

Sustainability Learning for Action and Community Engagement

Sarah Mead Wyman · Joshua Korenblat
Editors

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To Aska and the children who will see Earthrise beyond our sightlines.

FOREWORD

ENVIRONMENTAL LITERACY, INDIGENOUS WISDOM, AND EDUCATING FOR SURVIVAL: A VIEW FROM ALASKA

Very little in my culture taught me that my existence depends on the existence of earth.

Susan Griffin

Our educational mission is to produce human beings who are at home in their place, their environment, their world.

Oscar Angayuqaq Kawagley, Yup'ik Elder, first Alaska Native Ph.D.

As a White woman and lifelong Alaskan born a month before the territory of Alaska became a US state (1959), I had the great good fortune of missing out on many elements of modern North American culture for most of my formative years. Alaska is roughly 1/5 the size of the combined “Lower 48” (continental) states and, at that time, had fewer than 250,000 people living in its vast and wild lands. Immigrants from the Lower 48 were then scrambling to reconstruct American cultural and economic institutions in their new northern home (on top of sacred and unceded Native lands), but these institutions were often unsubstantial, as was adult oversight. We children were free-range, often left on our own to explore the sprawling lands and waters that impressively overshadowed human occupation. This sometimes put us in great peril, but it also allowed us to retain our primary relationship to the living world.

Even more fortunately, I was exposed to and schooled in the educational systems, philosophies, and ways of knowing and living of Alaska's seven major Indigenous nations who still inhabit their ancestral lands (Alaska almost entirely escaped the reservation system). I saw human communities that had survived and thrived "since time immemorial," as Native Elders say, in some of the harshest environments on the planet through honoring and teaching *right relationship* with all of life, both human and more-than-human. And functioning at a scale that allowed for the maintenance of a healthy balance between these human and more-than-human communities. The psychological, social, and ecological genius of these cultures can hardly be overstated, and I have spent much of my career attempting to elevate these voices, this wisdom and knowledge, including traditional Indigenous ways of teaching and learning. There is a saying that "when an Elder dies, a library burns." In my opinion, we would be wise to humbly request to learn every scrap of knowledge held in those libraries before it is too late.

As many Indigenous authors, scholars, Elders, and other thinkers have articulated, modern Western paradigms for organizing human life dangerously reverse the laws for living. Alaska Native Elders call our current society the "reverse or inside out" society because it has its priorities upside down and backwards. First and foremost, these Elders teach, we must recognize the centrality of our dependent relationship on the living world—the plants, animals, waters, lands, and climate which make human life possible. As more and more of us are coming to realize, continuous consumption, population growth, relentless extraction of minerals/oil/gas, and the endless production of waste and greenhouse gas emissions are leading to catastrophe. Humans will only be able to survive and thrive on this planet to the extent that we regain some balance with those living systems and teach each new generation the attitudes and behaviors necessary to do so: humility, reciprocity, gratitude, cooperativeness, restraint, continuous consideration of the common good, a respect for the intelligence and inherent value of other creatures and humans, and more. Missing this most basic understanding of the fundamental necessities for human existence results in the kinds of distorted behaviors and leadership from which we now suffer, and this loss threatens life as we know it. Teaching students almost exclusively about Western thought

through book learning and intellectual, individualistic approaches perpetuates the beliefs and practices that sustain our current dangerous path. Teaching in a way that empowers them to maintain their connection to the living Earth and their human communities, think for themselves, and take powerful action in the world gives them a chance at a hopeful future.

Combined with my own direct relationship with the living Earth, Alaska's Native cultures offered me a reference point and counterpoint to the cultural tidal wave that shocked and overwhelmed my community with the building of the trans-Alaska pipeline in 1973. The stunning upsurge in job- and profit-seekers, with the attendant upheaval in development, gave me a disturbingly rapid education in the fundamentals of American-style capitalism and how it can impact ecosystems and communities. In some very real way, we were living out the last gasp of American western expansionism that had built the country and sought to erase Indigenous nations and sensibilities. Alaskan license plates then and now read "North to the Future" and "the Last Frontier." My hometown of Anchorage exploded overnight, bringing with it Taco Bells and traffic and condominium complexes and cocaine. As a teenager living through this dislocation, I was shocked to discover that fast food outlets mattered more than wetlands and that the glimmer of oil money caused many people to sell their souls and communities to global oil corporations in exchange for fancy houses, important job titles, and fat paychecks.

Growing up in Alaska prior to the presence of global corporate oil companies and fully formed American institutions and in the presence of 10,000 year-old Indigenous cultures, I retained the clear-eyed vision of a kindergartener. Water IS life. Wetlands DO matter more than fast food chains. Staying in balance with our living Earth systems is not only logical but a fundamental necessity of self-preservation as a species. The human *self* does not end at the borders of our skin; we are literally dependent on a stable climate, clean water, healthy soil, and the contributions of our fellow species to our shared life support systems. If the bees go, we go with them.

Knowing this on a visceral level, I have spent most of my life engaged in free-range activism on behalf of our living systems and Indigenous knowledge and wisdom. Over the decades, as the tragedy at the core of our "endless growth"-based economic system has become increasingly obvious, more and more people are doing this kindergarten-level math at the core of climate change and other environmental impacts and have felt increasingly compelled to speak up and act. This includes educators who

are realizing that, in the words of US environmental professor David Orr, we must prioritize ecological literacy, leadership, and behavior change “so that all the other struggles may go on.” In higher education, one of our cherished values is a respect for science and the scientific process. Our own scientists are shouting at us that, if we do not educate our young people for a way of living and an economy that honors our dependency on Earth’s ecosystems and take quick and intelligent action to move into right relationship with its lands, waters, and creatures, our species may not survive the century. Or those members of our species who do survive will be living lives we might not recognize or wish to experience.

Spurred by everything from love for our children to a sense of morality to sheer self-centeredness, I can see no reason why any reasonably connected human being would argue against educating our young people for their own survival. However, my experience in teaching and higher education has been that most of us—unsurprisingly—are as disconnected from these fundamental realities as the rest of the world, having ourselves been uneducated in ecological literacy; we are teaching for a world long gone by. The pace of both technological and climate change is accelerating so fast that much of what we are teaching—as incredibly valuable as it is—is no longer relevant to the survival of younger generations. If citizens (of any age) do not know where their water comes from and how to protect it; where their food comes from and how to grow it; what their soil needs and how to restore it; how to work collaboratively and respectfully with other human beings; how to reduce energy consumption and generate it from renewable sources—then much of what we are teaching them now will not matter.

In books like this, we get a chance to ask ourselves: what is the purpose of education in the twenty-first century? There are lots of answers to that question. For most folks, the purpose of a Western education is to help each new generation of young people acquire the skills and knowledge necessary to be able to support themselves and their families, participate in some meaningful way in their communities, solve problems, assess and vote on the policies and political representation that determine our shared future, and, if they are lucky, enjoy the internal and external satisfactions of literature, history, art, music, and more. At its most basic, education in the dominant culture is supposed to help young people get and keep decent-paying jobs. And, since relatively few people are able to attend

college, higher education has largely been seen as a way to help young people secure higher paying jobs and become the professional—if not the elite—class within a society.

But education—particularly higher education—has also been viewed as the place where leaders are developed. It has aspired to the loftier goal of (in the words of John Samuel, former CEO of the Nelson Mandela Foundation in South Africa) “inculcating in each new generation the habits of democracy:” critical thinking; public speaking; the ability to honor more than one viewpoint; information, scientific and historical literacy; systems analysis, etc. It is common knowledge that a requirement for democracies to survive is an educated citizenry; in other words, an informed and critically thinking public is requisite to prevent despotism. We are learning about that anew as we speak.

For obvious reasons, educational systems (and cultures) necessarily tend to be matched to the economies they serve. We educate our children to be productive and to survive in the specific contexts into which they are born; as a result, education in modern times has been geared toward helping young people survive and thrive within late stage, post-industrial capitalism. That economic paradigm has established itself over the relatively recent past through the flourishing of global extractive industries based on harvesting minerals, oil, trees, fish, plants, water, crops, and more out of the living earth on large scales with little or no perceived need to restore, replenish, or protect the ecosystems from which it takes these elements. It has also relied upon the falsehood of a hierarchy of value among human beings and between human beings and other species. We have been educating our students to succeed and lead in this system. As some Native Elders have said, we have, in many ways, been “dumbing them down”—teaching them to thrive in a system that is threatening our very survival and the survival of life as we know it on this planet rather than in the ways that sustain human—and all—life.

This book, and others like it, seeks to change this and to help us move rapidly toward an educational system that reconnects our students with ecological realities and human communities in ways that support our common survival. There is no more important work in education these days. When coupled with our efforts to address equity and justice, both in our institutions and our world, these attempts are what really matters. I hope you read this, use this, spread this, add to this, and act upon what

is shared here as quickly as possible. All that we care about depends upon our doing that.

Quyana. Thank you.

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PREFACE: EARTHRISE

When the Apollo 8 astronauts photographed Earth from space in 1968, watching our planet rise across an unforeseen horizon, they gave us a new perspective on our home. Despite the distance, they could see seas, mountains, and deserts that pattern the surface. From that vantage point, however, they could not see the green leaves that indicate the health of our ecosystems, the seasonal uttering out of Nature's expression. They could not detect the leverage points or places we as humans might intervene for maximum impact, like a crowbar between boulders or fallen buildings, to guide the change or correct damage to people, creatures, and Earth. These scientists might not have been looking for such opportunities, as their photographs predate today's urgent recognition of planetary crisis. Yet they were undoubtedly searching for understanding and knowledge to bring back, borne of this new perspective.

Today, the Earth and its creatures face increased peril due to human-induced global warming and our failure to care adequately for nature and each other. The perceived separation between humans and nature that has guided many of our industrialized world cultures has fostered mind-sets based in individualist self-interest, neglect, and extractive practices that have cost us dearly. Poet Amanda Gorman has captured the urgency of our polycrisis in her poem (2021), "Earthrise." In *Orbital* (2023), Samantha Harvey allegorically describes our shameless flight from responsibility: "A full-throttle scarper in [a] billionaire's rocket, out and away,

away from the junk, away from the breaking burning storming scintillating earth like fleeing the scene of a crime” (199). The question of *how* to intervene in a calamity greater than our minds can hold, a complexity beyond our imaginings below and beyond the Earth’s crust, informs this book.

We know what to do. Humans have the technology, tools, and ingenuity to eradicate most of the challenges to climate stability, biodiversity survival, and many of the alarming responses that have leveled cities, burned forests, flooded communities, invaded ecosystems, extinguished species, and forced migrations of people in search of water, safety, or other social determinants of health. Human conflict and apathy are harder to manage, as evidenced by battles over depleted resources, human rights violations, extreme wealth inequity, economic precarity, and ensuing wars. On an individual level, our youth demonstrate the effects of ecoanxiety, despair, isolation, and additional threats to mental health and well-being. On a planetary level, Bruno Latour (2018) has named a new force, the *terrestrial*, as a way to render visible the earthly energy that shifts definitions, attracts attention, rises up, and speaks to us, at the moment our common world threatens to slip out of reach.

So, we turn to education and community engagement for ways to comprehend complex systems, share information, generate knowledge, and address changes in mindset and behavior necessary to address these crises. These requisite shifts must not be prescriptive but instead constructed by learners (including ourselves) who come to their own conclusions, like astronauts peering through portholes at the only home we have.

Earthrise is like sunrise, without distance or separation. We might remember what Tiokasin Ghosthorse (Cheyenne River Lakota Nation) reminds us: we must not see Earth as a metaphor for present circumstances. We must *become* Earth. For that is what we are.

We will not all agree on approaches or interpretations. Nevertheless, as a species, we have the opportunity and energy to move forward with intention and care in ways that will increase the chances for future generations to witness Earthrise as a scene of flourishing, solidarity, and ongoing potential.

EARTHRISE

Caves of emerald ice
meet the morning light
and whether you met
the grizzlies there or elsewhere
I'll never know.
They dance in a frozen field,
the floes caught in an Idaho freeze
high in mountains
where astronauts practice
moon landings.
They lumber and twirl
on a landscape
gray and cratered.
Anders shot a photograph
so we now see from a distance
the space where travelers watched
the Earth rise
over a lunar horizon
but could not count
bears crouched in wildflower meadows.

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- Build Green Now—www.BuildGreenNow.net
- Voices for Progress—www.VoicesforProgress.net

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For an overview of her work: <https://www.lucsus.lu.se/christine-wamsler> and <https://portal.research.lu.se/en/persons/christine-wamsler>.

On integrated inner-outer transformation: <https://www.contemplative-sustainable-futures.com/>.

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At Build Green Now, Dr. Warren leads research and pilot projects using industrial hemp and lime for external insulation to improve energy efficiency, lower heating and cooling costs, and increase fire resistance in buildings. Along with Henry Gage, Jr., and her team, she collaborates with legislators, community organizations, and industry partners to bring eco-conscious construction into the mainstream and create scalable models for green housing.

Through Voices for Progress, Dr. Warren helps develop and oversee an AI-powered project management platform that enables communities, non-profits, and businesses to plan, organize, and scale impactful

initiatives. This includes creating tools for volunteer engagement, skill-building, and connecting experts with projects that benefit from their guidance.

Her leadership combines scientific insight with practical implementation, ensuring that sustainable solutions move from concept to real-world application. Dr. Warren's efforts emphasize public benefit, workforce development, and environmental stewardship, inspiring collaborative action to build a cleaner, more resilient future.

- Build Green Now—www.BuildGreenNow.net
- Voices for Progress—www.VoicesforProgress.net

Sarah Mead Wyman teaches Comparative Literature with a focus on poetry, literary theory, human ecology, and the visual arts at SUNY New Paltz, US. She is a co-founder of Earthrise Learning Commons (earthrisecommons.org), an Eddy at New Paltz core collaborator and co-coordinates the Sustainability Faculty Learning Community and leads the Faculty/Staff Adventure Group. Recent sustainability publications include: “Collaborative Online International Learning (COIL) for Sustainability Education: Promoting Intercultural Competency in English Literary Studies,” *Intercultural Education* 2025, 1-19 (<https://doi.org/10.1080/14675986.2025.2514383>), “Introducing Sustainability Topics with Ursula Le Guin’s ‘The Ones Who Walk Away from Omelas’ and Richard Powers’ ‘The Seventh Event,’” in *Literature as a Lens for Climate Change: Using Narratives to Prepare the Next Generation*, Ed. R. Young, Lexington, 2022, and “Reframing Nature Within the Garden Walls: Feminist Ecological Citizenship in the Work of Louise Glück, Jeanne Larsen, and Anat Shifan,” *Feminist Formations*, 2020 (32)2. Additional critical work in literature and verbal/visual art intersections has appeared in *The Comparatist*, *African American Review*, *ANQ*, *Theatre History Studies*, *Modern Drama*, *Journal of Learning Through the Arts*, *Word & Image*, *CLCWeb*, and other venues. Her poetry volumes are *Sighted Stones* (FLP 2018) and *Fried Goldfinch* (Codhill 2021). <https://hawksites.newpaltz.edu/sarahwyman/>.

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