edited by COIMBRA SIRICA

AAAS Program Builds Cooperative Research

If South Dakota lacks a strong research infrastructure, it is not for lack of good science but because there is a lack of understanding about how research can benefit the state.

But Royce Engstrom, director of a program to stimulate research in South Dakota, sees hope in the new AAAS Research Competitiveness Program (RCP). "We're trying to articulate what our problems are here in terms of getting support for science and to ask AAAS if they can help with the mechanisms to address those problems."

The RCP is gearing up to help a number of states whose researchers work in isolation from the larger world of science. "It's not easy for people from universities in rural and poorer states to get connected to the broader science and technology community," says Project Director Al Teich, who also heads the AAAS Science and Policy Directorate.

The 3-year program, funded by the National Science Foundation (NSF), will provide a broad range of services to Puerto Rico and the 18 states that are part of EPSCoR, the Experimental Program to Stimulate Competitive Research. EPSCoR was established 18 years ago to help overcome the long-standing disparity in funding for research activities. The new program will allow AAAS to continue case studies of institutional development it began under an earlier NSF/EPSCoR-funded grant.

Plans are also under way for a study of the future of the research university, aimed at identifying the most effective models for future development of universities in the EPSCoR states. AAAS has already commissioned researchers for these two efforts, but it's just getting started on other parts of the program.

One prong of the RCP, a technical assistance extension service, relies on consultants to assist EPSCoR participants. The types of support will depend on the specific needs of the individual EPSCoR states, but potential assignments might include helping EPSCoR personnel develop research proposals for submission to peer-reviewed competitions or revising their state's science and technology plan.

On 12 February, in the hope of improving both the state's economy and its research base, Maine will unveil a comprehensive science and technology plan that was developed with the help the new AAAS program.

"Having outside help gave us an opportunity to think at a higher level than we might have before," says Edmund J. Lovett, chairman of the board of the Maine Science and Technology Foundation. "There are elements in the plan that require institutional and structural change, and AAAS's involvement lends credibility to this process."

A leadership development program will also draw on consultants to put EPSCoR personnel in contact with distinguished researchers, scholars, and practitioners. A series of regional meetings will afford opportunities for participants to network and learn from each other. "People who do research do a lot of things by instinct in terms of how they try to be competitive to get funding, get published, get the answers they're seeking in a research problem," says Teich. "We are going to set up a structure within which people can talk about those things they may do every day but seldom reflect on."

AAAS will develop a mechanism for quality control to judge the program's abilities to serve the needs of the EPSCoR participants. By using a database that delineates the credentials and availability of consultants, AAAS can respond quickly to a state's request and send the best expert for specified tasks. Although much will depend on which state needs what, the ideal consultants will have knowledge of the problems that challenge an EPSCoR state and will have experience in the top echelons of the science or engineering community.

The ultimate goal will not be to do the work for EPSCoR participants and then leave, but to help them make the most of their skills and create an environment that can produce good science. If you are interested in becoming involved, contact the RCP staff at 202-326-6600 or by e-mail at rcp@aaas.org.

High Marks for Project 2061

Ten years after AAAS launched Project 2061 to reform the way students are taught about science, mathematics, and technology in the United States, a study finds that the project has had "broad and substantive impact."

"There is a lot left to do, but Project 2061's accomplishments are a vital first step in moving us forward," says SRI International's Andrew Zucker, the study's principal investigator. The study by SRI, an independent applied-research firm, was the first to take a close look at Project 2061. In its two publications, *Science for All Americans* and *Benchmarks for Science Literacy*, Project 2061 has defined science literacy and proposed it as a goal for all high school graduates and has developed benchmarks for evaluating the science literacy of children from kindergarten through their high school years.

"People at the state level are paying attention to these reports and are making some changes in terms of their curriculum frameworks," Zucker says. "These were timely documents because people needed help, and this is the kind of help they were looking for."

Indeed, according to the SRI study, Project 2061's greatest successes were in arriving at "a unified vision for what the scientific community believes students should know about science," and in disseminating that vision of science literacy "to a greater number of communities and audiences than ever before." Project 2061's impact was found to be particularly significant in contributing to the development of science education standards. And education reform programs sponsored by the National Science Foundation have drawn extensively on the project's work.

SRI made clear, however, that Project 2061 still faces obstacles in its efforts to change science education. Proponents of Project 2061's reforms argue, for example, that textbooks must be made less technical in order to improve science literacy. "Textbook publishers have yet to subscribe fully to Project 2061's vision," Zucker says. "The publishers respond to market forces, and that means we have to change the market. The states will have to be active, as will school districts and their teachers."

AAAS Fellow Nominations

Groups of three AAAS Fellows are invited to nominate other AAAS members for election as Fellows. A Fellow is "a Member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished." At least one of the three sponsors must not be affiliated with the nominee's institution. Election is by the AAAS Council.

Nominations must be received by 2 June 1997. Forms are available from the AAAS Executive Office, 1200 New York Avenue, NW, Washington, DC 20005, 202-326-6635.

The *Directory of AAAS Fellows* is available from the AAAS Distribution Center, P. O. Box 521, Annapolis Junction, MD 20701 ($14.95 for members, plus $4 handling and shipping, prepaid).