



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1992 Volume V: Ecosystems: Tools for Science and Math Teachers

Biosphere 2 and Beyond

Guide for Curriculum Unit 92.05.01
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All life on our planet exists in a delicate balance, a system of interdependency among plants, animals, insects, microorganisms, and the environments in which they live. The Earth supports a variety of different ecosystems in the air, water, and land, and each ecosystem, ultimately, is dependent upon all the others for its survival.

Humans have been slow to learn this simple yet vitally important lesson. Carelessly and ruthlessly, we have hunted animal species to the brink of extinction, cleared away forests, and released poisons into the environment. We are only recently learning that if we cause an environmental crisis, or destroy a single habitat, even far away—in the sea, under the earth, or on another continent—we are indirectly affecting every creature on this planet and ultimately hurting ourselves.

This unit has been designed to help students in grades three through eight to better understand their environment and their world, through a look at Biosphere 1 (Earth), Biosphere 2, and mini-biospheres that can be created by the students in the classroom and a sampling of other hands-on activities. In an effort to encourage a generation of individuals who understand their relationship to the environment, we must begin to show students that there truly is a direct connection between how they live and the life support systems of the earth. They must begin right now to work towards saving their environment.

By teaching some of the specific forms of our current situation, I hope to clarify not only the reality of our present situation but help offer specific remedies that can be applied to the issues. You should be able to bring the issues before your class in its actual urgency, but also help them to come up with directions as to how they can meet the difficulty. While there is no single answer to the problem, the suggestions given here will work for almost everyone.

Use this unit and your students will no longer live in deadly innocence, nor will you feel so frustrated as to what you can do with your knowledge. The students in my classroom have already committed themselves to limiting their polluting activities. If these students can become aware of their situation and commit themselves to change it, then all of us should be able to rethink our present condition and proceed with the radical transformations that are needed.

(Recommended for elementary, grades 3-5 and Science, grades 6-8)

Key Words

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