

Young Children and Educators Engagement and Learning Outdoors: A Basis for Rights-Based Programming

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Research Findings: This article reports on a study undertaken with 4 early childhood programs in a medium-size city in Canada investigating young children's and educators' perspectives on engagement and learning possibilities outdoors. A rights-based methodology including participant observations and interactive activities with children as well as focus groups and discussion groups with educators reveals the diversity and richness of young children's learning opportunities in the natural outdoor space. Educators also talk about forming more egalitarian and fulfilling relationships with children in outdoor activities. The value educators placed on play in natural spaces led to the creation of opportunities for play outside and motivated educators to support children's interactions outdoors by mediating policy and societal fear of the risk of outdoor play. *Practice or Policy:* The results of the study highlight the value of a learning community for early childhood educators so that they might support children's full use of outdoor space and the critical role of adult allies in advocating for rights-based programming.

"I love to run downhill!" a 4-year-old boy told us as he walked us through the outdoor grounds of his early childhood program. In running down the hill, this boy is connecting to his local landscape, entering into a relationship

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with and making sense of his particular place. The sheer joy of running with the ground beneath his feet, experiencing the pull of gravity, feeling the wind in his hair, and smelling the air is fulfilling, embedding memories of sensations unique to that place. Listening to this boy, we wondered, how do early childhood programs support (or not) young children's connection to the outdoor environment, their local landscape? The evidence is mounting that children are spending less time outside and more sedentary time with television and electronic games. This lack of opportunity to move freely outside and connect with the natural world and its materials may contribute to problems such as childhood obesity (Temple, Naylor, Rhodes, & Wharf-Higgins, 2009) and a lack of environmental awareness.

The United Nations Convention on the Rights of the Child (UNCRC) states that all programs should recognize and respect children's perspectives, including those of young children, and that adults, as *duty-bearers*, have a responsibility to support children's rights, including the right of participation and the right to a holistic education that respects the natural environment (see Lansdown, 2005; Lundy & McEvoy, 2009; United Nations, 2005). With more children under 5 spending the majority of their days in early childhood programs and away from parents, understanding the educator's role in engaging with children outside in natural settings deserves attention (Moore & Marcus, 2008; Statistics Canada, 2006).

This article reports on a study undertaken in a medium-size city in Canada with four early childhood programs, where educators valued children's connections to the outdoors and wanted to increase the opportunities for explorations in natural outdoor settings by following the children's interests and concerns. A rights-based methodology was used during the 1-year research study that combined interactive activities and participant observation with children as well as focus groups and idea-sharing discussions with educators. The findings point to children's enthusiasm for the outdoors and educators' role in nurturing children's relationship to the natural outdoor landscape and in mediating with licensing authorities responsible for regulations. The study raises the issue of aligning knowledge, policy, and practice on the outdoor spaces of early childhood centers with the perspectives of two key social actors: young children and early childhood educators.

GAP BETWEEN KNOWLEDGE, POLICY, AND PRACTICE

To set the context for this study, this section reviews research that demonstrates the multiple benefits of the natural environment for young children; despite evidence of the benefits of play outdoors in a natural setting, most of the focus of early childhood educational training is on the inside

environment. We then present how a rights-based methodology can help address the current gap between knowledge and policy by listening to young children as well as involving educators.

The Multiple Benefits of Outdoor Play for Young Children

Overall, research shows that people with access to natural spaces have a greater sense of satisfaction with their lives. A review of the literature by Rohde and Kendle (1994) indicates that both viewing nature and being in nature have beneficial psychological effects—feelings of pleasure and diminishment of negative feelings. The merits of the outdoors apply equally to young children, with the natural play environment providing a variety of opportunities for development. Studies of different outside play spaces found that a mixture of manufactured materials and natural materials made children more active (Cosco, 2006). Outside, children can run, be noisy, and jump, which is often not allowed inside. While providing exercise and enhancing children's fitness levels, noisy rough-and-tumble play also offers opportunities to vary social relationships by interacting with peers in ways that contribute to children's social skills (Tannock, 2008).

It is significant that nature provides unlimited opportunities for learning that are compatible with children's interests and skills (Lester & Maudsley, 2007). Herrington and Studtmann (1998) found that although manufactured equipment encouraged physical development, landscape-based play spaces promoted learning in a range of areas—physical, social, intellectual, and emotional. In other words, play and learning became more complex and layered. Experiencing the effects of weather and seasons firsthand, finding bugs under logs and rocks, or watching a creek dry up or ice over provides children with direct knowledge. A natural setting also offers a chance to restore the ability to focus and sustain attention (Berman, Jonides, & Kaplan, 2008; Kuo & Faber, 2004). It is not coincidental therefore to find that although manufactured equipment may meet rigorous safety standards, children spend little time on playground equipment and more time around and about the equipment (Herrington & Lesmeister, 2006). Young children are agents as they select how and on what they play (Blanchet-Cohen, 2009).

Young children's experiences outdoors are also important for providing experiences that can contribute to the development of environmental citizenship. By experiencing the connection to the natural world and elements, children acquire an understanding of their relationship and responsibility to the human and non-human communities (Orr, 1993). Interviewing environmental activists about the impetus for their interest in the environment, Chawla (1998, 2007) found that activists had early memories of connecting to a place outdoors and to a particular adult who connected

them with the natural world. Cobb (1977) also noted the impact of time spent outdoors during childhood on writers, intellectuals, and artists: “The child ‘knows’ or re-cognizes that he makes his own world and that his body is a unique instrument, where the powers of nature and human nature meet” (p. 89).

Despite the merits of young children’s connection to the environment, playgrounds in early childhood centers are dominated by metal climbing structures and covered in rubber matting, pea gravel, or bark chips with concrete (Herrington & Lesmeister, 2006). Children are losing opportunities for those experiences outside that, as suggested in *Last Child in the Woods* (Louv, 2005), may have consequences for the health of the planet.

Lack of Environmental Education in Educators’ Training

Further supporting the importance of valuing the outdoor space in early childhood centers is Article 29(e) of the UNCRC, which states that all education should be directed to “the development of the child’s personality, talents and mental and physical abilities to their fullest potential” and to “the development of respect for the natural environment.” Early childhood educators currently, however, receive little in their education about the importance of unstructured outdoor play in a natural setting (Elliott, 2008) to a child’s development and learning. Environmental education in early childhood has been largely ignored; few early childhood educators value the outdoors as an opportunity for learning; many do not know how to facilitate children’s curiosity and connection with the natural elements (Davis, 2009). Lack of knowledge means that educators may place little value on the time spent outside or may not have resources to create meaningful opportunities for children. Maynard and Waters’s (2007) study in four schools in Wales showed that teachers were not fully aware of the “potential uses and benefits of outdoor environments” (p. 262), making them conclude that educators are missing “many of the opportunities afforded by the outdoor environment to enhance children’s learning” (p. 255). By acquiring language and concepts of the outdoors, children can develop the “communicative competence required in the democratic process of deciding what needs to be resisted, fundamentally changed or conserved and intergenerationally renewed” (p. 232). Helping children and educators articulate their experiences outdoors can provide them with a way of thinking about and discussing their experiences outdoors and ultimately lead them to protecting or enhancing the places they value and cherish.

As Davis (2009) stated, there is an “urgent” need to engage young children and educators in environmental education. There already exists a long tradition of promoting nature in early childhood education with, for

example, Rousseau's *Emile* (1979/1762); the McMillan sisters, who established the Open Air Nursery in 1914; and Rudolf Steiner (Waldorf schools), who wanted children to learn about the cycles of nature and advocated the use of natural materials. This thread continues today in Waldorf schools, the forest preschools of Norway and Denmark, but is less evident in most early childhood education programs in North America. Some of the first forest preschools have just been established in the past few years in Canada and the United States.

A Rights-Based Methodology for Engaging Children and Educators

As a reference point for how to support the rights of young children, we refer to *General Comment No. 7* on early childhood (United Nations, 2005). This states that all programs and professionals responsible for young children should adhere to the *principle of best interests*, which involves the protection of children's rights and promotion of children's growth and well-being "while taking into account their views and evolving capacities" (para. 13). A rights-based lens, therefore, requires listening to young children and actively inviting their perspectives. The involvement of children in the design of services is a requirement of the UNCRC as well as a means of optimizing children's claims and enhancing their authority as stakeholders (Lundy & McEvoy, 2009). This perspective, however, has not received due recognition because of the prevalent view of young children as incompetent and unable to actively participate in matters that affect their daily lives (Clark, 2010).

The present study was based on the principle that young children are knowledgeable about their own experiences and their own lives and that listening to children will enlarge and enrich pedagogical practice. As supported by a growing body of research, young children are shown to engage in designing their spaces (Clark, 2007; United Nations, 2005). When asked and listened to carefully, children as young as 18 months can share their insights and understandings (Lansdown, 2005). Children can speak to what matters to them in their particular space. Alison Clark (2007, 2010) has written about children as collaborators and contributors to design processes.

Another implication of a rights-based lens considered for this study was the need to involve the perspectives of educators as critical duty-bearers responsible for breathing life into children's rights. *General Comment No. 7* (United Nations, 2005) states that State Parties have a responsibility

to promote the active involvement of parents, professionals and responsible authorities in the creation of opportunities for young children to progressively exercise their rights within their everyday activities in all relevant settings, including by providing training in the necessary skills. . . . It also requires adults

to show patience and creativity by adapting their expectations to a young child's interests, levels of understanding and preferred ways of communicating. (para. 14[c])

Adults therefore need to create opportunities as well as adopt appropriate skills to engage young children. With the number of hours young children spend in early childhood centers, the role of educators in making this a reality is becoming increasingly important.

Applying a rights-based methodology in this study therefore involved working with both young children and educators, a dual emphasis that has often been overlooked in practice. We were interested in how young children and educators actively engage outdoors.

METHODS

Multisite Case Study

This study emerged from an interest expressed by educators in four centers who valued the time children spent in the outside space and were curious about creating more natural environments and exploring alternatives to the usual playground structures. As described here, the four centers served different groups of young children, and each had initiated a process to reflect on a redesign of its outdoor space.

One center was an infant/toddler program with 12 children younger than 3 years of age that served young mothers enrolled in an educational program. The infant/toddler program was based in an alternative school in which the children's mothers were enrolled in high school. This center had a large deck that looked onto a field with a couple of fruit trees. The staff had decided that by opening the deck onto the field they could use the field more often as an outside play space. This project provided the impetus to plan an outside space for toddlers.

The First Nations early childhood program served children from birth through school age. The outside area for the 3- to 5-year-olds had a climbing structure that licensing had approved but, subsequently under new regulations, wanted removed. They wanted to create a plan for the outside space. This play space had a natural slope and a bank with a large rock set into it and a lovely corner with bushes and trees. One of their goals was to have a replica of a Big House (where cultural activities traditionally take place) built for the outside area.

The university-based 3- to 4-year-old center had a large climber it wanted removed. They had built gardens and took the children beyond the fence of

their outside area to the nearby wooded areas. The children loved the ravine and woods beyond the fence, and staff felt the children learned a great deal as they moved over logs and through the trees and watched the water in the creek come and go with the seasons. They were interested in creating a richer, more engaging space outside their classroom.

The fourth program joined the study slightly later than the other three. They had heard about the project and asked to join our group. A preschool program that ran alongside a child care program, they spent almost half their time outside whatever the weather. Backing onto a nature reserve, they used the hill behind them for children to climb and explore. They were interested in sharing ideas and strategies for engaging children in the natural world.

In this multisite case study educators shared a common interest in engaging in discussions around how their outdoor spaces could better reflect children's interests, making them more accountable to children. The engagement of these educators provided a unique context for carrying out research activities with children and educators.

Approach With Children

Several methods were used to engage young children and educators in sharing their perspectives on the outdoors. As this was a participatory case study, participants were engaged members of the research; both the children and educators contributed to the research design and outcomes (Reilly, 2010). To understand the children's perspectives, we drew on the idea of a *mosaic approach*, defined as a "multi-method strength-based framework" (p. 116) that captures the strengths of young children by combining imagination and sensitivity and using participant observation and other participatory tools to engage the under-6-year-olds (Clark, 2010). In each center we had a minimum of four observation sessions, with at least two of these sessions videotaped. All observations took place in the morning during the spring and summer.

We found, across the different programs, participant observation to be a primary method of hearing from young children in unmediated ways. This involved spending time carefully observing what children were doing, what they gravitated to, and how they used the space and the elements available to them and then asking questions about what they were doing, but only when invited by the children. Seeing us take notes during the observations, children often came to us and started talking, showing us around their play area, sharing information and answering our questions. We found the informal setup made children eager and comfortable to talk at their own pace about what they did outside.

One interactive activity used was showing the children videotapes as a point of discussion of their outdoor play spaces. During the viewing, we observed children's reactions, heard their narratives in response to seeing and hearing themselves on the tapes, and asked them if we had correctly understood what they told us previously. Some children were more interested in sharing with us than others. Some were more interested in showing us their outside area. In two centers, we brought photos of the outdoor space and asked the children to discuss them, showing us what they liked and did not like. The activity resulted in a lively discussion in the center for the 3- to 4-year-olds but worked differently in the center for the toddlers. In the infant/toddler center, an almost-3-year-old boy systematically took each photo and went around the playground placing each one at its corresponding location! An activity intended to begin a dialogue on favorite/least favorite places proved to illustrate this boy's familiarity with his particular outside place. Another time, we brought in different materials, such as sand or water or small people and replicas of swings or slides, aimed at engaging young children in designing their ideal outdoor space. Instead it was informative to see to which materials children were most attracted.

Throughout the study, cultivating relationships with the children and educators was important. This aspect was greatly facilitated by one of us having community credibility, with years of experience as an early years educator. Our decision to proceed with an ethic of care extended to how we dealt with the consent form (Dahlberg & Moss, 2005; Elliot, 2007; Noddings, 1984). Although a university-approved consent form had been sent home to the parents/guardians requesting permission for their child's involvement in the study, we took the question of consent to the children themselves. The first day we visited we explicitly explained the purpose of the study to the children and asked their permission to tape and take photos, and we emphasized that they could tell us any time not to take their photo. We tried to remind them of this at times when we sensed reluctance during the research. All of the children agreed to be part of the study. Taking time and space for the children's agreement signaled our intent to take their active participation seriously. This meant staying aware of our own limited understanding of their perspective as we conducted research *with* young children.

Activities With Educators

After the observations and interactive activities with the young children, we did focus groups with the educators, asking two or three from each center for their views on play and learning outside. We asked about their experiences

with the children outside, what they noticed, and how they felt outside, as well as details about their own childhood experiences. We asked about restrictions that they faced in their outdoor spaces. We asked what the children did outside that was different from inside and for examples of what they learned outside. Two of the educators kept journals of their observations and understandings of the children's outdoor play that they shared with us, and these texts furthered our insights.

An integral dimension of the research method was the creation at the outset of a learning community among the educators (Elliot & Blanchet-Cohen, 2009). As a group, we met to discuss our visions for the outside spaces and shared ideas and stories of what we observed children doing outside, and as researchers we spoke of how we might proceed in gathering the perspectives of young children. We named ourselves the Natural Play Space group and met a total of six times during the course of the study. During the meetings we also introduced resource personnel—once inviting a landscape architect to share ideas and photos with us on what has been done elsewhere—and created opportunities for dialogue with other stakeholders, for instance by inviting the licensing officials responsible for ensuring that early childhood programs meet provincial standards.

To further the involvement of participants in the research analysis, the themes and ideas developed during the slightly longer than 12-month period were collated and discussed in a final meeting with educators to which we also invited the licensing officials. A rich dialogue began on the issue of safety in the outdoor environment. We agreed to continue our discussions and inquiry to explore how children's interests and enjoyment of being outside can be more fully supported by educators and society. These exchanges contributed to the research findings and to their dissemination.

FINDINGS

Although each program had a different vision and perspective, we found commonalities among the educators and the children of the four programs. The first common theme was young children's enjoyment of and deep engagement in play outside, and related development and learning opportunities. The second related to the educators' nurturing of opportunities for outdoor play, and the skills entailed in valuing the outdoors. Specifically, we discuss how educators in the study mediated outside restrictions on children's play outside. A final outcome of the study was the learning community in which educators shared ideas and resources and how this helped build support for advocating for natural outdoor spaces for children.

Children's Multilayered Engagement Outdoors

Most of the children expressed enthusiasm for being outside. We heard an intensity and eagerness in children's narratives about playing outside, and we saw the deep focus of the children and the joyful engagement in our observations. In each center, children had clearly identified a special place outdoors. The First Nations program had a rock around which the children had created a number of games, a large tree that served as a hiding spot for some children when they needed time on their own, and a clump of bushes that provided a space to be with a friend. The toddlers showed us their joy as they climbed a small hill and rolled or ran down the side. In the 3- to 4-year-old program, children spoke of the ravine and others spoke of the gardens. They treasured the space that allowed for running. The preschool children were enthusiastic about the "cave" that was part of the landscape on their hillside. In each program children named a natural space outside, not a structure.

Children involved all of their senses outdoors. In terms of physical movement, we saw lots of running outside and other large-muscle activity. Running was often a favorite activity, with remarks such as "I love to run downhill and jump over the benches at the bottom" or "I love to jump from the top of the rock." We also saw children smell plant leaves, feel the bark of trees and the soft fur of caterpillars, and taste mint leaves from a garden. Sand was also intriguing. Children liked digging holes and filling them with water, or burying things. In one sandbox the children dug through the sand to the soil below and explained that the "sand is melted earth."

Outside young children incorporate natural elements into their play and their movement. A bush could be hidden behind to be alone or with a special friend; a rock would be climbed a multitude of ways; a tree could be a solid presence to provide support when waving to a sibling or cousin in the next yard. Children were also intrigued by the different elements in the natural environment. One child who had just planted a bean plant told us that her plant was "this tall," holding her hands about 2 feet from the ground.

Bugs and worms attracted many children. In each program, children spent time examining small living creatures. A toddler educator reported, "Bugs are thrilling. The children love to see them scamper about, hide in cracks, or are scared and concerned about being bitten." In the young parent program, one of the boys was helping another overcome his fear of caterpillars by encouraging him to hold the caterpillar. Children played a unique role in encouraging their peers to appreciate the beauties of nature. At the 3- to 4-year-old program, the caterpillar became a source

of entertainment and discovery. A 3-year-old boy picked up a caterpillar, saying, “He is coming with me,” and started walking around with the caterpillar on his hand and decided, “Let me give her a flower.” An educator reported,

One child finds a caterpillar and rushes to show the teacher, other children crowd around to see and touch. After all had a turn, three children took the caterpillar for a walk around the garden. They put him on different surfaces, the wood, the rocks, “Hey! Look, he’s dancing!” They finally decided to let him go free on the raspberry bushes.

Within a natural setting, with its rich diverse materials and opportunities, the possibilities for imaginary play and learning are endless.

Spending time in a natural setting, children observe nature and have a unique opportunity to learn about the sources of their food and the seasons of growing, harvesting, collecting. The toddlers did a spontaneous “apple dance” when picking the apples to make a pie. The following spring, they noticed the blossoms in the trees and asked if they were the trees where the apples had come from. They noted the seasonal transformations of the trees, showing an ability to connect to a cycle of nature. Children in the First Nations program shared stories about their trip with elders to the beach that was a traditional area for gathering crabs. They loved going to the beach to learn about clams and crabs. They too were introduced to a traditional and seasonal cycle. The 3- to 4-year-old program had another example of a natural cycle that the children noted. A stream they saw regularly while walking to the small forest behind their center was full of water in the winter and dried up in the summer. Each of these stories illustrates the local knowledge and stories the children were accumulating and the sensual, embodied memories they were storing.

In one of the centers, a large manufactured climber was taken down during the study, providing a unique opportunity to observe changes in play. When the climber was there, children used it little and for a purpose other than climbing—as a platform to look out over the playground or a place to meet with friends. During an observation session there was an interesting dialogue between the children and the researcher:

Researcher: Do you like the climber?

Child 1: Actually, I like the swings best.

Child 2: Everybody likes the swings best.

Child 3: They are going to take the climber down.

Child 1: What are you writing down?

Child 2: I will show you how I slide.

Child 2: I will show you on my tummy this time; I like it on my tummy best.

Child 2: Can you write this down?

Child 1: Can I show you around?

The dialogue shows children's curiosity about the note-taking but also that although children commented most often on natural elements, they also enjoyed some outdoor structures like the swings. Swings were used in a solitary manner as a place for dreaming and reflection or as a test of skill, exploring different ways of moving from one swing to the other without touching the ground. Children often socialized at the swings, with one child on the swing and a friend standing nearby chatting. The movement of the swings seemed to have a particular draw.

To replace the climber, loose logs were brought up from the beach and opened a range of opportunities to diversify play. Likely in response to someone who had been camping, the children once made a fire circle. Another time, one log balanced across another log became a seesaw. On another occasion, it became a police station. According to the educators, the logs have increased the amount of imaginary play. One explained, "Before it was imaginative, but now they have to work through how they are going to move the log. [That] creates more cooperative play, collaboration and problem-solving. I have seen more bonds in play." Educators remarked on the greater autonomy of children outside, "They don't look to us for approval. They can figure it out on their own." Another explained how they learn about group work, "Lots of opportunity for leadership for workers, leaders . . . they problem-solve a lot out there. How to get from point A to point B . . . leaders emerge and helpers as well as observers. Lots of construction, mixing—like early chemistry." The learning opportunities are rich, varied, and many-layered.

Educators Nurture the Outdoor Connections

Throughout the study, we found that educators play an active role in nurturing young children's relationships with nature. As one educator explained, "Children are naturally attracted to nature, but that we have enthusiasm for their explorations also helps." In each program, educators drew on and adapted to the natural features of their immediate landscape and surroundings. The 3- to 4-year-old program took advantage of its closeness to a forested ravine. The children considered the ravine the "real playground," though it was not actually part of their playground. In the ravine the children and educators watched the stream flow full and noisy in the winter and dry to a trickle in the summer. The preschool program took advantage of small streams created during the rainy season and encouraged

children to divert water and create dams. The First Nations program was close to the beach and arranged outings with elders to share information on harvesting shellfish.

Educators created opportunities for young children's exploration. One recollected bringing loose pieces of wood for the toddlers to play with from a tree recently cut down at her own home. She was curious to see what young children would do with these different sizes and shapes of sticks. One day during the observation we watched a boy select a crooked knobby stick and use it in four different ways: as a telescope, as part of a campfire, as something to build with, and as a pointer. The program for the 3- to 4-year-olds had created gardens where interested children cared for raspberry canes, pumpkin plants, and peas and dug for worms. Exploring the nature reserve, educators from the preschool program provided the children with space and permission to roam, encouraging them to roam around as long as they were in eyesight.

Focus group discussions revealed that educators appreciated being outdoors with the children because of the improved quality of their relationships with children as well as the learning opportunities it presented. Educators are more likely to be co-learners with children outside in the natural landscape because unlike the inside, they are less able to control the environment and the discoveries and often are discovering natural phenomena at the same time as the children. One of the educators mentioned that she had had to research erosion in order to answer questions posed by the children. In several ways, being outside encourages educators to be more exploratory and more imaginative. Not knowing in what direction the children's discoveries will take them, educators must be flexible.

In some ways, interactions with children outside can be demanding because of a shift in roles. One educator remarked that a common perspective among educators on time outside is that it is "break time. [Time to] stand with their coffee . . . staff time to chat and have a hot beverage. Interacting with kids was seen as radical. I was told I need to step back." But these educators described the need to be intently in tune with what is happening: "We can be more focused. It is far more on the kids." Another one affirmed, "I like to be really involved either standing back to see where play takes them, or stepping in when [it is] slowing down." Another educator stated, "There is more participation of the teachers in the kids' play."

Educators also perhaps felt less of a need to impose structure outdoors. The outdoors changes how young children behave with one another and with educators and allows them to explore multiple roles. Expectations are distinct: "I find it better outside, they are calmer. It is freer, they don't

expect a structure as much outside, an expectation though when they come inside.” Outside educators also have different conversations with children: “They ask more questions outside, even about our own families and life . . . they ask more personal questions. I don’t have those conversations inside.”

Motivating educators to be outside with the children was their own childhood memories. Each of the educators had a story to relate of his or her own enjoyment of being outside as a child. One person remembered the creek that ran behind her house that she spent lots of time exploring; another person remembered creating houses and little villages with stones, moss, and sticks; yet another remembered a favorite tree. Paying attention to their own joy in childhood allowed the educators to connect in the present to the children’s joy at being outside.

Overall, the educators agreed that the children were more relaxed outside and there was less conflict. An educator from the toddler program reasoned that this was due to the fact that children feel less crowded and more occupied and therefore have less reason to say “my thing” or “mine.” She further explained, “When outside, it is not so intense, if we have someone saying goodbye to parents and it’s a difficult separation . . . [all the children] will pick it up inside, it affects them less outside.” The outdoors makes interactions more peaceful, less intense.

Educators Mediate Restrictions

Emerging from our findings was an identification of educators’ roles in mediating external restrictions that might constrict children’s exploration outdoors. Thus, educators adopted unique ways of dealing with the specific safety issues that arose with some of the children’s favorite spots and activities. At the First Nations program, educators recognized that the children loved the rock. Although concerned with the children’s safety, they understood that jumping off the rock from different places at different stages was a rite of passage and allowed this play. The educators of the 3- to 4-year-olds told the children that in venturing outside the fence into the forest they needed to be in eyesight and permitted the children their explorations. The infant/toddler educators understood the children’s need to be in the puddles and bought muddy buddies for all the children. At the pre-school, when children would go into the small “cave” educators monitored the children’s activities from afar, allowing the children the feeling of seclusion and privacy.

While engaging with children in the outside space, educators were often anticipating whether they might be transgressing licensing regulations. We found that each program kept “secrets” from licensing. They made decisions

that contravened regulations based on their understanding of the children's needs, of the environment, and of their own experience. For instance, in bringing in the branches from the cut-down tree for the toddlers, the educator asked herself,

Would it be safe for toddlers? Well, let's try them. I brought the sticks and no one got hurt. Rocks did not go over so well. They could pick them up and they dropped on people's toes. We have to keep experimenting.

Educators were critical of regulations that limit children's exploration and learning regardless of the context. In one case, a center chose to keep the cherry tree in its yard. They explained, "We have to be aware of the dangers of eating the pits and that the bark is toxic, but it is worth keeping to enjoy the cherries." Educators tended to trust children's abilities to manage their own risk taking. Children usually have a clear sense of what they are capable of and what is a safe risk, as we saw from the boy who liked to run down the hill and jump over the benches at the bottom.

Educators saw the importance of allowing children to deal with risk as part of preparing them for life. Once we observed an interaction in which young children were jumping off benches at a height above the limit approved by licensing regulations. The educators worked with the children to break the jump into two stages, thereby maintaining some of the thrill for the children and keeping to the safety rules.

Another educator was highly critical of the role of licensing, saying, "If [licensing] had their way they would have [the plants and rocks] all out. It is like they were never children . . . boring." Several considered the current system inadequate, citing the tension between concerns for protection and pressures for learning: "You can't protect from everything . . . we go overboard with protecting from nature. You need to learn from this. We just have to watch because of licensing."

In addition to considering licensing restrictions, programs have to convince parents of the value of the outdoors to their child's development. Several programs reported that some of their parents were uncomfortable with the children going outside. Sometimes this concern was one of cleanliness and keeping clothes tidy, other times there was a concern about cold or rain. In response, several programs have included in their policies and handbooks a commitment to interacting with the real world outside, advising parents that the children and educators might "go outdoors with a moment's notice." Educators actively negotiated concerns about safety while providing experiences for children that were rich and satisfying. Educators felt that parents became more comfortable with their children's play outside.

The Learning Community Supports Change

Another finding from the study is how the research with its ongoing discussion group (which still continues) encouraged educators to reflect more deeply and carefully on the value of the outdoors in early childhood education. Although each program had been investigating on its own, the discussions strengthened the educators' interest in the outdoors, encouraging them to try different things and to spend even more time outside. Educators also became more interested in the children's perspectives about play outdoors. Some of the educators began to pay closer attention to the nature they experienced outside with the children. An educator e-mailed us after a discussion group in which she shared how her reflections were being instigated by the research:

I have actually been thinking about the conversation I had with you and Natasha towards the end of November. More specifically the last question you asked: "What I learn from the children when in a natural environment." I think probably the greatest thing I learn from the children (or even the best thing I get from the children) is to have a sense of wonder and curiosity about what is around me.

The idea sharing during the Natural Play Space discussion groups gave an impetus to the participants to pursue changes to their outside spaces in new ways. Being exposed to the possibilities led to exploring different avenues. Sharing ideas with the First Nations program, we heard how they wanted to build a Big House, which is of great significance to the Coast Salish culture. The Big House is a place for families to come together to share stories and pass on traditions. However, licensing officials at first refused to approve the building because it would have a fire pit, a vital part of the Big House. For the program, it had become an issue of cultural safety; the director of the program felt that the regulation was oppressive, as they knew how to best care for their children. She stated, "Our children have been coming to the Big House for hundreds of years. Children know to stay away from the fire." After multiple discussions with licensing and the director of the program, the fire pit was permitted. The accommodation involved putting fire extinguishers at both ends of the Big House and building a smaller fire pit. Exchanges in the learning community helped her as well as provided her with valuable arguments.

Within our discussion group, we were able to create a safe space for dialogue. Inviting licensing officials to be part of the discussion gave an opportunity for educators to articulate the benefits they saw the children gaining from their explorations outdoors in more natural settings and to gain confidence in advocating for the children's engagement in a natural

setting. In turn, the licensing officers were able to hear some of the concerns of the educators and respond to misconceptions. In a final discussion with educators and licensing, in which we presented the results of the study, we raised the issue of safety and “secrets.” Although the licensing officers acknowledged that their primary concern is safety, they also explained recent efforts to move in a new direction. With the recognition that regulations had become restrictive and cumbersome, there was a move to be more flexible and negotiate with early childhood programs on how they could ensure children’s safety when some aspect seemed potentially unsafe. We saw the importance of sharing research to support the voices of educators and children as well as promoting progress in licensing procedures.

DISCUSSION

This study speaks first of all to the significance of children’s engagement with the natural materials outdoors to their learning and development. In paying attention to where and how children use their outdoor space, we observed their eagerness to climb big rocks and explore their relationship with the rocks, use raspberry leaves for pie, turn over rocks to find crabs, and find a connection to insects and worms. We were repeatedly reminded of Wilson’s (1993) notion that humans have an innate “emotional affiliation to other living organisms” (p. 31). A natural play space provides an opportunity for children to discover who they are in relationship to the trees, plants, living creatures, and terrain of their environment. They discover the abilities of their bodies to climb rocks, dig in the dirt, and lift logs with a group of friends. They socialize as they coconstruct and share their wonder and curiosity. As shown here, a natural outdoor environment can provide for a holistic education, meeting the UNCRC’s aim for education.

This study points to the importance of revisiting the prevalence of playgrounds covered over with rubber matting, pea gravel, and concrete with a prefabricated climbing structure (Herrington & Lesmeister, 2006). The use of a rights-based methodology suggests that natural outdoor spaces that reflect the local geography, flora and fauna, paths, and streams and the seasonal changes that take place within that locale would better meet the interests of both the children as well as the educators (Elliott, 2008; Keeler, 2008).

Natural play spaces in early childhood centers can also be the building blocks to creating environmental citizens among young children. All four outdoor spaces involved offered lessons for learning: the fruit trees to measure the season and learn about the fruit cycle, the height of the rock to measure how much stronger or bigger a child has become, the garden

to discover the fruits of the earth. In learning to read the local geography, children develop their attachment to place and their sense of security and competence. They may also, within that landscape, begin to feel a responsibility to protect the environment (Davis, 2009; Gruenewald, 2003; Sobel, 2008). Being in a less controlled environment, educators can also be fulfilled. As they explore and reflect with the children in the outdoors in ways that stimulate their own imaginations and understandings they may have an experience that Csikszentmihalyi (1990) called *flow*. Being present to the children and concentrating on the activity, the educators can find themselves focused and flowing with the experience.

Although young children have a natural affiliation with nature, this study highlights the role of educators in nurturing the relationship. Educators provide the mentorship evoked by Carson (1965), who spoke of the companionship of an adult to introduce a child to the wonders that can be found outside in the trees, the wind, the ants, and the earth. Indeed, "access to outdoor space is not enough to engender such attitudes; the use and management of the outdoor space by adults is as important as access itself" (Maynard & Waters, 2007, p. 257). Educators are active outside in ways that call for creativity, flexibility, questioning, and listening. These skills and qualities are what *General Comment No. 7* (United Nations, 2005) calls for in order to implement a rights-based approach to programming in the outdoors. In our own research activities with children, as we tried to be researchers who listened carefully, we had to try various activities and questions to reach understanding. To remain open to children's responses, we had to be careful not to judge too quickly what they might mean, realizing that we could not know their reality completely. We were reminded of Rinaldi's (2006) comment: "[It] is not easy. It requires deep awareness" (p. 65). In addition to the patience and creativity called for in *General Comment No. 7*, we had to be humble, aware that we listened and observed carefully but did not always understand.

Moreover, the research points to the role of adults as advocates for rights-based programming. Educators were critical in subtly curtailing hypervigilant licensing regulations. Children, as shown in this study, seek the opportunity to challenge their skills and engage their imaginations; they want challenges that slightly exceed their abilities, and if such challenges are not readily apparent, they find them. When running downhill becomes easy, the action is complicated by "jumping over the benches at the bottom." This was not the planned use of the benches! Listening to children has therefore meant contravening licensing regulations that focus on safety issues with little consideration of children's own ability and capacity to calculate risk. To provide a rich, stimulating, and challenging environment in which children can grow and learn, each program kept "secrets" from licensing. This study

is a reminder of the importance of adult allies in implementing a rights-based approach and the need to overcome the tensions that may be at play in providing for a better alignment of knowledge, practice, and policy.

CONCLUSION

More broadly, this study speaks to the importance of collaboration between researchers, educators, children, and decision makers in providing for the best interests of the child. Implementing a rights-based approach is about ensuring young children's participation as well as creating partnerships among those concerned to promote and advocate on behalf of children. Early childhood educators, reflecting on their own experiences, understand the importance of children connecting with the natural landscape. Without the exchange of ideas, the sharing of possibilities, and the consideration of experiences and evidence from elsewhere, young children's perspectives and interest in natural play spaces and materials can be ignored, the potential of the natural play space will not be realized, and children will not have the experiences of interacting with the richness and diversity of a natural setting. The learning community that emerged from this study created a momentum that gave voice to children and educators, put pressure on licensing regulations, and served as an inspiration to hesitant parents. The work is continuing.

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