



Solar Greenhouses

Guide for Curriculum Unit 83.01.13
by Stephen Kass

In the State of Connecticut, the energy crisis affects every person and industry. New England as a region and Connecticut, in particular, rely heavily on nuclear power and oil. There is growing agreement that nuclear power plant construction and oil supplies will dwindle dramatically in the next 20 years. This creates a rather dismal energy future.

In order to deal with these facts, science educators are beginning to reevaluate energy programs. Traditional energy studies have focused on fossil fuels; in particular, oil, coal, and natural gas. Many educators now realize this approach is very short-sighted. An alternative energy project can introduce the important concept of the finite nature of energy and natural resources.

This unit on solar greenhouses meets the following objectives. As an alternative energy project, it: 1) encourages the study inter-disciplinary subject matter; 2) increases knowledge of small scale technology; 3) stresses the use of a renewable energy source, conservation of energy, and food production; and 4) provides the schools with a socially responsible demonstration project. At the same time, vocational students can be involved with the actual construction of the building. Horticultural students can learn about plant life and food production. Science students can experiment with energy concepts.

The Solar Greenhouse Unit is designed for middle and high school students. It can be included in studies on alternative energy or solar architecture. The material can be used in a flexible manner, depending on teacher needs. The unit can last from one week to four weeks.

(Recommended for Grades 9 through 12 Physical Science and Grades 7 through 12 Energy and Architecture)

Key Words

Solar Heat Physics

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