



The Curriculum Research & Development Group

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Foundational Approaches in Science Teaching (FAST) is a physical science, ecology, and science and society program for grades 7–9 used by more than 6,000 teachers in 36 states and 10 foreign countries. This cost-effective program is designed both to develop understanding of the environmental concerns of our technological society and to provide the foundational tools for further study in the sciences.

The program

- requires minimal laboratory facilities such as heat sources, running water, and laboratory bench space for students.
- uses standard catalog supplies or equipment readily constructed by students and teachers.
- meets national standards for science education and has been effective in inclusion classes.

The principal objectives of the program are to develop thinking skills, laboratory skills, and a working knowledge of the foundational concepts of science.

Organization

FAST is organized into

- *FAST 1, The Local Environment*
- *FAST 2, Matter and Energy in the Biosphere*
- *FAST 3, Change over Time.*

Content in each program is organized into physical science, ecology, and the interrelationships and interactions of science and society.

FAST Teacher Support

FAST teachers are fully trained via both institutes and continued support programs. Teachers attend a 10-day institute in which they participate in inquiry investigations that model the varieties of teaching behaviors in *FAST* and provide for reflective discussions of the learning, teaching, and assessing experience. A one-year support program is also provided, including newsletter, e-mail, Web site, and 800-number phone support.

FAST Effectiveness

A decade of multi-state impact studies of students representing urban and rural populations, a wide range of ethnicities, and a variety of achievement levels, family incomes and teacher backgrounds and experience have shown *FAST* students to have significantly higher manipulative laboratory skills, science achievement test scores, and performance on creative- thinking measures.

Independent evaluations of *FAST*

FAST has been identified

- by the U.S. Department of Education (DOE) Laboratory Network Program as meeting national standards for science education.
- by the Program Effectiveness Panel (PEP) of the U.S. DOE as an exemplary effective science program.
- by Educational Testing Service as an exemplary program for reaching minority and female students.
- by the Consumers Guide to Science Curriculum as appropriate for high-ability students.

