

Education Development Center (EDC)

Report from the Earth Education Partnership Programme - February 1997

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This report summarizes the results of a focus group meeting with participating U.S. teachers regarding ideas for incorporating Earth Charter concepts into secondary school environmental education curriculum.

Teaching Sustainable Development

The attached list of sustainable development teaching objectives has been circulated to teachers of the Earth Education Partnership Program, who view it as a fairly comprehensive list. A small percentage of teachers are actually addressing these objectives as a unit of study; however, interested teachers have been able to integrate most of these sustainable development concepts in their science classrooms to some degree. Of those concepts that are not addressed, teachers feel that they are ill-prepared rather than unwilling to address them. Most of the teachers surveyed are science teachers, which may explain a self-identified weakness in addressing relationships between political, social and economic equity among peoples, development practices, and ecological health.

All teachers responding saw the usefulness of an Earth Charter in a study course of environmental education. Suggestions for using it in the classroom include exercises in which students identify real examples of each principle at work both positively and negatively. An Earth Charter would be a vehicle for developing cross-curricular programs and would be useful in any curriculum which includes values education.

Sustainable Development: Student Learning Objectives

1. Understand the following principles of natural systems as they relate to the development of a sustainable future:
 - the biosphere is a unity and all of its diverse constituent parts are interdependent;
 - all life depends for survival and well-being on the functioning of natural systems;
 - degradation of the global environment can lead to impaired functioning of the natural systems on which humanity relies.
2. Understand the following principles of sustainable use of natural resources and apply them to an analysis of existing resource flows:
 - the rate for renewable resources should be no greater than the rate of regeneration;
 - the rate for non-renewable resources should be no greater than the rate at which a renewable resource, used sustainably, can be substituted for it;

- the rate for the emission of waste products, including ecosystem contaminants, should be no greater than the rate at which the waste product can be recycled, absorbed, or rendered harmless by the environment.
3. Understand the principle of carrying capacity and use it to analyze trends in world population growth and natural resource consumption.
 4. Analyze and identify the social and environmental costs of goods and services exchanged in the marketplace.
 5. Identify relationships between political, social, and economic inequity among peoples, development practices, and ecological health.
 6. Demonstrate how the resolution of issues of political, social, and economic inequity can be integrated into sustainable development policies and programs.
 7. Identify ways in which productive processes, such as agriculture, fishing, and manufacturing, can be made to be more environmentally sustainable.
 8. Identify indicators that can be used to measure the degree to which their community, region, and nation are on the path to environmentally sustainable development.
 9. Identify actions that can be taken by an individual to promote a sustainable future.