

CREATING THE NEXT GENERATION OF ENVIRONMENTAL CHAMPIONS

A civically engaged population is essential to the strength and well-being of our state, especially with the large-scale environmental changes happening globally. Now more than ever, an environmentally literate citizenry is critical to the economy, natural resources, and quality of life in Rhode Island.

Over 10,000 students graduate from Rhode Island high schools every year, each with the potential to become effective stewards of the environment and future environmental champions. Environmental education can enable each of these graduates to feel confident in discerning fact from opinion, evaluating sources, and making informed decisions that impact their lives and the lives of those around them.

*“**Environmental education is about hope and change.** There is a mountain of evidence that suggests EE is a powerful way to teach students. Over 100 studies found that it provides transformative learning opportunities that bring tremendous results and engage young people in the world around them in meaningful, collaborative ways. There is no doubt that environmental education is one of the most effective ways to instill a passion for learning among students.”* (Dr. Nicole Ardoin, professor at the Stanford University Graduate School of Education and Woods Institute for the Environment)


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WHAT IS ENVIRONMENTAL EDUCATION?

Environmental education is the learning process through which citizens attain environmental literacy.

*“An **environmentally literate** person is someone who, both individually and together with others, makes informed decisions concerning the environment; is willing to act on these decisions to improve the well-being of other individuals, societies, and the global environment; and participates in civic life. Those who are environmentally literate possess, to varying degrees: the knowledge and understanding of a wide range of environmental concepts, problems, and issues; a set of cognitive skills and abilities; and the appropriate behavioral strategies to apply such knowledge and understanding in order to make sound and effective decisions in a range of environmental contexts.”* (Hollweg et al., 2011)

- The goal of environmental education is to support citizens of all ages as they:
- develop an awareness and understanding of the relationship between human and natural systems;
 - establish an appreciation and concern for the environment and our natural resources; and
 - acquire the skills necessary to take personal and collective action to develop solutions to current problems and prevent new problems from arising.

Environmental educators provide hands-on, place-based activities that weave real-world experiences into the classroom. Environmental education is not meant to simply add to or replace standard classroom curricula. It is an integral part of a comprehensive education that can be integrated within other disciplines such as science, mathematics, social studies, engineering, computer science, english/language arts, and history.

HIGH-QUALITY ENVIRONMENTAL EDUCATION

High-quality, comprehensive environmental education begins in the elementary grades with explorations and observations close to home, fostering a natural curiosity of the world around us (NAAEE, 2010). In middle school, environmental education helps students develop abstract and creative thinking skills, a deeper understanding of environmental processes and systems, and their own feelings and attitudes about the natural world. The learning process continues in high school, when students can apply problem-solving, analysis, communication, and other skills to solve real-world problems.

No matter where students are in their academic journey, those engaged in effective environmental education programs will develop:

- questioning, analysis, and interpretation skills;
- a knowledge of environmental processes and systems;
- decision-making and citizenship skills; and
- personal and civic responsibility that will continue throughout their lives.

In a comprehensive review of 119 peer-reviewed studies spanning the years between 1994 and 2013, experts at Stanford University found clear evidence that environmental education affords a wide variety of benefits to students as well as their teachers (Ardoin et al., 2018). Students participating in environmental education programs showed a significant increase in their understanding of environmental concepts. Additionally, knowledge gains were also seen across multiple disciplines—including science, mathematics, and others—in a staggering 98% of the studies examined.

The same study found that environmental education also leads to: an improvement in academic performance; a development of critical thinking, personal growth, and life-building skills such as confidence and autonomy; and an increase in civic engagement and positive environmental behaviors. The review found that 90% of participants reported increased skills, 86% reported positive changes, and 83% reported enhanced environment-related behaviors. In addition, the study found that environmental education fosters enthusiasm for and interest in school for both students and teachers.



The North American Association of Environmental Education (NAAEE) houses a vast and growing collection of peer-reviewed articles, summaries, and syntheses focused on environmental education and the connection between people and nature. Explore this research library at naaee.org/eeresearch and naaee.org/our-work/programs/eeworks.



ENVIRONMENTAL EDUCATION IN RHODE ISLAND

Rhode Islanders have ready access to diverse spaces that can serve as experiential learning environments, including forests, beaches, marine and freshwater ecosystems, schoolyards, parks, zoos, aquariums, nature centers, and farms. More importantly, environmental education can take place anywhere people are interested in observing and investigating the world around them. Ants marching along a city sidewalk, pigeons nesting on a rooftop, schoolyard gardens, and classroom science experiments are all excellent opportunities to learn more about natural systems and environmental issues.

OUR COMMUNITY



From farmers to health care providers to business owners, Rhode Island has a broad network of individuals, organizations, and agencies committed to providing high quality environmental education experiences for all residents. These environmental educators collaborate with schools to provide:

- clear links to Next Generation Science Standards and Common Core State Standards;
- professional development for teachers;
- outdoor exploration opportunities;
- access to museum collections, interactive exhibits, and live animals;
- specialized tools and equipment;
- funds to offset program expenses;
- and much more!

Beyond improving classroom engagement and academic achievement, environmental educators help advance positive clinical health outcomes, support local agriculture and businesses, increase stewardship of our natural spaces, and prepare residents to effectively participate as citizens.