

OUR GOALS

FOSTER EDUCATION IN SCIENCE AND TECHNOLOGY FOR EVERYONE

In a world increasingly influenced by science, mathematics and technology, all people need some understanding of these disciplines and their extensive impact on daily life. Through its own programs and in collaboration with other organizations, AAAS works to improve science education in the United States and other nations.

IN PURSUIT OF THIS GOAL, AAAS IMPLEMENTS THE FOLLOWING STRATEGIES:

Develop and Disseminate Goals for Teaching K-12

With the guidance of top educators and scientists, the Association helps to guide goals and standards for science, mathematics and technology (SMT) education, and is a leader in promoting appropriate policies and the development of curricula and assessments based on those goals.

Promote Research on Effective Teaching of Science and Mathematics

AAAS seeks to influence the teaching of science, mathematics and technology in college and in K-12. It influences teacher education programs, focusing particularly on SMT content and how to teach it to students with diverse backgrounds, languages, and interests, and in a variety of formal and informal settings.

Develop Science Education Resources for Use in Formal and Informal Education

AAAS enters into partnerships with the institutions that people most often turn to with their questions, publishing clearly-written information on complex issues in science and technology, and creating educational websites and radio programming.



STRATEGIES IN ACTION

The following are among the activities through which AAAS fosters education in science and technology for everyone:

New Book Offers a Way Out of “Superficiality”

AAAS’s Project 2061 released a book in 2001 that tells science and mathematics educators how to “unburden the curriculum.” *Designs for Science Literacy*, published by Oxford University Press, was the latest in a series of print and electronic tools and professional development services aimed at strengthening teaching and learning as part of the education reform initiative that AAAS launched in 1985.

The new book also addresses the challenging question of *how* to design K–12 curricula in a way that reflects local needs and interests, while enabling all students to reach national goals of literacy in science, mathematics, and technology.

Released 24 May at a gathering of education leaders, *Designs for Science Literacy* suggests how teachers might find the time to teach the most important ideas well. The authors devote an entire chapter to showing educators how to relieve the interminable accumulation of topics, superficial detail, and technical language that far exceeds most students’ understanding.

AAAS Education Website Reaching All 50 States

Part of the “MarcoPolo Learning Initiative,” Science NetLinks, is AAAS’s contribution to a partnership that includes websites managed by five other non-profit organizations. Together they provide free, Internet-based materials for educators across academic disciplines on the site that is now used as a resource for educators in all 50 states (<http://marcopolo.worldcom.com/>).

Science NetLinks (<http://www.sciencenetlinks.com/>) offers a comprehensive array of lesson plans and carefully selected links to related websites that are tied to the *Benchmarks for Science Literacy*, a set of science literacy goals developed by AAAS.

The detailed lesson plans include, for example, explanations of what teachers should expect students to record in their journals about a project on propagation.

“An entry for what was done to the plant should not be, ‘I watered it’. Rather, The plant was given 50 ml of water,” instructs the lesson plan.

Teaching Science through Web-Based Adventures

According to the results of four pilot projects in after-school programs in New York City and in Washington, DC, AAAS’s Kinetic City Super Crew website successfully draws children in and teaches them the principles of science.

Based on those results, and thanks to a \$1.3 million grant from the National Science Foundation (NSF), the program, which began seven years ago as a weekly radio show, is going national in 2002 with its new on-line format.

The principles that are taught by the program are based on the *Benchmarks for Science Literacy*, as developed by AAAS’s Project 2061. The target population is made up of children 8 to 11 who take part in after-school programs. The program is geared for clubs of about 30 children who will work together to solve the science problems presented on the site.