Integrating Environmental Education Into Your Curriculum

Perhaps the most difficult aspect of teaching environmental education is figuring out how to incorporate into a curriculum already full of requirements and content. The "Essential Underpinnings of Environmental Education" described below provide the key principles of environmental education, so you can have a more rounded understanding of what environmental education is and what it can provide as you work to integrate it into your classroom.

Essential Underpinnings of Environmental Education

From *Excellence in Environmental Education: Guidelines for Learning (K–12)*, a publication of the North American Association for Environmental Education (NAAEE). The full publication, which also provides the information for the standards-driven approach below, and an executive summary can be found at the NAAEE website (http://www.naaee.org/programs-and-initiatives/guidelines-for-excellence/materials-guidelines/learner-guidelines).

Systems: Systems help make sense of a large and complex world. A system is made up of parts. Each part can be understood separately. The whole, however, is understood only by understanding the relationships and interactions among the parts. The human body can be understood as a system; so can galaxies. Organizations, individual cells, communities of animals and plants, and families can all be understood as systems. And systems can be nested within other systems.

Interdependence: Human well being is inextricably bound with environmental quality. Humans are a part of the natural order. We and the systems we create—our societies, political systems, economies, religions, cultures, technologies—impact the total environment. Since we are a part of nature rather than outside it, we are challenged to recognize the ramifications of our interdependence.

The importance of where one lives: Beginning close to home, learners forge connections with, explore, and understand their immediate surroundings. The sensitivity, knowledge, and skills needed for this local connection provide a base for moving out into larger systems, broader issues, and an expanding understanding of causes, connections, and consequences.

Integration and infusion: Disciplines from the natural sciences to the social sciences to the humanities are connected through the medium of the environment and environmental issues. Environmental education offers opportunities for integration and works best when infused across the curriculum, rather than being treated as a separate discipline or subject area.

Roots in the real world: Learners develop knowledge and skills through direct experience with the environment, environmental issues, and society. Investigation, analysis, and problem solving are essential activities and are most effective when relevant to the real world.

Lifelong learning: Critical and creative thinking, decision making, and communication, as well as collaborative learning, are emphasized. These skills are essential for active and meaningful learning, both in school and over a lifetime.

Approaches to Integrating Environmental Education

There are a number of ways to frame environmental education. Below are three different ways to consider including environmental concepts as an integrated part of your curriculum. Consider what you want to get out of incorporating environmental education, and determine which approach will best suit your needs and situation.

Goals-driven Approach

You can approach integration of environmental education by focusing on the skills, content, or understandings that you wish your students to take away. The Iowa DNR Resource Enhancement and Protection –Conservation Education Program (REAP-CEP) provides a comprehensive overview of goals for environmental education, and their requirements are a good place to start when you consider what your goals may be. REAP-CEP-funded projects must fulfill one or more of the following standards by helping their audience:

- Understand environmental processes and systems (such as the earth as a physical system, the living environment, humans and their societies, and/or environment and society)
- Develop skills for understanding and addressing environmental issues
- Understand personal and civic responsibility
- Develop lifelong learning skills such as critical thinking, questioning and analysis skills
- Understand that human well-being is tied to environmental quality
- Understand and forge connections with their immediate surroundings
- Conserve and protect Iowa's resources

Theme-driven Approach

You might also incorporate environmental education into your teaching is by using environmental themes or project-based teaching, focusing a wide range of activities, lessons, and projects around a central theme. Themes you could focus on include:

- Conservation
- Endangered Species
- Global Warming
- Habitat Protection
- Habitat Restoration
- Invasive Species
- Pollution
- Sustainability
- Water/Wetland Conservation
- Wildlife Conservation

Standards-driven Approach

(Please note, Iowa does not have specific environmental education standards, but incorporates most of the concepts throughout other subject standards.)

NAAEE's *Excellence in Environmental Education: Guidelines for Learning (K–12)* offers a series of common, voluntary guidelines for environmental education. The guidelines define the aims of environmental education, set expectations for performance and achievement in certain grades, suggest frameworks for effective and comprehensive environmental education programs, and demonstrate how environmental education can be used to meet standards set by traditional disciplines. *Excellence in Environmental Education* organizes environmental education into four strands, each representing a broad feature of environmental education and the goal of environmental literacy. You might choose to use the suggestions found in *Excellence in Environmental Education* to guide your own incorporation of environmental education into your standards requirements. A more detailed summary of its strands and standards can be found in another document