



To Know the World

A New Vision for Environmental Learning

Mitchell Thomashow

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What is the single best thing a person can do for tomorrow's world?
—Richard Powers, *The Overstory*

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I

Why Environmental Learning Matters

1

The Past and Future of Environmental Learning

Now More Than Ever

In the early decades of the twenty-first century, the mainstream media continuously hyped “breaking news,” but the week of September 20, 2019, was truly momentous. Six million climate activists, mainly young people and their adult supporters, from 163 countries, staged over 2,000 events—including mass rallies, school walkouts, and street demonstrations.¹ Although an important focal point was Greta Thunberg’s emotional and riveting UN speech, her story was a symbolic narrative encompassing the dreams, aspirations, and fears of millions of global youths from a great diversity of geographic and cultural locations.

That week, a study published in *Science* magazine, “Decline of the North American Avifauna,” claimed that since 1970, the number of North American birds declined by 2.9 billion—a drop of 29 percent. The story received widespread mainstream media attention. The *New York Times* (September 25) reported on the most recent Intergovernmental Panel on Climate Change study warning of dire threats to the world’s oceans. Still on the newsstands, the August issue of *National Geographic*, “World on the Move,” was devoted to global migration with the subheading “Seas Rise, Crops Wither, Wars Erupt. Humankind Again Seeks Shelter in Another Place.” The September issue, “The Arctic Is Heating Up,” included the additional subheading on its cover: “Thawing Tundra Will Speed Up Global Warming.”²

For people who have been following environmental issues since the 1960s, as I have, these are stories we’re accustomed to. Over fifty years later, the direct, tangible impact of climate change, threats to biodiversity, and species extinction are reaching a new threshold—something we surely anticipated. What’s different is that the impacts now are so tangible, dramatically impacting the lives of just about everyone who lives

on the planet. These events are no longer the supposed special interest of environmental advocates. They are the source of profound human and more-than-human suffering. The young climate activists were born into a world where they worry that their future is limited, their opportunities are diminished, and the earth is in danger. They are fed up with the inaction of global leaders. And they have had enough.

Despite the best efforts of environmental education to deepen awareness of these questions, we have so much more work to do, and much less time to do it. We must embrace the urgency of this ecological planetary emergency. This is a book about environmental learning—how we broaden the scope of our educational efforts, and make connections between the seminal issues of our time, such as migration, race, inequity, climate justice, and democracy—and our understanding of the biosphere. My impression is that climate activists understand these relationships because they live them every day. Our educational work is how to deepen that understanding, use it to inspire widespread action, further clarify the connections, and weave the individual narratives of agency and action into a collective global narrative of constructive change.

I am proposing that we revitalize, revisit, and reinvigorate how we think about our residency on this planet, and am interested in educational approaches for doing so. For all the accomplishments of environmental education (and there have been many), we have not been able to stem the inexorable decline of global ecosystems. Indeed, environmental education is often trivialized, diminished, marginalized, and stereotyped as the province of tree huggers. That's why I use the term "environmental learning" to suggest that our relationship to the biosphere must be front and center in all aspects of our daily experience. This book provides the reasoning, narratives, and approaches for doing exactly that.

We are living in a time of great turmoil, tension, and expectation. It is also a time of hope and promise. I am greatly inspired by the possibilities that await us, young generation of climate activists, and compelling narratives that inspire and motivate them. I wish I could hear all their stories, and weave them together into a tapestry of constructive change, improvisational excellence, and brilliant environmental learning. Our challenge as educators and citizens alike is to tap into that energy and allow it to flourish. *To Know the World* is for the courageous six million activists, the people who support them, and those who are wondering how they should.

What's Next and Why

We have a great deal of ground to cover. Environmental learning encompasses countless themes and the fascinating complexities of their intricate interconnections. Where do we begin and how do we proceed? I've spent fifty years in a variety of educational capacities thinking about that question. Here's what I've learned. There is no one path or sequence for study and learning. You start with what interests you and see where it leads. The role of the teacher is to guide that journey, curate possibilities, ensure that minds stay open and awake, nourish confidence in creative learning processes, and remind learners that education is always reciprocal—giving and taking, remembering and forgetting, practicing and improvising, handing down and passing on, acting and reflecting.

In *To Know the World*, I cover what I think is crucial to the future of environmental learning. The contents reflect my path and interests as well as my experiences as a teacher, my take on the conversations I hear, the people I speak with and learn from, the information I gather, and my interpretation of what all that means. Before I tell you what I intend to cover, I'd like to introduce my own story of how I entered environmental studies way back in the 1960s. As an educator, my strategy is that by clarifying my path, you are inspired to do the same. What is your story, how do you share it, and how will it grow and develop?

What follows is a brief trip back in time when I was the same age as many of the climate youth activists. I believe there is a lineage that connects the past and future of environmental learning. The purpose of this chapter is to amplify that connectivity and contemplate where it leads. I'll start by reviewing the last fifty years of environmental studies. Then I'll explain how the field has changed, and how those changes inform where we go next—what this book covers and why. I will describe the educational perspectives that inform this journey. I have suggestions for how to read this book, make it your own, and use it to maximize environmental learning in your school, neighborhood, and community. How do we expand and enhance multiple narratives of environmental learning?

The Whole Earth Beckons

There's something happening here. What it is ain't exactly clear.
—Buffalo Springfield

I was a college student at New York University in the late 1960s. It was an exceptional time for an inquiring mind and a watershed era in global history. Four movements converged—civil rights, women’s rights, peace, and environment. Although these movements had long traditions, the historical matrix of the 1960s allowed them to develop and flourish. It was a time of cultural flourishing too, as the worlds of music and art, inspired by social upheavals, created alternative venues, styles, and perspectives, all linked to new formulations and possibilities for personal identity. The political and cultural reverberations of these movements are just as vibrant and controversial many decades later. They are also the source of much of the so-called values polarizations that are sweeping the globe.

Of course there was no internet then. To understand many of the exciting new ideas, I would scan the bookstores and magazine stands to keep up with the intellectual fervor. On Friday afternoons, I took the subway from the Bronx to Greenwich Village. I typically visited the Eighth Street bookstore and spent hours roaming the shelves. I loved poring over the record bins at music shops, or searching for new and unusual magazines like *Ramparts* and *Crawdaddy*.³ Many evenings, a group of friends and I would go to the Cafe Au Go Go, where new bands from England or the West Coast—such as Cream, Moby Grape, Procol Harum, and the Byrds—were making their first New York appearances.

One afternoon, I noticed a new and unusual book on the shelves of the bookstore. The front cover featured a photograph of the earth taken from space. The name of the book grabbed me—the *Whole Earth Catalog*. I took it off the shelf and flipped through the pages. It had an atypical layout, with multiple corners, columns, and illustrations. I had never seen anything quite like it. It was divided into compelling sounding sections like “Whole Systems,” “Learning,” “Shelter,” “Community,” and “Natural History.”⁴ In retrospect, this book inspired me to organize my thinking. It provided a way to tie all my interests together, blend the intellectual and practical, and think more deeply about what we now call sustainability. Indeed, as an eighteen-year-old, the *Whole Earth Catalog* represented the future of my environmental learning.

A Book Becomes a Field

Stay hungry. Stay foolish.
—*Whole Earth Catalog*

I pored through the *Whole Earth Catalog*, and took note of the assorted books and “tools” it recommended. It was my first organized environmental curriculum. There wasn’t a single course in the entire catalog of New York University’s uptown campus that explored ecology or the environment. The first Earth Day (April 22, 1970) preceded the academic field of environmental studies. You could study scientific ecology or forestry, but there were as yet no environmental degree programs. The *Whole Earth Catalog* promised a new interdisciplinary approach to learning that connected many different traditional fields of knowledge.⁵

Within a decade that began to change. I was a member of an expanding cohort of thinkers and learners who created the field that they longed to study. Over the next few decades, there were numerous pioneering programs at all educational levels, and by the year 2000, most North American university campuses had environmental undergraduate and graduate programs.

Environmental studies presented an activist orientation to learning—in terms of both a hands-on, field-based approach to curriculum and the urgency of the issues at hand. Environmental educators and activists alike have played a dual role in producing research that calls attention to critical environmental issues, while promoting policy suggestions and solutions. For most of my career I’ve worked with teams of people to develop new environmental programs at our home institutions as well as national gatherings of scholars, educators, and activists.

The passing decades represent a great deal of intellectual ground, and there is much to assess about the strengths and weaknesses of these educational efforts. In retrospect, the field has made great strides in promoting public environmental awareness. In the 1980s, concepts like biodiversity and climate change became front-page news. The sustainability idea took off in the early 2000s, influencing universities, businesses, and city governments, becoming a whole new branch of environmental studies. The depths and layers of scholarship, practice, and influence are remarkable. An entire new lexicon emerged. Despite the ever-challenging magnitude of contemporary environmental issues and legitimate concern that environmental values are not sufficiently influential, the public awareness of these issues has reached a new level.⁶

The Emerging Tides of Change

Many years have passed since the first Earth Day. It’s not helpful to diminish any of the important accomplishments of the environmental

movement. There are waves and cycles of global political trends, however, and environmental concerns do not always fare well. Periods of retrenchment and denial impede policy solutions as well as diminish public awareness. Nor is it sufficient to point out policy accomplishments and feel satisfied. With any significant social change, progress often comes excruciatingly slowly. We try to balance optimism and pessimism. We acknowledge success in order to build confidence, hope, and motivation in the face of difficult challenges.

Feverish tides of change are again sweeping the globe. The same tensions that converged in the 1960s (civil rights, feminism, peace, and environment) inflame as a result of the very environmental issues we've been concerned about—scarcities prompted by natural disasters, political upheavals, and religious extremism; refugees forced to abandon their homes and livelihoods; and interconnected global economic cycles that cause demographic dislocations and migrations, with the attendant impacts on ecosystems and the biosphere.

For the field of environmental studies, in the third decade of the twenty-first century, it's not sufficient to work mainly in the area of conservation and environmental protection. To remain pertinent and responsive, environmental citizens must demonstrate how these convergent challenges are inextricably linked to the fate of the planet. Let's reframe the tides of change as questions:

1. The rapacious exploitation of the biosphere and its life systems continues unabated. How do we best communicate the necessity of ecosystem thinking?
2. There is an increasing disparity between rich and poor. How do we promote economic equity and social justice in cultures of materialism and entitlement?
3. There is great apprehension concerning the integration and separation of global cultures. How do we promote intercultural understanding and cosmopolitan thinking in the midst of nationalist responses and ethnic tribalism?
4. Violence, weaponry, and terror compete with deliberation, diplomacy, and collaboration. How do we settle our differences through community democracy, service, and compromise, in the midst of conflict, autocracy, extreme behavior, and fear?

We are now in a time that very much resembles the 1960s, replete with similar dangers and opportunities. The same discussions of polarization

that I experienced in my youth are rampant around the world. The dark shadows of racism, fascism, and religion extremism haunt local and global communities. Yet the calls for equity, inclusion, diversity, and environmental sustainability ring even louder. In an era of mass access to instant information, the cultural shifts morph at lightning speed, and everything is moving quickly. The pace of change is much too fast for some and not nearly fast enough for others.

Environmental Learning and the Tides of Change

The task for environmental learning is to promote a deeper understanding of the “tides of change” while empowering students and citizens to promote human flourishing in local and global communities, both rural and urban. In my career and this book, I make the case that deepening your environmental awareness broadens your understanding of these challenges while promoting citizenship and agency. Our understanding of environmental issues grows through the blending of concepts and practices. Ideally, environmental learning is adaptive, envisioning creative opportunities for study, service, action, and vocation. The world is constantly changing, and so are we. Environmental learning and citizenship must always anticipate the future, and provide constructive solutions. In *To Know the World*, I propose ways to do that.

But before I proceed, I’d like to explain and justify why environmental learning matters, why it’s the river through which all the tides of change flow, and why now more than ever, it must be at the forefront of public conversation. Any controversial public issue—affordable housing and transportation, access to education, health care, immigration, and global trade—always has an ecosystem context. The availability, distribution, utilization, and recycling of ecosystem services is the context for prosperity as well as scarcity. That awareness isn’t always evident and it must be. There can be no long-term strategic solutions for community well-being at any scale without consideration of ecosystem services.⁷

As people spend increasing amounts of time using screens, driving in cars, riding in airplanes, and working indoors, their experience of the natural world is mediated, diluted, and filtered, thus diminishing sensory and sensual awareness of the biosphere. It often seems that technology enhances perception, and sometimes it does, but the diminished frequency of direct exposure to the biosphere limits our visceral experience of natural systems. Cultivating deeper awareness of our ecological place enables us to come out of our heads and into the biosphere.

The overwhelming presence of humans on the planet along with their ubiquitous fascination with themselves and obsession with consumerism breeds a collective narcissism. The best antidote to this human-centered engagement is to study and observe more than human nature—the birds and bees, if you will. You can't understand the meaning of humanity if humans are the only species you care to interact with. Whether it's the menagerie of microbes that live in your body, the trees in your local park, the birds that arrive at your feeder, or the river that flows through the heart of your city, observing the natural world is the last chance you have to understand what it means to be human on a planet with approximately 8.7 million species.

An ecological perspective on the origins of humanity suggests that we are a migratory species, roaming the planet for suitable habitat, interacting with other species through competition for survival or as coevolutionary partners, diversifying as environmental conditions change, and trading with other roaming bands of tribes. Trace your ancestry merely four generations, and you'll find a genetic soup of mixtures and hybrids. Race and ethnicity are temporary cultural constructions. We are one interconnected species, late arrivals in a complex evolutionary system, bound together as a global phenomenon.

Humans are endowed (through evolution) with the capacity for social learning, reflective awareness, and creativity. We have the potential to appreciate beauty and grace, conceptualize the vast reach of space and time, experience reverence, and contemplate questions of meaning and purpose. That inheritance requires reciprocation, taking the form of stewardship, and fulfilling that potential in service of both humanity and the biosphere.

I believe that environmental learning builds our capacity to engage with these questions, promotes community-based discussions and solutions, liberates how we think about education, and cultivates virtue and character. This book provides approaches for elaborating on this potential and how to catalyze the change that is already happening.

This is a book about environmental learning, how to bring it to the forefront of education, how to expand its impact, and why it's fundamental to human flourishing in the biosphere. Environmental learning matters now more than ever. How do we enhance its prospects and possibilities? And where is it happening?

A New Generation

There's a new generation of environmental change makers who are having a profound impact on communities around the globe. The

emerging environmental movement of the early twenty-first century has a new shape and form. Visit any grassroots community-based environmental project to speak to the staff and participants. You will find young activists who understand the necessity of working in diverse communities to promote constructive change. They are concerned with environmental issues, but they are equally committed to approaches that emphasize diversity, equity, and inclusion. They are flexible users of social media, and utilize these skills to build coalitions and promote their ideas.

If you look at the demographics of new social and community movements, you're looking at engaged millennials, people of color, and a great variety of groups that in one way or another are feeling dispossessed. What do these different generations and diverse sensibilities have in common? What can they learn from each other? How do they merge into a coherent, interpenetrating, responsive, and resilient social movement?

Often people from communities of color are on the front lines. They aren't asking for more wilderness, more hiking trails, or wonderful ecotourism resorts. They want opportunity, agency, participation, and equality. Environmental pollution is inevitably worst in the poorest, least white neighborhoods. Affordable housing, access to public transportation, access to inexpensive and nutritious food, nearby parks and recreation facilities, the ability to stay put in a gentrifying neighborhood, affordable health care, clean water to drink and bathe in, and good schools—these are the environmental challenges for the great majority of people who live on this planet.⁸

Environmental learning must address biodiversity and climate change by also dealing with the consequences of inequality, racial divides, and the dislocation of people and cultures. You can't address these inequities without understanding the necessity of intercultural understanding. Hence biodiversity meets diversity, equity, and inclusion. People concerned with these interconnected issues know that those who suffer most will be those in the most deprived economic circumstances. We know, too, that resorting to violence and oppression is a pathological response to the threat of deprivation. It's not the deprived that we fear. It's the prospect that we may become deprived as well.

The Ecological Knowledge Gap

Simultaneously, the ubiquity of social media and electronic communications is shifting how learning occurs, the context for environmental perception, the fate of higher education, and the future of work. There are dozens of new professions reflecting these trends—including information

design, social networking, big data compilation, media curating, social entrepreneurship, game design, public art, and impact investment—and they are attracting aspiring youths who understand how much impact they can have with mastery of these skills.

Twenty-first-century science is unleashing extraordinary capabilities—advanced technological sensory systems, earth system monitoring, artificial intelligence and quantum computing, genomic understanding and manipulation, neurobiology and consciousness, networked science, big data, and algorithmic simulations. These are astounding human accomplishments and provide us with exceptional tools for better understanding the evolutionary context of human actions in the biosphere.

Yet this reflects an ecological knowledge gap. There's a widening gulf between highly trained environmental change scientists who are at the cutting edge of research, and a broader, interested public that is concerned about issues of environment, equity, and democracy, and has practitioner experience and local knowledge, but does not have access to either the substantive research or emerging thought processes that provide insights about environmental change. The gap is even greater among those who have merely a passing interest in environmental concerns. Only a comprehensive emphasis on environmental learning can address this gap.

A new generation of highly trained interdisciplinary environmental scholars is integrating earth systems science, evolutionary ecology, biogeochemistry, network theory, urban planning, and sustainability science with new approaches to social and emotional intelligence, decision-making systems, behavioral change, and concepts of human flourishing. The blending of these fields supplies us with the tools and applications to address seemingly daunting planetary challenges. We must make these approaches more accessible.

At the same time, we are witnessing a resurgence of nationalism, tribalism, and ignorance, often transmitted as fake news and propaganda, reflecting a desire to find simple solutions to complex issues while glorifying an idealized past. This mind-set threatens democracy, open societies, individual autonomy, critical and creative thinking, and the very practice of science. Environmental learning must counter these trends.

Thinking Things Through

The choice is between forcing the description of the world so that it adapts to our intuition, or learning instead to adapt our intuition to what we have discovered about the world.

—Carlo Rovelli, *The Order of Time*

Thinking things through.
Thinking through things.
Things through thinking.
Through thinking things.
—Jim Dodge, *Rain on the River*

What is an appropriate educational response to the perils of ignorance? How might the ecological knowledge gap be addressed? How do we revitalize environmental learning? How do we expand the possibilities for environmental awareness? How should the field of environmental studies respond? How can environmental citizenship be renewed and transformed? These questions are the essence of my inquiry.

I invite you to participate in a collaborative exploration of environmental learning. I'll cover a wide range of conceptual ground, synthesizing and interpreting collective memories, experiences, and scholarship. Environmental learning deals with so many different subjects and fields of inquiry. The possibilities are vast, like a mycelial network spreading throughout the forest, making connections, and linking communities of species.

Learning, teaching, and reading are reciprocal processes. They inform each other and spark meaningful conversations. We find points of agreement and disagreement. We spawn celebrations and controversies. We bathe in phases of certainty and uncertainty. We endure waves of confidence and insecurity. We move between compassion and selfishness, between hope and suffering. We reflect and expound. That is how we come to know the world. And that is how I hope you read this book.

Each essay offers hands-on suggestions for enhancing your learning experiences. Consider them thought experiments that stimulate new perspectives, enhance your observational capacities, and generate improvisational approaches and solutions. They are intended to both spark curricular ideas and dynamic conversations while offering practical ways to participate with the narrative. They are organized around taking walks in your community, getting outdoors and exploring, talking to your neighbors, and recording the explorations through mapmaking, art projects, memoirs, narrative interviews, or other forms of documentation, thereby inspiring entire portfolios of additional thought experiments.

In *To Know the World*, my aim is to inspire creative thinking about the future of environmental learning. I encourage readers to curate their

experiences and take them where they lead. Along the way, I offer my synthesis of the challenging environmental concepts that should inform our thinking; I present interpretations of why those concepts matter, and how they can be expanded. In that way, I hope that my writing and your experiences inform each other.

This proceeds along two connected paths. Each essay is organized around a “developmental interlude”: a personal experience I’ve had that informs the chapter. This is the best way I know to share what I deeply care about. If this seems overly personal, that’s because it is. I have great passion for environmental learning. I want to share that passion with you. I also want to share the dilemmas, discontinuities, and anxieties that emerge from that passion. Environmental learning is most engaging as a process of discovery. It should be a celebration of life in the biosphere, but it is not always pleasant, comfortable, or happy.

The body of the essay subjects are organized around metaphoric themes. These themes (briefly described below) are an attempt to connect the diverse strands of conceptual possibilities. I consider them metaphoric because the terms themselves should generate creative intellectual discussion. For example, before you read the essay on constructive connectivity, consider thinking about what that term means to you. These metaphors are organizational tools. Most important, I encourage you to construct metaphors, syntheses, and interpretations that serve your work and thinking.

I believe that learning is fluid, and the boundaries of expression simultaneously expand and contract. An organizational system is a useful structure, but as a learning tool, we must explore what a plan enfolds and what it excludes. The edge of learning is the interface between structure and change. This book encourages flexibility in moving between synthesis, interpretation, and improvisation. Synthesis illuminates the relationships between ideas. Interpretation is a way to reflect on and speculate about those ideas. Improvisation generates creative expressions leading to another cycle of synthesis and interpretation.

When writing or reading a book, I take great pleasure in assimilating, interpreting, critiquing, and applying the intellectual content. What a gift to contemplate the world of ideas! Ideas matter most when they promote a simultaneous exploration of perception, feeling, identity, mindfulness, compassion, and reciprocity. The most powerful approach for integrating these sensibilities is to cultivate the imagination, balance it with reflection, and manifest it with generosity. Let us balance these qualities of learning.

To Know the World proceeds with a four-part sequence. Part I, “Why Environmental Learning Matters,” is an extended introduction, reiterating the urgency of our challenge while illustrating the educational spirit that guides this work. Chapter 1 places *the past and future of environmental learning* into both a historical and personal perspective, makes the case for some new directions in the field, and lays out the plan of the book. Chapter 2 is a reminder that *memory is forever unfolding*. I explore how childhood experiences influenced my learning trajectory, how memory and autobiography generate insight, and how those insights are the foundation of two forms of learning: adaptive and perennial.

Part II, “Environmental Learning in the Anthropocene,” investigates the global challenges that inform environmental learning. Chapter 3 goes into more depth regarding the *tides of change* sweeping the globe, and how they set the context for environmental learning and citizenship. Chapter 4 asks whether the *Anthropocene is blowing your mind*, and if the accelerating pace of technological change further separates psyche from biosphere. It suggests that a deliberate focus on ecological place provides balance and perspective in a world of proliferating information and instant access.

Part III, “A New Vision for Environmental Learning,” describes three convergent challenges—networks and their manipulation, migrants and refugees, and tribes and territories—why they are the crucial unfolding environmental issues of our times, and how they can be informed by ecological awareness. Chapter 5 is an inquiry into *constructive connectivity*: how networks allow us to create social capital, build bridges between communities, and better understand ecosystem relationships. Chapter 6 suggests that a deeper understanding of *the movement of people and species* is a gateway for considering refugees, migrants, and immigrants, that human migration in the biosphere is a successful adaptive strategy, and why we must allow for compassionate passage through and between habitats, nations, and communities. Chapter 7 introduces the idea of *cosmopolitan bioregionalism*, an approach to the integration of local and global thinking that bridges the divide between urban and rural, insider and outsider, and place based and cosmopolitan.

Part IV, “To Know the World,” explores two learning aspirations—improvisational excellence and perceptual reciprocity—that simultaneously promote a deeper awareness of the biosphere and human flourishing while enhancing the prospects for living a meaningful life. Chapter 8 looks at how *improvisational excellence* is the foundation for adaptive flexibility, creative insight, and the ability to recognize and

interpret global environmental change, thus enhancing the possibility for making good decisions in conditions of uncertainty. Chapter 9 assumes that there are multiple forms of species and planetary awareness, and human flourishing depends on our ability to tap into that awareness through *perceptual reciprocity*, the ability to learn about biosphere processes and species' behaviors that we may not fully understand, but that embody planetary knowledge and wisdom.

Although I've thought long and hard about the learning sequence of these chapters, there are many ways to read a book. In the spirit of creative improvisation, I encourage readers to find a path that seems most pertinent and appealing. The book is divided into multiple subsections so that you can read a few pages at a time, at a pace of your choosing. I do recommend that you read individual chapters in their sequential order, but there is no reason why you shouldn't follow a unique chapter sequence as a path through the book.

There are four additional reading resources. Please take advantage of the table of contents. The listing of subsections may serve as a map of your intellectual location, a sense of place for the reader, and a way to scan what's ahead and see the whole picture.

I provide a glossary, "Words That Matter," of some of the seminal terms and concepts. The glossary is not a repository of formal definitions but rather a reminder as to the conceptual linkages between ideas. Many of the word-concepts are my attempt to synthesize ideas. I do so by experimenting with combinations, such as cosmopolitan bioregionalism, perceptual reciprocity, and constructive connectivity, among many others. I encourage you to experiment with unique combinations. Who knows what insights you'll generate?

The recommended readings section is another organizational tool. If you want to dig more deeply into the core themes, you'll find some of the books and resources that I find most illuminating. It is both wonderful and daunting that such lists are always expanding. You can never quite cover what you think you need. It's useful to highlight the emerging classics—the perennial books, like good friends, that will always be there for you.

There's also an index of environmental learning templates. These can be used in curricular settings or as mindfulness activities for further contemplating various dimensions of environmental learning. As I stress throughout the book, use them as foundations for your own inventions.

In the next essay, "Memory Forever Unfolding," I share some of my most important learning experiences with you. These experiences shaped

my development in profound ways. I hope that while reading them, they evoke many of your own memories. When they do, then you become a participatory reader. Those memories will undoubtedly lead you in different directions. But if we can share them, then we can find common ground—the place where our experiences meet. It's crucial that we share these stories because they are the lifeblood of what matters most in our lives. This book is an invitation for you to share stories of environmental learning. There is no better way for us to know the world.

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