

The Definition of Environmental Education

Teaching about the natural and built environment provides a real-world context for learning by linking the classroom to the students' community. Students are engaged in hands-on, active learning that increases their knowledge and awareness about the environment. Because environmental education encourages inquiry and investigation, students develop critical thinking, problem-solving, and effective decision-making skills. Environmentally literate students become citizens who are able to weigh various sides of an environmental issue and make responsible decisions as individuals and as members of their community. Quality, standards-based environmental education improves everyday life by protecting human health and encouraging stewardship of natural resources.

Source: U.S. Environmental Protection Agency Office of Environmental Education. Retrieved August 1, 2003, from <http://www.epa.gov/enviroed>.

What is environmental education?

Bora Simmons: The National Project for Excellence in Environmental Education has identified four key elements of environmental literacy. First, environmental literacy depends on a willingness and ability to ask questions about the surrounding world, speculate and hypothesize, seek and evaluate information, and develop answers to questions. Second, environmental literacy is also contingent upon understanding environmental processes and systems, including human systems. Third, the environmentally literate citizen is able to identify, investigate, and formulate potential solutions to environmental issues. Finally, students are motivated and understand that what they do as individuals and in groups makes a difference in their world.

Since environmental education begins close to home, it encourages learners to understand and forge connections with the environment in their own neighborhoods and communities. It is through these connections that students gain the knowledge and skills that help them make sound decisions. Ultimately, the goal of environmental education is a democratic society in which environmentally literate citizens participate actively. The challenge, of course, is to develop an education program that fosters environmental literacy. Environmental literacy depends on skills and knowledge drawn from the sciences, social sciences, and humanities.

Why is environmental literacy important?

Bora Simmons: Effective environmental education programs support the standards-based curriculum and have been shown to contribute to increased student achievement in reading, math, science, and social studies. Environmental literacy is developed through environmental education curriculum that involves students directly in inquiry. Students are encouraged to ask questions about the world around them and to search for answers to those questions.

Through their explorations, students develop a deep understanding of both ecological and social-political systems. Learning how natural and human systems function and interact prepares students for the future. Environmentally literate students understand how environmental quality is impacted by human decisions and use this knowledge to make informed, well-reasoned choices. By adding environmental education to the curriculum, schools play a major role in ensuring that young people are ready and able to actively participate as the responsible citizens on which democracy depends.

Is environmental education the same thing as environmental advocacy?

Bora Simmons: No, environmental education is dramatically different from environmental advocacy. Environmental education is impartial and does not take sides. It teaches students how to collect and analyze information from a variety of sources using critical thinking and problem-solving skills. Environmental education teaches students how to analyze problems, generate alternatives, and make responsible choices. Students develop their own opinions and conclusions based on their own research. Advocacy, on the other hand, expresses only one point of view and advocates a specific course of action.

How do students benefit from an environmental literacy program?

Barbara Pietrucha, science teacher, Neptune Middle School: Students see the relevance of learning about their local environment. Environmental education involves students directly in inquiry. They are encouraged to ask questions about the world around them and to search out answers to their own

questions. When they are involved in learning about the real world, they see the connections between what they are studying and their own lives. This boosts their enthusiasm for learning.

Do teachers think environmental literacy is a worthwhile goal?

Barbara Pietrucha, science teacher, Neptune Middle School: Teachers who participate in environmental education programs see the results every day. Good environmental education programs support a standards-based curriculum and increase student achievement in reading, math, science, and social studies. Studies show that when students feel a strong sense of connection or belonging, they are generally more committed and they behave more responsibly. Teachers report that discipline problems decrease when the students are involved in environmental education. Both students and teachers find that they are fully engaged in a learning process that makes a difference. Teachers are enthusiastic about helping students become responsible environmental citizens.

Do parents support environmental education?

Barbara Pietrucha, science teacher, Neptune Middle School: Research indicates that parental support for environmental education is strong. Recent Roper-Starch polls indicate that 95 percent of parents surveyed nationwide believe environmental education should be taught in the schools. Parents see that their children are gaining knowledge and skills that are relevant to everyday life.

What effect has environmental education had in your school?

Moderator: I'm going to ask Karen Harris now to talk about comprehensive school reform, a principal's view.

Karen Harris, principal, Perry Hall Elementary School: Good morning everyone. I want to tell you a little bit about the history of Perry Hall and why we made the decision to become a Chesapeake Bay school, which is a school that uses the EIC goals as the integrated context for all of the learning. I took over Perry Hall—I'm just beginning my fourth year as a principal—and the staff was a very stable staff; the environment is a very stable environment. But they were a very negative group of people. When I took over, one of the first things they told me at a staff meeting—with their arms folded across their chests—was that they don't have faculty meetings and they don't do staff development. The dilemma was that it is a very stable community. The parents support their children; they come well prepared for school, and the test scores were flat. So, I knew I had a real problem when I took over the school midyear.

So, long around January, I was reading my mail and saw an invitation to go hear about the Chesapeake Bay School Project. I thought, well, I'm going to go to this, and I'm going to take my most negative teacher with me. And I did. And I went to this meeting, and she was sold hook, line, and sinker. We need to do this. And I said, "Fine. You need to go back and sell it to the staff." And she did.

It has changed the culture of my school, as well as, ultimately, student learning. It's not just activity-based learning. It can't be. It has to be able to increase student achievement. What have I seen as the benefits? The whole environmental education thrust in my school has been beneficial for not just the students and the parents, but the teachers. But hopefully, it's also going to lead to increased student achievement. And I don't have a doubt that it will.