

What is environmental justice? Why we should connect our science and engineering investigations to local environmental justice phenomena

As [scholar Esme Murdock writes](#), “The environmental justice movement largely emerged as one intended to serve particular communities whose environmental realities were not acknowledged or considered to be ‘environmental’ by the mainstream environmental movement” (Murdock, 2020, p.13). *Environmental justice* includes a focus on: (a) assessing the nature and extent of harm to a community, (b) understanding what it means to suffer environmental harm and how these harms impact community thriving, and (c) identifying what it means to help repair communities that experience place-based harms (including harms related to how people outside the community perceive them).

To get a detailed understanding of environmental justice, review [these environmental justice principles](#) generated at the First National People of Color Environmental Leadership Summit. These foundational principles can be used to design science and engineering investigations focused on environmental justice phenomena in specific local contexts—and can guide shared learning with students.

Environmental justice highlights how environmental harms impact people differently based on their [intersecting identities](#) and community affiliations.

- For example, people of color and people living in low socio-economic communities are more often exposed to environmental dangers like [air pollution](#) that can have lifelong health impacts.
- Patterns of land and sea use, resource extraction, toxic pollution, and climate change cause biodiversity loss and associated injustices on communities (e.g., [Northwest salmon ecologies and Indigenous peoples](#))—which relates to the broader biodiversity and extinction crises.
- Social and economic factors impact who is most vulnerable to environmental hazards such as extreme weather events. [Failure to provide equitable responses](#) to these disasters is also an environmental justice issue.

Frontline communities, including communities of color or those that are poverty-impacted, have responded to issues of environmental justice for decades by developing grassroots strategies to curtail policies and practices that are harmful to their wellbeing. Explore histories of the EJ movement with [this long-form article](#), [short documentary video](#), and [interactive timeline](#).

Choosing to not teach about environmental injustice erases the struggles of marginalized Communities suffering harm. Connecting science and engineering investigations with these historical and ongoing justice movements is crucial to honor the lived experiences of students and their communities, particularly those that are most impacted by environmental challenges. By amplifying the social leadership and scientific endeavors of Indigenous, Black, Latinx, Asian, Pacific Islander, and other marginalized communities, educators can support students’ sense of belonging and agency within environmental and climate movements.

To learn how climate and environmental justice relate to education, explore [this lesson sequence](#).

To deepen your understanding of environmental justice and intersectional environmentalism, you can explore [this collaborative reading list](#) gathered by the Environmental Studies Program at Pacific Lutheran University.

“Intersectional environmentalism” is a related movement with similar goals to environmental justice; see [this resource for more on intersectional environmentalism](#).