ENGAGING IMAGINATION in ECOLOGICAL EDUCATION

Practical Strategies for Teaching



Gillian Judson



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INTRODUCTION

What's it got to do with me, Ms. J? There I stood, empty water bottle in hand, giving a student the evil eye. How many times had I asked my students to recycle their plastic water bottles? I felt extremely frustrated—why didn't he put the plastic bottle in the blue recycling bin? Lack of knowledge was not the problem. Every classroom in the school had recycling bins; most businesses and homes have them as well. It is widely acknowledged that recycling is one way to reduce humanity's impact on the planet. In effect, recycling is one practical aspect of a broader interest in transforming the ways in which people interact with the world around them. It is one doable piece of a much larger agenda to make human beings more aware of their role in protecting the planet's environment. So I was not talking about an isolated school initiative; rather, it was a pressing social issue that has become a pervasive dimension of the educational agenda in nearly all schools.

As students bolted for the door and I looked with some dread at the towering pile of unmarked assignments on my desk, I pulled the empty bottle from the garbage can—which was situated *right beside* a very large, very blue recycling bin—and called the student back. I asked him, "Why didn't you recycle this bottle?" Usually students squirm a little and quickly offer a sideways apology: "Right! Sorry. Forgot. Oops." This time my student didn't apologize or make an excuse. Instead, he asked me why he should bother: "What's it got to do with me, Ms. J?"

This student expressed a sense of emotional disconnection from a situation much larger than himself, much greater than one plastic bottle ending up in the trash rather than a recycling bin. This was a good, conscientious student who, like many others, was gaining

knowledge about ecological issues in school and society at large, but who felt little, if any, personal connection to these issues. I observed in this student, at that moment, an expression of disaffection—a feeling that I've sensed with my students before and also, at times, within myself. Is recycling a bottle really going to make a difference? Why bother? It is becoming increasingly clear that our survival as a species requires more than recycling; it requires reimagining humankind's relationship with the natural world.

I am not the only one to notice a disconnection between knowledge and action.¹ Despite knowing what is going on and going wrong in the world, human beings continue to have little to no emotional connection to it and little to no commitment to do anything about the effect our collective actions are having. It seems, however, that the people who are most concerned about the earth—who are committed to making significant lifestyle changes for the sake of all life on the planet—have an emotional and imaginative connection to the natural world that runs very deep. Often, but not always, this is connected to engagement with the natural world in childhood.² Teaching in ways that afford students opportunities to feel something for what they are learning, by engaging their bodies, emotions, and imaginations in the world around them, is what this book is all about. It answers a question that teachers are increasingly seeking to address: What is required to Ecor All right city educate for ecological understanding?

Overview

This book is designed for educators who want examples of what students' emotional and imaginative engagement in learning and in the world around them looks like in practice. It also provides resources for lesson and unit development and addresses issues such as assessment and implementation. It is a practical guide for teachers of students of all ages and in all contexts—urban, suburban, and rural—who are seeking to educate for ecological understanding. To understand ecologically is to make sense of the human world as part of, not apart from, nature; it is to understand humankind's "implicatedness in life." 3 If we are to reduce our impact on the earth's natural resources, a deep cultural change is required to make long-lasting changes in the ways that we choose to live our lives.

Ecological understanding represents a radical shift away from the industrial mindset that has set humankind apart from nature and has also fuelled much of human development in the Western world. Ecological understanding requires reimagining ourselves and our world based on emotional and imaginative engagement. What this means in practical terms is that our beliefs and actions as a species will be influenced in no small way by a deeply felt connection with the world around us. There's a slogan in my daughter's elementary school classroom that reads "From Me to We." It is a call for greater social responsibility, reminding children to be inclusive and embrace the diversity of the human community in which we live. Ecological understanding could use the same slogan, although with a much broader embrace. The "we" now includes the natural world, and our thinking about how to live is profoundly influenced by this realization. Thinking "we"

engages social and ecological responsibility simultaneously. Emotional and imaginative connection to the local natural and cultural context in which people live supports the kind of care and concern for the earth that underlies more harmonious human action and decision-making.

For educators, cultivating ecological understanding is a much more challenging task than imparting knowledge of ecological issues—something that still tends to dominate some ecologically oriented educational programs.⁴ Educating for ecological understanding requires focusing on engagement throughout the teaching and learning process. Emotional and imaginative engagement with knowledge, with the world, and with the local natural and cultural contexts in which our students live and learn can support the kind of decision-making and action that addresses significant aspects of consumeroriented cultures. For example, we should wisely refuse first, then reduce, reuse, and recycle. With ecological understanding framing the ways in which we make sense of our world, we may see more reusable water bottles and fewer plastic ones. We may also see less paper in recycling bins, not because it has been thrown in the trash, but because we have radically reduced the use of paper. In short, recycling is important but it simply isn't enough. If we happily recycle but do not question the underlying issue of how much we consume and what impact our consumption has on the earth, then we are not going to be able to make the radical decisions—and changes—required to support a sustainable environment and healthy planet.

The chapters that follow provide a description of key principles of an approach to teaching called Imaginative Ecological Education (IEE).⁵ This method of teaching is centrally concerned with student engagement with knowledge and with the natural world of which students are part. You will read about how students can develop literacy skills through teaching that engages them as trackers in nature. As they learn to read signs in the natural world around them, they will also learn to read the symbols of alphabetic literacy. A unit on weather situates knowledge associated with science, social studies, and mathematics curricula within a context of students training to become meteorologists. Indoors and outdoors, IEE encourages students to feel, honour, collect, and organize knowledge about the various forms of weather around them. Through these examples, you will see how to replace the industrial model for teacher planning with a socio-cultural conception of learning that provides you with tools for making knowledge meaningful in students' minds.

Chapter 1 provides a critique of current programs in ecological education and explains the rationale for implementing an Imaginative Ecological Education program. Chapter 2 provides an introduction to the theory of IEE and its three principles: *Feeling, Activeness*, and *Place*. These principles are then discussed in detail in chapters 3, 4, and 5. Chapters 3 and 4 use a unit on weather to illustrate how the principles can be translated into practice. My hope is that you will find that the tools I employ with the topic of weather can be used to shape numerous other topics that you teach. Chapter 5 focuses on place-based activities that enable students to develop a *sense of place* and *feel* something for the contexts in which

they live. The detailed examples in these chapters illustrate how curricula can be designed using tools of the imagination and how, as a result, educators can cultivate ecological understanding as part of everyday teaching. Chapters 6 and 7 provide a unit on teaching literacy—a topic that some readers may not immediately consider imaginatively engaging or conducive to ecological teaching. These chapters address the question: "How do we teach children to read and how do we develop literacy skills in imaginative and ecological ways once students can read?" Chapter 8 reviews the practical dimensions of IEE, addresses implications for assessment and evaluation, and includes resources for getting started, collaborating, and implementing IEE in schools and classrooms.

.—and any ... the process. T ... whedge and resource ... whedge and resource ... where the process of the proce of student—in a way that engages the body, emotions, and imagination in the process. The chapters that follow provide you with the needed background knowledge and resources to use this approach in your teaching.

CHAPTER 1



THE RATIONALE FOR IMAGINATIVE ECOLOGICAL EDUCATION

o we really need *another* educational program? Aren't there plenty of educational programs available to the school districts, schools, and teachers taking on sustainability initiatives? Unfortunately, there aren't. For the reasons that I will address below, this chapter addresses why, for the most part, the educational programs and resources currently available are ill suited for cultivating ecological understanding. They are imparting knowledge but ignoring the emotional and imaginative core of ecological understanding. Consequently, students' behaviours often do not change—as illustrated by the example in the introductory section of this book, where a student did not bother to recycle his plastic bottle.

The Limitations of Current Ecological Programs

I am hardly the only one suggesting that humanity should care more about the earth or that teaching should cultivate students' ecological understanding. If you look at the mission statements of many schools, you will likely find references to the social need to address ecological issues and to create more ecologically aware citizens. In most mainstream schools, however, the interest in encouraging students' sense of ecological responsibility is one of a wide range of social and academic goals that include, for example, the development of social responsibility as well as increased literacy and numeracy skills. It is rarely acknowledged that cultivation of ecological understanding is an aim that requires a different pedagogical approach from the objectives-based model currently shaping educational practices.

In mainstream schools, teachers may connect curriculum topics to the natural environment in their local areas from time to time, possibly offering some outdoor and hands-on learning in attempts to get students outside.¹ Students in these schools may also have the opportunity to participate in immersive types of ecological educational programs. There are many different education centres, programs, and schools that describe themselves as "ecological," "place-based," or "environmental." When funding is available, they may offer immersive, ecologically oriented experiences for students that aim to develop ecological understanding. (For example, a quick internet search for such programs close to my home found S.E.E.C.—the Saturna Ecological Education Centre on Saturna Island, British Columbia, Canada.)

There are also ecologically oriented public schools that make the cultivation of ecological understanding of more central importance. Examples include Sunnyside Environmental (Middle) School in Portland, Oregon, and the Coombes School in West Berkshire, United Kingdom.² In attempts to connect children to nature, some public schools have made pedagogical changes that are even more radical. In these schools—often considered alternative—there are no school walls at all. The natural world is the classroom. In the last few years in North America, for example, there has been an increasing interest in fully outdoor, nature-based schooling for young children. These kinds of programs have been around for much longer in the UK and other European countries, and are serving in some cases as models for North American programs.³ Under the names of "Forest Kindergarten," "Nature Kindergarten," or "Outdoor Kindergarten," the concept of fully outside learning for young children is beginning to take its place in the range of educational program options available in North American school districts.

For example, both the Cedarsong Nature School (in the state of Washington) and the Mother Earth School (in Portland, Oregon) offer outdoor kindergarten programs. The Cedarsong Nature School has been offering nature immersion programs since 2006 and, more recently, a fully outdoor kindergarten program. The Mother Earth School, which first opened in 2007 with a single kindergarten class and is now enrolling students in kindergarten to grade 2, combines the Waldorf educational philosophy with a place-based learning model. In Canada, the Equinox Holistic Alternative School, founded in 2009 and located in Toronto, began offering an outdoor public kindergarten education program in the 2012–2013 school year. In British Columbia, outdoor primary education programs are being offered in various school districts, including Sooke and the Sunshine Coast. Since 2011, an entire elementary school curriculum has been taught "without walls" in the outdoor spaces of Maple Ridge, BC. In multi-age groups, students in kindergarten to grade 7 have been using the parks of Maple Ridge to learn the curriculum. My work on IEE as a curricular approach stems, in part, from my work with this project.

A teacher recently told me that her school was implementing the "West Coast recess"—that is, no matter the weather, kids spend one recess per week outside. While I am not sure how far this particular initiative can move us towards ecological understanding (it seems more likely that we will need to learn to deal with dripping kids), it does reflect a broader

acknowledgement of the value of children spending time outdoors. My research shows, however, that an increased interest in getting kids outside and interacting with nature is not necessarily for the primary purpose of increasing ecological understanding. For example, Knight defines the Forest Schools movement as follows:

In the UK, Forest School is a way of working in an outdoor environment, preferably but not exclusively in wooded settings. This is based on the premise that repeated enjoyable outdoor experiences will have a positive effect on people, including on their potential dispositions for learning or for personal change...⁶

Knight's account of the rise of Forest Schools in the UK and the diverse program offerings within this field⁷ demonstrate how this initiative is based on the belief that learning in the outdoors supports students' personal growth and their physical and emotional well-being. Similarly, both Constable and Slade, Lowery, and Bland describe the ethos and primary aims of Forest School programs in terms of increased motivation and engagement, development of creative and critical thinking skills, and social, personal, and emotional well-being.⁸

In the outdoor education movement one also finds that the cultivation of ecological understanding is not necessarily a central pedagogical aim. Allen Hill describes the "contested space of outdoor education" in which issues of "identity, philosophy, theory, curriculum, and pedagogy" continue to be discussed. He acknowledges that, more often than not, outdoor education is not aimed at developing ecological understanding; instead, many outdoor education programs in the Western context reflect the primary aims of adventure pursuit and personal development. Hill believes, however, that outdoor education should attend more specifically to ecological concerns, and he has designed a model that interconnects the aims of outdoor and sustainability education initiatives. In the cological concerns is a sustainability education initiatives.

Not surprisingly—and thankfully, from my perspective—it seems outdoor learning experiences, no matter the intent, can increase students' understanding of, and feelings of connection to, the earth. Two studies of student experiences in Forest Schools—by Ridgers, Knowles, and Sayers and by Slade, Lowery, and Bland—indicate how these programs increased students' knowledge of the natural world, 11 and their "understanding and appreciation of the natural environment," 12 despite the fact that students did not acknowledge increased care and concern for nature to be a primary aim of the program.

The dual aim of these programs to get students outdoors and increase their contact with nature aligns with Richard Louv's argument that human beings *need* nature. ¹³ That is to say, a primary rationale for moving learning outside—or, at least, increasing the number of experiences children have outside—revolves around the benefits nature can have for human health and well-being. The interest in connecting people with nature to evoke a more fundamental change in human-nature relationships is not discounted, but it is *not* the driving force behind these initiatives. Rather, we hear the argument that human

beings are increasingly suffering the consequences of living in an urban, indoor, plugged-in world. This kind of thinking reinforces instrumental values of nature—preserve nature because we can use it and need it to survive and thrive—rather than acknowledging the value of nature for its own sake.

I do not disagree with Louv's thesis that human beings' psychological, emotional, and physical health stems, in part, from contact with nature and that nature does people good. He are human-centred rationale for reimaging our relationship with nature won't take us far in shifting our perceptions of the world and our place in it. IEE builds on the premise that nature is *intrinsically* valuable, not only because its preservation appears crucial for human flourishing. Indeed, the kind of profound shift in human thinking required to address ecological issues is not possible if we continue to think about nature's value in instrumental terms. If we are to resolve local and global environmental crises, it is necessary to redefine the human-world relationship. He

I expect that many people considering nature-based experiences for children will find Louv's arguments compelling. ¹⁶ It is natural for people to want to do things that are beneficial for their well-being. Personal needs aside, however, it seems to me that the earth desperately needs human beings with an emotional connection to nature that translates into a desire to live differently. If we are healthier as a result—and no doubt we will be—that is a bonus.

There is a subtle difference between Louv's views and the premise behind adopting IEE as a pedagogical approach. Therefore, providing a rationale for IEE is crucial. Unless teachers see the importance of a new educational approach to ecological education, the effect they have on developing their students' ecological understanding will be limited. What I hope to show is that we will not be able to reimagine the human-world relationship without a pedagogical approach that

- centralizes ecological education in the curriculum;
- gets students outside;
- recognizes the importance of human beings' emotional and imaginative nature as crucial to shaping understanding and behaviour; and
- situates learning in the natural and cultural contexts in which students live and learn.

Supplemental, Infusionist, and Intensive Approaches

Currently, the resources available to teachers that make ecological education integral to the curriculum are limited. Most of the resources available today leave ecological education as an "add-on" to the curriculum or are tied to a specific subject area. This supplemental approach offers teachers curricular materials in the form of self-contained teachable units or lesson plans (for example, Project Wild materials or resources available through a magazine such as *Green Teacher*). In an infusionist approach, ecological topics or themes are used to shape particular curricular areas (such as social studies or language arts). In an intensive experience approach, students spend a few days once—or, if they

are lucky, twice—in a school year at an outdoor education centre or program where they are immersed in nature-focused curricula. An example of this approach is the Sea-to-Sky Outdoor School for Sustainability Education, located in North Vancouver, BC. In all three of these types of programs, ecological education remains peripheral to students' learning.

Changing the Context

Currently, students are primarily learning indoors. If we adhere to the belief that *real learning* takes place at desks or most certainly within school walls, we cannot change students' understanding of the world around them. We have been so conditioned to think about learning in particular ways that we don't question the negative impact that staying indoors might be having on student learning and student understanding of the world. I am suggesting that long-held and unquestioned classroom routines—how topics are taught, how we expect students to demonstrate learning, and even the programs we offer—may be stifling student imagination. We need to bring novelty into learning by changing the learning context—in this case, through relocating learning—but also through new, imaginative forms of engagement.

Consider also that if we assume that the classroom is the site of real learning, we may be contributing negatively to our understanding of ourselves as a species. The fact that we continue to separate ourselves from the world around us in order to learn about it is indicative of the ways we conceive of our relationship to the world. Imaginative ecological education addresses these negative features of current practice by getting students outside classroom walls more frequently and as part of the process of learning the mandated curriculum.

Technology and Ecological Education

You may be wondering how technology fits into ecological education. Can some of the hightech graphics and high-definition forms of media support the development of ecological understanding? Learning about nature inside rather than outside is a lot like conducting a music class without instruments or song. It is one thing to talk about playing a trumpet or singing and quite another thing to actually do it. While television and classroom teaching can provide knowledge, they cannot replace the awareness and emotional attachments that develop from direct experience in nature.¹⁷ In order to be able to emotionally and imaginatively engage with the natural world—to develop a connection with the diversity of life that surrounds them, no matter where they are in the world-students need to get outside. It is outside classrooms and school walls that students will more routinely experience their connection with the natural world around them, whether by feeling the breeze on their arms or the warmth of sunshine on their faces. An imaginative and ecological approach to teaching will challenge the norms and routines of classroom teaching, engaging children in learning within the world they inhabit. In rural, suburban, and urban contexts, imaginative ecological educators will extend their classrooms into the natural and human communities around them.



(HAPTER A

USING IEE PRINCIPLES TO SUPPORT READING AND WRITING

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many sio Strictly Prohibited.

dio* Deing able to track—to "read" or make sense of the many signs of life in the landscape— Dwas, at one time, a requirement for people's immediate survival. Rewind 2,000 years: If you didn't find your quarry, you and your people didn't eat. Fast-forward to the present day: Now, most people don't have to rely on accurately identifying spoor (indication of an animal's presence, such as tracks, signs, and trails) to put food on the table. However, the art of tracking has continued significance in the cultivation of ecological understanding, environmental planning, and law enforcement. Today, we are much more likely to be able to read the written word than the signs and symbols of the natural world.

Overview of Literacy Unit: Chapters 6 and 7

You may be wondering how human survival and tracking are connected with literacy. Tracking is a metaphor through which to imaginatively engage students in learning to read and write the signs of the alphabet and develop other literacy skills. This chapter and chapter 7 describe a range of place-based, ecologically sensitive activities designed to support you in developing the literacy skills of your students while fulfilling the mandated curriculum. This chapter begins with background information on how this literacy unit was developed, describes how mythic and romantic story forms or narrative structures were used to shape instruction on tracking and literacy, and concludes with ongoing activities that connect students' literacy development with somatic engagement and placemaking. Chapter 7 provides tracking and literacy activities designed for three different

natural places: a riverside, a wood, and a riverbed. These activities can be adapted to your local context. Chapter 7 concludes with activities that allow students to bring the story form or narrative of tracking and literacy to a celebratory closure.

The place-based tracking and literacy unit outlined in these two chapters has three pedagogical aims. The first aim is to show students how reading the *world* (tracking) and reading the *word* (alphabetic literacy) broaden human consciousness in distinctively different ways and contribute to two different understandings of the human-nature relationship. Tracking represents a kind of engagement that may bring us into closer relationship with the world around us, whereas literacy may leave us dislocated from the natural world. By drawing students' attention to the distinctive way alphabetic literacy engages us in the world and juxtaposing it with the tools of orality and the heightened somatic awareness of tracking, students may recognize how the various technologies we use to understand the world also shape the world we see.

The second aim of this unit is to support students in developing a sense of place. The suggested activities engage place-making and other imaginative tools that can nurture students' sense of immersion in a living world. These activities can easily be adapted to meet the needs of students in a variety of contexts.

The third aim of the unit is for students to become able writers and readers. The activities provide many opportunities for them to fulfill the kinds of mandated curriculum objectives for literacy that are similar in many jurisdictions. Along with the proposed activities, students of all ages and abilities should be given opportunities to read during each school day. Their literacy skills can be nurtured through guided reading (for new readers) and independent reading (for developing readers) of a variety of texts linked to unit themes, as well as books of their own choosing.

Background on the Development of the Unit

Planning this unit departed in two main ways from the kind of teaching practice I was trained in.

The first departure was that the literacy objectives did not direct my planning. That is, I did not work backward from the features of literacy I wanted to teach and design activities that would attend to each one. Rather, I began by reviewing features of literacy my students needed to learn. Then I thought about the emotional significance of literacy. What is the story on literacy? What is it about literacy that can evoke students' sense of wonder? Then I turned to the cognitive tools I knew my students would be using to make sense of the world around them and that I could employ to evoke their emotions in learning.

To address the different forms of imaginative engagement of new and more experienced readers, I developed two different story forms or narrative ways of shaping instruction on tracking and literacy: one "mythic" and the other "romantic."

The mythic story form is designed to engage the imaginations of new readers

(approximately K–Grade 2/3) and employs the cognitive tools of oral language. For these students, learning preliminary techniques for tracking can make them more aware of their surroundings and develop the kind of sensory awareness that can make the invisible become visible. Students will begin to "read" the signs around them, recognizing the multiple ways in which an outdoor space and its inhabitants communicate with them. An increased alertness to place will bring students closer to the world of plants and wildlife that surrounds them. The written word can also bring the invisible into view, so activities are included that will enrich students' recognition and use of the symbols of alphabetic literacy.

The romantic story form or narrative on tracking and literacy is designed to engage the imaginations of developing readers (approximately Grades 3–7) and employs cognitive tools of written language. This unit can enrich their literacy skills through developing their vocabularies and creative writing skills. It also aims to develop perceptual acuteness and, correspondingly, a more sophisticated and trained level of literacy. An able tracker observes the world with an acute level of discernment; the track is a window into the life of an animal.

The second departure was that, unlike most curricular units, this unit is connected to and designed for use in a particular place: Cliff Park, Maple Ridge, a rural community near Vancouver, BC. I chose three locations in Cliff Park that influenced and inspired my thinking and planning: the shores of Kanaka Creek, a cottonwood forest, and alongside sandstone cliffs in the upper riverbed. However, the activities provided here can help you develop imaginative place-based activities for your own context. Ideally you will have access to one or more of the generic locations described in chapter 7.

I strongly urge all IEE teachers to engage with place themselves. IEE is a place-focused pedagogy and it requires the involvement of teachers with an interest in, or an interest in developing, a sense of place wherever they teach. If you wish to awaken your students to the wonders of the places in which they live, you need to engage with place yourself, letting the natural world evoke your imagination and letting place be your teacher. The suggested activities in this unit are primarily a guide or stepping-off point for your own place-based and place-inspired literacy instruction.

Part I: Teaching Tracking and Literacy through the Story Form or Narrative Structure

A Mythic Approach: Framing the teaching of literacy for students in K-Grades 2/3

Note: Suggestions for what you might do appear in *italic* text in parentheses.

(Begin by asking students the following kinds of questions as a way of weaving an imaginative context for your literacy lessons.) What does it mean to be alone? Have you ever been in a natural place like this one and felt completely alone? Imagine you are all alone in this place. Close your eyes. Try to let the images you have in your mind of your friends standing around you slip away. Keeping your eyes closed, pretend that your eyes are not closed; pretend that they

COGNITIVE TOOLS EMPLOYED:

- ☑ Binary opposites (visible/invisible; meaningful/ meaningless)
- ☑ Mental imagery
- ✓ Metaphor
- ☑ Sense of mystery and puzzles

are actually OPEN and that you are the only one here. Pretend that the sound of my voice is your own, inner voice. Think about your breath. Breathe in slowly and deeply. (Try to describe as vividly as possible what you and your students are sensing in place. What follows is what I experienced as I immersed myself in my natural context. Depending on where you are, you may or may not have access to a forested area such as I describe here. However, playgrounds, local parks, or gardens offer wonderful opportunities for evoking students' mental imagery of place.)

Smell the faint scent of wet ground, of moss, of bark. Feel the air against your cheek. You are feeling the breath of the forest. Listen for the sound of the flowing river. Against the constant sound of the water in motion, notice the sound of the water bubbling up against obstacles in the river. Now look—with closed eyes—for the messages coming from the place that surrounds you. You are not alone. You are surrounded by life but you do not yet know how to recognize the signs. What signs of life do you hear around you? What signs of life do you see? (Instruct students to open their eyes. Encourage them to explore a little. Have them come back and be ready to describe some of the signs they noticed visually. They may begin to collect the visual signs by making sketches in their journals. Focus on other senses. For example, spend time talking about the signs of life they heard—can they recreate the sounds? What did they smell? What did they feel? What did they choose to touch?)

(Next you might take a stick and mark the letters R E A D in the dirt. Ask the students some questions about these odd markings.) What are these squiggles? Do they mean anything to you? Where might you find groups of squiggles like this? (Bring the conversation around to the idea of squiggles being letters, groups of squiggles being words, and collections of these being found all around us but especially in books). These are human symbols—another kind of sign. Who knows their letters? Who knows the whole alphabet? Who can sing it? Who can sign it? (Sing it! Sign it!) Letters reveal messages—and only those people who really know all about letters can read these messages.

(You can now extend the notion of markings—or squiggles—to those in nature.) Have you ever noticed that the earth is covered with marks, scrawls, squiggles, shapes, and so on? We are surrounded by all sorts of signs that communicate important meanings to those who understand those signs. What shapes, traces, lines, or patterns do you notice? You might think about this place, this park, as a book. If you learn to read signs, you can enter into it, just as learning to read words lets you enter into the story in a book. Children living here long ago learned how to read the signs of life around them from their elders, and with this knowledge they were able to survive. What did they need to survive? How did being able to read the signs of the natural world help them to survive? You are going to learn to read these same signs: you will learn to track just as the children did who lived here long ago. You are also going to learn to read the signs and symbols that come with the alphabet—two very different kinds of "reading" that will require you to do lots of exploring.

Until you start to recognize natural signs or human signs (the squiggles we call the alphabet), they are just squiggles. Until you begin to learn to identify the different letters and to make sense of groups of letters, or words, they are meaningless. Starting today you will begin to learn how to read the messages present in the world around you—those of animals and humans. Right now, you may not recognize them, so they are meaningless. Reading the signs of life in this place—what we will call tracking—allows you to learn more about the animals that live here, the plants that grow here, and the ways in which we are all connected to the natural world, Learning to read words will allow you to expand what you know, enter into other people's experiences, share your own experiences, and connect with each other. When you learn to read, groups of squiggles will become stories that can take you to places and times you never imagined. When you learn to write, you can share your deepest thoughts, feelings, and secrets. If you are a skilled tracker and reader, you realize you are never completely alone. You can identify the signs of animal life all around you that, to the untrained eye, ear, and nose, often remain invisible. If you are a reader, you can engage with other people even if they are not present. (This is a good time to make a dramatic stretching sound.) Can you feel your world getting bigger?



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