

# College Faculty's Outdoor Play Pedagogy: The Ripple Effect

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## **Abstract**

*The governments of many nations invest significant funding into early childhood education (ECE) programs. These programs play an important role in preparing early childhood educators for the workforce; however, it is unknown how many include training in outdoor play. We examined how outdoor play pedagogy is positioned in publicly-funded college and institute programs in Canada. Only five Canadian public colleges listed explicit courses on outdoor play in the fall of 2018. Despite this lack of calendar offerings, a survey of 28 faculty from 24 different institutions indicated that outdoor play training was seen as important. We recommend that those working to advance outdoor play pedagogy include college faculty in the process and that professional development resources focused on outdoor play be made available to college ECE programs.*

## **Resumé**

*Dans de nombreux pays, les gouvernements investissent d'importantes sommes dans les programmes de formation des éducateurs à la petite enfance. Ces programmes jouent un rôle essentiel pour préparer les candidats au marché du travail; nous ignorons toutefois combien de ces programmes abordent le jeu en plein air. Le présent article examine la place qu'occupe la pédagogie du jeu en plein air dans les établissements et collèges publics du Canada. Cinq seulement proposaient des cours expressément dédiés au jeu en plein air à l'automne 2018. Malgré l'offre de cours limitée, la formation sur le jeu en plein air est jugée importante selon 28 membres du corps professoral de 24 établissements différents interrogés dans le cadre d'un sondage. À ceux qui travaillent à faire progresser la pédagogie du jeu en plein air, nous recommandons de faire participer au processus les enseignants des collèges et de rendre accessibles les ressources de perfectionnement professionnel sur le jeu en plein air dans les programmes d'éducation à la petite enfance offerts dans les collèges.*

**Keywords:** outdoor play, pedagogy, pre-service ECE programs, training, college faculty

**Mots clés :** jeu en plein air, pédagogie, programmes de formation initiale en éducation de la petite enfance, formation, enseignants collégiaux

## Introduction

Imagine what it would be like for a child on a day (or several days) of not being outdoors. Think about the experiences and learning opportunities that children

miss when they are not afforded access to the wind at their backs or the feel of raindrops softly falling. Imagine how the lack of outdoor play and connections to nature, such as observing and finding animal tracks in the snow, engaging in risk-taking, and developing environmental competencies, negatively influences children's social, emotional, cognitive, and physical development. Children are hard-wired to need nature and to be part of natural environments (Smirnova & Riabkova, 2016). It is widely recognized that positive outdoor play experiences in nature engage all the senses and promote a sense of curiosity and wonderment, which contribute to the development of children's self-confidence and connection to their environments (Carson, 1956; Wilson, 2012). This is foundational to children becoming stewards of the environment.

In many nations, governments have been investing significant funds into early learning and childcare—for infrastructure, the development of curriculum frameworks, access to early learning and childcare programs, and, in some instances, training and development. In Canada, publicly funded pre-service early childhood education (ECE) programs at community colleges and institutes play an important role in preparing early childhood educators for the workforce (Kaplan, 2018). Collectively, these colleges and institutes comprise the membership of Colleges and Institutes Canada (Colleges and Institutes Canada, 2019).

In recent years, researchers have viewed unstructured “outdoor play” as a vital experience for the healthy development of children, and especially young children (Chawla, 2015; Coe, 2016). However, as this study will show, in Canada and elsewhere, there has been a trend toward less outdoor play. This study is a preliminary investigation of how outdoor play pedagogy is positioned within Canadian colleges' and institutes' ECE programs.

## Background

Environments influence children's curiosity, activity, and inquisitiveness (Crohn & Birnbaum, 2010). Adult role models have a major influence on children's desire to explore, discover, and participate in caring practices that contribute to sustaining their environment on a long-term basis (Dietze & Kashin, 2019a). As well, environmental sustainability and developing a connection to nature, play, and ecological literacy are emerging concepts that are being encouraged to be adopted in early learning and child care programs because sustainable behaviours and social responsibility are learned and cemented at a young age (Louv, 2008; Redman, 2013).

According to some international scholars (Beery & Jonsson, 2015; Brussoni, Ishikawa, Brunelle, & Herrington, 2017; Dietze & Kashin, 2019a; Little & Sweller, 2015; Sandseter & Sando, 2016; Wood, 2017), the current lack of sufficient and intriguing outdoor play for children is problematic in many early learning and child care settings, schools, and communities. Prior studies have found that the lack of access to and opportunities for outdoor play is negatively impacting

children's development (Becker, McClelland, Loprinzi, & Trost, 2014; Dowdell, Gray, & Malone, 2011; Legget & Newman, 2017; Sandseter & Kennair, 2011). Teachers influencing children's programming must have intentional training that demonstrates how multiple types of outdoor environments and experiences support children's quest to learn and develop (Brown, 2015; Dietze & Kashin, 2019b; Williford, Vick Whittaker, Vitello, & Downer, 2013). The attitudes and emphasis placed on outdoor play by college faculty and ECE teachers training students in practicum or fieldwork influence how students position outdoor play in their practice (Dietze & Kashin, 2019b; Ergler, Kearns, & Witten, 2016; Zurek, Torquati, & Acar, 2014).

Among ECE teachers, there is a lack of confidence in designing, implementing, and facilitating appropriate curriculum (Carrier, Thomson, Tugurian, & Stevenson, 2014; Mirka, 2014; Ridgway & Quinones, 2012). If college faculty delivering outdoor play pedagogy curriculum to pre-service students do not have the educational background or experience with it, the probability is low that they will emphasize it in the curriculum or advocate for explicit inclusion during curriculum reviews (Baust, 2013; Carrier et al., 2014; Dietze & Kashin, 2018). Teachers themselves require practice in using the outdoors as a space for various types of play and learning about their environment and themselves (Baust, 2013; Dietze & Kashin, 2018).

In Canada, attention to the lack of outdoor play is mounting across disciplines; however, approaches to changing current practices are fractured due to differing provincial and territorial government policies on the ECE curricula and expected competencies with which ECE graduates enter the field. The duration of programs and the backgrounds of faculty teaching ECE programs vary from one institution to another; moreover, the teaching and learning pedagogy, procedures, and philosophies as well as the preparation of early childhood educators and teachers (Gill, 2016; Lawson Foundation, 2019; Malaguzzi, 1994) differ from one institution to another and from one province and territory to another. Faculty may not necessarily be informed of new policies that should be considered in their curriculum so that students can gain exposure to them (Lawson Foundation, 2019).

This study seeks to understand how Canadian colleges and institutes that are delivering pre-service ECE programs position outdoor play pedagogy in their programs. The presence or absence influences how graduates transfer its importance to their professional practice with children (Carroll-Lind, Smorti, Ord, & Robinson, 2016; Cooper, 2016; Dietze & Kashin, 2014; Doan, 2013).

Research suggests that outdoor play is considered an ideal environment from which children's play experiences contribute to their sense of inquiry, curiosity, and developmental domains (Dietze & Kashin, 2018; Norodahl & Johannesson, 2016; Ostroff, 2016). Children who regularly engage in outdoor exploratory experiences develop stronger self-regulatory behaviours, communication skills, creativity, and attention spans. Outdoor play solidifies academic concepts and improves relational skills (Gehris, Gooze, & Whitaker, 2014; Kemple, Oh, Kenney, & Smith-Bonahue, 2016). Despite the major contribution

that outdoor play makes to children's development, research suggests that children in early learning and childcare programs are spending less time engaged in outdoor play than previous generations (Dietze & Kashin, 2016; Ernst & Tornabene, 2012; Legget & Newman, 2017). In fact, it appears that childhood is becoming somewhat of an indoor phenomenon. Often, when children do have access to outdoor play, they are limited in their scope of play and interactions with nature. This is due in part to adult intervention and the lack of intentional curriculum and programming (Brussoni et al., 2017; Buitink, 2009; Dietze & Kashin, 2018).

The Australian *Early Years Learning Framework* (EYLF) defines curriculum as "all the interactions, experiences, activities, planned and unplanned, that occur in an environment designed to foster children's learning and development" (Department of Education, Employment and Workplace Relations, 2009, p. 9). Further, the EYLF defines intentional teaching as:

Educators being deliberate, purposeful and thoughtful in their decisions and actions. Intentional teaching is the opposite of teaching by rote or continuing with traditions simply because things have always been done that way. (Department of Education, Employment and Workplace Relations, 2009, p. 15)

Legget and Newman (2017) outline the need for careful planning and management of outdoor play curriculum, as did Epstein (2007) a decade earlier. To address the sociocultural shift needed to advance outdoor play in early learning and childcare programs, they call for developing a comprehensive curriculum and the training of more staff who understand outdoor play pedagogy.

### Pre-Service Early Childhood Education Programs at Publicly Funded Colleges

In Canada, pre-service ECE programs are offered within all provinces and territories at publicly-funded post-secondary institutions, though the educational requirements to become a pre-service ECE teacher vary from one province and territory to another. The pre-service ECE programs at publicly-funded colleges and institutes in Canada that are members of Colleges and Institutes Canada (Colleges and Institutes Canada, 2019) train the majority of early childhood educators for the workforce.

Pre-service programs can be defined in a number of ways, but for the purposes of this paper, they refer to the formal education and training that students undertake to acquire a credential in a particular field of study (Department of Higher Education and Training (DHET), 2015). In the instance of ECE, trainees gain skills in planning and deploying nurturing and challenging curriculum, programs, and environments that support children's developmental needs, play interests, and curiosity aspirations.

College faculty play a critical role in pre-service programs and the quality of graduates. They determine what is included or excluded in the pre-service curriculum and how the theory and application of theory are delivered to students (Balter, van Rhijn, & Davies, 2018; Darling-Hammond, 2010; Tannehill & MacPhail, 2014). Curriculum design and delivery in pre-service ECE programs are of particular importance when investigating how children's outdoor play opportunities and experiences may be increased (Legget & Newman, 2017). If, how, and when college faculty incorporate outdoor play pedagogy into their programs influence how graduates of those programs transfer theory and application into their practice (Balter et al., 2018; Tsangaridou, 2017).

Currently, there is a lack of adequate knowledge on the depth and breadth of outdoor play pedagogy in pre-service programs in Canada. We estimate that there are some 3,000 ECE students in pre-service programs in Canada annually. Findings of an earlier study conducted by Dietze and Kashin (2017) showed that of 896 ECE teachers working in a variety of early learning and childcare programs, 89% had not been exposed to outdoor play pedagogy during their pre-service training. Research shows that how new ECE teachers explore or value outdoor play is highly influenced by how they were exposed to theory, concepts, and experiences during their pre-service training (Balter et al., 2018; Tsangaridou, 2017). We contend that an explicit outdoor play pedagogy curriculum in pre-service programs, including specific learning outcomes during practicum or field experience, would contribute to more outdoor play pedagogy in professional practice. Teaching and learning that occur in pre-service programs have a ripple effect in the following way: Curricular frameworks and documents guide college faculty, who in turn influence the experiences and curriculum delivered to pre-service students, raising the probability of more, quality outdoor experiential learning with children (Beyer et al., 2015; Ergler et al., 2016; Williams, 2016). We seek a better understanding of the training pre-service ECE students receive and the perceptions held by the college faculty who instruct them. This information is critical for raising the status quo in children's outdoor play.

### *Nature of Pre-Service Training*

Although publicly-funded college pre-service ECE programs across Canada differ in learning outcomes, curricular frameworks, program lengths, and faculty backgrounds, they are all composed of a combination of theory acquired through courses and application of theory to practice through classroom experiences, fieldwork, and/or practicums. The practical component of pre-service programs is grounded in the work of American philosopher John Dewey and his theory of experience (1938). In *Experience and Education*, Dewey suggests that learning must be aligned with actual life experiences. This "experiential style of learning provides for a more achievable outcome" (Freeman, 2009–2010, p. 15), resulting in better trained and more effective teachers. Practicums afford students with opportunities to observe more seasoned teachers in action, to begin to create

play and learning provocations, and to engage with children and guide them as required. Ideally, during a practicum or field experience, students have the time and space to interact with the children and with the teacher mentors in the outdoor play portion of programs (Gomboc, 2016; Gustavsson & Pramling, 2014).

College faculty, including those in pre-service ECE programs, are hired for their educational backgrounds and experience in a particular discipline. They may not necessarily have a background in teaching pedagogy or specific curriculum content areas that they are assigned to teach. This means that some faculty delivering pre-service curriculum may have education and experience working with children, but not necessarily a depth of knowledge or experience in facilitating or embracing outdoor play pedagogy and programming (Baust, 2013). In light of this, Baust calls for specialized experiential training of faculty on how to provide multiple environments for children to learn and grow.

Although outdoor play pedagogy research outlines the relationship of outdoor play to children's health and development (Dietze & Kashin, 2019a), "teacher preparation programs are increasingly seat-based, computer/television screen education, leaving out nature and the out-of-doors" (Baust, 2013, p. 1). If college faculty do not have experience in environmental education or in using the outdoors as a rich play and learning site, the quality of children's outdoor play experiences is jeopardized (Baust, 2013; Dietze & Kashin, 2018) because how and what pre-service ECE students experience in their program influence how they position outdoor play in their practice (Dietze & Kashin, 2018; Ergler et al., 2016; Norodahl & Johannesson, 2016). Without intentional outdoor play pedagogy and exposure to positive role models who implement experiential outdoor play, there is a gap in the students' knowledge and practice (Dietze & Kashin, 2018; Koc, 2012). Ideally, graduates from pre-service ECE programs acquire an understanding of how outdoor play supports children's development, appreciation of their outdoor environment, and zest for learning, as well as how it contributes to later academic success (Duque, Martins, & Clemente, 2016; Ernst, 2014; Kemple et al., 2016).

Another factor influencing outdoor play pedagogy in pre-service training is the college faculty contract. Hogen and Trotter's (2013) findings determined that "college and institute faculty members are primarily hired to teach and have broad discretion in how they teach as long as the objectives stated in the course outline are followed" (p. 78). This may have either positive or negative effects on the extent to which faculty members advance outdoor play pedagogies in pre-service programs. Faculty have the autonomy to deliver specified learning objectives and assess outcomes in a way they see most appropriate. For some faculty, this may mean that lectures are the predominant method of curriculum delivery, while for others, curriculum may be delivered through a combination of theory and experiential learning activities. No matter what the teaching and learning strategies are, studies emphasize that students in pre-service programs require experiences in and with nature and the environment as well as in

outdoor play pedagogy in order to influence their later professional practice (Duque et al., 2016; Ernst, 2014; Kemple et al., 2016).

We argue that students in pre-service programs who are neither familiar with examining the attributes of outdoor environments nor exposed to both the theory and application of outdoor play pedagogy will enter the workforce with a narrower view of why and how outdoor play has as much significance in early learning and child care programs as indoor programming. As Ernst (2014) and Mosothwane and Ndwapi (2012) note, limited training negatively affects teachers' sense of efficacy and competencies in engaging children in quality outdoor play experiences. If college faculty have not been exposed to environmental education or outdoor play pedagogy and the related research, they will be less likely and less able to provide rich outdoor play curriculum to their pre-service students (Iskos & Karakosta, 2015; Malandrakis & Chatzakis, 2014).

A review of many provincial policies and curriculum frameworks suggest that they lack specific learning outcomes related to outdoor play (McCuaig & Bertrand, 2018). This may contribute to both college faculty and ECE teachers working in early learning and childcare programs in having a limited understanding of the value that outdoor play experiences (Martin, Drasgow, & Halle, 2015) in their programs. Ernest (2014) and others suggest that college faculty members' ability to provide pre-service students with the theory or the practical application of outdoor play pedagogy in early learning and childcare programs is not well developed (Moseley, Huss, & Utley, 2010; Mosothwane & Ndwapi, 2012).

The hypothesis for this study derives from the literature review above, namely that outdoor play pedagogy is not prominent in pre-service ECE programs across Canada. In this paper, we present our findings from a preliminary, national, two-part study that examines if and how outdoor play pedagogy is positioned in English and French publicly-funded pre-service ECE college and institute programs.

## Methodology

### *Overview*

The study had multiple parts to it beginning with a literature review. This paper will focus on the results of the website reviews and survey results. The review of English and French websites was conducted to identify those publicly-funded Canadian college and institutes with pre-service ECE programs; from these programs, we identified what we referred to as explicit courses, that is, courses that made reference to outdoor play, outdoor play learning, or nature play in the course title. One of the purposes of the online survey with college faculty identified as providers of the explicit courses above was to gain insight into how outdoor play pedagogy and curriculum are delivered in their pre-service ECE programs. An understanding of the types of supports and resources that these college faculty received was sought.

## *Methods*

The research team at Okanagan College received approval from the college's Research Ethics Board. The study was oriented to public-funded college ECE programs. Data for the first component of the study were gathered from a review of the website of Colleges and Institutes Canada as well as a review of 100 websites identified covering English ( $n = 59$ ) and French ( $n = 41$ ) Canadian colleges and institutes across all provinces and territories that offered pre-service ECE programs. Of the 100 institutions with ECE programs, 96 had both the course names and calendar descriptions listed on their websites. Researchers emailed or submitted web forms to the four institutions with ECE programs without course detail on their websites.

All pre-service ECE calendar descriptions and/or course listings were examined to determine if explicit outdoor play courses were offered or if there were identifiable words or phrases (e.g., outdoor play programming, outdoor play pedagogy, outdoor learning and/or experiences) in their calendar descriptions that we considered to have embedded outdoor play pedagogy in courses.

The administration of the online survey occurred during the summer of 2018. Based on the contact information that could be mined during the research period, 76 institutions received emails from the researchers to introduce the study and to provide access to the survey link that was hosted on the college's institutional research site.

The survey consisted of two sections. The introductory section solicited information specific to the participants' context, including the institution name, the number of faculty teaching ECE in the department, and the level of ECE programs offered (certificate or diploma). The second section was composed of eight questions, three of which were open-ended and five of which were closed. Two of the closed questions provided participants with the ability to elaborate or add comments. This paper addresses the research questions related to how faculty viewed pre-service ECE students in receiving explicit outdoor play pedagogy in their programs, current practices on how students are exposed to outdoor play pedagogy, and the types of resources needed to advance outdoor play pedagogy in college programs. These areas are important, as little is known about how much outdoor play pedagogy, including environmental education, is in ECE pre-service programs.

A qualitative research method for the survey component was used to draw upon the interpretive paradigm (Spradley, 1980) because of both the exploratory nature of the study and the need to describe what was found. Each researcher read the survey responses and took notes about the prevalent themes in the responses. They each formed thematic codes by analyzing the data separately. This process allowed the researchers to draw out the themes as well as to articulate both them and the topics embedded within the data. The data were entered into spreadsheets and were then examined line-by-line. Both researchers individually reviewed the data multiple times to gain a thorough



understanding of the information collected. The researchers then met to discuss their initial notes and to look for commonalities. Collective analysis occurred next. Throughout the analysis process, insight into individual and group themes embedded in the data (Braun & Clarke, 2006) surfaced.

Province or Territory	Number of ECE programs	Number of programs with explicit outdoor play courses	Number of programs with outdoor play embedded in courses
Alberta	10	1 (New since study)	5
British Columbia	17 (16 Anglophone and 1 Francophone curriculum)	2 (2 New since study)	1
Manitoba	3 (2 Anglophone curriculum and 1 Francophone curriculum)	0	0
New Brunswick	2 (1 Anglophone curriculum and 1 Francophone curriculum)	0	0
Newfoundland and Labrador	1 (1 curriculum for the province)	0	1
Northwest Territories	2 (1 Anglophone curriculum and 1 Francophone curriculum)	0	1
Nova Scotia	3 (2 Anglophone curriculum and 1 Francophone curriculum)	0	3
Nunavut	1	0	0
Ontario	24 (22 Anglophone curriculum and 2 Francophone curriculum)	2 (1 New since study)	9
Prince Edward Island	2 (1 Anglophone curriculum and 1 Francophone curriculum)	0	0
Quebec	27 (2 Anglophone curriculum and 25 Francophone curriculum)	0	12
Saskatchewan	7	0	0
Yukon	1	0	1
<b>TOTAL</b>	<b>100</b>	<b>5</b>	<b>33</b>

*Table 1.* Colleges with explicit courses on outdoor play or embedded in program.

## Results

At the time of the initial study (spring 2018), only one college was found to have an explicit course on outdoor play listed on their website. However, a second examination of the sites four months later (fall 2018) determined that four additional colleges had explicit outdoor play courses listed on their sites.

Thirty-three of 96 college websites had embedded outdoor play in their course calendar descriptions. Table 1 provides an overview of the number of colleges with explicit outdoor play courses and those with outdoor play pedagogy embedded in courses.

As for the survey, the return rate was 32 % (24/76 institutions). Because of the timing of the survey occurring outside of the academic cycle, many faculty were not available to respond to the survey. There were a total of 28 participants, representing 24 different institutions: Four institutions had two participants respond to various aspects of the online survey. Information derived from the survey provides insight into how students in pre-service ECE programs are exposed to outdoor play pedagogy.

The first question explored was: *From a program perspective, do you feel it is important for pre-service ECE students to receive explicit curriculum on outdoor play pedagogy and achieve specific learning outcomes related to outdoor play pedagogy? Why or why not?* All participants indicated that it is important for pre-service ECE students to receive explicit curriculum on outdoor play pedagogy. For example, one participant noted that “outdoor play pedagogy tends to be underestimated in the field of ECE” while another noted that “it is extremely important for pre-service ECE students to fully comprehend the benefits and the importance of outdoor play and apply their knowledge to their practice through explicit curriculum on outdoor play pedagogy.”

A variety of comments were made in response to the second part of the question, *why or why not*, with the most common theme expressed by the respondents being that outdoor play benefitted children’s learning and development, including the way in which it contributed to physical literacy. Just over 15% of the participants suggested that outdoor play curriculum is important in pre-service programs because of how it supports children in connecting to their environment and developing a sense of environmental stewardship. One participant noted that:

[m]any of the children that ECE students work with never participate in outdoor activities or spend free time in the forests or outdoor areas. Children then have not learned to respect the outdoors and the environment. If children don’t respect the outdoor environment in which they live they may adopt an attitude that they don’t care about preserving it or taking care of it.

Many participants suggested that outdoor play is currently restricted, and is not mainstream, but they were of the view that it should be part of pre-service ECE programs.

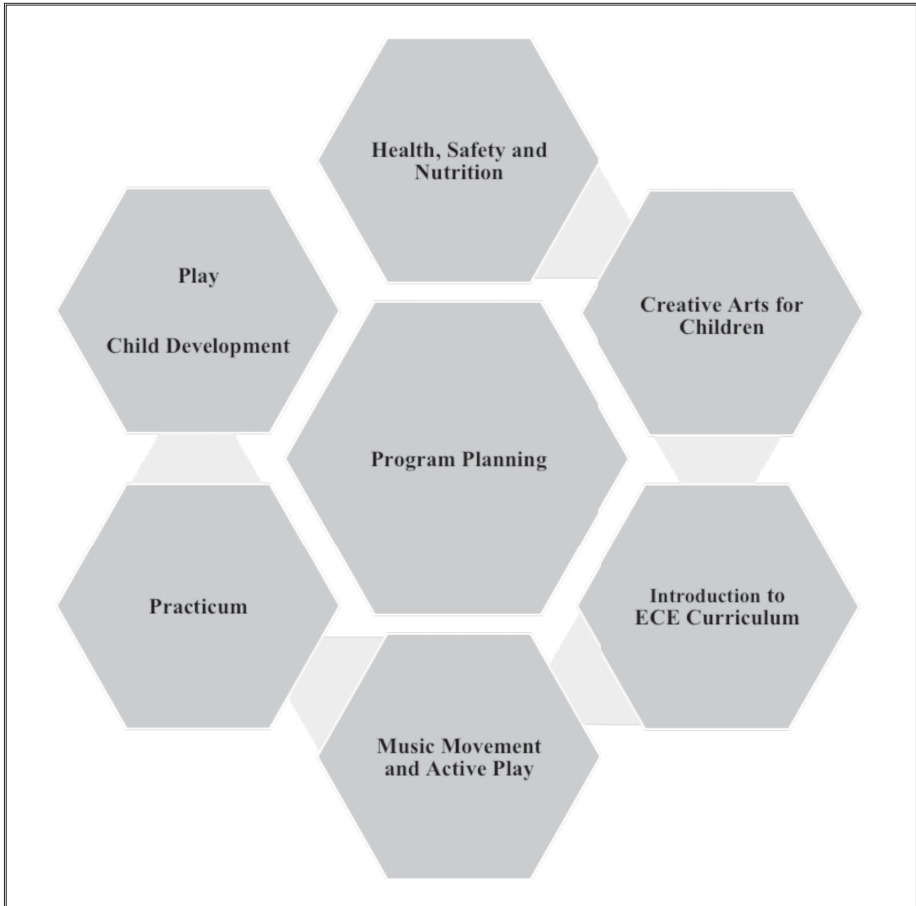


Figure 1. Where outdoor play is positioned in ECE programs.

In an effort to determine the types of resources and supports that college faculty may require to advance outdoor play pedagogy, the participants were asked: *Identify up to five new resources/supports that your program would benefit from in order to advance practice related to outdoor play pedagogy.*

There were diverse perspectives on the types of resources/supports that faculty felt would assist them in advancing outdoor play pedagogy. Some suggested they needed mentorship programs for faculty as outdoor play pedagogy is new to the literature and differs significantly from previous curriculum perspectives. Others suggested the need for textbooks, equipment, fact sheets, booklets, videos, and teaching guides. For example, one participant noted the need for a “textbook specifically about the pedagogy of outdoor learning and how it [is]

related to development,” while another participant noted the need for “current educational/teaching videos demonstrating play experiences within Canada, in rural and urban settings.”

Participants emphasized the need for workshops and conferences where faculty would engage in gaining the theory of outdoor play pedagogy and examine how it could be incorporated into courses. Also noted was an interest in: acquiring information about strategies to support children learning about environmental sustainability; gaining practical experience with outdoor play programs, such as with forest and nature schools; and having research opportunities for faculty and students.

No two pre-service ECE programs are the same. As Kaplan (2018) notes, there is very little data available that measure the quality of pre-service ECE programs either from a course delivery or practicum/fieldwork perspective. Most data available are based on self-reporting mechanisms developed by colleges and institutes themselves. In addition, the curriculum and delivery models are influenced by demographics, the nature of program funding, and provincial and territorial government early childhood policies, regulations, and standards. Furthermore, faculty backgrounds, diversity, experience with outdoor play, and program philosophies also play a significant role in shaping ECE programs (Beyer et al., 2015; Dietze & Kashin, 2018; Ergler et al., 2016; Van Nuland, 2011; Williams, 2016).

As discussed throughout this paper, the purpose of this study was to seek an understanding of how outdoor play pedagogy is positioned in pre-service ECE programs, where it exists, and how students acquire both the theory and its practical application. The findings of this study suggest that there is no consistent information about if or where outdoor play pedagogy is positioned in pre-service ECE programs across Canada. The positioning of outdoor play pedagogy in programs influences the focus taken in curriculum. For example, if outdoor play outcomes are embedded within a Health and Safety course, the core competencies are most likely to focus on safety strategies. By contrast, if the content is positioned in a play course, outdoor play pedagogy may be explored more broadly.

The results from the study support the perspective that if opportunities for and access to outdoor play are to increase in early learning programs, then it is important that pre-service ECE programs expand both the theory and the application of outdoor play pedagogy in their programs (Balter et al., 2018; Fletcher & Mandigo, 2012; Tsangaridou, 2017). It is not enough for programs to depend on class discussions, practicum, or fieldwork for students to acquire such knowledge and skills. Students require specific content, learning outcomes, and intentional teaching in an outdoor play pedagogy that includes a focus on nature and the environment.

The comments from faculty who participated in this study indicate that it is important for students to be exposed to outdoor play pedagogy. However, as

the data show, there is a disconnect between outdoor play's expressed importance by faculty and its evidence in calendar or program descriptions. One participant in the study suggested that students acquire their information on outdoor play "work[ing] with an agency around nature based learning and the environment." Another remarked that "students are encouraged to create outdoor play experiences for children." Although these are interesting comments, the survey results suggest that there is a lack of systematic incorporation of outdoor play in ECE programs in Canada that exceeds simply a lack of what is identified in the calendar course descriptions.

All faculty identified the need for outdoor play resources. At a minimum, basic resources should include fact sheets, texts, and videos, but they currently do not generally do so. In fact, there is a significant paucity of resources, including a lack of curriculum guides, of understanding of outdoor play pedagogy, of outdoor classroom space, and, as documented above, of texts or the people to support educators in gaining the level of knowledge, experience, and confidence required.

One of the positive findings from this study is that the participants were willing to offer views on the types of supports they would find helpful in advancing outdoor play pedagogy in their programs. For most college faculty, professional development is more of a personal practice than a workplace expectation or professional obligation (Haras, 2018). Funds available to engage in professional development for outdoor play pedagogy and curriculum development are limited or non-existent. There may be a need for new, innovative solutions for faculty professional development in outdoor play (Martin, Drasgow, & Halle, 2015). Although communities of practice and collaborative professional development models are emphasized as change agents (Douglass, Carter, & Smith, 2014; Jensen & Iannone, 2018), there is no research available to determine if this model has been used with faculty as it relates to outdoor play pedagogy. Douglass, Carter, and Smith (2014), emphasize that "[i]f we expect teachers who perform their work in highly interdependent teams to change and improve their teaching practices, we must provide professional development in ways that enable teaching teams, supervisors, and co-workers to learn together and implement change collaboratively" (p. 10). However, they found this was rarely the case: "almost three-fourths of the time (73.5 percent) that a program had anyone participate in a specific training, the programs had just one person participating" (Douglass et al., 2014, p. 8). Further research with college faculty is necessary to determine the types of professional development models that would support them in advancing outdoor play pedagogy. Ideally, professional development models will have experiential, collaborative, and research-based content delivered outdoors and allotted time necessary for reflection and dialogue (Casbergue, Bedford, & Burstein, 2014; Dietze & Kashin, 2014; Tsangaridou, 2017).

It is recommended that policy makers, researchers, college administrators, early learning and childcare program directors, educational consultants, and others who are working to advance outdoor play pedagogy include pertinent college and institutional faculty in the process. Emerging literature suggests that encompassing relevant faculty in such initiatives leads to a form of professional development. It may also be timely to advocate that college and institute faculty engage in outdoor play field research with the students (Catapano, 2005; Tsangaridou, 2017).

### Limitations and Future Directions

This study revealed core themes within publicly-funded pre-service ECE programs in Canada related to outdoor play pedagogy. However, there were some limitations. First, as indicated above, the sample of respondents to the survey was small. Second, the study depended on the content available on college and institute websites. Course calendar descriptions on websites may not be updated as quickly as course changes are made in programs, and limited word counts may apply in any event, which would limit the amount of information shared with the public on websites. Third, the information on the study was forwarded to ECE program contacts available on college and institute websites and from emails. The survey may not have necessarily been received by the faculty who teach outdoor play curriculum. Recognizing that faculty have some academic freedom, it is possible that either more or less outdoor play pedagogy is delivered than what was discovered in this preliminary exploration. Consequently, we could not objectively determine the breadth and depth of outdoor play pedagogy in publicly-funded pre-service ECE programs in Canada at this time. Further research is required with college teams to better assess the situation.

Results from the survey can only be generalized from the core questions that were asked and analyzed. Further work should examine how college curriculum is designed, changed, and implemented.

In some ways it may be appropriate to regard our study as a pilot that was conducted with limited resources, but which nevertheless sheds light on the suspected patterns. We wish for more studies with faculty who teach outdoor play pedagogy or who have a desire to incorporate outdoor play pedagogy into pre-service ECE programs. Finally, it is worth repeating that college faculty require the time and space to interact with other college faculty, children, peers, and mentors in the outdoors not only in order to advance their pedagogy but also in order to develop the confidence to translate and amplify this experience into evidence-based design, implementation, and facilitation of outdoor play pedagogy.

## Conclusion

This study may be the first of its kind in Canada to describe college faculty's views on how outdoor play pedagogy is positioned in pre-service ECE programs. The results of our preliminary study suggest that college faculty would benefit quite substantially if various forms of professional development and resources focussed on outdoor play pedagogy were available to them.

The current study also contributes to the emerging body of research calling for the advancement of outdoor play pedagogy through education. Our findings point to different perspectives on the precise placement of outdoor play pedagogy in pre-service ECE programs. According to the faculty consulted, outdoor play pedagogy may be delivered as a stand-alone course (embedded into courses such as play and child development), it may be learned directly during practicum or fieldwork, or it may be a combination of the foregoing.

This research project encouraged the entry of faculty voices into the types of resources they require to increase outdoor play pedagogy in pre-service ECE programs. A major concern is their availability, constrained as they might be by budget or logistics. College faculty identified a need for textbooks, videos, fact sheets, and research, along with specific professional development on outdoor play. The literature we reviewed above supports the identified lack of resources, which currently are inadequate, fragmented, or in some cases non-existent. Tsangaridou (2017) and Barr et al., (2014) conclude that professional development with teachers has the most significant impact on updating curriculum and teaching practice.

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## Notes on Contributors

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**April Cutler** is a teacher and educational consultant in British Columbia. She has taught a variety of grades and in a variety of capacities. April holds a Masters degree with a research focus on the transformative nature of curriculum. She is passionate about outdoor learning and the influential role it plays in development. When she is not thinking deeply about educational philosophy and curriculum, April enjoys exploring all the Okanagan has to offer with her husband and 5 children.

## References

- Balter, A., van Rhijn, T., & Davies, A. (2018). Equipping early childhood educators to support the development of sexuality in childhood: Identification of pre-and post-service training needs. *The Canadian Journal of Human Sexuality*, 33-42.
- Barr, E., Goldfarb, E., Russell, S., Seabert, D., Wallen, M., & Wilson, K. (2014). Improving sexuality education: The development of teacher preparation standards. *Journal of School Health*, 396-415.
- Baust, J. (2013, 03 8). *Indoor education for outdoor learning? What's wrong with this picture?* From Children and Nature Network: <https://www.childrenandnature.org/2014/03/08/indoor-education-for-outdoor-learning-whats-wrong-with-this-picture/>
- Becker, D., McClelland, M., Loprinzi, P., & Trost, S. (2014). Physical activity, self-regulation, and early academic achievement in preschool children. *Early Educations & Development*, 56-70.
- Beery, T., & Jonsson, K. (2015). Inspiring the outdoor experience: Does the path through the nature center lead out the door. *Journal of Interpretation Research*, 67-85.
- Beyer, K., Heller, E., Bizub, J., Kistner, A., Szabo, A., Shawgo, E., et al. (2015). More than a pretty place: Assessing the impact of environmental education on children's knowledge and attitudes about outdoor play in nature. *International Journal of Environmental Research and Public Health*, 2054-2070.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 77-101.
- Brown, R. (2015). Engaging families through artful play. *International Journal of Education & the Arts*, 1-19.
- Brussoni, M., Ishikawa, T., Brunelle, S., & Herrington, S. (2017). Landscapes for play: Effects of an intervention to promote nature-based risky play in early childhood centres. *Journal of Environmental Psychology*, 139-150.
- Buitink, J. (2009). What and how do student teachers learn during school-based teacher education. *Teaching and Teacher Education*, 118-127.
- Carrier, S., Thomson, M., Tugurian, L., & Stevenson, K. (2014). Elementary science education in classrooms and outdoors: Stakeholder views, gender, ethnicity, and testing. *International Journal of Science Education*, 2195-2220.
- Carroll-Lind, J., Smorti, S., Ord, K., & Robinson, L. (2016). Building pedagogical leadership knowledge in early childhood education. *Australian Journal of Early Childhood*, 28-35.



- Casbergue, R., Bedford, A., & Burstein, K. (2014). CLASS reliability training as professional development for preschool teachers. *Journal of Research in Childhood Education*, 426-440.
- Catapano, S. (2005). Teacher professional development through children's project work. *Early Childhood Education Journal*, 261-267.
- Colleges and Institutes Canada. (2019). *Our Members*. From Colleges and Institutes Canada: <https://www.collegesinstitutes.ca/our-members/member-directory/>
- Cooper, A. (2016). Nature and the outdoor learning environment: The forgotten resource in early childhood education. *International Journal of Early Childhood Environmental Education*, 81-95.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 35-47.
- Department of Education, Employment and Workplace Relations. (2009). *Belong, being, and becoming: The early years learning framework for Australia*. Canberra, ACT: Commonwealth of Australia.
- Department of Higher Education and Training (DHET). (2015). *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for teacher education qualifications*. Randburg: Government Gazette of South Africa.
- Dewey, J. (1938). *Experience and education: the Kappa Delta Pi lecture series*. New York, NY: Kappa Delta Pi.
- Dietze, B., & Kashin, D. (2017). *Building capacity - Creating specialized outdoor play training to empower children's experiences*. Okanagan College, Kelowna, BC: Unpublished.
- Dietze, B., & Kashin, D. (2016). *Empowering pedagogy for early childhood education*. Toronto, ON: Pearson Education Canada.
- Dietze, B., & Kashin, D. (2019). *Outdoor and nature play in early childhood education*. Toronto, ON: Pearson Education Canada.
- Dietze, B., & Kashin, D. (in press). Perceptions early learning teachers have about outdoor play and nature. *Learning Landscapes Journal*.
- Dietze, B., & Kashin, D. (2018). *Playing and learning in early childhood education*. Toronto, ON: Pearson Education Canada.
- Dietze, B., Penner, A., Ashley, S., Gillis, K., Moses, H., & Goodine, B. (2014). Listening to faculty: Developing a research strategy in early childhood education. *Transformative Dialogues: Teaching & Learning Journal*, 1-15.
- Doan, L. (2013). Mentoring needs of novice early childhood educators. *Canadian Children*, 21-24.
- Douglass, A., Carter, A., & Smith, F. (2014). Training together: State policy and collective participation in early educator professional development. *New England Journal of Public Policy*, 1-13.
- Dowdell, K., Gray, T., & Malone, K. (2011). Nature and its influence of children's outdoor play. *Australian Journal of Outdoor Education*, 24-35.
- Duque, I., Martins, F., & Clemente, F. (2016). Outdoor play and interaction skills in early childhood education: Approaching for measuring using social network analysis. *Journal of Physical Education and Sport*, 1266-1272.
- Epstein, A. (2007). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children.

- Ergler, C., Kearns, R., & Witten, K. (2016). Exploring children's seasonal play to promote active lifestyles in Auckland, New Zealand. *Health & Place*, 67-77.
- Ernst, J. (2014). Early childhood educators' use of natural outdoor settings as learning environments: An exploratory study of beliefs, practices, and barriers. *Environmental Education Research*, 735-752.
- Ernst, J., & Tornabene, L. (2012). Preservice early childhood educators' perceptions of outdoor settings as learning environments. *Environmental Education Research*, 643-664.
- Fletcher, T., & Mandigo, J. (2012). The primary schoolteacher and physical education: a review of research and implications for Irish physical education. *Irish Educational Studies*, 363-376.
- Freeman, G. (2009-2010). Strategies for successful early field experiences in a teacher education program. *SRATE Journal*, 15-21.
- Gehris, J., Gooze, R., & Whitaker, R. (2014). Teachers' perceptions about childrens' movement and learning in early childhood education programmes. *Child Care, Health and Development*, 122-131.
- Gill, T. (2016, 6 15). *The R word: risk, uncertainty and the possibility of adverse outcomes in play*. From Rethinking Childhood: <https://rethinkingchildhood.com/2016/06/15/risk-uncertainty-adverse-outcomes-play/>
- Gomboc, K. (2016). Back to nature: Exploring the potential for implementing the Norwegian idea of outdoor days in the Slovenian school system/V naravo: Iskanje možnosti implementacije norveske ideje učenja izven učilnice v slovenski solski sistem. *Revija za Elementarno Izobraževanje*, 123-138.
- Gustavsson, L., & Pramling, N. (2014). The educational nature of different ways teachers communicate with children about natural phenomena. *International Journal of Early Years Education*, 59-72.
- Haras, C. (2018, 01 17). *Faculty development as an authentic professional practice*. From Higher Education Today: <https://www.higheredtoday.org/2018/01/17/faculty-development-authentic-professional-practice/>
- Hogen, B., & Trotter, D. (2013). Academic freedom in Canadian higher education: Universities, colleges, and institutes were not created equal. *Canadian Journal of Higher Education*, 68-84.
- Iskos, E., & Karakosta, S. (2015). Not just a walk in the park: Case study of a Greek preschool located on an educational farm. *Canadian Journal of Environmental Education*, 46-62.
- Jensen, B., & Iannone, R. (2018). Innovative approaches to continuous professional development in early childhood education and care (ECEC) in Europe: Findings from a comparative review. *European Journal of Education*, 23-33.
- Kaplan, M. (2018). *It takes a community: Leveraging community college capacity to transform the early childhood workforce*. Washington, DC: Bellwether Education Partners.
- Kemple, K., Oh, J., Kenney, E., & Smith-Bonahue, T. (2016). The power of outdoor play and play in natural environments. *Childhood Education*, 446-454.
- Koc, K. (2012). Using a dilemma case in early childhood teacher education: Does it promote theory and practice connection? *Educational Sciences: Theory & Practice*, 3153-3163.
- Legget, N., & Newman, L. (2017). Play: Challenging educators' beliefs about play in the indoor and outdoor environment. *Australian Journal of Early Childhood*, 24-32.
- Little, H., & Sweller, N. (2015). Affordances for risk-taking and physical activity in Australian

- early childhood education settings. *Early Childhood Education Journal*, 337-345.
- Malaguzzi, L. (1994). Your image of the child where teaching begins. *Exchange*, 52-61.
- Malandrakis, G., & Chatzakis, S. (2014). Environmental attitudes, knowledge, and alternative conceptions of primary school children in Greece. *Applied Environmental Education and Communication*, 15-27.
- Martin, C., Drasgow, E., & Halle, J. (2015). Training teachers to enhance the play skills of young children with developmental disabilities during outdoor time by embedding instructional interactions. *Journal of Early Intervention*, 247-269.
- Martin, C., Drasgow, E., & Halle, J. (2015). Training teachers to enhance the play skills of young children with developmental disabilities during outdoor time by embedding instructional interactions. *Journal of Early Intervention*, 247-269.
- Mirka, G. (2014). Factors which influence teachers' use of outdoor classrooms. *The Journal of Environmental Education*, 25-33.
- Moseley, C., Huss, J., & Utley, J. (2010). Assessing K-12 teachers' personal environmental education teaching efficacy and outcome expectancy. *Applied Environmental Education and Communication*, 5-17.
- Mosothwane, M., & Ndwapi, G. (2012). Training pre-service teachers in environmental education: The case of colleges of education in Botswana. *International Journal of Scientific Research in Education*, 26-37.
- Norodahl, K., & Johannesson, I. (2016). "Let's go outside": Icelandic teachers' views of using the outdoors. *Education*, 391-406.
- Ostroff, W. (2016). *Cultivating curiosity in K-12 classrooms: How to promote and sustain deep learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Ridgway, A., & Quinones, G. (2012). How do early childhood students conceptualize play-based curriculum? *Australian Journal of Teacher Education*, 46-56.
- Sandseter, E., & Kennair, L. (2011). Children's risky play from an evolutionary perspective: The anti-phobic effects of thrilling experiences. *Evolutionary Psychology*, 257-284.
- Sandseter, E., & Sando, O. (2016). "We don't allow children to climb trees": How a focus on safety affects Norwegian children's play in early-childhood education and care settings. *American Journal of Play*, 178-200.
- Spradley, J. (1980). *Participant Observation*. Belmont, CA: Wadsworth, Cengage Learning.
- Tannehill, D., & MacPhail, A. (2014). What examining teaching metaphors tells us about pre-service teachers' developing beliefs about teaching and learning. *Physical Education and Sport Pedagogy*, 149-163.
- Tsangaridou, N. (2017). Early childhood teachers' views about teaching physical education: Challenges and recommendations. *Physical Education and Sport Pedagogy*, 283-300.
- United Nations High Commission for Human Rights. (1989). *Convention on the Rights of the Child*. Geneva: United Nations High Commission for Human Rights.
- Van Nuland, S. (2011). Teacher education in Canada. *Journal of Education for Teaching*, 409-421.
- Williams, D. (2016, 7 26). *Playworker: The adult role in outdoor play and learning*. From First Discoverers: <http://www.firstdiscoverers.co.uk/playworker-outdoor-learning/>
- Williford, A., Vick Whitaker, J., Vitello, V., & Downer, J. (2013). Children's engagement within the preschool classroom and their development of self-regulation. *Early Education and Development*, 162-187.

- Wood, J. (2017). Planning for children's play: Exploring the 'forgotten' right in Welsh and Scottish policy. *Town Planning Review*, 579-602.
- Zurek, A., Torquati, J., & Acar, I. (2014). Scaffolding as a tool for environmental education in early childhood. *International Journal of Early Childhood Environmental Education*, 27-57.