United States Senate

WASHINGTON, D.C. 20510

Sponsored by Senators Tsongas, Stennis, Hart, Pell, Randolph, Baucus

PURPOSE

To establish a national grants program providing matching Federal assistance for joint initiatives by private industry, educational institutions and state government to strengthen science, engineering, and technical education.

RATIONALE

An adequate supply of scientific, engineering and technical personnel is essential to ensure U.S. scientific and technological leadership, to bolster U.S. international competitiveness and domestic employment, and to safeguard national security. Our educational system must respond to the economic challenge by improving the quality of math and science instruction at the pre-college level, strengthening and modernizing programs in science, engineering and technology in our colleges and universities, and developing the capability to provide lifelong education and training to our existing technical workforce.

PARTNERSHIP

This Act would authorize a program of competitive grants for technology education projects and programs jointly sponsored by industry, educational institutions, and state governments. In order to be eligible for the 50% matching Federal grant, private industry would contribute 20%, and states 30%, of the total project costs. This formula ensures that federal funds to strengthen technological education would comport with the economic development policies of the state, educational needs of our schools and colleges, and priorities of the private sector. As a result, Federal funds would be channeled into educational areas that industry identifies as important for maintaining U.S. technological leadership.

ELIGIBLE ACTIVITIES

Grants made under this Act may be used to:

- modernize university lab equipment;

- establish university research/education centers;

- expand technician training programs at community colleges;

- develop lifelong cooperative education programs to maintain technical skills of the current workforce;
- initiate programs to retrain workers for jobs requiring more technical skills;

- enhance math, science and engineering teaching as a career;

- establish computer literacy programs in elementary and secondary schools;

- improve educational productivity through the development of new educational methods and equipment;

- develop programs to teach the management of technological innovation;
- improve the access of women, minorities and handicapped to the fields of technology;
- encourage cooperative programs between humanities and sciences;
- and support any other programs that strengthen technological education.

FUNDING

This Act would make available approximately \$500 million of Federal matching grants per year for five years. Three percent of the federal revenues from the sale of energy and mineral resources on Federal lands are placed in a Technology Education Trust Fund, which are then made available for grants for annual appropriation.

ADMINISTRATION

The technology education grants established by this Act are to be administered by the Director of the National Science Foundation (NSF). He is authorized to establish an advisory committee representing, industry, education, states, professional societies and labor, and to consult with the Secretary of Defense and other agencies to ensure coordination of Federal efforts.

PRECEDENT

The Morrill Act of 1862 devoted 17 million acres of Federal land for founding agricultural colleges across the country. Proceeds from the sale of the land were invested, and interest earned accumulated in a perpetual fund for the support of the land grant colleges. This Act sparked a technological revolution that led to U.S. industrialization and made U.S. agriculture number one in the world.

STATUS

On May 11 the Labor and Human Resources Committee reported favorably legislation entitlted the "Education for Economic Security Act," which incorporates the High Technology Morrill Act as Title III - Partnerships in Education for Mathematics, Science and Engineering.

Title III does not include the trust fund provisions of S. 631 but provides direct authorization for \$30 million in FY84 and \$60 million in FY85. The scope of the program is the same in this version as in the partnership requirement of the original proposal. The contribution required from industry is raised to 30%, and the states 20% share may be contributed by educational institutions, businesses, or other nonfederal sources. In another departure from S. 631, Title III requires that the states submit proposals to NSF.

PROSPECTS

Senate floor action is expected in June, at which time an amendment to raise the funds authorized in FY85 may be offered. The Senate bill will be considered in conference with H.R. 1310, the Emergency Mathematics and Science Education and Jobs Act already passed by the House.