

# ONE WALK AT A TIME

An Imaginative Education Approach to Outdoor Learning



Megan Sandham

Simon Fraser University

Instructor: Michael Datura

EDUC 904

June 5, 2022

### **Abstract**

This qualitative action research project follows four public elementary school teachers wanting to provide more meaningful outdoor learning experiences for their students. The purpose of this research was to support teachers in taking their students' learning outside by using the theory of Imaginative Education and cognitive tools, combined with the use of Dr. Gillian Judson's (2018) resource, *A Walking Curriculum: Evoking Wonder and Developing Sense of Place (K-12)*. The research examines the teachers' experiences and seeks to understand what impact an Imaginative Education approach to outdoor learning has on their practice. The research is designed around a series of three walks delivered to three different classes. Support is provided in the planning and delivery of the first two walks in the series, while the final walk of the series is independently planned and delivered by each classroom teacher. The effectiveness of both human and symbolic mediation is investigated as it relates to educational change. The findings of this research seem to suggest that with the proper supports, "all teachers (not just those who identify as "outdoor educators") can help students reimagine their relationship with the natural world" (Judson, 2018, p. 2).

## Acknowledgements

I would like to acknowledge that the walks in this action research project took place on the traditional territory of the hənq̓əminəm speaking people. I am grateful for their past and continued stewardship of this land, the water and the air, and am committed to listening, learning and taking action as I travel along my own path towards truth and reconciliation.

I would like to thank the teachers and students who let me into their classrooms and enthusiastically joined me on this little adventure – it was such a pleasure to learn with and from you!

I would like to thank the best critical friend group ever. Your support throughout this entire process is more appreciated than you'll ever know. You have been the most amazing question askers, suggestion givers, push-backers, rant listeners, cheerleaders, and belly laugh providers. Your friendship and guidance means the world to me.

I would like to thank my professors at Simon Fraser University for giving me the opportunity to reflect on my beliefs and practices and for encouraging me to do things I didn't think I was capable of. I would like to especially thank Dr. Gillian Judson for your mentorship and inspiration and Michael Datura for your cool and calm support while supervising my Action Research.

I would like to thank my colleagues, friends, and family for your support over the last two years. Thank you D for your words of encouragement and for your perfectly timed junk food deliveries. Thank you M and S for stepping up and taking on extra responsibilities so that I could go on this adventure. And finally, thank you, M. You deserve a Master of Education right along with me! Thank you for listening, reading papers about topics you know nothing about and for always knowing exactly what I needed - exactly when I needed it.

## **Table of Contents**

<b>Introduction</b>	6
<i>Vignette</i>	6
<i>Personal Background and Context</i>	8
<i>Rationale for this Action Research Project</i>	9
<b>Research Site Context</b>	12
<i>School Community</i>	12
<i>Outdoor Learning Space</i>	12
<i>Research Participants</i>	13
<b>Research Question(s)</b>	14
<i>Guiding Question</i>	14
<i>Sub Questions</i>	15
<i>Potential Challenges and Limitations</i>	15
<i>Inquiry Rationale and Methodology</i>	17
<b>Why Action Research?</b>	17
<b>Why Imaginative Education?</b>	18
<b>Research Ethics</b>	19
<b>Literature Review</b>	19
<i>Outdoor Learning</i>	20
<i>Educational Change</i>	21
<i>Teaching Teachers Through an Imaginative Education Approach</i>	23
<i>Indigenous Perspectives</i>	24
<i>Mediation</i>	25
<b>Research Design</b>	26
<b>Implementation and Fieldwork</b>	29
<i>Initial Interviews</i>	29
<i>School Culture and Collaboration</i>	29
<i>Beliefs About Outdoor Learning</i>	30
<i>Outdoor Learning Successes</i>	31
<i>Outdoor Learning Challenges</i>	31
<i>Imaginative Education, Cognitive Tools and Walking Curriculum 101</i>	33
<i>The Walks</i>	34
<b>Data Analysis</b>	52



<b>Conclusions</b>	55
<b>Appendices</b>	60
Appendix A	60
Ethics Documentation	60
<i>Appendix A1 - TCPS2 Certificate of Completion</i>	60
<i>Appendix A2 - District Ethics Approval</i>	61
<i>Appendix A3 - Educator Letter of Informed Consent</i>	62
Appendix B	63
Research and Design	63
<i>Appendix B1 - Initial Interview Questions</i>	63
<i>Appendix B2 - Initial Interviews Transcript Samples</i>	64
<i>Appendix B3 - My Reflection Sample</i>	67
Appendix C	68
Implementation and Fieldwork	68
<i>Appendix C1 - Summary of IE</i>	68
<i>Appendix C2 - Post-Walk Teacher Reflection Questions</i>	69
<i>Appendix C3 - Post-Walk Teacher Reflection Samples</i>	69
<i>Appendix C4 - Final Walk Teacher Reflection Questions</i>	73
<i>Appendix C5 - Final Walk Reflections</i>	73
<i>Appendix C6 - Final Questionnaire</i>	75
<i>Appendix C7 - Final Questionnaire Response Samples</i>	76
<b>References</b>	78

## Introduction

*The act of creating a world is an act of revolution.*

*To imagine something different, something better, or something more interesting is to push the existing world into a state of change. Some of the greatest revolutionary acts of our time came to be because someone had the courage to imagine something new.*

*If it is true that imagination creates our reality, then we can view ourselves as alchemists, able to transform society and the culture at large with our words and ideas. We have the power to heal an ailing culture with the “magical energy” that comes from our imaginations. Just by documenting our ideas, we can begin the process of change.*

*The Imaginary World of — (Smith, 2014, p. vi)*

### ***Vignette***

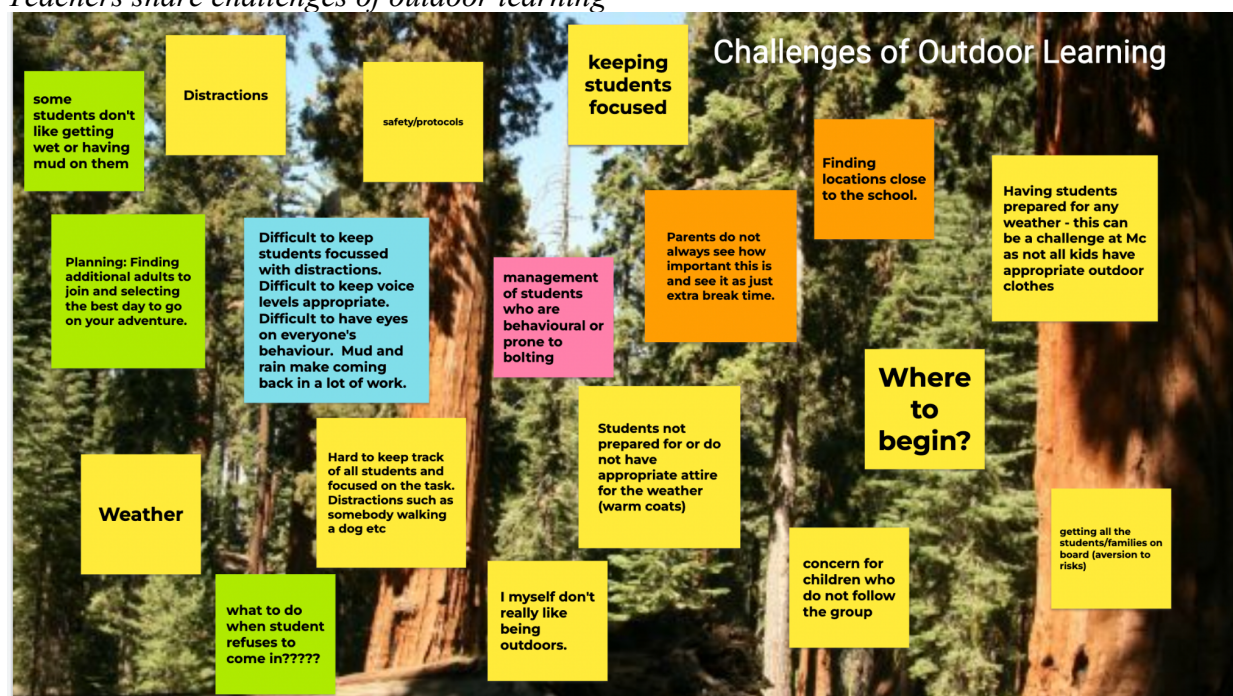
I am sitting at my dining room table, staring into my computer screen as I facilitate yet another workshop over Zoom. This time, however, we aren't Zooming because of Covid protocols, but because of the state of emergency declared across British Columbia. Days of relentless rain have caused major landslides, left entire communities under water, completely destroyed major highways, and shut down the Trans Mountain pipeline. This has resulted in government mandated fuel restrictions forcing us to work from home. And so here we are, ironically, learning about outdoor education. Indoors. From our dining room tables.

Early in the workshop, educators are invited to share their successes and challenges around outdoor learning. They use virtual sticky notes and in no time, the jamboard is full. We start with the successes. Teachers enthusiastically share stories, specific activities, and the benefits they see when they take students' learning outside. Next, we move onto the challenges. The vibe in the (virtual) room changes. These teachers are at this workshop because they want to incorporate outdoor learning into their practice, and yet many of them feel unable to do so. The reasons they share are very real, but as we read through them, I can't help but think that with the right resources and supports, the challenges could all be overcome.

**Figure 1**  
*Teachers share successes of outdoor learning*



**Figure 2**  
*Teachers share challenges of outdoor learning*



### ***Personal Background and Context***

I first became aware of Dr. Gillian Judson's (2018) book *A Walking Curriculum: Evoking Wonder and Developing Sense of Place (WC)* in 2019, and to say it changed me is an understatement. Outdoor learning was something I was starting to hear more and more about and I was curious. The idea of taking learning outside was appealing to me, but I wasn't sure how to begin. My outdoor experiences up to that point were limited to outdoor free play and I was looking for something more focused and tied to the curriculum. The *WC* seemed to be exactly what I was looking for. Excited to get started, I quickly skimmed the introduction, and jumped right in. I loved how easy the walks were to follow and they quickly became a regular part of my practice. My students and I participated in the 30 Day Walking Challenges, shared our walks on Twitter, and felt an increased connection to the natural world just outside our classroom.

A year later, I found myself sitting in my very first course of my Master of Education Program in Imaginative Learning and Teaching. One of our required texts was *a WC* and one of our assignments was an in-depth investigation of the outdoors, exploring the Imaginative Ecological Education (IEE) principles of feeling, activeness, and place. Although I was already familiar with the resource and had been taking my students out on walks for quite some time, I hadn't actually read the *whole* book. With no real understanding of Imaginative Education (IE) or cognitive tools, I pretty much ignored the challenges and activities listed with each walk. The walks I took with my students were fine. We were getting outside and exploring our space more than we ever had before, but I couldn't help but feel like something was missing. During our walks, I often found myself frustrated with students' behaviour and their lack of focus and engagement. The learning felt superficial. Something had to change.

The first thing I did was actually read and engage with the ideas in a *WC*. As I began to plan and approach each walk in a more thoughtful and purposeful way, and as I experienced my own investigations of place, the walks I was taking with my students began to change. Student focus and engagement began to increase and our walking experiences became more meaningful and memorable. Walks that had been fine in the past became so much more. My growing understanding of IE and the cognitive tools associated with it made our walks come alive. My students began to connect to the outside world in a way I hadn't seen before. They began to express deep and abstract ideas about the world around them and I witnessed a transfer of these

ideas into other contexts - both outside and inside the classroom. Witnessing the transformative power of the outdoors and seeing such growth in my students inspired me to continue to explore the possibilities of outdoor learning and I became a passionate advocate for outdoor education in my district. The *WC* was my doorway into a whole new world and its influence continues to lead me on a journey of professional and personal growth.

### ***Rationale for this Action Research Project***

In September of 2020, in response to increased teacher interest in learning outside, my school district's Director of Innovation and Inquiry brought together a group of classroom teachers, administrators, and district coordinators who shared an interest in outdoor learning. Our group was named 'Place as Pedagogy' and our purpose was to gather our energy, connect all the pieces, and make our curiosities visible. We met over Zoom several times throughout the year, and our ideas, tips, tricks, and discoveries were curated, organized, and shared on the district's Learning Outside website, accessible to all educators in our district. The website was well received and seemed to increase teacher interest in outdoor learning. In response to this interest, and in an attempt to further support outdoor learning, our group members received a request from a district coordinator asking for recommendations of "must have" resources for taking students outside. "Dream big! The sky's the limit!" she said. And dream big is exactly what we did! The Learning Services team took our suggestions and purchased a wagon full of our recommended resources and gifted it to every single elementary school in the district.

Fast forward to September 2021. After more than 20 years as a classroom teacher, I took on a new role in the district as a Coordinator of Primary Learning. Part of my role is to support teachers and schools around curriculum, instruction, and assessment. Every year, the staff and students at each school in our district engage in a spiral of inquiry to further their collective learning and professional growth. This year, 7 of our 26 elementary schools are focusing their inquiry on some aspect of outdoor education, and in the short time that I've been in my role, one of the requests I get most often is asking for support in taking students' learning outdoors.

**Figure 3**

*E-mails received from educators seeking outdoor learning support*

From: Michaela Biehl <mbiehl@deltaschools.ca>

Sent: October 6, 2021 2:37 PM

To: Megan Sandham

Subject: Outdoor Education

Hi Megan,

I am the COI at [REDACTED] and our focus this year is Outdoor Education. We are looking for some resources or someone to come and share their knowledge with us on the topic!

Thanks so much!

From: [REDACTED]

Sent: October 26, 2021 4:16 PM

To: Megan Sandham

Subject: Re: Sooo good to see you!

We would love that. Would you be open to do an outdoor learning workshop on Nov. 29th Proday?

Thanks,

From: [REDACTED]

Sent: February 5, 2022 3:06 PM

To: Megan Sandham

Subject: Take 2!

Hi Meg,

Hoping we can connect to discuss possible visits and/or lunch and learns. I think there would be a definite interest in Outdoor Ed here. I would like to plan this for Term 3 as I know the next month will be crazy for staff. Thoughts?

Enjoy your weekend,

Receiving these types of requests often and having similar conversations with classroom teachers and administrators over and over again, led me to really consider how I could best support teachers in taking their students' learning outside. Despite the district's efforts in providing many different resources, it was clear that there were still some very real barriers stopping many classroom teachers from taking their students outside. As I thought about these challenges, I reflected on my own experiences with outdoor learning. I have witnessed increased student engagement and self-regulation in outdoor learning situations. I have seen students develop strong connections to their place and have watched them care for the natural world in ways they may not have before. I have observed students when they are outside and see amazement and wonder flow out of them, as they explore and make sense of their world. I know for certain that the *WC* gave me a starting point for my explorations into outdoor education and I believed it could do the same for other teachers interested in giving outdoor learning a try. I also wondered if having a basic understanding of IE and the cognitive tools central to the walks might enrich teachers' experiences and perhaps lead to teachers using an IE approach in other aspects of their teaching, just as it had for me.



## **Research Site Context**

### ***School Community***

My action research project was conducted at a suburban public school in the Lower Mainland in British Columbia, Canada. The school serves an economically and culturally diverse community and has a supportive and active parent group. Approximately 350 students attend the school.

The school has a supportive principal and vice principal and prides itself on its caring and professional staff. The entire school staff, like all schools in the district, is involved in a spiral of inquiry; a collaborative and professional way to move collective learning forward and to further teachers' adaptive expertise. The focus of this school's inquiry is how outdoor learning can help to develop calm, connected, and engaged learners and is facilitated and supported by a teacher Coordinator of Inquiry (COI). This collective learning is central to the school culture and all teachers have the opportunity to regularly collaborate with other teachers as they work through the stages of the spiral.

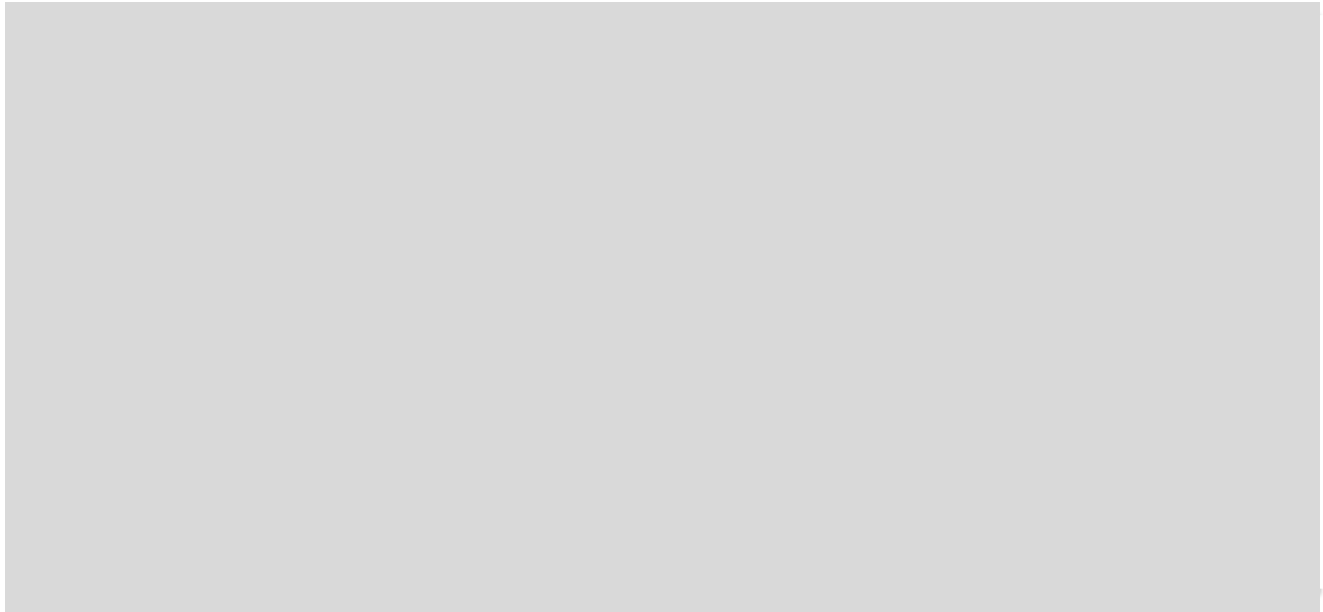
### ***Outdoor Learning Space***

The school yard has two playgrounds, a set of swings, a rock circle, a friendship garden, a group of newly planted cedar trees and a large, established cedar tree situated in the middle of the roundabout at the front of the school. The school is surrounded by grass fields and borders a municipal park that includes a natural turf field, a paved walking trail, washrooms and a bike pump track, and is well used during the week by walkers and dog owners.

There are several outdoor spaces within walking distance of the school: a community garden, a grass sports field and picnic tables, and a greenbelt that borders farmlands. The municipal hall grounds are across the highway and can be accessed via a pedestrian and cyclist overpass. This is a popular area as it has a pond that is home to herons, turtles and ducks.

**Figure 4**

Google Maps Satellite of School and Surrounding Area

***Research Participants***

In my role as Primary Learning Coordinator, I have the opportunity to work with different teachers and schools in supporting their school-wide spirals of inquiry. I was already aware of this school's inquiry into outdoor learning, and approached the school's Coordinator of Inquiry to see if there might be some teacher interest in participating in my action research project. Ms. L gave me the names of some teachers she thought might be interested and I reached out to them to explain my research project and invite them to participate. Several teachers expressed a desire to participate. I chose a group of educators teaching at the Grade 2/3 level because they had a range of outdoor learning experiences.

Ms. G teaches grade 2 and has 30 years of teaching experience. She has been at this school for 29 of those years.

Mrs. M teaches grade 2 and has 20 years of teaching experience. She has been at this school for the last 4 years and has a diploma in Teaching with Technology in the Global Classroom.

Miss C, a UBC teacher candidate in the Community and Inquiry for Teacher Education cohort was completing her long practicum in Mrs. M's class during this action research.

Ms. L teaches grade 3 and is also the Coordinator of Inquiry. She has 20 years of teaching experience and has been at this school for the last 3 years. She has a post baccalaureate diploma in Early Childhood Education and a Master of Education in Educational Leadership.

Ms. G, Mrs. M and Ms. L are all advocates of outdoor learning. They each have different comfort levels with outdoor learning and incorporate it into their practice in a variety of ways. Each of these teachers has used a *WC* as inspiration for some outdoor walks, and are excited to learn how to use the resource more effectively. They are also eager to learn about IE and how to use the cognitive tools to enrich their students' outdoor learning experiences.

Miss C has very little experience with outdoor learning and has never heard of a *WC*. She wants to learn more about this resource, IE and cognitive tools, and is interested in participating in this research by co-planning, observing and leading some walks.

### **Research Question(s)**

This action research was guided by one overarching question and several sub questions. I was interested in exploring my hunch that using a *WC* might lead to teachers' increased understanding of IE and cognitive tools and as a result, increase their confidence and effectiveness in designing and delivering outdoor learning experiences for their students. I was also curious to hear the teachers' reflections on the process, in order to guide me in future work with educators.

### ***Guiding Question***

How do teachers experience the implementation of outdoor learning into their practice when using *A Walking Curriculum: Evoking Wonder and Developing Sense of Place* (Judson, 2018), Imaginative Education (IE) theory and cognitive tools?

### ***Sub Questions***

- How does *A Walking Curriculum* help teachers overcome some of the perceived barriers to taking students outside?
- Is *A Walking Curriculum* an effective mediator in helping teachers begin incorporating outdoor education into their practice? Can it help to develop a habit of regularly taking students outside?
- Does an understanding of the cognitive tools of Imaginative Education make a difference to how walks are planned, delivered and experienced by teachers?
- Does using *A Walking Curriculum* build teacher capacity in outdoor learning or does it become an overly relied upon resource that limits teachers?
- How can *A Walking Curriculum* support the teaching and understanding of Indigenous ways of knowing and the First Peoples Principles of Learning?
- Can the use of *A Walking Curriculum* lead to teachers implementing outdoor learning as a regular part of their teaching?

### ***Potential Challenges and Limitations***

I identified several potential challenges and limitations of this action research project - some before the project began and others as I conducted my research.

The teachers who chose to participate in my action research believed in the benefits of outdoor learning and because they were interested in learning more about IE, cognitive tools and a *WC*, I had “buy-in” right from the start. The teachers were motivated to make a change and were therefore open to everything I shared and fully engaged in the project with open-minds. I am keenly aware that attitudes might be very different if it was a change that was imposed on teachers, rather than being a change they initiated for themselves.

Time, or rather the lack of it, created challenges and limitations. It was difficult to schedule a time to work with each of the teachers and when we did, it was limited. I was only able to give a very brief overview of IE and cognitive tools and felt that because of this, the teachers had some misconceptions about both. Although debriefing immediately after the walk would have been preferable, it was not possible. Follow-up emails, asking teachers to share their reflections had to suffice and some insights were lost by not having the time to discuss the walks while they were still fresh in their mind.

I was interested in having the teachers collaborate not only with me, but also with one another. This was possible with Ms. L and Mrs. M, and Mrs. M's teacher candidate, Miss C, as they were already used to planning together and regularly took their two classes out for Wilderness Wednesdays. Because of different schedules and obligations (parent meetings, coaching track and field, IEP meetings, etc.) before, during and at the end of the day, and because the teachers were interested in doing different walks on different dates and different times, it wasn't possible for Ms. G to collaborate with the other teachers. It would be interesting to see how collaboration among all the teachers involved would change this experience.

Going into this research, I had very different relationships with each of the teachers involved in the project - from a close friendship to a quick introduction before diving into the project. The importance of relationships in education is well researched. When seeking to implement change, one approach is an engagement approach, where the leader of the change engages in a dialogue with the participating teachers, to uncover their beliefs and values (Robinson, 2018). This process can be difficult for both the leader and the participants, and can leave them feeling vulnerable. It is therefore important to take time to establish a safe relationship with each participant *before* jumping into the change. I wonder how this action research project would differ if I had a more established relationship with all the teachers. I felt like there was some hesitation in fully sharing experiences, which I completely understand, and there were very few questions or critiques of the theory of IE, the cognitive tools or the walks themselves. Of course, even with established relationships, the same could occur, for a variety of reasons which could be explored at another time.

### ***Inquiry Rationale and Methodology***

This action research project looks at teachers' experiences with outdoor learning, as they engage with the theory of IE, cognitive tools, and *a WC*. At its heart, this project is very much a story of educational change - how teachers approach and experience change. My interest in this topic came out of my experiences, observations, and frustrations as a district coordinator in trying to lead and support educational change. Fullan (2016) defines effective change as being a process that shapes and reshapes good ideas as it builds capacity and ownership" (p. 46). Throughout my research, I attempted to create a process that would do just that - bring about a successful change.

This research is intended not only for educators and their supporters interested in taking their students' learning outside of the classroom but may also provide helpful insights for any educational leaders hoping to support individual, school or district wide changes to pedagogy or practice.

### **Why Action Research?**

Action research, simply put, "is a process of systematic inquiry that seeks to improve social issues affecting the lives of everyday people" (Hine, 2013, p.151). It falls into a special category of applied research that Parsons et al. (2013) refer to as site-based action research; a methodology that is undertaken by educators, in their schools, as a way to identify and propose solutions to specific issues encountered in their day-to-day practice. The process of action research is cyclical, responsive and collaborative, and usually involves revisiting a series of phases: "targeting an area of collective interest; collecting, organizing, analyzing and interpreting data; and taking action based on this information" (Sax & Fisher, 2001, p. 72). This is research conducted in real life, with real practitioners and real students, and the findings are directly relevant and applicable to the specific issues of the specific learning community (Parsons et al., 2013). While this type of qualitative research has numerous strengths, it does not come without challenges.

There are several problems that researchers can encounter when conducting action research, including an unclear research focus, a lack of and mismanagement of time, and beginning the research with a conclusion or solution already in mind (Hine, 2013). These challenges, although common, are not insurmountable. As Parsons et al. (2013) suggest, “research is less rocket science than a carefully planned, rigorously attended activity” (p. 5).

Despite its potential challenges, action research is a valuable methodology that, when done well, encourages reflection and professional growth and development. It “addresses relationships, communication, participation, and inclusion, and potentially leads to benefits for all stakeholders involved in the process” (Sax & Fisher, 2001, p.72). When we give educators the opportunity to engage in meaningful work that matters to them, their students, and the greater school community, the possibilities for transformative change cannot be underestimated.

### **Why Imaginative Education?**

Developed by Kieran Egan, IE is a way of teaching and learning that wants to engage the feelings and imaginations of learners (Egan & Judson, 2016). Imaginative educators believe that emotion is at the heart of all learning; when we are emotionally attached to a topic, learning becomes meaningful and memorable. If we can engage our learners’ imaginations and get them to feel something about whatever it is we are teaching, they will be more invested and engaged, and more likely to remember and internalize their learning in a meaningful way. Imaginative educators see learners as constantly perceiving, feeling and thinking, and once imagination takes hold and becomes part of these perceptions, feelings and thoughts - magic can happen! Imagination, to the Imaginative educator, is not a fluffy, head in the clouds type of creativity that is only pulled out in very specific cases, but an approach to teaching and learning that seeks to engage the emotions and imaginations of learners (Egan & Judson, 2016). This approach can lead to the development of different kinds of understandings that help learners experience and make sense of concepts across the curriculum - not just in the arts.

IE identifies five kinds of understandings: Somatic, Mythic, Romantic, Philosophic, and Ironic. Each kind of understanding is shaped by a set of cognitive tools and is the way in which human beings engage imaginatively with, and make sense of, the world around them (Egan, 1997). These kinds of understandings are messy and don’t necessarily follow an order that can be neatly summed up in a table or a graph. Learners move between and through the different kinds



of understandings as they acquire and effectively use the tools associated with each one (The Centre for Imagination in Research, Culture & Education, n.d.)

The thoughtful and intentional use of the cognitive tools of imagination, “can make students’ learning more efficient and effective, and can make teaching and learning more interesting, engaging, and pleasurable for all” (Egan & Judson, 2016, p.5). What really resonates with me is that emotion is at the heart of all learning - that emotional attachment to, and a sense of wonder about a topic, creates meaningful and memorable learning. When we feel something about the topic, we are much more likely to be invested and engaged in our learning. As a result, we are more likely to connect to it, remember it, and internalize it in a meaningful way.

### **Research Ethics**

Before beginning this action research project, I attended a workshop with Candase Jensen, from the SFU Office of Research Ethics to ensure that all ethics procedures were carefully adhered to and completed the online TCPS2: CORE 2022 Course on Research Ethics ([Appendix A1](#)). I followed the necessary protocols to obtain permission to conduct research in my district ([Appendix A2](#)) which included a copy of the informed consent for educators participating in the action research ([Appendix A3](#)). Their participation was voluntary and they could withdraw from the research at any point without any negative effects. Permission was obtained to use and share recorded interviews and reflections with members of my critical friends group, graduate cohort, and instructor in order to demonstrate my own learning, and a copy of the completed project will be shared with participants and the district. Throughout this action research project, all pandemic-related precautions, protocols and procedures were strictly adhered to, in accordance with the district, school, Fraser Health and Ministry of Education guidelines.

### **Literature Review**

Before beginning and throughout my action research, I read what felt like hundreds of articles. These are the ones that had the most impact on my research.

## ***Outdoor Learning***

I began by reading as many articles as I could on outdoor learning, and very early in my journey, I came across research conducted by van Dijk-Wesselius et al. (2020). The study looked at the outdoor learning experiences of teachers in five primary schools in the Netherlands over a period of two years and identified a range of barriers that educators face in regards to outdoor learning. van Dijk-Wesselius et al. (2020) categorized these barriers into four broad themes: lack of a formal status of outdoor learning in the curriculum, lack of teacher confidence in their own outdoor teaching expertise, difficulties in getting started, and physical constraints. These findings echoed what I had been noticing in my work with teachers around outdoor learning and really served as a starting point for my action research. I was curious to understand why teachers who believed in the value of outdoor learning and wanted to implement it into their practice, continued to face challenges that prevented them from taking their students' learning outside. They believed in the theory, but they struggled to put it into practice. As I continued to sift through the research, I came across a recent Canadian study conducted by Oberle et al. (2021) that identified many of the same barriers found by van Dijk-Wesselius et al. (2020). Despite survey data suggesting increased interest in outdoor learning, Oberle et al. (2021) pointed to teacher characteristics, systemic factors in the education system, culture, and environment as being barriers to outdoor learning. The teachers involved in my research shared similar challenges, including inclement weather, uninspiring school grounds, lack of time, pressure to cover the curriculum, lack of knowledge regarding outdoor learning, and concerns about student behaviour. As Oberle et al. (2021) state, "while it is critical to understand barriers, it is also important to take a strength-based perspective and identify support factors that can drive outdoor learning in schools, and through which barriers can be overcome" (p. 252). It was this idea of taking a strength-based perspective that led me to wonder if a resource like a *WC*, combined with support in planning and implementing the walks, could help not only the teachers involved in this action research, but teachers that I will work with in the future.

It was impossible for me to conduct this research without learning more about the theory of Imaginative Ecological Education (IEE), an approach to teaching that "is centrally concerned with student engagement with knowledge and with the natural world of which students are part" (Judson, 2015, p. 10). IEE identifies three principles: feeling, activeness and sense of place, each designed to engage the emotional and imaginative core of ecological understanding throughout

the teaching and learning process. Each of the three principles has a set of learning tools, similar to the cognitive tools of IE, that are used to engage students' emotional and imaginative lives (Judson, 2015). The first principle - feeling - requires that educators "determine *the story* on any given topic" (Judson, 2015, pp. 22-23) in an attempt to make the learners feel something about the topic they are learning about. The second principle - activeness - incorporates a set of learning tools that develop a "distinctly body-based understanding of topics" (Judson, 2015, p.23) and help students connect to the world around them. The third principle of IEE is sense of place. Place, and sense of place, have different meanings to different people, however, in terms of IEE, sense of place involves "both a personal relationship with one's context as well as a certain depth of knowledge about it" (Judson, 2015, p. 24). These principles, and the learning tools associated with each one, were incorporated into my work with the teachers participating in my action research. Many of the resources or programs available to, and used by, educators tend to view outdoor learning as either completely separate from the curriculum or something that can only fit into very specific curricular areas like science or physical and health education. The teachers participating in my action research were eager to move beyond outdoor play and the delivery of the occasional outdoor science lesson. They wanted to use the natural world as a classroom and to create opportunities for their students to develop a deeper ecological understanding. By taking an IEE approach in my research, it was my hope that the teachers participating would feel inspired and supported to take their students' learning outside, not as an extra stand-alone activity, but as part of an intentional and regular practice woven into all areas of the curriculum.

I was disappointed and a little frustrated to discover that so much of the research around implementing outdoor learning is focused on early childhood and free play. I was interested in finding research that examined outdoor learning in the late primary and early intermediate grades and I was also interested in reading research that looked at the experiences of teachers and learners when engaging in more focused and regularly scheduled outdoor learning activities not in a dedicated outdoor education program or a Forest School.

### ***Educational Change***

One of the central themes in my research is that of educational change. Before I began working with the teachers in my action research project, I was already aware of the

complications and complexities of effecting change. I reflected on past attempts at change that had been less than successful and considered what I could do to support the participating teachers. One of the biggest obstacles in the way of systemic change, is the lack of alignment between individual teachers and those leading the change. According to Egan (1999), this is a common problem in the world of education. We all hold presuppositions, or beliefs, that influence and guide the decisions we make, and how and why we make them. When we fail to identify our own presuppositions, as well as those of the people we are working with, it is virtually impossible to achieve any kind of meaningful or effective change. In my experience, there is often little to no time spent uncovering, sharing, and discussing beliefs prior to the implementation of any sort of systemic change. This step can be difficult, uncomfortable, and time consuming, but every time these valuable conversations are bypassed, the change is superficial at best. Although the teachers participating in this research were committed to implementing outdoor learning into their practice and embraced this particular educational change, it was still important for me to begin our research with this step in mind. I began by interviewing each of the teachers participating in the project, with the goal of gaining a better understanding of the participants' beliefs about outdoor education before implementing the walks and cognitive tools from a *WC*. I wanted to create the conditions and environment that would support what Fullan (2016) claims to be the two most important components that drive successful change: moral purpose (of both the individual and the institution) and knowledge. My hope was that by using a *WC* as a guide, offering support in planning and implementing the walks, and providing opportunities for reflection, would bring about a real change resulting “in a sense of mastery, accomplishment, and professional growth” (Fullan, 2016, p. 21) for the teachers involved. Any kind of real change, whether it’s voluntary or imposed, states Fullan (2016), “involves loss, anxiety and struggle. Failure to recognize this phenomenon as natural and inevitable has meant that we tend to ignore important aspects of change and misinterpret others” (p. 19). I was aware that although the teachers participating in my research were eager to learn more about IE, the *WC* and cognitive tools, they were all starting at different points and I understood that the process of change could be challenging.

I did a google search using the terms “educational change and outdoor learning” and came across an article by Jickling et al. (2018) outlining a set of guiding principles that are “both points of departure and places to return” (p. 2) for teachers interested in outdoor learning and

change. Jickling et al. (2018) refer to these guiding principles as ‘touchstones’ and identify six: agency and the role of nature as co-teacher; wildness and challenging ideas of control; complexity, the unknown, and spontaneity; locating the wild; time and practice; and cultural change. Jickling et al. (2018) state that “there is a growing recognition that life on this planet is in trouble and that if change is going to happen then education needs be at the heart of that work” (p. 2). The touchstones are a response to this call and are intended to provide a framework to promote and support the change required. Each touchstone speaks to “the concerns and intuitions that we have begun to identify. And our hope is that the touchstones offered below will resonate with, and constructively challenge, the work and thinking we are all doing” (Jickling et al., 2018, p. 2). As the teachers and I planned walks using the *WC* and the cognitive tools of imagination, I kept these guiding principles in mind. I used many of the questions posed in the article as inspiration for the questions I asked the participants to consider in their post-walk reflections. Two questions, in particular, stayed with me as we planned, delivered and reflected on the walks: “How am I maintaining and nurturing my own practice of immersing in, and building relationship, with the places and beings I encounter? Am I noticing my practice, trying new things, reflecting on what has been attempted, and creating the kinds of support that allow me to continue to expand as a teacher?” (Jickling et al., 2018, p.9).

### ***Teaching Teachers Through an Imaginative Education Approach***

Towards the very end of my action research project, I stumbled across an article by Judson et al. (2021) about their experiences of being teachers teaching teachers, while using the pedagogy of IE. I devoured the article, highlighting nearly every line. The experience of being an IE educator teaching other educators about IE is a very different experience than using the same approach when teaching children. Or is it? No matter how old the students are, when taking an IE approach to teaching them, the educator must “recognize which cognitive tools are primarily leading their students’ engagement with the world” (Judson, et al., 2012, p. 2). This can be done, claim Judson et al. (2012), through the thoughtful use of the cognitive tools found in oral language, written language, and theoretical language. When teachers are able to discover which cognitive tools are best suited to their particular group of students, they are better able to capture their learners emotions and imaginations, making the learning more meaningful and memorable.

This article also reminded me that as I worked with the teachers, I needed to keep relationships at the heart of my work. Interpersonal relationships with each teacher would be key in effecting a change to their practice “because sometimes we are best able and comfortable employing cognitive tools when we feel part of a community, when we feel we belong, and, most importantly, when we feel we are in a safe pedagogical space to take learning risks” (Judson et al., 2021, p. 4). The other relationship that would need to be nurtured, in order to take an IE approach to outdoor learning, would be the relationship between the teachers and the content we would be engaging with. As I worked with the teachers in my action research, I wanted them to live IE. I encouraged them to be perfinders - to perceive, feel and think, all at the same time, as we worked together to plan and provide outdoor learning experiences that would allow students to do the same (Judson et al., 2021).

### ***Indigenous Perspectives***

*Learning from the land is not innovative. Indigenous Peoples have been doing it since time immemorial. – Heidi Wood (personal communication, May 30, 2022)*

As the teachers involved in my action research and I co-planned, delivered, and reflected on our early walks, we realized that they were very much situated in a Western colonial perspective of outdoor learning. In my experience, outdoor learning is very often approached with a mindset that sees the natural world as being a resource and object that serves human interests. Wanting to learn more, I asked a colleague in our district’s Indigenous Education department to recommend some reading for me. One of the articles she shared really changed the way in which I thought about outdoor learning and had an effect on how I supported the teachers throughout the rest of my research project. “For anyone who seeks an understanding of what Indigenous land-based education is, it may be instructive to begin by grasping what it is not. If your mind went straight to “taking the classroom outside” or “outdoor education,” bingo: that’s what it’s *not*. Or at least, that’s not all it is - not by far” (Canadian Commission for Unesco, 2021, p. 2). Through a process that centers and values respect, reciprocity, reverence, humility, and responsibility, connecting to the land “has the capacity to create transformational opportunities for all Canadians to learn about the many ways in which our education, economic,

social and political systems reinforce colonialism” (Canadian Commission for Unesco, 2021, p. 2).

At the same time that I was conducting my action research, *Walking Forward: Learning From Place* (Wood & Judson, 2022) was making its way into the world. The resource was the result of a project seeking to “support teachers in imaginatively engaging their students in outdoor learning and in understanding the First People’s Principles of Learning (FPPL)” (Wood & Judson, 2022, p. 5). The resource builds upon the walks in a *WC* and expands the definition of Place, with a capital P. Rather than viewing place as its physical location, Place refers to “the emotional and ancestral connections that include the physical landscape, language, resources, traditions, protocols and history to a specific area” (Wood & Judson, 2022, p. 5). During my research, I had the opportunity to plan and deliver the “Feeling Rooted” walk from Wood and Judson’s (2022) resource. I had done the walk several times, with different classes, using a *WC*, but embedding Indigenous perspectives and knowledge changed the walk by encouraging all of us - teachers and students - to look at our Place differently and to develop a deeper understanding of and a connection to the world around us.

### ***Mediation***

As part of my research, I wanted to look at supports provided to teachers when they are implementing change and understand the role that those supports play in effecting that change. I immediately thought about Vygotsky’s theory of development, specifically the idea of mediation. Vygotsky believed that development and learning were not processes that happened naturally or were simply discovered but were instead influenced by social and cultural factors. He argued that children’s development and learning happen through social interactions with adults or more knowledgeable peers, through the use of cognitive tools, and as such, should be considered when developing and implementing learning experiences (Kozulin, 2003). I wondered if the same would be true of adults undertaking new learning. According to Vygotskian theory, there are:

two faces of mediation, one human, the other symbolic. Approaches focusing on the human mediator usually try to answer the question, What kind of involvement by the adult is effective in enhancing the child’s performance? Those who focus on the symbolic



aspect pose the question, What changes in the child's performance can be brought about by the introduction of symbolic tools - mediators?" (Kozulin, 2003, p. 19).

As I designed my research, I replaced 'child' with 'learner' and considered myself a human mediator and the resource, a *WC*, as a symbolic mediator.

Kozulin (2003) summarizes Vygotsky's view of human mediation, explaining that "each psychological function appears twice in development: once in the form of actual interaction between people, and the second time as an internalized form of this function. (p. 19). Through my research, I was curious to see if the participating teachers would be able to take our shared interactions and internalize them in such a way that they would become part of their own psychological functions (Kozulin, 2003).

According to Vygotskian theory, one of the most important symbolic mediators is writing (Kozulin, 2003). Without guided experience, however, "symbols may remain useless unless their meaning as cognitive tools is properly mediated to the child. The mere availability of signs or texts does not imply that they will be used by students as psychological tools" (Kozulin, 2003, p. 24). I kept this in mind as I guided the participating teachers through the use of a *WC* with the hope that the teachers would not only be able to independently and effectively use it to plan and deliver outdoor learning experiences for their students, but also take their learning and apply it to different contexts throughout the curriculum.

### **Research Design**

As a Primary Learning Coordinator, I don't have my own class and I work with a variety of K-5 teachers across the 26 elementary schools in our district. In order to answer my question - How do teachers experience the *WC* and what impact does it have on their practice? - I decided to work with a small group of teachers already involved in a school-wide inquiry around outdoor learning. I wanted to keep the group small and wanted the teachers to be teaching similar grades, in the hopes that there might be a possibility for collaboration. Research indicates that "teachers are often the preferred source of ideas for other teachers" (Fullan, 2016, p. 62) and I wanted to harness that power, not only by supporting the teachers myself, but by also having them support each other.

My action research project was designed to support teachers in taking their students' learning outside, by giving them some background on IE and cognitive tools. We used a *WC* as

our resource for planning the walks. The teachers and I met to plan one walk at a time and delivered it at a later date. After each planning session and walk, we all wrote down our reflections, questions and suggestions and shared them before the next walk. Ms. L's class and Mrs. M/Miss C's class go outside together every Wednesday for "Wilderness Wednesdays" so we decided to keep this format and schedule. We met ahead of time to co-plan our walks and then took the two classes out together when we delivered the walks. Ms. G and I co-planned and delivered walks for her class only.

I felt it was important to not only co-plan the walks with teachers, but also to co-lead some of them. The idea was for there to be a gradual release of responsibility - we would co-plan the first walk together and I would lead it while the teacher observed. We would then co-plan and co-lead the second walk, and finally, for the third walk, the teacher would plan and lead the walk independently while I observed. This format ended up looking different for each teacher.

In order to enhance the credibility of my inquiry, I used a triangulation method to collect my data. The first method of data collection was individual interviews. Before beginning to co-plan and deliver walks with the teachers, I interviewed each teacher individually. Because of different comfort levels and because I wanted to be able to record the interviews, I chose to conduct each one over Zoom. I chose to interview the participants because I wanted to begin to develop a relationship before working together ([Appendix B1](#)). Interviews would feel more natural and conversational, and I hoped that they would lead the participants to share more personal insights and allow me to delve deeper into their responses (Parsons et al., 2016). My interviews followed a semi structured format with a bit of an emergent structure thrown in. Because I knew that each of the teachers involved in my research had different experiences with outdoor learning, I wanted to use a semi structured interview format by asking the same questions, in the same order, so that I could see the differences and similarities in their responses. I did, however, slightly alter my interview questions for Miss C, the teacher candidate, as I knew her teaching experience was limited. It was also important to me to have the interviews be somewhat emergent, allowing me to have the flexibility to ask the participants follow-up questions (Parsons et al., 2016). I did not provide the participants with a list of questions beforehand. Giving the participants a list of questions ahead of the interviews may have increased the teachers' comfort level, allowing them to think about their answers ahead of time. On the other hand, they may have felt pressured to do some research ahead of the interviews in

order to give the “right” answers. Something to consider next time, for sure. Once the interviews were complete, I transcribed them to use as a reference throughout my research ([Appendix B2](#)).

The next form of data collection I used was observation. After each co-planning session and walk delivery, I took time to reflect on the experience and wrote down my observations - what I noticed and what I wondered. Samples of my reflections can be found in [Appendix B3](#).

I also asked each of the teachers to take some time after co-planning and delivering a walk, to reflect on the experience. In order to make this process as easy as possible for the teachers, I emailed a list of questions ([Appendix C2](#)) to help guide their reflections, making sure to provide them with an opportunity to add their own observations and questions. At the end of the series of walks, I emailed a final questionnaire ([Appendix C6](#)) to each of the teachers. See Appendix B6 for samples of the teacher responses.

## Implementation and Fieldwork

*If you want to walk fast, walk alone. But if you want to walk far, walk together. - Ratan Tata*

### ***Initial Interviews***

I began my fieldwork by interviewing each teacher individually ([Appendix B2](#)). The initial interviews served several purposes, the first being to begin to develop a relationship with each of the teachers, two of whom I had never met. Making a change, even when it is desired, can make you feel vulnerable, especially when you are making the change in front of others. The teachers participating in my research were opening up their classrooms to me, allowing me to guide them through a change in their practice, and allowing me to share their stories. I was incredibly grateful and I wanted their experiences to be positive.

Another reason I had for conducting initial interviews was to uncover each teachers' behaviours, beliefs and values, and the intended or unintended consequences of those behaviours - what Robinson (2018) refers to as "theories of action" (p. 14). In order for any kind of change to be successful, it's important to understand the starting point. I wanted to learn about each teacher's strengths, their challenges, their reasons for wanting to learn about IE, cognitive tools and a *WC*. I wanted to know what they hoped to get out of their participation in the research project and what they thought success would look like.

The interviews allowed me to explain the research project in more detail and gave the teachers an opportunity to share their experiences with outdoor learning, specifically, their knowledge of the *WC*, IE and cognitive tools. This was also a time for teachers to ask any questions and to let me know what supports they wanted or needed.

### ***School Culture and Collaboration***

*"There's definitely a culture of collaboration and outdoor learning. There are definitely people who are willing to try lots of different things." - Mrs. M, Grade 2 teacher, initial interview*

The teachers I interviewed expressed feeling supported by their administration, their colleagues and their students' families in taking their students outside. They were appreciative of

the resources available to them and were especially thankful to be able to have the opportunity to co-plan lessons and have the chance to observe one or two, before planning and leading them on their own. At the end of the research, they all pointed out how helpful it was to be able to co-plan and deliver the lessons with someone more experienced and knowledgeable about a *WC*, *IE* and the cognitive tools.

### ***Beliefs About Outdoor Learning***

*“I just love being outside with the kids. I think whenever they have the opportunity just to be out in the fresh air, and to be active, and be curious and explore and observe - you know - all of those things fit into their science, their language and their math.” - Ms. G, Grade 2 teacher, initial interview*

Although each teacher was at a different stage in their outdoor learning journey, they all believed in the benefits of learning outside and expressed the desire to implement it in a more thoughtful and purposeful way. Each teacher shared different reasons for their interest in taking students’ learning outside, including mental and physical well-being, equity, connecting to place, thinking about learning in different ways, and the freedom to be curious and explore. Jickling et al. (2018) share several of these beliefs, stating that education “can include intentional activities that provide a fertile field for personal and purposeful experiences without controlling the environment and its actors, the learners, or the outcomes” (p. 3), and describe the natural world as a place where “people and more-than-humans are able to interact in equitable ways, where all have the opportunity to flourish and express themselves as they best might (p. 3).

### ***Outdoor Learning Successes***

*“It was pouring rain. Pouring rain. They [the students] put on their Muddy Buddies, they put on their boots and they went out. I think we were out there probably the longest time we’ve ever been exploring. They were just so engaged in what they were doing. I mean, it was more play than it was actual learning, but we turned the play into learning when we went back into the classroom. We created stories about what was happening that day, we documented, we shared thinking. It was so enriching that it just became more.” - Ms. L, Grade 3 teacher, initial interview*

The teachers had many success stories to share about outdoor learning and eagerly communicated tales of lessons they felt went particularly well and lessons that started out rocky but turned out to be amazing in the end. What really struck me about these success stories, however, was how proudly the teachers spoke of the positive impact outdoor learning had on their students. These student success stories served as motivators for the teachers, encouraging them to learn even more and provide opportunities for their students to soar. As Fullan states (2016), each time a change works out, it results in “a sense of mastery, accomplishment and personal growth” (p. 21) and once we feel those results, our confidence increases and we want to do more.

### ***Outdoor Learning Challenges***

*“I just found it was really difficult to keep their attention - they were just so excited about the rocks and who was going to sit next to a friend on the rock, who was going to stand on the rock and focus their attention. I just thought - This is not how I envisioned this. I envisioned them sitting on the rocks in this peaceful circle and listening again to the acknowledgement and being able to set the intention for our walk.” - Ms. G, Grade 2 teacher, initial interview, on attempting to start a walk at the rock circle*

Despite their many successes, the teachers in this action research also had many challenges to share. The challenges mentioned by the teachers during our initial interviews

overlapped and were identified as barriers in the research conducted by van Dijk-Wesselius et al. (2020) and Oberle et al. (2021). The challenges that came up over and over again included safety concerns, inclement weather (i.e. “Wet Coast Weather”), lack of confidence, concerns about where and how to begin, lack of time, lack of connection to the curriculum, uninspiring outdoor space, and concerns regarding students’ behaviour when outside. All of these challenges are legitimate and are not unique to this group of teachers. Some challenges have relatively easy fixes, such as setting the expectation that you will go out rain or shine, requesting that parents dress their kids appropriately and asking the parent community for donations of outdoor clothing. Other challenges, however, require a bit more effort. I thought that many of these “extra-effort” challenges could be addressed through proper mediation and I offered support during the planning and delivery of the walks, using the *WC* as a guide. Lack of confidence and uncertainty, treating outdoor learning as an add-on, not having enough time, and thinking the outdoor spaces weren’t ‘natural’ enough, were all considerations in the development of Judson’s (2018) resource: “this book will be readily useable for teachers K-12. The activities described can easily be adapted and used in all contexts - limited additional time and/or resources are required” (p. 1). Another challenge identified by the teachers was managing student behaviour when learning outdoors. I found this challenge to be the most interesting and perhaps the most difficult to address. First of all, each one of us has different ideas about what “good behaviour” looks and sounds like. For some people, good behaviour might be students working quietly and independently, following directions, and completing tasks exactly as the teacher intended. For others, good behaviour might be students having lively discussions, using a space in different ways, approaching tasks with flexibility, and completing the tasks in a variety of ways. During my research, I also discovered that “good” or “appropriate” behaviour is closely linked to teachers’ ideas of what does and does not constitute learning. In research conducted by Hunter et al. (2018), there are two different approaches teachers take when going outdoors with students: an “inherently experiential learning found within open-ended, free-play, and the knowledge and values orientation of a more structured environmental education” (p. 35). Many of the behavioural problems identified by teachers during our walks, seemed to me, to come “out of conflicting goals of what outdoor experiences are for; getting energy out and gross motor development or more cognitive and emotional development, including the inculcation of environmental values” (Hunter, et al., 2018, p. 35). It was my hope that by approaching outdoor



learning with an IE lens, and by using cognitive tools and the *WC*, we would be able to bridge these two seemingly conflicting goals (open-ended free-play vs. structured activities) and address the behavioural concerns the teachers identified, by equipping the students with a toolkit of cognitive tools they could employ as they used their body, emotions and feelings to explore and make meaning of the world around them.

### ***Imaginative Education, Cognitive Tools and Walking Curriculum 101***

*The first time I actually looked at the Walking Curriculum and looked at the book was when we were teaching during COVID - it was available for free. Basically, I would want to go for a walk, flip through and find one that works for us in our area. I don't necessarily read everything that I should be doing for the walk. I think sometimes, I'll read just the title of the walk and I'll be like - "Oh! A shape walk! We're gonna go look for shapes!" and I don't necessarily read the whole lesson - the suggestions and stuff. - Mrs. M, Grade 2 teacher, initial interview*

All of the teachers involved in my action research expressed an eagerness to learn about IE and cognitive tools, and were excited to work with me to implement some walks from a *WC*. Although three of the four teachers were familiar with the resource, none of them had read the entire book and they were all unfamiliar with the theory of IE and its cognitive tools. They all admitted to using the titles of the walks as inspiration, but none of them had tried using the cognitive tools suggested with the walks. Miss C, the teacher candidate, had never heard of a *WC*, IE or cognitive tools. I was excited to share my own experiences, successes and challenges with the teachers and was hopeful that their experiences would be as positive as mine. I hoped that an understanding of IE, cognitive tools and the *WC* would lead to a commitment to regularly incorporate outdoor learning, to go beyond the walks in the resource and to implement the theory of IE and use cognitive tools in other areas of their practice. Before diving straight into the co-planning and delivery of the walks, I gave the teachers a crash course in IE and cognitive tools. Without having a basic understanding of the theory of IE, cognitive tools, and why we might want to use this approach, the change the teachers were looking for - improving the way they planned and implemented outdoor learning experiences - would not be successful. With this in mind, I gave the teachers a brief explanation of IE and cognitive tools at the beginning of our

first co-planning sessions, along with a paper copy of my summary of IE ([Appendix C1](#)), that they could look over again at their convenience.

### ***The Walks***

The walks in the *WC* are divided into three sets. The first set includes 30 easy walks that are each paired with some guiding questions and a student activity inspired by the use of a cognitive tool. This first set of walks are appropriate for students in K-12 and do not involve much direct instruction or guidance before getting outside. The walks in the next section require a bit more direct instruction and guidance and are most effective when introduced ahead of time. The final set of walks are geared more towards high school students.

In order to take ownership of their learning, I felt it was important for the teachers involved in my research to choose their own walks. I encouraged them to choose the ones they thought would engage the body, emotions, and imaginations of their students, but I also wanted them to choose walks that sparked *their* curiosity and engaged *their* feelings and imaginations. The teachers all ended up choosing walks from the first set in the book. Although this was not intentional, in hindsight, I think this was the best way to introduce the walks and the cognitive tools. In the future, when introducing other teachers to the *WC*, I will definitely encourage them to choose a walk from the first set.

Co-planning the walks was a key component of my research. I agree with Fullan's (2016) claim that "teachers need to participate in skill-training workshops, but they also need to have one-to-one and group opportunities to receive and give help and more simply to *converse* about the meaning of change. Purposeful interaction is essential for continuous improvement" (p. 108, emphasis in the original). I wanted to have those one-on-one opportunities to work together and talk about the change the teachers were making. I wanted to be what Vygotskian theory refers to as a mediator, providing the teachers with support so that they could take what we did together, learn and internalize it, with the goal being to eventually do it independently without my support (Kozulin, 2003). And so, it was based on these ideas, that I designed the fieldwork portion of my research to include a gradual release of responsibility. Things didn't go exactly according to plan and adjustments were made. The walks are laid out in the order they were taken and the teachers' post-walk reflections are shared below.

## Walk 1 - Vertical World Walk, p. 19 from *A Walking Curriculum* (Judson, 2018)

**Figure 5**

*Vertical World Walk Lesson Plan, April 11, 2022 - Ms. G*

Monday, April 11, 2022  
9:00 - 10:00

Grade 2 class

**Vertical World Walk - p. 19, *A Walking Curriculum***

- Walking from
- Gather students outside, in a circle, to set the intentions for the walk
- Do you know why we are in a circle?
- How are we going to be outside? What will it look like? Sound like?
- What is my signal that I want everyone's attention?

**Prompts**

What pulls your gaze downward?  
What pulls your gaze upward?  
What shapes and spaces fill the in-between world?  
\*what do we mean by "gaze"? "the in-between world"?

**Cognitive Tool: Jokes and Humour**

What would it be like to live off the ground?  
Imagine what your school would be like if it was normal to exist above the ground.  
How would games like basketball be played?

Ms. G chose the Vertical World Walk as our first walk. She had done it the year before with her class, but wanted to try it again with this new group of learners, and wanted to use the cognitive tools. We were unable to co-plan our first walk in person, so I sent her an email with the lesson plan and a brief overview of IE. I asked Ms. G if I should lead the first walk and she suggested that we co-lead it. We began the walk by gathering the students outside in a circle to acknowledge the land, the Nations whose traditional territory we were on and to ground ourselves in our Place. We reviewed expectations for outdoor learning and set the intentions for the walk. Ms. G asked the students to walk single file, as we would be walking in the community. Our final destination was a fair distance from the school and would require us to keep a certain pace if we wanted to get there and back in an hour. At the end of our walk, we gathered once again in a circle to complete the student activity inspired by a cognitive tool. Later in the day, Ms. G had the students complete a follow-up activity where students folded a paper

vertically, into 3 sections, and asked the students to draw something they saw when they looked up, something they saw at eye-level and something they saw when they looked down.

After the walk was completed, I asked Ms. G to answer some reflection questions ([Appendix C2](#)).

### **Post-Walk Teacher Reflections - Ms. G**

#### **Successes**

- gathering outside in a circle for a land acknowledgement and explaining the significance of the circle
- setting the intentions for the walk
- the variety of spaces covered in the walk
- stopping to gather kids to ask questions and share something interesting found on the ground

#### **Challenges**

- having to remind the students to leave behind the sticks they found
- some students had challenges with listening
- the students had difficulties listening and focusing their attention when we gathered in a circle back at the school at the end of the walk to allow students to share ideas and respond to some interesting questions

#### **Suggestions/Questions**

- wrap-up may have gone better in the classroom

## Walk 2 - Feeling Rooted Walk, p. 24 from Walking Forward (Wood & Judson, 2022)

### Figure 6

*Feeling Rooted Walk Lesson Plan, April 13, 2022 - Mrs. M, Miss C, Ms. L*

Wednesday, April 13, 2022  
9:30 - 10:30

**Feeling Rooted Walk - p. 22, A Walking Curriculum and Walking Forward**

- Walking around on the school grounds
- Gather students outside at the rock circle:
  - Honour the land beneath our feet, our Place which holds us up and our ancestors, those who were here before us
  - to set the intentions for the walk (Feeling Rooted Walk)
- Do you know why we are in a circle?
- How are we going to be outside? What will it look like? Sound like?
  - You need to be able to see a teacher and a teacher needs to be able to see you
  - No playing on the playground
  - Leave nature in nature
  - Have fun!
- What is my signal that I want everyone's attention? Classroom teachers use a whistle, so we'll stick with that.

**Prompts**  
What are roots? What has roots? - share out

Students look around for things that have roots  
Come back to the circle - What did you find? What did you notice about the roots?

Indigenous Connections:

- First Peoples harvested various kinds of roots for multiple purposes
- Coast Salish peoples harvested cedar roots to make baskets

- Interior Salish peoples harvested balsam roots to make a salve for skin ailments

Knowing what, where, and how to harvest roots is an example of Indigenous traditional ecological knowledge.

Being able to recognize and sustainably harvest roots shows a connections to Place = community, traditions and history

**Cognitive Tool: Metaphor** (inside the class and record ideas on the whiteboard)  
Use the Metaphor Cognitive Tool: Humans often use language related to trees (and other plants) to describe themselves. For example, we talk about "to be rooted" or "branching out". What does it mean to have good roots? What does it mean to branch out?

Have students do a reflection - What did you see? What did you learn today?  
Why do we use "tree language" to describe humans?

This walk was co-planned, in person, with Mrs. M, Miss C and myself. Ms. L was away sick and was not able to plan with us. The teachers chose the Feeling Rooted Walk from a *WC* because it sounded interesting. During my research, I had the opportunity to participate in a learning series facilitated by Heidi Wood and Dr. Gillian Judson, the authors of *Walking Forward: Learning from Place* (2022). The resource was not yet available to the public but I was part of a group of educators testing some of the walks out with classes. The timing could not have been better. The teachers involved had expressed an interest in incorporating Indigenous perspectives into the walks. Feeling Rooted was one of the walks in the new resource and I was excited to share it with the teachers and try it out with students. In our initial interviews, the teachers expressed some frustration with the lack of different natural spaces on their school

grounds. We wanted to see if wonder could be found and connections could be made even in spaces that appeared to be uninspiring, so we decided to take this particular walk on the school grounds. I led the walk and the teachers observed. I gathered the students at the rock circle and started our walk by grounding ourselves in our Place. We reviewed outdoor learning expectations and then we began the walk, starting with the guiding questions, followed by some small group exploring (buddies) and sharing our discoveries and learning about the different ways First Peoples have harvested roots for multiple purposes. We ended the walk outside with the student activity inspired by the cognitive tool - metaphor. The students went back inside after the walk to complete a follow-up activity where they were asked to work with a partner to draw or write about something they had learned, something they saw, or examples of the “tree language” we used to describe humans. After the walk was completed, Mrs. M and Miss C shared their reflections. See [Appendix C2](#) for reflection questions.

### **Post-Walk Teacher Reflection - Mrs. M**

#### **Successes**

- beautiful weather
- the walk focus gave students lots to think about
- conversation before the walk was rich and gave the students a good purpose to move forward in their learning
- expectations were followed and students were aware of what they were supposed to do
- students were engaged
- the conversation after the exploration led to many new thoughts and learning
- a lot of students were prompted to think more deeply about their roots and what that means to them and their place

#### **Challenges**

- some students didn't stay with their buddies
- some students seemed to be off task near the end of the walk - they were drawing in the mud and playing with sticks in the dirt

#### **New Learning**

- the idea of not repeating what students said so they have ownership of their ideas

#### **Cognitive Tools**

- tools were new to me and I really liked the use of metaphor because it gave deeper meaning to the purpose of the walk
- usually I would have just come back from the walk and talked about what we discovered about roots
- the cognitive tool gave the students something more to think about - they built on each others' ideas more than they have ever before

### **Post-Walk Teacher Reflection - Miss C**

#### **Successes**

- two classes walking together
- students had so many reflective ideas to share and no answers were the same
- I was in awe the unintentional metaphor a student used when they said that humans have roots inside of them - their veins

#### **Challenges**

- hard to keep students I don't teach (the other class) on task

#### **New Learning**

- not repeating what students said so they had ownership of their ideas
- allowing the students to lead the discussion - less teacher directed
- felt like true inquiry
- as a new teacher, I am still learning to let students think on their own - I feel the need to fill the space of silence

#### **Cognitive Tools**

- using metaphors without being explicit about it was interesting and added lots of meaning to the walk
- using metaphor, without actually calling it that allowed the class to have many answers and opportunities to compare roots and terms of rooted/branch out to other things in their world and made the walk/discussion that much more engaging



### Walk 3 - Hiding Places Walk, p. 23 from *A Walking Curriculum* (Judson, 2018)

#### Figure 7

*Hiding Places Walk Lesson Plan, April 20, 2022, Mrs. M, Miss C, Ms. L*

Wednesday, April 20, 2022

10:50 -12:00

#### Hiding Places Walk - p. 23, *A Walking Curriculum*

- Explore the same space that we explored in the "Feeling Rooted Walk"
- Gather students outside at the rock circle:
  - Honour the land beneath our feet, our Place which holds us up and our ancestors, those who were here before us
  - Who remembers why we meet in a circle?
  - Set the intentions for the walk (Hiding Places Walk)
- How are we going to be outside? What will it look like? Sound like?
  - You need to be able to see a teacher and a teacher needs to be able to see you
  - No playing on the playground
  - Leave nature in nature
  - Have fun!

#### Prompts

What good hiding places can you find (think of)? Think of a hiding place for yourself. What makes a good hiding spot for a person? (Share out as a whole group)

What would be the best hiding place for: (explore our Place with a partner and be ready to come back to the circle and share out)

- a raccoon?
- a mouse?
- a spider?

What other animals can you think of that might have hiding places in this area?

Why do you think — would be the best hiding spot for —?

#### Cognitive Tool: Binary Opposites

##### Whole Group

What would you say if I told you, that right now, all around us, there is a giant game of "hide and seek" going on.

What do I mean by this?

##### Partners/Small Group

What things in nature do you think are always trying to hide? Why?

What is a hider? (prey)

What is a seeker? (predator)

Identify "prey" and "predators" - hiders and seekers

Think about the whole space above ground, underground, look up, look down, look all around.

#### Follow-Up

On 11x17 work with your partner to draw our space and label the "hiders" and the "seekers".

Mrs. M and I co-planned this walk in person and shared the plan with Miss C and Ms. L. Just as we had in our first walk, we decided to meet at the rock circle to ground ourselves and review our outdoor learning expectations. We also decided to explore the school grounds once again to see if we would notice something new. I once again began with some of the guiding questions, sent the students off to explore with their buddies and gathered them back together periodically to share their observations and ask questions. Then I introduced the student activity using the cognitive tool of binary opposites and had the students think about hiders and seekers. We wrapped up the walk inside with a follow-up activity where students worked with a partner



to draw a hider and seeker scene. Mrs. M, Miss C and Ms. L shared the following reflections after the walk. See [Appendix C2](#) for reflection questions.

### **Post-Walk Teacher Reflection - Mrs. M**

#### **Successes**

- student engagement was high
- it was nice to explore the same space as last week
- students listened well at the beginning of the lesson

#### **Challenges**

- some students are still drawn to the playground and some needed reminders to stay off of it

#### **Cognitive Tools**

- having two walks using cognitive tools under our belt, I feel like I would always use the cognitive tools now
- it was interesting that some students could make a connection to curriculum we are covering (lifecycles)

#### **Questions/Suggestions**

- it would be nice to have some curricular connections attached to the walks in the book

### **Post-Walk Teacher Reflection - Miss C**

#### **Successes**

- the ideas students offered were so great and gave good insight to their thinking

#### **Challenges**

- it was hard not to jump in and give my students ideas and suggestions when they were thinking

#### **Cognitive Tools**

- having binary opposites was great because it gave student the black and white of prey and predators

#### **Questions/Suggestions**

- it would be nice to play a re-enactment game of prey vs. predator
- I'm surprised that the food chain didn't come up and the fact that some animals are both predator and prey

**Post-Walk Teacher Reflection - Ms. L****Successes**

- the whole walk was well laid out
- having layers to the questions allowed students to think deeper each time they went to explore
- valuable being on the school grounds again - we need to revisit it more
- the student deeper thinking answers made me proud and reminded me why we go out so much
- time and patience pay off
- the follow-up lesson was important for reflection

**Challenges**

- some students are still drawn to the playground and it reminded me to revisit the school more during Wilderness Wednesdays
- it frustrated me when the students weren't using local animals and were being silly about the animals

**Cognitive Tools**

- they make the walk more meaningful and help guide the thinking and allow our students to make more connections

## Walk 4 - Hiding Places Walk, p. 23 from *A Walking Curriculum* (Judson, 2018)

### Figure 8

*Hiding Places Walk Lesson Plan, April 25, 2022, Ms. G*

Monday, April 25, 2022  
9:00 - 10:00 am

**Hiding Places Walk - p. 23, *A Walking Curriculum***

- Explore the school grounds or go for a walk around the neighbourhood?
- \* ✕ • Gather students outside at the rock circle:
  - Honour the land beneath our feet, our Place which holds us up and our ancestors, those who were here before us
  - Who remembers why we meet in a circle?
  - Set the intentions for the walk (Hiding Places Walk)
- How are we going to be outside? What will it look like? Sound like?

**Prompts**

What good hiding places can you find (think of)? Think of a hiding place for yourself. What makes a good hiding spot for a person? (Share out as a whole group)

What would be the best hiding place for: (explore our Place with a partner and be ready to come back to the circle and share out)

- a bunny? (\* made these suggestions)
- a robin?
- a ladybug?

What other animals can you think of that might have hiding places in this area?

Why do you think — would be the best hiding spot for —?

*Why do animals hide?*

**Cognitive Tool: Binary Opposites**

Whole Group

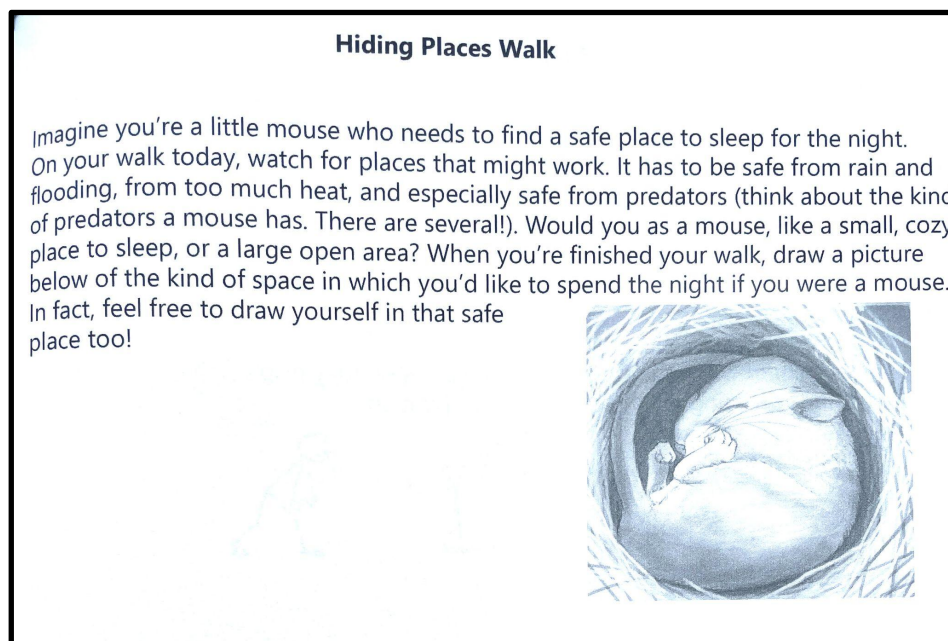
What would you say if I told you, that right now, all around us, there is a giant game of "hide and seek" going on.

This walk was co-planned over email. Ms. G chose the Hiding Places walk as she had heard how successful it had been for Mrs. M, Miss C and Ms. L's classes. I was interested in seeing how different teachers experienced the planning and delivery of the walk. Ms. G proposed that we go off the school grounds to look for hiding places. Our first walk together was long and it felt like we spent a lot of time getting to our destination and less time looking closely and really exploring our space. Because of that, I suggested that we do this walk on the school grounds so the students would have more time to explore. Ms. G agreed that it would be a good

idea and we decided to lead the walk together. Ms. G took the guiding questions from the resource and suggested we make some changes to the animals. Instead of identifying the best hiding places for a raccoon, a mouse, or a spider, Ms. G proposed a bunny, a robin, and a ladybug. I loved that she took the resource and made it work for her and her students' context. Ms. G had also recently discovered *Playing in the Muck and Other Arty Stuff: Imaginative Art Activities for The Walking Curriculum*, by Adelle Caunce (2020) and wanted to try one of the extension activities from the book as a follow-up to the walk.

### Figure 8

*Extension Activity from Playing in the Muck and Other Arty Stuff (Caunce, 2020) - Hiding Places Walk*



We decided to try meeting at the rock circle to ground ourselves, review outdoor learning expectations, set the intentions and share the guiding questions. Ms. G was eager to try meeting at the rock circle, as a past experience with this class had been less than successful. It had recently rained and Ms. G instructed the students to work in pairs and reminded them to stay on the path as we explored different parts of the school grounds, so that the students wouldn't get wet feet and grass wouldn't get tracked into the school. The students started out the walk by staying on the path, but it quickly became apparent that this was not feasible. Soggy feet would

dry and we'd just take extra care to wipe our shoes off before going back in. After exploring and thinking like a bunny, a robin and a ladybug and looking for other hiding spots, I introduced the cognitive tool activity. The students were engaged and their responses were thoughtful. At the very end of our walk, we ended up circling a huge cedar tree near the front of the school. Several students started to peek inside and one student climbed into the branches - which caused a bit of disruption to the lesson. We ended with a sharing circle. The students completed the follow-up activity later in the day, thinking like a bunny, a robin or a ladybug. Ms. G had the following reflections to share after the walk. See [Appendix C2](#) for reflection questions.

### **Post-Walk Teacher Reflection - Ms. G**

#### **Successes**

- meeting at the rock circle went much better than previously
- the kids were engaged and enjoyed their time exploring the Friendship Garden
- the kids enjoyed having the opportunity to work with a partner
- the listening and responding to questions overall was quite good
- students stayed on the path
- the length of time (45 minutes) for this walk was perfect
- the children enjoyed completing the follow-up activity

#### **Challenges**

- some of the students' behaviour and willingness to engage
- some students had difficulties listening respectfully when adults and other children were speaking

#### **Cognitive Tools**

- I liked the idea of introducing the concepts of both hidere and seekers
- some students said it made the walk more interesting
- the idea of camouflage came up in a book interview when doing Benchmarks a few days after the walk and we were able to recall our discussions from our walk

#### **Questions/Suggestions**

- next time I will be clearer about expectations about being in and around the large cedar at the front of the school

Walk 5 - Color Walk, p. 21 from *A Walking Curriculum* (Judson, 2018)

Figure 9

Color Walk Lesson Plan, April 27, 2022, Mrs. M, Miss C, Ms. L

WILDERNESS  
WEDNESDAY

## LESSON PLAN

Grade: 2	Subject: Wilderness Wednesday	Date: Apr. 27
Topic: Colour Walk		Lesson # 3
Lesson Focus and Goals: -finding every colour of the rainbow -metaphor -find as many shades of one hue		
Materials Needed: -ten frame -crayons, pastels, pencil crayons	Accommodations: -with partners	
<p>Structure / Activity:</p> <ul style="list-style-type: none"> <li>gather in rm. 114, read "They Say Blue" on Epic together</li> <li>ask what would we name colours in the book -are all blues the same? yellow?</li> <li>head outside to rocks, look up - what colours do you see? look down- " " " look all around-</li> <li>with your partner, find every colour of the rainbow in nature? Bring them the circle or remember where you saw it. Return to the rocks in 10 mins (when you hear the whistle). It might not be right in front of you so look all around.</li> <li>Share what they found for ROYGBIV</li> <li>What makes colour? How can we create colour? Indig. Connection- How can natural materials be used to create dyes?</li> </ul>		
<p>Assessment:</p> <ul style="list-style-type: none"> <li>in a ten frame pick two colours → create hues of that specific colour - using materials listed above -name their new colours</li> </ul>		

This was my final walk with these two classes. Miss C planned the walk and delivered it while Mrs. M, Ms. L and I observed. Instead of starting this walk outside, Miss C gathered both classes together and read *They Say Blue*, by Jillian Tamaki (2018). She then took the two classes outside to the rock circle, asked them to look up, down and all around to see what colours they



could find. Then, with a partner, they were sent out to find all the colours of the rainbow. After the students had a chance to explore, Miss C gathered them back to share their discoveries. Some students used Ms. L's phone to take pictures. Miss C included an Indigenous connection by teaching them a bit about how different plants were used in the past, and continue to be used, to create dyes. The students went back inside to complete the student activity using metaphor. Miss C used a lesson from *Playing in the Muck and Other Arty Stuff* (Caunce, 2020) and had students work in pairs to chose two of the colours they discovered and create different hues of those colours. The students were also challenged to name their colours.

### Figure 10

*Extension Activity from Playing in the Muck and Other Arty Stuff* (Caunce, 2020) - Colour Walk

**Colour Walk**

After you've collected your samples of different shades of a specific colour, as talked about on your walk today, choose five hues for this activity. Place the different materials in the upper boxes, and below each item, try to match the colour, using coloured pencils, crayons, oil pastels, or chalk pastels. Don't worry about drawing the item, just try to match the hue.

It's trickier than you might expect. For example, the colour green isn't just 'green', it's made up of blues, yellows, and reds, too. Sometimes we think of objects as simply having one colour, like a bright red strawberry, but even the brightest, reddest strawberry has greens or even blues in it as well.

Start lightly and layer colours on top of each other, allowing the colours to blend. Look carefully at the item. Does it have white in it? Orange? Try to identify as many colours as you can. Notice how the light falling across the item changes the colours. Shadows often have blue or purple in them.


After the walk, I once again asked the teachers to share their reflections. Because these walks were planned and led independently, the questions I asked were different from the questions asked after the previous two walks ([Appendix C4](#)).

### **Post-Walk Teacher Reflection - Miss C**

#### **Walking Curriculum**

- I used the resource to frame my lesson and its focus
- I used *Playing in the Muck and Other Arty Stuff* (Caunce, 2020) for a follow-up activity

#### **Successes**

- I liked exploring the same place because of comfortability, exposure to the same place would facilitate their search for colours
- the walk went great and students were engaged, they loved the follow-up activity
- all the students were listening and participating
- students engaged in learning and shared thoughts and ideas in the discussions
- students were enthusiastic about creating their own colour pallets
- students recognize gradients of hues

#### **Challenges**

- students found the colours faster than I thought they would, perhaps going somewhere new would have allowed for more exploration and different hues of colours
- thinking was not stretched enough, possibly

#### **Cognitive Tools**

- I felt that I had to prompt some students on thinking about colours with not just their name, but inquiring what other name could we give this colour to be more specific

#### **Questions/Next Steps**

- Indigenous perspectives were missing from the resource, but I had access to the Surrey School District's 30 Day Walking Curriculum Challenge, created by their Indigenous Education Department and could bring in the topic of natural colours and dyes
- explore a different location off the school grounds
- how could I have stretched this walk with cross curricular subjects?
- I'd focus on the inquiry - How are colours made?



### **Post-Walk Teacher Reflection - Mrs. M**

#### **Strengths**

- the walk was fun and the cognitive tools created an atmosphere of creativity for the students
- students were engaged and listened
- students were excited to share their ideas

#### **Challenges**

- few challenges as students are getting more used to the procedures

#### **Cognitive Tools**

- cognitive tools add another layer to the walk and add focus and purpose
- students tend to stay more on track

#### **Questions/Suggestions/Next Steps**

- having some walks in the resource that include a mentor book to read before or after the walk
- reading a story linked to the walk
- including the First People Principles of Learning in each lesson
- How could this walk be connected to the curriculum in an authentic way?

### **Post-Walk Teacher Reflection - Ms. L**

#### **Strengths**

- colour is everywhere and it's easy to identify a variety of colours
- students were engaged and were able to find a variety of colours

#### **Challenges**

- some students were picking flowers and didn't remember our outdoor learning guidelines

#### **Cognitive Tools**

- some students were using deeper thinking to share their ideas

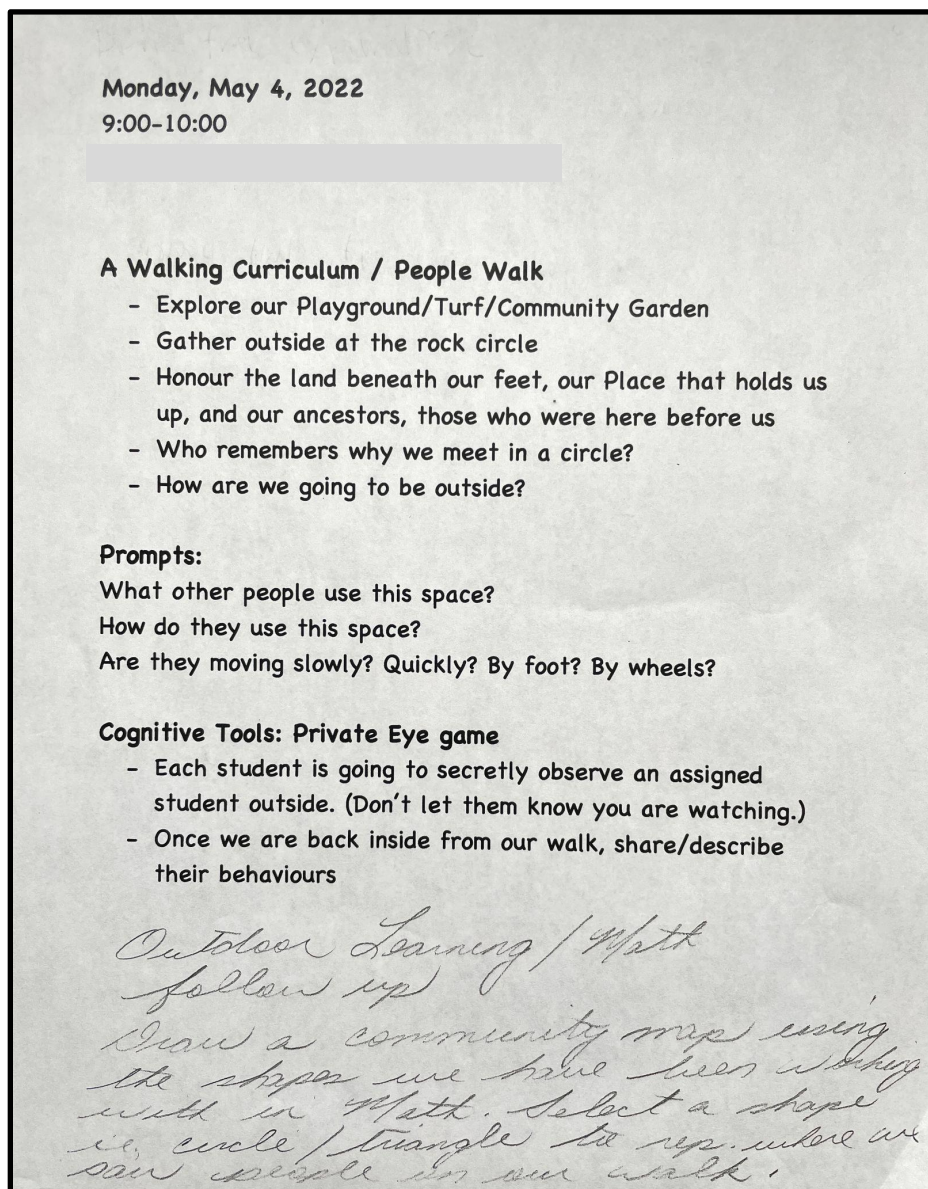
#### **Questions/Next Steps**

- how would we address multi-colours
- bring in connections to Indigenous plants, dying, weaving
- creating paint - every student makes one colour and then they are shared
- writing activity - describing colours
- would this walk be as successful in other seasons?

## Walk 6 - People Walk, p. 23 from *A Walking Curriculum* (Judson, 2018)

Figure 11

*People Walk Lesson Plan, May 4, 2022, Ms. G*



Ms. G planned and delivered a People Walk for our last walk together. I was excited to see this walk in action because in my years using a *WC*, I had never experienced this particular walk. Ms. G decided to explore the school grounds and the surrounding community. Once again, she began the walk at the rock circle and honoured the land beneath our feet, our place, our ancestors and those who were here before us. Ms. G then used the guiding questions to focus the

walk and set the intentions. As the students walked, they were challenged to complete the student activity inspired by the cognitive tool of role play and change of context. The students' mission was to spy on another student in the class throughout the walk. At the end of the walk, while eating their snacks, the students had a chance to describe the movements of the person they were spying on and everyone else tried to guess who they were describing. Later in the day, Ms. G had the students do a math activity where students were asked to draw a map and use 2D shapes to represent the places on the map where the students saw people. Ms. G shared the following reflection after the final walk. See [Appendix C4](#) for questions.

### **Post-Walk Teacher Reflection - Ms. G**

#### **Walking Curriculum**

- I just went through the book and selected today's walk because it sounded fun and it was one I hadn't tried yet

#### **Strengths**

- students were encouraged to become more observant about the other people who pass through or live in our community and how they use the local environment

#### **Challenges**

- it is difficult to have conversations with the students when we are walking in a line on the sidewalk

- a few students need reminders to stay focused and to stay on the path

#### **Cognitive Tools**

- playing the I Spy game and being asked to secretly observe a peer from the class added something extra and fun to the walk

#### **Questions/Next Steps**

- I would plan the walk for finer weather so the kids could observe more adults working in the Community Garden and make connections to the gardening the students have been doing in the courtyard garden

- I would be curious to hear if you have any ideas regarding pairing the walks with other Grade 2 curriculum topics

### Data Analysis

After all of the walks had been planned and delivered, I asked the teachers to reflect on their experiences. Because of time constraints, I emailed them the questions ([Appendix C6](#)). This allowed them to take their time to answer the questions thoughtfully at their convenience. It also allowed me to follow-up on any answers that sparked more questions or needed more clarification. The insights that the teachers shared were honest and thoughtful and indicated that overall, the experience of participating in this action research was a positive one. See [Appendix C7](#) for samples of the teacher's final questionnaire responses.

All of the teachers expressed how user friendly the *WC* was as a resource and said that they would recommend it to teachers interested in looking for a place to start. They appreciated the simplicity of the walks and the inclusion of the cognitive tools, and liked how the tools helped guide their walks in more structured ways. Despite the positive reactions to the cognitive tools, one of the teachers suggested that the resource was maybe *too* simple, and wanted even more explanation of the tools and how to use them. The addition of more developed lessons for some of the walks was also requested. All of the teachers involved in this action research said that they would continue to use the *WC* and the activities inspired by cognitive tools. Three of the four teachers also indicated that they would like to participate in the 30 Day Walking Challenge next year.

IE and cognitive tools were new to all of the teachers involved in this action research. Based on the teachers' final questionnaire responses, their understanding of the theory of IE was not entirely accurate. The teachers referred to IE in terms of student learning and none of them identified it as an approach to teaching. The teachers described it in similar ways, stating that IE allows students to be curious, make their own choices, be active and have fun. It allows students freedom to use their imaginations and doesn't inhibit or direct their thinking. Ms. L explained her understanding of IE, saying, "It is allowing curiosity and creativity to guide your learning. It's allowing children to guide their learning through play. I use the term playful inquiry." Although these understandings reflect some aspects of IE, they don't capture it in its entirety. The idea that IE is a way of teaching and learning that engages the minds, the body and the imaginations of learners through the use of appropriate cognitive tools was missing in all of the teachers' definitions. There also seemed to be a lack of understanding about the three principles of Imaginative Ecological Education (IEE): feeling, activeness and sense of place and IEE's

goal to “not only teach students about the world around them, but to do so in ways that leave them *feeling* and inclined to *do* something about the current state of affairs” (Judson, 2015, p. 18, emphasis in the original). It seemed like the idea of feeling something was focused on in our walk planning and delivery, but the idea of doing something wasn’t touched on as much.

The goal of my research was not, however, to turn each of the teachers into experts on IE pedagogy, but to allow them to get their feet wet and perhaps spark some further curiosity. I have spent the last two years living and breathing all things IE and a deeper understanding of the theory can only come with time and patience. I need to remember this when working with teachers.

The teachers all expressed an appreciation for the cognitive tools and said that they engaged the students and brought added interest and a sense of fun to the lessons. Miss C said that she could see herself using cognitive tools in the future because they would “aid in other areas of thinking in the classroom, not just outdoors.” Mrs. M shared her enthusiasm in learning about and using cognitive tools:

I am so happy that I co-planned these walks because I probably would have never used the cognitive tools. When I read the book, I was confused about what the purpose was of the cognitive tools. In the book, I feel like the tools aren’t explained very well. I didn’t understand what they were. Now that I have had the chance to use them and taught how to use them, I probably won’t do a walk without them. They were so helpful to focus the purpose of our walk. The tools gave the students a deeper knowledge about what the walk was about rather than just a time outside to learn. This was evident from the deep discussions we had with each walk. Students were able to share what they learned and why it was important.

Ms. L noticed that the use of cognitive tools allowed her students’ learning to be directly connected to the curriculum and the core competencies, and is interested in taking a more structured approach to some of the outdoor learning experiences she plans, rather than having them all be open-ended and play-based.

At the beginning of this action research, the teachers all shared the challenges they face when it comes to outdoor learning. In their final questionnaire responses, the teachers said that taking an IE approach to outdoor learning and using cognitive tools and a *WC* helped them overcome some of these challenges. The teachers felt more confident taking learning outdoors

and believed that scheduling and planning the walks helped them get outside on a more regular basis. The teachers enjoyed the fact that outdoor learning time was more focused and could be connected to the curriculum. By taking focused walks on their school grounds, the teachers all expressed an appreciation for being able to experience their space in a new way.

Being supported while exploring a different way of taking students' learning outside, was valued by all the teachers. Having the opportunity to co-plan, observe and co-lead the walks was super helpful and made the new learning feel doable and sustainable. Ms. G explained:

Although I have done a lot of outdoor learning activities with my students, this was only my second year trying out the various walks. I appreciated you encouraging me to include the cognitive tools in the lessons and the questions you asked the students during our walks together.

The teachers all acknowledged that having time to work with more experienced peers, collaborate, co-plan and observe other teachers in action is a luxury that is often hard to come by. We are lucky in our district to have some collaboration time built into our schedule because of our involvement in school-based spirals of inquiry, however, this is often not enough, especially when trying to make a successful and meaningful change.

I Used to Think...Now I Think.. is a thinking routine I first learned about from Project Zero, Harvard Graduate School of Education (n.d.). I often use it in workshops to see how educators' thinking has changed and decided that it would be the perfect way to capture each teacher's biggest take-away from their participation in this action research project.

*I used to think that choosing a focus for an outdoor learning lesson was sufficient, but now I think using the suggested cognitive tools from A Walking Curriculum adds much to our outing and makes for a richer experience. - Ms.G, Grade 2 teacher*

\*\*\*\*\*

*I used to think structured activities would lose the organic feeling of being outside, but now I think it allows for deeper connections to our place and the world around us. - Ms. L, Grade 3 teacher*

*I used to think that I needed to be an outdoorsy person who loved everything about being in nature. Like an enthusiastic hiker, someone who loves to fish, go camping in all weather conditions, etc. but now I think this isn't necessary to incorporate an outdoor education. While I don't need to be the most adventurous person who lives and breathes being outside, it is important that I am open minded to the natural environment to explore it with students. Moreover, a need for flexibility needs to be present when teaching outdoors since so many different possibilities can spark student interest! - Miss C, Teacher Candidate*

\*\*\*\*\*

*I used to think that teaching outside was a brain break for students. We would go for a short walk, play on the playground, or get outside to play a game. I used outdoor learning not as time to learn but time to take a break from learning. Now I think that learning outside is an integral part of our day for learning. We have used our outside time to take walks of discovery, create curiosity, deepen our thinking and learning, and to talk about what wonders we have. The cognitive tools in "A Walking Curriculum" have helped my students and I take our questions and curiosities to a deeper thinking level. – Mrs. M, Grade 2 teacher*

### **Conclusions**

The main purpose of my action research was to gain a better understanding of how teachers experience a *WC* and the impact it has on their practice. My reasons for wanting to explore this topic came directly from my experiences working with teachers and I hoped the insights gained would help me support educators in the future. The teachers participating in the research were relatively new to the *WC* and had no understanding of IE or cognitive tools. It was my goal to support the teachers as they learned about IE, cognitive tools and how to use a walking-based practice more effectively in order to provide their students with more meaningful outdoor learning experiences. I learned so much from the teachers participating in my research. Their willingness to be vulnerable, to take risks, and to step outside of their comfort zone,

knowing I would be documenting the whole process, was inspiring and will be useful in my future work with teachers.

Based on teacher responses, the *WC* was an effective mediating tool. After using the resource to co-plan, observe and co-lead two walks, the teachers felt confident planning their final walk on their own. The book was user friendly and the teachers loved the guiding questions and the suggested student activities. I wonder if the resource will continue to build teacher capacity in outdoor learning or if it will become an overly relied upon resource that limits teachers. Once the teachers go through all the walks in the book will they check outdoor learning off their to-do list and stop there, or will they use it as an inspiration to continue to find new ways to take their students' learning outside?

As the teachers and I used the *WC* as our guide, I started to think about all the different ways educators interpret and implement resources and programs. I thought about my own past experiences and remembered all the times I skimmed a resource and implemented it in a way that worked for me and the times I took bits and pieces of a program and added them to my existing one. It's not surprising that we do this, and I think it's perfectly understandable. This practice, however, can make the resources or programs we are implementing less effective and has the potential to go sideways. I am interested in exploring this further.

Students' outside behaviour was a challenge that came up several times during my research. As I stated in my data analysis, this may be related to teachers' ideas about what outdoor learning is for. As I worked with the teachers and observed the students, however, I started to think about rules, expectations, and guidelines. It seems to me that, no matter what you call them, there is a fine line between too few rules and too many rules. Too few rules can lead to problems because of unclear expectations or lack of boundaries, while too many rules can force teachers to spend too much time enforcing them all. Both cases can be problematic. Learning outdoors is different from learning in a classroom, and although rules are necessary, finding a balance is crucial.



When asked, the teachers claimed that having a basic understanding of IE and cognitive tools helped deepen their understanding of outdoor learning and provided their learners with more meaningful experiences. The teachers were surprised by and pleased with the effectiveness of the cognitive tools suggested in the walks. Before their participation in the research, they had never heard of cognitive tools, let alone used them, and agreed that they would not consider doing any of the walks in the future without incorporating the tools. In this sense, the introduction of cognitive tools was a success. I'm not sure, however, how much of an understanding the teachers have of the *purpose* of cognitive tools or IE, especially as it pertains to ecological education, and I'm not sure they would use it in other areas of their teaching. I found it difficult to engage the teachers with the theory of IE - not because they weren't interested in learning about it, but because they simply didn't have the time for it. Teaching is an incredibly challenging job. In elementary schools in this district, classroom teachers get a total of 110 minutes of prep time a week and six professional learning days a year (which are often focused on school-wide goals or district initiatives). Teachers want to learn about different practices and improve outcomes for their students, but the reality is that they just don't have the time. The system expects teachers to engage in new learning in their free time - an unreasonable and unsustainable expectation that is not effective in bringing about successful and widespread change. Due to lack of time, teachers want activities that are ready to use and require little preparation, supplies or special expertise. These activities do not always have the desired results. If we want teachers to be life-long learners and make meaningful changes to their practice, we need to give them the time and support necessary to be successful.

The impact that the teachers' understanding and use of IE and cognitive tools had on students' experiences is beyond the scope of this research. On every single walk we took, the learners were engaged with the world around them. I heard them ask thoughtful questions and watched as they made exciting discoveries and connections. The teachers echoed these observations and expressed a belief that their new understanding of IE and cognitive tools allowed them to create learning opportunities that captured their students' feelings and imaginations in a way they hadn't before. This is wonderful to hear and very promising, however these claims cannot be substantiated by the data collected in this research.

As I reflected on my research, I realized that although I explained IE and cognitive tools to the teachers involved, I didn't give them the opportunity to actually experience IE or the tools

for themselves. The next time I work with teachers interested in learning more about outdoor education or the *WC*, I will take them out to experience a walk for themselves, before we begin to co-plan and co-lead any walks with students.

Another question I had going into this research was around support - specifically what types of supports work best when leading teachers through an educational change. In my role as a district coordinator, I often find myself working with individual teachers, groups of teachers or entire schools to help them implement new practices. Sometimes these changes are sought out by teachers, while others are driven by school or district administration, and are occasionally provincially mandated. Implementing change is difficult and the coordinators in my department have spent a lot of time this past year thinking about and discussing how to best support teachers. Through this research, the value of supporting teachers, not only at the beginning of a change, but throughout the entire process was confirmed. The teachers expressed appreciation for the continuous support I offered, as well as the support of a *WC* as a guide, and said that they felt much more confident when it came time to plan and implement a walk independently. In their final questionnaire responses, the teachers asked if I would be willing and able to come back again next year to continue to work with them on their outdoor learning goals. This type of support is something that needs to be offered whenever we want to bring about effective change, especially if we want the change to be meaningful, sustained and widespread.

Collaboration was an important and challenging part of this research. Every time I have collaborated with others, the outcome has always been better than when I've worked on my own. The benefits of collaboration and support are confirmed by Fullan (2016) who claims that "significant educational change consists of changes in beliefs, teaching style, and materials, which can come about *only* through a process of personal development in a social context" (p. 107). Time was not on our side, however, and many of the walks were planned, not in person, but over email. This was a sufficient work around and was still a form of collaboration. I noticed, however, a difference in the teacher's learning when the walks were co-planned in person. Although we fired some emails back and forth before each lesson, the feeling of learning together, making decisions, asking questions, and pushing each others' thinking was not the same over email as it was in person. I don't think this negatively impacted the walks. I do wonder, however, what impact, if any, this will have on the teachers' desired change. Will their confidence continue to increase when it comes to outdoor learning? Will they continue to take

their students out for focused walks on a regular basis? Will they continue to learn more about IE and the cognitive tools and translate their learning into outdoor learning experiences for their students? Only time will tell, and I can't wait to check back with these teachers next year. As for my future work with teachers, this research reinforces what other researchers have already discovered: just how valuable teacher collaboration is in bringing about successful change, and how important it is to create regular opportunities to gather, in order to share successes, challenges and to ask questions.

This action research has provided me with answers to so many questions and has raised so many more. The four teachers who shared their beliefs, their struggles, their successes, their suggestions - their hearts and their imaginations - have had an impact on me that they may never fully understand. They allowed me to be part of their journey. I will take what I've learned and apply it to my work with other teachers interested in exploring outdoor learning. One walk at a time.

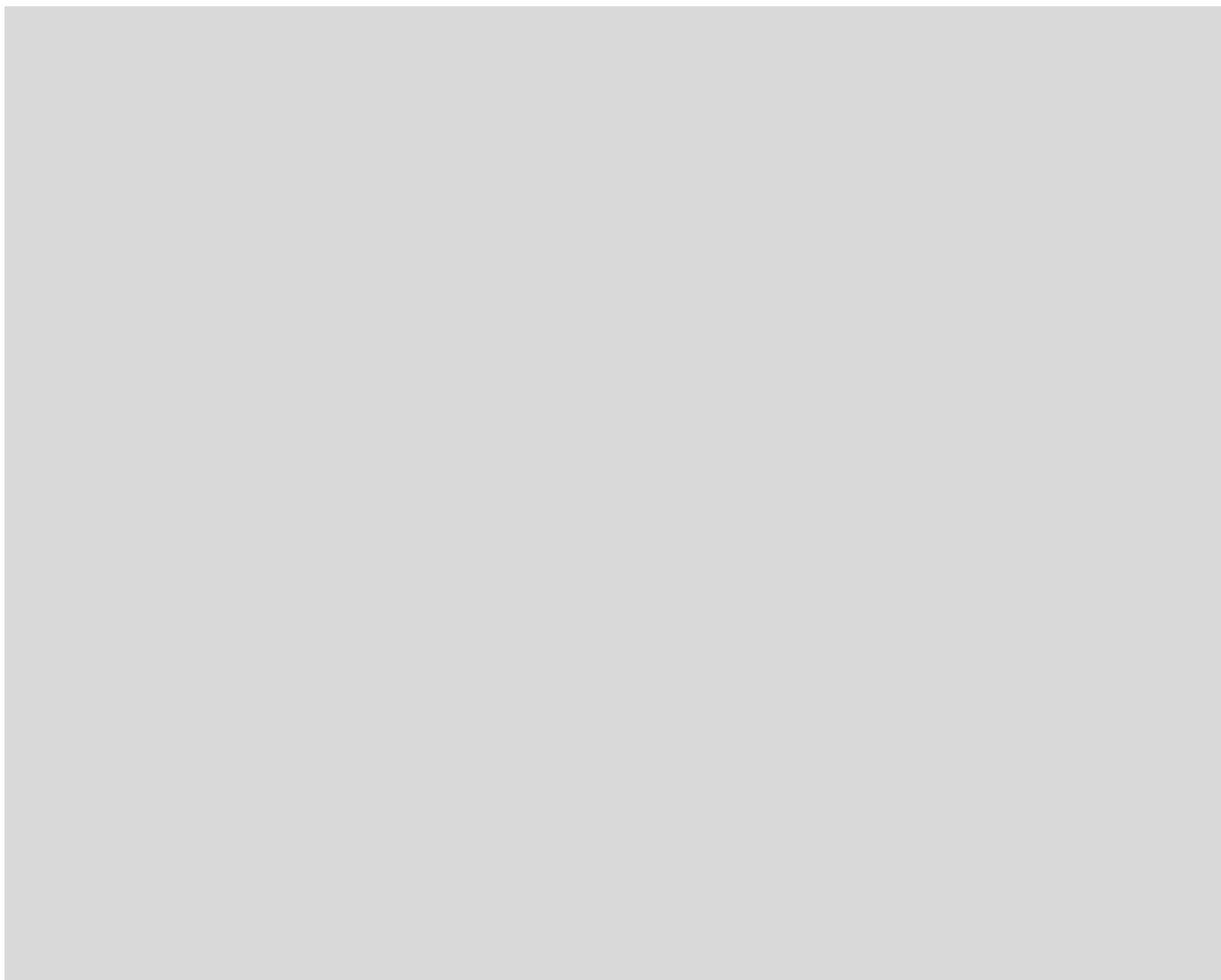
## Appendices

### Appendix A

#### Ethics Documentation

#### *Appendix A1 - TCPS2 Certificate of Completion*



*Appendix A2 - District Ethics Approval*

*Appendix A3 - Educator Letter of Informed Consent*

SIMON FRASER  
UNIVERSITY

Dear Educator,

One Walk at a Time: An Imaginative Education Approach to Outdoor Learning

Principal Investigator: Megan Sandham

Course: Education 904

Contact Information: [REDACTED]

Please consider this an invitation to participate in a study as part of my program requirements for a master's degree in education program from Simon Fraser University. As an educator, you may be interviewed, invited to participate in discussions with other teachers or with students, or be observed while teaching by the researcher or complete interviews and surveys. The data collected will not be used for professional evaluation.

Data may be recorded in written or digital form, including still photos and audio recordings. Any personal data that is collected during the study will be kept strictly confidential, within the limits of professional ethics. You may withdraw from the study at any time.

Simon Fraser University and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and to ensure your full understanding of the procedures, risks, and benefits of the study.

Questions, concerns or complaints regarding this research may be communicated to the principal investigator named above.

Thank you for your consideration in this matter.

Sincerely,

Megan Sandham

[REDACTED]

## **Appendix B**

### Research and Design

#### ***Appendix B1 - Initial Interview Questions***

##### **Action Research - Teacher Interview Questions**

**1 hour**

##### **Background Information**

Name, grade

How many years have you been teaching? How long have you been teaching at this school?

\*Tell me a bit about your school culture, especially around your experiences of support and collaboration. What is it like to work at this school?

##### **Outdoor Learning**

What are your beliefs about outdoor learning? Why do it?

What does outdoor learning/education/learning outside mean to you?

What does it/can it look like? Definition of outdoor learning.

Why did you start taking your students outside? Anything that stands out from the early days?

Difference from then to now?

Was it a change that you initiated or was it as a result of being encouraged by “outside forces”?

Tell me about some of your successes with implementing outdoor learning into your practice.

Tell me about some challenges you’ve encountered, in terms of outdoor learning. Were you able to overcome them? If yes - how? If no - what are the reasons? How often do you take your students outside? Is it a regular part of your practice/schedule?

How supported do you feel in taking your students outside? Who are you getting the support from?

##### **The Walking Curriculum**

How did you learn about the Walking Curriculum? How have you used it in your practice? What questions do you have?

##### **Action Research**

What do you hope to get out of your participation in this inquiry?

What kind of support do you want/need from me?

## ***Appendix B2 - Initial Interviews Transcript Samples***

**Miss C**

**Me:** Okay. Have you have you guys done anything um, like any of your courses about outdoor learning at all?

**Miss C:** Um, we've done a bit, I took PE, and we talked about how it's, I believe, the acronym is H.O.P.E - so health, outdoor, physical education. So we did a bit of that and the importance of just going outdoors as well, not just only being in a gym setting. Yeah, so that was pretty good. And I guess a little bit of grounding, like every TC kind of did like a lesson. So one of the TCs did a lesson, and they did their grounding activity. And so it was actually really nice, because we went through like the five senses, and like, what we heard, what we saw - everything. And that was kind of like, the most experiential thing we've done, like at UBC. And then I did have an Indigenous course. And the extent to that was, sometimes instead of like talking at our tables, our prof would be okay, go outside and talk. So in that sense, there's kind of like, us as students, like going outside and doing our learning out there. And that's, that's kind of it that we've - that I've had.

**Me:** Okay, so in that - in that one course, did you... so you weren't just doing what you would do inside, but you did it outside?

**Miss C:** Yeah, we did it outside. Yeah.

**Me:** Okay, cool. And for the other one, did each of you have to do a lesson? Or just one person did it new?

**Miss C:** Yeah. So we kind of had groups of three and we did different topics in PE so like, mine was healthy eating just these T C's in general, they outdoor outdoor education. So they did their lesson on that.

***Mrs. M***

**Mrs. M:** I have one more thought, sorry. No, I'm just connecting with their place, though. So making connections with each other, but a lot of kids don't know their neighborhood very well. So I love that we have - we have a new student in our class from Korea who just arrived. And so, it's nice today to be able to show him. We walked over the overpass and just connecting with his community - he's not from here and has just moved here. So it's really nice to be able to like, make those connections, about what buildings are, what place is, you know, it's different, a lot different for him here. So...



**Me:** Nice, nice. There's like - outdoor learning has lots of terms. There's outdoor learning, outdoor education, learning outside. What does that look like or what can it look like? Like when someone says outdoor learning? What does that mean to you?

**Mrs. M:** Okay, yeah, and when you say outdoor education to me, like, outdoor education to me is like, I'm learning compass work or from my experience, right? That, to me, that's what it is, more learning how to survive, like survival or whatever outside. But for me learning outside is just another extension of the classroom. Right? So like, we're still learning math outside, we're still learning. It's not, you know, it's just a different classroom. It's more of an outside classroom, rather than just saying we're learning about the outdoors and outside, you know.

**Me:** What could that look like? Like doing a lesson that you would do inside exactly the same way outside? Or would it be different? Like, what was different?

**Mrs. M:** I wouldn't do the same thing probably inside. I mean, you certainly could. But I think my hope for outdoor learning or learning outside is that it gives them a different feel or a different... to me it's different than being in the four walls of our classroom.

**Ms. G**

**Me:** So can you share, so you've shared some challenges, or sorry, some successes, have you had any challenges that you're currently experiencing, or that you've experienced in the past, or even like, before you got started? Were there any barriers, that kind of like popped up that you're like, Okay, this is going to be something I'm going to have to overcome.

**Ms. G:** In terms of a barrier, even before I started, it was just the nervousness of trying something new. Right. But the minute I did that very first lesson with them, I was hooked. And I thought, this is easy, like, you don't need a lot of stuff. You know, it's it's, it's everything's coming from the kids, it's their curiosity, what they observe, their imagination. And I, even something as simple as having the outdoor learning resources, like I just would go to the cupboard, and I would just pick different things. And I would just explore with them, you know, the little cards, like find something round, find something like an oval, you know, the little mini cards? That was the first lesson that I did with them in the fall, because it would keep them, you know, fairly close within a given area, you know, of our playground, that was our first outdoor learning activity. You know, having the clipboards that have the little brushes and the markers attached. And like, it was just sort of picking an idea, seeing what resources there were and then just kind of giving it a go. But when the activity would be successful, then that kind of gives you the confidence and the interest to carry on with that, you know, and in terms of the challenges, it has just been the getting going piece. And that's just the listening and the manners piece, you know, from some of the kids like, I really want you to hear, you know, what we're doing. And

the other thing was, they love their play time. And especially if we go to the community garden, they really enjoyed the little mini playground that's about a block and a half away from it. So the first time they were out, when they did, you know, looking for something shaped in you know, like a circle or stick shaped like an S or whatever. They didn't get the difference between outdoor play and outdoor learning. And so it really made me wonder if they had had those opportunities prior. But once because that first lesson was not successful, they were all over the place. And it was more play than looking for anything connected to their cards. And so then when we came back together at the end of the circle, a lot didn't have a lot to share, because they had carried their card around, but they had played, they had run and climbed and jumped in.

**Ms. L**

**Me:** Do you talk about like, do you set your intention inside? Or do you set it outside? Or does it depend? What does that stuff look like for you?

**Ms. L:** Um. It's all dependent right now because I'm establishing routines with classes, because I'm taking classes outside to teach right now. I start in the beginning, I start in the classroom, with clear expectations - we have we have five when we go outside, especially because these are just the expectations. It's always be safe. Yeah. And we talk about what is safety? What does it mean to be safe, like walking on a sidewalk? If you're climbing a tree, you can't go more than two of your height? Because we talked about what would happen if you fell from a high tree. And if you're playing with sticks, you're not hitting people. What are common sense expectations? It's not to slow play down, or engagement down. It's just we need to be safe. Yeah. We also had a parking lot that had really good trees for climbing and, and hedges at my old school, but that's where people came to use the park or pick up their kids. So we had to, okay, you can play there, but you can't go near the parking lot. Right? You must always see a teacher and a teacher must always see you. So you can head all the way across the field. But if you turn around, will the teacher be able to see you? And can you see us? You can be hiding in the bushes. Can you still know we know where you are? Yeah. Nature stays in nature - that we're not bringing things back. That's a pretty straightforward one. No playground. In the beginning, we have to say that. And then, last is have fun. And that I mean, that's it. So there's not really a ton of expectations.

**Me:** I know you've had a ton of them. But just tell me like, you know, one or two that really stand out to you - successes with implementing outdoor learning into your practice.

**Ms. L:** We had a really, really hard kindergarten class. We had 22 and 22. So we had 44 children in the shared space. In the beginning, we were like, we want to have sit spots for everybody. We want to have control, control, control. And I - I was looking and I said this isn't working. They need to play. They don't know how to play outside. So when we try and give them an intention, they're not even able to focus on it.

### ***Appendix B3 - My Reflection Sample***

#### **Reflection - April 20 - Hiding Places Walk**

We went on a Hiding Places walk today. The sky was overcast and the wind was blowing hard enough to carry my words across the open field behind the school. We gathered at the rocks in a circle, just like we had for our last walk, and began by grounding ourselves in our Place. The week before, I had shared the significance of meeting in a circle and asked the students if they remembered why the circle was such a powerful way to come together as a community. Many of the students remembered that everyone is equal in the circle and that all voices deserve to be heard. There were also some new ideas: “A circle is a strong shape. It doesn’t have a beginning or an end.” We then reviewed the outdoor learning expectations that these two classes have been following since the beginning of the year and their simplicity is so effective:

1. You have to be able to see a teacher and a teacher has to be able to see you.
2. Keep nature in nature.
3. Be safe.
4. No playing on the playground equipment.
5. Have fun!

These guidelines really provided just enough structure to the outdoor learning time without inhibiting the students’ ability to explore. I found that the students really knew how “to be” outside and despite having two full classes of 7, 8 and, 9-year-olds, there was very little “management” needed by the adults outside.

Before heading off to explore the school grounds, I asked the students to look around and consider where they would hide if we were playing a game of hide and go seek and why they would choose that particular spot. Hands quickly shot up and the students enthusiastically shared their thoughtful and creative ideas.

“The garbage can, because that’s where people always hide in movies.”

“I’d hide up in a tree because people always forget to look up.”

“I’d hide somewhere obvious like behind that tree because people always look in the hardest places first.”

## Appendix C

### Implementation and Fieldwork

#### *Appendix C1 - Summary of IE*

Imaginative Education is a way of teaching and learning that wants to engage the feelings and imagination of learners. Imaginative educators believe that emotion is at the heart of all learning; when we are emotionally attached to a topic, learning becomes meaningful and memorable. If we can engage our learners' imaginations and get them to feel something about whatever it is we are teaching, they will be more invested and engaged, and more likely to remember and internalize their learning in a meaningful way. Imaginative educators see learners as constantly perceiving, feeling and thinking, and when these perceptions, feelings and thoughts are combined with imagination - magic can happen! The role of imagination in education, to the Imaginative educator, is not a fluffy, head in the clouds type of creativity that is only pulled out in very specific cases, but rather the idea that when we engage the emotions and imaginations of learners, they are able to develop different kinds of understandings that will help them experience and make sense of concepts across the curriculum - not just in the arts.

Imaginative Education identifies five kinds of understandings: Somatic, Mythic, Romantic, Philosophic, and Ironic, and seeks to develop knowledge by engaging students' feelings and imagination through the use of various cognitive (or learning) tools. Although there is a bit of an order to these types of understandings, they are not linear and are not necessarily attached to a specific age, however, each understanding contains some ideas that can only come once you have knowledge of other things.

Somatic Understanding is the kind of understanding we are all born with. It comes before language and is the way in which we experience the world around us. Bodily senses, emotions, humour, music, rhythm, patterns, and gestures are all cognitive tools associated with Somatic Understanding.

Mythic Understanding develops when we start to speak. The emotions and imaginations of Mythic learners are best engaged when we use fantastical stories, full of tension, mental imagery and humour to teach our topic.

Romantic Understanding develops when we become literate. Romantic learners are less interested in fantasy and are much more engaged by heroic qualities, extremes and limits, challenging the norm, humanizing topics of interest, collecting and organizing things and exploring different concepts and points of view.

Philosophic Understanding can develop once we have more experience in the world. Philosophic learners are interested in theories and processes; testing them, looking for anomalies and searching for "the truth". It is within this type of understanding that learners really start to figure out who they are and how they see their place in the world.

Ironic Understanding is the kind of understanding that can be developed once an individual has a strong grasp of the other types of understandings. Ironic learners are reflective and flexible in their thinking, and are able to see ideas from different perspectives.

When used intentionally and purposefully, Imaginative Education's tools can evoke emotion and imagination and open learners up to all sorts of possibilities.

## Appendix C2 - Post-Walk Teacher Reflection Questions

### Debrief

**What went well?**

**What did you find challenging?**

**Was there anything I did that you hadn't seen before?**

**What did you think about the cognitive tools? Do you think they made the walk more meaningful?**

**What questions do you have?**

## Appendix C3 - Post-Walk Teacher Reflection Samples

**Ms. G**

From [REDACTED]  
Sent: April 11, 2022 5:54 PM  
To: Megan Sandham [REDACTED]  
Subject: Outdoor Learning Walk #1

Hi Megan,

It was an absolute pleasure to do an Outdoor Learning walk with you and my students this morning. And can you believe the beautiful weather? It was a perfect spring morning to be out of doors.

I just thought I would share a few of my impressions of our time together before I forget.

I think many things went well today; from gathering outside in a circle for the First Nations acknowledgement and discussing the significance of the circle shape. (Thanks so much for including this suggestion), setting the intention for the walk, the variety of spaces covered in the walk, from the playground, overpass, the park, and the pond, and how exciting to have been able to see the heron, ducks, and turtle up close!

I loved how you would stop and gather the kids to ask questions or share something interesting you found on the ground such as the seed pods and dried hydrangea.

In terms of challenges, there were a few times I had to remind students to leave behind the sticks they found as we were leaving the park.

I also have 4 students who have challenges with listening, so I try to be a bit strategic in terms of them having at least 2 friends between them. This was challenging for them to adhere to today.

I made the mistake of forgetting to have [REDACTED] at the front of our line. He has been good at leading the class to the other side of the road while I'm in the middle making sure everyone gets across safely. [REDACTED] was in the lead at one point and just kept on walking! Haha

I appreciated when we returned to school that you wanted to gather in a circle and share ideas and have the kids respond to some interesting questions. They can be a bit of a tough crowd when it comes to listening skills and focusing their attention on the speaker. This is something that we've been working on. Unfortunately, listening well remains a challenge. With this crew, the wrap up may have

gone better in the classroom. However, that being said, I think after 1 hour they may have just been ready for their snack time.

Overall, I think it was a most positive outing. I loved your warm and kind manner with the children. If there is anything else you need from me, just let me know.

Kind regards,  
[REDACTED]

PS The kids worked on a little 3 part follow-up drawing which I'll share with you next time.

*Mrs. M*

Reply all ▾ Delete Junk Block sender ...

**brief of Feeling Rooted Walk Apr. 13**

Thu 14-Apr-22 11:18 AM  
To: Megan Sandham

**What went well?**  
The weather was beautiful! It was a great day for a walk and the students were prepared as it was our usual time for outdoor learning. I think the walk that was chose was a great choice as it gave the students a lot to think about. The conversation was rich before the walk which gave them a good purpose to move forward in their learning. The expectations were followed and the students were aware of what they were supposed to do. Students were engaged and mostly stayed together with their buddies to explore for roots. The conversation after exploration led to many new thoughts and learning. I feel like a lot of the students were prompted to think more deeply about their roots and what that means to them and their place.

**What did you find challenging?**  
Some of the students didn't stay with their partners like they were asked to do. It has been a challenge for some students all year. Also, some of the students seemed to be off task near the end of the walk as they were drawing in the mud and playing with sticks in the dirt.

**Was there anything I did that you haven't seen before?**  
Not necessarily anything I haven't seen done before but I liked our conversation around not repeating students answers as to not take away their voice and the importance of what they are saying.

**What did you think about the cognitive tools? Do you think they made the walk more meaningful?**  
I had never used or read about the cognitive tools in the Walking Curriculum book so the tools were new to me. I really liked using the metaphor tool of "feeling rooted" and "branching out" because it gave deeper meaning to the purpose of the walk. Usually I would have just come back from the walk and we would have talked about what we discovered about roots but the cognitive tool gave the students something more to think about. They built on each others' ideas more than they have ever before.

**What questions do you have?**  
When can we go again? It was so much fun and my students are looking forward to going out again with you!



*Ms. L*

Re: Walk Debrief

KL

To: Megan Sandham

Mon 25-Apr-22 4:56 PM

Yes I can.

What went well? I think the whole walk was well laid out and having layers to the questions allowed them to think deeper each time they went out. It was valuable being on the school grounds again. We need to revisit it more. The deeper thinking answers made me pound and reminded me why we go out so much. Time and patience pay off.

The reflective drawing was important to showing

What did you find challenging?  
Being on the school and forgetting our no playground rule was frustrating. It told me to revisit the school more during WW.  
It frustrated me when they weren't using local animals and were being silly about the animals.

What was missing?  
I think this is a good lesson. Nothing

What do you think about the cognitive tools?  
Do they make the walk more meaningful?  
Yes this helps guide the thinking and allows our students to dive deeper and make more connections.

Questions:

Do you need more?

---

**From:** Megan Sandham  
**Date:** Monday, April 25, 2022 at 12:33 PM  
**To:**  
**Subject:** Walk Debrief

Happy Monday! I hope you had a chance to enjoy the beautiful weather this weekend!

When you have a chance could you please send me your debrief from our walk last week.

See you on Wednesday!

Megan

*Miss C*

## April 13 Debrief

Wed 13-Apr-22 12:32 PM

To: Megan Sandham

## Debrief:

## What went well?

- The open and welcoming atmosphere of the two grades was wonderful! They had so many reflective ideas to share and no answer was the same. When a student mentioned that humans have roots inside them (their veins) I was in awe of the metaphor the used unknowingly.

## What did you find a challenge?

- I found it challenging to get students that I don't teach, on task. It's possible that I haven't earned their trust yet, but certain grade 3's were reluctant to look for roots around them.

## Anything new?

- Most things were new to me. Not repeating after a student was very new, and it seemed hard! Allowing students to lead the discussion by not giving them answers or ideas. It felt like a true reflection of inquiry and allowing students to think on their own. As a new teacher this is something I'm still learning to do since I feel the need to fill the space of silence.

## Cognitive tools? Walk more meaningful?

- Using metaphors in a way that wasn't explicit was very interesting and it added lots of meaning to the walk. The fact that we didn't even have to say "We will be using metaphors..." was great because that would have felt constricting to students. The class had many answers and opportunities to compare roots and terms of "rooted/branch out," etc. to other things in their world and made the walk/discussion that much more engaging.

## Questions?

- No questions yet! Still taking in and trying to learn more about outdoor learning through this walking curriculum.



### Appendix C4 - Final Walk Teacher Reflection Questions

- What were the strengths of the walk?
- What were the challenges?
- What was missing? Was there something you wish this walk had included?
- How did the use of the cognitive tools change the walk?
- What, if anything would you do differently next time?
- Do you see connections to other areas of the curriculum in the walk?
- What extensions would you suggest?
- What questions do you have?
- Any other observations/comments you'd like to share?

### Appendix C5 - Final Walk Reflections

*Mrs. M*

Monday, May 30, 2022 at 09:14:31 Pacific Daylight Time

---

**Subject:** Re: Colour Walk Debrief  
**Date:** Friday, April 29, 2022 at 11:50:52 AM Pacific Daylight Time  
**From:** [REDACTED]  
**To:** Megan Sandham  
**Attachments:** Outlook-dhrcwnum.jpg, Outlook-mx040e1v.png

- **What were the strengths of the walk?**  
 The walk was fun and the cognitive tool created an atmosphere of creativity for the students (naming the colours they had created).
- **What were the challenges?**  
 There were less challenges with this walk as the students are getting more used to the procedures. Students were engaged and listened. They were excited to share their ideas.
- **What was missing? Was there something you wish this walk had included?**  
 We included a story with the lesson as we liked that way to hook the students into the colour walk lesson. I wish some of the walks included some mentor books that could be read with the walks.
- **How did the use of the cognitive tools change the walk?**  
 The cognitive tools add another layer to the walk. I hadn't used the tools associated with the walks before. Usually, we would go out for a walk with a certain purpose, the students would get distracted by something else on our walk and we would take the opportunity with that teachable moment. Now, using the cognitive tools, I feel like our walks are more focused and purposeful. The students tend to stay more on track with the reason why we are walking.
- **What, if anything would you do differently next time?**  
 Nothing! I really like how we developed the lesson and how we included the First Peoples Principles of Learning in the lesson.
- **Do you see connections to other areas of the curriculum in the walk?**  
 I didn't in this walk as much as I did in the previous walk.
- **What extensions would you suggest?**  
 Reading a story and including the FPPoL in each walk are great ways to extend the lesson
- **What questions do you have?**  
 How could I connect this walk to the curriculum in an authentic way?
- **Any other observations/comments you'd like to share?**

Page 1 of 3

*Ms. L*

Re: Colour Walk Debrief

KL

Tue 03-May-22 9:22 AM  
To: Megan Sandham

👍

↶

↷

→

...

- What were the strengths of the walk?  
There is colour everywhere and it is easy to identify a variety of colours. Students were able to find a variety of colours and all were engaged in learning.
- What were the challenges?  
There were some picking the flowers and were not remembering nature stays in nature. Some were done fast and looking for what is next/
- What was missing? Was there something you wish this walk had included?  
How to deal with multicolour items? Are they one or the other?
- How did the use of the cognitive tools change the walk?  
Afterwards during the discussion period people were using deeper thinking to share their ideas. Connecting our walk to colour on clothes etc.
- What, if anything would you do differently next time?  
We could look at one item such as the variety of flower colours or can we find a variety shades of red etc.
- Do you see connections to other areas of the curriculum in the walk?
- What extensions would you suggest?  
The connection to indigenous plants would be a great extension here. Dying and weaving. Also creating paint for your class would also be a good extension. Everyone makes their own paint colour in each colour. When we paint we can use all the class colours. So can tie into art. Also literacy if you work on describing each colour in writing,
- What questions do you have?  
Would we have the same success if this was done in September?
- Any other observations/comments you'd like to share?  
We shared a few when we walked I can't remember what we talked about.

Thank you!

Meg

about:blank

1/1

## ***Appendix C6 - Final Questionnaire***

### **Final Interview Questions**

Thank you so much for your willingness to take this journey with me! Please answer the following questions as you think about our entire inquiry. Take your time and let me know if you have any questions or would like some clarification.

1. What walk was your favourite? Why?
2. What walk was your least favourite? Why?
3. Describe your experience of co-planning the walks using *A Walking Curriculum*. What were the strengths and challenges of co-planning the walks?
4. Was *A Walking Curriculum* user friendly? Why or why not? What role do you see *A Walking Curriculum* playing in your practice moving forward?
5. What is your understanding of Imaginative Education?
6. We used several different Cognitive Tools in our walks.  
How did the introduction and use of these cognitive tools affect the walks for you? For your students? What role do you see Cognitive Tools playing in your practice moving forward?
7. What were the highlights of this inquiry? What stood out to you?
8. What were the challenges you faced during this inquiry?
9. At the beginning of our inquiry, you identified some barriers to outdoor learning. Has the use of *A Walking Curriculum* helped overcome any of these barriers? Why do you think this is the case?
9. What questions do you still have?
10. What supports would you like moving forward?
11. What advice would you give to teachers who are new to outdoor learning?
12. What suggestions do you have for me in supporting teachers with outdoor learning?
13. Is there anything else you would like to share?

## ***Appendix C7 - Final Questionnaire Response Samples***

### ***Miss C***

#### **3. Describe your experience of planning the walks using A Walking Curriculum. How do you think your experience would change if you were co-planning with a colleague?**

- It was a very seamless process using A Walking Curriculum. Since the resource is short and sweet I didn't feel overwhelmed with the lesson I was going to produce. Since I am a Teacher Candidate, I slightly co-planned with my School Advisor to make sure we were on the same page for how the lesson would go. I can see though, how being given such a concise resource and lead teachers towards different paths and visions for a lesson, so it's possible that many ideas can come about from a single walk. I'm curious if as an educator I would want to split the lesson over two days to ensure students are receiving different perspectives on one topic.

#### **4. Was A Walking Curriculum user friendly? Why or why not? What role do you see A Walking Curriculum playing in your practice moving forward?**

- It was VERY friendly! I didn't feel bogged down by planning the lesson and when I was doing it. If anything it made me excited and eager to plan another one because it offers great inspiration with so much freedom to explore the natural world with students. I personally, want to get a copy of A Walking Curriculum so I can use it at least weekly in my teaching career.

### ***Mrs. M***

#### **6. How did the introduction and use of these cognitive tools affect the walks for you? For your students? What role do you see Cognitive Tools playing in your practice moving forward?**

I am so happy that I co-planned these walks because I probably would have never used the cognitive tools. When I read the book, I was confused about what the purpose was of the cognitive tools. In the book, I feel like the tools aren't explained very well. I didn't understand what they were. Now that I have had the chance to use them and taught how to use them, I won't probably do a walk without them. They were so helpful to focus the purpose of our walk. The tools gave the students a deeper knowledge about what the walk was about rather than just a time outside to learn. This was evident from the deep discussions we had with each walk. Students were able to share what they learned and why it was important.

#### **7. What were the highlights of this inquiry? What stood out to you?**

The highlights for me were seeing the curiosity of the students grow, even just about the garden on our school grounds. I was also happy to introduce more outdoor learning practice to my teacher candidate. I feel like it is something that she will now try as she moves her teaching practice forward. Another highlight was listening to the students thoughts and ideas. They were rich and interesting. The cognitive tools helped pull out their deeper thinking.

#### **8. What were the challenges you faced during this inquiry?**

I hate to admit it but the weather was still a challenge for me. I need to make sure I am prepared for the weather and leave warm clothes and boots at the school.

***Ms. G***

**6. We used several different Cognitive Tools in our walks. How did the introduction and use of these cognitive tools affect the walks for you? For your students? What role do you see Cognitive Tools playing in your practice moving forward?**

I appreciated your questions so very much as I may not have thought of them on my own. I think it brought added interest and a sense of fun into the outdoor lessons. I liked hearing the kids using the language associated with the questions.

**7. What were the highlights of this inquiry? What stood out to you?**

The highlights of the inquiry included being introduced to the cognitive tools and going a bit deeper with the follow up activities as a response to our Outdoor Learning walks vs class discussions or no follow up.

**8. What were the challenges you faced during this inquiry?**

The only challenge was one of time as I'm the head coach for Track and Field. Spring is my busiest season of the school year. That being said, this doesn't impact doing the Outdoor Learning walks and activities.

**9. What questions do you still have?**

Not really a question, but I feel I need more experience and practice with the cognitive tools.

***Ms. L***

**3. Describe your experience of co-planning the walks using A Walking Curriculum. What were the strengths and challenges of co-planning the walks?**

I think our strength was our experience outside so much that students felt comfortable outside.

Challenge was sometimes finding the right time to plan.

**4. Was A Walking Curriculum user friendly? Why or why not? What role do you see A Walking Curriculum playing in your practice moving forward?**

Yes, it was helpful as it guided a structured walk to support the cognitive tools instead of just being. There is a time and a place for unstructured walks but this opens the door in so many ways. I am going to use this to guide walks next year in the school starting in September.

**5. What is your understanding of Imaginative Education?**

It is allowing curiosity and creativity to guide your learning. Its allowing children to guide either learning through play. I use the term playful inquiry.

## References

- Blenkinsop, S., Jensen, A., Jickling, B., & Morse, M. (2018). Wild pedagogies: Six initial touchstones for early childhood environmental educators. *Australian Journal of Environmental Education*, 34(2), 159-171. <https://doi.org/10.1017/aee.2018.19>
- Canadian Commission for UNESCO. (2021, June 21). *Land as teacher: understanding Indigenous land-based education*. IdeaLab. <https://en.ccunesco.ca/idealab/indigenous-land-based-education>
- Caunce, A. (2020). *Playing in the muck and other arty stuff: Imaginative activities for the walking curriculum*.
- Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. University of Chicago Press.
- Egan, K. (1999). *Letting our presuppositions think for us*. Retrieved from <http://www.educ.sfu.ca/kegan/Presuppositions.html>
- Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. The Falmer Press.
- Fullan, M. (2016). *The new meaning of educational change (Fifth Edition)*. Teacher's College Press.
- Hine, G. (2013). The importance of action research in teacher education programs. *Issues in Educational Research*, 23(2), 151-163.
- Hunter, J., Brodal Syversen, K., Graves, C., Bodensteiner, A. (2018). Balancing outdoor learning and play: Adult perspectives of teacher roles and practice in an outdoor classroom. *The International Journal of Early Childhood Environmental Education*, 7(2), 34-50.
- Judson, G. (2015). *Engaging imagination in ecological education: Practical strategies for teaching*. University of British Columbia, Pacific Education Press.
- Judson, G. (2018). *A walking curriculum: Evoking wonder and developing sense of place (K-12)*. Independently Published.
- Judson, G., Powell, R., & Robinson, K. (2021). Educating perfinkers: How cognitive tools support affective engagement in teacher education. *The Canadian Journal for the Scholarship of Teaching and Learning*, 12(1), 1-18.
- Kozulin, A. (2003). Psychological tools and mediated learning. In A. Kozulin, B. Gindis, V.S.

- Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (1st ed., pp.15-38). Cambridge University Press.
- Oberle, E., Zeni, M., Munday, F. & Brussoni, M. (2021). Support factors and barriers for outdoor learning in elementary schools: A systemic perspective. *American Journal of Health Education*, 52(5), 251-265.  
<https://doi.org/10.1080/19325037.2021.1955232>
- Project Zero Harvard Graduate School of Education. (n.d.). *I used to think...Now I think....*  
 Retrieved May 25, 2022, from  
[http://www.pz.harvard.edu/sites/default/files/I%20Used%20to%20Think%20-%20Now%20I%20Think\\_1.pdf](http://www.pz.harvard.edu/sites/default/files/I%20Used%20to%20Think%20-%20Now%20I%20Think_1.pdf)
- Robinson, V. (2018). *Reduce change to increase improvement*. Corwin.
- Sax, C. & Fisher, D. (2001). Using qualitative action research to effect change: Implications for professional education. *Teacher Education Quarterly*, 28(2), 71-80.
- Smith, K. (2014). *The imaginary world of \_\_\_\_\_*. Penguin Random House UK.
- Tamaki, J. (2018). *They Say Blue*. Groundwood Books Ltd. The Centre for Imagination in Research, Culture & Education. ( n.d.). *A brief guide to imaginative education*.  
<http://ierg.ca/about-us/a-brief-guide-to-imaginative-education/>
- van Dijk-Wesselius, J. E., van den Berg, A. E., Mass, J., & Hovinga, D. (2020). Green Schoolyards as outdoor learning environments: Barriers and solutions as experienced by primary school teachers. *Frontiers in Psychology*, 10(2919), 1-16.  
<https://doi.org/10.3389/fpsyg.2019.02919>
- Wood, H. & Judson, G. (2022). *Walking forward: Learning from Place*.  
<https://www.educationthatinspires.ca/files/2022/05/Walking-Forward-Wood-Judson-2022.pdf>