you can give a lot of toys that are not like noisy toys and all the electronic like normal toys. then they are gonna discover the world and play with it and develop different kinds of thing, but one point, I feel like it's a rhythm. just a sense of saying. okay, this is big. you know and sometimes the base camp is hidden to the woods. but there's not a fence around. so it's more open. and they stay close. you know, but they also like to push a little bit more and we have some like woods that we put together cause that's the point because that's the point. they put them and they're follow them. so that's part of a first session of how it works to be here at the forest school. So I need to see you, and I want you to see me and if I call you I want you to listen, and the same way. When you talk to me, you want me to listen to you. so.. we wanna be make it possible. So, we always ask them. it's a lot of questioning to kids like improvised, like "what do you think about this?" and they are like... in the beginning, they are not ready to answer cause always it's like you can do this this this and cannot this this this. So when you asked them "really? I can answer that?" "I can decide that?" "freedom for me?" is really important.

I've not been in may programs in my careers because I was in more like a schoolish educator, and we have all kinds of programs, so we also have school programs so teachers want that like "this is the subject" "we are gonna do that" but we've been changing our practices a little bit like giving that space. that space just to look around, and even there teachers and students sometimes are like "now what?"

S: HMMM.. AFTER TH..

M: "Okay, we are here. Now what? what we do here?" they look around, you can discover. "What? What am I supposed to do?" and that's what forest schools allow like open the door where you can discover by yourself. and

let's try to discover together.

S: SO SCHOOL TEACHERS COME HERE WITH THEIR CLASSROOM AND THEY EXPLORE?

M: Yeah, we have different kinds of activities since our forest school is **being open since 2015**, so at the beginning it was just like normal forest school program. Saturday and after school programs, but at some point I wanted it to push a little bit more into the classroom cause I feel that it is necessary, and we have school programs but it was the school approach, scientific approach or discovering approach, or inquiry also, but it was like a frame around it. so I wanted to push a little bit more like the Finland approach try to see some teachers are interested so we look for the education board, and they were open to the pilot project, to open that more like exploration with the hidden objectives cause we had it, but we know that maybe kids need more play and it was interesting but for teachers were really new. those teachers are with lots of experience that loves to be outdoors, but they are not used to go outdoors with the kids. so they are really aware like oh yeah they discovered really intelligence and they asked a lot of interesting questions everything. even when we are here, they expected or something. and I think that that's the point we need to learn to expect and let go. You have an expectation but that's why we put those guidelines. it helped me to say "okay, my point is not the kids becomes to a biologist, but to make him aware where he is living. and his action has an impact into the environment. so for me... what i see ... is little bit different. and since we have the forest school we have a teachers that called us and say "I'd like to something more like forest school program instead of those programs that are really really subject into nature" so we do both. and we tried to adapt those needs of those teachers and I think it's spreading. Slowly. but it's spreading.

There are lots of challenges too about transportations and umm... different kind of budget. it's not easy and we're really like lucky to have mount royal, right in the middle of the city. There are lots of kids doesn't live close to the mountain, and just to come to the mountain, it's already at discovery. and it doesn't matter if they just come here for two hours program that has a subject that teacher chose. and, but we tried to introduce like a little bit of time like free play and free exploration. if the teacher asks for an animal program, we have a lot of objectives and everything with a program, national program and everything, but at some point, we like to leave 15 minutes, just to let them being free. how they feel about the environment? just running around little bit.

and other challenge for us is it is really big park. it's beautiful but it's right in the middle of the city. we have 4 million visitors. we always do whatever it's not gonna stay for a long. so we have the conservation issue too. that we need to respect because we are here to make them know that we want to protect this place, so that's the part of challenge cause sometimes you'd like to let kids just climb a tree that you are not supposed to allow them. Here is not the place to do it.

S: IS IT PROHIBITED?

M: Yeah. cause there are few rules in the city they put them. we're not supposed to do fires. and that's important part for forest schools but you cannot do it. so we adapt. we just adapted our reality and we know that it could be different but we do it in this place and we want to aware of Mont Royal and the she issues and usually it is well received but it depends on the kids.

some kids ruin. so i need to tell them "no, there are rare plants growing here. and it takes a lot of times to grow" let them awake by themselves and respect that. When you go to the friends' house do you wake them when they are sleeping? then "oh we need to respect them" "okay, let's do the same" so we tried to work with empathy. that way you understand how you need nature and how nature needs you.

S: SO DURING THE FOREST SCHOOL LETTING THE CHILDREN GO, IF THERE IS A TREE, DO YOU EXPLAIN ABOUT THE TREES SOMETIMES?

M: It depends. As I was telling you, sometimes we use stories or we know that we are going to the nest that we observed, so we modify a little bit. maybe it draw to something, maybe try to get their attention somehow, but not just. it's depending on the kids. sometimes kids are really really into discovery and knowledge. some of them they asked a lot of questions. That's a lot of challenge for myself like they ask a question and I answer the question, and I tried to do the opposite. They ask a question and I ask another. what do you think? let's think together. I think I have a book in my backpack. so I put out the guide and said would you like to look around? and they "i don't know how

to look around". "I don't know then let's see. look what's the similarity? what's similar with this bird and difference with another? where do you think we can find them?" also you need to be open to those kids they are gonna be like umm... are not gonna follow and they expect really like an answer. so we tried to push a little bit. but if it's not working and the kids gonna say "okay, whatever" then I give something else. "oh, look at that. I just found something. could you read it?" and that way the child say "okay, we have the information." or once they have it, and I asked them could you share what do you learn about? do you share with the circle? **you make it more like their discovery.**

S: DO YOU HAVE A BACKGROUND KNOWLEDGE ABOUT THE NATURE?

M: Oh, that's a nice question. I'm not a biologist. I'm passionate about nature, and I'm always wanted to take care about environment. I didn't know what I wanted to do with my life, so at some point "I don't know" but science was always not the best for me, so at some point "I'm gonna find my passion one day" and I decided to study communication to communicate my passion some way. When I found it, it was in between nature and education. So, forest school was perfect for me. for me it is necessary to understand this connection between nature and us. we think of nature like far. but we don't think we need to be in the nature. for me, all this path to discover that, it grows in you somehow. I tried to open this path to kids.

About knowledge, I have a mount royal map because I'm working for 8 years. I have the knowledge because I have been working here for a long time, not because I have them. and I've seen some guides with more pictures works really well for younger kids. Even for 3-5 years old we take them with the guide with pictures and they are excited, just see the birds. They start not looking around but at some point what kind of bird that we saw. So they discover a lot of them. even though they don't find it it's okay. it's an opportunity.

S: IT'S A PROCESS.

M: yes, it's a process. I had a girl that told me once, "You know, with the guide, I can just look at the guide and look at the bird, then look at the guide, and look at the bird. So, I can really see if it's the good one or if it is the other one next to it." I was like, "She understood everything. How the guide works, but by herself." Just letting the time, this is how it works. Some of the kids are like, "Oh, this is nice. Lots of pictures. Let's play" but that's okay, but that girl was more into "I want to know what the bird was," and she didn't know, so we need to find a way to know it. She had this discovery. She was so proud of this like, "I understand what is the point of you having a guide!"

S: IS IT A DAILY PROGRAM? OR IS IT FOR WEEKENDS?

M: our programs are every two weeks. (by weekly). Saturdays, Wednesdays, one Thursday with the older kids. **it's after school program.** we also have the program following the pilot. the program was once a week for 8 weeks, but it was too heavy for teachers. Teacher said, they are missing one day class at school. and we were like "you are not missing anything, they are just learning something different. That's the challenge to put it into the school program. and teacher need to be like believing in it. So, this year we have 8 classes.

S: ARE YOU DOING ALL BY YOURSELF?

M: I do one class but I have two other colleagues do the rest, and I do the after school.

S: AND IN THE CLASS YOU DO IT ALONE?

M: I do it with my colleagues. always with the partner cause we have 16 kids. so we want small ratio to better learning and attention. That's another challenge. it means it's much more expensive.

S: DO YOU THINK PARENTS ARE SUPPORTING FOR THIS SCHOOL? OR SOMETIMES THEY GOT UPSET?

M: we have consent form explaining all the risks of the program because we are gonna let them go, but we know we have responsibilities, so we write down our responsibility and their responsibility. They need to sign it before the program starts. that way they will aware of that.

S: SO IT IS ABOUT THE CHILDREN.. GETS HURT?

M: for example, we have insurance here. they can fall, bitten by a bug or something, sometimes they don't know that they are allergic.

Just once in 4 years, one parent was like I don't feel good to sign this. I explained a little bit more and it was open conversation and everything was okay. Except for that, generally, parents are super super supportive. every season we send evaluations by email to parents, so usually they are not a lot of responses. but those who responded they always satisfy and they look for more.

S: WHAT DO YOU THINK WHAT SOCIETY CAN DO FOR FOREST SCHOOLS?

M:I think as a African proverb says, 'we need a town to educate a child,' So, for society, we need to open for this program, but also we need to be responsible. Those boom for the program could be not that good for the nature.

S:HMMMMM....

M: How gestures to protect this environment? some people says that letting the children go and make them learn through breaking it, but here we have that the challenge. if we break everything and we let go that way, we need to find a balance. it's same for the regional park, not only for mount royal. the responsibility should be the same. The role of the society have to be more connected how to reserve the nature too.

What I like about the program is that also going to the parents. parents are participating and that way we say make sure you staying on the path, and try to respect the environment instead of just touching. so we need the participation of the society.

S: DO YOU HAVE ANY RESPONSE FROM STRANGERS?

E: Oh yeah, it happens a lot. people walking with their dogs asked, and there are mostly good response. I think it is more positive than any other questioning. I don't recall anything negative. It help us to do the part of job too to spread it.

S: WHAT ABOUT THE GOVERNMENTAL? WHAT CAN THEY DO TO SUPPORT THIS PROGRAM?

M: what they are doing now is paying for those 8 classes. I think it's a nice beginning. Just point of they supporting us in that and the teacher see what we can do with this is nice. Some of the school are located far away from the park. If the government did not pay for it they couldn't do it. And the experienced teacher can do with your own class. the only thing is you are not gonna have an educator with you, but try to repeat this approach at the park next to your school. Trying to spread this approach with teachers. Once one teacher is doing it at the school, she's going to speak with her colleagues. we want to do it like a movement. forest school is a way to understand your self. more and more. for children and for educators.

you might feel uncomfortable with weathers and situations, uncertainties, and things like that, but at some point, you understand what happened to you, how you did adapt to it. It's a part of learning. a part of yourself. a part of how to be yourself. I think empathy in between human and nature is important to the future of the world.

S: TO CLARIFY, WHAT DO YOU THINK THE FOREST SCHOOL HELPS TO CHILDREN'S COGNITIVE, SOCIAL, EMOTIONAL, PHYSICAL DEVELOPMENT?

M:From what I've been seen, it's all. forest school is altogether. first they didn't want to participate, but we let them choose. so they know they have choices. some of children are more shy, but it's not a bad thing they learn the those differences socially. Also, they are developing "the brown is not equal" and physically if they fall down they would be more aware and cautious. and the balance on the dead tress. or also movement put a branch and little sticks on the little hole tried to fit it inside. that motions are really delicate. a girl was really scared of everything, but at the end, she's with the nature. she is excited of challenges. she wants to share with her mom. I found it is so nice!

## # 2. Hexagon Program

HAVE YOU EVER THOUGHT ABOUT STOPPING THIS PROGRAM BECAUSE OF THE FINANCIAL DIFFICULTIES?

I mean, we will see as time goes on. Cayote program is part of a network of the nature school that follows the same kind of modality. It's a lot more than just like a nature play. Like time outside, but it is also that. and so I feel like I have a lot of support like C program is still just, this is our third year. I've worked at a school, and so, I feel like we're following a model that can be financially successful. There are not a lot of nature school that aren't not for profit. maybe we'll go become non-profit eventually, but for now this is just flexible on it. and it works. We are following like for pricing, we are following an industrial standard, which I feel good about. This is the first of its kind in Montreal, we'll see if people are willing to pay that. you know? I have a friend who has a school, very successful in Vancouver, and people have more influence and there is more money in Vancouver so..

IT IS ALSO A FOREST SCHOOL?

I tend not to use the word "forest school" but it is kind of all through a forest school.

WHY IS THAT?

it's kinda vague. I don't know cause it's becoming like a brand. and we're not certified by that brand. I feel like we do mentoring in nature, and it's a lot more than take kids out for free play, which my impression of a lot of forest school is like.. that's the approach. and we do have a lot of time of free play, but we also have a lot of other stuffs we worked on. so we are like forest school plus what we do.

OKAY. HOW MANY YEARS YOU ARE WORKING FOR FOREST MENTORING THEN?

more intentionally, I've always been in the outdoor education kind of world. but I think intentionally since 2010, 2009, and when I, uh, was a prentice at a wildness awareness school just where I studied for a year. so they have you working with several programs a week. and that's in Washington state in the west coast. // Before that I started to do some programs on my own around Montreal just a little pilot projects. that was really fun.

WHAT IS THE REASON THAT YOU START THESE KINDS OF PROGRAM?

good question. I think it's like, it's very has such a potential to be transformative, offer a transformative experience for youth, and to really empower them in pretty significant ways that I don't see the conventional education system is doing. I think it does it, but hard. I see big lacks. maybe it comes from that seeing like a lack in a modern world in where I grew up with, what I've seen in school. my friends are teachers, so they kind of reported.

and it's like such a powerful opportunity that I was like, and I just love it. I have to do this.

YOU'RE MORE FOCUSED ON YOUTH, RIGHT?

yes. we want to focus more on the youth, but at the moment, we offer programs for adults and family. so offer for everyone. Integrating family is a big thing, I think, because the kids can go through this experience and start to have this routine and things, and parents might not get it, but the kid might not know how to communicate it. So, our family programs are like really big hit, and I didn't expect that. A lot of people showed up to the family program. That's awesome! and it's very different vibe like mentoring we can do with youth is very different because when the kids are with their parents, there's a dynamic going on. You don't wanna get on the way that. and kid doesn't fully step into their autonomous self with the parent right there. so, the level of mentoring we can do is less with the family program, and it's like "oh.. okay" but it's cool to have parents. we tried to involve the parents in other ways like we send them stories, talked to them when they dropping or picking their kids up, we are starting to do raise up the passage. so kids who are between two different age groups, we put on in advance just for them and it's by donation, and parents are involved to come out towards the end. so, this will be the second year and kids will go off. they are like 12 years old. and they go up the woods and start the fire on their own, and sit by themselves.

SO YOU TEACH THEM HOW TO SET THE FIRE?

yeah. make a little shelter and set up and, we frame it as like a reflection experience about their growing autonomy.

They grow autonomy and like getting into think about how they wanna step up in life. and then come out of that, and we honor them we say like "wow, you you did this, and you're growing, and you're becoming more autonomous. and this is awesome. and I try to harvest some kind of lesson. and we help them integrated it. and we ask the parents how are you gonna support your kids now that they are becoming more autonomous. what would you need to grow?

DO YOU HAVE ANY BACKGROUND WITH CHILD?

nope. It's been years of doing this extra curricular kinda activities, and guiding people onto canoe trips. that's where I started it. this is very different in that. and I like to do it more at some point. immersion in the forest can get more than that. haha. we need to create the needs.

I THINK THERE A LOT OF NEEDS. THEY JUST DON'T KNOW WHERE THE PROGRAM IS.

okay. ya. sometimes I don't know. we are slow to market and slow to growth. I'm like, do people care? is it gonna work? so we will see. we're trying.

WHAT ARE THE DIFFERENCES BETWEEN THE CHILDREN PLAYING OUTSIDE AND IN THE NATURE AND CHILDREN WHO IN INSIDE?

The first thing that comes up with my head is like resiliency? the ability to be uncomfortable and be okay being uncomfortable with the weather, with physical challenges, with being able to work in a group. and nerve system has the ability to relax more? and the child has more of capacity to empathize with others? so the physical resiliency, and emotional resiliency, resiliency just living in the community and the ability to empathize that comes just naturally. you have to listen, you have to pay attention to when many things going on.

like in a rain day, we're gonna have fun. it's rainy, yeah it's kinda uncomfortable, but you're gonna be okay. we're gonna have fun. haha. and they get strong.

IS THERE ANY CHILDREN WHO DOESN'T WANT TO GO OUTSIDE?

no. I mean, for sure it happens. kids get really cold and they need to learn how to take care of themselves and we encourage that, but it's them doing it at the end of the day like we're not gonna put jackets for them. it's more like: you look cold, where is your jacket? hahaha. why don't you think putting it on?

Yeah. Sometimes there is resistance, but I mean they know they are coming to our program staying whole day outside. we can have fires and we have some shelters to hang out in. In Angrignon, sometimes we light up the bbq.

SO BY WATCHING THEM GROWTH, DO YOU FEEL REWARDING?

yeah, I do. definitely really do. and sometimes you have the success stories where you like it is kinda settled kinda growth so it's like hard to see it, however, and it's hard to measure this stuff. we look for certain qualities to see if they are developing. and you feel it more than anything doing with the kids over the years. yeah. so a lot of what we do is we build the culture in our program, which is a powerful thing. give kids the chance to like mere that culture and bring it to their lives, and the other places. feeling gratitude for the world, for being able to express themselves well, being able to listen to others well.

and on the surface is like kids playing with sticks, and sliding, doing whatever, but then all these little settles things, sharing gratitude on the regular basis, celebrating people's passions and curiosity, following up the nature's mysteries, listening to each other's, and talking in circles, tracking the nature world all the time, raising questions about the history of the land and ancestry, where they come from.

DO YOU GIVE THE ANSWER OF THE QUESTIONS?

no. I mean, we really try to use something called the art of questioning, like exploring through the questions. they figure out the lesson on their own. that's really key to a lot of how we handle complex and dynamic issues, and we explore nature more often than not value their journey on figuring out the answer for themselves than their ability to repeat what we told them what the answer was. we can offer certain things and role model it for sure.

DO YOU HAVE ANY CHALLENGES TO BE A TEACHER AND FOREST MENTOR?

haha. for sure. there are so much to learn. there is always more. we are doing mentoring, we are not doing education. we are not doing.. eh.. in a school term, it's loose. haha. I mean every child is different and every child is gonna test you at some point in own unique way, and that's like a beautiful thing. what their challenges are, what their gift and passions are. They are inviting us to help them connected to the world in their unique way, and so every kid's gonna be different. and that's awesome. so I always have to think about kids, and how can I best support this unique person on his journey. what's going on for them that I can help them. that's personal. so we do a lot of cultural building for sure, but we also like consider every kid at the end of the day we do a debriefing be like we talk about the kids and what did you see that where are shining, or did you see their edges come up, how can we help them? umm... we do our best. that's why our ratio is one to six max. and often we have our volunteers in our program, so sometimes the ratio is one to four, one to three. that's crazy! one to four ratio? you can chill with these kids and get to know them. you can have a really personal relationship with them. yeah. the big thing we do is that treat them like adults? like we talk to them like adults. and you can really do that when you are in the small group. when you are hurting a bunch of 20 kids, but you can't get to know them individually.

we do use knife sometimes and they're not following the knife safety rules. that could be a test. if a kid like can't handle a comparative game, or whatever. some kids just have their things, and it tests us. that's very like clear test.

there are so many test. even the quite kids, it is so easy to neglect them cause they are so easy. oh they are cool, they are quite, but are we really serving them? and you have to reach. it's a challenge. it's a test. so, I can support them.

WHEN DO YOU INTERVENE WHEN YOU ARE A TEACHER?

so, we usually have the three respects: respect nature, respect yourself, and respect each other. and that's the basic kind of.. if you are not doing some of that, we have to intervene. you are disrespecting the land, we're gonna step in. if you're disrespecting yourself, or others.yeah.

SO WHEN YOU MEAN "TAKING CARE OF YOUR SELF," AS SAFETY?

yeah. safety, if they are not drinking enough water, not like taking care of their gear or something.

LIKE ALL THE PARENTS ARE SUPPORTIVE? PARENTS ARE NOT UPSET?

honestly, some parents are like "yes! let them be resilience, let them grow" we have pretty like thrill and safety standards. we don't do crazy stuff ever. umm.. I don't think we don't have much trouble around that. I mean sometimes, parents are concerned "oh, it's raining. It's cold. my kids suck at taking care of themselves, can you really make sure my kids don't get sick at the end of the day?" so "oh, yeah. for sure, we totally do our best, and really check up with the kids."

I've never seen that, not to say that it couldn't happen, though. and I mean, we don't let the kids do like super dangerous things. you can't climb a tree super high. we say like "climb the tree when you're with your parents. go super high with your parents, not with us." I think I had a moment where we checked with the parents, "oh, they cut themselves using with the knife, it's just a little thing", and the parent's are like: "oh, great! what did you learn? what are you gonna do different next time?" they are very supportive.

THE WEATHER COULD BE A CHALLENGE TOO IN MONTREAL?

yes, it's a challenge for sure. and it's on our minds, in some places like on days that are super windy, i'm always paranoid about trees falling, you know, when branches falling off the trees, we can't hang out in tree places on super windy day.

With the cold, for sure, with the young kids, I think -23, -25 is a border line. However, I remember one day a couple of years ago. we ran a program, it's a regular program, once a month, and environment Canada said "don't go outside." and it was -30 something, and we were doing this in the west island, and there was a warm building that we could go and hang out in. so we could go play outside, go out, the warm, go out, the warm. And we told parents, we got this, we got this building, we're gonna be cool. it's gonna be cold but we can always go inside.and maybe half of kids showed up. parents were like "nah, nah, just too cold" I remember that day was one of the funniest days ever. it was so cold, but kids were so into it. we warmed up, and at one point, we went out with a group we are following dear tracks, and we kept on a trail. and I checked in with them, "alright, it's really cold, we are pretty far from the

building now, but this is really fun. do you guys wanna go back? I'm down!" and they are like "no! let's keep going" we kept going, kept going. the tracks got to a field because of the wind the tracks started to disappear, and we are following it and the winds are blowing, and we looked around, and I'm like :alright, dude. we can either go back or we can just pretend like we are dear and imagine where the dear would go, and the kids were like "No, I don't wanna go back! No, we are good, good!" and they were warm, you know, I checked them, good gears. and then, I'm like "okay, close your eyes, picture your dear, where would you go?" and they were like "over there" so we crossed this big field, and we get there and there was a dear track, and they found the spot, and then we followed it more, and it had gone to like some apple trees? umm.. this is like in the winter, so apples are kind of like fermented and wrinkled, but the dear had eaten that apples. we had lunch there and I said "okay, cool. do you guys wanna go back? or you wanna go keep on this trail?"

IS IT -30, RIGHT?

-30! right! we kept going, kept going, and then we found the dear. we saw the dear.

NO. REALLY?

yeah. we followed the track all the way to the dear. we were like "look up, look up!!" and the dear was bouncing right in front of us and the kids were like "we, just, did, that. we found the dear." On the day when people were like "don't go outside"

Think about the pride and the empowerment of I know how to take care of myself. we are gonna stay warm. they were really good at taking care of their gear, and we stayed active. we had good food.

and it's like for sure it's dangerous. no doubt. you have to be attentive. you have to. but you don't need to push it all the time. it's okay. sometimes, success is just showing up and hanging out next to the fire. yeah. outside is crazy cold and windy, but we made it. and we have fun. you don't have to push it super extreme or whatever.

YEAH. THAT'S CRAZY. DO YOU THINK THERE ARE ALSO CHALLENGES FOR DIRECTING THE FOREST PROGRAM?

yeah. there are so much. I think i'm just like slowly stepping into this. there are the whole business side. figuring that out. mentoring the staffs, which I gotta be more and more in tuned with because I'm not at the every program, so like doing quality control, like getting feedback from the staff and supporting them with more tools.. yeah, so there are lots of challenges. what else... umm.. Like having them really take ownership of the programs but also being involved in the bigger picture of the business. I don't wanna be like the president, the boss, I really want them to be really integrated and share responsibilities. but to a certain extent, I will offer the final words.

WHAT ABOUT TEACHER'S ROLE? WHEN YOU'RE TRAINING THE TEACHERS, WHAT DO YOU THINK THAT TEACHERS SHOULD BE IN THE PROGRAM?

the role... to be.. like protector of those three respects, it is to guide and inspire the youth to facilitate nature connection experiences, and community experiences, ummm... and their role is to nurture their personal passions and their personal connection to nature cause if they are board, if they are not on their learning journey, and they are not like genuinely curious about nature, kids can feel that. so they have to be sincere, and like real with the kids, and real with themselves. Authentic leadership is a part of the role. to be a role model.

DO YOU THINK THE GOVERNMENT COULD MORE?

hell yes. hell yes. we are not enough our profit because it is just started. we are just growing this quality programs slowly, you know, building really significant partnerships and relationships. Yeah, I'm not chasing grant money all the time. I think it's a tricky situation cause like I really want to be involved with conventional schools. that's where the money at. that's where most of kids are. that's where you have most of the impact, but it's coming from such an industrial history of manufacturing good, hard-working citizens, and it is so less about empowering individuals to find and nurture their personal gifts, and that are connected to the world. I really wanna do more with them, and it's always tricky cause you have to sacrifice certain things with after school program we do it at some schools. It's like we can do less mentoring because we only have an hour, and it's just like end of the day, so kids are like "huaaa" and they start to run, and it's a huge group with one staff or something. that's not where mentoring happens. I'm not sure

what the best way that the government help more for those things. like we started a leadership kind of program at a Waldorf school in NDG here and it's really cool. It's like very special because we are building towards a canoe trip, and we meet like a full day regularly, and there's a, one of my native friends is involved and teaching that group, and so there is a cultural exchange, which is like so rich. about native history, and about native relations, and talk about colonialism. what she brings to that is so special.

#### WHAT ABOUT YOU WANT SOMETHING FROM THE GOVERNMENT?

I wanna be able to have cool forest schoolish kinda camp inside city parks that we can use. because in city parks, you can't go off trail, you can't touch plants, you can't have fires, so it's very limited. I'm slowly working on that and have some ideas of like trying to find opportunities, so that's tricky. yes because these kids don't have acc..., how they can engaged with the wild nature? we have this relationship with parks with the wilderness, that's very like don't touch, humans are not part of this. I think there is a huge potential for the kids to be involved and taking care of the places. I don't know about less regulation but more like supervise regulation.

especially, with the art of angle, we take survival skills and wilderness living, the kinds of stuff, unconsciously asks you the questions: "What do you really need to be happy?" So, we don't have to like need... and.. "Who am I, really." When you remove the video games, social drama, and like the pressure of the modern life and get a job, pay taxes, duh duh, who am I really, what do I really need to be happy and strong and healthy to take care of myself? What does it really look like? so I feel like everyone gets.. is working on that. yeah, by involving nature.

#### HOW CAN YOU MOVE THE PARK OR THE PLACES?

by bus or transportations. I wish there are some places, there are like an outdoor center in a west-island that it's very expensive to rent and we can't afford it. so, I'm hoping maybe we build a partnership with the city at some point, so they let us use.. because we have small groups and it's like a tight budget. so we cannot pay 200 dollars a day.

#### DO YOU HAVE ANY SOCIAL RESPONSES?

I think we've got the generally, really positives. Other people come by and said "oh, what are you doing? that's awesome. Can I try?" people just walking by who are just like smile and really like happy to see the kids. Generally, really amazing. I mean people don't get out and play with nature enough and I think more and more kids are alienated from the nature, the pressure of schools and like video game addiction, screen, you know culture, everyone knows it like kids need to get out more and when they see that people are really encouraging it.



## Appendix D

### Selection of Coding Scheme

Table 1

*The Benefits of Outdoor and Nature Play that Korean Educators Perceive*

No.	Direct quote	Keywords	Categories	Subtheme	Theme
8	거기 있는 건 전부다 놀이감이니까 애들이 상상놀이를 하면서 하니까. 플라스틱 하나도 없이	"imaginary play"	cognitive - imagination	children's ability	benefit
18	자율적인 자발적인 힘을 끌어내는 거다	"spontaneity", "voluntary power"	spontaneity	children's ability	benefit
30	면역력이 강화되었다	"strengthen the level of immunity"	physical - immune system	children's ability	benefit
10	그날의 자기 컨디션에 따라서 선택으로	"their own pace", "select"	constructivism	meet children's need	benefit
4	아이들의 눈높이에 맞춰서 이렇게 이야기하는 건	"children's eye level"	constructivism	meet children's need	benefit
20	유아숲 같은 경우는 구에서 지원을 하는 거예요.구청에서 지원하고	"support from government"	governmental support	governmental support	benefit
11	그날의 자기 컨디션에 따라서 선택으로	"their own pace", "select"	respect individual	pedagogy	benefit
16	아이들의 입장에서는 없는거나 마찬가지지.	"there is no curriculum to children"	emergent curriculum	pedagogy	benefit
17	아이들에 대한 어떤 믿음 신뢰	"trust on the children"	growing trust on children	teacher's growth	benefit
13	근데 애들이 정말 귀 빨개지고 코 빨개지고 해도 너무 재밌게 노니까 내 너희들을 위해서 희생해야지	"I can sacrifice myself for the happy children"	teacher's rewarding feeling	teacher's growth	benefit

Table 2

*The Challenges of Outdoor and Nature Play that Korean Educators Perceive*

No.	Direct quote	Keywords	Categories	Subtheme	Theme
44	일자산까지의 거리를 좀 압축하고	"shorter the distance"	distance	distance	challenge
130	국가 수준의 교육과정이	"curriculum of national level"	Government regulation	Negative condition	challenge
72	불과 한 3-4년 전부터 문제가 생겼잖아요, 저희가 미세먼지는 어떻게 제어가 안 되는 상황이어서	"very recent problem, micro dust"	micro dust	weather	challenge
105	“제가 다 알고요” 그랬더니 “니가 엄마냐!” 그러면서, 전화에 대고	"you aren't a mom! How can you be a mother?"	stranger's reaction	Negative condition	challenge
31	미세먼지 걱정 안 해주셔도 된다는 거	"don't worry about micro dust"	Negative social responses	Negative condition	challenge
3	일단은 부모님들	"first of all, the parents"	overprotective parents	Negative condition	challenge
40	엄마들의 인식은 쉽게 변하지 않는데	"it's difficult to change mother's perceptions"	parent's reaction	Negative condition	challenge
9	오 아이가 다치면 어떡하지?" 이런 생각들에 잠을 못 이룰 정도로 이렇게 걱정이 되었는데,	"get hurt", "nervous"	risk	safety	challenge
49	옷 가서 입혀야 하고 뉘여야 하고	"cleaning, clothing..."	teacher's preparation work	teacher's work burden	challenge
67	눈이 안 와서	"no snow"	weather	weather	challenge

Table 3

*The Benefits of Outdoor and Nature Play that Canadian Educators Perceive*

No.	Direct quote	Keywords	Categories	Subtheme	Theme
2	we're really like lucky to have mount royal, right in the middle of the city	"lucky to have mount royal"	distance	accessibility	benefit
33	Think about the pride and the empowerment of I know how to take care of myself	"pride" "empowerment"	empowerment	children's ability	benefit
9	it's another moment to share how we're feeling	"sharing how we're feeling"	social dev	children's ability	benefit
48	The first thing that comes up with my head is like resiliency	"resiliency"	resiliency	children's ability	benefit
13	I like this approach, the forest and nature school because it let them discover things by themselves	"discover things by themselves"	constructivism	Meet children's need	benefit
28	in the nature children are free.	"free"	free	Meet children's need	benefit
24	the point there is to let them discover by.. with their own rhythm	"discover with their own rhythm"	respect individual	meet children's need	benefit
33	every season we send evaluations by email to parents, those who responded they always satisfy and they look for more.	"they always satisfy"	parent's positive feedback	parent's support	benefit
44	the parents are like: "oh, great! what did you learn? what are you gonna do different next time?" they are very supportive	"parents" "supportive"	parent's support	parent's support	benefit
38	sometimes we use stories or we know that we are going to the nest that we observed, so we modify a little bit	"we modify"	flexibility	pedagogy	benefit
37	we tried to involve the parents in other ways like we send them stories, talked to them when they dropping or picking their kids up, we are starting to do raise up the passage.	"tried to involve the parents"	integrating family	pedagogy	benefit

Table 4

*The Challenges of Outdoor and Nature Play that Canadian Educators Perceive*

No.	Direct quote	Keywords	Categories	Subtheme	Theme
58	There are lots of challenges too about transportations	"transportation"	distance	accessibility	challenge
63	we're not supposed to do fires. and that's important part for forest schools but you cannot do it	"cannot do it"	governmental regulation	negative condition	challenge
55	Their rules are very strict about children's safety and security	"strict about children's safety and security"	governmental regulation	negative condition	challenge
56	I never tied children with a rope to go out. they're free	"tie children with a rope"	governmental regulation	negative condition	challenge
58	the problem is that all play grounds are closed in the winter	"closed in the winter"	limited place	negative condition	challenge
68	sometimes you'd like to let kids just climb a tree that you are not supposed to allow them. Here is not the place to do it	"not the place to do it"	governmental regulation	negative condition	challenge
73	nature like.. it's savage and it's dangerous or dirty	"savage""dangerous""dirty"	dangerous	safety	challenge
75	bitten by a bug	"bug"	bug	safety	challenge
76	sometimes they don't know that they are allergic	"allergic"	allergic	safety	challenge
74	kids get really cold and they need to learn how to take care of themselves	"get really cold"	Cold weather	weather	challenge

Appendix E



**CERTIFICATION OF ETHICAL ACCEPTABILITY  
FOR RESEARCH INVOLVING HUMAN SUBJECTS**

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**Name of Applicant:** Sumin Lee  
**Department:** Faculty of Arts and Science / Education  
**Agency:** N/A  
**Title of Project:** Forest School Teacher Perspectives about Benefits and Challenges of Outdoor and Nature Play in South Korea and Canada  
**Certification Number:** 30010497  
**Valid From:** January 22, 2019 **To:** January 21, 2020

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

A handwritten signature in black ink, appearing to read "Shannon Hebblethwaite".

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Dr. Shannon Hebblethwaite, Vice Chair, University Human Research Ethics Committee

## Appendix F

### Consent Form



#### **INFORMATION AND CONSENT FORM**

**Study Title:** Forest School Teacher Perspectives about the Benefits and Challenges of Outdoor and Nature Play in South Korea and Canada

**Researcher:** Sumin Lee

**Researcher's Contact Information:** ynsumin@naver.com

**Faculty Supervisor:** Sandra Chang-Kredl, Ph.D

**Faculty Supervisor's Contact Information:** Sandra.chang-kredle@concordia.ca

**Source of funding for the study:** Concordia International, Graduate Student Mobility Awards

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

#### **A. PURPOSE**

The purpose of the research is to develop a better understanding of different approaches to forest schools in each culture and to bring enhanced opportunities for children to engage in outdoor and nature play.

## **B. PROCEDURES**

If you participate, you will be asked to share experiences and perspectives in the forest environment. You will also be agreeing to audio record the interview session(s) and to allow the researcher to observe the environment and teacher-child interactions. Finally, you will also be allowing the researcher to take pictures and drawings of the environment.

In total, participating in this study will involve a face-to-face interview session lasting approximately one hour, and allowing the researcher to take some environmental observations. Follow-up debrief sessions may follow the face-to-face interview session.

As a research participant, your responsibilities would be: to provide accurate and honest answers in the interview session(s), and to provide feedback as to the authenticity of the transcriptions and analyses.

## **C. RISKS AND BENEFITS**

There are very minimal risks involved in participating in this research.

Potential benefits include: to provide personal growth as a teacher by thinking about the teacher's role in a forest environment setting for early childhood education and the forest environment's advantages and disadvantages, and to think about social support to enhance the benefits of the forest environment setting.

This research could provide opportunities to ponder the role of the educator for the forest school and its future direction by considering other cultures' forest school circumstances.

#### **D. CONFIDENTIALITY**

We will gather the following information as part of this research: Your name, previous & current work experiences, and your perspectives in the forest environment and outdoor and nature play based on your experiences.

We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form.

By participating, you agree to let the researchers have access to information about your beliefs and wishes about certain types of educational environments where outdoor and nature play is valued. This information will be obtained from an environment observation and an interview session you engage in for the purpose of this research.

We will not allow anyone to access the information, except people directly involved in conducting the research, and except as described in this form.

We will protect the information by keeping all your information in encrypted files on the

researcher's laptop.

We intend to publish the results of this research. The names will be kept confidential and anonymous

We will destroy the information five years after the end of the study.

## **F. CONDITIONS OF PARTICIPATION**

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must tell the researcher before January 10th, 2019.

We will tell you if we learn of anything that could affect your decision to stay in the research.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

We will not be able to offer you compensation if you are injured in this research. However, you are not waiving any legal right to compensation by signing this form.

## **G. PARTICIPANT'S DECLARATION**

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print)

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SIGNATURE

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DATE

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If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or [oor.ethics@concordia.ca](mailto:oor.ethics@concordia.ca).