

Environmental Education and Civic Engagement

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INTRODUCTION

The environment provides us nourishment and fosters physical and mental health (Bratman et al., 2019; NAAEE, 2020). It is often the basis of our culture and traditions, and it sustains our economy and lifestyle. By promoting environmental literacy and civic engagements, **environmental education (EE)** can help us move toward addressing these issues and building a more equitable and sustainable future. EE is a highly convergent process which integrates academic and conventional knowledge to advance students' understanding of environmental challenges and encourage them to work individually and collaboratively toward solutions.



Source: North American Association for Environmental Education (NAAEE). (2020). About EE and Why It Matters. <https://naee.org/about-us/about-ee-and-why-it-matters>.

How have environmental education programs advanced student awareness of environmental challenges in their communities?

METHODS

To understand how EE affects students' awareness and attitude toward the environment, we reviewed literature on the subject and examined the cooperation between **Generation Earth**, an EE organization managed by Los Angeles County Public Works' Environmental Programs Division, and schools. We then evaluated their work based on reports from the National Environmental Education Foundation (NEEF) and the North American Association for Environmental Education (NAEE).



FINDINGS

- **Hands-On Learning Helps Students Retain the Information and Skills for Effectively Addressing Environmental Challenges**
Several studies found that students felt their work was meaningful and were able to retain the knowledge and skills they learned when they were engaged in solving real, complex issues in their community. By giving students the opportunity to work with their peers to make a positive change in their community, they can see the impact they can make in their community (NEEF, 2021).
- **Promotes Awareness and Motivates Students to Take Action**
In teaching students the complexity of the environment and how everyday actions may affect it, EE may motivate students to take action by caring for the environment locally (NEEF, 2021).
- **EE Programs Involve Service-Learning Opportunities**
EE projects often encourage students to develop a solution and work to remedy an environmental issue through service learning opportunities or community-based stewardship. For example, Generation Earth has several projects for preventing water pollution in which students study the issue, present a possible solutions, and take action to prevent pollutants from entering waterways and raise awareness of the issue. In taking action, students are made aware of how their actions can affect their environment (Flanagan et al, 2019).

CASE STUDY: GENERATION EARTH

Generation Earth works with educators to improve students' understanding of current environmental challenges including those pertaining to waste management, pollution, and conservation. Some of these efforts include waste diversion competitions and pollution reduction projects.

Streets to the Sea

Through this competition, students applied their knowledge of the hydrologic cycle, urban environments, and water pollution to advocate for efficient and sustainable water usage and educate their community to reduce water pollution.



Source: Thomas, A. (2018). Streets to the Sea 2018 [Digital Image]. Retrieved from <https://www.flickr.com/photos/treepeople/27938747758/in/album-72157666404369027/>

Battle of the Schools

Schools across LA competed against one another to divert solid waste such as cardboard, plastic bottles, aluminum cans, e-waste, and ink cartridges from the landfill. This program encourages students to be mindful of how to responsibly dispose of waste to minimize environmental harm.



Participants in Generation Earth's Battle of the Schools competition. Source: Generation Earth. (2021). Waste Reduction and Recycling Project Toolkit [Packet]. Los Angeles County Public Works, Environmental Programs Division.

Water Pollution and Prevention Education Campaign

Through this project, students explore the issue of stormwater pollution and designed a education campaign to raise awareness and encourage people in their community to take action to remedy the issue.



Student water education campaign. Source: Los Angeles County Public Works, Environmental Programs Division. (2021). Generation Earth. Retrieved from <https://www.dpw.lacounty.gov/epd/ge/Default.aspx>

CONCLUSION

EE programs such as Generation Earth expand students' environmental knowledge, thus encouraging them to think critically and take action against environmental issues in their community. EE plays a vital role in transitioning to more informed, equitable, and sustainable communities; however, implementation of EE in schools are limited by accessibility issues and lack of funding (Parlo and Butler, 2007).



Source: Generation Earth. (2021). Education Campaign: Water Pollution and Prevention Project Guide. Los Angeles County Public Works, Environmental Programs Division.



Waste reduction project at a school. Source: Los Angeles County Public Works, Environmental Programs Division. (2021). Generation Earth. Retrieved from <https://www.dpw.lacounty.gov/epd/ge/Default.aspx>

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