

BACKGROUND

What is Environmental Education?

Environmental education is a process that aims to develop an environmentally literate citizenry that can compete in our global economy, that has the skills, knowledge and inclinations to make well informed choices concerning the environment, and that exercises the rights and responsibilities of members of a community. Additionally, environmental education contributes to an understanding and appreciation of society, technology and productivity and the conservation of Illinois' natural and cultural resources.

Why Teach Environmental Education?

Environmental education has the ability to successfully address many societal needs. Cries can be heard from corporate leaders saying we need a workforce of problem solvers, critical thinkers and cooperative workers. Pleas of parents and community leaders can be heard saying we need quality education that will help students cope with the challenges of today and prepare them for the future. Contamination and loss of natural resources can be seen and the need for future generations to appreciate, understand and solve environmental problems is apparent. The public's concern can clearly be seen in the National Environmental Education & Training Foundation's *1997 National Report Card: Environmental Knowledge, Attitudes and Behaviors*. This survey found that fully 95 percent of adult Americans and 96 percent of American parents support the teaching of environmental education in schools.

Environmental education is interdisciplinary in nature. It does not solely adhere to the tenets of science teaching. Students can learn about the natural and built environment through proj-

Goals and Objectives of Environmental Education as established by the Belgrade Charter and the Tbilisi Declaration (1970).

Goals of Environmental Education

- To foster clear awareness of and concern about economic, social, political, and ecological interdependence in urban and rural areas.
- To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
- To create new patterns of behavior by individuals, groups, and society as a whole towards the environment.

Objectives of Environmental Education

Awareness - To help social groups and individuals acquire an awareness of and sensitivity to the total environment and its allied problems.

Knowledge - To help social groups and individuals gain a variety of experiences in, and a basic understanding of, the environment and its associated problems.

Attitudes - To help social groups and individuals acquire a set of values and feelings of concern for the environment, and the motivation to actively participate in environmental improvement and protection.

Skills - To help social groups and individuals acquire the skills to identify and solve environmental problems.

Participation - To provide social groups and individuals an opportunity to be actively involved at all levels in working toward resolution of environmental problems.

ects that cross disciplines, as well as the boundaries of the school building and school yard. This approach to teaching may seem overwhelming at first, but it brings on meaning when partnerships are developed between schools, non-formal education institutions (nature centers, museums, zoos, historical societies, etc.) and other public and private entities.

Standards and Environmental Education

More and more, teachers are being asked to demonstrate their ability to achieve the educational outcomes identified in state and nation-

al standards. These standards are meant to ensure that students are receiving the kind of education that their communities demand, and that graduates possess the skills needed to function and prosper in the modern world. Environmental education has a role to play, both in helping teachers to meet those standards, and in helping to identify the expectations that communities have regarding the skills and knowledge students need to make informed decisions around environmental issues.

Currently, the only environmental education standard that is tied to national standards in core curricular areas is *Excellence in Environmental Education—Guidelines for Learning (K-12)*, developed by the North American Association for Environmental Education. These standards are unlike any of the core curricular standards due to the multidisciplinary nature of environmental education. Opportunities are provided for students to demonstrate their efficacy, their understanding of local and global issues, and their mastery of the skills and content areas of the core disciplines in ways not otherwise possible. Environmental education enhances these disciplines while remaining distinct.

Environmental Values

Values are human preferences and moral decisions which usually lead to certain behaviors. They guide choices and are usually reflected in a person's lifestyle. Environmental values are a part of all values which consider the care and use of natural resources and maintenance of ecological cycles. These values are sometimes in competition with other values such as human comfort, convenience, safety, sanitation, or enjoyment. It is not possible to act only upon environmental values all of the time.

Educational activities can be designed to encourage awareness and analysis, and can be the impetus for students to examine their own values. "Teaching" an environmental

value does not imply forcing it on students. A better approach is to provide the proper conditions for a meaningful indoor or outdoor experience which may result in the realization of a new value or the modification or reaffirmation of one presently held.

Carl Rogers, the late educator and psychotherapist, proposed that persons who move toward greater openness and sharing of their experiences arrive at a commonly held set of values which enhance self, community, and the survival of the human species. The key to values education is that the study, discussion, debate, and resolution of conflicts centered around environmental issues will result in a set of values that sustain planet Earth. The following tools can accomplish these goals without imposing a set of "right" values upon students.

- *Clarification* - Activities can be structured in such a way that people interact, express and explore their personal values as they relate to environmental questions or problems. For example, students can explore whether they feel that a parcel of land should be left undeveloped for habitat or developed to provide shelter or jobs.

- *Writing* - Writing exercises based on environmental issues and experiences can lead to values development. Writing forms can include journals, short stories, essays, or poetry.

- *Action Projects* - Hands-on projects directed toward solving or minimizing environmental problems can affect values. For example, activities such as cleaning up litter, controlling erosion, or planting trees can transform perceived values into repeated patterns of action.

- *Games and Simulations* - Role playing is a powerful tool for shaping values. Games and simulations that use elements from nature, demonstrate ecological relationships, or pose

environmental dilemmas can contribute to the process of valuing, especially when they are reflected upon and shared.

- *Reading* - Poems and stories can serve as springboards and sources of motivation for valuing experiences. Written text by authors such as Dr. Suess, Robert Frost, Aldo Leopold and many others can provide stimuli for values development.

- *Asking Questions* - Sometimes by asking the right questions people can become clearer about their values. Activities can be developed using questions as the main component or as follow-ups to a structured experience.

- *Finding Examples* - One teaching technique is to provide learners with a list of value terms and to ask students to find examples of them in their environment. For example, these value terms can cover such areas as harmony, good/bad changes, balance, or categories such as nature as a teacher, creative force, or something to control.

Using the Outdoor Classroom

Contemporary education places many demands on teachers and students alike. With the pressure for teachers to teach more and more with less and less, there is a growing assumption that the brick and mortar classroom is the only place where legitimate learning can occur. This results in many lost opportunities for learning.

Using the outdoor environment does not require traveling great distances. The best classrooms can be found right within your own neighborhood. The school ground, a nearby park, a pond, the downtown, a vacant lot, even a paved parking area may all serve to enhance learning when incorporated into instructional experiences.

The environment and people's interactions with it are the subject for most of the activities contained in *Environmental Pathways—Youth Investigating Pollution Issues in Illinois*. Many of the activities in this packet incorporate or require the use of the outdoors as a learning environment.