

STATEMENT OF THE HONORABLE JOHN E. FOGARTY, MEMBER OF CONGRESS FROM RHODE ISLAND, BEFORE THE LABOR AND EDUCATION COMMITTEE OF THE U.S. HOUSE OF REPRESENTATIVES IN SUPPORT OF HIS BILL, HR 12023, THE SCIENTIFIC AND MATHEMATICS EDUCATION ACT OF 1958, April 22, 1958.

~~Mr~~ Mr. Chairman and members of the Committee. I personally appreciate the courtesy of this Committee in permitting me to appear today in support of my bill, HR 12023, the "Scientific and Mathematics Act of 1958".

In recent months the nation has buzzed with excitement and speculation over the latest scientific developments which appear to symbolize either a whole new frontier of learning or the most serious threat to our way of life that we have ever seen. These events ^{have} caused many people to seriously examine the status of American education in the area of scientific training. One such group was the Rhode Island Department of the American Legion, which strongly believed ^s that education is a keystone in the progress of the American people and is interwoven with our national security and the security of the free world.

This organization, in collaboration with the R.I. Association of School Superintendents ^{has} spent much effort and many long hours in attempting to ~~come~~ ^{develop} up ~~with~~ a proposal which would speed up scientific education in this country and tend to match the strides being made by Soviet Russia. The Legionaires and educational authorities held many meetings and conferences ^{on the problem over the past 6 mos,} and eventually produced recommendations which they thought would best promote the nation's educational program in science and mathematics.

These recommendations, in conjunction with a careful appraisal of the representations which have been made to and before ~~the House of~~ this Committee and the Senate Committee on Labor and Public Welfare, have been the basis for the bill which I have introduced. Many of the statements which have been

made by leading educators and people prominent in the fields of science and industry, as well as government administration, show that there is an immediate ~~need~~ and pressing need for the encouragement of young men and women of ability to pursue studies in the fields of science, mathematics and engineering.

It is unfortunate that the number of pupils trained in secondary schools capable of undertaking studies leading to degrees in the sciences has been far short of current and estimated needs. While some progress has been made, I do not believe that the national trend to shun studies involving mathematics and science ~~have~~ ^{has} been halted. I do believe, ~~however~~, ^{however,} that, given the incentives ~~to be~~ found in the bill I have introduced, this trend will be halted and an ever-increasing number of qualified students will go on to higher education in the sciences.

Again, we must work to solve the dilemma of the teaching profession, which remains underappreciated and underpaid in an age of great social progress and scientific advancement. The American people need to give far more regard to the intrinsic value of the teacher's contribution to our civilization. We need to recognize one simple fact - whatever our coming generations think and do about our way of life, about our search for world peace, about our scientific accomplishments, - will be determined to a substantial degree by the day-to-day influence of our teachers. With this thought in mind the subject bill attempts to emphasize the training of teachers and to assist high schools and colleges in securing adequate ^{SCIENCE} staffs by supplementing teacher's salaries.

Briefly, the legislative proposal which I have introduced has three main approaches: (1) to provide loans ~~and~~ and grants to students; (2) to supplement the salaries of math and science teachers; and (3) to authorize the construction of math and science teaching facilities. It would provide in essence for:

1. A system of Federal insurance for loans to high school and college students. To be eligible a student would have to be over 16 years of age and have completed his sophomore year in high school. No loan could be for over \$1500 for any single year but the program would cover the last two years in high school, college and post-graduate work leading to a Master's degree. The loans, guaranteed by the Federal government, would be made by regular lending institutions and would be repayable by the student except that repayment of loans for work toward a Master's degree would be waived. The money borrowed for this graduate work would be paid by the Federal government upon the awarding of the Master's degree.

The bill also proposes a grant of up to \$3,000 per year to any holder of a Master's degree in mathematics, science or engineering who pursues further graduate work aimed at obtaining a Doctorate in Philosophy, Science or Engineering.

2. The second title of the bill provides for \$360,000,000 being made available to the States on a per capita basis for the purpose of supplementing salaries for those teachers engaged in the fields of science or mathematics. Its goal would be to assist high schools and colleges to secure adequate teaching personnel in Math and Science Departments by providing added increment to basic salaries. This title also provides for courses of instruction in science and math for teachers and supervisors. Federal funds authorized under this title would be matched on a 50-50 basis by local and State funds and would be allocated to States in proportion of their population to the total population of the United States.
3. The third title of the bill provides \$100,000,000 for additions, new construction, and equipment for programs in Mathematics and Science in high schools and colleges. A minimum facilities concept similar to that of Public Law 815 applies to this title. The proposed facilities would include specialized buildings and equipment designed especially for educational projects in the fields of science and mathematics.

Mr. Chairman, there is excellent precedence for the bill which I have proposed. Three decades ago it was determined by Congress that vocational education was a matter of national interest and essential to the national welfare. Congress also determined that federal funds were necessary to stimulate and assist the states in making adequate provisions for such training.

On February 23, 1917, the 64th Congress of the United States approved an Act for the purpose of promoting and developing vocational education through a cooperative plan between the federal government and the several states. This Act is usually referred to as the Smith-Hughes Act. From time to time supplementary acts have been enacted. The latest of these ^{was} ~~is~~ the Vocational Education Act of 1946, commonly known as the George-Barden Act. Thus ~~in 1917~~ as early as 1917, the Congress had adopted policies which established a cooperative operation between the states and the federal government for the purpose of developing vocational education.

Today, it is a matter of national interest and essential to the national welfare that mathematics and science education should also be developed. To do so it is necessary that the Congress make federal funds available to stimulate and assist the states in making adequate provisions for such training. Essentially, this bill provides for the promotion, development and operation of programs of mathematics and science education in accordance with the same principles, provisions, and policies that the federal government now provides for vocational education.

Consequently, Mr. Chairman, there is nothing new or startling about this proposed legislation. It provides ⁸now the needed federal assistance to help and assist the states to provide for adequate mathematics and

science programs in our schools with accompanying advances in the training and economic status of mathematics and science teachers. This is an area in which the federal government has an immediate and vital concern and I hope that this^e Committee will see its way clear to vote favorably on this bill.

