

# The Concept of Environmental Education

William B. Stapp, et al.

No book of readings would be complete without this article as a component part. It is an environmental education classic.

In this article, Dr. Stapp and his associates develop a considered definition of environmental education - a definition which is very consistent with many of those one finds in the literature today. Given that this article was published in 1969, one wonders why in the world other scholars debated so vociferously about a definition for environmental education. Even other excellent definitions which do the field justice, e.g., the EPA definition found elsewhere in this book, do little more than take the reader further into the substantive structure of the field. In this dimension at the very least, Dr. Stapp was far ahead of his time.

WITHIN THE past 50 years, the United States has become a predominately urban nation, both in thought and in physical character. Large and middle-sized communities, many within complex urban regions, have evolved to where over 70 percent of this country's population resides on one and one-half percent of the nation's land surface. By 1980, eight out of ten Americans will probably live in an urban environment. Consequently, the independent rural-oriented living that once characterized this country's social and political heritage is no longer a dominating influence in the lives of most Americans.

In rural surroundings, direct daily contact with the basic natural resources was prevalent, especially within man's immediate environment. As man became progressively urbanized, his intimate association and interaction with natural resources diminished and, with it his awareness of his dependency on them. Yet, it is imperative that man, wherever he lives, comprehend that his welfare is dependent upon the proper management and use of these resources.

Man should also have an awareness and understanding of his community and its associated problems. Our communities are being plagued with

problems such as: lack of comprehensive environmental planning; indiscriminate use of pesticides; community blight; air and water pollution; traffic congestion; and the lack of institutional arrangements needed to cope effectively with environmental problems. While these problems are legitimate concerns of community governmental officials and planners, the responsibility for their solution rests, to a large extent, with citizens.

To an increasing extent citizens are being asked to make decisions that affect (directly and indirectly) their environment. Specifically, citizens make these decisions as they cast votes on community issues; as they elect representatives to policy-making bodies; as they directly act upon the environment itself. Citizens can be effective in influencing sound policy in other ways. They can ask informed questions, at the proper time, of the right people. They can serve on advisory and policy-making committees. They can support sound legislation directed at resolving environmental problems. To perform these tasks effectively, it is vital that the citizenry be knowledgeable concerning their biophysical environment and associated problems, aware of how they can help solve these problems, and motivated to work toward effective solutions.

The definition and major objectives of environmental education presented in this paper were developed in a graduate seminar in the Department of Resource Planning and Conservation, School of Natural Resources, The University of Michigan. The members of the seminar were: Mr. Dean Bennett, Mr. William Bryan Jr., Mr. Jerome Fulton, Miss Jean MacGregor, Mr. Paul Nowak, Mr. James Swan, Mr. Robert Wall, and Professors Spenser Havlick and William B. Stapp.

Most current programs in conservation education are oriented primarily to basic resources; they do not focus on community environment and its associated problems. Furthermore, few programs emphasize the role of the citizen in working, both individually and collectively, toward the solution of problems that affect our well being. There is a vital need for an educational approach that effectively educates man regarding his relationship to the total environment.

The Supreme Court decision regarding the one-man, one-vote concept, enabling the increasing urban majority to acquire greater powers in decision-making, makes it imperative that programs developed for urbanites be designed with them in mind. It is important to assist each individual, whether urbanite or ruralite, to obtain a fuller understanding of the environment, problems that confront it, the interrelationship between the community and surrounding land, and opportunities for the individual to be effective in working toward the solution of environmental problems.

This new approach, designed to reach citizens of all ages, is called "environmental education." We define it in this way:

Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.

**Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution.**

The major objectives of environmental education are to help individuals acquire:

1. A clear understanding that man is an inseparable part of a system, consisting of man, culture, and the biophysical environment, and that man has the ability to alter the interrelationships of this system.

The principal feature of the philosophy of environmental education is that man is an integral part of a system from which he cannot be separated. Specifically this system consists of three components, man, culture, and the biophysical environ-

ment. Culture, in this context, incorporates organizational strategies, technological processes, and social arrangements (political, legal, managerial, educational, etc.) through which man interacts with the biophysical environment. The biophysical environment designates both the natural and man-made components of the environment.

The fundamental relationship between the integral parts of the system is man's interaction through culture on the biophysical environment to produce or obtain the goods and services that he needs.

Within the system, man has the ability either to strengthen, weaken, or maintain the interrelationships between the system's major components. The ultimate goal of environmental education is the development and maintenance of a high quality system in which man interacts through culture on the biophysical environment to advance human welfare.

2. A broad understanding of the biophysical environment, both natural and man-made, and its role in contemporary society.

The existence of any civilization is dependent upon man's use of natural resources. Resources are defined as those parts of the biophysical environment which are appraised by man as being immediately or potentially useful to him.

A basic understanding of natural resources ideally includes their characteristics, distribution, status, interrelationships, and their present and potential uses. Natural resources serve man in many ways, whether in a relatively undisturbed condition or in the highly altered utilitarian forms of the man-made biophysical environment. A strong understanding of how these resources are used requires knowledge of the social, political, economic, technological processes, institutional arrangements, and aesthetic considerations which govern their utilization.

The man-made components of the biophysical environment result from man's use of natural resources. An understanding of this aspect is also essential: it should ideally include familiarity with urban and rural design, including transportation systems, spatial patterns of development, and aesthetic qualities which have a major impact on the functioning of society. Fundamental to these understandings should be the realization that the development of the man-made environment should strive for a high quality system which improves

human welfare in relation to the natural environment.

3. A fundamental understanding of the biophysical environmental problems confronting man, how these problems can be solved, and the responsibility of citizens and government to work toward their solution.

Biophysical environmental problems result from the interactions between man, culture, and the biophysical environment. Pollution, the inefficient utilization and management of natural resources, the indiscriminate use of pesticides, urban blight, and transportation congestion are just a few biophysical environmental problems. These problems, caused by a complex set of biological, physical, and social factors, affect the total environmental system.

Citizens need to understand how to work toward solutions of biophysical environmental problems through laws, public policies, planning, resource management, research, technological developments, and institutional arrangements.

Citizens should realize that the responsibility for solutions to these problems belongs to them and the governments which represent them.

4. Attitudes of concern for the quality of the biophysical environment which will motivate citizens to participate in biophysical environmental problem-solving.

The word "attitude" used in this context implies more than simply the knowledge of a body of factual information. Instead, it implies a combination of factual knowledge and motivating emotional concern which result in a tendency to act. Further, it is understood that clusters of attitudes about similar environmental conditions will motivate individuals to express their attitudes. Therefore, for environmental education to achieve its greatest impact, it must: 1) provide factual information which will lead to understanding of the total biophysical environment; 2) develop a concern for environmental quality which will motivate citizens to work toward solutions to biophysical environmental problems; and 3) inform citizens as to how they can play an effective role in achieving the goals derived from their attitudes.

**Epilogue for:**  
**"The Concept of Environmental Education"**

As the first International Director of Environmental Education for the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Dr. Stapp had the unique opportunity to work in close association with environmental educators on all continents in preparation for the Belgrade Working Conference on Environmental Education (1975) and the Tbilisi Intergovernmental Conference on Environmental Education (1977).

Two international environmental education definitions adopted by the world community six years following "The Concept of Environmental Education," published in the first *Journal of Environmental Education*, are as follows:

**Working Definition of Environmental Education -- Belgrade (1975):**

Environmental education should be an integral part of the educational process, aimed at practical problems of an interdisciplinary character, build a sense of values, and contribute to public well-being. Its focus should reside mainly in the initiative of the learners and their involvement in action and guided by both the immediate and future subjects of concern.

**Concept of Environmental Education -- Tbilisi (1977):**

Environmental education is a process aimed at developing a world population that is aware of and concerned about the total environment and its associated problems, and has the attitudes, motivations, knowledge, commitment and skills to work individually and collectively towards solutions of current problems and the prevention of new ones.

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

Knowledge -- to help individuals and social groups gain a variety of experiences with the total environment and to acquire a basic understanding of the environment, its associated problems and humanity's critical responsible presence and role in it;

Attitudes -- to help individuals and social groups acquire social values, strong feelings of concern for the environment and the motivation for actively participating in its protection and improvement;

Skills -- to help individuals and social groups acquire the skills for working toward the solution of environmental problems and to foster a dialogue between these groups; and,

Participation -- to help individuals and social groups develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to help solve these problems and avoid future problems.

**Bill Stapp**  
**September 1997**