



# Introduction:

## Climate Literacy Work After COP28

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### Abstract

In this Introduction, we review the key developments of 2023 when it comes to climate, including COP28. We reflect on what they mean for *CLE* and consider their implications for the urgent challenge of building a climate literate, ecological civilization.

### Keywords

climate change, COP28, climate literacy education, ecological civilization

Welcome to the second issue of *Climate Literacy in Education*! We write these words a week after the end of COP28 in Dubai and at the close of 2023, which was not just the [hottest year on record](#), but saw the [hottest week ever](#) (in 120,000 years) and the [hottest day ever](#) too: the hottest "in at least a hundred and twenty-five thousand years" ([McKibben](#), 2023, n.p.). These numbers are not anomalies. They are indicators of a building momentum that comes from derailing of the planetary system caused by human-driven climate change, especially the burning of fossil fuels. These numbers also come at the tail end of the [La Niña cold period](#), which had kept global temperatures lower for the last 18 months, and at the start of a strong [El Niño event](#), which is expected to bring even more record-breaking temperatures through at least mid 2024 and will

accelerate the arrival of "[unsurvivable heat extremes](#)" in many parts of the world this very decade (Vanos et al., 2023, p. 9). The record numbers in temperatures also correlate with rapidly growing costs of climate disasters—2023 being another [record-breaking year for billion-dollar disasters in the US](#)—and, equally worryingly, with a rapidly growing number of [armed conflicts, international tensions, and rising authoritarianisms](#) all over the world. As if climate, temperatures, and resource scarcity had anything to do with authoritarianisms or wars.

There is another war that is being fought globally and is, increasingly, globally called out. It is a war against life on Earth, present and future, fought by Big Oil and their allies. In this war the stakes are power and corporate profit, even if just for a while longer, versus habitability of the planet for human and nonhuman beings—today and for generations ahead. "War against life" is not too strong a word either: its casualties have been [69% of wildlife populations](#) (as compared to 1970 population levels), [49% of wild grassland and 20% of forests](#) (since 1900), [six out of nine planetary boundaries](#) that define a safe operating space for humanity (since ever), over 2 million people dead as a direct result of extreme weather events (since the 1970s), with an additional 8+ million dying each year from [CO2 emissions and air pollution](#)—and about \$4.3 trillion in economic damage worldwide ([Associated Press](#), 2023). If this doesn't count as war, how else would you call it? And if it does—in scope, scale, and impacts—consider who has been winning in this war over the past four decades? And why?

It is not wrong to be impatient with the current system. Or with its key strategy of "addressing" climate change through negotiations at Conference of the Parties (COP) summits. COP28 in Dubai was unprecedented in revealing the shameless determination of Big Oil to question, disrupt, deflect, slow-walk, and flat-out refuse any meaningful change. Not only was this year's summit led by the CEO of the UAE's Adnoc—one of the major oil companies in the world (which used COP28 to strike [new oil deals](#))—and by an oil executive who distinguished himself by being the first-ever COP President to declare that [there is 'no science' behind demands for phase-out of fossil fuels](#). It also included in negotiations at least 2,456 fossil fuel lobbyists, "almost four times as many [as] the number registered for Cop27 in Sharm el-Sheikh—which itself was a record year" ([Lakhani](#), 2023, n.p.). With so many high-level professionals pushing the fossil fuel interests, COP28 was largely—and more than ever before—a fossil fuel trade fair. In

particular, the final resolution—[article 28, subsection d](#)—replaced the call to *phase out* fossil fuels (see 2023 Global Stocktake Synthesis Report, p. 21) with a vapid call to [transition away](#) from fossil fuels, and specifically "in energy systems" rather than across all emission sectors and industries.

Yet what seems to be another victory for Big Oil (the final agreement) only accelerates their demise on other levels, especially though what happens in the sidelines. At least since COP21 in Paris (2015), COPs have increasingly become spaces where thousands of people, groups and organizations—including those from the Global South, BIPOC, Indigenous communities—come together to propose equitable and ecocentric ways to move forward. On these levels COPs [increasingly succeed](#) to unify global resistance against ecocide: this year [Indigenous women leaders](#) took center stage, detailed proposals for [equitable phaseout of fossil fuel extraction](#) were released, and a number of important declarations were announced (see the [full list here](#) and the [UN list](#)). Our favorites include [COP28 Declaration on Sustainable Agriculture](#), the [Freshwater Challenge initiative](#), and the long-awaited, albeit [ridiculously underfunded Loss and Damage Fund](#). All these are important steps. Yet much more needs to be done, especially by the general public.

One consensus is this: we need pathways that are alternative or parallel to the COP process, pathways that accelerate the pace of change and public pressure for it. [Rupert Read](#) calls these initiatives "coalitions of the willing": collaborative efforts by groups and individuals who see opportunities for action in the present and are committed to do "what actually needs to be done, if we are to have a future" (2023, n.p.). Another climate action leader [George Monbiot](#) (2023) is calling for adoption of a different voting system that cannot be manipulated by Big Oil and a more localized system of creating regional treaties that can bypass the gridlocks of the UN general assembly approval system. Finally, the doyen of climate science [James Hansen](#)—acknowledging the continuing collusion of governments and financial interests to ignore the climate's delayed response—urges "anticipatory action" (Hansen et al., 2023, p. 2), especially with young people, in preparation for a period when "climate will become less tolerable to humanity, with greater climate extremes, before it is feasible to reverse the trends" and restore the climate to its Holocene levels (26).

At *CLE*, we believe in anticipatory action of universal climate literacy education. Ours is a coalition of the willing that can transform every classroom but requires the initial investment of research, design, curriculum development and training. This is not an easy work. About a year ago the Center for Climate Literacy was tapped by an organization in UAE that asked us for advice on preparing a climate curriculum for showcasing at COP28. Although they were eager for the final product, they had never considered details such as how many teachers would get trained, based on what materials, how many schools would participate, at what grade levels or for how long... Every new question we asked made it more clear that a climate curriculum can never merely be a product for display. It needs to be a lived reality embedded in classroom teaching, requiring broad cooperation, a support system, and a vision of change. Since none of those things are "showcasable," the request was dropped. We do not know what educational initiatives were eventually presented in Dubai. We do know, however, that even Big Oil recognizes the power of stories to shape young minds. If you attended COP28, you had a chance to receive a free copy of [I Need to Know: An Introduction to the Oil Industry & OPEC](#), a children's informational book produced by the PR and Information Department of the Organization of the Petroleum Exporting Countries. Dedicated to children and young people all around the world, the book is a shameless piece of fossil fuel propaganda on how oil is necessary for the human civilization to survive and how OPEC has played a key role in advancing humanity's march toward prosperity and stability. And if this message strikes you as contrary to the very idea of COPs or climate action, it also suggests that a transformation toward an ecological civilization will first need to be achieved in the realm of stories: in words that recognize the truth of our predicament and help imagine the way forward.

Contributions in this issue of *Climate Literacy in Education* put forward tangible, practical, and necessary interventions in education. Articles in this issue's Curriculum Section offer critical frameworks for engaging students with multimodal texts. Nina Goga and Maria Pujol-Valls, along with students Rebecca Agostini, Debora Carolo, Giulia Nai, Ilaria Sardella, Giulia Silvestrini, discuss insights from the Green Dialogues project. They show how educating pre-service teachers to use picturebooks that "address both greed and insensibility and welcome young readers to collaborate and engage critically" (p. 7) can raise ecocritical consciousness in both pre-service educators and the students they

teach. Abby Hartzell shares complimentary insights from a secondary perspective, arguing that Oziewicz's CLICK Framework offered her ninth class a generative opportunity to reflect their relationship with the non-human world.

The Reflection Section includes two perspectives on and experiences in engaging with climate literacy. Neela Nandyal describes preliminary findings from her doctoral research in coastal Ecuador, noting that Ecuadorian youth are simultaneously acutely aware of climate destruction and hopeful about their own capacity to make positive change. Mary Woodbury, curator at Dragonfly.eco, shares her experiences curating one of the world's largest databases on eco-fiction resources. Woodbury's practical insights prove useful to anyone collaborating on digital platforms.

A robust set of critical essays offer readers several insights to think with. Marek Oziewicz outlines the CLICK Framework: a care-centric map for guiding students through climate literacy learning. Unpacking the notions of climate literacy "knowledges" and "capacities," Oziewicz argues that the CLICK Framework allows students to both articulate relationships of care and understand their profound interconnectedness. Richard Beach and Blaine Smith discuss the range of skills that young people are already leveraging in their creation of digital media. They offer a wide summary of examples of youth-created digital media that educators could use in their classrooms. Lee Zimmerman responds to Kirsten Hunt's [article](#) on discussing Naomi Klein's *How to Change Everything* with pre-service educators. Zimmerman suggests that blanket insistence on hope risks blunting the need for urgency and action and suggests we "stay with the (climate) trouble." Marcus Axelsson and Charlotte Lindgren's reading of Sven Nordqvist's *Pettson and Findus* series argues for leveraging "pre-ecocriticism" books to engage the youngest readers in ecocritical dialogues. Julia Coltman argues that many of the stories in Shuan Tan's *Tales from the Inner City* demonstrate human arrogance and put forward more ecocentric alternatives.

Finally, Emma Ambrosi introduces us to Mr. Warbler: a pen-pushing clerk who, feeling work-weary, decides to go on a walk. Ambrosi's Gorey-inspired text and her illustrations (which also feature as this issue's cover) are a call for us all to, like Mr. Warbler, venture further afield than just a stone's throw.

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