

REVIEW

# Justice and equity in climate change education: exploring social and ethical dimensions of environmental education

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## Review Authors

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The climate crisis that has occurred in various parts of the world has had a domino effect on humans and the ecosystems within them through complex interactions (Feng et al., 2019). The climate crisis can occur because of human activities to cause an imbalance in the Earth's atmosphere or natural disasters. The changing climate situation can be minimized through transformative education, so understanding climate change is a major need for educators (Irwin, 2020). Universities have an important role to play in educating students about climate change and being active in engaging with climate changers that affect the course of future life. Issues concerning climate change are one of the curricula in education and extracurricular programs to prepare future professionals to face the challenges of future changes (Walsh, 2022).

School closures due to the impact of the climate crisis have occurred in almost all parts of the world. Climate change education must become justice education as a historical and conceptual foundation for equal focus in climate change education. Inequality and injustice are often overlooked when designing and implementing climate and environment-focused educational programs. Relatedly, the book *Justice and Equity in Climate Change Education: Exploring Social and Ethical Dimensions of Environmental Education* brings together the writings of researchers who have worked at the forefront of climate change education, and presents climate change education and conceptual frameworks for considering equity, fairness, and social dimension, ethics of climate change, research case studies and educational programs which seek to advance, theorize, and promote the voices of those who have been silenced and marginalized.

This book consists of an introductory chapter and two parts. The introductory chapter deals with issues related to climate change education, more broadly on justice, equity, and social transformation, and ultimately calls for a rapid response to the need for climate reform education. Part 1 consists of three chapters that explain the theoretical perspective of equity and justice in climate change education. Chapter 1 describes that the climate justice movement focuses on marginalized groups and the world's poorest countries. Movements that focus on climate justice aim to disrupt the oppressive systems of colonialism, capitalism, patriarchy, and racism. Provisions through education are needed to understand the climate system and the causes and impacts of climate change as a hope for successful change for the future. Chapter 2 describes the climate inequality that occurs between generations. An educated citizenship is critical to

increasing shifts in individual pro-environmental choices, especially in industrialized countries with large carbon emitters. As such, massive change is not limited to individuals but encourages public change through activism and policies (local and global) through systematic practices and priorities. The situation of inequality has become the impetus for creating a climate-based education curriculum. Educational activities must include three main components, namely the environment, ideas, and actions for climate change. Chapter 3 describes public pedagogy extending the pedagogical analysis beyond schools, colleges, and universities to study in institutions such as museums, zoos, and libraries, and the media.

Part 2 consists of seven chapters that provide case studies and enactments of climate change education for equity and justice. Chapter 4 discusses the National Wildlife Federation's Earth Tomorrow Program in terms of salient aspects of the overall program design as well as its efforts to elevate climate justice by linking climate change with social and environmental justice pursuits in the program curriculum. The program provided includes training for young people in improving leadership skills and being able to influence the environment in a positive direction, therefore this program can be used as an alternative to implementing environment-based programs in schools. This powerful approach advocates the principles of fairness, equity, diversity, and inclusion and elevates the voices of often marginalized leaders and organizations. Chapter 5 provides an explanation of the impact of climate change on the Island of Virginia and disaster response program. This natural disaster simulation program is an emergency preparedness effort in the educational environment. The advantage of this program is that it emphasizes mental health which emphasizes the possibility of Post-Traumatic Stress Disorder (PTSD) because this is very important as a part of trauma-informed practice. This program involves student involvement in recovery efforts and resilience to the needs of a growing community.

Chapter 6 was a program initiated by two-midcareer researchers, international scholars of science education, for teachers as agents of change. Several programs were formed to let the Earth breathe such as creating bicycle-friendly communities, recycling programs, reducing single-use plastics, and others. The main activity of this program is to provide training to teachers as critical social agents. Education is activated as a means to access a larger population and create educated citizens and empower the public to act towards climate change solutions to address climate change. The program offered is the development of teacher identity and the provision of material on important contextual factors in climate change education efforts.

Chapter 7 discusses an example of a curriculum using an integrated approach as a form of educational reform that promotes environmental justice education practices. The curriculum combines theory and practical applications for pre-service teacher education learning environments. Activities in this curriculum explore the importance of storytelling and imagination in ecological awareness and the need for interpretive practice through poetic inquiry into identity development focusing on the human/nature relationship. Part of the eco-justice pedagogical practice that includes an eco-hermeneutic approach to poetic inquiry, the learner connects with what is important because this methodology asks readers and writers to inquire about what they write in relation to the world around them so as to shape their identity.

Chapter 8 focuses on implementing land-based environmental education as a solution to facing the challenges of climate change education. The authors pay attention to a specific focus on children's voices: self-directed land-based learning activities including learning stories from Indigenous Elders and guardians of knowledge, learning how to build relationships with different species, and leading children's actions for climate change learning and action. Chapter 9 explores climate change education from a social and cultural perspective by examining the interactions of Indigenous children in rural Alaska. Contributors extend climate change education equitable dialogue to legitimize the critical attributes of child environmental identity formation by using Environmental Identity Development Theory (EID) as a framework for interpreting children's agency in their environment and their developing relationships with the natural world.

Finally, in the last chapter, contributors examine the relationship between the negotiation of identity, roles, and positions in groups, the contestation of story writers, and the way individual learners exercise agency within groups and through storytelling in middle school girls' climate science digital storytelling. This analysis demonstrates the potential opportunities that digital storytelling provides for youth to tell meaningful stories in a personal way, take agency in crafting their story directions, and play with possible future selves.

The strength of this book is that it presents in a comprehensive manner the concepts and empirical analyzes of the rapid response to the needs of climate change education by contributors from several countries. This book is not only limited to discussing extreme climate change in the environment but also the impact on psychological changes and human mindsets. Furthermore, the case studies presented provide critical insights for the design of varied learning environments, curricula, and climates in learning related to climate change in schools. In addition to this, several chapters are written neatly and scientifically and have clear objectives, results, and discussion making it easier for the reader to follow the flow of thought of the contributors. However, in several chapters, especially part 2 (chapters 6, 7, 8), there is no conclusion. Using the same case study writing template will make this book more structured going forward.

Overall, this book is a worthy read for researchers, academics, educators, and policymakers with an interest in science education, social justice studies, and environmental sociology more broadly. In particular, this book is highly recommended for readers interested in climate change education, curriculum studies, and climate adaptation. With empirical results regarding climate change education in several countries, this book is useful for researchers to compare how climate change is addressed in various other countries.

## References

- Feng, Q., Yang, L., Deo, R.C., AghaKouchak, A., Adamowski, J.F., Stone, R., Yin, Z., Liu, W., Si, J., Wen, X., Zhu, M., Cao, S. (2019). Domino effect of climate change over two millennia in ancient China's Hexi C. *Nature Sustainability*, 2(10), 957–961. DOI: [10.1038/s41893-019-0397-9](https://doi.org/10.1038/s41893-019-0397-9).
- Irwin, R. (2020). Climate change and education. *Educational Philosophy and Theory*, 52(5), 492–507. DOI: [10.1080/00131857.2019.1642196](https://doi.org/10.1080/00131857.2019.1642196).
- Walsh, E. M. (2022). *Justice and Equity in Climate Change Education: Exploring Social and Ethical Dimensions of Environmental Education*. DOI: [10.4324/9780429326011](https://doi.org/10.4324/9780429326011).

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