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Information for contributors appears on page Xi of the 31 March 1989 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005. Telephone: 202-326-6500.

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Congressional Fellowships for Science

Representative Doug Walgren (D-PA) has teamed with Senator John Glenn (D-OH) to push for passage of legislation that could be a significant step toward ameliorating this country's deteriorating position and future prospects. Under terms of the legislation, every year one female and one male high school graduate in each congressional district would receive a scholarship paying a maximum of \$5000 a year for 4 years to study science, mathematics, or engineering. The proposed legislation calls for an initial appropriation of only \$5.5 million, and in terms of needs, the number of students who will be helped is small. However, as a symbolic gesture with possible follow-on consequences, enactment of the legislation could make a large difference.

Walgren has stated, "Because of their broad geographical distribution [the] fellowships would serve as a highly visible stimulus and source of role models for high school students.... The awarding of these fellowships—perhaps during National Science and Technology Week—would remind members of Congress and the public of the importance of science to our national goals."

The legislation would place responsibility on the National Science Foundation to administer the program. Some of the mechanisms to be employed would give the program great visibility. For example, "The Director shall notify all public and private secondary schools and all institutions of higher education in the United States annually of the availability of scholarships under this Act."

The legislation further specifies that the National Science Foundation "shall establish for each congressional district, or, to the extent a contiguous group of congressional districts reflects a geographic region similar in demographics, geography, and economic status and activity, for each such group of congressional districts, a broad-based committee of educators, scientists, mathematicians, and engineers who shall submit to the Director [NSF] nominations of one male and one female from each congressional district for scholarships under this Act." Such committees would identify a host of excellent candidates worthy of support. The attendant activity and publicity would be likely to stimulate substantial additional financial support from industry, foundations, alumni, local communities, and the states. Were the program to be markedly successful, it might serve the function of a pilot plant for later expanded federal support.

Another provision of the legislation could lead to improvement of relations between the Congress and scientists, mathematicians, and engineers. The Act includes: "The Director shall notify each Member of Congress in writing of selections made from such Member's district at least one week before public announcement of such selections is made." Given adequate notice, the various congressmen would have highly valued photo opportunities and a chance to share in a happy public event. They and their staffs would become better acquainted with the scientists, mathematicians, and engineers of their districts, who in turn would become better informed about some of the concerns of congressmen.

In pushing for the legislation, Walgren has been joined by a bipartisan group of 27 members of the House Science, Space and Technology Committee, including Chairman Robert A. Roe (D-NJ). He has received strong support from the scientific community in testimony presented 9 March by Richard C. Atkinson, president of AAAS, Thomas F. Malone, president of Sigma Xi, and Lynn Arthur Steen, chairman of the Council of Scientific Society Presidents.

In his testimony, Atkinson implicitly reminded the Congress that the problems we face in education for science and technology are broader than those addressed in the Walgren proposal. He pointed to a "leaky pipeline" which conveys to the doctorate only a tiny fraction of students with the potential for it when in the tenth grade. In addition, he noted that by 1995 about 30% of the engineering faculties will have retired and have to be replaced. But in 1987, only 42% of U.S.-granted Ph.D.'s in engineering were awarded to U.S. citizens.

Obviously, the new legislation addresses only part of the educational problems, but it is an imaginative proposal that should enjoy broad support. Critics should exercise self-restraint in seeking this or that modification. That would only lead to delays or outright failure of enactment.—PHILIP H. ABELSON