

"I was fortunate enough to grow up on Aquidneck Island where learning about the environment was part of our every day lives. I believe environmental education is crucial to creating the next generation of environmental stewards who will ensure Rhode Island's unique environment is preserved and celebrated." Rhode Island Senate Majority Leader M. Teresa Paiva Weed



Students explore a freshwater wetland at Audubon Society of Rhode Island's Environmental Education Center and discover the importance wetlands play in their lives.



First graders from East Greenwich participate in a program on nocturnal animals presented by the Roger Williams Park Zoo Zoomobile.

"Amgen is committed to environmental sustainability as well as science education," said Jean Lim, president of the Amgen Foundation. "We are proud to partner with organizations like the Audubon Society of Rhode Island to advance environmental literacy in our communities. It is critical that the next generation understand the importance of conservation, stewardship and responsibility toward the environment. Programs such as the Environmental Literacy Plan help achieve these goals."



Students getting up close and personal with a sea star while on a rocky shore exploration with Save The Bay.

RiEEA

RHODE ISLAND ENVIRONMENTAL EDUCATION ASSOCIATION

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Front Cover: Using basic science tools, students determine the quality of the water through identifying macro-invertebrate species with Audubon Society of Rhode Island's educators.

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Rhode Island



Environmental Literacy Plan: Case for Support

What is environmental literacy?

- A fundamental understanding of the systems of the natural world and the interactions between the living and non-living environments,¹
- The ability to make responsible decisions based on scientific, economic, aesthetic, and ethical considerations, and
- The confidence and motivation to exercise rights and responsibilities as a member of a community.

The health of Rhode Island's future depends on its citizens being environmentally literate and able to make informed choices about environmental issues such as water use, air quality, and land development.

How is environmental literacy achieved?

Environmental education is the learning process through which citizens attain environmental literacy. Environmental educators provide hands-on, place-based activities that weave real world experiences into the classroom. Environmental education is neither an addition to, nor a replacement for, standard classroom curricula.

Environmental education has been shown to contribute to overall academic achievement. Quantitative and qualitative studies highlight the immense benefits of an integrated environmental education framework. In one study of 40 schools, 92 percent of students who were taught using the environment as the integrating context **"academically outperformed their peers in traditional programs."**²

Evidence gathered from this same study indicates that students learn more effectively within an environment-based context than within a traditional educational framework. Observed benefits include:

- Better performance on standardized measures of academic achievement in reading, writing, math, science, and social studies,
- Reduced discipline and classroom management problems,
- Increased engagement and enthusiasm for learning, and
- Greater pride and ownership in accomplishments.



A student aboard Save The Bay's educational vessel M/V Alletta Morris looks for Narragansett Bay's wintering harbor seals.

Why does Rhode Island need an environmental literacy plan?

When the Federal No Child Left Behind law is reauthorized, it is likely to include new language and funding that supports environmental education. The bill currently includes \$500 million to equip teachers with the skills, knowledge, and confidence needed to integrate the environment into their curricula. **Only states with qualifying Environmental Literacy Plans will be eligible for a percentage of this funding.**



A student examines an owl skull during a classroom visit from the Roger Williams Park Zoo's Zoomobile program.

Regardless of the status of the federal legislation, this is a timely concern. In our media-rich world, children are exposed daily to environmental news stories that range from global climate change to natural disasters to local fish kills. We need to ensure that our children have the critical thinking skills and content knowledge to process and assess this information effectively.

The New England Common Assessment Program (NECAP) now requires students taking the standardized science exams to demonstrate proficiency in diverse subject areas. Environmental education unites subject areas and provides real-world context that gives deeper meaning to science, math, literacy, geography, and civics, as well as art and music.

An Environmental Literacy Plan for Rhode Island will be the stepping-stone for our state's future. It is imperative that we act now to prepare today's students—tomorrow's policy makers—with the proper knowledge and skills to make critical decisions regarding our global and local resources.

Environmental education in Rhode Island today

Rhode Islanders have ready access to diverse spaces that can serve as experiential learning environments including forests, beaches, marine and freshwater ecosystems, parks, zoos, aquariums, nature centers, and farms. Environmental education, however, 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.



Second grade students from Newport investigate a rainwater-filled cistern at Rose Island Lighthouse as they explore basic conservation principals.

Teachers, schools and parent organizations looking for creative ways to improve students test scores while providing hands-on experience take advantage of environmental education programs and resources. However, they often provide these experiences of their own accord and on their own dollar since most primary and secondary schools have not integrated environmental education into their curricula.

Rhode Island has a broad network of community organizations, public agencies, and businesses committed to providing high

quality environmental education experiences for teachers and students. These environmental educators collaborate with schools to provide:

- Clear links to **Grade Level Expectations and Grade Span Expectations** across disciplines,
- Expertise and training,
- Outdoor exploration opportunities,
- Access to museum collections, interactive exhibits, and live animals,
- Specialized tools and equipment, and
- Funds to offset program expenses.



Through constructing their own recycled pizza box solar oven and eating the tasty results, young people from Olneyville learn about solar cells and other ways to harness energy directly from the sun at the Apeiron Institute for Sustainable Living in Coventry.



Providence middle school students explore plankton collected from Narragansett Bay at Save The Bay's Bay Center.

¹ For more information about environmental literacy, see <http://www.fundee.org>

² February 1999, from EETAP Resource Library No. 46