

Thinking Outside the Four Walls of the Classroom: A Canadian Nature Kindergarten

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Published online: 3 October 2017
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Abstract The authors share a narrative of planning and implementing a Nature Kindergarten in the public school system in British Columbia, Canada. Inspired by similar programs in Northern Europe, the Nature Kindergarten became the first program of its kind in Western Canada. The importance of developing pedagogical principles, understanding local context and designing a program that is responsive to place is highlighted. Learning about the place in which they live offers Nature Kindergarten students opportunities for learning that cannot be found inside a classroom. This learning can be complex and layered and deepen children's connections to their place. Outdoors, the Nature Kindergarten educators also take on a different role that has encouraged them to continue to question their thoughts and practices around emergent learning. The authors conclude that the process of creating a Nature Kindergarten provided an educational opportunity to think differently about how Kindergarten students learn, what they should be learning, and to articulate a pedagogy that embraces complexity and uncertainty.

Keywords Canada · Nature Kindergarten · Pedagogy · Early childhood education

Résumé Ce rapport narratif décrit la planification et la mise en oeuvre d'une maternelle Nature dans le système scolaire public de Colombie-Britannique, Canada. Inspirée par des programmes similaires en Europe du Nord, la maternelle Nature est devenue le premier programme de son genre dans l'Ouest canadien.

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L'importance de l'élaboration de principes pédagogiques et de la compréhension du contexte local, afin de concevoir un programme sensible au milieu, sont mises en évidence. Apprendre dans leur milieu offre aux étudiants des occasions d'apprentissage qui ne peuvent être trouvées dans une salle de classe. Un tel apprentissage peut être complexe, multiple et approfondir les liens des enfants avec leur monde particulier. Dans les espaces extérieurs, les éducateurs ont pris un rôle différent qui les a encouragés à remettre en question leurs idées et leurs pratiques en matière d'apprentissage émergent. Le processus de création d'une maternelle Nature a donné des occasions éducatives de réfléchir autrement sur la façon dont les jeunes élèves apprennent, sur ce qu'ils apportent à l'apprentissage, ainsi que d'articuler une pédagogie du lieu qui englobe la complexité et l'incertitude.

Resumen Este informe narrativo describió la planificación e implementación de un Kindergarten de la Naturaleza en el sistema escolar público en British Columbia, Canadá. Inspirado por programas similares en el norte de Europa, el Kindergarten de la naturaleza se convirtió en el primer programa de este tipo en el oeste de Canadá. Se destacan la importancia de desarrollar los principios pedagógicos y la comprensión del contexto local, a fin de diseñar un programa que responda al lugar. Aprender en su lugar ofrece a los estudiantes oportunidades de aprendizaje que no se pueden encontrar dentro de un aula. Tal aprendizaje puede ser complejo, acumular y profundizar las conexiones de los niños con su mundo particular. En los espacios al aire libre, los educadores tomaron un papel diferente que los animó a cuestionar sus pensamientos y prácticas en torno al aprendizaje emergente. Los procesos de creación de un Kindergarten de Naturaleza proporcionaron oportunidades educativas para pensar de manera diferente sobre cómo aprenden los jóvenes; lo que aportan al aprendizaje, así como articular una pedagogía de lugar que abrace complejidad e incertidumbre.

Introduction

In September 2013, twenty-two children came out onto the school field with their new black rain pants swishing, grins on their faces and a bounce or two in their steps. It was a sunny day with the hint of a small breeze; the grass was a bit prickly due a dry summer. Eyeing each other a little shyly and listening to the teacher's instructions to make a circle, the children put their little backpacks in a pile in the center of what would be the circle and sat down. Introductions happened and the teacher and early childhood educator began to build a community that would spend half of each day outside, whatever the weather. After a year and a half of planning, the Sooke School District's Nature Kindergarten had started.

At the outset of our journey to start a Nature Kindergarten in the Sooke School District, even before the program itself began, we had requests to speak with local, national and international audiences, this was more than we had anticipated. Since 2012, we have been sharing our experiences of creating this program in the public school system through articles (Elliot 2014; Elliot et al. 2014; Hoyland and Elliot

2014), presentations and interviews. These opportunities have provided us with important opportunities to revisit our ideas, shift our understandings in light of accumulated experience and uncover some of the tensions we have experienced and continue to experience. Our story is ours and, we hope, may be useful to others thinking about beginning a similar program.

How a Good Idea Came Together and Took Form

The idea of a Nature Kindergarten had struck a communal chord in the Sooke School District, located on Coast Salish Territory on Vancouver Island, British Columbia, and it was here that the project was conceptualized, planned and implemented. Southern Vancouver Island is a place of rocky shorelines, sandy beaches, coastal bluffs and wooded hills with Coastal Douglas-fir and Western Hemlock ecosystems. There are many streams throughout this landscape, home to a variety of fish and habitat for bears, cougars and deer. Coast Salish elder Dave Elliott Sr. noted in 1980 (as cited in Turner and Hebda 2012, p. 11) "... ours was an abundant land. Our forests, meadows, creek sides, marshes and seashores offered many plants for our use," and his ancestors have been on these lands for over 10,000 years (Turner 2005), and the land has supported and nourished them until recently, when colonization disrupted Coast Salish society and way of life.

Frances Krusekopf is a teacher and an administrator in the Sooke School District and was key to encouraging the district to undertake this project, while Enid Elliot is a researcher and early childhood educator who has documented the process and carried out research over the years since the project's inception. While we have spent a few years planning and thinking together about this program, writing its story has allowed us to think about it again. We have tried to tease out some of the thinking behind the Sooke Nature Kindergarten and what has emerged over the time the program has run. Looking back over the past 7 years that it took to plan and implement the program has given us a different perspective and understanding from what we first thought about it. We are firm in our belief that each Nature Kindergarten and related programs will be unique and will need to be responsive to its community, environment and context from which it emerges. In other words, it appears clear to us that there are no generic models of Nature Kindergartens: They must be place based. Ours is a discussion of an educational experiment connected to a local situation.

The idea of a Nature Kindergarten started as a café conversation in January 2011, when Frances shared photographs and stories with Enid of her son's *Waldkindergarten* experience in Munich, Germany. This was the beginning of a partnership that is continuing as we share this ongoing journey while supporting others in their own process of building Nature Kindergartens.

Over coffee, Frances talked about how, in the spring of 2010, her family stepped away from their life in Victoria, BC, to immerse their two children, then aged 4 and 6, in a German language experience for 4 months. Having heard about the *Waldkindergartens* (forest Kindergartens), Frances found *Wurzelkinder Waldkindergarten*, a program somewhat near their new home on the outskirts of Munich, Germany.

Over the past 20 years, German early childhood educators and parents of young children had embraced the idea of outdoor programs for young children. While Germany had outdoor programs earlier, the current interest surged with inspiration from programs developed in Scandinavia (Bickel 2001; Miklitz 2007), with much of the interest coming from parents who sought this type of experience for their children. The number of *Waldkindergartens* in Germany has grown to approximately 1000 in 2017. Operating as one form of government-subsidized child care, they typically run as a parent-governed nonprofit full-day program from Monday to Friday for 3–6 year olds.

Wurzelkinder Waldkindergarten was staffed by two energetic and experienced early childhood educators, and supported by a practicum student and a young man completing his mandatory year of public service. Most children arrived at about 8 o'clock, dropped off on their parents' way to work and spent the whole day outside in the woods. The day began informally as the children played freely while waiting for their peers to arrive and their educators to prepare for the day. Frances remembers arriving one rainy morning to find three boys playing with boatlike objects, made of natural materials, in a puddle that had emerged in the middle of the path. Oblivious to the weather and obstructing traffic, the boys were deeply immersed in their explorations of boats and the growing puddle. Bickel (2001), in her discussion of *Waldkindergarten* programs, describes that one outcome of being outdoors in all types of weather is that children learn that outdoor exploration and play can be enjoyable regardless of the conditions.

The daily *Wurzelkinder Waldkindergarten* routine included an excursion to a forested site or to the nearby banks of the Isar River. The young children walked in a relaxed manner that is less familiar in our Canadian context, where young children are more likely to be in lines controlled by educators when walking outside. The German children freely wandered in small clusters along the path, with older children empowered to run ahead and wait for the group at predetermined stops. Impressed by the children's respect for the guidelines of journeying like this, Frances was also amazed at the stamina of these young children who walked up to 3 km each day. No child complained about the distances travelled; instead, they chatted playfully with one another or learned about the plants found en route. This informal process aligns with the principles laid down for *Waldkindergarten* programs where informal conversations and observations about the flora and fauna along the path encourage the young participants to experience and notice the natural world and its rhythms (Bickel 2001; Miklitz 2007). At times the children brought along a soccer ball to kick around in an open field, but for the most part manufactured toys or playthings were reserved for Fridays. During every outing, the children participated in a ritual of gathering together in a circle on the forest floor or a rocky river bank to eat a snack that they had carried in their backpacks. While eating, they often acknowledged nature through song or words. This was a common practice in *Waldkindergartens*, where educators hoped to build a deeper connection between the children and their natural environment by educator-led conversations and sharing stories and songs (Bickel 2001; Miklitz 2007). In particular, Miklitz (2007) speaks of *Waldkindergarten* programs allowing children to experience the rhythms of the natural world because they spend all their time outside.

Enid, who teaches early childhood education at Camosun College, had also read about the *Waldkindergartens* and other similar programs in Northern Europe, and over coffee with Frances, she shared her enthusiasm and belief that British Columbia was ready for a program like this. As an administrator of curriculum and instruction at the School Board office, Frances was well placed to work on this idea. With the possibility of creating a Nature Kindergarten in front of us, we began to plan.

Examples of this type of education were scarce in Canada in 2011, and to our knowledge, a nature-based program similar to the German *Waldkindergarten* model did not exist in a Canadian public school. Two notable Canadian forest preschools included Carp Ridge Learning Centre in Carp, Ontario, formed in 2008, and an outdoor preschool program at Kerry Wood Nature Centre in Red Deer, Alberta, established in 1987—neither in the formal school setting. Because of her research with early childhood programs and their outside play spaces (Blanchet-Cohen and Elliot 2011) and having read about the movement of nature-based preschools in Northern Europe, Enid was familiar with some of the different philosophies and histories behind the early childhood programs. Everything Frances talked about that afternoon in the café corroborated Enid's interest in the educational possibilities of this movement.

At the time we were talking, this “movement” was catching on in Britain, Australia and New Zealand (Knight 2009). In Canada, our timing was right as there was growing concern about obesity rates and fitness levels among young Canadian children (Ebbeling et al. 2002). Getting children outside seemed to be one answer to these concerns, as research has shown forest preschools benefit children physically, emotionally and intellectually (Williams-Siegrfredson 2012). Early studies of children playing outside indicated that participants were able to concentrate better, had better physical and motor development and engaged in more complex and imaginative play (Chawla 1990; Grahn 1996; Sobel 1993). An explosion of research in the past few years suggests that being outside is beneficial to children on many levels (Chawla 2015; Elliot et al. 2014; Selhub and Logan 2012).

During her two and a half years at the Board office, Frances had established a strong working relationship with the senior management team as well as with the Board of Trustees. Having championed various initiatives, she understood what factors needed to be considered to successfully propose, develop and implement a new program. It was also an auspicious time in British Columbia for educational innovation related to children in the early years. In 2010, the provincial Ministry of Education decided to change kindergarten classes from half day to full day. With that change, there was increased instructional time and an interest in reinvigorating play-based learning in the early (or primary grades) years.

Early on, the three post-secondary institutions on southern Vancouver Island—University of Victoria's Faculty of Education, Royal Roads University's Environmental Education and Communication program and Camosun College's Early Learning and Care program—were represented on the planning/advisory committee through faculty and staff involvement, along with key players from the Sooke School District such as the Principal of Aboriginal Education. As word of this project began to filter out to the community, others asked to join the Advisory

Committee, which grew to include many individuals of differing backgrounds, all willing to commit time and thought for the next 18 months. Whoever arrived or sought involvement was welcomed and invited to offer their particular skill, knowledge and perspective; our committee grew to include K-12 educators, academics, early childhood educators, biologists, park naturalists and interpreters, First Nations educators and environmentalists. Not everyone participated at the same time or for every meeting, but when we needed their expertise they contributed. Drawn from different segments of the community, each brought a unique idea of what a Nature Kindergarten might look like. Not everyone knew the names of the trees or bushes in the local forest; not everyone knew local First Peoples' narratives of place. But everyone saw this project as potentially providing children with experiences that might broaden their understanding of and connection to our local landscape. With many voices represented, we were able to develop a strong plan.

The Child in Nature

A Nature Kindergarten is a romantic idea; young children in nature conjure up images of wide-eyed innocence or for some trigger nostalgic memories of childhood hours spent in trees or at the beach. Nostalgia may be part of the appeal and motivation for creating this type of program. A memory of play outdoors as a young child has a nostalgic pull for many people, who often mention the freedom and the lack of adult surveillance as some of the attractive aspects of this type of play (Louv 2005). Memories of playing outside unsupervised are diverse, from play in the backyard creek to discover worms in an abandoned nearby lot to urban memories of grasshoppers and poison ivy. Chawla (1990) has found these memories can sustain people like "radioactive jewels buried within us, emitting energy across the years of our life" (p. 19).

The child in nature as natural and innocent is part of a long tradition in Western thought; Rousseau's depiction of the young child as being born in goodness only to be corrupted by society has been influential and become part of the common European/North American vernacular (Burman 1994). Other educators since Rousseau have made similar connections, such as Froebel and the idea of a child's garden (Kindergarten) (Weston 2000).

Research into environmental activists' histories and motivations has found that time spent outside, often with a caring and knowledgeable adult, influenced these individuals' commitments to their work (Chawla 1990; Louv 2005). Our Advisory Committee felt that supporting children to connect deeply with nature might in turn encourage them to protect and care for it as adults; to some, a Nature Kindergarten was thought to help build future environmental advocates and activists. Another concern within the group was the perception that within British Columbia and Canada, children's decreasing ability to roam freely and the increasing amount of time spent with computers and electronic devices might be associated with increasing levels of obesity and a general lack of fitness (Chawla 2007).

Whether for romantic ideals or practical reasons, our group brought their particular expertise and motivations to our discussions. When it became clear the Nature Kindergarten was a real possibility with the School District ready to entertain a plan from us, the committee began to grapple with creating an educational vision for the program; however, we would be in uncharted territory. While Frances had experienced the *Waldkindergarten* in Germany over a few months and Enid had visited a small preschool program outside Ottawa for a day, neither of these programs had been in a public school setting. Others on the committee had done reading about or had heard of this type of program, but none had actual experience.

Creating a vision and principles of a Nature Kindergarten that would operate within the public school system began to bring form and substance to the ideas that were generated by our open-ended discussions. Finding a perspective and a guiding philosophy as part of creating an educational vision supported us as we moved forward with establishing the program, and ultimately would help guide the educators as they ventured beyond the four walls. We were considering a pedagogy of place that included the children's relationships with the materials and life found in their local environs (Gruenewald 2003; Somerville et al. 2011) and needed to consider what education meant in this unexplored context, and what skills and understandings would be key for the educators to possess as they would be the ones to find a path to a successful program.

From Idea to Reality

Establishing a program within the public school system had its own constraints. The educational vision of a Nature Kindergarten needed to fit into the prescribed provincial kindergarten curriculum for British Columbia, and we needed to include the prescribed curriculum in our thinking. But not only was an educational vision needed, we also needed to plan for the logistics of safety, identify ideal teacher qualifications, imagine logistics of the actual school day, consider how to create a parent registration process and many other details.

Before our educational plan fully emerged, we had to make some initial decisions. As a committee, we decided that for a class of 22 children (the maximum number of 4 to 5 year olds for a kindergarten class in BC) we needed a primary teacher and an early childhood educator. Being outside in a forest beyond classroom walls, it was important that the teacher have a partner for safety as well as someone to work with in a team. We decided that an early childhood educator, being familiar with a process of documentation that investigated children's possible interests and concerns in order to build discussions and curriculum, would bring a unique perspective to this educational innovation. Rather than spending all day outside, we decided that children would spend each morning in the forest whatever the weather and come back to school for lunch, spending the afternoon in different in-school activities. The morning outside was a good amount of time away from the classroom; this would be new for the teacher and educator, and we felt it would be

useful to think carefully, with our committee, about the educational values and beliefs that would guide this practice.

In our early discussions, we collectively shared our assumptions and hopes for this program. We all agreed that children would benefit from being outside in the forest adjacent to the school, but defining how the morning might look uncovered different perspectives we each brought to the meetings. Some of the naturalists were focused on teaching the names of the various species and the parts of the ecosystem; some of the educators wondered how reading would be taught; early childhood educators saw multiple opportunities for play and exploration; the wilderness first-aid expert saw the possibilities for learning about safety; and First Nations educators had multiple narratives of land and beginnings that defined that place. The program, the place and the possibilities had multiple layers.

By discussing what principles and values would guide the program, we challenged our collective thinking about what type of educational experience for young children would be significant and meaningful. For many of us, this project was connected to feelings of responsibility and care for the environment and the particular place in which we live. We wondered how to help children find the connections to that place and how the place might welcome the children. Taking the time as a committee to discuss our thoughts and ideas about teaching and learning proved to be valuable. As we shared our visions for this program, we heard each other's viewpoints and stories and our own perspectives were enriched and broadened.

The focus and/or emphasis of the program might have differed for each of us. Following the BC Curriculum, (BC Ministry of Education 2017) interacting with the natural setting and the living beings found there, physical exercise and being welcomed to kindergarten/school were put forth as important elements for the Nature Kindergarten. All of us also felt we wanted to acknowledge and honor the First Peoples that had been caring for and loving this place long before the European settlers arrived. There was no question that the traditional stories and knowledges that were tied to the land and were appropriate should be part of the learning experiences.

Key concepts were discussed; what did we mean by “nature,” “education” and even “curriculum” were considered. Through 2011–2012, we shared and listened deeply to the different perspectives around the table. An initial discussion led us to revisiting Rachel Carson's (1965) quote about children's sense of wonder for inspiration.

A child's world is fresh and new and beautiful, full of wonder and excitement... If I had influence with the good fairy, who is supposed to preside over the christening of all children, I should ask that her gift to each child in the world be a sense of wonder so indestructible that it would last throughout life, as an unfailing antidote against the boredom and disenchantments of later years... If a child is to keep alive his inborn sense of wonder without any such gift from the fairies, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in... (Carson 1965, pp. 45–46)

All of us believed children could be out in the world as part of a learning community, and hear the multiple stories offered there in order to become familiar with the place in which they lived, to move confidently in the natural living breathing spaces of their community, to even fall in love with the wilder places and feel comfortable there. With Carson as a starting point, we went on to discuss how young children perceive the world through their senses, their bodies and their relationships as they construct their ideas about the world, themselves, and their community (Abram 1996; Merleau-Ponty 1962). Arriving in kindergarten for the first time, they encounter a learning community in which they will be engaged for the next 12 years at the least. Within this learning community, they will develop identities as learners, discover dispositions for learning and begin a relationship with school. As a group, we felt that the children should also engage with the wider world, their particular location in that world and create their own relationships with the life that is beyond the classroom.

By moving kindergarten outside, the children along with their educators have the possibility of rich opportunities to construct their identities as learners, community members and beings among other living beings. They can build multiple identities including an “ecological identity” (Thomashow 1996). Spending time engaged in the forest and creeks of Royal Roads University, the Esquimalt Lagoon and the beaches of the Juan de Fuca Strait, we hoped that the students would have an opportunity to form relationships with adults, peers, biota and their local landscapes. Led by a community’s inspiration, the models of European programs, a commitment to the environment and the possibilities of dynamic learning in the “larger community” (Berry 2006), our committee worked to articulate our vision and eventually a set of pedagogical principles emerged.

- *Connecting deeply with nature: environmental stewardship* teachers and students would nurture their relationship with nature with care, compassion and a sense of wonder for the physical world in which they live by fostering a “Sense of Wonder,” curiosity and inquiry and by encouraging a sense of responsiveness, and commitment to the environment and by supporting an understanding of ecology and sustainability.
- *The environment as another teacher* the understanding that all living things and systems are in connection with us is central to the program. Spending significant periods of time in the outdoors should support children’s awareness of their intertwined connections with natural landscapes and phenomenon. By moving freely in outdoor spaces, learning by looking into and with nature rather than at it, developing self-confidence in natural landscapes, engaging with the sensuality of nature, engaging in unstructured and spontaneous play and enjoying the sensory awareness of being engaged outside can all provide rich learning situations.
- *Learning collaboratively as a part of a community* Through a growing sense of place, children can begin to appreciate their connections within their local community that includes family, neighbors, friends and local nearby nature. The students may be able to learn with a kindergarten-level primary teacher, early childhood educator and community members such as First Nations Elders, CRD

parks educators and Royal BC Museum curators, grandparents and parents, building a sense of belonging and community by developing a sense of attachment to their “larger community” (Berry 1988).

- *Physical and mental health* with consistent and sustained interaction in and with the natural environment, children’s physical and mental well-being can benefit as being in a green setting fosters mental health and provides multiple opportunities for movement (Kuo 2010). Exploring their physical abilities, children have opportunities to take risks and become comfortable in their bodies.
- *Aboriginal ways of knowing* the forest the children would be entering each morning has been a special place of gathering and engagement for several Coast Salish First Nations bands (Turner and Hebda 2012; Turner et al. 2000).

All of these principles were meant to guide our program, and the extensive discussion, which accompanied their development, was an important step in our process. As noted earlier, even before the Nature Kindergarten started other schools and educators were interested in what we were doing. The process of developing our key ideas provided opportunities for discussion with our wider community. We immediately received feedback on one of our principles, *Aboriginal Ways of Knowing*; several people within the local Indigenous community suggested our wording gave the impression that we were assuming a universal Aboriginal understanding of nature. Canada has many different Indigenous groups each with their own language, narratives and knowledge unique to their particular place. We were grateful for this feedback and changed the term to *Local Traditional Knowledges*, which in our case meant Coast Salish narratives and knowledge. We began to understand that this particular aspect of our vision was complex and had multiple layers and that we needed to focus on sharing with the children the narratives that belonged to the place in which they would be playing and learning.

Each discussion or response to the outline of our educational vision invited us to refine and rethink our ideas. As we were interested in sharing the knowledge and stories that belonged to the particular site the children and teachers would regularly visit, we needed to think deeply about the meaning of the narratives held in the place. We wanted our program and perhaps other subsequent programs to be embedded within the local community, landscape and place, and so we were focused on the inhabitants, human and “other than human,” as well as the multiple stories of place which included traditional narratives as well as settler history.

Supporting the Educators

Once the program started, and together with the two educators, we set about developing a pedagogy that supported the children’s interests and connections to the earth, air and water. The teacher and educator had a support team that included the school principal, Frances (who was also a principal and familiar with the School District) and Enid (an experienced early childhood educator and researcher who documented the process, the questions, some of the answers, and more of the questions and reflections). Engaging with the Nature Kindergarten teacher and the

early childhood educator, this team continued to think about pedagogy that fits with being outside with children in the West Coast forest. In 2017, over four and a half years later, the team continues to refine and build upon the pedagogical principles of the Nature Kindergarten as we learn from the children, educators and the environment. We offered ongoing support for the educators that focused on an emergent design of the curriculum (Stacey 2009) that listened for children's questions, children's working theories and their stories of the earth.

What Have We Learned?

Clearly, the children had experiences that were different from ones that they would have found in a classroom. Outside in the living breathing world, what Merleau-Ponty calls "the flesh of the world" (Merleau-Ponty 1962) reaches out to them and invites them to know Thomas Berry's "comprehensive Earth community" (Berry 1988) or what Affrica Taylor calls "common worlds" (Taylor 2013).

A sense of community was strong among the children and educators. When outside, the children formed communities of safety where they trusted the teachers, as well as their classmates to care for them, physically and emotionally. Encouraging the children to take responsibility for themselves and each other was part of the program's risk management plan. Building this community of safety, the children were all given a kit of band aids, Kleenex, a "space blanket" and emergency food to carry in their backpacks. They learned how to behave if they sighted a predator (there are cougars and bears in the school's habitat), what to do if they stepped on a wasps' nest and how to negotiate the height to which they felt safe to climb or what to do if they became lost in the forest. Being in charge of a major component of their own safety promoted children's understandings of their own limits rather than imposed ones, and that each child's safety depended on everyone's safety. Within this community, self-regulation was more about regulating one's self within the group, and the group dynamics helped each child find their place. A child who insisted on barking all morning could be told by another child that she was a fairy dog and fairy dogs "don't bark." Rather than have to be quiet because her barking was annoying, the children found a way for her to still be a dog, but a quiet one.

Students shared learning with each other, as well as the teacher and educator. "I will meet you at the cedar tree." "That is an invasive species." "I am going to make an old age home for my worm, she is old and pregnant." "Worms are half boy and half girl." They learned about what trees might the local First Nations peoples choose for a canoe, and why. They absorbed information from each other as well as their teachers, community experts and the Aboriginal Support educator who journeyed with them one day a week.

The other-than-human community offered many opportunities for learning and different ways to express that learning. The children learned about paradox, like "when is my stick also your stick?" One day, Enid was walking down the trail with four children, and three had sticks and were comparing their stick's characteristics. The fourth child complained she did not have a stick and without missing a beat, the

child beside her broke his stick over his knee and gave her half of his stick, saying, “Now you do.” They learned about metaphor and poetry. For example, with a break in the clouds and a bit of blue sky, a child said, “the sky is waving at us.” While caring for the other creatures of the forest became a concern for the children.

One morning the children found that the anthills they had been visiting each day on the walk to their site were being covered with sticks and stones by others who walked in the forest, some of whom were from the older grades. Upset by the violation to the ants’ homes, the children made signs and posted them by the anthills, then visited some of the other classes to explain that the anthills were the ants’ homes and should be respected. While the Nature Kindergarten children were not always caring or thoughtful, and worms might still be stuffed into pockets or twirled by one end, even uncaring behavior could be an opportunity for discussion and thought.

While the Nature Kindergarten is a place of possibilities and invitations, it is also a place of uncertainty; outside of the four walls, there were many opportunities for children to engage with life, materials and the relationships that rocks, trees, owls offered them. Finding dead owls or watching a maggot crawl out of a dead animal can raise questions that call for thoughtful responses. One never knew what would present itself. Children were usually ready to see and seize the opportunities, and the educators learned to do the same, responding to the questions and concerns that arose from the current situation in which the children were engaged. “Why did the owl die?” “Where do the cougars hide?” “Why not pick the lily?” Educators must respond in the moment and to the children’s interest of the moment.

Educator Roles

Focusing on the children’s inquiries rather than following a set lesson plan became the two educators’ goal. They used narrations, children’s questions and theories, and their own observations and discussions with the children to see where to co-construct the teaching/learning. Working together carefully, they thought about what children seemed to be exploring and where their questions lay; they took notes of children’s ideas and decided which ideas they might follow. Working as a team, they were able to question each other when it seemed one might be settling for an easy answer to the children’s explorations. Was it really birds the children were focused on or was it woodpeckers or nests as homes? What was the entry point of children’s interests? They tried not to hijack the children’s discussions and manipulate them, but rather collaborate with them. The children were clear about their preferences and interests as they would often drift away from the teachers when something did not interest or intrigue them. Without walls, children are less contained within the space; place, the very fabric of the forest and land that they walked on, sat on and lay on, seemed to entice children to explore, to wonder and to ask questions. Without the walls, it was easier to drift away from an uninteresting lesson. As Orr (2013) says, “the place itself becomes an agent in the curriculum” (p. 184).

Being outside with children meant the teachers had to be ready for anything and willing to not know everything. There was so much to wonder about when in the forest: A dead owl may be in the path; worms may be everywhere as the rain pours down; and, bright red fungi might have sprouted up overnight. There are multiple stories to share—why worms come out in the rain, why is cedar a powerful ally, the history of immigrants and settlers, both plants and people.

As members of a community, we found that the children were capable and interested in exploring ethical questions and choices. For example, one day the children were wading in Bee Creek when a “shrimp” floated to the surface. One boy was particularly upset about the dead shrimp and wondered if their wading might have caused it. The next morning before heading out, the children discussed this problem and what they should do. “Perhaps we should not go in.” “Or maybe we should step really lightly.” “Or maybe we should only wade on the very edges.” All were good thoughts, but once the creek was in sight they forgot their resolutions and ran to experience the water. The power of the creek with flowing, bubbling water was too enticing to resist, but they had the discussion and had thought about their responsibility. Perhaps we all need continual practice in thinking ethically before we can truly act ethically and we can start this thinking early. Abram (2010) reminds us that we need to practice “right relations” with our immediate world.

Teachers and students experienced tensions that have to be negotiated. What is safe and how to decide this? How to include cougars and bears in our thinking, and how do we have “right relations” with these creatures? A bear was killed by conservation officers on the children’s playground during the first week of school, and the students talked about this. Should the bear have been killed? A dead bird found in the forest raised questions about death and loss and what it means to be prey. Worms offer examples of gender beyond a mammalian male and female dichotomy.

Settler stories and indigenous stories may present different and conflicting visions of the world to children. With multiple stories and histories that are not always easy to explain and which raise uncomfortable questions, these discussions were begun with young children, so they could also begin the journey to understanding the layers of complexity held by the land and the life beyond the classroom.

Where Are We Now?

We believe that the Nature Kindergarten presents us with an opportunity to think differently about education and to articulate a pedagogy of place that embraces complexity and uncertainty. As Gruenewald (2003) says, places “teach us about how the world works and how our lives fit into the spaces we occupy. Furthermore, places make us as occupants of particular places with particular attributes, our identity and our possibilities are shaped” (p. 621). Further, Sobel (2008) suggests, “one transcendent experience in nature is worth a thousand nature facts” (p. 13).

The educators wondered if the children could learn enough of the provincial curriculum with only the afternoons inside the classroom. After first 3 months

outside, the teacher shared that she could be outside all day and the children would be more than ready for grade one. Over time, the teachers and the two of us have become more comfortable with the organic nature of an unfolding and emergent curriculum, comfortable with the uncertainty of teaching this way and comfortable too with the children's abilities to notice, question, listen, share and grow.

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