



The CLICK Framework: A Care-Centric Conceptual Map for Organizing Climate Literacy Pedagogy

Marek Oziewicz, University of Minnesota-Twin Cities, Minneapolis, MN, USA

Abstract

This article outlines the Climate Literacy Capabilities and Knowledges (or CLICK) framework for climate literacy pedagogy. The framework includes four domains—Earth Care, Kinship Care, People Care, and Systems Care—and is modeled on the care-centric thinking central to the Indigenous Worldview and to other Earth stewardship efforts emerging today. The purpose of this article is to introduce CLICK as a conceptual tool to guide classroom practice.

Keywords

climate literacy pedagogy, CLICK, climate literacy capabilities, climate literacy knowledges, Indigenous worldview, Indigenous knowledge(s)

There are many ways to teach climate literacy. Given the urgency of the climate emergency—and the urgency to design climate literacy education pedagogies that speak to age-specific audiences, place-specific challenges, and discipline-specific forms of knowing—the best strategy is to be creative. That said, designing conceptual frameworks for climate literacy education (yes, we need many and diverse frameworks!) can help articulate foundational principles, goals, and questions to guide practice and inspire pedagogical innovation. The framework described in this article—Climate Literacy Capabilities and Knowledges (or CLICK)—was originally drafted for the 2022

“Schools for the Planet” summer institute. I have since expanded it, based on my research and classroom practice. CLICK is a practical tool, whose uses I intend to unpack in future essays. Here, the goal is to outline the framework as a theoretical model intended to help us think about ways to scaffold climate literacy capabilities and knowledges across K-12 education.

The CLICK framework builds on three core notions: climate literacy (described in this [article](#)), capabilities, and knowledges.

“Capabilities” is a notion introduced by Nobel laureate economist Amartya Sen—later modified by moral philosopher Martha Nussbaum to include “the capabilities of nonhuman animals as well as human beings” (Nussbaum, 2011, p. 18)—to refer to actual (in contrast to theoretical) things we can do or become, if we so choose ([The Capability Approach](#)). For example, my ability to read is a capability I can use to read [The Climate Book](#); reading this book becomes a realized capability, or “functioning,” that informs my other functionings, say as a teacher. Sen refers to capabilities as “substantive freedoms” to achieve what we value, stressing that thinking in terms of capabilities “makes us accountable for what we do” (Sen, 2009, p. 19). Applying capabilities to climate literacy allows us to distinguish—on individual and community levels—between ways of doing or living that we can actually achieve and those we cannot (yet). Say, eliminating or reducing meat from my diet is a functioning I can achieve. Stopping industrial carbon emissions is not, at least not in the current system. The notion of “climate literacy capabilities” will thus refer to functionings—practical ways of being and doing—we can achieve to live as climate literate Earthlings.

The plural term “knowledges” is a notion derived from Indigenous theory and scholarship, which rejects the post-Enlightenment monolithic idea of “knowledge” in favor of braided, evolving, place- and experience-based knowledges—the plural acknowledging “both the shared commonalities and the diversity of many Indigenous ways of knowing” (Kovach 2021, p. 19). Collectively referred to as Indigenous Knowledge—also “Indigenous perspectives and thought processes,” “Indigenous pattern thinking,” and “Indigenous Knowledge Systems” (Yunkaporta, 2020, p. 17)—these ways of knowing combine values, technologies, and culture. Accordingly, “climate literacy knowledges” (in the plural) is proposed to refer to a vast body of practical and philosophical knowing—often fragmentary and/or intuitive—that transcends

conventional disciplinary boundaries, is grounded in “resident relationships” with our environments (Topa & Narvaez, 2019, p. 3), and helps us learn how to live at the time of the climate emergency.

So what are these capabilities and knowledges? Given that climate literacy is about “developing values, attitudes, and behavioral change aligned with how we should live to safeguard the Earth’s integrity in the present and for future generations” (Oziewicz, 2023, p. 34), I have followed a line of thought about knowledge as care that has been a trickle in mainstream (Western) scholarship and is best articulated by proponents of Indigenous Knowledge and [Indigenous Worldview](#) (Topa & Narvaez, 2019). This line of thought affirms that human beings are nature: not *apart from*, but *part of* a complex living system that sustains us all. Its precepts find expression in statements like Robin Wall Kimmerer’s “Know the ways of the ones who take care of you, so that you may take care of them” (Kimmerer, 2022, p. 89). They can also be heard in arguments like James Lovelock’s insistence that “we need to love and respect the Earth with the same intensity that we give to our families and our tribe” (Lovelock, 2000, p. viii).

Unpacking the Kimmerer and Lovelock statements, I propose that values and attitudes that inform our relations with “the ones who take care of us” can be thought of as falling into four domains: relations *with the planet*, especially its geophysical processes that enable all life; relations *with nonhuman beings or persons*, especially plants and animals, with whom we share the Earth; relations *with human people*, including strangers, ancestors, and future generations; and relations *with human-created systems* in which we participate, such as education, economy, etc. The CLICK framework emerges when we map values and attitudes onto a conceptual diagram of these four core domains of care.

Important caveat: although the four vectors of care are explored here as separate domains, they are *not separate* at all. I am inspired by Indigenous thinkers to believe that withholding, refusing, or limiting care in any one domain degrades our capacity to care in other domains too. I thus chose to represent these values within the Native American [Medicine Wheel](#) which symbolizes balance, interconnection, and interdependence of these values. The CLICK framework thus includes four equally important core domains in which climate literacy values and practice are realized.

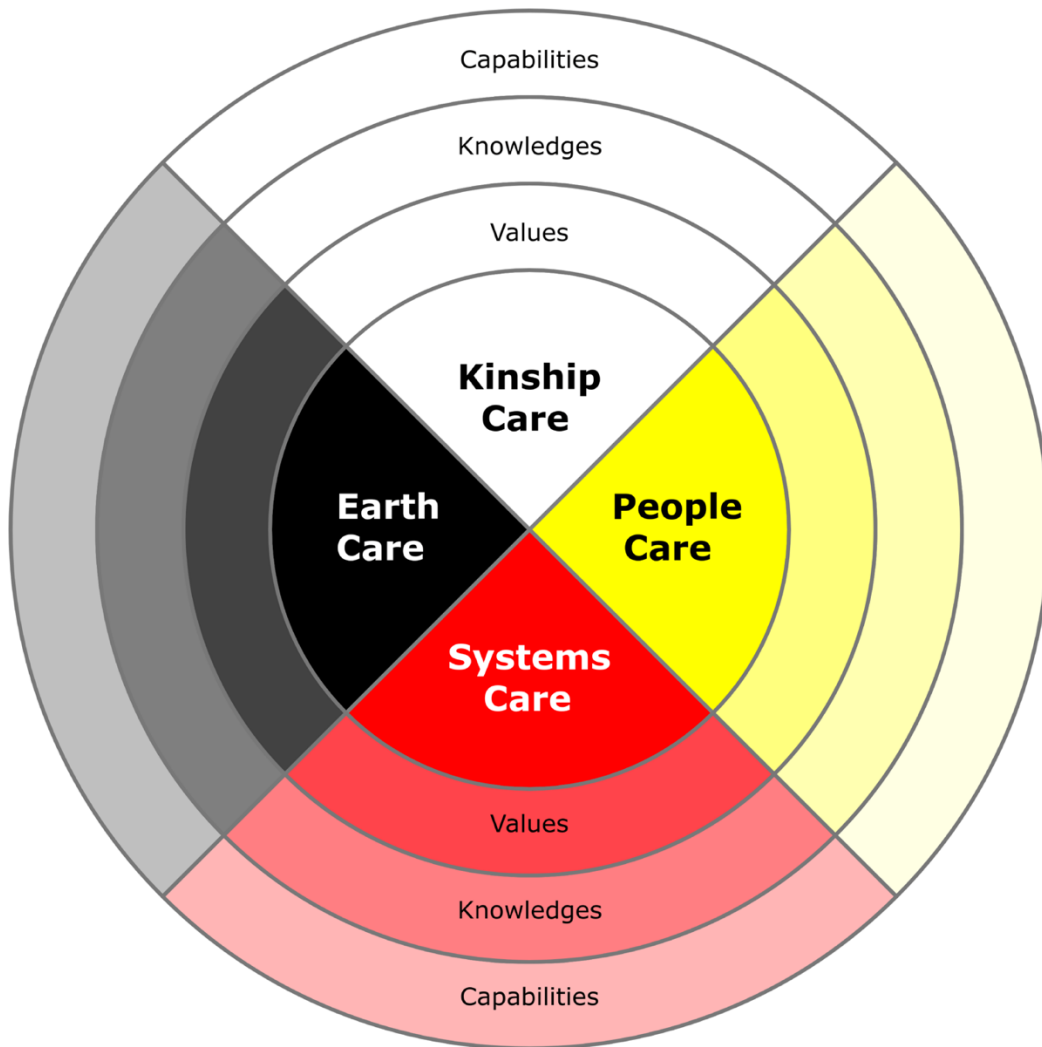


Figure 1. The CLICK framework, domains & rings structure.

Earth Care: How do we care for the planet, its ecosystems, bioregions, water, air, soil, and geochemical processes—tightly integrated on organic and inorganic levels—whose complex interactions enable life to exist? How do we actively defend, restore, and steward the planet’s wellbeing and the health of planetary-scale elements that support the web of life? This domain requires we actively confront questions about threats to a living Earth, say, pollution or global warming, but also that we actively seek to experience the wonder of a living Earth and develop a love-care relationship with the land, waters, sky, ecosystems, and the planet. The notion of Nature Rights; the fight for clean air, water, and soil; all initiatives to curb, eliminate, or clean industrial pollution; recycling; rewilding; conservation; organic farming; Leave no Trace ethic; the notions of ecological and energy footprints; and a number of other concepts and initiatives are all part of the Earth Care domain.

Kinship Care: How do we care for nonhuman persons/beings: animals, plants, insects, and all other life forms? What values and forms of relating do we cultivate, and how, versus what types of relationships with the nonhuman should be discouraged or avoided, and how? This domain includes all aspects of human-animal and human-plant relationships, including what we eat, respect for habitats, how we engage with the outdoors, attention to and things we can do for local species. The Kinship Care domain invites conversations about animal and plant rights; wildlife corridors, sanctuaries, and refuges; protection of endangered species; expanding habitats and supporting nonhuman life even in human-dominated spaces; conservation initiatives such as [Half-Earth](#), [Homegrown National Park](#), [We Are the ARK](#) movements; and other initiatives to curb human expansionism in general.

People Care: How do we care for other humans, those we know and those we don’t, near and far, living today and those yet to be born? How to address historic injustices of settler colonialism, slavery, violence, and exploitation that continue to expose BIPOC, poor, and Global South communities today to higher risks of climate change-related threats, from floods, droughts, and rising sea levels to food insecurity, energy shortages, pollution, and resource depletion? Climate migrations; climate, environmental, social, and racial justice; Indigenous land rights; poverty, exclusion, and wealth inequality; access to education and healthcare; human rights and freedoms, democracy vs authoritarianism; opportunities for building communities and supporting communities where relations are local, grounded, and based on recognition of collective responsibility to each other are some of the key issues in the People Care domain.

Systems Care: How do we (re)organize our communities, countries, and the global civilization to practice the ethics of care across the board? How do we redesign human-created systems like politics, education, media, finance, economy, healthcare, transportation, housing, food, and others to at least stop eroding the planet’s capacity to sustain life? Better yet, how do we reimagine these systems so that they become accelerators for creating a sustainable, clean, just, inclusive, and biodiversity-rich planet that supports thriving human and nonhuman lives? Energy transition; circular economy; green technologies; universal basic income; farm-to-table and other local production-consumption networks; energy and food sovereignty; zero waste economy; system change not climate change; the Green New Deal; initiatives like a [Fossil Fuel Non-Proliferation Treaty](#), [Project Drawdown](#), and other systemic solutions—all these belong in the Systems Care domain.

The goal of using the CLICK framework in classroom activities is to help students 1) learn to think about the workings of the world in terms of these four domains, 2) develop an understanding of their role as agents of care and change in a complex living system, and 3) identify, name, and build students’ climate literacy capabilities and knowledges for each of the four domains. Using stories—fiction and nonfiction alike—is a practice in which students are prompted to explore questions and issues in the story as they relate to each domain. The story serves as a springboard for considering these issues not just in that single narrative but in other stories and in real life too. The exploration, which the students can scale up or down depending on the project’s scope, becomes an inquiry into each domain which also demonstrates how the four domains are inherently interrelated.

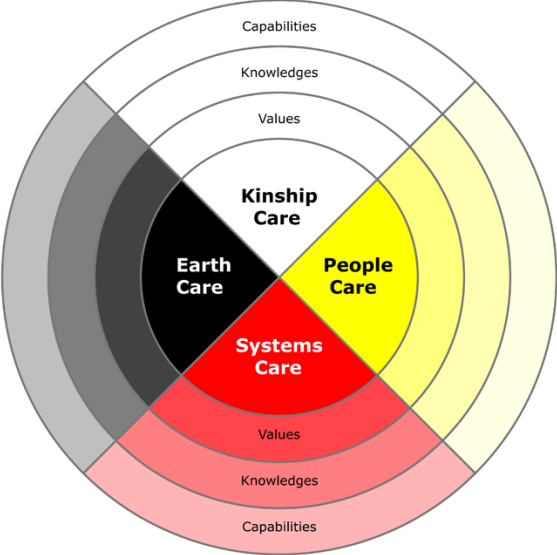
In the opening of the last section of *The Climate Book*—entitled “The most effective way out of this mess is to educate ourselves”—Greta Thunberg introduces the Swedish word *folkbildning*, which stands for “broad, free, voluntary public education” (325). She notes that Fridays for Future was not originally intended as a protest movement but as a *folkbildning* project: to educate everyone about the climate emergency. The irony, Greta says, is that she had to skip school to find climate education. The time is now to bring the *folkbildning* of climate literacy education front and center in all schools everywhere. The CLICK framework is one conceptual model that can help make it happen. It can serve as a cornerstone for considering climate literacy capabilities and knowledges. It can act as a springboard for a broad range of pedagogical strategies, inquiries, and action. Most of all, it can inspire teachers and students everywhere to discuss what we can do, and how, to restore ecosystems and build an ecological civilization.

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Your name:

Story title & Summary (1-2 sentences):

	Elements of Kinship Care you see:	Elements of People Care you see:
	Elements of Systems Care you see:	Elements of Earth Care you see:
Values operating in the story:	Knowledges behind characters' understandings	Capabilities informing characters' actions:

Use the back of this sheet to map aspects of the care domains, OR **any** values, knowledges, or capacities you notice in the story

