Restorative Playscape Design: A Phenomenological Approach to Designing Playscapes

Jennifer Bradley

Follow this and additional works at: https://dsc.duq.edu/etd

Part of the Child Psychology Commons, Community Psychology Commons, and the Human Geography Commons

Recommended Citation

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection.
RESTORATIVE PLAYSCAPE DESIGN:
A PHENOMENOLOGICAL APPROACH TO DESIGNING PLAYSCAPES

A Dissertation
Submitted to the Department of Psychology

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By
Jennifer Bradley

May 2023
Copyright by

Jennifer Bradley

2023
RESTORATIVE PLAYSCAPE DESIGN:
A PHENOMENOLOGICAL APPROACH TO DESIGNING PLAYSCAPES

By
Jennifer Bradley

Approved April, 3 2023

Eva-Maria Simms, Ph.D
Professor of Psychology
Duquesne University
(Committee Chair)

Michael Arfken, Ph.D.
Associate Professor of Psychology
University of Prince Edward Island
(Committee Member)

Jessie Goicoechea, PhD
Director of Clinical Training
Associate Professor of Psychology
Duquesne University
(Committee Member)

Kristine Blair, Ph.D.
Dean, Duquesne University
Professor of English

Elizabeth Fein, Ph.D
Chair, Psychology Department
Professor of Psychology
ABSTRACT

RESTORATIVE PLAYSCAPE DESIGN:
A PHENOMENOLOGICAL APPROACH TO DESIGNING PLAYSCAPES

By
Jennifer Bradley
May 2023

Dissertation supervised by Eva-Maria Simms, Ph.D.

This dissertation outlines the development of a phenomenological and restorative approach to playscape design. Restorative Playscape (RPD) is a phenomenologically based approach to designing children’s play environments that involves a process of attending to, noticing, and uncovering natural affordances for play and development, and making enhancements to the environment so that the affordances can be experienced in their full potential and capacity to support children’s growth and development. The restorative approach involves the application of three phenomenological methods to identify the affordances of the outdoor play environment: 1) Child Guided Walks- to explore the affective and relational dimension of children’s experience of place 2) Place Study- to provide a deeper and more experiential understanding of the environment’s natural affordances 3) A Educational and Learning Needs Questionnaire- to provide additional insights into what developmental affordances should be considered based on the developmental
needs of young children. In 2019, the RPD approach was applied to the re-design and development of an outdoor play environment at an Early Years Centre in Prince Edward Island, Canada. Fourteen children participated in the Child Guided Walks, fourteen adults participated in the Place Study, and three educators completed the Educational and Learning Needs questionnaire. The data revealed experiential affordances that support children’s emotional, psychological, social, and physical development and well-being. In addition to physical movement and socialization, the study revealed that outdoor play areas can afford emotional safety, predictability, stimulate imagination and creativity, provide rich sensory experiences, and experiences that cultivate esteem, confidence, and mastery. The data was translated into a re-design plan for the outdoor environment, which was aimed at enhancing experiential affordances, making them more available and accessible to the children during play. Further research is needed to measure and evaluate the impact of restorative play environments on children’s emotional and psychological well-being.
DEDICATION

This dissertation is dedicated to all the children who have welcomed me into their world of play and imagination over the past decade. You have re-awakened me to the aliveness and vitality of the world; to the magic of play and imagination; and to the endless possibilities for life and being.

Thank you.
ACKNOWLEDGEMENT

I would like to thank the many people whose participation and support made this dissertation project possible. First, I would like to thank my professor and chair of my dissertation, Dr. Eva Simms. Through this project and Place Lab, you have helped me to discover the heart of research. This dissertation would not have been possible without our many conversations, your enthusiasm, and support throughout the entire process. I would also like to extend my deepest gratitude to my committee members Dr. Mike Arfken and Dr. Jessie Goicoechea. To Mike: thank you for introducing me to phenomenology and ecopsychology, and for encouraging me to pursue a Ph.D. I could not have undertaken this journey without your unwavering support and guidance. To Jessie: thank you for your consistent support, mentorship, and wisdom over the course of the program and throughout the dissertation process. Your guidance has been integral to my growth as a clinician and researcher.

I would also like to express my deepest appreciation to Dawn MacLeod who has been a vital part of this project from beginning to end. Your compassion and care for children, families, and the environment are what inspired this project, and your dedication and guidance throughout made the project come to life. Thank you.

To all the participants and the CHANCES community: thank you for welcoming me into your community and backyard, and for sharing your experiences. Collaborating with you all was such a joy and enriching learning experience.

To my incredible cohort and colleagues at Duquesne: Thank you for being my home away from home. Without your constant support, love and laughs throughout the trials and tribulations of graduate school, I would have never made it through.
Finally, to my family and friends: thank you for the unconditional love and support, your patience and understanding during the busy and stressful times, and for always keeping me grounded. And a special thanks to my mom and dad for pulling out the knotweed and putting down the stones.
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iv</td>
</tr>
<tr>
<td>Dedication</td>
<td>vi</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>vii</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter I: Literature Review</td>
<td>10</td>
</tr>
<tr>
<td>Nature and Well-Being</td>
<td>10</td>
</tr>
<tr>
<td>Nature and Affordances</td>
<td>14</td>
</tr>
<tr>
<td>Chapter II: Theoretical Review</td>
<td>23</td>
</tr>
<tr>
<td>Lived Space and Spatiality</td>
<td>23</td>
</tr>
<tr>
<td>Children’s Lived Space</td>
<td>24</td>
</tr>
<tr>
<td>Lived Affordances of Space</td>
<td>26</td>
</tr>
<tr>
<td>Affect, Mood and Place</td>
<td>29</td>
</tr>
<tr>
<td>Self and Emotional Development in Children</td>
<td>33</td>
</tr>
<tr>
<td>Chapter III: Methodology</td>
<td>37</td>
</tr>
<tr>
<td>Overview of Restorative Playscape Design</td>
<td>41</td>
</tr>
<tr>
<td>Researching Children’s Lived Space</td>
<td>44</td>
</tr>
<tr>
<td>Place-Based Research</td>
<td>61</td>
</tr>
<tr>
<td>Community Voices in Research</td>
<td>68</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>73</td>
</tr>
<tr>
<td>Chapter IV: Results</td>
<td>76</td>
</tr>
<tr>
<td>Themes and Affordances: Child Guided Walks</td>
<td>78</td>
</tr>
</tbody>
</table>
Themes and Affordances: Place Study ................................................................. 97
Themes and Affordances: Educational and Learning Needs Questionnaire ..... 115
Chapter V: Implementation of Restorative Playscape Design ..................... 117
  Overview ........................................................................................................... 117
  The Playset ...................................................................................................... 120
  The Northside .................................................................................................. 125
  The Southside ................................................................................................. 134
  The Southwest End ......................................................................................... 140
  The Whole Yard ............................................................................................. 144
Chapter VI: Concluding Remarks ................................................................. 156
  Limitations ...................................................................................................... 158
  Conclusion ....................................................................................................... 164
References ......................................................................................................... 167
Appendix A ......................................................................................................... 188
Appendix B ......................................................................................................... 195
Introduction

The happy, active, free outdoor life Maud led in her Cavendish surroundings was an ideal palliative for her overly sensitive and emotional nature. Maud recalled how children could “wade on the rock shore, and bathe on the sand shore; climb the cliffs and poke sea-swallows out of their nests; gather pebbles, dulse, sea moss, kelp, snails and mussels; run races on the sand, dig ‘wells’ in it, build mounds, climb the shining ‘sand hills’ and slide down in a merry smother of sand, pile up driftwood, collect and unravel into twine the nets of wrecked lobster traps, make ‘shore pies’, peep through the spy glass at the fishing boats”. When the children saw distant sailing vessels, they glimpsed the exciting world beyond.

-Lucy Maud Montgomery, Lucy Maud Montgomery: The Gift of Wings

Have you ever witnessed a child playing by the shore or walking through the woods on an autumn day? It is the most magnificent thing to see: the laughter and excitement ignited by the sight of scurrying creatures; the profound curiosity and interest in the critters and the various hiding spots behind a tree or in a cave; the hypnotic appeal of wet sand dripping through their hands while they sit along the shoreline, giggling as waves crash on their knees; and their love of the world shown through gentle care for creatures and insects. Working in early childhood for over a decade on Prince Edward Island, I have often been reminded of how special nature places are to a child. Nature, I believe, reveals its vitality through its interaction with children. They react and respond to nature and its multitude of invitations with such excitement, curiosity, wonder and love. In my own experience as a child playing along the red shores of Prince Edward Island, I recall being ‘chased’ by the waves. The waves would crash into the shore, and I would
run away from them screaming and giggling hysterically, only to chase them back when they pulled away in retreat. Other times I would sit along the shoreline gently piling wet sand on my legs and feet as if I was covering myself up with a blanket. I was mesmerized by the sand slipping through my fingers, and enjoyed the heavy, cool sensation on my legs. I took for granted the refuge and comfort I felt being near the ocean until I moved to Pittsburgh, Pennsylvania for graduate school. When stressful times struck, as they often do in graduate programs, I often found myself dreaming of the shore. During summer and Christmas breaks, the beach was often my first visit, and when hurricane Fiona hit in the fall of 2022, I wept and grieved at the destruction of my beloved place of refuge and security.

In recent years there has been a growing need to address children’s socio-emotional health. The Mental Health Commission of Canada released a policy brief in June 2021, highlighting recent research findings regarding young children’s emotional and behavioral health (Mental Health Commission of Canada, 2021). It was reported that 40% of parents in Ontario had noted behavioral-emotional changes in their children; 61% of parents across the country reported feeling “very or extremely concerned about managing their child’s behavior, emotions and stress” (Mental Health Commission of Canada, 2021, p.2).

As a training psychologist interested in child emotional and behavioral health, I have participated in many conversations with other mental health professionals and educators about how to better address issues related to the emotional health of young children. What is often missed in these discussions or perhaps taken for granted is the importance of outdoor play for children. Based on my own lived experience working in early childhood settings, educators know all too well that when it is raining or too cold to go outside, there will inevitably be a
marked increase in restlessness, hyperactivity, irritability, and a decrease in sustained focus and attention observed among the children. Conversely, if children have lots of time outside, they are refreshed, sleep better during nap time, and are more engaged throughout the day. The benefits of outdoor play for young children are supported by emerging research (Brussoni et al., 2017; Lundy & Trawick-Smith, 2021; Oswald et al., 2020) and yet in my experience, it has been overlooked when considering interventions to improve the emotional and behavioral well-being of children.

In the wake of increased natural disasters, community violence against marginalized communities, an opioid epidemic, mass shootings, and most recently the COVID-19 pandemic in North America, we will undoubtably see the already-striking numbers of anxiety and depression increase across all populations, but particularly among our children and youth. The Mental Health Commission of Canada (2021) further reported that the mental health services for infants and young children within Canada are not sufficient to address the increase in anxiety, mood, and behavior related issues. Issues with funding and inadequate training of mental health professions for this age cohort as reasons for the lack of adequate care for young children and families were cited. It was also reported that the COVID-19 pandemic added additional stress on an already-struggling system. When resources are scarce and the traumas are infiltrating at the individual, communal and global level, alternative interventions need be considered such as community or place-based approaches.

Early childhood educators have been at the forefront of developing programs and curricula that meet the specific needs of children. One example is the widely imitated Italian Reggio Emilia Approach. The Reggio model places emphasis on the child's physical learning
environment, which is sometimes called the "third teacher" (Strong-Wilson & Ellis, 2007). Underlying this approach is the notion that the environment is “alive” and can shape children’s experiences and play. Children’s spaces can be developed and constructed to invite interaction (Strong-Wilson & Ellis, 2007). A Reggio-inspired classroom is aesthetically appealing and filled with diverse elements and materials, whose functions are not circumscribed. Children are frequently taken outside and on excursions to natural places, such as mountains and caves to provide them with safe but challenging experiences. If we can develop classroom spaces intentionally to invite natural learning and educational opportunities for children, we can begin to wonder about how classroom space and design might function to support their psychological and emotional growth.

Another example of the power of environmental design has been the trend in schools and early childcare centers to set up self-regulation spaces, which are referred to as “calm down corners” (Harmon, 2018) or “safe places” (Conscious Discipline, 2022). These areas typically have cozy furniture, self-regulation materials such as squishy balls, play dough, quiet, calming music or sounds, and signage with simple, child-appropriate instructions on how to de-stress the body (e.g., breathing techniques and mindfulness exercises). Underlying these initiatives is the assumption that we can shape and design children’s environments to support children’s capacity to regulate their emotions and to deal with stress and arousal in peaceful, non-violent, and non-punitive ways.

Environmental, ecopsychological and ecophenomenological literature has shown for decades that time spent in nature, or the outdoors affords psychological and emotional benefits for both adults (Berto, 2014; Hinds, 2011; Kaplan, 1995) and children (Hart, 1979; Kellert, 2012;
Louv, 2007; Wells, 2000). Some studies suggest that time spent in natural environments can support attentional restoration in children with ADHD (Kuo & Taylor, 2001; 2004; Louv, 2008), children with autism (Louv, 2008), and children dealing with stress (Wells & Evans, 2003). Literature on wilderness therapy for youth supports the notion that wilderness programs can improve psychological functioning among individuals and children (Bowen et al., 2016; Johnson, et al., 2020). A wealth of literature has been devoted to better understanding the benefits of outdoor play for children, particularly its developmental affordances through natural areas or elements that promote physical (Fang et al., 2019; Rocha & Nunes, 2020), intellectual (Kuo & Taylor, 2004; Schutte et al., 2017), and social-emotional development (Chawla, 2015).

The places we inhabit have the power to shape us. And in turn, we have the power to shape and structure our environments to support learning and benefit our health. Nature experiences have been found to afford certain emotional and psychological health benefits. However, a deeper and more nuanced understanding of how or in what ways nature can provide these beneficial experiences has been understudied. This dissertation project outlines the development of a novel approach to playscape design, Restorative Playscape Design (RPD) that involves: 1) employing phenomenological methods to uncover the affective and relational affordances of a natural play area for children and 2) examining and utilizing this experiential information to further enhance developmental affordances, particularly affordances that can support psychological and emotional development.

My hope is that by developing an approach to uncover the embodied, affective, and relational affordances of natural places, we can discover new ways to enhance their restorative potential and create future play areas for children that will serve to enrichen their psychological,
emotional and self-development. Employing this approach to playscape design may further provide creative opportunities for the early childhood sector to address the rise in emotional and behavioral issues among Canadian children, especially those in under resourced communities. Additionally, designing playscapes to support emotional and psychological growth expands our understanding of how and where healing happens. It may provide an alternative healing space and experience for children who have not been responsive to traditional forms of mental health support such as play or behavioral therapy.

The inspiration for this dissertation project emerged as a response to a call from my home community, Epekwitk, the land now known as Prince Edward Island, Canada. Epekwitk, which means “lying in the water” has been inhabited by Mi’kmaq for at least 12,000 years and was colonized in the 1700s by the French and later, British settlers. At present, Prince Edward Island (PEI) is Canada’s smallest province with approximately 152,000 inhabitants. In recent, years Prince Edward Island’s population has increased dramatically (4.26% in the past two years) due to immigration, which has led to significant ethnic and cultural diversity within the small, 140-mile-long province. The province is most known for its breath-taking land and seascapes, vibrant red soil, and rural, community-minded way of life. The local economy is supported mostly through tourism, agriculture, and fishing sectors, which provide seasonal economic resources.

This picturesque vision of Prince Edward Island however masks a darker, more devastating reality for Islanders. A broken healthcare system, lack of government funding and resources, low paying seasonal jobs, paired with high costs of living have contributed to an ongoing housing crisis as well as a mental health and addictions crisis across Prince Edward Island.
In 2016, the provincial government released a document that outlined a ten-year plan to address the mental health and addiction issues facing many islanders (Government of Prince Edward Island, 2016). The plan was developed as a response to the public outcry for better and more efficient mental health services. The document identified clear barriers to access: lack of funding, space, and mental health professionals. A briefing on this plan was held in October 2017 at a meeting of the legislative assembly of Prince Edward Island. It revealed that although several plans are well underway, there is still a shortage of psychiatrists, psychologists, and services. Dr. Heather Keizer, who is the chief mental health and addictions officer on Prince Edward Island, released several statements concerning the mental health crisis. She reported that the number of psychiatrists available for emergent care was incredibly low, and that many psychiatrists were leaving the Island to work elsewhere (Ramlakhan, 2017). This has left Islanders struggling to find stable and supportive mental health services.

Children have been no exception. With regards to child mental health, it was reported that the wait time for psychoeducational assessments was over 3 years. Children requiring urgent mental health care were currently waiting approximately 50 days or more to see a psychiatrist and 25 days to see a mental health provider (Government of Prince Edward Island, 2016). Consequently, there has been a public outcry from many Island families to the provincial and federal government to address these on-going issues as to better support children who are suffering (Ross, 2017). These issues have only been intensified in recent years with the onset of the COVID-19 pandemic. For instance, the number of students referred to well-being programs on Prince Edward Island has been increasing steadily since the 2017-2018 school year with 183 referrals to a startling 1,353 referrals in 2020-2021 with long waiting list for access to these programs due to staffing issues (Bruce, 2022). The escalating crisis and unclear future of the
mental health system inevitably calls for a creative and accessible approach to address the psychological and emotional needs of children on Prince Edward Island.

The call from Prince Edward Island came in the fall of 2018. A former colleague, Ms. MacLeod, reached out for some guidance regarding the re-development of a large green space at a CHANCES early childhood center in Charlottetown, Prince Edward Island. CHANCES (Caring, Helping, and Nurturing, Children Every Step) is a non-profit organization that provides a wide range of services for children between the ages of 0-5 and their families. These services are directed towards facilitating healthy emotional, psychological, and intellectual development of children. One service provided by the organization are early childhood education programs. These programs exist in many locations across Prince Edward Island. At the time of the study, Ms. MacLeod was an assistant director for the Chances Early Years Centers. She expressed to me her desire to update a backyard space that served as an outdoor play area for one of the Early Years programs. The space was also frequently used by other drop-in programs for children and families. She described the place as “having a lot of beauty and potential” but had been somewhat neglected over the years. She also desired a restorative, safe outdoor space for the children and families to mediate some of the emotional and psychological stress that she observed in the children and families at the center. Knowing my background and interest in the restorative benefits of the outdoors, as well as my experience in child development and psychology, Ms. MacLeod sought my expertise in helping her to restore the backyard.

As I began putting ideas together for the backyard, something did not feel right. I had no relationship to this place. I had never been there before, nor did I have a sense of how the staff or children experienced it. What if there were special areas or experiences that I was not aware of? And what if my recommendations ended up disrupting important, special experiences for the
children? In these moments of tension, I felt a strong urge to connect with the place itself and the people who knew it well. I was not the expert here nor was Ms. MacLeod. The experts, I realized, were the children and staff at the center.

The current project was inspired through discovering and working through this tension. Rather than simply design a playscape based on my own knowledge, I would instead develop an approach to designing playscapes that was rooted in lived experience and collaboration. At this time and throughout the course of this project I was a member PlaceLab and worked closely with Dr. Simms. PlaceLab is a research lab consisting of members from the Duquesne Psychology program, as well as community members from the greater Pittsburgh area. The lab researches the intersection of community and place with the tools of psychology and philosophy. Members strive to address the degradation of community and place through community-engaged qualitative research, advocacy, and education. For this project, PlaceLab provided a space to discuss ideas, issues related to place-based research, collaborate, and draw inspiration from my colleagues who were engaging in various place-based projects across the city. Dr. Simms’s mentorship and Place Lab was integral to the process of outlining and developing the current study.

After collaborating with Dr. Simms and Place Lab on ways to approach community and place based environmental design, I presented my burgeoning approach to Ms. MacLeod and discussed doing a project with the center that would involve implementing this new approach to playscape design. Soon after, Ms. MacLeod and I met with the other directors and the executive director of CHANCES to discuss the project and its potential benefits. The method and project, which will be discussed in depth in later sections, was approved with little hesitation from the
stakeholders. With encouragement from CHANCES and Dr. Simms and PlaceLab, I was inspired to develop a novel, experientially based approach to playscape design.
CHAPTER I: LITERATURE REVIEW

Nature and Well-Being

In recent years, there has been a growing interest in understanding our relationship with the natural world (Abram, 1996; Akhurst, 2010; Garst et al., 2010; Hansen-Møller & Ostrup, 2004; Hedlund de-Witt, 2013; Hinds, 2011; Kyriakopoulos, 2011; Louv, 2008; McDonald et al., 2009; Passmore & Howell, 2014). Industrialization, urbanization, and technological advancements over the past century have contributed to a dramatic change in our engagement with the natural world and its resources. Some argue that our departure from and destruction of the natural world has contributed to widespread physical and psychological conditions such as depression, anxiety, attentional and behavioral issues, obesity, and other diseases (Kidner, 2007; Louv, 2008). In the past decades, many research studies have helped us understand the connection between humans and nature, and particularly how this relationship is a contributing factor to our health and well-being.

Many findings suggest that exposure to nature has a direct impact on our well-being and health, as well as strengthens our commitment to sustainability practice and protection of the natural world. Well supported theories such as Attention Restoration Theory (ART) (Kaplan, 1995), the biophilia hypothesis (Wilson, 1984) and Ulrich’s (1983;1986;1991) stress reduction theory (SRT) suggest that humans have an affinity for nature and benefit from experiences in natural environments. While this literature does extend across the lifespan, studies with children -- and particularly with young children -- are few compared to youth and adults (Taylor et al., 2002; Wells, 2000). Studies that examine the benefits of nature for young children focus on their physical health (e.g., obesity and sedentary lifestyles) (Fang et al., 2019; Molina-Cando et al., 2021; Rocha & Nunes, 2020); the over-use of technology and screen time (Oswald et al., 2020);
psychological and cognitive health (Kuo & Taylor, 2004; Schutte et al., 2017) as well as their affiliation and connection (or lack thereof) and its implications for future environmental behaviors and practices (Molina-Cando et al., 2021).

With rapidly growing advancements in technology, devices such as cell phones, tablets, and laptops and all kinds of screens are becoming more accessible and used more frequently for both educational and recreational purposes. Infants and young children are increasingly exposed to and engage with various forms of screen technology. With the onset of the COVID-19 pandemic, screen use has increased exponentially among children and youth of all ages (Moore et al., 2020). Recent research conducted with children under 5 suggests that too much screen time in the early years may disrupt cognitive development, proper sleep hygiene and lead to behavioral issues (Oswald et al., 2020). Oswald et al’s (2020) systematic review compared studies that examined the psychological impacts of “screen time” versus “green time”. The review’s findings suggest that young children (five years of age and younger) who experience high levels of screen time were more likely to have deficits related to cognitive development (Tomopoulos et al., 2010), communication, attention, language (Tomopoulos et al., 2010), and behavioral issues (McDonald et al., 2018; Radesky et al., 2014; Rocha & Nunes, 2020). Conversely, increased exposure to local green spaces was associated with reductions in mental health problems and peer conflicts, as well as better developmental outcomes in social, emotional, cognitive and language development for younger children (Oswald et al., 2020).

Additional research on the impact of screen time, including video gaming, on the health and well-being of young children suggests that accessibility and increased use of screens has contributed to childhood obesity rates and sedentary lifestyles among young children (McCurdy, et al., 2010). These concerns have amplified in the wake of the COVID-19 pandemic when
children spent most of their day indoors (Moore et al., 2020). Many outdoor activities such as recreational sports were cancelled for a prolonged period, leaving many children with limited opportunities for physical play outside (Moore et al., 2020). Research exploring children’s relationship with nature and the outdoors often emphasize its affordances for physical activity, and view spending time in nature as an opportunity for physical play (McCurdy et al., 2010).

The research on the restorative and psychological benefits of nature experience is inspired by the well-documented theories of Attention Restoration Theory (ART) and Stress Reduction Theory (SRT), and the biophilia hypothesis. While much of this research has been conducted with adult participants, there are some studies that involve child and youth participants. Wilson (1984) pioneered the biophilia hypothesis, which theorizes that all humans have a genetic and biological attraction and need to connect with non-human organisms and natural environments. Kellert’s (2012) work on children’s experience of the aesthetic qualities of nature further indicates that experiences in nature contribute to their development across several domains (e.g., cognitive, intellectual, emotional, and spiritual).

Kaplan’s (1995) restorative theory of nature posits that spending time in natural environments can mediate cognitive fatigue and improve attentional resources. Drawing from William James’ work on directed attention, they suggest that spending time in nature can help us recover attentional resources that may become depleted throughout the day. When attentional resources are depleted, it can impact the function other cognitive faculties such as impulse control, memory, and self-discipline (Taylor, et al., 2002). Based on Kaplan’s theory, the aesthetic qualities of natural environments can attract our attention with little to no effort. This innate attraction to natural elements allows humans to distinguish between relevant and irrelevant stimuli effortlessly when attending to the environment, allowing time for cognitive
resources to replenish (Stevenson et al., 2019). Stevenson and colleagues (2019) showed that a 30-minute walk in a natural environment can improve performance on the Attention Network Task, which is a task designed to measure directed attention. Additionally, Dadvand and colleagues (2017) explored how lifelong exposure to residential greenspaces impact brain development, particularly attention in young children. Their results indicated that exposure to green spaces led to better performance on attention tasks. These findings are further substantiated by earlier studies (Kuo & Taylor, 2004; Strife & Downey, 2009; Taylor et al., 2002; Wells, 2000).

Ulrich’s Stress Reduction Theory (SRT) (1979;1983; 1991) posits that exposure to nature can lead to a reduction in psychological and physiological stress. Ulrich’s (1984) work on nature exposure in hospital settings revealed that availability of nature (e.g., seeing trees outside a patient’s window as opposed to viewing a brick wall) is associated with improved recovery time, required less pain management, and experienced less complications related to surgery and recovery. Recent research on nature exposure and stress reduction supports Ulrich’s theory (Scott et al., 2021). However, there are no current studies that explore this phenomenon in young children.

Studies with adult populations have also shown a positive correlation between exposure to nature and affect, suggesting that time spent in natural environments can improve mood (Berto, 2014; Louv, 2008). Berto’s (2014) comprehensive review of nature restorativeness suggests that spending time in nature can “mediate the negative effect of stress, reducing the negative mood state (e.g., anger, aggression, fear and sadness), and at the same time enhance positive emotions such as friendliness” (p.397). And last, but certainly not least, investigating children’s experiences in nature has implications for addressing the ecological crisis (Louv,
Louv (2008) compares a child’s relationship with the natural world to that of attachment with a parent suggesting that “if children do not attach to the land, they will not reap the psychological and spiritual benefits they can glean from nature, nor will they feel a long-term commitment to the environment, to the place” (p. 159). Wells and Leikies (2006) were also interested in understanding if and how early experiences in nature influenced environmental attitudes and behaviors in adulthood. They found that unstructured play experiences in nature positively shaped environmental attitudes and behaviors in adulthood. The authors further suggested that early exposure to nature, prior to age 11, was directly associated with pro-environmental behaviors.

**Nature and its Affordances**

Given the compelling literature in the previous section, it should be of no surprise that there is a subset of research devoted to how and what elements or material qualities of natural spaces afford these developmental and educational experiences for children. In *The Ecological Approach to Visual Perception*, James Gibson (2014) discussed the notion of affordances. Gibson found that properties of physical environments can afford certain behaviors and experiences in animal species. He wrote: “the affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill” (p.119). According to Gibson (2014), an affordance is a property of the environment that is immediately perceived and experienced by an animal. In a radical departure from orthodox theories of perception, Gibson (2014) wrote that:

> an important fact about the affordance of the environment is that they are in a sense objective, real and physical, unlike values and meanings, which are often supposed to be
subjective, phenomenal, and mental…it is both physical and psychical, yet neither. An affordance points both ways to the environment and the observer. (p. 121)

For example, an acorn is an affordance in so far is it is perceived and used to provide nourishment and is edible to a squirrel or other animal. While Gibson (2014) did not apply his theory directly to human beings, geographers and ecologists have applied the concept of affordances to human relationships (Chemero, 2003; Rietveld & Kiverstein, 2014), and psychologists to the development of children (Gibson & Pick, 2003). Geographical and landscape researchers interested in children’s experience of space and place have applied Gibson’s (1979/2014) concept of affordances to their work on understanding how children’s spaces contribute to their experience and development (Bagot et al., 2015; Fjørtoft & Sageie, 2000; Fjørtoft, 2001; Hayball et al., 2018; Herrington & Studtmann, 1998; Kirkby, 1989; Prieske et al., 2015; Storli & Hagen, 2010).

Outdoor play environments in educational settings are generally understood as a secondary space where children can continue their learning and development with the additional opportunities for physical movement and socialization, and the literature reflects this. Studies on children’s outdoor play environments generally involve uncovering affordances that contribute to a child’s social (Herrington & Studtmann, 1998; Keeler, 2008; Kirkby, 1989; cognitive (Bagot et al., 2015; Zamani & Moore, 2013), and physical development (Hayball et al., 2018; Storli & Hagen, 2010; Spencer & Wright, 2014).

Researchers have engaged in a close examination of children’s behaviors and movement to identify natural elements that afford opportunities for growth and learning. A clear example of this was Fjørtoft and Sageie (2000)’s study, which examined how play in a local woodland area facilitated healthy motor development in children. By analyzing the topography
and the vegetation of the landscape, as well as the movement and play patterns of the children, they concluded that this natural landscape afforded versatile play. Versatile play was defined as: functional play (i.e., a form of play that requires gross motor movements such as tag or hide and seek), constructive play (i.e., a form of play that requires the child to build or construct something such as building a house using sticks), and finally symbolic or dramatic play (i.e. imaginative play whereby the child imagines themselves in different roles and situations such as pretending to be pirates or playing “house”). Children were drawn to areas that supported their play. For example, children engaged in symbolic or constructive play would go to areas with lots of shrubbery and deciduous trees, and children engaged in functional play would seek out trees for climbing or sandy areas for digging. The more diverse a natural area was, the greater the opportunities for diverse forms of play. Like other studies, these findings suggest that access to diverse topographies and vegetation can foster healthy and more complex motor and social development in children (Fjørtoft & Sageie, 2000; Herrington & Studtmann, 1998; Keeler, 2008). These findings have further implications for designing and developing outdoor play spaces for children.

Rusty Keeler (2008), a pioneer of playscape design, does not refer to outdoor play environments as “playgrounds”, but rather as “playscapes”. For Keeler, the term playground implies permanence and evokes an image of man-made equipment. A “playscape”, on the other hand, can invite us to imagine an outdoor play environment as a “landscape for play” (Keeler, 2008, p.16). In a landscape, the child is not limited to play that is predetermined, but rather offers children the opportunity to bring their imaginations to life through their outdoor play. In his book Natural Playscapes: Creating Outdoor Play Environments for the Soul, Keeler (2008) provides a simple, yet detailed approach to designing and constructing natural play spaces for children.
Keeler recommended that outdoor playscapes should be stimulating, diverse, and aesthetically appealing spaces that invite various forms of play and activities.

He emphasized the importance of having natural play spaces (i.e., places with no, or very few, human-made elements), and identified several key natural “ingredients” that make up the ideal playscape such as hills, water, plants, pathways, sand, stages, sounds, hideouts, seating, and gardens (p. 92). These elements have also been cited in relevant literature as important features for natural play environments:

- **Hills, stumps, and trees** - These elements can challenge a child (Barbour, 1999; Norðdahl, K. & Einarsdóttir, 2015; Prieske et al., 2015; Veitch et al., 2006) and facilitate *gross motor development*, as they call for children to move and coordinate their bodies in different ways (Spencer & Wright, 2014).

- **Water** - Having water available to children affords diverse *sensory* experiences (Keeler, 2008; Swank & Shin, 2015). Children can also *experiment* with water because it exists in various forms and can transform other elements such as sand and dirt (Spencer & Wright, 2014).

- **Plants** - Having plants or a garden in a playscape can invite *exploration* (Keeler, 2008); *restore attentional resources* (Bagot et al., 2015); foster a sense of *care and empathy* towards other living beings (Keeler, 2008; Swank & Shin, 2015); and increase an *appreciation for the natural world* (Keeler, 2008; Spencer & Wright, 2014).
• **Pathways**- Having natural or intentional pathways invites the child to *explore new areas* and *challenges* the child physically (Herrington & Studtmann, 1998); it encourages cooperation among children using the path (Herrington & Studtmann, 1998; Keeler, 2008); and helps them experience a sense of *connection with each other and the natural environment* (Parsons, 2011)

• **Sand**- Sand play creates opportunities for children to develop *locomotor skills, social engagement, sensory experiences, and exploration, curiosity, and creativity* (Keeler, 2008; Spencer & Wright, 2014).

• **Stages and Seating**- welcomes the children to gather and engage with one another and foster *social connection* (Keeler, 2008; Kirkby, 1989; Spencer and Wright, 2014)

• **Different sounds**- Having different sounds or natural musical instruments available facilitates self-expression and movement (Keeler, 2008; Spencer & Wright, 2014)

• **Hideouts or “secret places”**- Children are drawn to small hiding spaces where adults cannot go (Keeler, 2008; Kirkby, 1989 Norðdahl & Einarsdóttir, 2015; Veitch et al., 2006); Winterbottom, 2008). These small spaces can intensify or enhance a child’s dramatic play (Kirkby, 1989)
• **Loose Parts**—having loose parts (e.g., tree logs, branches, stumps, tires, old barrels, rocks etc.) spread throughout the playscape inspires creativity (Fjørtoft & Sageie 2000; Keeler, 2015; Susa & Benedict, 1994) and fosters cooperation (Keeler, 2015).

According to Keeler (2008), these key elements invite the child to engage their senses and the world in unique ways that contribute to their growth and development. He also highlighted the importance of community engagement in the process of creating a playscape and believed that the design of the playscape should be unique to the school or the local area. Although the term “playscape” has not yet become popularized, the importance of having natural elements available in an outdoor play environment has been supported in the literature (Fjørtoft & Sageie, 2000; Keeler, 2015; Susa & Benedict, 1994).

A small subset of this literature explores the therapeutic potential of outdoor play environments for children (Swank & Shin, 2015; Winterbottom, 2008). Swank and Shin (2015) presented a nature-based approach to Client-Centered Play Therapy, proposing that outdoor environments be used as alternative to the traditional therapeutic playroom. Drawing on existing literature, they posited that spending time outside and engaging in outdoor activities like gardening can promote healthy social and emotional development, including improved relationships with others and self-esteem.

Winterbottom’s (2008) review of the *Garden of Hope Project*, which is an ongoing community-based project in Guatemala aimed at developing an educational space for children in a small, poverty-stricken community surrounding a massive, toxic garbage dump. The community was built to provide housing for families that were removed from their previous homes and provided employment for individuals who were suffering from the poverty that pervaded Guatemala during the 1980’s. Displacement trauma was evident in the dynamics of
families and many children suffered psychological trauma from parental neglect and abuse. One initiative to address community trauma was *The Garden of Hope Project*. In 2004, Hanley Denning, the executive director of Safe Passage (an organization whose primary aim was to provide educational services to the children in the poorest communities of Guatemala) took a group of children to Antigua, a beautiful and ecologically diverse community. The children who ordinarily displayed typical signs of trauma (withdrawal, cautiousness, tension), were curious and engaged in this beautiful space. Denning reported that the children were rolling around in the grass and touching the bugs. This experience led Denning to eventually develop a preschool in a park space. For Denning, the park would serve as a space where local children could experience “exploration and learning” as well as a sense of “safety and healing” (Winterbottom, 2008, p.441). Developers established parent and child focus groups to help create and design the park space. Parents wanted a space that included: walking paths; shaded areas; diverse plants and flowers; a wall surrounding the space; gardens; places for supervising the children; and open spaces for community celebrations. The teachers requested multi-purpose play elements, diverse gardens, and an open space for supervision. The children expressed wanting hidden spaces, a diverse ecosystem filled with lots of different plants, animals and insects, picnic tables, an open field, and diverse spaces such as mountains, caves, and forests. At the time of the publication, the project had completed the first phase of development, which included the soccer field, entry space, gathering space and the gardens.

I hope to contribute to this burgeoning field of work through developing a novel approach to playscape design, which I refer to as a Restorative Playscape Design. Much like Winterbottom’s (2008) *The Garden of Hope Project*, my project emerged as a response to a call from my home community in Prince Edward Island, Canada. Ms. MacLeod, a director of an
Early Years Child Development Center reached out to me for support in re-designing the outdoor play environment. The play environment was a large greenspace that had been neglected for some time. Most toys were faded and broken, some junk from other centers and the main office had been abandoned in a corner of the yard, and much of the vegetation lacked care. While the backyard was primarily used by a group of children between the ages of 2-5, it was also used as alternative space for other community-based family programs before and during the Covid-19 pandemic.

Drawing from the literature, I developed what I have called Restorative Playscape Design by integrating Keeler’s (2008) and Winterbottom’s (2008) community-based approaches into this phenomenological method to ensure that the children and staff who utilized the space daily had a voice in its re-development at each stage of the project. Literature on the restorative qualities of natural environments, as well as the psychological and restorative affordances of outdoor playscapes contributed to the unwavering support from the staff for this project -- particularly considering the difficulty of finding psychological services for children’s mental health challenges. This project complements the existing literature in a few important ways:

- This study examines the affective and relational dimensions of children’s lived experiences of an outdoor play area; children have been an underrepresented population in environmental and related studies.

- This study attends to the affective dimension of nature experience, thus illuminating potential psychological and restorative affordances of the outdoors. The emotional affordances of natural play environments have been understudied in landscape design and environmental research on children’s nature experience
Finally, this study involves translating experiential data into playscape design with the goal of enhancing children’s development through the enriching psychological and emotional affordances of place.
CHAPTER II: THEORETICAL REVIEW

Lived Space and Spatiality

Over the last few decades, greater attention has been given to how our physical environment shapes our psychological, emotional, and socio-cultural experience, which is apparent in theoretical and research literature. This interest in the dynamic relationship between individual and space grew, in part, from a philosophical shift towards a spatial perspective in the 20th century. Initiated by continental philosophers Michael Foucault and Henri Lefebvre, the spatial turn is a post-modern movement that emphasizes the role of space in shaping our lived experience. The spatial turn moved beyond an exploration of space in terms of its physical, geometric properties and towards something that is “intimately tied to lived experience” (Soja, 2009, p.4). Critical geographers explored the dynamic connection between the social-cultural and the spatial through social justice themes such as issues of economic inequity, racial/gender discrimination, systems, and institutions of power, etc. (Harvey, 1989; Soja, 2009; Soja 2010). Phenomenologists and phenomenologically inclined geographers were drawn to one’s embodied relation to the world and others (Casey, 2009; Merleau-Ponty, 1945/2011; Relph, 1976).

In *Phenomenology of Perception*, Merleau-Ponty (1945/2011) argued that the very structure of our perception is rooted in space since our bodies are always engaged in a meaningful, dynamic relationship with the world or “milieu” where we are situated. For Merleau-Ponty (1945/2011) “space is not the milieu in which things are laid out, but rather the means by which the position of things becomes possible” (p.254). In other words, space is not some geographical area that our physical body simply occupies, rather space is what allows our encounters with sensations, things, and others to become possible. The affordances of our milieu
(e.g., its physical structures, cultural meanings, social practices etc.) inform how we will encounter the world and take it up as space for certain deeds and actions to be enacted.

**Children’s Lived Space**

Benswanger (1979), in her study on *Lived Space in Early Childhood*, wrote that “from the moment of birth there is an involvement in a place” (p. 115). The world---the source of nourishment, the warm blanket wrapped tight around the skin, the gentle coo of a caregiver’s voice---all envelop the infant. Although the skin is a boundary that separates the infant’s body from the world, they do not experience such separation. In Simms (2008) essay *Spatiality and the Structures of Child Consciousness*, she elaborates on the sensory experience of the newborn. She writes: “though it covers the body, the skin rarely comes to awareness as a whole, but appears, like the continents on a world map, as regions of sensation here and there: wherever the world touches us” (p.33).

With the help of caregiver(s), infants develop the capacity to inhabit a world that “is beyond the realm of [their] own immediacy” (p.115). The “anchorage” or rather, security that infants develop within their immediate milieu (i.e., parents, home, familiar objects, and things) will later afford them the capacity to move into broader, more expansive worlds of experience. Benswanger (1979) writes: “[they] grow in the midst of an existing world into a world [they] continually discover and elaborate” (p. 115). This exploration is further afforded by the development of the upright posture. When infants learn to sit up, crawl and eventually walk, they begin to take claim upon their milieu. Through these claims, infants come to recognize the contours and limits of their bodies. Imagine a child who closely watches their mother put their favorite toy away on a shelf that is beyond their reach. They may walk over, stand in front of the shelf, and stretch their body as far as it will go to reach the toy. In failing to retrieve the desired
object, the child becomes aware of their body as something distinct in their milieu. Simms (2008) wrote that: “the body as mine is given to me not in itself and through the recognition of the boundedness of its skin but as an element in the equation of action space” (p. 42). In other words, the notion of the body as separate and distinct from the world is not something that we inherently know, but rather something that is realized through our movement through our spatial field.

Around the age of three or four, “thinking awakens in the child, and the sensorimotor relationship with spaces is overshadowed by the more symbolic relationship of mythical, animistic thinking” (Simms, 2008, p. 52). The child’s capacity for imagination and thought brings with it a new way of relating to space where the imaginary predominates and the familiar is rendered strange and mysterious. The kitchen table is no longer designated as simply a place for eating, but becomes a pirate ship, a house, or a cave. Simms (2008) explains that “imaginative play responds to the plenum and allows the child to perceive and realize some of its dimensions that are hidden from most adults” (p. 51). Children at this age typically have developed enough lived distance⁠¹ from the world that they recognize their capacity to press upon, change and possess (aspects) of their milieu, and yet they are still deeply attuned to its sensorial and affectual elements. Simms (2008) reminds us that young children are captured and moved by the feeling dimensions of a given place, which is most clear in their fear of the dark.

How children perceive and experience space is shaped by the mood or atmosphere of that space. This is an important point to emphasize in the context of trauma and adversity. Spaces, situations, or relationships that are permeated with stress, anxiety, fear, depression, etc. shape

---

¹ The term lived distance refers to “the sense of seeing life unfold around me, while its ‘ambient’ becoming (that is, movement toward the future of beings and things that are not me) is happening more or less independently of me (Simms, 2008, p. 48).
how an infant or child will perceive and inhabit space. Benswanger (1979) wrote that “the child’s sense of comfort, familiarity and security invariably affects his perception of a place and his behavior there…” (p.45). Children who have developed this comfort or security (i.e., anchorage) may engage with the world in a curious, open and engaged way (e.g., looking around, pointing, trying to move, reaching) whereas children who do not know this sense of safety may experience their spatial field with fear, reservation, and disinterest (e.g., minimal eye contact or scanning, restricted interests in people, activities and objects, unusual or repetitive movements). What this poignantly reveals is that space and what it affords, from conception, shapes our perceptual, relational, and emotional ties to the world and others. When working with children who experience trauma, chronic stress, or anxiety, it is important to pay attention to the spaces they inhabit (e.g., classrooms, playgrounds, therapy rooms) and how they shape their social and emotional experiences.

**Lived Affordances of Place**

The concept of affordances was initially developed by James Gibson (1979) in *The Ecological Approach to Visual Perception*. As mentioned earlier, Gibson’s concept of an affordance challenged existing, inferential theories of perception in animals. Inferential theories of perception locate perceptual meaning within the animal or human. In other words, the animal detects discrete stimuli in the environment, which then becomes interpreted and made sense of through a series of internal processes (Chemero, 2003). Gibson (1979) formulated a direct theory of perception, arguing that what we first encounter when attending to the environment (e.g., an object, structure, element, etc.) is not a confusing mass of discrete stimuli that must be organized into a meaningful whole as an act of cognition, but rather, what is first revealed to the
animal/human is what the environment affords. First, the affordance calls the body into action, a pre-cognitive and pre-predicative, yet meaningful act. We see this most clearly in animals, infants and young children, whose engagement of the world is not yet primarily mediated through cognition. Drawing from research on infant perception, Gibson (1979) found that

The infant does not begin by first discriminating the qualities of objects and learning the combinations of qualities to specify them. Phenomenal objects are not built up of qualities; it is the other way around. The affordance of the object is what the infant begins by noticing. The meaning is observed before the substance and surface, the color and form are seen as such.

Eleanor Gibson and Anne Pick (2003) posited that an infant’s engagement with the world and its plenitude of affordances shapes their learning and development across all domains. They write: “babies encounter the world in the course of events and learn about what things and situations afford by observing and especially exploring them spontaneously” (p.188). When discussing perception beyond infancy, she explains that as the infant/toddler/child develops, new affordances become available which creates new opportunities for perceptual learning and engagement.

In studying animal perception, James Gibson (1979) claimed that environmental structure(s) afford or invite certain behaviors or actions. Environmental affordances, according to Gibson, are thus inherently imbued with meaning, function, and purpose regardless of the presence of the animal. This is a radical departure from reductionist theories of perception that maintain that the material world only has meaning in so far as someone (animal or human) is there to make sense of it.
Chemero (2003) challenged and refined Gibson’s theory of affordances, filling in some theoretical gaps. He argued that Gibson (2014) lacked clarity and precision in his claims about perception, noting “the description makes affordances seem like impossible ghostly entities that no respectable scientist could have as part of their ontology” (p.182). For Chemero, what becomes theoretically (and ontologically) problematic with the concept of an affordance as presented by Gibson (1979), and later Turvey (1992) and Reed (1996), is that an important question remains about “whether affordances are resources that guide natural selection or dispositional properties of the environment that must be complemented by some property of the animal(s)” (p.184). In other words, are there affordances out in the environment just waiting to afford something to the animal/human, or do affordances arise and manifest themselves in the context of an interaction with the animal/human. Chemero uses the example of edibility to clarify this disagreement: “[is] the affordance of ‘being edible’ a property of objects in the environment only if there are animals that are capable of eating and digesting the object” or is the edibility of the object an inherent property of it regardless of the presence of an animal (p.183). Chemero attempts to resolve this debate by arguing that an affordance is not a property, nor a feature of the environment, but rather exists as relationship. The affordance lies at that intersecting point between the perceived and the perceiver. He draws on our perception of someone being “taller-than” someone else to describe what he means:

Shaquille is taller than Tony. Notice first that the only objects in this relation are Shaquille and Tony. The taller-than is not inherent in either of them but depends on both of them for its existence…the affordance is not an extra thing in any of the usual senses of the “thing”. Yet it exists nonetheless, and, like the fact that Shaquille is taller than Tony, is quite perceivable (p. 187)
Chemero’s (2003) compelling examples support the concept of an affordance as a relational phenomenon. From this perspective, an affordance is not a property, or a structure, but rather it is an experience that is actualized through our encounters with place. Understanding an affordance as a relational phenomenon invites new possibilities for how our interactions with the material world or qualities can shape our lived experience, including the psychological, emotional, and imaginative realms of experience. It provides us with a theoretical framework for understanding how emotional and psychological experiences are shaped and transformed through our experiences of place (i.e., why a entering a cave might elicit fear or anxiety, or why being near the ocean can evoke calm, relaxing feelings).

To understand and identify affordances, in the context of playscape design, is to closely observe what Casey (2009) described as place. That is, “what takes place between body and landscape … the point where space and body intersect” (Casey, 2009, p. 29). It seems that attending to what happens at that intersecting point (i.e., to closely observe and attend to what the child is thinking, feeling, and doing in a certain place, and noting how their experience changes with transition to another ‘place’) may reveal the emotional and psychological affordances. Phenomenological methods provide a framework to observe and identify affordances, namely the affective and psychological experiences of place. Using phenomenology as a tool to discover and examine the emotional and psychological affordances of children’s lived spaces, and then translating experiential data into a playscape design has not been done before.

**Affect, Mood and Place**

Within mainstream psychology and clinical practice, the terms mood, affect, and emotion are often used synonymously to describe the affective dimensions of our everyday experience.
Popularized theories generally agree that an emotional experience is understood as a combination of thought(s), feeling(s), motivation(s), and physiological and motor response (Moors, 2009). Early theories of emotion such as James-Lang Theory of Emotion (1884) and the Cannon-Bard Theory of Emotion (1927) have shaped and continue to inform contemporary understandings of emotions. James’ (1884) theory posits that emotional experience is a conscious reaction or awareness to physiological stimuli (e.g., we experience fear because our heart begins to race or we experience shortness of breath, etc.). According to Moors (2009), Cannon (1927/1987) challenged this theory, arguing that it was too simplistic, as it could not account for the fact that similar states of arousal can be accompanied by different emotions (e.g., excitement and fear can both elevate heart rates), and that when artificially induced, physiological states did not necessarily produce an emotional reaction or response. Moors (2009) explained that Schachter (1964) attempted to reconcile both theories, proposing that emotion begins with physiological arousal, but is then appraised through cognition (e.g., My heart is racing because I am awaiting the arrival of my partner at the airport therefore, I am feeling excited versus my heart racing because I am being chased by a dog and therefore, I am feeling fear).

Appraisal theories of emotion emerged in critical response to Schachter’s theory (Moors, 2009). Appraisal theories such as those proposed by Arnold (1960), Frijda (1986), and Lazarus (1966, 1982, 1991) to name a few, posit that cognitive appraisal occurs “at the very onset of the emotional episode (after the stimulus), prior to the body responses” (Moors, 2009, p. 638). Without getting into the nuances of each specific theory and approach to emotion, what is most important to note here is that contemporary theories of emotions characterize emotional experience as a process which involves interpreting internal, physiological, or cognitive
reactions to external stimuli. Within these overarching models that dominate modern psychology, emotions or emotional states are understood as an internal reaction to the external world, and help us to appraise, monitor, and act upon our experience. Further, each of these theories attempts to create a universalized theory of emotion and goes so far as to identify unique neural pathways for each discrete emotional state. This reduction of emotionality to physiological and mental processes conceals the rich complexity of human emotions and their embeddedness in the world.

This universal and reductionistic approach to emotion has been challenged by critical disciplines, including phenomenology, in favor of a theoretical approach that accounts for the political, social, cultural, and spatial dimensions of emotional experience. Critical geographers and phenomenologists have argued that even within their own disciplines, emotionality is too often missed in discussions of embodiment and place (Davidson et al., 2005; Roald et al., 2018). In *Phenomenology of Perception* Merleau-Ponty’s approach to affect and the body provides a lens through which we can understand the existential, relational, and spatial dimensions of emotional experience, a perspective that Roald, Levin and Køppe (2018) argue has been overlooked in phenomenological literature on affect.

In *Phenomenology of Perception* Merleau-Ponty illustrates the nuanced and dialectical nature of emotion in his chapter “The Body as Expression and Speech”. He writes:

It is not merely the gesture that is contingent with regard to bodily organization, it is the very manner of meeting the situation and of living it. When angry, the Japanese person smiles, whereas the westerner turns red and stamps his foot, or even turns pale and speaks with a shrill voice. Having the same organs and the same nervous system is not sufficient for the same emotions to take on the same signs in two different conscious subjects. What
matters is the manner in which they make use of their body, the simultaneous articulation of their body and their world in the emotion (p.195)

Here, Merleau-Ponty challenges the reductionistic and mechanistic approach to affect that underlies traditional theories of emotion. In doing so, he introduces a way of understanding emotionality that is relational and includes both situation and world to make meaning of emotional experience. In their discussion of affectivity in Merleau-Ponty’s *Phenomenology of Perception*, Roald, Levin and Køppe (2018) emphasize the co-constitutive relationship between emotions, the body, and the world. Summarizing Merleau-Ponty, they write: “emotions are continuously created in relation to the environment where the differentiation between self and environment is mutually constitutive” (p. 211). The term “environment” can refer to an intersubjective encounter or situation between two or more persons; however, the emotional or attuned environment or milieu (Benswanger, 1979) can also be understood as the physical environment with its tangible structures, lights, shadows and objects. In other words, just as our subjective experience of affect may color or shape how we perceive a situation (e.g., through a period of grief one may experience the world and their relationships as dull, grey and meaningless), a situation or physical environment may also shape our mood or affect (e.g., waking up in a dark room may elicit an experience of fear or nervousness). This phenomenon is powerfully articulated throughout Gaston Bachelard’s (1958) *The Poetic’s of Space* which describes the ways in which our physical environments, namely places within the home, shapes our affective experience of intimacy and emotional memory. According to Bachelard, all memories are emplaced in some way or another. When discussing the experience of storms, he draws from Henri Bosco’s *Malicroix* to emphasize how the soundscape can alter our mood and affect.
He cites:

There is nothing like silence to suggest a sense of unlimited space. Sounds lend color to space and confer a sort of sound body upon it. But absence of sound leaves it quite pure, and, in the silence, we are seized with the sensation of something vast and deep and boundless. It took complete hold of me and, for several moments, I was overwhelmed by the grandeur of this shadowy peace” (p.64).

In recounting this vivid encounter with silence, Bachelard highlights how our physical environment in all its potential manifestations, which in this case is the experience of home during a storm, alters our psychological experience and mood. The sound of silence elicits an experience of profound, overwhelming peace.

Appreciating the dynamic relationship between body, world, and affectivity has important implications for designing outdoor playscapes, especially when the aim is to cultivate a space that has restorative and psychological benefits. Drawing from Merleau-Ponty and other phenomenologists, we are reminded that our affective life has the potential to be transformed through our engagement with the world. We can begin to attend and attune to the ways in which our physical environments shape our affective experiences.

**Self and Emotional Development in Children**

Long-standing developmental theories emphasize the significance of early life experiences in shaping one’s sense of identity, self, and emotionality in adulthood (DeRobertis, 2008; Reubins & Reubins, 2014). More specifically, early *relational* experiences with caregivers and later with other adults and peers, significantly influence self and emotional development. Nurturance, care, consistent and predictable responding from caregivers, especially during infancy, are understood as the key ingredients to a child’s secure attachment and trust in others.
and the world. Emotional safety and security set the foundation for exploration and engaging in new experiences with curiosity and openness. Without this sense of a security, a child may approach the world and others with fear and anxiety, which will inhibit their curiosity and impede their action in the world and toward others and interfere with their growth and development across all domains. The experience of safety and security are thus foundational in a child’s capacity for self-acceptance, self-esteem, self-worth, self-efficacy, feelings of vitality and creativity, and empathy and relatedness with others, which are all components to a healthy sense of self (DeRobertis, 2008; Reubins & Reubins, 2014).

Child development theories are deeply embedded within Western worldview, which values individualism, freedom, and agency. In her chapter on *The Ecopsychology of Child Development*, Barrows (1995) describes the complexity of infant development. She writes:

“I am struck by the complexity of the task that faces the infant. The task is riddled with paradox: the child must simultaneously build enough of a membrane around herself to be able to function in her culture and allow the membrane to be permeable enough, receptive enough to sensation, feeling and communion (p.105).

She goes on to say that our culture has exclusively attended to the first part of this task, which is that the infant must develop the capacity for separation and autonomy. Understanding healthy development as a process where the goal is ultimately autonomy and separation both aligns with and reinforces cultural values centered on independence, mastery and agency (Barrows, 1995). Developmental theories are thus powerful tools socially and culturally as they prescribe what is considered “healthy” and “normal” or what is considered “appropriate” or “inappropriate” thoughts, feelings and behavior. What has been normalized through most widely held developmental theories (among other things) is the notion that humans are inherently separate
and distinct from the natural world, which is also known as anthropocentrism (Kidner, 1994). Kidner (1994) examined how psychology as a discipline reinforces anthropocentrism, which has significant consequences for environmental actions and behaviors. He argued:

…by focusing its gaze on the decontextualized individual, psychology perpetuates and legitimates a world view in which the individual is seen as separate from the natural environment; that by locating itself within a Cartesian paradigm of human rationality as the only basis of understanding, psychology reproduces an anthropocentric ideology that denudes non-human aspects of the natural world of essence and inherent value; [and] by assuming a largely cognitive model of the person, psychology colludes in the denial of those aspects of Being that are capable of perceiving and protesting against the violence of environmental destruction (p.362)

Thus, current developmental frameworks that position autonomy and separation as the goal or signal of health, as opposed to understanding these as aspects of one’s being and experience may inadvertently maintain the status quo, which is an anthropocentric worldview that has serious implications for the ecological crisis.

Ecopsychologists have attempted to address the anthropocentrism inherent in psychology by expanding an understanding of the “self” and “psyche” within an ecological framework or context (Barrows, 1995). For example, Barrows (1995) offers an ecopsychological perspective on child development. Throughout her chapter, she frequently returns to the notion of the paradox of Being, which involves two “movements of being---the tendency to cohere and the tendency to dissolve, the tendency to consolidate into a given shape and the tendency to yield and be yielded into—as equally valent and essential” (p.108). Here, she is ascribing equal value and health to two ways of being and developing in the world: the capacity for self-cohesion,
boundedness, and stability of the self, as well as the capacity to be immersed, in deep-connection with the world and with others.

As mentioned earlier, developing a healthy sense of self does require a steady and stable relationship with the outside world. However, the outside world has been narrowly defined as human-human(s) interactions and the social context (Kidner, 1994). While relational experiences with caregivers, adults, and peers are necessary for the development of the self, the child must also be in an environment that cultivates experiences for esteem, vitality, creativity, empathy, and connection. In other words, the adult caregiver rarely, if ever, responds to the child as an isolated being, but rather they respond to the child as a being who interacts with them within the world. Thus, the significance of the relational experience for self and emotional development should not be reduced to the caregiver-child, or human-to-human relationship, but should extend to child-milieu relationship as the milieu can encompass all aspects of the child’s relational world. Attending to the emotional and psychological affordances in an outdoor play environment may involve exploring how the child responds and reacts emotionally as well as verbally to the environment. A child whispering to the gently held ladybug may reveal something about their experience of empathy or observing a child building a sandcastle may reveal something about their desire and their experience of creativity. The child’s engagement with the world, especially between the ages of 2-5, is an intimate and embodied relationship. Attending to their engagement with outdoor places through observation and joining with the child in their experience may reveal something about how outdoor play places afford psychologically and emotionally enriching experiences.
CHAPTER III: METHODOLOGY

In his chapter, “Recovering the soul of method”, Romanyshyn (2007) reminds us that the Greek etymology of the word “method” (meta-hodos) is deeply connected with the terms “path” and “journey”. He writes: “a method is way into one’s work. It is a way of going to work on one’s work, the making of a path that one follows into one’s work” (p. 215). Romanyshyn (2007) further distinguishes psychology as a natural science from a human science, arguing that traditional approaches to studying human phenomena, which are rooted within empiricist and rationalist frameworks, cannot and do not encapsulate the full complexity of human experience. Given this complexity, Romanyshyn defends the use (and the need) for a “plurality of methods” when studying human experience. Psychology as a discipline should, according to Romanyshyn, begin with the subject and not with the method. The method(s) must therefore be uniquely tailored to the subject/topic of research at hand to address the research question as well as capture as much of the complexity of the subject as possible.

Uncovering affordances of place requires an integration of multiple methods because a singular method only captures one dimension of place experience. Romanyshyn (2007) explains that a “method is a perspective that both reveals a topic and conceals it” (p.212). Methods are aimed at foregrounding particular aspects of a phenomena, allowing other, equally significant aspects of the experience to recede into the background. For example, an interview captures the conscious, subjective aspect of one’s experience, but neglects unconscious, embodied dimensions of a phenomenon. When examining the experience of ‘place’ we must employ methods that can foreground both the subjective experience ‘place’, the physical and material dimensions of place, the embodied experience of place, and somewhere in between. Furthermore, when considering playscape design for children, a pedagogical dimension must
also be considered as attention should be given to how this space can facilitate educational learning and development.

The following section outlines a phenomenological and restorative approach to playscape design. This integrative, phenomenological approach involves a process of gathering and examining experiential data to uncover and restore the affordances of an outdoor play environment for children. To recount, relational affordances are emotional, psychological, or behavioral/physical experiences that are afforded by an outdoor play environment. An outdoor play environment includes natural places but can also include already-existing built structures such as a playset, playhouses, or other non-natural objects. The process of uncovering affordances in children’s playscapes involves employing two phenomenological methods 1) Child Guided Walks with children and 2) A Goethean inspired Place Study with adults. The first method is aimed at uncovering affordances that emerge from the child’s embodied experience and relationship to place. The second method aims to uncover affordances, but through both an experiential and reflective, imaginative engagement with the place. Each approach aims to uncover different experiential dimensions of an outdoor play environment to illuminate the affordances of place. Phenomenological methods provide a framework for examining the psychological and affective dimensions of place, and as such these approaches may illuminate psychologically restorative affordances of nature already identified in the literature. Thus, we can use this information to develop a more nuanced understanding of the restorative potential of nature and cultivate outdoor play environments to maximize their restorative potential.

In addition to the phenomenological methods, the restorative design approach also involves gathering information on child development and learning to identify what affordances are needed to support healthy development across all domains. Knowledge about place is best
generated by those who engage with it locally. Thus, place-based decisions should be made collaboratively by those who engage with the place on a regular basis. An open-ended questionnaire is used to gather information from the educators about the developmental needs of children. By completing the questionnaire, educators can provide input on what types of developmental affordances should be available in an outdoor play environment. Questions further prompt educators to share their own observations of the children’s everyday play experiences and their own teaching needs. In the following section, I will discuss each method, providing the theoretical foundations upon which they rest, and how each method was constructed and employed in the current study.

Later, I will discuss the process of analyzing and integrating the data to identify the affordances of the greenspace at a local Early Years Center on Prince Edward Island. The experiential affordances guided the development of enhancements to the greenspace. Enhancements were implemented to make developmental affordances available and accessible to children with particular attention to affordances that support healthy psychological and emotional development. The approach is therefore considered *restorative* because it is a process aimed to uncover and restore affordances in a nature place, allowing its potential for psychological restoration and healing to be realized as fully as possible.

To summarize, the process of restorative playscape design rests upon four key principles, which are grounded in phenomenology, community-based participatory action research, and ecopsychology:
• Knowledge about place is best generated by those who engage with it locally. Thus, place-based decisions should be made collaboratively by those who engage with the place on a regular basis.

• Children have the right to share their experience and perspective on matters that directly impact their lives and experience, including the design and development of their local places.

• Educators have the right to collaboratively participate in decisions that directly impact their experience as educators and the design and development of their educational space.

• The relationship between humans and nature is interdependent. It is therefore imperative that we strive to provide care and respect for our natural environments through teaching children how to honor and cultivate these places. We also recognize that “the best landscape development practices respect and enhance the qualities of the place itself” (Simms, 2014). It is therefore our goal to give the place itself a voice and discover and enhance its potential.
The Restorative Playscape Design (RPD) Project: An Overview

In 2019, I collaborated with CHANCES (Caring, Helping, and Nurturing, Children Every Step), a non-profit organization that provides a wide range of services for children between the ages of 0-5 and their families to implement a restorative approach to designing and re-developing an outdoor play environment at one of their centers. One of their greenspaces required some tender love and care. It was a large greenspace with diverse natural features and elements, and primarily used as an outdoor play area for one of their Early Years Programs. The greenspace was also used for community-based, parent-child programs during the evenings and weekends. The Restorative approach involved implementing three phenomenological and pedagogical methods to first identify the place’s affordances. Once identified, the affordances were used as a guide for developing enhancements that would support child development across all domains, with particular attention to the psychological, emotional, and self-development. The following methods were used to identify experiential affordances, and will be explored in depth throughout this section:

- **Child Guided Walks** - phenomenologically oriented walking interviews and observations with the children enrolled at the early years program

- **Place Study** - an experiential method aimed at uncovering place affordances through experiential, reflective and imaginative exercises, which was conducted with members of the CHANCES community, provincial early childhood coaches and members of the local university (UPEI)

- **An Open-Ended Questionnaire** - an open-ended questionnaire aimed at eliciting feedback from educators regarding the developmental and educational needs of children.
The project was approved by the Institutional Review Board (IRB) at Duquesne University in Pittsburgh, U.S. All adult participants consented to participation in the study. Parents of child participants consented to their participation, and all children gave their assent before participating in the study.

**Instruments**

The instruments that were used to collect data are:

- voice recorder (place study)
- video recorder (embedded walks)
- notepads and/or computer for typed notes (place study)
- Paper copies of pedagogical questionnaire
- consent forms
- assent forms

**Participants**

Twenty-seven participants were recruited for this project by the assistant director and staff of the Chances Early Learning Center. Most participants were members of the CHANCES community: Ms. MacLeod who was the assistant director of the Chances Early Learning Programs at the time of the study; the staff of the Early Learning Program at the time of the study; and the children enrolled in the Early Learning Program at the time of the study. In the place study phase of the project, staff members from other CHANCES centers, members of the early childhood sector of PEI, and a student and faculty member of the University of Prince Edward Island were recruited to participate.
Ms. MacLeod participated in all phases of the research: the data collection, data analysis and the implementation phase. Since Ms. MacLeod had a close relationship with the children and staff at the Prince Street Program, worked on site, and was initially tasked with developing the greenspace, (including applying for funding) it seemed appropriate and necessary that she participated in each phase of the project. Ms. MacLeod was not only a key stakeholder in this project, but also provided invaluable insight into the experiences of the staff, children, and the space itself (it’s affordances, current use, limitations, etc.).

Fourteen children between the ages of 2-5 participated in the study. Child participants were recruited from the Chances Early Learning Center who utilized the backyard space daily for outdoor play. There were 10 male participants and 4 female participants. Six participants were 4-years old; five were 3 years old; two were 2-years old; and one 5-year-old participant.

The three primary educators of the child participants were recruited to complete the open-ended questionnaire. The brief questionnaire asked the educators to reflect on what types of outdoor experiences they felt were necessary for young children to encourage and strengthen growth and development. All three educators completed the questionnaire.

We also collected data from a two-day Place Study led by Dr. Eva Simms and me. Ten CHANCES staff, two provincial coaches, and two members of the UPEI community participated in the workshop. The adult participants engaged in a series of experiential and reflective exercises aimed at deepening their understanding of the greenspace and its diverse affordances. Participants’ reflections, which were recorded through notes, drawings, and audio recordings, were utilized in the playscape design and project. The following sections will outline each phenomenological and developmental approach and method for the present study.
Researching Children’s Lived Space

Research with children, particularly young children (2-5 years) has historically been challenging both practically and theoretically. Mainstream child development theories often cast an image of children as helpless, naive, and immature (Parnell & Iorio, 2016; Woodhead & Faulkner, 2008). Consequently, children have not been considered active, meaning-making participants in research. Instead, their engagement in research has been passive, as they are often regarded as objects and/or subjects, rather than as participants of research (Parnell & Iorio, 2016; Woodhead & Faulkner, 2008). Research questions and findings regarding children become reduced to adult interpretations and perspectives, ultimately silencing the voice and needs of the child.

The adult-centrism in child research has been critiqued and problematized by developmental scholars since the 1970's (Woodhead & Faulkner, 2008). During this period, children were finally recognized as "the principal stakeholder[s] in their own well-being with a right to express their views and feelings, and to be consulted on matters that affected them was becoming embedded in in legal and social work practice" (Woodhead & Faulkner, 2008, p. 12). This new appreciation for children’s perspectives and self-expression extended to clinical and research settings, too.

Woodhead and Faulkner (2008) acknowledged that child researchers have since improved by attending to the lived experience and collaborating with them throughout the research process. However, they argued that still, the act of theorizing about the experiences of children leaves "child development [as] a body of knowledge [that is] constructed for the most part by adults, for other adults to use in order to make sense of, regulate and promote children's lives, growth and well-being" (p. 13). Some child researchers have addressed this criticism by
embracing a more participatory practice (Christensen & James, 2008; Parnell & Iorio, 2016). They acknowledged that children’s perspectives and experience are valuable (Woodhead & Faulkner, 2008 p.13). Furthermore, children have the right to offer their perspective, and have it considered when addressing issues or developing projects that directly impact their lives, which includes but is not limited to the design of their everyday places.

Various qualitative and participatory methods have been developed to examine children’s experience of place such as photovoice and walking tours with children. Grounded in a participatory action framework, these approaches involve children in the research process in an engaging and age-appropriate way. Child-led tours are a popular participatory method for researching children’s experiences of place (Loebach & Gilliland, 2010). When conducting a child-led tour, the researcher follows the lead of the child participant who directs the researcher’s attention to his/her lived experience of a given space/place. In Dixit’s (2018) study, which involved an examination of school-aged children’s experiences of their school yard, she avoided using the term “child-led tour”. According to Dixit,

the word tour implied a sense of technicality and distance. A tourist in his or her tour gazes through the window at the foreign land with the hope of seizing the everyday, but he or she is prone to adopting an exoticizing and appropriating lens… Thus, instead of adopting the term child-tour, [she] used the expression “embodied walk.” The term “walk,” a quintessential feature of our life, acknowledges the ordinary intimacy and relationality that [adults] and children lived through this land of the [backyard space]. However, that familiarity embedded in the word “walk” simultaneously poses the risk of us being lost in the obvious. Thus, the word “embodied” is a call to the body for a more attentive way of walking necessary in research. (p. 21)
Here, Dixit (2018) reminds us that what we are attending to in the research encounter is the lived, everyday experience of the child, but cautions us to not “get lost in the obvious”. In other words, we must not presume that we, as the adult researcher, understand the lived experience of the participants simply because what we witness seems familiar. To avoid becoming blinded by presumptions, researchers will encourage children or adolescent participants themselves to become active investigators and use visual media such as cameras or drawings to capture their experience(s) on these walks.

Visual methods such as photos or drawing maps are often used because they can help to facilitate the child’s process of describing and reflecting upon his or her experience of a given place such as a neighborhood or schoolyard (Loebach & Gilliland, 2010). In a place study conducted at a Waldorf School in Pittsburgh, for example, students were invited to share their experience of the schoolyard to help inform the re-development of the yard. The student participants were given the option to draw a map of their playground. According to Dixit (2018), “their documentations captured the footprints and traces of the children’s walk with their parents and peers. These documents evoked the children’s impressions, moods, and experiences of their places” (p.21).

Visual methods are useful and evocative when a child participant can engage reflectively with these symbolic representations. In other words, the child must not only be able to recognize the map or the photo as a symbol of the space, but to reflect upon and describe the feelings, sensations, experiences etc. that are evoked when presented with the image. This reflective engagement with visual mediums such as photos, maps or drawings may be difficult for younger children between the ages of 3-5. Children within this developmental period make sense of the world and their experience through their immediate presence and embodied experiences within
it. Whereas a photo or map for a school-aged child may evoke memories, feelings, and impressions of a place in such a way that invites them into a meaningful dialogue, a pre-school aged child requires an immediate participation with a place to express what he or she does there. Simms et.al (2014) recognized the challenges presented when trying to use a mapping technique or photovoice with young children. To accommodate this, she asked the parents of the younger children to have their children give them a tour of their schoolyard. Parents were encouraged to ask the children about the places they liked and disliked, listen for stories about the place, attend to the places children were attracted to or avoided, and document their responses and reactions. Collaboratively, the parents and children created maps and written descriptions about their experience in the school yard.

Simms et al’s (2014) and Dixit’s (2018) approach to embodied walks, or what Simms now refers to as “child-guided walks”, orients us to the existential dimensions of the children’s experiences of their places (in this case, a school yard). Simms and Dixit offer a developmentally appropriate method that serves as a guide to engage the child participant on their journey through a meaningful place. While not addressed explicitly, this child-led approach further empowers child participants to participate and engage in the process of enhancing and developing their outdoor space. Such participation and engagement in research can also be a therapeutic process. In a photovoice project with predominately African American children, who suffered systemic disenfranchisement and trauma, Gupta, Simms, and Dougherty (2019), used child-guided walks and photography as a therapeutic tool to experience and articulate their feelings about their neighborhood places, and used this data to advocate for change in their community. Gupta, Simms and Dougherty (2019) express that their “therapeutic photovoice program focused on helping children express their emotional experiences of living in their Hilltop South
neighborhoods—both their painful emotions to work through trauma, and their pleasant emotions to celebrate community” (p. 3). Thus, collaborating with young children through a combination of non-verbal and verbal techniques gives them a voice and a mode to express their feelings and document their experience of place. It allows them the opportunity to express either verbally or in an embodied way how their place feels to them, and what they might want to change.

**Uncovering Lived Affordances of Children’s Places**

Phenomenology provides a framework through which we can identify and examine the affordances of children’s outdoor places. Conducting child guided walks offers a way into the land of affordances, and engaging a phenomenological perspective provides a way of attending to and identifying affordances.

Phenomenology is the study of lived experience, and certain methods (e.g., written descriptions, interviewing, observation) can be employed to access and reveal the existential dimensions of everyday, lived experience. Lived experience refers to all existential dimensions (time, body, space, relationship) of one’s experience as a being-in-the world, and what can be examined is the pre-predicative aspects of experience. To practice phenomenology is therefore to explore human experience as it is lived and experienced prior to any act of reflection or conceptualization, which makes it particularly suitable for examining affordances. van Manen and van Manen (2021) explained that “doing phenomenology on the phenomena means taking up the attitude of immediate seeing and practicing an attentive awareness to the things of the world as we live them rather than as we conceptualize or theorize” (p. 1071). Historically, this has been done through examining written narratives, descriptions, or transcriptions of a
particular phenomenon. The idea here is that subjective experience can be captured and articulated through language and writing. While this may be sufficient for verbal adults or older children, it is not an appropriate method for capturing the experiences of young children. To articulate, describe and write about one’s subjective experience requires cognitive and linguistic capacities that the child between 2-5 is only beginning to develop. Their lived experience of the world, as mentioned above, is much more intimate and embodied. Thus, to capture their being-in-world, we must listen to what they say, yes, but also closely observe and watch what they do, how they move, how they react and respond.

van Manen (2016) proposed that “close observation” is the most appropriate to employ when exploring the lived experiences of young children. It should be noted that his approach to observational research differs from that of experimental and/or behavioral research whereby the researcher/observer remains at a distance from the phenomenon and/or participant being observed. For van Manen (2016), the researcher should assume a more participatory and engaged stance when attempting to understand the lived experience of children. Benswanger (1979) who shared, and perhaps even inspired van Manen’s observational approach, used the term “encounter” rather than observation to illustrate the relational quality of the participant observation. van Manen (2016) wrote that: “to gain access to the experience of young children, it may be important to play with them, talk with them, puppeteer, paint, draw, follow them into their play spaces and into the things they do while you remain attentively aware of the way it is for children” (p. 68). In the current study, child guided walks involved using video recordings of the children to obtain observational data (which included their verbalizations, their movements, non-verbal reactions, and responses) that could later be analyzed. What the phenomenologist is attuned to when employing this method are the existential dimensions of the child participants’
experiences. In the context of place-based research, this involves closely attuning to how the child engages their environment and reflecting on: What are they *doing*? How are they *moving*? What are they moving *towards* or *away* from? What are they *saying*? What and how are they *feeling*?

Benswanger (1979) who shared, and perhaps even inspired van Manen’s observational approach, used the term “encounter” rather than observation to illustrate the relational quality of the participant observation. van Manen (2016) wrote that: “to gain access to the experience of young children, it may be important to play with them, talk with them, puppeteer, paint, draw, follow them into their play spaces and into the things they do while you remain attentively aware of the way it is for children” (p. 68). Participant observation with young children involves a joining-with the child in their embodied and intimate relational world, which requires a certain amount of flexibility on the part of the researcher. While it is important to have questions to ask during the child guided walks, the researcher must be prepared to fall into the world of the child’s imagination and to follow their experience as it is unfolding. The researcher must have a sense of what must be attuned to, but without holding too tightly to certain prescribed ideas and assumptions about what or how the child should be experiencing. What the researcher is attuned to and curious about during the walks are certain existential dimensions of the children’s experience of place. Benswanger (1979) identified four themes of existential space that emerged from her close observations of infants and toddlers: *Attuned space, activity, spatial characteristics*, and *organization*. These themes provide a lens through which a child’s relationship and experience of place can be observed.

*Attuned space* refers to the child’s affective relationship and response to space(s). Attending to the child’s affect in space can reveal its emotional atmosphere as well as how it is
perceived by the child. For example, child who enters a small dark space with some hesitancy and caution suggests that the space may evoke a sense of fear and anxiety.

*Activity* “is made manifest in the ways that a subject directs himself to his surroundings, the ways in which he encounters and shapes his world” (p.117). Paying attention to a child’s movement reveals what aspects of space captures their interest, desires, and movement. It is through observation of activity that affordances may also be revealed.

*Spatial characteristics* refers to the “suchness of a space” (p.118). Here Benswanger invites us to wonder about the material features of the place that may contribute to its affordance. In other words, what are the qualities, elements or structures that afford certain kinds of experiences for children? When discussing spatial characteristics, Benswanger writes:

> the qualities that allow things to be seen, touched, and moved, the durable aspects of certain places, the boundaries, enclosures and marking that separate one kind of space from another, all of these realities are experienced by the child and integrating into their reparator of spatial meanings (p.18)

Finally, the last theme that Benswanger identifies is *organization*. Benswanger notes that in her observations of children, there is always a place that infants and children consider to be a home base- or “anchorage”; that is, a place that the child returns to for safety, comfort, and familiarity. Benswanger identified the mother’s breast, the crib, and home as places that are experienced as anchoring for a child. When studying children’s places, it is thus important to identify the child’s points of anchorage. When thinking of the outdoor play space, these anchorage points may be the areas of the playground that the children go to first and then slowly branch out from. They may be the areas where refuge and safety are experienced.

Benswanger’s (1979) spatial themes inform the current method in the following ways:
• They informed the questions to ask the children on the guided walks, as they attend to the embodied and affective dimensions of the child’s experience
• These themes provide a framework for data analysis, which will be discussed later
• Finally, and perhaps most importantly, these spatial themes orient us to the child’s embodied and affective relationship with their environment; thus, directing us towards to psychological and emotional affordances.

Following the first point, it is important to formulate open-ended questions that are aimed at uncovering these spatial themes in the child’s experience (e.g., what do you like to do here? What can you smell? What do you see? What do you like/not like in this place? Where’s your favorite place?). These questions should not be prescriptive or imposed on the child’s experience in any structured way, but rather should be prepared and ready by the researcher and used to facilitate the already-natural unfolding of the child’s experience. For example, if a child is not particularly interested in the flowers in the yard and shows no interest in them, it is not appropriate to direct them to the flowers. However, if a child gets close to a patch of flowers and starts to explore them, then the researcher might ask: “what can you smell over here? what do they feel like? Is this a nice smell or is it not-so-nice?”.

In summary, the Child-Guided Walk is a developmentally informed approach to understanding young children’s lived experience of place. What differentiates child-guided walks from other participatory approaches is that it serves not only as a method to collect data on children’s lived experience of their outdoor play environment, but a way of intimately engaging children in the process of designing and cultivating their playscapes. Within the model of Restorative Playscape Design (RPD), children are not regarded as subjects or participants, but
rather as co-constructors and developers of their playscapes. Children communicate their experiences, needs and desires for their outdoor play environment through their words, their bodies and movements, and engagement with the land and non-human beings. It is through these varying forms of communication that a child “participant” joins in the process of change and development. In the following section, I discuss the facilitation of Child-Guided Walks in the present study, which includes formulation of open-ended questions informed by Benswanger’s (1979) spatial themes.

Data Collection and Method of Analysis: Child Guided Walks

Recruitment

All parents whose children were enrolled in the CHANCES Early Years program that utilized the outdoor play environment daily were invited to consent to their child’s participation in the study. Ms. MacLeod briefly discussed the project with each parent during a drop off and pick up time. Once the parent(s) were informed of the project, Ms. MacLeod received their consent. Parents were also informed that there were no foreseeable risks to the child’s emotional, psychological, or physical health. Consent forms were signed two- three weeks before the walks began. This gave parents an opportunity to withdraw their child from the study if they no longer wanted their child to participate. Of note, no parents or children withdrew from the study. Once a participant completed the guided walk, they could no longer withdraw from the study as all information was de-identified upon collection.

Children were informed of the project during a large group discussion led by Ms. MacLeod. It was during this discussion that the children were also introduced to ‘Burghy the pig. ‘Burghy was a pig puppet that we had on hand at all of the interviews to facilitate our
discussion with the children. I will discuss the purpose and use of a puppet in child-research later.

In addition to parental consent, each child assented to the process, and were informed that I would be videotaping them during the guided walk (e.g., “Miss Jen is going to take a video so that we can remember what you tell us about the yard. Would that be okay?”). Most child participants assented to the study. Of note, there was one participant who was identified as non-verbal and had developmental delays. With parental consent, and their willingness to explore the backyard with us, we recorded and observed their free play, and used this observational data in the study.

**Data Collection**

Fourteen children between the ages of 2-5 participated in the child guided walks portion of the study. The guided walks took place over the course of three weeks in July 2019. As mentioned earlier, fourteen children participated in guided walks. These walks were conducted during the summertime on days that were overcast or sunny (i.e., not on rainy days). On interview days, Ms. MacLeod and I went to the early years classroom and invited a participant to explore the backyard with us. If the child showed interest and agreed to join us, we took them to visit the backyard. Initially, we planned to take children out in groups of 2-3 so that they would feel more comfortable together, and so we could observe peer interaction. However, after two interviews, this approach proved challenging. When placed in dyads, the children tended to disperse and spent more time engaging with Ms. MacLeod and myself rather than one another. We further noticed that one child assumed a leader-type role, often directing or leading the other child around the backyard making it difficult to assess whether the second child's experiential
account of the yard was a true reflection of their desire, interest, and engagement with the backyard. To follow the participants’ journeying, as it naturally and intuitively emerged, and to give each child an opportunity to share their individual, uninterrupted experience of the yard, we decided to conduct the rest of the interviews with one child at a time.

Once at the yard, we received assent from each participant. We explained that Ms. MacLeod and I would be asking them about what they liked and didn’t like about the backyard, and what they liked to do there (See Appendix A1 for semi-structure interview script). We also explained that I would be filming the walk and asked if it was okay to do so. We showed them the recorder and how it worked. We also asked them if they would like ‘Burghy to join us; a few participants were eager to have the puppet join us, but most participants did not seem interested. For those who were not interested, we set ‘Burghy aside. Only one child participant, a four-year old girl, wanted to engage with ‘Burghy for the duration of the walk. The other child participants responded to ‘Burghy initially, but then ignored the puppet and talked directly to Dawn and me throughout the rest of the walk. Ms. MacLeod led the guided walks by asking open-ended research questions. I recorded the guided walks and asked some follow up questions or responded to the children where appropriate. We phrased the guiding research questions on the language level of four-year old’s:

- Tell me about what you like about the yard.
  - [Prompts: can you show me what you like to do in the yard? Can you show me your favorite place to play/ thing to do? What do you like about [x]?

Asking children what they liked about the greenspace, their favorite places, and what they liked to play was aimed at identifying what types of experiences, areas, and structures
were the children drawn to in the backyard. Following up with “what do you like about it?”
further revealed what elements of the experience contribute to the attraction or likeability of
the experience.

- Tell me what you do not like about the yard.
  - [Prompts: are there things/areas in the yard that you do not like to do/play
    with/play on etc.? What do you not like about [x]?]

    Asking the child participants about where they did not like to go was intended to reveal
repulsive, undesirable places or experiences, as well as explore any strong affective or emotional
responses to place. Asking the children specifically about what they did not like about ‘x’ was an
approach to identifying any affordances that were disrupting the child’s capacity to engage the
backyard in an open, curious, and explorative way.

- Tell me what you like to… smell, look at, listen to [Prompt: what areas are quiet? What
  areas are loud?], and touch [Prompt: are there things that you like to touch or rub in the
  yard? Are there things that you like to feel with your hands or feet?]

These questions were aimed at exploring the child’s sensory experience of the backyard, and to
identify already-existing sensory affordances.

- What do you do here [asking participants about different areas of the yard and how they
  are used]?
This question was aimed at exploring the child’s experience of the backyard as an action space such as examining how different areas of the backyard might afford certain actions, behaviors, and/or types of play.

- Tell me what you would like to do/ play with/ see/ listen to/ feel… in the yard? If participants respond, then ask where they would like to do [x].

This question addresses what affordances or types of experiences are currently missing but desired while playing in the backyard. This question also reflects to the child that we are interested and take seriously their wants and needs, and feedback about the backyard project.

The guided walks were unstructured for the most part. We started each walk by asking the first research question: “show me where you like to play in the backyard”. In asking about a desired or likable place, we hoped to reduce any nervousness or discomfort that might naturally emerge during any observational process, especially with new, unfamiliar adults. From this first question, we took the child’s lead. Ms. MacLeod followed the child closely but took care to walk beside or behind the child so that she did not inadvertently direct the child. Additional research questions were asked where appropriate. For example, a child stopping to smell a flower prompted questions about sensory experience. When a child paused and seemed unsure of where to go next, then Ms. MacLeod would ask: “where are the places you don’t like to go?” During the guided walk, I followed closely to film, but kept somewhat of a distance as to not interfere. The walks lasted approximately twenty minutes. The longest guided walk was 30 minutes and
the shortest walk lasted 12 minutes. Approximately two weeks after the guided walks were complete, a two-day place study workshop took place on the site with adult educators, staff, and members of the community.

**Method of Analysis**

Once the data from the guided walks was collected, I reviewed and transcribed each video. All guided walks combined totalled 230 minutes of video footage. Given that there was important non-verbal, embodied data to consider, I documented each area or place in the backyard that the children explored, noting what direction and order the children visited. Additionally, I made note of their movements and behaviors in each place. During this process, I journaled my own reflections, making note of my own experience re-watching the data. Questions I asked myself were: what moments from the video footage did I vividly recall? What were the moments felt evocative and potent?

Next, I identified the “cogent moments” (van Manen, 2016, p.69) from the guided walks. The cogent moments were identified by the following criteria:

- if a participant dwelled within an area or experience for a significant amount of time (i.e., much longer than other areas);
- if the area evoked a visible emotional reaction;
- if a participant returned to an area or an activity more than once;
- if more than one participant engaged in the same or similar activities in a given area;
- it was also noted and given some attention if a participant blatantly ignored an area.
It should be noted that these cogent moments were often identified by both Ms. MacLeod and I immediately after each walk, and discussed with the staff and educators to see if these experiences aligned with their informal, day-to-day observations of the children.

Once identified, I returned to the cogent moments by re-examining the video data, transcript, and notes to “recover those living phrases and incidents that [gave] the anecdote a cogent power or point” (van Manen, 2016, p.69). During this process, I also took note of an area or ‘place’ within the backyard where the cogent moment occurred. Then, I reviewed all video footage again, documenting all behaviors, quotes, and movement that occurred in these ‘places’. Using this data, I proceeded to write vignettes to capture the cogency of each place.

Vignette research was developed from van Manen’s anecdotal approach (van Manen & van Manen, 2020). When describing his anecdotal approach, van Manen (2016) explained that “the researcher who is involved in closely observing situations for their lived meaning is a gatherer of anecdotes” (p.69). These anecdotes are short narratives or stories, which are constructed using moments in the interview or observational encounter that reveal the lived, affective meaning of the experience. Ammann (2018) explains that what should be captured in the vignette “are the moments which affect (e.g., memorable, peculiar, pleasing, disturbing and curious, situations) the researcher, in other words, the moment he is caught by the situation that starts him thinking and reflecting” (p.7). In addition to affective experience, vignettes or anecdotes are also effective in capturing the relational dimension of experience. van Manen (2016), drawing on van den Berg, believed that anecdotes as a phenomenological tool were a powerful way to illustrate the relationality inherent in lived experience. He writes: “what van den Berg wants to show by way of anecdote and the phenomenological explication is that the human being not only stand in a certain conversational relation to the world---the human being really is
the relation” (p. 116). Since the aim of the guided walks was to capture the children’s experiences of ‘place’, particularly the affective and embodied experience of place, a vignette approach seemed most appropriate for describing these relational encounters.

How vignettes are created and used in both quantitative and qualitative research is varied (Ammann, 2018). Some vignettes are written as fictional narratives and used to prompt exploration of experience, whereas other vignettes capture scenes co-experienced by a researcher and participant (Ammann, 2018). In the current study, vignettes involved an interweaving of different quotes, significant behavioral observations, and my own memory of these cogent moments.

Van Manen (2016) further describes the process of writing in research as an integral process to research itself. In the natural and social sciences, the process of writing in research is a means to an end----to report, document and make available the results of a given study. However, in phenomenological research practice, the practice of writing is part of the research process. He writes:

Writing involves a textual reflection in the sense of separating and confronting ourselves with what we know, distancing ourselves from the lifeworld, decontextualizing our thoughtful preoccupations from immediate action, abstracting and objectifying our lived understandings from our concrete involves, and all this for the sake of now reuniting with what we know, drawing us more closely to living relations and situations of the lifeworld, turning thought to a more tactful practice, and concretizing and subjectifying our deepened understanding in practical action (p.129)
Writing vignettes requires a return to the lived moments of place, expressed through the data in behaviors, movements, and verbal expressions, over and over again. Through each return and clarification through writing, I felt closer and closer to capturing the affordances.

Next, I examined each vignette in terms of Benswanger’s (1979) themes, reflecting on how the experience being described revealed spatial characteristics, affectivity, activity, and points of anchorage. Organizing the data in this way afforded new insights and helped guide the process of developing enhancements.

**Place-Based Research**

The first phenomenological method involves examining children’s relationship to place with the aim of identifying affordances. With this first method, close attention is given to the embodied and affective experience of the *child* in relationship to place. The second phenomenological method, a Goethean inspired place study, examines the structural and experiential dimensions of the *place*, giving greater attention to what elemental or structural aspects of the outdoor play environment shapes the affordances identified throughout the child guided walks.

A commonly used method for understanding and assessing children’s behaviors and activities in their outdoor play environments is Geographical Information System (GIS) and behavioral mapping. This spatial technology tool can examine natural and urban environments, as well as past and present, human and environmental activity (Cox et al., 2018). Fjørtoft and Sageie (2000) investigated how experiences in natural environments, namely a small forest in Norway, influenced children’s learning and development. Drawing from landscape ecology and its methods, Fjørtoft and Sageie sought to understand how the forest and its elements afforded
certain developmental, namely gross motor, activities among children. To do this, they utilized GIS and mapping tools to assess and analyze the vegetation and topography of the place. After operationally defining different categories of play, the researchers observed the child participants’ behaviors, movements and play in relation to the landscape. Their findings indicated that the diverse topography and vegetation of the landscape did afford a variety of play experiences, and it revealed the range and frequency of children’s use of different locations. However, they were somewhat limited to interpreting physical play and motor activity. What is missed with these impressive, yet exclusively objective methods, is a deeper understanding of the emotional and psychological affordances of place. In other words, how can we identify the mood of a place and how it may shape how the child feels or experiences it? How might the affordances of a natural environment evoke imaginative play in the child -- or fear, or courage, or safety, or peacefulness? Behavioral observations and mapping tools alone are not sufficient for understanding the breadth of affordances that are offered by natural places.

Despite its popularity, the use of GIS in archeological and geographical communities has been theoretically and methodologically contentious, especially in the wake of the spatial turn (Gillings, 2012; Warner-Smith, 2020). Warner-Smith (2020) reminds us that mapping technologies are deeply rooted within Cartesian epistemology: space is conceptualized according to its raw, physical forms, and does not account for how place is socially, relationally, and experientially constructed and experienced. Warner-Smith (2020) cites phenomenological, humanistic, and feminist scholars who critique the disembodied and colonial nature of traditional mapping technologies. She writes:

Scholars have therefore tied cartography to the nation state and colonial empire. Through two characteristics of scientific practice---standardization of measurement and
classification—maps came to be seen as authoritative representations, eliding the subjective gaze and colonial interests shaping these representations. Such standardization replaced embodied phenomenological experiences, and polysemous meanings with the omniscient “god trick”. These critiques understand traditional Western maps as disembodied and static, in opposition to an embodied itinerary or phenomenological dwelling in the world (p.769).

So how can we capture an affordance? How can we honor both the subjective experience of the perceiver and the features of the landscape that are being perceived and experienced?

The 18th century poet and naturalist Johann Wolfgang v. Goethe developed a detailed and close observational approach to studying colors and plants that has been taken up by contemporary phenomenologists and organized into a systematic phenomenological method, which has been applied to the study of places (Brook, 1998; Simms, 2017). As mentioned earlier, phenomenological methods invite us to experience spatial phenomena in an embodied and intimate way and to make them perceivable not only to the eyes, but to all the senses. Underlying this approach is the presumption that the lifeworld is a network of meanings, which can be accessed with a particular sensitivity or attunement to a phenomenon. Simms (2014; 2017) developed a five-step “guided phenomenological process in order to observe, assess, and imagine the potential of [a] schoolyard” (p. 280). With each step, the participant or “observer” deepens their experience and reflections of place with the aim of revealing its affordances and potential.

**Preparation phase**- In this initial phase, the observer attempts to attend closely to their immediate impressions of the [place]; that is, to note what they are immediately attracted to, or
curious about in the place. Participants are asked to spend time there and to document either through writing or sketches, their immediate and intuitive experience.

**The Exact sensory perception phase**- In the second phase, place is attentively observed and carefully described. During this stage, the researcher should “engage all of his/her senses to fully experience the place. Detailed notes and descriptions should be documented” (p. 282). Ideally, the place should be visited several times before completing this phase.

**The Exact sensory imagination phase**- In the third phase, “the observed details, forms, impressions, and finally the relationship with the larger place context are varied in the imagination. The exact sensory imagination may bring the images of perception into relation with each other and move them around” (p.283). In other words, participants will begin to engage a process of imagination to draw awareness to the place’s potential. Participants are asked to pay attention to how their experience of place changes form and how these imagined features fit into the whole of their experience and connect to other places and activities. It is during this phase that participants can discuss how to enhance or alter certain features of the place.

**Beholding and inspiration**- In this final step, “the phenomenon is deepened and intensified… the researcher lets the phenomena speak for themselves by noting and interrogating the meaning and significance of their gestures or physiognomies. The result of this step is an opening and quieting of consciousness so that the otherness and intentionality of the phenomenon can appear” (p.284). When we open our imagination to the possibilities of a place and what it could be, we can easily lose sight of what the place already is and what it already offers us. This final phase of the method helps participants to integrate that which they have imagined the place to be or become with what already exists and to assess whether they align. It
further gives them one last opportunity to interrogate their own projections, desires, and assumptions about the place to ensure that they have really listened to what the place as a whole, and as a series of parts, has revealed.

This Goethean-inspired method, which is deeply relational, orients participants to the felt and pre-verbal experience of place, which is different than other qualitative methods such as interviewing. The participant must attune to their bodily, as well as their psychological, response to place and its atmosphere. Thus, Simms’ (2014; 2017) method is appropriate for examining the affordances of place because it can lead us to that intersubjective, in-between realm that precisely defines what ‘place’ is. In the following section, I will discuss how this approach was implemented as a part of the playscape design process.

Data Collection and Method of Analysis: Place Study

Recruitment

Ten CHANCES staff, two provincial early childhood coaches, and two members of the UPEI community participated in the workshop. All participants were invited to participate via email correspondence. All participants reviewed and signed a consent form.

Data Collection

Based in Goethean science and phenomenology, Simms (2014; 2017) developed a five-step “guided phenomenological process in order to observe, assess, and imagine the potential of [a] schoolyard” (p. 280). Simms and I adapted her phenomenological method into a two-day experiential workshop to assess the affordances of the backyard, as well as create an opportunity
to re-imagine its potential for enhancement. Together, Dr. Simms and I co-facilitated the workshop.

The workshop was organized into a series of “steps”, which had a series of experiential exercises that participants engaged in to gain a deeper awareness of the backyard, its features, and its potential for enhancement (See Appendix A2). The experiential steps and exercises implemented throughout the two-day workshop aimed to collect experiential data on the following:

- The impressions of the place as a whole and/or its distinctive features or locations (e.g., what do you first notice? What are you drawn to? This could be positive or negative)
- The emotional atmosphere of the place (e.g., What do you feel like in this place? How does it shape your mood?)
- The features or aspects of the place that draw attention or awareness (e.g., what do you notice? What do you attend to?)
- The types of movement or activity that is afforded (e.g., what does your body feel called to do? What activities do you want to engage? Or are certain movements stunted or foreclosed in this place?)

After each step was completed, participants debriefed in a large group to share their observations, feelings, and thoughts about what was revealed through each exercise. These conversations were audio recorded. Some experiential exercises required reflections through journaling, drawing and collaborative writing (e.g., small groups would record ideas, themes, experiences on large pieces of paper to review with the whole group). At the end of the workshop, writings and drawings were collected and used as experiential data. This source of rich, experiential data was significant as it served several purposes for the approach to design.
On one hand, this method was aimed at capturing the *affordances* of place, what it offers and its potential for enhancement. On the other hand, it also serves as a second source of data that can be used to validate affordances identified in the data from the guided walks. Additionally, it provided an adult perspective of the backyard that could then be compared to the children’s experiences of the backyard so that key differences or tensions could be identified.

**Data Analysis**

Prior to analysis, the audio recordings were transcribed, and all journal notes, and collaborative writings were typed and organized into a document. Firstly, I organized the data in terms of the experiential dimensions described earlier:

- What places or features were highlighted and explored throughout the workshop?
- What was the emotional atmosphere of these places or features?
- How was the sensory field described and articulated?
- How is movement described and articulated?
- I also differentiated reflections on the whole place from reflections on distinct places and features of the backyard.

van Manen (2016) defines the process of thematic analysis as one where you “recover themes that are embodied and dramatized in the evolving meanings and imagery of the work” (p.78). During the second phase of analysis, I drew on van Manen’s approach, scanning for the frequent themes and cogent moments. In other words, I reflected upon:

- The places or features of place most discussed.
- The initial impressions that were shared by more than one participant
• The places or aspects of the group discussions that activated lively or passionate ideas, experiences, and reflections.

• Common or shared suggestions for future enhancement (e.g., to enhance or implement affordances for specific learning goals)

I consolidated these reflections into a document that would later be compared with the experiential data and reflections from the child guided walks. This process will be discussed further in a later section.

**Community Voices in Research**

Community-based participatory action research (CBPAR) aims to discover and generate an understanding of community-specific concerns and uses this knowledge to promote positive change within that community. Some key values of this model are the importance of collaborating with community members throughout the research process and recognizing that knowledge about a community and their needs is best generated by the community or co-constructed between the researcher and community members. It is through the discovery, production and dissemination of this knowledge that ultimately leads the researcher(s) and community members to identifying creative, community-specific solutions. According to Langhout and Thomas (2010), PAR is ultimately a “theoretical standpoint and collaborative methodology that is designed to ensure a voice for those who are affected by a research project” (p. 61).

Key stakeholder(s) in the current project are early childhood educators. The CBPAR framework is a particularly well-suited for educators. When discussing the benefits of a
participatory action framework in schools, Jacobs (2016) emphasizes the method’s equalizing power for students and educators. Referencing Pine (2009), Jacobs (2016) shares that participatory action research within an educational institution recognizes that teachers are in a position of power and privilege, and that our society as a whole values knowledge as power. But a PAR research process calls for the teacher to come down from their “expert” mantle in order to adopt the curiosity which all stakeholders bring to the project (p.51)

Jacobs (2016) further clarifies that having both teachers and students as co-researchers in PAR aims to dismantle the hierarchy that exists between them, allowing for the students’ voices to not only be heard, but also honored and acted upon by the educators and the institution. While I do not disagree with the issue of power between students and educators, I do think that what has been missed here is consideration of how power is regulated by the organization/institutions in ways that influence how educators regulate their students and classrooms. In *Power, Space, and Place in Early Childhood Education*, Cory Jobb (2019) examines how power is negotiated in one early childhood classroom in Canada. The participants, who were two early childhood educators, described a tension that exists between pedagogy and regulation. Jobb (2019) cites one educator who described feeling a lack of power, She said: “when we think about our classroom as a space, we think of limitations, we think of Ministry [of Education], we think of the rules…our codes, licensing, capacity… then we’ve got rules and regulations that we have to follow…it’s everybody else’s power except for ours” (p.223). Based on my own lived experience working in the field of early childhood education, this experience of powerlessness is one that is common and shared among many educators. CBPAR invites all members of a given community to have a voice in matters that pertain to them. There are many different participatory action methods, all
of which aim to listen and attend to the voices of community members throughout the research process. The third method employed in the restorative playscape study was a an educational and learning needs questionnaire completed by the three primary educators in the Early Years program. This questionnaire was aimed at collecting feedback from the educators at the onset of the study regarding their observations, developmental and educational considerations for the greenspace, as well as their own needs for the space.

**Educational and Learning Needs Questionnaire**

The final source of data is responses from an educational and learning needs questionnaire completed by the primary educators at the CHANCES Early Years Center. Early childhood educators are considered experts in child development and early learning, and thus can provide valuable insight into the types of outdoor play experiences children require for healthy development across all domains. Several studies have illustrated the benefit of collaborating with educators when developing early childhood programs and practice (Erwin et al., 2012; Hawkins, 2011; Simms, 2014; Simms, 2017).

**Data Collection and Method of Analysis: Educational and Learning Needs Questionnaire**

**Recruitment**

The three primary educators of the child participants were invited to complete the Educational and Learning Needs questionnaire. They were notified about the study during a visit to the center from myself and Ms. MacLeod. All participants provided written consent to participate in the study.
**Data Collection**

The questionnaire was aimed at gathering additional observational data and feedback from primary educators who observe the children’s outdoor play daily. Three open ended questions were asked:

1. What are some of the things that you see children doing, or activities that they are engaging in each day?

2. What types of experiences do think children need at different ages? Please list experiences (e.g., digging, playing with sand, etc.) rather than specific equipment of developmental milestones).

3. We also recognize that these spaces are not only used by children, but also by adults such as yourself as well as parents. What experiences would you want to have in the backyard?

Of note, these three primary educators remained an integral part of the study throughout all phases of this process. They were invited to share ongoing observations, provide feedback on ideas for enhancements, and supported with the implementation of the enhancements.

**Method of Analysis**

Responses from the questionnaire were reviewed and analyzed using a simple thematic analysis (Harper & Thompson, 2012). Thematic analyses are used to “identify and analyze
patterns of meaning in a data set” (Harper & Thompson, 2012, p.207). After reading through the responses carefully, I identified key, overlapping themes in the data. This data was further used to validate affordances and key themes discovered in the place study and the child guided walks data, and feedback was considered when developing enhancements.

**Integrating the Data**

After analysis of each data set, I highlighted major themes in each, noting areas of congruence and incongruence. Triangulation is a method used in qualitative research to increase the validity of the findings, as well as to develop a more comprehensive and multi-faceted understanding of the results (Carter et al., 2014). Each data set provided a unique dimension to understanding the affordances of place: the Child Guided Walks explored the affective and relational dimension of the children’s experience of place; the place study provided a deeper and more experiential understanding of the environmental affordances and offered insights into the adult’s lived experience of place; and finally, the Educational and Learning Needs questionnaire provided additional insights into what developmental affordances should be considered based on the developmental needs of young children.

**Reflexivity**

An integral part of phenomenological inquiry is the use of reflexivity. To be reflexive throughout the research process means maintaining an awareness and reflection of one’s assumptions and presuppositions about the phenomena under investigation (Banister et.al, 1994). In traditional phenomenological research, “bracketing” is often used as a framework for reflective practice. Bracketing is a concept drawn from Edmund Husserl’s (1931/2012) *Ideas,*
which was intended as a method for moving from the natural attitude towards a phenomenological attitude. The natural attitude is our taken-for-granted experience of a given phenomenon. In other words, how we attempt to make sense of or understand the meaning of a particular phenomenon is guided by our past experiences and shaped by our own unique perceptions, as well as cultural discourses and practices (Banister et.al, 1994). Many scholars have assumed that “bracketing” is a process of a suspending one’s own subjective, pre-conceived ideas regarding the phenomena being studied to gain a clear and objective understanding of the data (Stutey et al., 2020). Stutey and her colleagues (2020) argue that this is a misinterpretation of Husserl’s writings and argue that “setting aside bias in order to increase neutrality” was not Husserl’s intention (p.144). Rather the phenomenological attitude is a process of “meditative reflection” whereby one can “become aware of the manner in which their consciousness intends or is bound up with others and the world” (Husserl, 1931/2012 as cited in Stutey et al., 2020). To address this misconception, Stutey and colleagues (2020) explore an approach to reflective practice in phenomenological research referred to as bridling. As a reflective process, bridling involves remaining in an ever-evolving, active awareness and curiosity about the relationship between the researcher and the phenomenon being studied. They suggest that “bridling increases researchers’ openness and is a continuous effort by researchers to cultivate their understanding of the entire phenomenon they are studying during each component of the process” (p. 147).

Reflective bridling involves:

- Reflecting on why the researcher is interested in studying the phenomena
- Exploring places of resistance that emerge
- A willingness and flexibility to allow meanings to shift and evolve throughout the research process
• Recording and reflecting deeply on experiences with each participant, and each phase of data collection

• Identifying and exploring emotional reactions to the research experience, data, meanings, etc.

Stutey et al. (2020) suggest that these reflections should be recorded through journaling, and to embrace bridling as an unstructured process. Should a researcher impose too much structure on this process, they may interrupt the intention of bridling which is to “foster dwelling, listening and attending to the phenomenon” (p.147).

Throughout this project, I engaged in bridling reflection at the onset and throughout the research process. Even throughout the process of writing the discussion section, new revelations and experiences of the data and enhancements emerged. I spent a great deal of time reflecting on my own interest in this work, which is informed by my own personal relationship with the natural world; my childhood experiences in nature and play; the existing power dynamics (between myself and the staff; between the educators and children; and between the educators and the organization); my experience of the backyard and with each of the participants; and the list goes on. These reflections were recorded through journaling, drawings, sharing and discussing my experience and reflections with others (e.g., Dr. Simms, Mrs. MacLeod, educators, and colleagues). My reflection and awareness throughout this process was constant. Admittedly, engaging this reflective process complicated my understanding of the project. The deeper I reflected, the more lost I felt. However, it was through a process of working through the complexity and contradictory nature of the data through deeper reflection, that the project emerged as something rich, meaningful, and cohesive.
CHAPTER IV: RESULTS

The Child Guided Walks and the Place Study data revealed experiential themes or “affordances”, and feedback from the Educational and Learning Needs Questionnaire revealed what developmental and experiential affordances were missing from or lacking in the outdoor play environment. There were several ‘places’, which can be defined here as areas (e.g., “the rock area” ---a small clearing surrounded by vines and knotweed at the Northeast end of the yard) or specific structures (e.g., the playset) that afforded diverse affective, psychological, behavioral, and relational/social experiences among participants. Returning to Casey’s (1993/2009) description of place, it is “the point where space and body intersect” and, taking this one step further, where a meaningful experiential encounter occurs (i.e., an affordance) (p. 29). At times, several ‘places’ existed within a geographical area. For example, on the Northside of the yard, there were several ‘places’ of significance such as a “rock area”, a patch of Japanese knotweed, and a tunnel. Thus, when presenting the findings below, I will first describe the general geographical area where ‘places’ emerged, and then outline the affordances of each place.

To capture and articulate the cogency of each significant ‘place’ for the child participants, my analysis of the data led to the writing of a series of vignettes which focus on the cogent moments for children and adults. The vignettes were storied by weaving together a series of direct quotes, images, and descriptions from the transcripts of the Child Guided Walks and the Place Study. Pseudonyms were used to protect the identity of the child participants. Following each vignette is a list and brief description of the affordances that emerged in each ‘place’. In the
section following, I present the affordances that were discovered from the Place Study workshop, and then I will briefly present the key themes and points of feedback from the Educational and Learning Questionnaire.

Themes and Affordances: Child-Guided Walks

Location 1: The Center of The Yard

Located in the center of the outdoor play area was a traditional playset structure, which was set in a bed of gravel. The structure had two swings, a set of monkey bars, and a slide.

Vignette 1A: The Playset (Figure 1). Alice stood up on her tip toes and peered into the yard, impatiently waiting for me to unlatch the gate so that she could go and play. As soon as I opened the gate, she ran excitedly to the edge of the deck. She looked back at me, seeking permission to jump off the deck into the yard. I nod and quickly join her at the edge. “Can you show me where you like to play the most?” I ask. She smiles, "okay" and fearlessly launches herself off the deck, heading straight for the playset. She giggles as she runs towards the swings. Huffing and puffing, she tries to wiggle her bottom onto the swing. "Would you like some help?", I ask. But she promptly responds: "No! Me do it". I listen and step away as she continues to shimmy and shake her body until she is seated upright on the swing. Once seated Alice looks up at me, "Push me!", she demands. Alice's smile grows as she goes higher and higher; she closes her eyes and throws her head back as she swings back and forth. While pushing Alice, I glanced around at the playset. It appeared worn, old, and uninviting. The sun was hot and beaming down on my face, making me sweat. I shifted back and forth, as the
gravel poured into my loafers. I felt so uncomfortable: “This has just got to go”, I thought to myself.

After a moment, Alice stopped asking me to push her, and her swaying slowed. She lets the tops of her feet drag along the gravel floor. "Come watch this", she says eagerly as she hops off the swing. Pulling her wild, wind-blow hair out of her face, she grabs my hand and walks over to a set of bars that leads to the first platform of the playset. She grabs on to the bars and begins to pull her body up, "look what I can do", she says proudly as she climbs. She crawls across the platform to the monkey bars. She stands up and grips her hands tightly around the first bar. She glances down for a moment, and then looks over at me nervously. She kicks on foot out, and then quickly retreats. Taking a deep breath, she lets her body go. She hangs there for a moment before scrambling to get back on the platform. Alice lets go of the bars and backs away from the monkey bars, "I don't think I want to do those today" she explains as she turns around to face a bright yellow slide. Alice quickly slides down the slide and jets off to another area of the yard.

Figure 1

The Playset
**Place 1A: The Playset**

**Familiarity.** The playset, located at the center point of the yard, was the first place that all participants went to when given the prompt: "show us where you like to go?" Several participants, namely the older children (age 3.5-5) approached and engaged the playset with a sense of confidence and ease. Children appeared to already-know what to do there, as there was little hesitation when approaching the structure. Some children further expressed that they liked swinging because it reminded them of their parents, or their own backyards. This suggests that the playset afforded for some children a sense of familiarity, predictability, and comfort.

**Gross Motor Movement and Coordination.** Outdoor play equipment has been historically designed to afford gross motor movement and play, and the participants’ activities and movement on the playset reflected this. Participants were observed climbing, stretching, crawling, sliding, and swinging.

**Availability of a Caregiver.** While using the playset, the children were frequently conversing with Ms. MacLeod. While Ms. MacLeod did initiate conversation with the children through open-ended questions about their experience of the playset, child participants also engaged with Ms. MacLeod spontaneously. They typically called on her to “watch” them or to “help” them. Of note, the educators shared that they always have to be present at the playset because children constantly require their attention. The playset as a structure, which is intended to afford a physical challenge, also becomes a place the for the child to a) experience a sense of safety and security when attempting a physical challenge and b) experience validation, encouragement, and praise from an adult caregiver when they succeed.
Independence. The children’s experience of the playset was further marked by a sense of independence. Several participants expressed an eagerness to show Mrs. MacLeod and I what they were able to do on their own. Whether it was their ability to pull themselves up on the swing or climb up the bars to the top platform, several participants expressed wanting us to watch them on the equipment. I had the impression that these participants were looking to Ms. MacLeod to validate their sense of independence, as well as physical strength, which was evident in comments such as: “look what I can do!” or “I don’t need any help”. There were however certain structures such as the monkey bars that were met with fear and resistance. If participants were drawn to the monkey bars, they frequently requested our assistance and support.

Sensorimotor Experience. Several children expressed that they loved the feeling of swinging or sliding down the slide. When swinging, some children were observed closing their eyes, rocking their bodies, and taking deep breaths. Children smiled and laughed while on the swings. When asked what they liked about the swings, one child reported that “it just feels nice”. Affordances:

- Predictability and familiarity
- Adult connection and safety
- Reminder of home and parents
- Diverse gross motor movement
- Independence/ self-assertion
- Self esteem
- Achievement
- Pride
• Pleasurable sensorimotor activity

**Vignette 1B: High Places.** As soon as Andrew enters the yard, he rushes over to the swings. "Push me! Push me!" he demands. "You like the swings, huh?" I ask Andrew as he starts to push him gently. "They are fun. Higher! Higher!" he shouts.

"You want to go higher? How does that make you feel?" Mrs. MacLeod asks. Andrew giggles, "good!"

"And does it make you smile?" I clarify.

"yeah" he responds. After a few minutes, Andrew gets tired of the swings and begins to climb the playset. As he climbs, I ask him what he likes about the playset and promptly responded: "climbing up high. I like being high! Because I was born that way". The desire to "be up high" persisted as Andrew toured the rest of the yard. He would stop and climb on the roofs of the small plastic houses, the trees, and rocks. At one point, Andrew summoned me to the "rock area" to check out a tree that he really liked. He started to climb the tree and I asked him what had attracted him to that tree," "if I go up there, I can see the nice view" he responded. I stood back and nervously watched as he climbed, calculating each move. Finally, he wedged himself between some branches so that he was stable and calmly looked out, scanning the entirety of the yard. He appeared calm and content in that moment.

**Place 1B: ‘High’ Places**

The desire to feel and be "high" either through the act of swinging or climbing was a common experience among the child participants. Children were attracted to both natural and human-made structures that afforded the experience of being high. Even the small playhouses,
which are not intended for climbing, had structural features that afforded climbing. For example, there were several children who used the window of the playhouse as a step to launch themselves up onto the roof of the house.

**Sense of Safety.** A key affordance of being up high, especially when standing on the highest point of the playset, was the opportunity to see and assess what is happening around the yard, and neighboring areas. The educators shared that the children commonly expressed frustration and at times, fear, when they could not see what was happening in the neighboring yards. This was also observed during the child guided walks. If there was a siren blaring or neighbors chatting, the child participants would peer through the cracks of the fence to try and place where the noise was coming from. During one guided walk, a fire siren blared loudly in the neighborhood, and it was hard to place where the sound was coming from. The child participant looked up at me wide-eyed, “what was THAT?” he anxiously shouted. He darted towards the fence to peer through one of the cracks, “what was that noise?” he asked again. I explained that it was a fire truck, but this did not suffice, and he continued peering through different cracks in the fence, until we could no longer hear the siren. There were no structures in the yard, aside from the trees, that were high enough to see over the fence or to survey the entire yard. Children thus relied on cracks through the fence or what they can see at the top of the playset.

**Gross Motor Movement.** Structures and places that afforded an experience of being up high, often required children to climb up something. The availability and diversity of natural and human-made climbing affordances such as trees, plastic houses, and the playset, provided opportunities for children to engage, practice and develop their gross motor skills. The variety of climbing places throughout the yard provided scaffolding-type experiences for children of all ages to safely experiment and practice hand-eye coordination, stability, and balance.
**Mastery and Agency.** When participants were in high places whether it was up in a tree, standing on top of a plastic house, or firmly planted on the top platform of the playset, they often resisted adult authority and concern. Getting up high, out of adult reach, afforded an opportunity to assert their sense of agency over their experience and play. For example, some children resisted Ms. MacLeod’s request for them to come down from a high up place when it seemed unsafe. One participant who had climbed up on the roof of the plastic playhouse and was happily jumping up and down resisted Ms. MacLeod’s efforts to help him off the playhouse as it was not safe to jump. He whined, “no! I don’t want to come down. Let me stay up here! This is a safe choice!”. Having access to places that were “up high” or out of reach from others, namely adults, seemed to evoke a sense of agency and mastery over their own bodies and experience. The resistance towards adult authority when in high places also seems to be the child participants way of asking for freedom to be agents of their own bodily autonomy and experience of play. It was as if they were saying, “let me decide how high I go”, “let me decide how long I stay up here”, “let me decide how I will plan to get down from here”.

**Discovering Limits.** While there were several child participants who thoroughly enjoyed the challenge of climbing up high, there were some children who exhibited fear and reservation while climbing. This was observed in their facial expressions (e.g., eyes widening, frowning), urgent requests for help to get down from a high place or their bodily gestures (e.g., freezing up and tensing body). One child (mentioned in an earlier vignette) had climbed to the highest platform of the playset and reached out to the monkey bars, but instantly retreated after realizing it was too high for her. Another, younger child, had attempted to hop off the deck during one of the guided walks. He extended his foot out to the air but quickly realized that he could not safely
jump. Instead, he pulled his foot away and waited for Ms. MacLeod to help him down. The availability of climbing structures therefore *affords* natural opportunities for children to discover the limits of their own bodies and capacities.

**Affordances:**

- Emotional safety
- Sense of control/awareness of surroundings
- Self-assertion/agency
- Bodily autonomy
- Achievement
- Diverse gross motor movement
- Discovering and challenging limits
Location 2: Northside

Along the edge of the Northside of the yard were several patches of Japanese knotweed intermeshed with overgrown grape vines and tall, uncut grass. There were small patches of mint growing on the edge of the wild intertwining plants. A narrow, human made path between an old, unused shed and an overgrown lilac tree led to a small clearing. There were red clay rocks of different sizes on the outside of the small clearing. There were two sheds: an old, unused shed located at the Northwest end of the yard, and a newer shed that was used to house the children’s toys.

Figure 2

Northside
Vignette 2A: The place where the ‘Wormies’ Live. Alex led me down a short narrow path that was lined with two small trees, at the end of the path was a small, warm, open area filled with rocks and the scent of purple lilac. The area was sheltered by overgrown grapevines and Japanese knotweed woven together. "What do you do back here?", I asked. Alex lifted his fingers to his lips, “shh”, he whispered. I whispered back, “oh this is a quiet area”? Alex nods his head and replies, “we don’t want to scare the animals away”. He began to tip over the rocks, inspecting the bottom of each rock carefully. "What animals do you find back here?" I asked. "Wormies! And bugs, and the skunk" he replied, scrunching up his nose. Alex continues inspecting underneath each rock for a moment and then announces: “if you fall in this hole it will lead you to somewhere". "What happens in this hole?" I asked him.

"I think wormies because wormies can fit in there. Look at those white little things! What are those white little things? he says to himself out loud, “what the heck are they?” I watched as Alex picked and prodded at the the "white things". He eventually picked it up to inspect it further. After a moment, he looked up and asked: "What's that smell?". "It's lilac", I responded, pulling off a flower for him. "It's nice", he said, inhaling the flower. Alex returned once again to the rocks, and this time his actions were intensified: with clenched teeth, he picked up rocks and smashed them on the ground. After a few good smashes, he picked up a small piece and held it to his ear, "it's my cell phone", he explained. He meandered around for a couple of minutes, pretending to talk to someone on the phone. When he finished, he led me out of the rock area and back into the open yard.
**Place 2A: The Rock Area**

**Privacy.** What I will refer to as the "rock area" was a popular stop on the Child Guided Walks. Unlike other areas of the yard, the rock area is hidden during the summer months when the vines and knotweed grow to their fullest potential. An educator mentioned that the children had cultivated their own human-made path behind there several years ago, and it has since become a “secret” place for the children to play as it is hidden from adult view. When engaging with this place, several of the child participants’ voices quieted to a whisper. They spoke softly when sharing their experience of this special place, which suggested that the place was experienced as quiet and perhaps secretive. Having this small clearing surrounded by large vines and knotweed afforded the children with a sense of privacy, solitude, and some peace and quiet.

**Movement and Exploration.** Scattered throughout the dirt clearing were red clay rocks of all different shapes and sizes. Some of the participants shared that they liked to pick up, push, and smash the rocks. Moving the rocks around challenged the limits of their strength, which was revealed through their request for help from Ms. MacLeod. Educators later shared that the children often requested help from their peers, too. Thus, the availability of large rocks evokes a social experience of cooperation and support.

**Exploration and Imagination.** The availability of rocks further invited children to investigate and explore. Three child participants were particularly eager to show us the worms or bugs that were hiding beneath the rocks. Given that the rocks were clay, they could be easily broken or shattered thus creating new objects or materials for play. This provided rich opportunities for imaginative play such as using one of the shattered pieces as a cell phone.

**Sensory Experience.** Participants were also curious about the strong smell of lilacs but did not spend much time engaging this sensory experience because they could not reach the
flowers. The inaccessibility did seem to hinder their engagement with the sensory element. When they were able to hold and touch the lilacs, such as when Ms. MacLeod picked one off for them to hold, they expressed liking and appreciating the scent.

Figure 3

*Entrance into Rock Area*
Vignette 2B and C: A Wild Place. On the Northside of the backyard there was an overflowing abundance of tall grass, grape vines, and Japanese knotweed, all wrapped up and woven together. Christopher ran into the tall grass like a child running into crashing waves. The grass whipped against his body, tickling him. He laughed, "come here, I show you something" he said with a grin. I hesitantly walked into the tall grass behind him. I nervously glanced around for glass or rocks. It did not seem safe. Christopher, on the other hand, stomped through the tall grass, along a faint outline of a path, dramatically parting the vines that were in his way. We reached the fence where the weeds had formed a small, almost indistinguishable tunnel along the back of the fence. Christopher giggled as he moved through the tunnel, "shhhh", he whispered. When we reached the end of the tunnel, the warm sun suddenly hit our bodies. Without pause, Christopher slashed through the tall grass with ease and confidence. I on the other hand found myself distracted by the weeds and bugs. My legs were itchy and red; I couldn't wait to get out of there. Christopher turned to me and shouted: “oh look a bamboo stick”, as he started to pull at a tall piece of Japanese knotweed.

"You found bamboo!" I reflected.

"[yeah], wet bamboo" Christopher clarified as he aggressively stomped on three large sticks of bamboo.

"Is that what you like to do around here?" I ask him.

"yep", he replied, now examining his stick.

“How come?" I pressed.

“Because we like bamboo sticks” he replied. Christopher dropped the broken piece of bamboo and moved onto pulling out another piece: “come on...I want you bamboo stick”, he said with frustration as he attempted to rip the bamboo from the root. After several failed attempts, he let
go of the stubborn bamboo, and picked up a loose piece of bamboo instead. "Look, it's my walking stick" he said proudly, and continued walking along the edge of the tall grass. As we walked, I discovered a strong scent of mint. I crouched down and summoned Christopher to check out the mint that was growing. He closed his eyes and inhaled deeply, "mmm" he mumbled and then turned to walk back to the playset.

Figure 4

*Patch of Knotweed on Northside*
**Place 2B: The Tunnel**

A secret, hiding place. Many of the child participants, namely the boys, were attracted to this area of the yard. The tall grass and the knotweed presented a serious challenge for them, and they seemed to really enjoy tearing through the grass to get to the tunnel by the fence. The tunnel was small—almost too small for an adult body— which presumably made it an inviting place for children. The educators later told me that faint path and tunnel emerged because of the children's constant presence there. While the children did not explicitly label the tunnel as a "secret" place, their surreptitious invitation and desire to remain quiet, leads me to believe that it was experienced as such.

**Place 2C: The Knotweed Patch**

**Catharsis and Challenge.** The Japanese knotweed or "bamboo" was a figural element for several male participants. For one young boy who understood that the knotweed was an invasive species, the weed became something that needed to be "killed". He, like several other boys, approached pulling the knotweed with a sense of aggression. Unlike other physical activities afforded in the yard, pulling out the knotweed did not appear to be a show of strength and determination, rather it called forth an experience of aggression, challenge, and triumph.

**Affordances:**

- Exploration
- Curiosity
- Pleasing scents (e.g., lilac tree and mint)
- Sense of adventure
- Sense of privacy (e.g., tunnel and rock area)
- Catharsis (e.g., Pulling the Knotweed)
• Excitement
• Quiet
• Sensory engagement
• Disappointment (toy shed)
• Physical movement and gross motor (e.g., pulling knotweed and pushing rocks)
• Empathy, curiosity and interest in insects and critters
**Location 3: The Southside**

The entire southside was shaded by large, old trees with small ferns and patches of grass scattered on the clay ground. The southside was a markedly cool area compared to other areas of the backyard. The Southeast end was cluttered with junk---a broken plastic chair, a rotting mud kitchen, and other household and play items that were long awaiting garbage pick-up. Two hard-plastic playhouses and a tipi were scattered throughout this area. The southwest end was a particularly quiet and warm area when the sun was out.

**Vignette 3A: An Uncertain Place.** We were ten minutes into our walk when I asked Charlie about the southside of the yard. It was a place that I experienced as quite beautiful and serene. Large trees shaded the area, and there were wild, vibrant ferns that thrived there. The leaves of the trees hung down low and cradled the land. Although Charlie was willing to go to the southside of the yard, he appeared hesitant about taking me there. First, he showed me the tipi, which rested at the edge of the shaded area; a threshold, where the sun met the shade. He crawled inside and whispered, "this is my rocket ship". He made room for me by sitting off to the side, but I could not fit, so I crouched down next to the entrance. When Charlie discovered that I could not join him inside the tipi, he immediately crawled out and led me to another area. He traversed along the threshold down towards the Southeast part of the yard where there was another small plastic house. "Can you move this?" he asked softly. "Sure", I said, "where do you want it to go?". Charlie ran quickly out of the shaded area to a sunnier spot. "Right here!" he said enthusiastically. I moved the house to the sunnier area, and he immediately went inside. "What do you want? Nuggets?" he shouted. Before I could answer she was already gathering leaves and dirt and placing it on the small ledge outside of the window.
"Five nuggets, please! I shouted, mimicking his enthusiastic tone. "What is this place? I asked. "It's a drive through", he said simply, "more nuggets?".

"Yes, please", I responded, holding out my hands. Charlie walked out of the house and glanced around the yard, so I prompted him to show me around the rest of the area. Hesitantly, Charlie headed towards the southwest end of the yard. His movements were cautious and measured. He climbed through a tree and meandered over to the fence where he tiptoed around the ferns to get to the fence. There he followed a path of sunlight to the north end of the yard. I followed silently. The sounds of fire sirens in the distance startled both of us. He looked over at me, panicked: "What is that?! Where is it coming from?!" I responded immediately, "it sounds like a firetruck".

"Where is it?!" he asked suspiciously, peering through the cracks of the fence. "I am not sure where it is coming from", I said, "but I hear it, too". His shoulders relaxed and he continued walking until he discovered a long, thin stick: "This looks like a snake", he said, “and this is why I am scared”. "You're scared back here?", I reflected.

"Yes, I don’t want these vines creeping up on me and going 'blah'”, he says in a matter-of-fact tone. He hangs the vine up on a tree branch and runs into it while shaking his body he shouts, “AH!”.

"What do you think would make this place less scary? I wondered out loud to Charlie. He took a few steps silently, and then responded, "‘well maybe we could just have a path that would go through here so that we won’t get lost”. Then he picked up another stick and dragged it along the dirt, marking where he imagined the path to be. We ended what felt like a long journey from the Southwest to Northwest area of the yard. At this end, there were patches of sun that lit up the ground, and it was quiet, so quiet, all I could here were the birds chirping above
us. "What do you like to do here?" I whispered. Charlie shrugged his shoulders and paced around the area quietly for a few moments before moving to a new area of the yard.

Figure 5

Southside
Place 3A: The Moodedness of the Whole Place

Somewhere scary. For the child participants, the southside area was generally not an inviting or desired place to be. There were only a few cases where children showed us this area unprompted. While few children articulated their fear and ambivalence verbally, others expressed this through their gestures and movements. For example, children were observed staying closer to Ms. MacLeod during this part of the child guided walk, relying on her immediate presence to move through the area comfortably; most participants tended to walk or meander tentatively in this space as opposed to running; and many participants were observed holding tight, rigid postures.

Place 3B: The Imaginative Potential of the Whole Place

Imagination. Despite the child participants’ ambivalence to engage with the space, certain play structures and other features did invite imaginary play experiences. For example, many children were excited to show Mrs. MacLeod the tipi, which some used as a "rocket" ship. The plastic house with a large window and windowsill was used by several children as a “drive through”. Finally, for two boys, a bundle of sticks next to a tree were used to create a “campfire”. Additionally, there were holes underneath some of the trees that fueled the child participants imagination and fear.

Vignette 3B: The Skunks. As Sadie and I were nearing the end of our walk, I asked her if there was anything else that she wanted to show me. She gave me a cheeky smile and ran to the southside of the yard. She stopped at the base of an old, large tree that
was wedged between the boards of the fence. She pointed to the bottom of the tree where there was a hole about the size of a tissue box. It was a deep, dark hole that I had never seen before. “What happens over here?” I asked Sadie.

“A big giant animal comes out, and it will pull you in”, she says while wrapping her arms around herself tightly.

“How does that make you feel?” I responded.

“Bad”, she huffed.

“Why?” I asked gently.

Sadie looks at me nervously “because you can put a stick in there and if you put a stick in there, he may grab it and pull you in” She then grabs my arm and pulls me away from the hole.

"Are there any other holes around here?" I asked.

Sadie nodded and ran to another tree. The tree was located at the north end of the yard. Beside it, was a large clay boulder. Other children had shown me this place before as a local for jumping and climbing. I was therefore surprised to discover that there was also a hole there.

Sadie smiled and pointed to the hole. “What happens in this hole?” I asked.

“An animal comes and climbs right here”, she said, while dragging her fingers down the tree, "and goes right in here!”

"What kind of animal?" I asked.

Sadie cups her hands together as if she is holding something small and responds: “A skunk, a little tiny skunk”. She peers in the hole and inhales, "pee yew, stinky", she laughed, running away from the tree.
Place 3C: The Skunk Holes

The holes, particularly a hole located on the southside of the yard, were a feature that was identified by most of the child participants. There was a hole at the root of a large tree located on the southside, which sparked the participants' imagination. In general, the hole evoked a sense of curiosity as well as some nervousness and fear of the unknown. For several children, the hole was home to the infamous skunk who they believed came out at night and sprayed the yard. In many ways, the hole as home for the skunk was a way for the children to make sense of why a skunky smell lingered through their yard at times. Creating stories about the holes and their potential inhabitants seemed to be a way that the children made meaning of a space that was hidden and underground. Interestingly, the mood and emotionality shifted depending on the where the hole was located. The hole on the southside, an area generally experienced with some
ambivalence, was understood as a place where one might get “grabbed” and “taken away” to some dark, unknown place with an angry skunk. Whereas the hole located at the southwest end near a beloved rock and tree that children enjoyed using to climb and jump, was revered as the protective home for a small, cute baby skunk.

**Affordances:**

- Fear and Uncertainty
- Curiosity
- Imagination
- Creativity
- Ambivalence

Diverse affordances emerged throughout the guided walks. The walks revealed several attractive and preferred places, and undesirable places. The participants were particularly attracted to places that evoked a sense of safety, curiosity, and their imagination. Places or structures that provided physical affordances such as climbing, and swinging were also popular among the child participants. Engaging in physical movement and challenges contributed to a sense of esteem, confidence, and pride among the children. In the following section, the experiential affordances identified in the place study will be explored.
Themes and Affordances: The Place Study

The Place Study workshop was a two-day workshop led by Dr. Eva Simms and me in early July 2019. Re-adapted from Dr. Simms’s Goethean Place Study, the workshop was designed to guide adult participants through a process of sensory exploration, imagination, and openness to the inspiration the place affords through a series of experiential and collaborative activities and discussion. The reflections, artwork and journaling from participants was recorded and used to guide recommendations and greenspace enhancements. The first day of the workshop was a sunny, warm day in July. The grass was still wet from the morning dew, but the participants were eager to spend time exploring the backyard space. During this early phase of the workshop, participants were first given a prompt to simply notice what areas or elements of the yard they were drawn to. Unlike the children who were drawn to the central point of the yard, many of the adult participants were immediately drawn to the edges of the yard. The edges, as you may recall, are vibrant and wild. On the west side of the yard, you can find lots of shade, ferns, vibrant shades of green, with large trees with large leaves. The east side, on the other hand, is sunny with tall grass, vines, invasive knotweed, and wildflowers.

Many participants of the place study were early childhood directors or coaches who had many years of experiences as early childhood educators. Being an educator deeply influenced how they engaged with the place study and their perception of the backyard and its affordances. In the final phase of the place study, participants were invited to imagine the potential of the backyard. However, many participants had entered this phase only after exploring it once because they could already “see” the potential for learning that this place had to offer. For one participant who was an early childhood coach with a keen interest in literacy, she was bursting with ideas about how to incorporate materials for writing and early reading. For another
participant who had an interest in music and science, ideas for how to incorporate diverse sounds and tools for sensory exploration were shared early on. This educational and pedagogical perspective was helpful, especially in the final phase of the workshop, however it did limit participants’ experiences and impressions of the yard, making it challenging to “see” affordances beyond a circumscribed development and learning model.

Unlike the child participants, some adult participants tended to be drawn to features of the whole yard. For example, some participants were drawn to the sensory elements of the whole backyard experience, or “the plastics” and garbage scattered throughout the yard. Also, some places were foregrounded for the adults that were not foregrounded for the children such as the old shed and the deck. Given that this data was intended to supplement and deepen our understanding of the child places, I have organized the data from the workshop to highlight the adult reflections and experience of the child-identified places but have also included any adult-specific places that emerged throughout the data, and their affordances.
**Location 1: The Center**

**Place 1A: The Playset.** One adult participant, Lana, was drawn to exploring her experience of the playset. Her first impression of the playset was marked by a sense of intimidation, which prompted her to think about the limitations of the structure for young children. She reflects:

> when I came to the structure, it really stands out. It was a little intimidating; like thinking of the little children, there’s no way to get up. There are no steps to get up, and although there are things like a ladder for a child to want to learn to get up, there is no alternative. There is not even a step to get into the gravel, which is okay, but I know little kids to get up, you have to hold them.

Later, when reflecting on how the structure shaped her mood and affective experience, she shared:

> the mood walking up to it was exciting. There were a variety of moods, and they went up and down throughout. At first, I was excited, and then it was anti-climactic, and I know with like older children and they’re like “yay” and then they get up there and there like, “well what do I do here” and I felt that. And then it was really sunny, but that made me really tired. And I’ve worked at that playground, and I’ve felt that before, and I assume the children felt that, too. But then when I was up in the structure, it pulled me to try new things. At first, I was just enjoying it, but then I was like oh wouldn’t it be cool to, I saw the monkey bars, and I said oh wouldn’t it be cool if I could just like pull myself along the top, and some ideas like that came to mind

When later reflecting on how the place inspired movement, Lana shared: “the movement it inspires is to reach, stretch, move and be physical and be above, to seek this higher ground. It
does some have some issues with respect to safety”. Like the child participants, Lana also expressed a desire to be high.

Figure 7

*Second view of the playset*
Affordances:

- Excitement
- Something missing
- Evokes imagined possibilities for movement
- Fatigue
- Inaccessibility

Location 2: Northside

The Whole Place 2A. The participants who were oriented towards the east side of the yard noted the presence of bees buzzing, the smell of lilacs and mint, and the diverse flowers and weeds that were interwoven together.

Place 2B: The Rock Area. The rock area was identified as a place of curiosity and interest for one participant, an educator, who had spent each day in the backyard with her students. When speaking to her sensory experiences, she reported being attracted to certain elements of the place such as “the rocks, trees, leaves, vines. I heard birds chirping like leaves rustling, there were like smooth rocks, textured paths with wood pieces”. When exploring the possibility for movement, she shared: “there were large rocks for balancing, heights at different levels, which led to the next path. There was like holes in the ground, like a hilly pathway”. Finally, she described her experience of ‘flow’, or lack thereof in this place, sharing:

*it like stopped abruptly at the large rocks, so it didn’t flow into the next area or had a clear destination. But I did feel kind of calm sitting there, explorative, wanting to touch*
different things, inquisitive, and try out different levels of rocks. And it was a quiet space, hidden away from everything else

Similar to the child participants, this participant also was drawn to rocks, exploration, and experienced it has somewhere hidden and quiet.

Affordances:

- Quiet
- Hidden
- Prompts exploration and inquiry
- Disconnected from other places
- Calming
- Stimulates the senses (especially auditory)

Place 2C: The Old Shed. One participant, Dave, a university student spent most of the workshop exploring an old worn-down shed located in the Northwest corner of the yard. Of his experience, he shared:

...when I looked back behind the shed, I saw all of these lost toys, and you can imagine kids... like there’s like the blue ball and you know that Billy lost the blue ball. It’s like a no-go zone, but it was kind of interesting to see that because it also felt like you were looking into another a time. There is like neglect there, like something lost. It was old. It was like a time sort of thing. And I don’t know if we always need children to be in the present. It’s just sort of interesting to look back there and see all of these old-discarded toys that kids were almost too afraid to go get or couldn’t go get
For Dave, the old, moldy shed evoked a sense of loss, neglect, and general disgust. When asked what he thought should happen with the shed, he could not answer. It was as if the shed itself interrupted his capacity to imagine its potential.

Figure 8

The “old” shed
Affordances:

- Loss
- Disgust
- Neglect
- Imaginative disruption
- Aversive

**Place 2D: The Tall Grass and Tunnel.** One participant was drawn to exploring the east side of the yard where the tunnel was located. When speaking to her sensory experience of this area, she shared:

> I could see overgrown bushes, and I could hear bees buzzing. I could see ants on the ground, which was nice. There was a lot of broken vines and sticks, and I could feel them crunching underneath my feet, and there were a lot of high and low bushes. So then that made me feel blocked and restricted, but curious. There was a little path through the middle that I tried to walk through, but then it stops because it is overgrown on this side and that side. And then I thought of what if a child crawled because it was more open on the bottom, but it was so broken that I was like well I wouldn’t want to crawl because then it would be hurting my legs. It was calming when you were sitting looking at it, but when you started to investigate, I was nervous about what was going to poke my feet, what was under here that I couldn’t see because it was so overgrown. A path would have been nice so that you wouldn't be overwhelmed by everything around you but could still explore. So like my biggest one was when I tried to walk in to try and investigate, but I couldn’t because it stopped. I couldn’t even get through. I could see little holes, but I couldn’t get there
Another participant, a director at a different center, was also interested in exploring this space. When recounting her experience of this area, she shared:

*I feel much more calm, and I was watching insects like a few bumble bees, a few butterflies, and there were some ants on the leaves and some flies. And there was a sound of birds. There were tall grass and some sticks right there, and “I wanted to get up and go inside, and like as a child you would want to go and get inside that. I want to see what is right there.” And I tried to go in and there were like the vines, and the insects go on my legs like they wanted to eat me, and I was like “ah I got to get out from there”. It was almost like scared, but excited because I wanted to go in and like explore there. I feel like happy. I wanted to move around and explore all of the leaves like a different type of leaves, and then I could smell the mint. And the mint was amazing. I could smell like the wild grass*

In this place, the adult participants were attracted to the sensory affordances (e.g., the sights, the smells and the sounds), but the presence of tall grass and the vines disrupted their experience. Whereas the children seemed to approach the tall grass and vines as a fun, adventurous challenge, these elements were deterrents for the adult educators.

**Affordances:**

- Motivated curiosity and exploration
- Restriction
- Visual appeal/attraction
- Calming
- Nervousness and fear
- Engages the senses, especially olfactory
**Location 3: Southside**

**The Whole Place 3A.** The participants who explored the southside of the yard noted the fresh smell, the varying shades of green, and the feeling of dirt under their feet. Participants drawn to this general area noted how immersed they felt in the place. For example, two participants shared that sounds from the outside such as cars and the air conditioner receded into the background of their experience while exploring this place. When describing the flow of the place, one participant noted how the place called for her to body to explore through movement. She shared:

*The movement in that area, because it has a great flow, it just goes from one end to the other, the trees are just placed perfectly where you could zig zag in and out of them and I could just see children running through and stopping and exploring one tree from the next. And then being able to climb. That was a big thing for me was how am I going to get to the top of the tree and use my problem-solving skills to try and figure out how am I going to get back down and out of the tree. The flow for me, I could have stayed in the space all day. However, even though I felt I could stay there all day there were not enough materials to keep my attention focused in that area. So when I see the branches on the ground, I think “oh if I had a magnifying glass, I could sit on this branch and look for bugs or you know if I had tweezers I could pick up this caterpillar” or even if I had loose parts I could. I went from climbing trees, to the sensory. I wanted to explore; I wanted to get in that dirt you know pick at the moss on tree and get those leaves on the trees*

In this description of flow, the participant also shares what was missing from the place. She notes that there were not enough materials to support her interest and curiosity in exploring. Another participant noted the lack of diverse sensory experiences in this general area. She expressed:
I heard birds, bugs, but I needed more sounds. It was super quiet out there. I know my child doesn’t like when things are super quiet, so I wanted a little more even if it was bells in the trees or anything. I felt lots of trees, dirt, and plants. I didn’t smell things. Something I did see in the middle of it there was a pool of sunshine. If you put your hands in it, you can make shadows.

Finally, a third participant who explored this area further reported feeling like something was missing. She shared: “I felt really peaceful there, but I also felt like there were missing connections to multiple sensory experiences”. All participants who were invested in exploring this area more deeply identified the potential for the place to be restorative, but all felt as though there were some missing sensory elements and materials to support exploration, movement, and play.

**Affordances:**
- Exploration
- Curiosity
- Movement
- Engages the senses
- Yearning for more
- Immersive

**Place 3B: The Tree with the Big Leaves.** The large, old trees located on the southside of the yard were a point of interest for participants. Karen, a director of another CHANCES center, was particularly attracted to a tree with large, low hanging leaves. When she later discussed her experience of mood, flow, and movement in this area, she shared:
[I was attracted to] the big leaves, hanging branches, the smell of nature, kind of freshness underneath that tree. I love how there’s almost like an arch way, like a welcoming pathway for the children go in and then there is a space around the tree, so you can crouch small or stand tall, and really the movement can be slow or fast. There was a feeling of calm and renewed like there was real growth of small baby leaves that were coming from it, but it could also be fast and adventurous. It could be anything that you want it to be in that moment.

For Karen, the aesthetic qualities of this area of the yard revealed its restorative affordance. It calls for the body to express and move freely; to go fast or slow, but with a sense of calm and ease.

Figure 9

“The Tree with the Big Leaves” on the Southside
Affordances:

- Pleasant smell
- Enclosure/containment
- Inviting
- Openness for possibilities
- Witnessing new growth, aliveness

Place 3C: Where the Broken Things Are. Sharon, a woman who had visited the yard many times before, wanted to deepen her experience and reflection regarding what could be described as the aversive elements or materials placed throughout the backyard such as the garbage or broken items. In her reflections she shared that she "cringed in places”. Using poetry to express her experience, she shared:

_There was broken plastic, there was old tissues intermingled within the rocks, [and] there was bags." She continued, "And I would smile, if I was in a curious place, but I would look down and there would be debris. Bright puffs of flowers emerging around crooked trees, perfection of nature, natural growth that somehow flowed from a corner of mishappen stuff. Does this stuff provide exploration? Or is it carelessly managed without cause or thought. Vines intertwined covering the ground. Beauty, sticks, stop plastic bags that have been left behind. The tree providing shelter and towering to the heavens, do we see the shards of waste, intermingled with the rotting leaves? Buildings, fencing and a central place showing that there are expectations so that we can find order. Nature waiting to emerge to call forth our spirit to connect and discover who we are, or who we dare to be. Faded, broken plastic, and crumpled bits of tissue, a notion_
that no one cares. This is a limitation, an expectation, the earth tells me that there is a secret to where the wild things are; the plastic tells me that no one cares; the crows fight in protest

This experiential account, through poetry reveals the ways in which nature draws her in to curiosity, exploration and perhaps some joy, but that the presence of garbage or broken items disrupts and forecloses her experience of the natural beauty.

Affordances:

- Evoked feelings of anger
- Feeling uncared for and worthless
- Evoked feelings of disappointment

**Place 3D: A Tranquil Place.** Unlike the other parts of the Southside, the Southwest corner of the greenspace was a beautiful and warm, quiet space. There were no toys or equipment in this area. One participant was drawn to this area and spent the workshop deepening her experience of this place. When describing her experience of it, she shared:

> I didn’t feel anything negative in that space, but you can hear the birds, hear the leaves, blowing in the wind. There was a feeling of freshness, and there was a rock that you could use for a sitting space or a crawling space. It is a huge open space, so there is so much potential there. You could dance or you could run, but there were nice quiet opportunities as well. It felt safe and comforting and there was a lot of green in that space. You know it’s not grass, but it’s grade. There’s shade and its cool. There was a huge hole at the bottom of one of those trees, so you could wonder where does it go? Who lives there? Or all those
questions that you sort of have and then there are two peep holes in the fence where it needs another piece of wood replaced. It brings you back-to-back to old memories, like the woods. There were no woods in Summerside but there were little trails where we could pack our back packs with our thermos and soup and sandwiches, and we’d go out for the day. Then there was that big tree that we all talked about, and you know your imagination could go anywhere. You could feel like you were in the rainforest or a jungle because you know it’s not something you typically see every day

Here, the participant is identifying several experiential affordances of this place, indicating its potential for restorative experience.

Figure 10

*Southwest Area*
Affordances:

- Sense of safety and comfort
- Nostalgia
- Possibilities
- Imagination
- Curiosity
- Engages the senses
- Quiet
- Openness

**Location 4: The East End**

**Place 4A: The Deck.** Andrew, a professor at the local university, had been drawn to examining the thresholds, namely the deck at the entrance of the greenspace throughout the workshop. When reflecting on his experience of the entrance, he shared:

*I was thinking about the boundary of getting us from one space to another, and the feeling that I was getting was that it was happening too rapidly like getting from one space to another. I remember as a child really liking tunnels, but these kind of in-between spaces like a transition sort of space, and so I was really longing for that sort of transition and instead of just immediately being in the space. And then the other part is the boundary between the deck, and the grass area, and it was just too sudden. I wanted it to happen slowly, and transition into that sort of space. When they design paths for national parks, it’s never just a straight path. It always curves around to create interest*
for what is around the corner, so I was just imaging building that anticipation of some things so like for a child having to meander and having like big boulders or rocks so they can’t see around, but they're interested about what might be around it. So, I could I kept getting the sense of transition and prolonging the experience. It was too abrupt in several ways, and I kept trying to find ways to prolong it. The description I have is like when you lower yourself into a warm bath, like it is just a massive sort of experience

For Andrew, there was no sense of transition into the green space. The abruptness that was felt at the point of entry, left Andrew yearning for a longer, slower transition into the green space, which would allow for an experience of anticipation and excitement. One component of the place study workshop was to focus on the elemental qualities of the space, and wonder about the ways in which earth (how does the ground support activity?), water (what is the flow of the place? How does it gesture to us?), air (what are the scents, sounds, and moods of the place?) and fire (where does the inspiration happen in the space?) shape our perception of the place. During a follow up discussion on the elements, the issue of accessibility or lack thereof emerged. After reflecting on the thresholds using an elemental framework, Andrew realized the lack of accessibility in the backyard. He shared:

I’ve been talking about thresholds and transitions, and how things go from one place to another. I was taking into account the elemental aspects of it. Thinking about how earth structures channel things so like water or air, water or fire, and the way that you kind of channel energy through that in terms of the entrance, and in terms of how to create that channel or that flow. There’s a book by Michael Pollen where he talks about personal space and thinking about it in terms of chi. He runs around his landscape to see where it
directs him and goes with it, and where his energy pools up. Where are those pools of energy? When I started to think of elements, I began to think of accessibility and how incredibly inaccessible this space is, and so there wasn’t a ramp to come up to this entrance, there wasn’t a drop off. It wasn’t until I started thinking about elements and energies that accessibility just really slapped me in the face.

Andrew’s reflection sparked a discussion among the group about accessibility. Later in the workshop participants were asked to reflect on “what the place says” in other words, if the place could talk, what would it say? Anna, a director, shared her experience as a mother of a child with a physical disability and how accessibility issues at playgrounds and centers were always on her mind. The backyard was no exception. She expressed sadness and frustration when she realized that her son would not be able to access the deck easily. She shared that, if the whole place could speak, it would say: “you’re not welcome here…the stairs, the drop off…you’re not welcome here”. Throughout the workshop participants continued to share their disappointment with the lack of accessibility in the backyard and at their own centers and tried to brainstorm ways that it could be addressed.

Figure 11 A.

The Entrance: Deck and Gate
Affordances:

- Abruptness
- Unwelcoming/ uninviting
**Place 4B: The Art Desk.** One participant, Rachel, attended to what felt like an overwhelming amount of “plastic” that was scattered throughout the green space. She deepened her reflections of the plastic elements through a close observation and reflection of her experience of an art desk located on the northeast end of the yard near the deck. During a group discussion, she shared:

…it was facing a building so although it had a privacy to it, it didn’t give you much to look at and create from. Just by turning it could have been so much more. I feel like my creativity was taken when it was facing the building. But the smell was inviting; I could smell the kitchen, and it tickled all your senses. I liked that aspect of it. I looked at the kitchen center. It was really small, only two children could fit in it, so it really limited the movement of where they could move around, but there was this wonderful smell of mint and the natural materials that were available, the leaves, the dirt, twigs and sticks and the chestnuts were up farther; there was a lot of that stuff”

One component of the workshop was to imagine what the place might say if it could speak. When Rachel was called upon to discuss her experience attending to the plastic objects in the yard she said:

[The plastics] did not speak to me. I drew an art desk looking out into the beautiful green space. It said to me that I couldn’t get creative when facing a wall when I was present in a beautiful space. Negativity comes within plastics

Dr. Simms followed up and asked: “what did the place say to you?” Hesitantly, Rachel responds, “it’s so hard to say it when it’s negative”, but it says to me, “you’re facing a wall, what did you do wrong?”
The art desk, its location, and the lack of intention regarding its position, evoked a strong emotional and affective reaction within Rachel. However, surrounding sensory elements such as the smell of food cooking, and mint, contributed to a somewhat more pleasant experience.

Figure 12

*The Art Desk*
Affordances:

- Uncertainty
- Punishment
- Confusion
- Shame
- Loss of creativity and imagination
- Pleasant olfactory experience

Themes and Affordances: Educational and Learning Needs Questionnaire

The two educators and one staff who taught the child participants completed the pedagogical questionnaire.

The first question invited educators to share their observations regarding the children’s daily activities and play in the backyard. Educators observed children engaging in diverse activities such as: climbing and balancing (e.g., trees; play set), imaginative play (e.g., using basketball net as a rocket ship; playing “restaurant” in the play kitchen); searching for bugs or digging in the rock area.

The second question asked educators to indicate what types of outdoor play experiences support the developmental needs of children for children between ages 2-5. For 2-year-old children, educators identified activities that support physical development such as climbing, balancing, jumping running, as well as sensory-based activities or experiences (e.g., toys that can help children fill and dump). For 3-year-old children, materials or elements that supported physical and gross motor development such as opportunities for climbing and running were important. Structures, toys, and other elements that support dramatic and imaginative play were
also identified as important for this age group. Finally, the educators indicated that affordances or opportunities for experimentation and exploration were of particular importance for the older children (e.g. 4-5 year olds). They also highlighted that creating experiences for them to learn about how to care for living things such as caring for a garden, may be important for this cohort.

The final question asked the educators to reflect on their own needs for the outdoor play environment (e.g., think about what they need to support their teaching and what the parents may want to experience). The educators initially misinterpreted the question and shared what they wanted for the children. This included having natural structures for balance, a climbing wall, sandbox, mud kitchen, structures for imaginative play, a garden, music wall and water wall.

Of note, I followed up with the educators regarding this last question to ensure that I received feedback regarding their own needs as educators, and their impressions about what parents may want or need. The educators noted that the lack of a ramp or steps off the deck often dissuaded the parents from entering the yard. They also noted the lack of shade at the playset, and how hot it was for them to stand and monitor the children in this area. One educator requested benches in shaded area along the West end of the yard, noting that this was the only area where they could monitor all the different areas at the same time. They reported that they would like to comfortably engage children in each of the different areas of the yard and requested some seating in each area. The responses, and particularly their ideas and suggestions for the greenspace were integrated with the experiential affordances identified in the Child Guided Walks and the Place Study workshop to later be translated into a design plan for the greenspace.
CHAPTER V:
DISCUSSION AND IMPLEMENTATION OF RESTORATIVE PLAYSCAPE DESIGN

The final phase of the approach involved using the experiential data to guide the re-development of the playscape. Identifying the meaningful places and affordances for the child participants was integral to the process of enhancing and removing barriers to the already-existing developmental and restorative affordances. Experiential feedback from the children, educators and participants from the workshop inspired the design of new structures or addition of natural elements to cultivate restorative experiences. The experiential data revealed how the environment affords children open-ended and diverse opportunities for play, movement, exploration, socialization, creativity, and rich, intensified engagement with the sensory world. Features such as the tall structures that afford seeing across the whole yard, and familiar play equipment such as swings and slides further lend to feelings of safety and security. Outdoor play also provides opportunities for connection between children, educators, and families, as well as non-human beings, which can promote healthy social emotional development, empathy, and care.

On the last day of the Place Study workshop, I presented my initial observations from the Child Guided Walk to the group of adult participants’ and facilitated a discussion about how to integrate my initial findings and impressions and their observations and feedback. From there, I compared and integrated the child guided walks data, suggestions made during the Place Study workshop and feedback from the educators. I identified overlapping themes and reflected deeply on tensions within the data sets. When developing enhancements, I prioritized the children’s voices and needs while also giving strong consideration of the educator and staff needs. Next, I finalized and presented my recommendations to the CHANCES administration and outlined a
plan/timeline for restoring the greenspace. During this meeting, we outlined and prioritized what could be reasonably implemented within the current budget for the project.

Up until this point, I have discussed community-engagement in terms of listening, holding space for and honoring the different voices and perspectives of key stakeholders: the children, the educators, and the greater CHANCES community. During the design and implementation phase, engaging the community means inviting participants take part and invest in the restoration process. It involves inviting the community into the process of cultivating and enhancing the natural affordances (e.g., painting, gardening, planting, etc.) to foster a sense of care, connecting and commitment to the place, children, and the future. During this phase, what is considered “community” extends beyond the children and educators, to include caregivers, families’ other members of the CHANCES community, neighbors, and local artisans, carpenters, landscapers etc.

The restoration phase of the current project was intended to be community centered. I had planned to recruit staff, participants from the workshop, children as well as parents within the CHANCES community to help with the enhancements (e.g., to construct, build, plant, paint, etc.) However, the re-development of the greenspace took place at the onset of the COVID-19 pandemic. Given COVID-19 restrictions and safety precautions both provincially as well as organizationally, we were not able to invite people from different households or “bubbles” into the shared space. Consequently, most of the re-development was completed by myself, with the immense support of my parents, Ms. MacLeod, and local construction workers, as well as landscapers in the community.
It is with much gratitude that CHANCES and its sponsors provided generous funding. We were able to implement most of the recommended enhancements with assurance that other, longer-term plans for the yard would be considered. Thus, certain enhancements discussed in the next section are a part of a larger, longer-term project that will require additional funding to complete. Of important note, all structures and landscaping were developed in collaboration with local, Island businesses. *MacPhail Woods Ecological Forestry Project* is a non-profit initiative of the Environmental Coalition of PEI. They offer several different programs to Islanders, all of which are aimed at connecting with and restoring our natural ecosystem. One of their programs involves landscaping and restoration with plants, trees and shrubs that are native to Prince Edward Island. CHANCES contracted a local landscaper from MacPhail woods to assess the backyard and make recommendations for plants, flowers, shrubs, and trees to be planted throughout the greenspace. CHANCES also contracted local construction companies and woodworkers to construct custom play structures and enhancements to the deck.

At the end of the summer when the re-development was complete, we invited the child participants, educators, and staff, as well as two Mi’kmaq elders in the community who blessed the play environment (which will be discussed in a later section). The celebration was small due to Covid-19 restrictions but was intimate and special event for the children to connect with the elders and enjoy their new play environment.

Finally, I wrote a report to the CHANCES Administration outlining each enhancement (See Appendix B1), how it emerged from the experiential data, and it’s potential developmental and restorative benefits. Suggestions for enhancements that were not implemented during the initial re-design process were also included in the report. The report was made available to CHANCES staff, educators as well as caregivers and families.
Since implementing the changes and enhancements, many children, families, and educators/staff across programs have utilized this space regularly as a place of refuge for safe outdoor play during the COVID-19 pandemic. While we do not yet have “hard” data (i.e., comparative data to examine its restorative effects), our qualitative data and informal feedback regarding children and families experience of the yard does support its positive impact on overall well-being.

**Integrating Data and Theory into Design**

In the following section, I discuss the enhancements made to each major area of the greenspace, and how they were informed by the data and supported by existing literature. Each enhancement aimed to amplify already-existing restorative and/or developmentally enriching affordances, eliminate existing barriers to affordances, or was implemented to cultivate an affordance that was desired or noted as missing in the participants’ experience of the greenspace. Drawing on the nature restoration literature, as well as child development and psychological theory, I further explore how each enhancement aims to foster developmentally enriching and restorative experiences for children.

**The Playset**

**Honoring the Safe Place.** The playset was a favorite place among the child participants during the child guided walks. When asked at the beginning of each interview “show us your favorite place to play in the yard”, all the children immediately went to the playset. Typically, children started at the playset and then journeyed to other areas of the backyard. It was not uncommon throughout the walks for children to return, sometimes quite briefly, to the playset before exploring another area. During one interview, a child was observed transitioning from the Northside of the yard to the Southside of the yard. While he was running, he quickly grazed his
hand along the edge of the playset, before entering the shaded area of the Southside of the yard. The playset was approached with a sense of predictability and familiarity. The child participants, regardless of their age, seemed to “know” what to do there. For example, a two-year old child participant could not get on the swings without adult support, but nonetheless, approached the swings, gripped her hands on the chains, and attempted to lift her bottom up onto the seat.

The child participants’ relationship with the playset as a safe place reminded me Bowlby’s theory of attachment, and the child’s inherent need for a sense of security before they can explore novel places or experiences. John Bowlby’s influential work on attachment and the emotional, psychological, and social development of the child is critical to understanding the child’s inherent need for security with others and their environment. Drawing from evolutionary theories and perspectives, Bowlby defined attachment behavior as “seeking and maintaining proximity to another individual”, which meets a biological need for survival and a psychological need for security (Bowlby, 1969, p. 195, as cited in Reubins and Reubins, 2014). Early interactions with caregivers, shape how the child will experience themselves in relation to others and the world (e.g., how they think, feel, and behave). Bowlby posited that infants and children who experience a relationship with their caregiver(s) that is marked by consistent and predictable responsiveness will develop a sense of trust and safety with others and the world, which will give children a sense of confidence and security when exploring the world and their experience.

The playset emerged as an “anchorage” or a “secure base” for children during the Child Guided Walks. As mentioned earlier, Benswanger (1979) suggested that there is always a place—a home base—that the infant or child consistently will orient to as a source safety and refuge. Safety is further marked by consistency, predictability, and familiarity. For example, in infancy,
the mother’s body, a rocking chair and the crib may serve as the child’s home base as these are usually places where the child receives nourishment, care and a sense of security.

The participants were drawn to the playset as a “safe base”. It was their starting point where they would spend a short period of time engaging in safe, predictable activities before branching out to other areas of the yard. Moreover, an adult educator, was almost always available and present at the playset. Therefore, not only did the playset afford predictable and familiar activities, but also had the presence of a safe, reliable, and consistent caregiver.

The current literature on the affordances of traditional play equipment has narrowly explored its potential for physical development (e.g., gross motor development and coordination) or social development, but has not, to my knowledge been explored in terms of its affordance of emotional safety and predictability.

**Creating a Challenging Place.** Creating a developmentally appropriate play structure that promotes safe physical activities allows for age-appropriate risks and challenges for children to promote healthy gross motor development. When play structures do not have physical affordances that are safe-enough, children (and adults) can not only experience a fear of hurting themselves, their sense of mastery and esteem will be negatively impacted. Children must have structures or elements that afford a physical challenge, but that can also be mastered and achieved. The former structure was designed for school-aged children (ages 5-8), and so while the older children (ages 4-5) tended to utilize most elements of the structure (except for the monkey bars, which proved too challenging for most children to do independently), the younger children (2-3) required significant adult support and intervention to use the play structure. The primary educators of the early years program, frequently shared with me that helping the younger children onto the play structure took up most of their time and attention. They reported
that they wanted to engage with children in other areas of the yard, facilitate activities and conversations, but felt that they could not safely leave the playset. The alterations that were made to the playset addressed not only developmental appropriateness, but also were intended to put the staff’s worries at ease so that they could comfortably engage with children beyond the playset.

Figure 12

*Playset before enhancements*

![Playset before enhancements](image1)

Figure 13

*Playset after enhancements (front)*

![Playset after enhancements (front)](image2)
Providing Shade and Protection. An important aim of this project has been to develop an approach to playscape design that deeply honours and respects the land. The land upon which this playscape has been developed is referred to as Epekwitk, the land now known as Prince Edward Island, Canada. The Mi’kmaq relationship to land is one marked by a deep sense of interdependence and respect. In a discussion on basket-weaving as a Mi’kmaq tradition, Della Maguire shares that “it is common knowledge that when aboriginal people take from the land they give thanks, and every part of the product has a use” (Maguire, n.d, p.12). The ash tree,
which is used for basket weaving because of its flexible and highly durable fibers, has been an integral part of Mi’kmaq’s capacity to live off the land. Maguire recounts a legend about the ash tree, which is that “Glooscap, taking up his great bow, shot arrows into the basket tree known as ash and our people came out singing and dancing” (p. 11). Myth and legends in Europe also revere the ash tree as a healing tree. During the plague, sick children were placed under the tree to heal from their illness. It was believed to have healing powers. The ash tree is thus revered as a symbol of care for people and for the environment. As such, we decided to plant an ash tree to honor Chief Gould and the Mi’kmaq people of Prince Edward Island, as well as to show our commitment to the land. We decided to plant the tree near the play structure. Based on discussions with primary educators, as well as feedback from the place study workshop, a clear issue with structure was that it was in direct sunlight. The gravel and equipment would get too hot for both the children and educators. The primary educators reported finding it difficult to engage with the children at times because of their discomfort with the heat and asked if it would be possible to purchase a shade structure. Rather than recommending a shade structure, we opted for planting a tree that will grow and eventually provide shelter from the uncomfortable heat.

When the enhancements were complete, we had an intimate ceremony to celebrate the land and the project. Children, educators, and members of the CHANCES community gathered to walk through, play, and celebrate the playscape. Mi’kmaq elders were invited to the ceremony, which took place at the ash tree. They said a traditional prayer, blessing the playscape on behalf of the Chief.
Northside

**Protecting Child-Determined Places.** On the Northside of the greenspace, there were two areas that were identified by the educators as “special” places for the children: the rock area and the tunnel. These were considered “special” because their existence had been determined by the children. The children buried their way through the weeds and grapevines to a small clearing, the “rock area” where they would play and congregate together. Over time, a faint path to the area emerged and the clearing widened. The process of creating the tunnel was the same. Children found a small opening under the cascade of grapevines that draped over the fence. A small, child sized tunnel was formed through the children’s constant movement and play within this small opening that eventually grew into a tunnel.

Most child places are prescribed and designed by adults, especially in educational settings. Educators intentionally choose what toys go in the classroom, the play equipment used in the outdoor play spaces, and the structure of the children’s days and activities all to support their growth and learning. However, as children develop their sense of self and separateness from the world, which become most pronounced around age three when the child typically
begins to assert their independence and preferences (e.g. reflected in statements such as “My want to do it!; “No help!”; “I want the yellow one!”), they begin to resist adult-determined places and find places to cultivate on their own. Based on her phenomenological research exploring undetermined places in childhood, Simms (2008) discovered that often these were places that were “neglected and unwanted by adults” (p.54). Interestingly, this point was reflected in the adult place study workshop. The participants who examined and reflected upon the Northside of the yard found the long weeds and insects to be particularly bothersome, especially around the tunnel.

Child determined places are important to honor and respect as they can support the developmental process of separation and individuation (Reubins & Reubins, 2014). Optimal conditions for this process, especially between the ages of 3-5, involves caregivers attending to and honoring the child’s desire to separate and discover their own sense of self (e.g., their likes, dislikes, their budding interests, and desires), and I would further add, sense of place, while also remaining as a stable and secure presence. The child must trust that they can separate: to be different and be away from the adult caregiver, all while trusting that are still accepted and loved. Too much separateness (e.g., the child who is left alone to play all of the time) can impact difficulties relying and depending on others later in life; whereas a lack of separateness (e.g., a child whose play is always prescribed and monitored by adults) creates a sense of fusion and enmeshment can create a sense of over-dependency on others and restrict engagement with the world and new experiences. Thus, undetermined places for children around this age cohort are typically places where children are hidden from direct adult view, but where the child can still see the familiar adult who is their anchorage point (Simms, 2008). To honor the undetermined places on the Northside of the yard we developed small enhancements to preserve these places
throughout the seasons. In the late summer months, the grapevine and the weeds would be so overgrown that the tunnel and access to the rock area would disappear. For the tunnel, we created a lattice frame (child size) for the grapevine to drape over, preserving the tunnel for the children into the Fall season. We also made a stone path leading to the tunnel and the rock area and did some landscaping to preserve and prolong its affordance as a child determined place.

Figure 17

*Stone path and wooden bridge leading to the tunnel*

![Stone path and wooden bridge leading to the tunnel](image17)

Figure 18

*Stone path leading to “rock area”*

![Stone path leading to “rock area”](image18)
Note: Prior to landscaping, the “rock area” was hidden by overgrown weeds and invasive plants. By clearing the weeds and planting diverse plants and shrubs, the “hiding” affordance was preserved, but with an enhancement of the sensory affordances of this area as well as afford learning opportunities for children to learn about native plant species on PEI.

**Cultivating Curiosity and Exploration.** The “rock area” was a beloved, hidden area for the children to engage in exploration and imaginative play. The activities in the rock area were varied. Some children enjoyed it as a quiet place that “smelled nice”, whereas for others, it was a place for exploration and experimentation. The rocks and boulders were turned upside down to examine bugs and worms or they were smashed to make “cell phones” or other materials for imaginary play. To honor and enhance the explorative element of this area, we bought shovels, magnifying glasses, and other containers to have available to support and encourage the children’s natural inclination to dig, explore and experiment. Furthermore, we cleared out the weeds surrounding the lilac tree, and had a local landscaper plan native shrubs and flowers. Planting native plants served two purposes: 1) to enhance and diversify the sensory elements in this area (which will be explored further in future sections) and 2) to create opportunities for children to learn about native plants on Prince Edward Island. Educators could invite specialists in to discuss the plants, what insects they attract, how they grow, etc. or they could create their
own curriculum to teach the children about local plants, seasonal changes, pollination etc. Stoking a child’s natural curiosity in a place that they are inherently drawn to and that feels special to them, not only affords opportunities for scientific learning and experimentation, but supports children (and adults!) in fostering connection and attachment to nature (Louv, 2008). In his discussion on attachment theory and its application for the relationship between children and nature, Louv (2008) suggests that “if children do not attach to the land, they will not reap the psychological and spiritual benefits they can glean from nature, nor will they feel a long-term commitment to the environment, to the place” (p.159). In other words, the more attached we feel to a place, the more inclined and committed we will be to protecting it. This statement by Louv is significant in that it highlights the interdependence between humans/children and nature. Children not only benefit from experiences in nature, but that these experiences are critical in addressing the ecological crisis in the long-term.

Figure 20

*Enhancements to the “rock area”*

Note: A small bench was added, as well as shovels, magnifying glass, containers and other materials for exploring (not shown in picture)
Creating a Place to Garden. Incorporating a vegetable garden in the backyard was proposed by the adult participants. The backyard previously had a garden, and the primary educators reported that the children enjoyed planting and watching the vegetables grow. Research has shown that there are both physical and emotional benefits to gardening in childhood. Gardening or garden-based interventions in educational settings have been found to improve children’s physical and nutritional health, including increased consumption of vegetables among young children (Blair, 2009; Skelton et al., 2019). Other research suggests that gardening helps children develop care and empathy towards other living beings (Keeler, 2008; Swank & Shin, 2015).

Finally, Louv (2008) suggests that access to gardens is another way in which children can be introduced to nature and nature experience, especially children in urban environments who otherwise might not have accessibility to greenspace.

Figure 21

The Garden

Note: The garden was over a section of the Northside that had been covered in Japanese knotweed. The knotweed was cleared, the garden box was constructed, and children could use a small gate to enter and exit the garden area.
Creating a Sensory-Stimulating Place. Sensory elements such as colorful, scented flowers (e.g., lilacs), the strong scent and taste of mint available in this area was attractive to both the children and the adult participants. The lilacs however were inaccessible to the children, and they required adult assistance to smell and touch the lilacs. The children loved the tall grass, overgrown trees and bushes in this space, and adults saw its potential, but the diversity of the sensory elements was limited. Sensory enhancements to this area were an incorporation of PEI shrubs and wildflowers that would be low enough to the ground that children could readily access the flowers and shrubs, to smell, to touch and to see. Opportunities to engage all the senses in natural environments has been shown to increase children’s recollection of meaningful encounters with nature as well as enhance the process of learning (Beery and Jørgensen, 2018).

In the Spell of the Sensuous, David Abram (1996) explores the sensory and perceptual experience of our interaction with the natural world. Drawing on Merleau-Ponty’s work on sensation and perception, Abram posits that we are always in meaningful participation and dialogue with the natural world. The meaning making and learning that occurs in this participatory space is not some verbal, abstract process of understanding, but rather something unspoken and embodied. Abram (1996) writes: “even boulders and rocks seem to speak their own uncanny languages of gesture and shadow, inviting the body and its bones into silent communication” (p.63). This “silent communication” is felt rather than thought, and because nature and natural elements are in constant evolution, shifting and changing with surrounding elements, our curiosity and awareness never grows stale. For example, the color of leaves not only changes with the seasons, but changes with the time of day and the weather. I vividly recall the daily rainstorms during the summer months in Pittsburgh. Almost every day around mid-afternoon, the dark clouds would roll in, signaling an hour-long thunderstorm. Contrasted against
the dark, grey sky the greenness of the trees and shrubs intensified, thus heightening my own awareness and perception of their presence in my visual field.

One might argue that human-made materials also engage our senses. However, Abram (1996) clarifies that:

the mass-produced artifacts of civilization…draw our senses into a dance that endlessly reiterates itself without variation and once our bodies have mastered these functions, machine-made objects commonly teach out senses nothing further; they are unable to surprise… or stimulate us (p. 64).

The lack of diversity, novelty and spontaneity of human-made artifacts thus forecloses learning and meaning making. I would take this one step further to say that it forecloses, at some point, creativity, and imagination as well. Whereas, with a diverse, sensory world such as that of natural spaces, a child’s (and adult’s) senses are constantly being stimulated by a new and ever-evolving communion with the natural world. The natural floor of the rock area can recede into the background on sunny days, serving as the floor for activity, but can quickly transform to a mud pit on a rainy day, thus becoming foregrounded in the children’s’ experience.

Beyond meaning-making and learning, contact with nature and its elements press upon the senses in such a way that evokes an existential awareness, an awareness of self as a being-in-the-world. In Spell of the Sensuous, David Abrams (1996) writes:

to touch the coarse skin of a tree is thus, at the same time, to experience one’s own tactility, to feel oneself touched by the tree. And to see the world is also, at the same time, to experience oneself as visible, to feel oneself seen (p.68)
This experience is significant, especially for younger children who are just coming to learn that they are beings-in-the-world who can both shape and be shaped by the world and others. This is also of particular importance for children who have experienced severe trauma or neglect. When children lack human contact, and I would add here, contact with a world that responds and engages with the child’s senses, the child’s capacity to reach out to the world and others and to make contact and communicate diminishes substantially (Simms, 2008). For example, images and video footage of children at the Romanian orphanage in the mid-late 20th century capture motionless, silent children after a period of severe neglect. These children who, at one time, reached out to the nurses, crawled around the crib searching for connection and stimulation, eventually stopped reaching out to the world (Greene, 2020). And while nature is not a substitute for a human caregiver and nurturance, nature does have the capacity to hold and respond to the child’s implicit reaching out to the world—to touch and be touched; to see and be seen; to call out and receive a response.

**Preserving the Knotweed.** An experiential theme which emerged throughout the guided walks was the activity of pulling and tugging at the Japanese knotweed on the Northside of the yard. Japanese knotweed is an invasive species on Prince Edward Island. It multiplies quickly, is difficult to manage and control, and can be almost impossible to get rid of completely. The knotweed had completely taken over a large section of the southside of the yard. Several male-child participants traversed through this area which was marked by tall grass, weeds and uncontrolled knotweed and grapevines. The knotweed looks like bamboo, and so many children referred to it as such. The participants who engaged the knotweed had a particularly strong, aggressive reaction to it. For some, pulling or breaking the “bamboo” was for the purpose of
getting a “walking stick” or a “sword”, but for one child, who understood the invasive properties of the knotweed, he wanted to pull it out to “kill” it. Regardless of their intent, their actions appeared aggressive. Their eyebrows furrowed and their lips were pursed, and they huffed and puffed trying to de-root the knotweed. Unlike other challenging activities, pulling the knotweed did not appear to be a show of strength such as attempts at the monkey bars, or picking up and moving large rocks in the rock area. The children reacted to the knotweed as if it was a person or a living being, something that posed a real threat to them or perhaps for the boy who understood how invasive it was, it posed a threat to the ecosystem. It was as if the invasive and threatening properties of the knotweed was somehow perceived and felt by the children, and their reaction was an emotionally driven response to the inherent threat of the knotweed. Donald Winnicott, a child psychoanalyst, and pioneer for child developmental theory, believed that aggression is a healthy experience for children, as it reveals their desire and intent to assert themselves in the world (Reubins & Reubins 2014). In Reubins and Reubins’ (2014) review of Winnicott’s work, she writes: “every aspect of the development of self is involved in creating an individual who feels a sense of being, one who is able to impact the world, and be able to be assertive” (p. 12). The Japanese knotweed affords the children an opportunity to express their aggression and agency in a cathartic and non-harmful way and may allow for a safe experience of self-assertion and even self-protection (depending on the meaning of the knotweed for the child during play).
Switching sheds. Removing the old shed was necessary as it had been falling apart and was no longer functional. It was replaced by another shed from a different center, which had been the plan well before this project had started. Behind the original shed was weeds, old leaves, broken toys, or toys that were no longer accessible to the children. Entrance to the paths behind the shed were blocked by old, worn baby gates that were nailed to the shed and the fence, restricting access. Throughout the child led tours, some children guided Ms. McLeod behind the old shed to show her all of the lost, broken toys. They seemed curious and were observed peering through the holes of the gate and pointing to the lost toys. One adult participant was drawn to the old shed and expressed that it evoked a sense of sadness and neglect.

A new shed replaced the old shed, and so children’s access to the area behind the shed was still restricted. The proposed enhancements were to build gates between the fence and the shed. Gates would allow for increased accessibility behind the shed, so that staff could retrieve any lost toys. It was further proposed that the gates should have different sized peep holes so that the children could see behind the shed. I purchased garden decorations such as a plastic skunk, a rabbit, and encouraged staff to also find other creatures, fairies, etc. to place behind the shed to
evoke a sense of curiosity and wonder for the children. The gates and magical elements were proposed, but not able to be implemented during my tenure at the center, as we were awaiting a carpenter to install the gates.

The “gold” door was proposed by a child participant who excitedly requested that we paint the door to the shed (“with all of the toys”) gold. This excitement was observed among other child participants who desperately wanted Ms. MacLeod or me to allow them access to the shed to retrieve toys such as the bikes for the deck, balls, etc. Children who were interested in the shed during the guided walks would jump up and down, pleading for us to open the shed. Unfortunately, Ms. MacLeod and I did not have access to the shed and could not open it for the children. Having a gold door was intended to mirror the excitement and significance of the toy shed for the children.

Figure 23

*The new shed with the gold door*
The Southside

Honoring the Plenum. In The Child in the World: Embodiment, Time and Language in Early Childhood, Eva Simms (2008) explores the mooodedness of space for young children through their experience of the plenum. The plenum refers to the “complex sensory qualities that are given to our perception as a total form. Color, sound, warmth, heaviness, spatial organization, and temporal duration in their intersecting qualities are part of [this concept]” (Simms, 2008, p.225). The plenum shapes mood and experience of lived space and includes those aspects of space that are often hidden or concealed from view. According to Simms (2008), children around age three and four are particularly attuned to the plenum. She writes:

thinking awakens in the child and the sensorimotor relationship with spaces is overshadowed by the more symbolic relationship of mythical, animistic thinking. The child’s emerging sense of separateness and perspective lets the plenum appear in all its formidable otherness (p.52).
For the young child, the world is alive and animated (e.g., the long, thin branches dangling from the trees do not look like snakes, they are snakes; the bees and worms do not appear to be watching the child; they are watching the child). Whereas the adult participant transitioning from the sunny, light, warmer areas of the yard, to the dark, shaded, cooler area, that is the southside of the yard may notice the shift in temperature or contrast between light and darkness, the child may experience a shift in mood or feeling. They do not merely notice the shift from warm to cool, or light to shade, but rather from safe to scary. Aspects of the plenum that are hidden or concealed can become foregrounded for the child. The desire to make sense of that which is hidden is not always experienced by the child as a curious or explorative endeavor but can be a mission to rectify a feeling of fear. This was observed by the child participants’ who were drawn to one of “the holes” under a tree in shadiest part of the southside of the yard. Children anxiously and tentatively approached the hole, and would recount the myth of the mean, smelly, dangerous skunks who lived in the hole, and who could emerge at any moment and pull them down into the darkness, the unknown. Children would poke sticks down the hole and try to fill it with rocks to protect themselves from the skunks. Simms (2008) proposes that imaginary play draws children into a relation with the plenum in such a way that allows them to “perceive and realize some of its dimensions that are hidden from adults” (p.51). This is likely why when the adult participants explored this area of the yard, the holes went unnoticed and the uncertainty of what was happening on the other side of the fence was of little concern.

The plenum and affordances of this area seemed to draw children into imaginary and creative play. The aims for establishing enhancements for this space were to make it feel safer and more inviting for the children, but without foreclosing its imaginative potential. We did this in several ways such as, creating paths throughout the area, cleaning up the broken toys and old
leaves, planting shade tolerance shrubs, and adding loose parts for building and constructing (e.g., tires, long sticks, rocks, pieces of wood of different shapes and sizes, pinecones) and open-ended play structures.

**The Power of Paths.** During one of the guided walks, a child participant expressed fear and reservation when journeying on the southside. As we walked along the fence, his body tightened as he tried to dodge the long thin branches or “snakes” hanging down. When asked how he felt, he expressed feeling “scared”. I followed up with what would make the place feel less scary, he simply responded: “a path, so at least we will know where we are going”. In this simple, yet powerful statement, this four-year old child articulates what contributes to the uncertainty and fear felt in this place: the lack of direction, certainty, and orientation. Part of what is scary is not having a way out of the scary place. In Simms (2017), she explores the pathic dimensions of place experience. Drawing from Straus’ (1952) work on the upright posture, Simms (2017) reminds us that the human body is organized such that we are called to move ahead and to move forwards toward something in the world. She writes:

> The body determines the basic grammar of our spatial prepositions: before (ahead/in front) is the open perceptual field which calls and beckons our hands and feet; behind (back) is what we do not see, the perceptual field that is only vaguely attended and mysterious; above (up) is the sky with its shifting light-shows and weather patterns; and below (down, under) is the ground upon which we move” (p.444)

Paths reveal something fundamental of the human experience: “bodies, animal and human, are always situated and mobile. To be situated means that we are tied to a specific time and place; to be mobile means that when we move, we move through a particular space at this time and not
through others” (p. 444). Without a path, it becomes harder to find a sense of direction, a way forward. Motility becomes stunted, perhaps even paralyzed, and time collapses in on itself.

As Simms (2017) recounts in her panicked experience of trailing off a path in the woods and the 4-year-old child’s reaction to the dark, overgrown sector of the yard, the meaning and necessity of a path becomes clear: it is an anchorage point; it is a place of return to the familiar, the knowable and predictable. Without a path in this area, children spent most of their time attempting to orient to the space. Where do I go? What do I do here? Where can I play? And explore? All attention is directed towards: how do I stay safe? How do I feel okay here? This was evident in their movement: their tense bodies; their tentative and slow movements; their tendency to stay close to Ms. MacLeod; their shrugging shoulders when asked: what do you like to do here?

We constructed a few paths throughout this area to connect the southeast and southwest end of the yard, as well as along the fence, leading to the skunk hole. The direction of the path to the skunk hole was determined by the child participant who had expressed the need for a path. He showed us where he felt the path needed to go, and we created a colorful path along the fence, leading from the entry of the backyard to the skunk hole. I also created a small path, designed in the form of a “hopscotch”, that connected the skunk hole to the main area of the greenspace. Having a familiar path—a hopscotch—also was intended to provide children with a sense of predictability and familiar, a sense of “I know what to do here”. As will be discussed in the sections to follow, children cannot engage their imaginative and creative capacities when they do not have a sense of safety and predictability. The southside is a place that calls forth imagination, wonder, curiosity, and myth. By having paths available, it invites and welcomes children into the world of imagination.
Cultivating Imagination and Dramatic Play. Despite children’s general avoidance of this side of the backyard, most imaginary and dramatic play affordances existed on this side of the yard. The house/drive through, a tipi, and an area where the children liked to play “camping”.

Figure 25

A Child-determined path along the fence on the Southside of the backyard.

Figure 26

The “hopscotch” path on the Southside of the backyard
Opportunities for dramatic and imaginative play are crucial for a child’s cognitive and emotional development. Dramatic play involves “transforming objects, actions and self-identity” (Petrakos and Howe, 1966 as cited in Cloward-Drown and Christensen, 2014). Sociodramatic play involves more than one child or a small group of children engaging in imaginative play. Through imaginative play, children can inhabit conventional social roles (e.g., pretending to be a chef at a restaurant) and through their play learn about what it means to be a person in their society and culture. They can also create or co-create novel imaginative roles, worlds or situations that allow them to expand and deepen their sense of creativity and wonder.

Imaginative play encourages the utilization and development of important cognitive development such as logic and reason, abstract thinking, visual processing (Oke and Middle, 2016). This form of play further supports the development of social skills, communication, cooperation, and problem solving (Brown et al., 2013, as cited in Drown and Christensen, 2014).

Aside from cognitive and social development, creating opportunities for pretend play has implications for the child’s psychological development. Attending and responding to children’s imaginative play as it naturally unfolds (as opposed to directing or guiding children’s play or incorporating overly prescribed play materials) with excitement and curiosity will further support their development of confidence, esteem and encourage further creativity. It is through this engagement with adults and their peers that they discover their capacities for creativity and self-direction. Further, creating opportunities for socio-dramatic play and engaging with children in their imagined roles provides opportunities to mirror, reflect and acknowledge children’s desire to understand and be a part of their community and embody valued social roles. Doing so helps children experience a sense of pride and confidence in their capacity to become a valued member and participant in their community.
When identifying enhancements for the greenspace, it is not simply a process of ensuring that loose parts or imaginative play materials are made available, but that we listen and attend to children’s play first and then collaboratively discuss what materials, toys, elements they may need to enhance their imagination. The aim in identifying and designing enhancements was to be both intentional (i.e., choose structures, elements, materials that honor the current child participants’ imaginary play themes), but also to have play structures and materials that were non-prescriptive and could invite other forms of imaginary play. For example, to honor the child participants’ beloved dramatic play scenario of a “drive through”, we constructed a large mud kitchen that had a window and a small ledge. Children could still “drive” up to the window, but the ledge could also serve as a small table for a kitchen, or a windowsill for plants or to cool off the food. We also designed ‘A’ frame structures with a small window. The structures were intentionally designed with minimal details or elements so that children could engage their imagination and allow the structures to be whatever was inspired through play. For example, the children often played “camping” in this area of the yard. Thus, the structure could be a tent, or a house, or a shelter, or a rocket ship, etc. Finally, we created a loose parts area at the southeast end of the yard, which had previously been cluttered with old junk that had accumulated and needed to be thrown away (e.g., a broken mud kitchen, a plastic lawn chair with only three legs, etc.). The loose parts were old tires wedged in the ground, which could be used for climbing, balancing wooden boards, or building. There was a metal bin filled with different sized wooden blocks, sticks and boards. This was also close to the area where the children liked to play “camping” so they could also be used as firewood for their campfire.
Figure 27

*Mud kitchen located in the Southside of the backyard*

Figure 28

*The loose parts area located in the Southeast area of the backyard.*
Creating a Safe Place to “See”. The southwest corner of the yard was experienced much differently by the children than the rest of the southside. The sun cast through the trees, making it warm, and because there was nothing but tall grass and ferns (i.e., no toys or structures) it was very quiet. When we asked the children to take us to a place that was “nice and quiet”, several child participants led us to this area. An adult participant was also drawn to this spot, and shared similar reflections. However, once we had arrived at this place, the children could not identify any activities or things that they liked to do, and after only a few moments, they would transition to another area.

This place was clearly a desirable place for the children but was underutilized. As such we decided that this would be the spot where we would build a tall, lookout structure that was wheel-chair accessible. From the look out, children could view the entire backyard and all its activity. The top of the lookout was enclosed, like a tree house, but children could peer out the lattice work and peep holes. The bottom of the structure was intended to be a sandbox. The
purpose in constructing a look out structure was to honor the theme of “being high up”, and the desire to be able to *see* and assess the activity throughout the whole of the yard. While there are many potential affordances for activity, movement and play on this structure (e.g., imaginary play, sand play, some climbing, and many more affordances that we may not even be aware of yet!), a key intention for designing this structure was to create an affordance of emotional safety.

During the child guided walks, many children were aware of the hidden and uncertain aspects of backyard, which was expressed in their concerns and curiosity about what was happening beyond the fence, and what was happening deep in the skunk holes. Feelings of uncertainty often arouse a need for control, a need for safety. We seek to *know* and to *see*, because the unseen and unknown can evoke anxiety, fear, and even terror. Returning to the child’s experience of the *plenum*, the plenum draws a child into an affective relation to the spatial dimensions of the environment, which can include fear. Simms (2008) writes that the “plenum can also become the ‘unperson’, that is the alien and threatening face of space that intimidates and frightens the child” (p.51). For Simms (2008) this is perhaps most clear in the child’s fear of the dark. This is why night lights are common fixtures in child bedrooms because they illuminate the room so the child can see under their bed to confirm that there are, in fact, no monsters, or the jacket behind the door can be seen as a jacket, and not a witch waiting in the dark.

These dark, hidden dimensions of the plenum may become particularly amplified for children who have experienced trauma, abuse, and neglect. Uncertainty for traumatized children is not just an anxiety-evoking experience, but it can be a terrifying, de-stabilizing experience. For these children, to have a sense of control and to see and to know what is happening in the environment is not only desired, but *necessary* to feel safe enough to explore and engage
In a discussion on therapeutic play, Simms (2008) explores how trauma and neglect narrows and restricts a child’s engagement with the world and others. Citing Erikson’s (1950/1960) work, she writes:

Neglected, uncared-for children will not cry when hurt or upset because they do not experience a response from the world anymore. They do not investigate new situations or play with unknown things. Their trust in themselves, others and the world has been damaged (p. 111)

It is not uncommon for children who experience trauma and neglect to engage in very restricted, repetitive actions or behaviors. These repetitive actions, within a trauma framework, are engaged because they are predictable, self-initiated, self-controlled acts. In other words, they are safe. Children require a sense of safety and trust in the world and with others before they can engage it in an open-ended, explorative, and curious way. Without this sense of safety, their actions and engagement with the world will remain limited. Thus, traumatized children require places for play that are less stimulating, quiet, and predictable.

In a previous section, I explored how the playset is an anchorage, a safe landing pad for children. The playset is experienced as a safe, predictable place for children who have a safe-enough attachment to others and the world. They know how to play and use the equipment and can rely and depend on their adult educators/caregivers. Children who experience severe trauma and neglect do not have this sense of trust in the world or with others, and thus cannot yet play because they are still learning how to ‘be’ and ‘be’ safe in the world.

The lookout with its basic wood structure, in a quiet area, with the warm sun beaming down through the trees, and a sandbox underneath is a potential place for children who do not
yet know or feel safe enough to play in the other, more stimulating areas of the yard. We also planted ferns and witch hazel around the sandbox to enhance its calming properties and hope to incorporate additional aromatic plants in the future. Of note, we do not know if any of the child participants in the current study had experienced trauma or neglect as there were no formal assessment completed. Themes regarding safety presented in this study reflect typical safety needs for children within this age cohort. However, with the wealth of data and research on trauma and its impact on young children and development, I strongly encourage implementing a trauma-informed lens when considering playscape design for young children (Center for Disease Control and Intervention, 2021). We can use the environment, especially the outdoors, to support traumatized children in their healthy emotional growth and development.

Figure 30

The “Leaf Ramp”
The Whole Place

One major theme that emerged across all data sets was a constant disruption to the flow of the participants’ experiences in the backyard. That is, participants were drawn to certain areas, elements, and affordances of the yard, but could not engage their experiences fully. The lack of interconnectivity between discrete areas of the yard, disruptions at the entry points, as well as garbage, broken toys and developmentally inappropriate structures all impeded the flow of activity and experience.

Creating an Accessible Place. As mentioned earlier in the section on themes, the issue of accessibility emerged in both the place study workshop as well as the child-guided walks. The issue was initially raised by an adult participant who was a mother of a child who had mobility issues and who required a wheelchair. In a powerful statement, she brought to our attention that should her child ever come to this space that they would not be able to enter the backyard, let alone explore or play there. With each barrier encountered, she reported that the place, had a resounding message of: “you’re not welcome here”.

Accessibility was not something that was initially foregrounded in the child guided walks. The children who were interviewed were able-bodied and could readily access the physical structures in the yard. However, as I further reflected on this, I realized that the children did experience issues with accessibility, but it extended beyond the narrow association between accessibility and physical access to space. Throughout the child guided walks, children were constantly denied access to experiences or desired types of play. There were several instances where a child would approach a toy or a play structure, only to discover that it was broken, dirty or empty. There were trucks without wheels, bubble bottles with no bubbles, dirty playhouses that were covered in cobwebs and bugs. Several children expressed a desire for Ms. MacLeod to
“open the barn” where the other toys, or in some cases, essential pieces to toys or structures were stored away. Ms. MacLeod and I did not have a key to the barn, which left the children feeling disappointed when we were unable to provide them with the tools, objects, toys that they wanted or in some cases needed to fulfill their play. If we broaden our conception of accessibility as it pertains to children’s play, we discover that what often becomes the issue is not merely a lack of access to the place itself, but rather, lack of access to the experiences that the place has to offer. Furthermore, to address the lack of accessibility in this broader sense we must think beyond just adding a ramp or a concrete path, it is to reflect upon the ways in which our neglect, lack of care, perhaps even desire to assert our power as adults, and our able-bodied privilege limit the experiential and play potential for children.

Playground accessibility and inclusivity has garnered a lot of attention in recent years (Harris et al., 2022). Whereas accessible playgrounds emphasize the need for playgrounds to be accessible to children with mobility issues or physical disabilities, inclusive playgrounds aim to ensure children across all ages with diverse abilities and neurodiversity have access to the playground (Fernelius & Christensen, 2017; Harris et al., 2022). Inclusive playgrounds aim to ensure that the social as well as physical affordances of outdoor play are made available to all children (Fernelius & Christensen, 2017; Ruane 2022). There are seven principles of inclusive design (Ruane, 2022):

- Equitable use—that all children have equal access to play structures and experiences
- Flexibility in use—have choices available, make structures that can adapt to diverse needs and abilities
- Simple and intuitive use—implement structures and instructions for use that are easy to access and understand
- Perceptible information—have information available in different formats (e.g. visual, tactile, verbal)
- Tolerance for error—minimize hazard and errors, de-centralize any challenging or risk-based structures
- Low physical effort—implement structures that allow for a “neutral body position” and “minimize sustained physical effort”
- Ensure that playground structures and features are within reach and access to children of varying ages and abilities (p.49).

The principles of inclusive design are important in that they provide a framework—a way of examining playgrounds and informing design with complexity of children’s’ diverse experiences in mind. However, these principles are limited in that they still focus, almost exclusively, on making accessible physical and social play experiences with little attention to accessibility to emotional and psychological affordances of place. Further, while inclusive playgrounds exist in outdoor spaces, they are often completely free of any natural elements. This makes sense given that natural elements can interfere with accessibility and create hazards under certain conditions, but nonetheless they rob children of experiences in nature that can afford developmental and restorative play experiences. What I hope has been made clear throughout this dissertation is that there are significant psychological, emotion, and physical and social benefits to nature experiences. Thus, when developing inclusive playgrounds or playscapes, perhaps we need to begin with identifying to a) what natural affordances exist in the outdoor play environment and then b) focus on how we make these experiences accessible to children of
all ages and abilities. Future applications of this approach, especially for public outdoor play environments should consider selecting participants of different ages, abilities and needs to gain a comprehensive understanding of the affordances of place.

One significant barrier to creating an inclusive playscape is cost. It is a huge expense to construct a fully inclusive playscape, and as much as we wanted to implement a wide range of inclusive infrastructure for this project, it was not possible due to financial limitations. We did implement some enhancements to begin to address issues related to inclusivity. I also made some strong recommendations in the final report for future, larger scale, enhancements to support accessibility. The look-out was wheelchair accessible, as there was a ramp that went to the very top of the structure so that a child with mobility issues, or younger children who may still have difficulty with stairs and climbing, could have access to the affordance of “being high up”, an important experiential theme that emerged across the data sets. We also adapted part of the play structure so that a wheelchair could fit in the bottom of the structure with a musical wall and “windows”. Finally, we installed a pergola as an additional entry point to the yard. The pergola was wide enough to accommodate a wheelchair. We also created a ramp from the ground to the deck. Much work is still to be done however as there are no wheelchair accessible paths, yet, to connect these areas. It was strongly recommended that wheelchair accessible paths be considered for future enhancements so that children with mobility issues can access a multitude of diverse affordances in the backyard.

As should be clear at this point, the spaces we inhabit and the places where children play shape feelings, moods, and self-experiences. Up until this point, I have discussed how different elements and structures can open possibilities for imagination, creativity, physical play, and exploration. However, there are ways in which the elements or structures can also shutdown play
or experience, which may have further implications for their psychological and emotional experience. One major theme that also emerged in the adult workshop was the sense of disgust and disappointment with the presence of garbage, broken toys, and overall lack of care in the backyard. For Dave, the old, mouldy shed evoked a feeling of loss, neglect, and disgust; for Sharon, the garbage concealed the natural beauty and aesthetic of the back yard; and for Rachel, the overwhelming number of plastic toys and structures did not evoke any feeling or invitation. While children did not vocalize their experience of the garbage or broken toys, their gestures, and reactions to these aspects of the backyard indicate aversion and disappointment. For example, the southeast area of the backyard was somewhat a junk pile of to-be-thrown out items, and children just generally avoided the area. When child participants encountered something broken or empty such as the empty bottles of bubbles, they would just frown and chuck it, or grunt in frustration and move on. When discussing how our environment shapes our experience, Day (2002) writes:

Nature-formed places may be harsh, inhospitable, frightening. But never dishonest, aggressively ugly or humanity-devaluing. It’s what we have done to them that brings these qualities. The impact of place on us and us on place is reciprocal: the more we damage our environment, the more damaging it is to us (p. 119).

Day suggests rather strongly that how we care for our places is a direct reflection of how we care for ourselves. Taking this one step further, we might say that how we care for our children’s places may also be a direct reflection of how we care for our children. Encountering empty bubble bottles and broken toys are a part of life and can provide an important opportunity for children to navigate difficult feelings such as disappointment, sadness, experience of loss, etc. However, to experience brokenness, neglect, lack of care and barriers to experience in almost
every area of the yard may leave the child with a sense of unworthiness, neglect, and foreclose engagement with the natural affordances of the yard.

Day (2002) suggests that “there’s a universality about ugliness. In everything ugly, there’s something of disrespect, cynical disregard”; whereas “beauty has to do with unstintedly given care, compassion, love” (p. 111). He continues:

Beautiful places are invariably underpinned by ‘rightness in place’ – ecological health. They have integrity, wholeness, balance. Their spirit of place is reinforced by our valuing it. All this radiates back to us, for the spirit a place emanates affects how we feel about, hence define, ourselves. This shapes how we act, even who we are (p.113)

In other words, to put love and care into a place is to uncover its beauty, recover its spirit, and its sense of wholeness, which then reflects to the child. Part of the work to access the natural affordances, including the backyard’s natural beauty and aesthetic qualities, was to simply clean up the yard, to remove the broken toys, throw out the garbage, prune the trees and clear the weeds. It was a process of making space for those natural affordances to emerge and be engaged with in their full potential. This further models for children the importance of valuing and caring for their places, and the natural world.

**Enhancing Flow with Thresholds and Paths.** A threshold is an entry point, or the starting point of an experience of a place. Day (2002) shared that our first impressions of a place reveal its essence and mood. And where do these first impressions occur? The threshold, the point(s) of entry. Several adult participants noted issues with the point of entry. Aside from accessibility and safety issues (e.g., children had to jump or climb off a 2ft deck to get into the
backyard), the structure of the entry point created substantial experiential barriers. To recount the child’s experience entering the yard: an adult was required to unlatch the gate, and then children had to step up onto the deck (which was okay for older children but challenging for toddlers). Children would then run with excitement, only to reach the end of the deck and need to wait, again, for an educator to help them down into the yard. Further, the educators who frequently used the backyard, reported that during pick up, parents typically stayed on the deck or at the gate, rather than coming into the backyard. Educators expressed wanting parents to come into the yard and spend time there but believed that the lack of a ramp or stairs from the deck into the yard discouraged them from doing so.

A popular concept that is often used in interior design and may be worth exploring here is the Ancient Chinese concept of *Feng Shui* and *Chi*. In brief, *Feng Shui*, which means wind and water, refers to the notion the idea that there is a life force or energy that runs through all living beings (i.e., chi). It is understood that *Chi* is fluid and flows through the body and the world like water and air. It is thought that any disruptions in *Chi* can create too much or too little energy and throw the elements or environmental system off balance, created disharmony. Consequently, when there are disruptions to *chi* in the spaces we inhabit, we can experience this sense of disequilibrium and unbalance within ourselves. According to Gallagher (1993), “the general sense of *feng shui* is that if a setting doesn’t make you feel welcome, tinker with it until it does” (p. 143). I acknowledge that I am providing a rather simplistic explanation of a more complex and ancient Chinese tradition and concept, but nonetheless, it aligns with much of what we have discussed already regarding affordances. Environments can make us feel welcome or unwelcome; awe-inspired or disgusted; propel or hinder movement. One way to explore the concept of *chi* in environments is to examine movement: where and how does movement happen
in a space? Is the movement fluid and rhythmic? Or does the movement appear disorienting, or
choppy or blocked? Now, imagine walking through the woods and discovering a stream. Almost
intuitively, you might find yourself walking alongside the stream in the direction of the flowing
water. The stream is not straight or linear, it has a certain curvature, and yet it directs your
movement with ease. If you fall into the stream or a river, you will immediately be caught up in
its flow and direction, and to run counter to it may prove challenging, if not impossible.
Similarly with wind, if you are walking in the direction of the wind, your body moves with it
swiftly and with ease, but if you turn and walk the other way, the wind will push against you,
and it will be harder to walk.

Several adult participants noted the lack of ‘flow’ in the yard. One disruption in flow was
at the point of entry, but disruptions in flow were also evident in the lack of interconnectivity
between the discrete places in the yard. There was a sense among the adult participants that the
place felt somewhat directionless, and transitions to other areas felt disorienting (especially the
contrast from the cool, shady area on the southside to the sunny, hot area of the northside). This
disruption of flow was also observed in the children and their movement between different areas
of the yard, especially when there were no paths. Children often went to the playset first (their
home base) and then would go to the northside of the yard where there were paths and a tunnel
throughout. A few of the child participants also requested a bike path, and when asked where the
bike path should go, all the children made a circular motion around the playset. One participant
spent almost half of the interview running in circles around playset. The goal of enhancing the
flow of the yard thus became a project of connecting the discrete areas of the yard and
dismantling the barriers to experience at the threshold. Beginning at the threshold, we built a
pergola and gate at the southeast end of the yard, creating a second entry point. The gate opens to
the shadiest part of the yard with two paths (a colorful, stone path leading to the skunk hole, and another stone path leading to the sunnier area of the yard to the playset). I also proposed that eventually the stone path be replaced with a smooth, concrete path for wheelchair accessibility. To address safety concerns and create a more welcoming experience for parents and children with mobility issues, we constructed benches and flower beds at the end of the deck with a ramp in the center that extended to the ground. As mentioned in an earlier section, several paths were constructed to connect the discrete areas on the Southside of the yard, and similarly on the Northside. Paths were made of stones, but also with the intentional placement of shrubs and flowers, a small bridge, and wooden planks. I proposed that with more funding, strong consideration should be given to creating a bike/wheelchair accessible path that surrounds the playset with smaller, connecting paths to the edges of the yard (e.g., southside and northside). As well, I suggested that the ramp from the deck be extended to the playset to enhance wheelchair accessibility to the playset. This further reflects the experiential theme of the playset being the home base, and the first area most of the child participants are drawn to when first entering the yard.

Aside from chi, enhancing the experience of ‘flow’ in the backyard, encourages participation and provides clearer direction and guidance to the multitude of affordances available in the yard. It enhances feelings of security and safety through the predictability and reliance of a path, of direction.

Figure 31

*New pergola entrance to the Southside of the backyard*
Creating a Sensory Sanctuary. According to landscape architect Christopher Day (2002) “every cell in the body is regulated by sensory experience” (p. 216), and how our body functions is in direct relation to how we experience our everyday worlds and environments. Our sensory experience shapes our mood and our desire to engage and participate in the environment. For example, Day (2002) writes: “rooms smelling of wood, the essential plant oils of ‘natural’ paints, flowers and natural fabrics, can uplift the spirit just as fungal or synthetic carpet smells oppress it” (p.216). Diverse sensory experiences are especially important is for infants and children and are an important building block of therapeutic environments: “it is through our
[sensory] modalities that we experience ourselves and make contact with the world” (Oaklander, 1988, p. 109).

Earlier I discussed sensory experiences and enhancements made to the Southside and Northside areas of the backyard. However, sensory engagement and interest for both the child and adult participants existed throughout the whole backyard but were perhaps most salient in these two areas. Children were drawn to the scent of flowers and herbs, touching the dirt, the gravel in the playset and grass; they experienced a heightened awareness to sound (e.g., bees buzzing, cars driving by birds chirping). The adult participants were also drawn to the sensory elements. One participant noted the “fresh smell” on the Southside of the yard, and the birds chirping. Several adult participants however expressed wanting and needing more sensory experience. When discussing future potential of the yard during the place study, many participants expressed the potential to heighten the sensory experience. In addition to sensory enhancements made on the Northside, we planted colorful and scented flowers in the wooden planters on the deck. We planted edible herb plants in different areas of the backyard. We purchased bird feeders that were painted by the children and placed on the trees to attract different types of birds. We invested in some wind chimes to enhance the soundscape of the backyard. I also proposed as a future enhancement, a water feature such as a fountain or water wall to have not only accessibility to water, but also to the sound of water flowing.

**Introducing Sand and Water.** The availability of sand and water is imperative in virtually all child learning and play environments. According to Simms (2008), “the most fundamental requirement of any type of play is the experience that a child can change the structure of the world through his or her own engagement with it—and that [they] are changed in turn” (p.112). Oftentimes, sand and water play are encouraged in early childhood settings
because they are forms of sensory play, support children with fine motor development (e.g., pouring and scooping) and provide opportunities for learning and experimentation. However, psychologically, and emotionally, sand and water play pose opportunities for a child to develop their sense of self and sense of agency, and awareness of possibility and change. Sand play has long been utilized in play therapy for children for precisely this reason. Sand and water are two elements that can take on many different shapes and forms. The possibilities for play and for transformation are endless. When a child engages in sand or water play, they discover their capacity to mould, alter, or change something in the world, and more fundamentally, they gain an awareness of their self as an agent of change. Simms (2008) illustrates this beautifully when she writes:

> When the sand responds to the touch of the hand, it makes suddenly visible the child’s very own gesture and reveals her as an actor on the world’s stage. It becomes a possible location for self-expression and self-experience and makes the child’s intentionality visible: “Here I want to have a hollow in the sand… and there… Do I want it to remain smooth?” (p. 112).

The backyard had limited water and sand play. During the interviews, a few children showed us the drainpipe where they had been collecting water on a leaf, and other children were digging and scraping at the dirt in the rock area. Children expressed wanting water access and the educators expressed wanting a water wall or some way for children to access water in the yard independently (e.g., a way to access water that did not involve educators needing to untie and pull the water hose from outside of the yard each time). We built a sandbox underneath the lookout structure and purchased a rain barrel to collect rain on the deck. We positioned the barrel in such a way that the children could readily access the water for watering plants or filling up
their buckets, etc. While it was not in the initial budget for the project, I also recommended that the staff create a water wall with the children, and to place a fountain or bird bath somewhere along the northside of the yard.
CHAPTER VI: CONCLUDING REMARKS

Final Discussion, Limitations and Suggestions for Future Research and Development

The identification and development of the enhancements for the backyard required a complex integration of the experiential data, as well as literature on child development across several domains (e.g., physical, cognitive, psychological, and emotional). Overall, what was revealed across the experiential data were a plenitude of affordances. Some affordances were obvious at the outset, but many were not obvious, and required close observation of space and experience to be uncovered. Access to certain affordances was also limited and disrupted by the lack of care and attention to the play environment. Analysis of affordances revealed that the child participants were drawn to activities and experiences that afford safety and predictability; engage their curiosity, imagination, and desire to explore; experience sense of interconnection and communion with other humans and non-human beings; and provide opportunities to cultivate their self-esteem and sense of independence.

Returning to Barrows’ (1995) ecological model of child development, we can see that the children were drawn to experiences in the backyard that engage both aspects of “being”; that is, to be both “permeable” and “separate”. The child’s sense of permeability and communion with the natural world was evident in their emotional reactions and responses to the natural features and critters in the yard. The children very much played with the backyard, as opposed to playing in the backyard. At the same time, however, children were also drawn to affordances that empowered them to assert their sense of identity, their capacity to “do” and “be” on their own. They were drawn to spaces or experiences that afforded separation and individuation. Barrows’ (1995) reframes the child’s desire to separate as not a move towards autonomy, but rather a
move towards expanding their connection with the world and others. She writes: “what we have perceived, for example, as serving the process of separation might also be understood as serving the child’s sense of connectedness to the world: the toddler who takes his first steps away from his mother makes active forays into the world” (p. 108). I would add that re-conceptualizing separation as a process of expansion, allows us to envision the development of a self that flexible and malleable, open to change and transformation.

To expand into the world and to engage it in a curious and explorative way requires a sense of safety, predictability, and consistency. For a child to try something new out whether it is a new movement the body (e.g., trying out the monkey bars) or a new space to explore and investigate (e.g., going into the shady part of the yard), they must enough anchorage points (i.e. places that are familiar and predictable) available. For example, children need to know that if something is too challenging and they fail (e.g., cannot climb the tree like their older peers) that they can return to familiarity of a playset, something they can readily achieve to restore their esteem and confidence, to approach the challenge again. Children need to experience the deep uncertainty of their imaginative world with the evil skunks or the hidden spaces, but with a sense of trust that they will be able to find their way out (e.g., having a path). Finally, discovering and enhancing the natural affordances of outdoor play areas creates opportunities for children to foster their connection and engagement with the natural world. Through connection, children may deepen their already-intimate engagement with nature, which may contribute to a future commitment to protection of the natural world.

For the child analyst, Donald Winnicott, the optimal conditions for child rearing is a “good enough” environment, which is understood as the social environment between a mother and child (DeRobertis, 2008). The “good enough” environment refers to the idea that for the
child to develop a healthy sense of self, they must have a certain degree of reliability, emotional mirroring, and dependability. If the child’s world is too predictable, too safe, and too reliable, they will have difficulty expanding into the world; conversely, if they have no sense of reliability and dependability, they will have difficulty expanding into the world. Thus, they simply require an environment that is “good enough”, that is, reliable enough, dependable enough, and secure enough. If we take this notion and apply it to the development of a restorative playscape, it is important that we aim to create playscapes that are “good enough”. We must aim to discover and identify the affordances of safety and refuge, of predictability and familiarity as well as the places that are unknown, that invite curiosity, that invite a challenge and welcome an expansion of the child’s self in relation to their world. What we “restore” and make available in RPD are the experiences in nature that facilitate the growth and development of both aspects of the child’s being-in-the-world: their capacity for communion and their capacity for expansion.

**Limitations and Future Considerations**

Throughout conducting this research, I discovered some limitations and areas of growth and development for this novel approach to playscape design. Identifying and better understanding these limits has proved useful as it will enhance the approach for its next employment.

**Practical Considerations**

One key hope and plan for this project was to have parents, educators and the children involved in the implementation of the enhancements. As mentioned in the literature review, research has shown that community investment in the process of design and development of community spaces contributes to their sense of attachment, investment and care these places.
Initially, we had planned for the educators, staff, parents, and the children to be a part of the backyard development (e.g., putting the garden together, planting flowers and shrubs, putting in the paths). We had hoped that participation in the development process would enhance the community’s commitment and connection to the backyard. Given budgetary requirements, the implementation of enhancements needed to happen during the spring and early summer of 2020. This period was during the height of the COVID-19 pandemic, and due to strict rules and guidelines regarding in person interactions on Prince Edward Island, I was not able to invite educators, parents and/or children to the yard to support with its development. With the help of my own parents, local contractors, and Mrs. MacLeod, we were able to complete the enhancements, socially distanced of course! When the initial enhancements were complete, and the COVID-19 rules loosened, we hosted a small, intimate event with children and educators, and Mi’kmaq elders from the community of Scotchfort to bless and honor the land, and to celebrate the completion of the project. Future implementation of the method should consider how to involve the community in the process of developing the playscape.

There were some practical limitations to the enhancement process and implementation such as needing to accommodate certain requests and needs from CHANCES staff and the organization regarding the backyard. For example, we had initially wanted to tear down the old shed and cultivate this space as a meeting place or “circle time area” for children and educators to gather with short tree stumps in a circular formation. The organization however had already planned (and needed) to replace the old shed with a new shed located at a different center that had to be moved. We also wanted to construct a path to connect the northside and southside of the yard through a large open area at the Westend. However, we were unable to do this due to issues regarding lawn maintenance. Despite our best efforts to advocate for this path, that would
consist of balance beams and stumps to offer additional gross motor affordances for the children, it was not permissible. When working with community organizations, negotiating, and sacrificing certain enhancements is inevitable. However, many of the discussions regarding enhancements were informal and occurred during different stages of the process due to the ever-evolving nature of the project. For future projects, I recommend having a more formalized or structured meeting with the organization to review the enhancements and why they should be implemented.

**Financial Considerations**

Another limitation was financial. We were granted a very generous amount of funding by the organization, and because of this, most of our enhancements were able to be implemented. However, important enhancements that emerged from the affordances such as the need for better flow, a bike path, and accessibility, were not able to be implemented due to financial limitations. Funding also impacted the process of negotiating what types of enhancements were going to be implemented, what needed to wait, etc. We were not aware of how much funding was going to be made available at the outset of the project. For future projects, I do recommend discussing the available funding for the playscape as it may help to frame and simplify the process of the identifying affordance enhancements.

**Seasonal Considerations**

A significant challenge in the current study was how to implement a playscape design that would enhance affordances across all seasons. Prince Edward Island has four seasons, and with each season, new experiences and thus affordances, emerge. For example, the snow during
the winter months (and where and how it will land each year) poses a variety of different affordances that were not explored in this current project. Further, different enhancements will not be accessible during the non-summer months. For example, the quiet, rock area is only quiet and hidden during the summer and early fall when the leaves are full and in bloom. Once the leaves die, this space is no longer hidden and therefore the experiential affordances of this location are likely much different. To begin to address this challenge, we considered seasonal change when making decisions about what trees and shrubs to plant in the yard. We chose certain trees and shrubs that would remain vibrant and produce flowers and/or berries throughout various seasons of the year. When implementing this method in the future, I recommend conducting Child Guided Walks with the children and conducting a place study during each season to identify seasonal-specific affordances of place. This way, enhancements can be created in ways that may be able to change and accommodate to the different seasons.

Methodological Considerations

Finally, one major limitation of this project was that we were not able to complete follow up observations during the COVID years or assess the restorative potential of the place formally after completing the project. Most of the children who had participated in the study had graduated from the early years program, and thus we would need to measure a group of new (and much younger) children’s experience of the yard, thus complicating the validity of the results. Furthermore, constructing a formal measure to capture the restorative potential of these affordances was beyond the scope of the current dissertation project and is a project for further study. We did, however, receive informal feedback from staff who used the backyard for drop in, parent-child programs as an alternative space during the COVID-19 pandemic. Staff reported
that parents and families frequently expressed how much they enjoyed the yard and found it to be a peaceful and fun place for themselves and their children. In the future, I hope to research RPD further and develop measures around the developmental and restorative affordances to show the efficacy of this model for designing playscapes for children.

**Reflexive Considerations**

As adults, how we construct meaning out of children’s experiences is deeply shaped by the cultural, historical, and social meanings attached to childhood, self-hood, and development. Earlier I discussed the importance of maintaining reflexivity throughout the process of research, which involved acknowledging and thinking critically about my own position as a clinical psychology student and as someone who has worked extensively in the area of early childhood and development. Holding this reflexive position throughout this project however has been challenging. I have, at many points, found myself swept up and carried away by the traditional and mainstream psychological and developmental frameworks that I have been taught throughout my work and education. It has been hard to shake off and “bracket” these ways of seeing the child and their development. This is in part because I have a certain cultural, historical, and ideological situatedness in the world that frames my way perceiving and understanding experience, but also because children’s experiences of themselves and the world are shaped by their cultural and historical situatedness. The children’s lived experience during the child guided walks was a lived expression of their cultural and historical situation, which, at times, reinforced and re-affirmed certain developmental theories and frameworks. For example, there were several themes of “agency” and a “need” or “desire” to separate from the adults. Being up high, wanting to do things on their own and have this be acknowledged, or wanting to
“hide” and play out of the caregivers’ sight, are all themes that align with current, popularized models of development such as Erikson’s model of identity development and Mahler’s theory of separation and individuation.

Returning to the ecological developmental model discussed earlier, separateness and desire to cohere, is one aspect of the developmental process (Barrows, 1995). The other, equally important aspect is interdependence and connection with the world and others. If both the researcher and the participants are both share and are situated within certain cultural, historical, and ideological contexts, it can be easy to overlook aspects of development that have been undervalued and unacknowledged or have been considered immature and pathological such as dependency, fusion, deep sense of interdependence with the world and others. Thus, if we uncritically examine children’s lived experience and use this information to guide the development of their outdoor play environments, we may inadvertently prioritize one way of being or developing over another and further reinforce certain cultural and historical ideologies that deepen the already-existing gulf that exists between people and the natural environment.

Part of the RPD approach is to honor the children’s lived experience, but another crucial part of this approach is to honor the land and the inherent, interdependent relationship between humans and the natural environment. Thus, while we must listen to the children’s experience and use this to guide enhancements, we must also be mindful to not construct spaces or experiences that reinforce experiences of domination, control and hyper self-reliance and independence—all aspects of the Western worldview that contribute to anthropocentrism and destruction of the natural world. How I have attempted to address this in the current project has been to maintain reflexive awareness of the balance between the developmental need to cohere and separate, and
the need to connect and depend to ensure that enhancements are made to facilitate both aspects of being.

**Concluding Remarks**

This dissertation project involved developing a novel, phenomenological approach to designing children’s outdoor play environments. As I have outlined, Restorative Playscape Design (RPD) involves attending to, noticing, and uncovering the natural affordances of outdoor play environments, and enhancing these affordances to reveal their qualities and capacities to support children’s growth and development. As a psychodynamic and trauma-informed psychotherapist, I am always attending to a child’s psychological and emotional development, an area of child development that has been majorly overlooked in the literature on playscape design and development. Phenomenology and phenomenological methods provide a way of closely observing and analyzing lived experience, thus providing a framework for analyzing the affective and psychological dimensions of the experience of place. Engaging those who are most connected to the place in the process of identifying and enhancing experiential affordances further supports and fosters a deeper connection and commitment to the place itself.

There are three phases of Restorative Design:

- **Attending**- identify and understand the affordances of place through application of phenomenological methods
- **Enhancing**- develop enhancements aimed at restoring and enriching natural play and developmental affordances to support child growth and well-being
• *Cultivating*- re-developing the play environment through implementation of the enhancements with the support and engagement of community members and key stakeholders.

In applying this approach to the re-development of outdoor play environment at a local early childhood center on Prince Edward Island, the affective and psychological, as well as other developmental affordances were revealed. This outdoor play environment afforded a sense of predictability and emotional safety; sensory stimulation; imagination and creativity; self-expression; sense of achievement and mastery, and various other forms of play and experience. Attending to and uncovering the affordances of places draws our dynamic relationship with the physical world out of the unconscious and into our awareness. It is only through such awareness of how we relate to and experience our environments that we can begin to cultivate, enhance, and restore our places so that we might experience the full range of what they can afford us physically, psychologically, and emotionally. I want to be clear that this is not and should not be understood as a process of domination—taking all that we can from the natural world for our benefit— but rather a process of connection, acknowledgement, and appreciation for the ways in which the natural world has and will continue to provide nourishment, growth, and healing. Places *matter*—how we care for them, cultivate them, and relate to the environments we inhabit has implications for our health and well-being, as well as the welfare of the planet. It is my sincere hope that in developing a restorative approach to designing outdoor play environments, we can continue to work *with* the natural world to uncover its restorative potential so that we can cultivate enriching developmental and healing nature experiences for the next generation.
References


Bruce, S. (2022, June 2018). P.E.I student referrals to well-being teams more than doubled during pandemic. *CBC News.* mentalhealthwellbeing1.6504553#:~:text=P.E.I., student%20referrals%20to%20well%2Dbeing%20teams%20more%20than%20doubled%20during%20a%20legislative%20committee%20heard%20Tuesday.


https://consciousdiscipline.com/free-resources/shubert/shuberts-classroom

/safe-place/


Greene, M. (2020, June 23). 30 years ago, Romania deprived thousands of babies of human contact: Here’s what’s become of them. The Atlantic July/August issue


https://doi.org/10.1007/s40489-022-00345-3


Washington: Exchange Press.


Maguire, D. Secret powers of the ash tree.


https://doi-org.authenticate.library.duq.edu/10.1080/02697459.2015.1081336


https://doi.org/10.1016/j.healthplace.2005.02.009


https://doi.org/10.1007/s10761-019-00527-6

Wells, N. M. (2000). AT HOME WITH NATURE: Effects of “greenness” on children’s
cognitive functioning. *Environment and Behavior, 32*(6), 775-795.

https://doi.org/10.1177/00139160021972793


https://doi.org/10.7721/chilyoutenvi.16.1.0001


https://doi.org/10.1177/0013916503035003001


https://doi.org/10.7721/chilyoutenvi.18.1.0435

Appendix A- Data Collection Materials

A1- Semi-Structured Interview Script for Child Guided Walks

Semi-Structured Interview Script

The script is semi-structured, and therefore it may be paraphrased depending on the interaction with the children.

Introduction

This will be read to the participants before they go out into the yard

Now, it is your turn to go out into the yard for Miss Jen and Miss Dawn’s study. When we are outside I will ask you lots of questions about the backyard like what do you like to play or do? What are your favorite spots? Only Miss Jen and I will know what you say or do out here in the yard. We will keep what you tell us private. Miss Jen and I will use what you show and tell us to help change the backyard around. Miss Jen might also write this in a big paper someday, but she will use a pretend name for you like Sally or Jenny, etc. You are always allowed to say no if you don’t want to go outside with me, and you do not have to answer any or all of my questions.

If you feel uncomfortable with anything, please let me know and we will stop and do whatever we can to make you feel better. It is important to remember that you are in charge of your body.

Would you like to come outside with me today? [the answer that the child gives for this will indicate their assent. Dawn will indicate whether or not the child assented to the process on the assent form].

The “tour”

These questions/prompts will be presented throughout the tour

Tell me about what you like about the yard.
[Prompts: can you show me what you like to do in the yard? Can you show me your favorite place to play/thing to do? What do you like about [x]?

Tell me what you do not like about the yard.
[Prompts: are there things/areas in the yard that you do not like to do/play with/play on etc.? What do you not like about [x]?

203
Tell me what you like to... smell, look at, listen to [Prompt: what areas are quiet? What areas are loud?], and touch [Prompt: are there things that you like to touch or rub in the yard? Are there things that you like to feel with your hands or feet?]
What do you do here [asking participants about different areas of the yard and how they are used]?

Tell me what you would like to do/ play with/ see/ listen to/ feel... in the yard? If participants respond, then ask where they would like to do [x].

**Options to Withdraw**
These statements will be presented if a child appears hesitant or resists participation.

If Mrs. MacLeod senses that a child is hesitant or does not want to go outside, then she will say: “You don’t have to come outside if you do not want to.

Or if the child appears uncomfortable during the walk: “If you want to stop and go inside with your teachers and friends, it is okay.”

If the child decides to go inside: “Don’t worry; no one will be mad at you if you decide to stop. Is it okay if we use what you already told us about the backyard? If the child says no, then we will disregard the information that they provided us. If the child says yes, then Mrs. MacLeod would reply, “okay, thank you for your help!”

**Conclusion:**
This will be presented at the end of each tour

Thank you for sharing your experience of the yard with me! This will help Miss Jen and I change around the yard so that it might help make your bodies feel more calm and comfortable when you are out here.

---

**A2- Steps and Instructions for Place Study Workshop**
Introduction to Place Study

Phenomenological Place Study

Places we want to live in must both function materially and nurture the soul, sustain us spiritually as well as being materially and biologically sustainable. (Christopher Day, *Spirit & Place*, p, 91)

Human Beings have a powerful relationship with nature: nature carries, supports, and nourishes us, but we also have the ability, through our thinking and willing, to intervene in the natural processes and alter their course. Human activity can dominate, distort, and destroy natural environments – and we end up with places that are ugly, inhospitable, or even make us sick. But human activity can also respect, understand, and enhance natural places.

Our Place Study is an attempt to attune our minds to the qualities of place, allow our senses to explore, and connect our interest and care to the natural areas that surround the building. The goals are

- To listen to what is there and what wishes to be there in the future
- To discover how we can enhance the natural features of the landscape
- To bring a healing quality to the places that the children encounter every day
- To respect the shared destiny of humans and nature
- To develop a vision and guidelines for the development of the grounds

Places affect us in ways that we are often not aware of: they speak a subliminal language. We would like you to set aside your professional expertise for now and attune yourself to what the place says to your senses, to your limbs, to your heart, and finally to your mind, and approach the grounds with the openness of a child’s wonder.

-The Steps and Exercises-

Day 1: Walking and Observing the School Grounds

1. **First Impression** (15 minutes): Approach the school in your normal way, walk around the property, and note your first impressions in the journal. This reveals something about the essence of place before we get confused by details.

   Short Debriefing Session

2. **Deepened Perception and Description** (25 minutes): Follow your first impression and explore an element of the place that stood out to you either positively or negatively. This can be anything from a quality of the place as a whole, a specific location that speaks to you, a question
or problem the place poses for you. Try to attend to all the features of the place through your senses:
✓ What do you see, hear, smell, touch?
✓ What kind of movement of your body is made possible by the place?
✓ What do you notice about the features of the place?
✓ How does it shape your perception and attention?
✓ How do you feel? What mood do you encounter?

Use your journal to describe and explore your experience of the place. You can use drawings and even photographs to clarify and illustrate your perceptions.

Debriefing and Conversation Session

3. Attention to the Elements: Visit “your” place again and this time observe the elemental forces of place at play:
   ➢ Earth as the material element that supports life, its substance: how does the ground anchor and support human structures and activities? What is the material structure of the place? --- Can you imagine an enhancement?
   ➢ Water as the flowing, changing, gesture principle, the fluidity of its living relationships: How does the energy of the place flow? What gestures does it make? How does it enliven our energies and dissolve our rigidities? --- Can you imagine an enhancement?
   ➢ Air and the scents and sounds that evoke feelings: what moods do you encounter? How does it change with the seasons and time? --- Can you imagine an enhancement?
   ➢ Fire and warmth that inspire and transform places: how does the place nurture social life and the soul? How does it touch, protect, and inspire children? --- Can you imagine an enhancement?

PEI and the Elements: The Larger Context of Children’s Life Here

Evening of Day 1:
Meditative Exercises at Home

4. Imagination. Between our workshops we ask you to do a simple meditative exercise tonight and notice changes in your awareness:

   Picture “your” place in your imagination:
   ▪ (Earth) Imagine the physical place—let it go
   ▪ (Water) Imagine the place in movement/gesture—let it go
   ▪ (Air) Imagine your first impression or mood of the place—let it go
   ▪ (Fire) Imagine what the place inspires in you – let it go

   Keep noting in your journal some of your insights:
What forms and events have appeared through your process of observing and imagining your place?
- How does your place change in time?
- How does it connect with other places and events?
- How does your place fit into the whole?
- Are there guiding principles that apply to the place as a whole?
- Can you imagine your place change through an enhancement?

5. **Inspiration**: At the end of the meditative process we ask you to think the place from the perspective of the place itself (listen to the spirit of the place) and see its potential:

   *What does your place say to you?*

   (write a sentence in your journal)
Day 2: Artistic Activity and Place Enhancements

6. **Artistic Activity:**

Please use the piece of paper, which is in the shape of a circle, to create a symbol of the spirit of the place. Choose any artistic media or materials you feel drawn to—pencil, crayons, pastels, pens. Evoke the intuitive quality and identity of the place in your mind and create an image in the circle (it can be a symbolic picture, a flowing gesture, colors etc.) that symbolizes the spirit of the place for you. Please bring your circle and pin it to the Place Map.

*On the back, please write in a sentence what your place is saying to you?*

7. **Envisioning exercise on the future of the grounds (30 mins, outdoor, groups)**

Please go to this place, walk around together for a while, and find a place to sit and talk. Have a conversation about the following list of considerations and keep notes of your conversation on a sheet of paper:

1. **What did the place say to the participants (check Mandalas)?**

2. **What should it say?** (this is an exercise that tries to listen to what the place itself suggest for future development)

3. **What changes are possible and appropriate in order to enhance this section of the grounds?** The questions below do not have to follow an exact sequence (sometimes an idea is pretty clear, sometimes a gesture comes first). Try to stay open to the flow of the conversation and don’t get lost in planning details:

   A. **Which ideas want to live here?** What is needed to enhance and balance the fire element?
B. -- What moods and activities are appropriate here? What is needed to enhance and balance the air element?

C. -- What kind of spatial enclosures, relationships, and gestures can achieve this? What is needed to enhance and balance the water element?

D. -- What material changes would achieve this? What is needed to enhance and balance the earth element?
Appendix B- Additional Materials

B1- Study Report for Early Years Center

A Cradle in the Waves: An Experiential and Restorative Approach to Playscape Design
Study Report

Jennifer Bradley, M.A.
in collaboration with CHANCES Inc.
INTRODUCTION

In 2017, CHANCES Family Center in Charlottetown, Prince Edward Island collaborated with Jennifer Bradley, a Prince Edward Island native, and PhD Candidate at Duquesne university to facilitate a study of the backyard at Upper Prince with the aim of understanding and enhancing its restorative potential. The backyard at Upper Prince is a diverse landscape marked by shaded areas, old trees, and a sunny, wildly overgrown garden. CHANCES recognized that with some tender love and care the backyard space could be transformed to be an inviting and restorative area for children and families to spend time. CHANCES values a strength-based approach to program development and always strives to meet the unique needs of children and families. It was therefore important to CHANCES to engage a design process in a way that upheld and honored their strength-based, community-led approach.

I. PRINCIPLES FOR RESTORATIVE DESIGN

The Restorative Playscape Design Process was developed by Jennifer Bradley, M.A. as partial fulfilment of her doctoral thesis at Duquesne University. Restorative Playscape design is an experiential approach to designing children’s outdoor play places that involves utilizing local knowledge of children and educators lived and embodied relationship with their play landscape to guide the process of enhancing the emotional and restorative affordances inherent in natural landscapes.

Research has shown that experiences and time-spent outdoors in natural environments can contribute to increased attentional capacity, decrease in physiological and psychological stress, improved sense of self-esteem, afford opportunities for connection and empathetic development (Louv, 2008; McCormick, 2017). Additionally, when members of a community such as children and staff are invited into a decision-making process regarding their spaces (e.g. classrooms, schools, grounds, etc.) they develop greater self-esteem, feelings of self-worth, and develop a deeper sense of respect and responsibility the places they inhabit (Jacobs, 2016; Thomas, 2007).

Drawing from contemporary research on the psychological and emotional affordances of natural environments as well as the benefits of engaging children in the place design, I developed a novel approach to playscape that is deeply embedded within child-centered, phenomenological and eco psychological frameworks.

Key Principles of Restorative Playscape Design:

- Knowledge about place is best generated by those who engage with it locally. Thus, place-based decisions should be made collaboratively by those who engage with the place on a regular basis.

- Children have the right to share their experience and perspective on matters that directly impact their lives and experience, including the design and development of their local places.

- Educators have the right to collaboratively participate in decisions that directly impact their experience as educators and the design and development of their educational space.
The relationship between humans and nature is interdependent. It is therefore imperative that we strive to provide care and respect for our natural environments through teaching children how to honor and cultivate these places. We also recognize that “the best landscape development practices respect and enhance the qualities of the place itself” (Simms, 2014). It is therefore our goal to give the place itself a voice and discover and enhance its potential.

II. FRAMEWORK

The pilot study for the Restorative Playscape Design Process involved implementing three experiential and community-based methods that are appropriate for eliciting an understanding the lived experience and emotional atmosphere of outdoor landscapes. The data collected was woven together into themes and categories. The points of resonance and tension were further explored and used to guide the overall design and enhancements of the backyard.

1. CHILD-EMBODIED WALKS

Rusty Keeler, a North American playground designer coined the term “playscape” as he understood that children’s outdoor play spaces are and should be perceived as landscapes for play (Keeler, 2008). When we design and develop places intended for children, it is imperative that we develop an understanding of their experience of the playscape; to understand what they are attracted to, what they avoid, what they express liking and disliking, and how their body moves and gestures in response to the place. Making efforts to understand the child’s experience of their playscape gives us insight into its affordances, which are structural features of a place can afford or allow for certain types of experience. For example, a large rock can afford climbing, jumping, and potentially hiding for a child. Asking open-ended questions about their experience and watching how their bodies move and react to the different areas and features of place can also give us insight to how they feel; how the place shapes their mood and behavior.

Sugandh Dixit (2018) coined the term “embodied walk” to reflect her embodied approach to place-based research with children. Challenging traditional child-led methods that rely too heavily on verbal expression and/or naturalistic observation, Dixit reminds us that our approach to research with children should reflect our everyday, “typical” engagement with children. An embodied approach should involve some degree of walking and talking with the children about their places and experience, and to closely attend to what children do in their playscape rather than merely asking them to “use their words” to explain their activities. Dixit’s embodied approach holds that our experience of a place is co-constructed through our interactions and conversations with others, and so to walk alongside and to engage with children, rather than to merely follow and/or observe at a distance, more aptly reflects children lived, everyday engagement with their places.

2. PEDAGOGICAL REFLECTIONS

One of the key features of community engaged research is that it involves honoring the voices and expertise of all members of a given community. Educators have gained competency and expertise in child pedagogy and development. It is therefore important that their experience as educators is explored and recognized when developing outdoor playscapes for their young learners. This
component of the design process requires educators to think about what types of developmental and learning experiences they believe young children should have in their outdoor playscapes.

3. **PLACE STUDY**

A fundamental tenant of this study and design approach is recognizing the interdependent relationship between humans and nature. Human beings and especially children have a strong connection with nature: “nature carries, supports and nourishes us” and likewise, we can carry, support and nourish nature through our own activity and engagement to understand and honor the restorative potential of outdoor places, it is imperative that we work to understand the natural affordances of a place and how these affordances shape our feelings, moods and activities.

Johann Wolfgang von Goethe, a nineteenth century poet and naturalist, developed a detailed and close observational approach to studying colors and plants that has since been developed into a systematic experiential method, and applied to the study of places (Brook, 1998; Simms, 2017). Drawing from Goethe’s approach, Eva Simms (2014) developed a five-step, guided experiential process that invites participants to develop a deeper and more sense-oriented understanding of place (Simms, 2014). This process requires participants to engage in structured observations, assessment and imagination as an approach to discovering the natural affordances and potential of the place in question.

III. **THE PILOT**

A pilot study was conducted with the CHANCES community in the summer of 2019. The project was approved the Institutional Review Board (IRB) at Duquesne University in Pittsburgh, U.S. All participants, and parents of the child participants, consented to participation in the study. Following the design process described above, the study consisted of three parts: embodied walks with children participating in the Smart Start Early Years program; completion of a pedogeological survey from the educators of the Smart Start Early Years program; and finally, a place study with adult members of the CHANCES community including educators and directors, as well as provincial coaches, and a student and faculty from the University of Prince Edward Island.

1. **CHILD EMBODIED WALKS**

Fourteen children between the ages of 2-5 participated in the child embodied walks portion of the study. Children were invited to give our trusted friend ‘Burghy the Pig (a pig puppet) and Dawn MacLeod, the CHANCES Coordinator a “tour” of the yard to share where they liked to go and the activities, they liked to engage in. Children were also prompted to share what they could see, smell, and hear in the backyard, and to indicted where the places they did not like were located. The children were so excited to share their experiences with ‘Burghy and Dawn, often inviting them to join in on the fun! The information gathered from the embodied walks was organized into general themes. Significant places in the backyard were identified. The emotional atmosphere (i.e. how the children felt in each place), the activities afforded, and a description of the structural/natural
features of each significant place were also documented. These findings were later used to guide the enhancements of the backyard. The results are available in the “Responses from the Embodied Walks”

2. PEDAGOGICAL REFLECTIONS

Three educators and staff were invited to complete a pedagogical survey. The brief survey required staff to reflect on what types of outdoor experiences are necessary for young children to encourage and strengthen growth and development. All three educators completed the survey and the results are available in the “Responses from Educators” document attached.

3. PLACE STUDY

In July 2019, Dr. Eva Simms conducted a two-day place study workshop with ten CHANCES staff, two provincial coaches, and two members of the UPEI community. The adult participants engaged in a series of experiential and reflective exercises to deepen their understanding of the backyard place and its diverse affordances. Discussions from the workshop and other forms of documentation such as sticky notes, journal entries and drawings were collected and used as data to inform the backyard design at Upper Prince Street. Prevailing themes and places are identified in the “Responses from the Place Study” document attached.

IV: THE DESIGN

Once all of the data was collected and organized from all three experientially based sources, we began the process of developing enhancements for the backyard. I examined the significant “places” and experience(s) that were shared among participants, and developed enhancements that would intensify the developmental, learning, and most importantly the emotional affordances of the place. If there were important experiential affordances that were missing or limited, I designed or implemented an enhancement that would fill this gap while maintaining the overall integrity of the yard and its inherent affordances.

Many of the enhancements which are featured in the Upper Prince Backyard were designed and built in close collaboration with the children, staff, local carpenters and builders, including CHANCES parents, landscapers, and even my own parents! Our Island own: Sterling Construction, Steph Construction, Harvey Construction, and the MacPhail Woods Nursery were key community partners throughout this project. See the “Place Enhancements” document for a comprehensive overview of the place enhancements.

V: CONCLUDING REMARKS

This project started with the recognition and appreciation that outdoor places have the potential to provide rich opportunities for play, while also restoring our mind, body, and soul. Using experiential methods, we were able to explore this phenomenon at a deeper level to discover what particular
affordances exist in the Upper Prince Backyard Space that enhance learning, development and well-being, and then discover enhancements to intensify or evoke restorative experience. We discovered that outdoor play affords children open-ended opportunities for play, movement, exploration, socialization, creativity, and rich, intensified engagement with the sensory world that can leave children and adults feeling restored mentally and physically. Particular features such as the tall structures that afford seeing across the whole yard, and familiar play equipment such as swings and slides further lend to feelings of safety and security. Outdoor play also provides opportunities for connectivity between children, educators and families, as well as non-human beings, which can promote healthy social emotional development, empathy and care. Since wrapping up the project, which happened to be during the COVID-19 pandemic, and implementing many of the core structures and enhancements, many children, families and educators/staff across programs have utilized this space regularly as a place of refuge and safety. While we do not yet have “hard” data (i.e. comparative data to examine its restorative effects), our qualitative data and informal feedback regarding children and families experience of the yard does support its positive impact on overall well-being.

References:


Responses from the Embodied Walks

| Where the ‘Wormies’ Are | The "rock area" or “the place where the wormies are” was identified by the children as beloved place. Located at the North East end of the backyard, the rock area is a small clearing surrounded by small trees, shrubs and weeds. Children entered the rock area via a short dirt path with a canopy of intersecting leaves overhead. At the clearing, red-clay rocks of all shapes and sizes were available for children to climb, pick up, move, and smash. Underneath the rocks, children discovered worms and other bugs that drew curiosity and fascination. Some were attracted to the strong scent of lilacs and the sound of buzzing bees. Despite the seemingly loud activity of smashing and moving rocks, many children insisted on speaking in a hushed tone as to not scare away the bees and other critters. |
| The “Safe” Base | The “safe base” refers to the large traditional playset located in the center of the backyard. The playset, particularly the swings, was the first place that children went during the embodied walks. The structure has two swings, a slide, a set of monkey bars, and two climbing apparatus’, and provides opportunities for climbing, swinging, sliding and social interaction. The children engaged the gross motor affordances of the structure in ways that were predictable and intended. Engaging in these predictable activities evoked feelings of joy, excitement, and pride. Children were excited to show off their ability to climb, swing and slide all on their own, often wanting adults to watch rather than assist them. The monkey bars presented a challenge to all of the children, but unlike other structures that afforded a challenge such as the swings and climbing wall, the monkey bars were too fear-inducing. The structure was the first place that children visited and would be a place that many would return again and again throughout their embodied walks. The consistent return to an area that was experienced as familiar and predictable reveals an affordance of the play structure as a safe place. It is a place where an adult presence is almost always guaranteed and affords |
activities that are familiar and accomplishable. Children felt confident, joyful and connected here.

| The Place Less Travelled | The children’s experience of the westside of the yard was marked by a sense of fear, uncertainty and unpredictability. The shady, mosquito ridden area covered with ferns and weeds was not particularly inviting to the children. The children who were interested in playing here tended to orient around the plastic houses and wooden teepee, which rested in this general area. These houses afforded imaginative, interactive play and climbing. A popular activity at one plastic house was “drive through”. Several children invited Dawn and ‘Burgy to be the “customers”. The older children (age 4-5) also liked to climb trees, and some children expressed an interest in playing imaginative games at the north west end of the yard (the only place on the west side that had a patch of sun).

When children were asked about what happened beyond the structures, they appeared uncertain and at times, fearful. Some children explicitly shared that the area was “scary”, while others indicated this through shrieks, scrunched shoulders and a hesitancy to explore (unless an adult was in close proximity).

One particularly appealing feature of the west side was a hole at the bottom of a large tree trunk. There were leaves, dirt and old twigs stuffed down the hole. Almost all of the children identified this as a place of interest and intrigue. Children engaged the hole with a sense of fear, anxiety and a wee bit of excitement. A few children were convinced that a “smelly skunk” lived in the hole, while another child believed that something lived there that could “grab you” and “pull you in”! In any case, the presence of this hole and its mythology really animated the children’s imagination. |

| The Tunnel | Children overwhelmingly identified the center east side of the yard as a favorite place. In particular, there was a small child-sized and child-made tunnel made of |
intertwining knotweed and grapevines that ran along
the fence. Several children excitedly led Dawn and
‘Burghy through the tall grass, knotweed and flowers to
the “secret” tunnel. This wild unkept place evoked a
sense of adventure and resilience, particularly for the
male participants, who were observed stomping
through the tall grass, tugging and breaking through the
Japanese knotweed as they forged their own path.
Several children were also attracted to the powerful
smell of the flowers and herbs, as well as the presence
of insects such as bees and butterflies. Several children
expressed wanting more flowers and a garden here.

High Places

Children were drawn to places that afforded an
experience of “being high up” such as “the good
climbing trees”, the play structure, and the swings. For
some children, being high up was associated with
feeling big and powerful. For example, there were a
few boys who enjoyed climbing on top of the plastic
houses so that they could be “taller” and “higher” than
the teachers and other children. For other children,
climbing trees presented a challenge that required a
great deal of attention, focus and coordination.
Whereas climbing the houses was extrinsically
motivating (e.g. drawing attention from others,
particularly adults), climbing trees appeared to be a
more intrinsically motivating and satisfying activity for
children. Being up high as a consequence of climbing
tree appeared to be associated with a feeling of pride,
relief and satisfaction. Structures that afforded “being
up high” also provided a sense of safety and security.
Children relied on the play structure as a place where
they could see the whole yard and over the fence into
the neighboring yards. Located in an urban
neighborhood, loud sounds coming from outside the
confines of the yard often startled and frightened the
children. Having a place to climb and assess the
potential situation, provided a sense of orientation and
comfort.

The “Driving” Deck

The deck is the threshold between the gated entrance
and the backyard. After entering the gate, children ran
across the deck, launching themselves into the grass.
Toddlers had a more challenging time with this, often
needing to wait for adult support to step down into
the yard. Aside from being a transitional space, the
deck also was a place for riding small plastic cars and
bikes, an activity that had to be closely monitored as
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The places where the toys are not accessible</td>
<td>Throughout the embodied walks, children were drawn to areas where toys were located, but could not be accessed. For example, several children led Dawn and ‘Burghy to a shed that has “all the toys”. Because of this, a few children identified the shed as a “favorite” place. One child made a request for a “gold” door because it was just “so exciting”. Some children expressed disappointment and frustration that there were toys that they could not access. Another place of interest was the “old shed”. The “old shed”, located in the north east corner of the yard was worn and tattered and no longer accessible. Plastic sandboxes and baby gates connected the barn to the fence so that children could not access the narrow space behind the barn. Here, there were balls and broken toys that the children could see but could not reach. Unlike the “golden” barn, this area did not evoke disappointment or frustration, but rather a sense of apathy and indifference. It was as if they had already given up hope of every playing with those things again.</td>
</tr>
<tr>
<td>The places with the broken things</td>
<td>Scattered throughout the yard were some toys or play materials that were broken, empty or missing pieces. Children would often approach the broken toy with a sense of excitement only to be disappointed when they encountered a damaged toy, or a structure that was missing pieces. For example, a young girl shrieked with excitement when she saw a bottle of bubbles from afar. However, when she was closer her expression turned to disappointment after realizing that the bubbles were empty. It is important to consider what impact this has on a child when they consistently encounter damaged things or uncared for environments. How might this impact their sense of self-esteem? Self-worth? Or their motivation to help care for their environments?</td>
</tr>
</tbody>
</table>
## Thresholds

The entrance to the yard (the deck) was identified as a problematic place for a number of reasons. For one participant, the threshold or transition from the deck gate to the grassy part of the yard felt too abrupt. Seeing the yard in full upon entering was almost experienced as a shock to the senses. A desire for a more “prolonged” experience was identified. Another participant, who is a mother of a child who uses a wheelchair, experienced the deck (and consequently, the yard) as unwelcoming because it was not wheelchair accessible. The lack of accessibility was experienced as restricting and rejecting. Finally, many participants identified the safety concerns with the deck. With the steep drop off, children often required assistance from educators to transition from the deck to the grass and vice versa, which took time away from engaging with the children.

## The Northside

This place emerged as a calm place, sense stimulating area that invited exploration. The presence of bees buzzing, the smell of lilacs and mint, and the diverse flowers and weeds that were interwoven together heighten the aesthetic appeal of this area. Participants imagined great potential for this area, which included creating a garden and bringing in tools for investigating (e.g. magnifying glasses, shovels, etc.)

## The Southside

Several participants identified the southside as a favorite area of the yard. Unlike the child participants, the adults found that this area was inviting and restorative. It was experienced as peaceful, relaxing and protective. Participants also felt invited to explore and engage their imagination here. Affordances such as the canopy of leaves, the large boulders, and trees invited participants to move their bodies in a variety of ways (e.g. jumping, crawling, ducking, climbing, etc.).

## The Playset

The playset was identified as a focal point of the yard. For one participant who closely explored the structure, the playset evoked a sense of excitement. She felt herself wanting to move in novel ways, however her excitement was not sustained. She quickly felt bored. Similar to the children’s findings, she enjoyed climbing and being able to “be above higher ground” and to see out across the yard. It afforded a new perspective of the yard. Several participants also noted that the play structure was not developmentally appropriate for the age group who used it most.

## The Whole Place: Beauty and Unbeauty

Generally, participants identified the yard as a whole an aesthetically appealing place, noting the beauty inherent in the natural features of the yard such as the flowers, the vibrant trees, the contrast between the shady and sunny areas, etc. However,
several participants expressed feeling as though the beauty was overshadowed or hidden by other, less appealing features of the yard such as the clutter of plastic toys, many of which were broken and/or uncared for, the old shed, and the general lack of maintenance. There was a strong desire from virtually all participants to eliminate the plastic materials in the yard (e.g. old plastic houses and slide structures, an old art table, etc.) and replace them with natural structures and features. For one participant who close examined the old shed at the north-west end of the yard, the poor state of the shed interfered with his ability to imagine the potential and growth of that area. He associated the old shed with feelings of neglect, rejection, and a sense of loss.

| The Whole Place: Sensory Experiences | The yard as a whole was identified as a sensory haven. Participants were attracted to the diverse sensory experiences that were afforded in the yard, namely ones that were associated with feeling calm and relaxed such as the sound of leaves blowing in the wind, the sound of insects and creatures, the strong smell of mint and lilac, smell of “freshness” that was present. However, there was an overwhelming consensus that more sensory invitations were needed. Several participants noted the need for more tactile experiences (e.g. sand and water), as well as diverse sounds (i.e. chimes, birds chirping), and smells (e.g. more flowers, herbs, and “smelly things” |
| The Whole Place: Learning Places | Throughout the duration of the workshop, participants, namely the educators, directors and coaches were eager to explore the learning potential of the place. Places such as the southside and the north side were experienced as areas that afforded math and science learning opportunities, as there were many natural items such as chestnuts, rocks, etc. that could be counted or explored scientifically and in diverse ways. Some participants were interested in how literacy could be incorporated into the backyard through writing identifying words on structures or areas. Participants as a whole, discovered great potential for learning opportunities here. |
Pedagogical Questionnaire

This questionnaire was developed to support the development of the outdoor yard space at the Chances Family Center in Charlottetown, PE. In this questionnaire, educators were asked to answer three open-ended questions about the experiences that they observe and experiences that they would like the children to have in the backyard.

1) Children play and do lots of different things in their yard. What are some of the things that you see children doing, or activities that they are engaging in daily?
   - **Participant 1:** Climbing trees, moving rocks to find bugs, play soccer, use basketball net for a rocket ship
   - **Participant 2:** Climbing trees; searching for bugs; playing soccer; use dump trucks to fill/pour rocks; play “restaurant” in the play kitchen; lay the basketball net down and sit on it to play “space ship/boat or car; climb and hang from ladder bars on playground; balancing on tree branches or wood and playground
   - **Participant 3:** Digging for worms/bugs; climbing the dollhouse roof to “fix” it; climbing trees; using vines to wrap around the fence to climb it; play with the big trucks (dumping filling); use the basketball net as a means of transportation (lays it down, pretends it is a spaceship and boat

2) What types of experiences do think children need at different ages? Please list experiences (e.g. digging, playing with sand, etc.) rather than specific equipment of developmental milestones). See back of page for other ages.
   - **Age 2**
     - **Participant 1:** climbing wall, dirt areas for trucks and tractors
     - **Participant 2:** climb, run, jump, balancing
     - **Participant 3:** space to run, climbing structures, filling and dumping, balancing, sensory play
   - **Age 3**
     - **Participant 1:** climbing area, area for running
     - **Participant 2:** climbing, run, areas to engage in dramatic, imaginative play (e.g. boat/car and kitchen)
     - **Participant 3:** climbing, drawing, space to engage in dramatic play experiences, exploration and swing
   - **Age 4**
     - **Participant 1:** area for dramatic and area for swings
     - **Participant 2:** investigation/exploration; cause and effect; take care of environment (e.g. plants); areas to hang and climb
     - **Participant 3:** exploration; cause and effect; opportunity to experience outdoor living things (garden)

3) We also recognize that these spaces are not only used by children, but also by adults such as yourself as well as parents. What experiences would you want to have in the backyard?
   - **Participant 1:** wooden logs for walking and for balance
   - **Participant 2:** climbing wall, sandbox, mud kitchen, imaginative play (e.g. boat/car), balancing (different height, logs, tree stumps), garden
   - **Participant 3:** climbing wall, sandbox, music wall, mud kitchen, water wall, and big wood logs (imaginative play)
The following enhancements were identified and developed based on an integration of the data sets. All enhancements aimed to honor and enhance core experiences identified by participants such as: emotionally and physically safe experiences, imaginative experiences, enhancing learning and development opportunities, sensory experience, beauty and aesthetics, empowering places, and to ensure accessibility to the yard and its affordances for all children.

<table>
<thead>
<tr>
<th>Place</th>
<th>Recommendations</th>
<th>Enhancement</th>
</tr>
</thead>
</table>
| North Side (Rock Area, Wild Place and Old Shed) | 1. Preserve and enhance the structure of the child-made tunnel  
2. Make a garden and have access to water  
3. Replace the “wild” (Japanese knotweed, weeds and uncontrolled grapevine) with native PEI shrubs and wildflowers to diversify the sensory experience  
4. Create paths that can still be accessed when the area becomes overgrown  
5. Allow children to pull and break the knotweed (“bamboo”). This experience posed a challenge for children, it contributed to their sense of “adventure” and imagination and it allowed them to engage their emotional experience and regulation.  
6. Remove old shed, add new shed, paint a gold door! | 1. A long pergola was designed to go underneath the grapevine (Figure 1. This structure will be completed in Fall 2020)  
*Future considerations:* stone path under pergola  
2. An 8 x 8 garden box was constructed in the center of the North Side. In July 2020, children planted beans, lettuce, carrots, squash, cucumber and tomatoes. We preserved the naturally growing mint, and planted clematis and a service berry bush (See Figure 9). A rain barrel was placed on the deck, as well as watering cans and other canisters to collect water and take it to other parts of the yard (e.g. to water flowers, to make mud for the mud kitchen or to construct a water wall).  
3. MacPhail Woods Homestead landscaped the large “wild area” with native PEI shrubs and wildflowers, which attract different types of birds, bees, and afford new and inviting scents and colors to this area (See Figure 2)  
*Future considerations:* annual landscaping maintenance  
4. Several paths (linear and meandering) were created throughout the wild area, the rock area and behind the lilac tree. Some paths were dirt, some had stones, and small bridge was added as a part of a path to the |
tunnel to enhance the sense of adventure and imagination.
5. A patch of knotweed near the north east end of the yard was preserved for the children (see Figure 3)
6. The old shed was removed and replaced with a new shed. With a gold door! The gold door enhances the excitement and imaginative quality of the shed, and what is in it, which are toys—this was a strong request from a child participant because the toys are just “so exciting” (see figure 4). The new shed also is intended for educators to store their materials such as any art materials, bikes, other loose parts or toys such as balls, hula hoops, etc.

Future considerations: It is strongly recommended (and has been proposed) that fences be put up between the shed and the surrounding fence (one should be a gate). Additionally, to enhance the imaginative, playful quality of this place, I suggest creating a fairy garden and/or placing some garden trinkets behind the shed. Create some peek holes in the fence so that children who are interested in what is behind the shed are not faced with old, broken toys, but rather something that enhances their imagination, curiosity and excitement. We also need to find some better gold paint!

| Playset | 1. Adapt the play structure so that it is developmentally appropriate
2. Adapt the play structure so that it is safer for children.
3. Make the playset accessible to all children, including 1. A local carpenter (Sterling Woodworking) was contracted to make adaptation to the play structure. He did the following: replaced monkey bars with a second slide; closed one of the entrances to enhance safety; |
| South Side | 1. Make this area more inviting and welcoming to the children while preserving the imaginative and mythical qualities of the place  
2. Create more opportunities for socio-dramatic/imaginative play (e.g. preserve the children’s interest in playing “drive through”) | 1. All enhancements to follow fulfill this first recommendation.  
2. Sterling Woodworking created two A-frame structures to replace the plastic houses. We also collaboratively designed a wooden mud kitchen that functions like a drive through (see Figure 16 and 17).  
3. All garbage was removed by staff. MacPhail Woods landscaping |
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Clean up all garbage and broken toys in the South East end of the yard</td>
</tr>
<tr>
<td>4.</td>
<td>Enhance the quiet, peaceful play affordances of the South West corner of the yard</td>
</tr>
<tr>
<td>5.</td>
<td>Create paths to invite children to explore this area in a way that feels familiar and safe (this was an explicit recommendation from a child who expressed that he experienced the area as scary. When asked what would make him feel safer, he said: “a path because then he would know where he was going”</td>
</tr>
<tr>
<td>6.</td>
<td>Have loose parts available to enhance the imaginative and curious affordances already made available here</td>
</tr>
<tr>
<td>7.</td>
<td>Create peek holes in the fence so that children can safely see what is happening around them while in this anxiety-provoking area of the yard</td>
</tr>
<tr>
<td>8.</td>
<td>Protect the holes! And document story telling.</td>
</tr>
</tbody>
</table>

pruned the trees and removed a dead tree and shrubs. 

**Future considerations:** annual landscaping maintenance 

5. A large tree-house-like structure was designed in collaboration with Steph Construction (see Figure 13). This enhancement is a wheelchair accessible structure that can afford any child the experience of being “high up” and seeing across the whole yard (once accessible paths throughout the yard are developed). The ramp leads to a small tree house, and underneath there is a space that will be a sandbox in summer 2021 (see Figure 14). Surrounding the sandbox are ferns and witch hazel that will enhance the sensory affordances of the yard. The structure affords quiet engagement with the outdoor space, and the restorative activity of sand play. **Future considerations:** Plant more herbs to enhance the calming qualities of this area. 

5. A colorful linear path was placed along the fence and stopped at the tree with “the hole”. From there, I designed hop-scotch path to the tree house a.k.a “the leaf ramp”. The hopscotch path is an important feature here because similar to the playset, it affords a familiar activity in a place that is experienced as somewhat foreign, scary, and uncertain (see Figure 18). **Future considerations:** wheelchair accessible paths 

6. A loose parts area was created at the south east end of the yard. A 3-tire path was installed, and pieces
of wood, plastic piping, and other loose materials were placed in this area to promote construction, creativity and imagination (see Figure 15).

7. This recommendation that has not yet been implemented.

8. The holes were left alone, but I encouraged educators to not dissuade the children from exploring them and investigating, but rather engage them in their story telling about what happens in the holes, who lives in there, and their feelings (e.g. fears, anxieties).

*Future considerations:* implement a mailbox structure and collect stories about the hole and the yard. One story that emerged frequently was about “the skunk”; however, stories are ever-changing with new children entering the program. It is important to document and share all of the unique stories that are told about this place. This also would afford a natural learning opportunity for areas such as literacy, reading and writing! Add some fairy houses or colorful mushrooms around here, too.

| Deck (Threshold) | 1. Use structural enhancements to prolong the experience of entering the yard (via the deck or another entrance)  
2. Enhance accessibility  
3. Make it more inviting for staff and parents | 1. **A.** We designed a beautiful pergola entrance from the parking lot into the yard (South East). When children and educators enter the pergola, they are met with a long colorful path along the edge of the fence; to the right is the loose part area with a space where children and adults can walk through to the main part of the yard (See Figure 19).  
**B.** On the deck, we created a ramp that extends from the center of the deck to the ground. On the |
edge of the deck Sterling Construction built flowerbox benches to discourage climbing on and jumping off the deck. Thus, when entering via the deck gate, children must meander around the deck to reach the ramp rather than feeling compelled to run and jump (see Figure 20).

2. The height and width of the pergola meets the requirements for accessible entrances. A ramp that extends from the deck to the ground makes the deck accessible from the yard. *Future considerations:* create an accessible path from the pergola to other parts of the yard and create an accessible ramp that leads from the parking lot onto the deck.

3. Flower boxes and benches were built along the edge of the deck to invite people to sit, relax and enjoy the flowers and the view of the yard. We also put a rain barrel on the deck for children to have access to water so that they can water their garden or use it for water play (see Figure 20). *Future considerations:* a picnic table or eating area and more flowerpots.

| The Whole Place: Flow, Invitations and Aesthetic | 1. Establish flow. Each place in the backyard has distinctive features and affordances, and participants (adults expressed this verbally and the children did so through movement and activities) expressed a lack of interconnectivity between the places in the yard. | 1. Stone paths were placed in a number of areas to enhance the connectivity between places (e.g. south east to south west). Landscapers also planted trees and shrubs in areas that were more open (westside, north east, and east) to soften the contrast between the diverse, full plant life on the north and south sides and the otherwise barren center part of the yard. |
| | 2. Enhance and preserve the natural beauty and aesthetic of the whole place | |
3. Create educator-friendly areas in the yard to invite comfortable engagement with the children in the yard.

4. Provide ongoing maintenance and care—when we learn to care for a place, we learn to care for each other.

---

**Future considerations:** A meandering wheelchair/bike path that goes around the playset (around the whole yard). Or if this is not possible, accessible paths from the deck/pergola into other areas of the yard.

2. In collaboration with MacPhail Woods Homestead, we created and implemented a landscape design. We planted native trees, shrubs and wildflowers that would provide color and diverse sensory experiences to the yard all year round, and that would attract different bird species. All play structures that were added are natural wood.

**Future considerations:** Continue maintenance and care, which includes annual pruning. And please, reduce plastics if at all possible.

3. An educator requested a wrap-around bench for a tree located at the west end of the yard. For her, this was the “best” place to have a bench because you can see the entire yard and all of the areas where the children play. Additionally, adult-sized benches in other areas such as the rock area and next to the tree ramp to enhance engagement between staff and children.

---

**The Whole Place: Accessibility**

<table>
<thead>
<tr>
<th>The Whole Place: Accessibility</th>
<th>1. Make the affordances of the playscape accessible to children with diverse needs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Autism friendly affordances</td>
<td>1. Accessibility as it relates to distinctive places is mentioned persistently throughout the preceding sections. However, it is important to emphasize here the pressing need to be implementing an accessible framework in outdoor play spaces for children. That is, we must continue thinking critically and intentionally about how children with non-typical needs and accommodations can gain access to</td>
</tr>
</tbody>
</table>
the experiential and restorative affordances of the backyard space. I have started this by designing a tree house that could afford a child with mobility issues with access to “high places”. Wheelchair accessible paths would also support children in reaching other important areas of the yard such as the sensory affordances of the wild area, the garden, the music wall on the play set. A path also would provide a clear, safe passage for a child with visual impairments to access different areas of the yard.

2. What was not explicitly discussed above was the relationship between sensory enhancements and autism. Children with autism are often drawn to immersive sensory experiences and seek out specific types of sensory experiences (e.g. tactile, visual, auditory, olfactory, taste) to engage in when they feel overwhelmed in an overstimulating environment. Having access to diverse sensory affordances, including edible plants and food, can afford children with autism or sensory dysregulation, opportunities to engage safely with sensory elements that are naturally stimulating and restorative.

Secondly, children with autism require relationships and environments that are marked by consistency and routine. Keeping some “stable” elements such as the play structure that affords predictable activities such as swinging and sliding, tree house, and small houses, supports their need for a predictable, safe environment.
**Future considerations:** incorporate reflective materials such as mirrors; keep two pairs of headphones in the shed in case children find the sounds of the yard overwhelming; ensure some areas are designated for solitary play (some children who have autism often prefer or require respite from their peers. Having places that are available and invite solitary and sensory stimulating play can be helpful, especially if a child is feeling overwhelming and dysregulated from the action of the yard.
NORTH SIDE

Figure 1. Pathway to the tunnel

Figure 2. “Wild Area” (Landskaped with native shrubs and wildflowers that will grow big over the next couple of years)

Figure 3. Japanese Knotweed

Figure 6A. The original plastic art table

Figure 6 B. Art table that looks out to the garden and wild area
Figures 9A, 9B, 9C. Olga's Garden
THE SOUTH SIDE

Figure 13. Leaf Ramp

Figure 14. Future Sandbox

Figure 16. House structures and mud kitchen

Figure 17. Mud Kitchen/ Drive Through

Figure 18. Colorful Path

Figure 15. Loose Part Area
THRESHOLDS

Figure 19. Pergola Entrance

Figure 20. Deck with accessible ramp
FINAL TOUCHES: Other additions

Figure 21. A Service Berry Bush, that will continue to grow and eventually provide shade to the deck.

Figure 22. A wrap around bench that overlooks the entire yard. This location was identified by one of the educators who uses the space regularly. Also, you can see here the spruce trees against the fence that will add color to the backyard during the winter months and will help enhance the flow by filling out this space.

Figure 23. Last but certainly not least, this is a white ash tree that is dedicated to the Mi’kmaq community on Prince Edward Island. This tree will eventually provide shade and shelter for the children and staff when they use the playset. Symbolically, this tree has been associated with transformation, healing and creative expression.