

IN HONOR OF ROBERT M. BECK

**HON. DENNIS J. KUCINICH**

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

*Thursday, May 3, 2001*

Mr. KUCINICH. Mr. Speaker, I rise today to honor a courageous man for his commitment to labor, the community and his concern for protecting the lives of others. Cleveland State of Israel Bonds is honoring Robert M. Beck, the President of Cleveland Police Patrolmen's Association.

Officer Beck is an outstanding role model not only for his fellow law enforcers, but for the entire community as well. Prior to Robert Beck's presidency of the Cleveland Police Patrolmen's Association, he fulfilled numerous professional capacities. He served first as a patrol officer and then spent 13 years in the Third District Detective Bureau and Strike Force Unit. In 1980, Officer Robert Beck assumed his first elected position as a shift director. After years of hard work and on-going dedication, he was elected to his present position.

From a very young age Robert Beck knew his career goal. Although his father thought that Robert would enroll in the family business, he truly wanted to become a police officer. Even with several adjustments, rigors and pitfalls, such as being injured in the line of duty, Officer Robert Beck has upheld his honor and dignity throughout all occasions.

Presently, he is the elected first vice-president of the Cleveland Police Credit Union, chairman of the board of the Ohio Police and Fire Pension Fund and area vice-president of Cleveland AFL-CIO. In recognition of his consistent determination, Officer Beck has been honored with various awards. He is the recipient of the 1985 Rotary Valor Award, the 1986 Exchange Club Police Officer of the Year and the 1990 Five Year Distinguished Service Award.

Despite Officer Beck's many achievements, he still has an overwhelming passion for protecting the lives of others. My fellow colleagues, join me in saluting Officer Robert M. Beck for his continual dedication to the Cleveland community.

STATEMENT ON INTRODUCTION OF  
H.R. 1693 THE SCIENCE EDUCATION FOR THE 21ST CENTURY ACT

**HON. RALPH M. HALL**

OF TEXAS

IN THE HOUSE OF REPRESENTATIVES

*Thursday, May 3, 2001*

Mr. HALL of Texas. Mr. Speaker, today I am introducing legislation that will help to improve K-12 science and mathematics education in the nation's schools. The Science Education for the 21st Century Act authorizes a range of activities to increase the numbers and enhance the capabilities of science and math teachers, to advance knowledge on the most effective uses of educational technologies, to increase participation in science and technology careers by women and minorities, and to provide more effective coordination of public and private sector efforts to improve science and math education.

I want particularly to acknowledge the assistance and contributions of several of my Science Committee colleagues in the development of this legislation. The bill incorporates Rep. EDDIE BERNICE JOHNSON's provision to establish school/business partnerships to improve science and math education and to support students in pursuing undergraduate degrees in science and engineering; Rep. LYNN WOOLSEY's Go Girl Grants to encourage girls and young women to study math, science and engineering; Rep. JIM BARCIA's provision to establish an educational technology extension service to support K-12 schools; Rep. MARK UDALL's scholarships for science, math and engineering students willing to become certified and to serve as science teachers; Rep. JOHN LARSON's provisions on assessing the means for deployment of broadband networks for schools and libraries and on demonstrating educational applications for such networks; and Reps. BOB ETHERIDGE's and JOE BACA's provisions on improving the preparation and in-service professional development of science and math teachers.

The importance of providing all students with a sound grounding in science, math and technology education is evident. Looking at the overall economy, worker skill level correlates directly with productivity growth. More than one quarter of the growth in labor productivity during the boom years of the 1990s is attributed to increases in worker skills, as measured by education and work experience. The Department of Labor estimates that a 1% increase in worker skill level has the same effect on output and productivity growth as a 1% increase in hours worked.

Moreover, national economic, policy and cultural matters are increasingly influenced by science and technology. Having a basic grounding in science and technology is necessary for individuals to make informed judgments about public policy issues and to lead fulfilling lives. Unfortunately, it is clear that we have problems both in the quality of K-12 science and math education and in attracting students to careers in science, engineering and technology.

The National Assessment of Educational Progress, the national report card, reveals that fewer than one third of 4th, 8th and 12th grade students attain proficiency in science and math. International comparisons of math and science skills show the performance of U.S. students declining with years in the school system, and falling below that of students from most of our economic competitors. Poor preparation in elementary and secondary schools is reflected in the findings that over 40% of freshmen at public 2-year colleges are enrolled in remedial classes. Even at private 4-year colleges, 13% of students are enrolled in such classes. Moreover, approximately 35% of companies provide remedial math education for their employees.

Although college attendance is increasing, relatively fewer students than in the past are pursuing undergraduate degrees in science, math and engineering. From peak levels in the mid-1980s, engineering majors have declined by 30%, and math majors by 45%, relative to other fields of study.

One reason that the pool of scientists and engineers is growing more slowly is simply that the group traditionally most likely to enter these field, white males, is declining as a percentage of new workers. At present, white

males constitute a little over 40% of the workforce and nearly 70% of scientists and engineers. In contrast, white females are about 35% of the workforce and only 15% of scientists and engineers. The corresponding figures for African Americans and Hispanics are each about 10% of the workforce and 2% of scientists and engineers.

Clearly, we must do a better job of attracting women and minorities to science and preparing them to pursue postsecondary studies in science, math and engineering.

The Department of Labor projects that new jobs requiring science, engineering and technical training will increase by 51% between 1998 and 2008—roughly four times higher than average job growth nationally. The changing economy will not only require more scientists and engineers, but will require most workers to have increased skills. Sixty percent of all new jobs will require at least a high school education, and only 12% of new jobs will be filled by those with less than a high school education, and the number of such jobs will continue to decline.

These trends suggest the need to improve K-12 science and math education, both to prepare more students to pursue science and engineering studies in college and to raise the skill levels for all students, who will find themselves in an increasingly technological workplace.

The Science Education for the 21st Century Act will establish a range of education programs, primarily at the National Science Foundation, to address key factors that affect the quality of science and math education, as well as the associated problem of attracting individuals to careers in science, engineering and technology.

First, the bill establishes programs to improve the training and professional development of science and math teachers, including incentives for science and engineering students to become science and math teachers. Clearly, an essential first step in improving science and math education in the schools is having teachers with both a sound knowledge of their subject and effective teaching skills.

Next, the bill will institute programs to explore ways to use information technologies effectively in the classroom. Computers and communications networks have revolutionized the workplace, but have yet to reach their potential for educational applications. The emphasis will be on quantifying the techniques and approaches for employing technology that will lead to improved student performance, so that schools will know which approaches actually work and are worth the substantial investments needed to implement them.

In addition, the bill authorizes programs to encourage the interest of women and minorities in science and math, and to help prepare them academically to pursue careers in science, math and engineering. The changing composition of the nation's workforce makes it essential that the talents of all segments of society are fully developed and utilized.

And, finally, the bill establishes mechanisms to improve the coordination among the federal agencies that support K-12 science and math education activities. The federal resources available for this purpose are limited. Therefore, it is imperative that the resources be used for maximum benefit in helping the states and local school system that are engaged in reform of science and math education.