



Introduction

Mathematics and science are essential components of the general intellectual development of students. In the middle schools and high schools it is in these subjects that students begin to learn basic concepts in the physical and biological sciences and how a combination of experimental and mathematical methods provides a basis for the rapid advances in science and technology that are characteristic of the world and age in which the students live.

Mathematics and science can be presented to students on the basis of their intellectual merit, and indeed all of us have seen students who become very excited and interested as they begin to appreciate the intellectual beauty of these subjects. Other students, however, require other kinds of motivation to become truly interested in mathematics and science. The curriculum units developed in this seminar are intended to encourage students in mathematics and science by relating these subjects to aspects of the world in which the students live.

Each Fellow prepared a curriculum unit emphasizing the science and technology in meeting a basic human physical need. The topics chosen are as follows:

Transportation

Bicycles (John Crotty)

Automobiles (Joyce Bryant)

The space shuttle (Robert Mellette)

Food (Beverly Stern)

Clothing

Weaving cloth (Pamela Fowler)

Dyes and dyeing (Sophronia Gallop)

Potable water (Ann Fogarty)

Light (Margaret Loos)

Charles A. Walker

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