

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 EDU-
CATION 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 fields, 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.

Mr. Speaker, improvement of K-12 science and math education is one of the most critical problems facing the nation. It is central to meeting the workforce needs of the information age economy and thereby maintaining the nation's economic strength. The Science Education for the 21st Century Act offers initiatives and programs that will help to meet this need. I commend the measure to my colleagues and ask for their support.

SUMMARY

Science Education for the 21st Century Act

TITLE I. PRE-SERVICE TRAINING AND PROFESSIONAL DEVELOPMENT FOR SCIENCE TEACHERS

SECTION 101. SCIENCE TEACHER SCHOLARSHIPS FOR SCIENTISTS AND ENGINEERS

Establishes 1 year, \$7500 scholarships for science, math and engineering students, or baccalaureate degree holders in these fields, to enable them to take courses necessary to become certified as K-12 science teachers ("science teacher" in the bill means K-12 science, math or technology teacher). Individuals receiving scholarships are required to work as a K-12 teacher for a minimum of 2 years. NSF is authorized \$20 million per year for FY 2002 through 2004 to make competitive grant awards to institutions of higher education, which will administer the scholarships.

SECTION 102. COLLABORATIONS FOR IMPROVING SCIENCE TEACHER EDUCATION

Establishes a competitive grant program for collaborations of education, math and science faculty at institutions of higher education to develop courses and curriculum for pre-service science teacher education and for in-service professional development of science teachers (in-service courses must be offered by awardees). Emphasis is placed on developing educational materials and instructional techniques consistent with hands-on, inquiry-based teaching and incorporating innovative uses of information technology. Proposals must show evidence of a strong commitment by the home institutions to institute rewards and incentives for maintaining faculty participation among the various departments and schools and also must include a plan for continuation of the collaboration beyond the period of the award. NSF is authorized \$25 million per year for FY 2002 through FY 2004.

SECTION 103. MASTER SCIENCE TEACHERS

Establishes a competitive grant award program for state or local educational agencies to implement a plan for the development and use of master science teachers for grades K-8. The proposals must include a detailed plan describing certification and ongoing professional development requirements for master teachers, job responsibilities, and the relationship of the master teachers to school administrators and other teachers. Grant funds may be used for professional development activities, support for participation by master teachers in summer research projects, acquisition of educational materials and equipment, and computers and networking access for master teachers to allow for collaboration with colleagues and access to online materials and content experts. NSF is required to give priority in making awards to schools with a low proportion of certified science teachers and to put in place means to assess the effectiveness of the program in terms of trends in student performance. NSF is authorized \$25 million per year for FY 2002 through FY 2004.

SECTION 104. ASSESSMENT OF IN-SERVICE TEACHER PROFESSIONAL DEVELOPMENT PROGRAMS

Requires NSF to review all in-service teacher professional development programs

to determine (1) the amount of attention given to training teachers to use technology in the classroom, and (2) the level of resources for school-building and district-level professional development activities. NSF is directed to ensure that the programs are adjusted as needed to emphasize both areas and to report to Congress on any proposed changes to the programs.

TITLE II. EDUCATIONAL TECHNOLOGY SECTION 201. RESEARCH ON EFFECTIVE EDUCATIONAL TECHNOLOGIES

Establishes a competitive, merit-based research program at NSF and the Department of Education to conduct large-scale experiments to assess quantitatively the educational effectiveness, in terms of student outcomes, of promising educational approaches and techniques that incorporate information technologies. The experiment will involve a wide range of educational settings and track the progress of a substantial number of students over time. Part of the research will involve developing appropriate metrics to assess student performance, and the results of the experiments will be widely disseminated. The program is authorized at \$50 million for FY 2002, \$75 million for FY 2003, and \$150 million for FY 2004.

SECTION 202. EDUCATIONAL TECHNOLOGY UTILIZATION EXTENSION ASSISTANCE

Establishes an educational technology extension service for K-12 schools composed of regional centers based at intermediate school districts, regional education service agencies, or institutions of higher education. The centers will advise schools on the adoption and requirements for support of new technologies, assist and train teachers in the integration of technology into classroom instruction, and provide general support services for teachers, administrators and local school authorities in the acquisition, utilization and support of educational technologies. NSF is authorized \$7 million for FY 2002, \$8.5 million for FY 2003, and \$9.5 million for FY 2004.

SECTION 203. NATIONAL SCIENCE, MATHEMATICS, ENGINEERING, AND TECHNOLOGY EDUCATION DIGITAL LIBRARY

The National SMET Education Digital Library is an ongoing component of the interagency digital library initiative. The digital library initiative is developing the means for searching, retrieving, organizing and preserving large collections of digitized information in distributed locations, including presentation tools and interfaces. The National SMET Education Digital Library is a particular application of these technologies that encompasses all education levels. It is now funded primarily by NSF at \$25 million per year. A supplemental authorization is provided of \$10 million for FY 2002, \$15 million for FY 2003, and \$17.5 million for FY 2004 for activities focused on development of the precollege education collections and on support services for teachers and school administrators, including assistance to schools for selection of educational materials.

SECTION 204. STUDY OF BROADBAND NETWORK ACCESS FOR SCHOOLS AND LIBRARIES

Requires NSF to prepare a report, in consultation with other agencies, on the current status of school and library access to high bandwidth Internet connections, on uses of such high bandwidth connections, and on options for and factors involved in acquiring and maintaining high bandwidth connections.

SECTION 205. BROADBAND DEMONSTRATION PROJECTS

Under the Next Generation Internet (NGI) portion of the High Performance Computing Act of 1991, broadband Internet connections

to K-12 schools are authorized in order to allow for demonstration projects testing the uses and effectiveness of such capability for science, math and technology education. The demonstration projects must be carried out in coordination with the experiments authorized under section 201. NGI agencies are authorized \$7 million for FY 2002, \$8.5 million for FY 2003, and \$9.5 million for FY 2004.

TITLE III. INCREASING PARTICIPATION BY UNDERREPRESENTED GROUPS IN SCIENCE AND ENGINEERING

SECTION 301. MATHEMATICS AND SCIENCE PROFICIENCY PARTNERSHIPS

Establishes a grant program at NSF for local educational agencies to establish partnerships with private sector entities to strengthen science and math education in the participating schools and attract students to pursue science and engineering baccalaureate degrees. The federal funds are available for curriculum improvement and associated materials and equipment and for teacher professional development. The private sector funding, which must be available as a condition for the awards, will provide undergraduate scholarships, summer internships and support the acquisition of computer equipment. The program is targeted for schools with a high proportion of students from low-income families. This is conceived as a demonstration program to see if substantial private sector funding can be leveraged. NSF is required to track the progress of the program and to assess its effectiveness. NSF is authorized \$5 million per year for FY 2002 through FY 2004.

SECTION 302. GO GIRL GRANTS

Establishes a grant program at NSF for local educational agencies and institutions of higher education to stimulate the interest of girls in science, math and technology and to attract them to careers in those fields. The grants may provide for such activities as tutoring, after school activities, summer programs, internships, and field trips. NSF is authorized \$10 million per year for FY 2002 through FY 2004.

SECTION 303. ARTICULATION PARTNERSHIPS BETWEEN COMMUNITY COLLEGES AND SECONDARY SCHOOLS

A provision of the Scientific and Advanced Technology Act of 1992 authorizes NSF to make grants to community colleges to enter into partnerships with secondary schools to improve math and science education in those schools, to encourage student interest in pursuing careers in science and engineering, and to help ensure that students satisfy college entrance and course requirements for science, math and engineering majors. This section directs NSF to give priority for these awards to proposals that involve secondary schools with majority minority student populations and to waive matching requirement for these cases. NSF is authorized \$5 million per year for FY 2002 through FY 2004.

TITLE IV. COORDINATION OF SCIENCE EDUCATION PROGRAMS

SECTION 401. INTERAGENCY COORDINATION COMMITTEE

The director of the Office of Science and Technology Policy (OSTP) is required to establish an interagency committee to coordinate federal programs that are targeted on improving K-12 science education. The committee is charged to catalog federal programs, determine the balance of funding among types of activities, assess the relevance of the programs to assist states and local school systems to implement standards-based reform of science and math education, evaluate the adequacy of procedures used by agencies to assess whether the goal of the programs are being met, and identify

ways to streamline application procedures and requirements across agency programs.

SECTION 402. EXTERNAL REVIEW

Requires NSF to task the Nation Research Council to review federal K-12 science education programs, similar to the tasking to the committee under section 401.

SECTION 403. EDUCATION PLAN

Requires the OSTP director through the interagency committee, and in consultation with appropriate state and private sector entities, to prepare a plan for federal K-12 science education programs that will delineate a strategy to increase the effectiveness of federal programs in assisting localities engaged in standards-based reform efforts, to identify best practices for use of information technologies in classroom instruction, and to replicate programs identified as being effective.

SECTION 404. SCIENCE, MATH, ENGINEERING, AND TECHNOLOGY BUSINESS EDUCATION CONFERENCE

Requires NSF to convene annual K-12 science education conferences to provide a forum for information sharing and to help coordinate school reform efforts among the federal government, state and local education agencies, teachers, and the private sector. NSF is authorized \$0.3 million for FY 2003, and \$0.2 million for FY 2004.

SECTION 405. REPORTS

Specifies that the OSTP director shall provide annual reports on the development of the education plan required under section 403 and on its implementation. NSF is required to provide annual reports on the results of the conferences established under section 404.

PAYING TRIBUTE TO ANITA COVERT

HON. MIKE ROGERS

OF MICHIGAN

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 3, 2001

Mr. ROGERS of Michigan. Mr. Speaker, I rise today to congratulate Anita Covert on being named Michigan's Small Business Person of the Year by the United States Small Business Administration.

In 1982 Anita Covert realized her dream of owning a small business by opening her first quilt shop in Eaton Rapids, Michigan. Today, Anita maintains four quilt shops located in east Lansing, Flint, Jackson and Owosso, Michigan with 60 total employees. Anita has always maintained a commitment to her staff, even helping employees achieve the American dream by starting their own small business.

Anita Covert's business, Country Stitches, Ltd., is the third largest dealer of high-quality Viking Sewing Machines and has become the eighth largest Pfaff Sewing Machine dealer in the nation. Country Stitches has also been honored as one of the top ten quilt shops in the nation by Better Homes and Gardens.

Since 1982, Anita Covert has served as a job provider and community leader. I commend her for her commitment to mid-Michigan and wish her continued success. Therefore, Mr. Speaker, I respectfully ask my colleagues to join me in paying tribute to Anita Covert for being named Small Business Person of the Year by the United States Small Business Administration.

HONORING NANCY ATKINS

HON. MARCY KAPTUR

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 3, 2001

Ms. KAPTUR. Mr. Speaker, I rise today to recognize the career of service of Nancy Atkins from Toledo, Ohio. Nancy is retiring on May 1, 2001 after twenty years at the helm of Toledo Metropolitan Mission (TMM), a faith-based agency dedicated to uplifting the underserved. Concurrently, she led the metro Toledo Churches United (MeTCU) for the past fifteen of those years. The last ten years also found her leading these organizations' umbrella agency, Toledo Ecumenical Area Ministries.

Thomas Paine said, "I believe that religious duties consist in doing justice, loving mercy, and endeavoring to make our fellow creatures happy." This sentiment has been the guiding principle behind these organizations' development under Nancy's ever-present leadership. Nancy's leadership positioned TMM as the strongest advocate for the weakest among us, influencing or developing programs for poor people, children, struggling women, homeless people, and older people. TMM has weighed in heavily on issues affecting these disaffected groups of people, from housing to health care to the impact of welfare reform. TMM and MeTCU are respected as voices of true compassion, never forgetting Christ's admonition, "Whatever you do to the least of my brethren, that you do unto me." Nancy has empowered TMM to lead the charge for the rights of those most vulnerable and yet ignored. Her guidance saw TMM develop more than a dozen programs to address those rights, forged coalitions of agencies committed to those rights, and nurtured in many the growth of self-advocacy for those rights.

A member of more than fifteen community, social justice, and inter-religious organizations, Nancy Atkins has galvanized the role of TMM in bringing the rights of all to the table and ensuring that no one is left out of the discussion. She has fostered a spirit of cooperation while working together toward common goals and practical solutions. Truly, her contribution to the success of TMM and its mission cannot be underestimated.

Mindful of Dr. Martin Luther King's creed that "Injustice anywhere is a threat to justice everywhere" Nancy Atkins' leadership these past two decades has been the embodiment of social justice. If the measure of a person is her legacy, then Nancy Atkins' legacy thus far is beyond measure. Her daily presence at TMM will be sorely missed, but her imprimatur is there, it will not fade. She will remain a vibrant contributor to its mission for she will always be a part of our community. We wish her well in retirement, and hope she is able to spend time doing all those things she most enjoys.

IN HONOR OF DAVID P. BYRNES

HON. DENNIS J. KUCINICH

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 3, 2001

Mr. KUCINICH. Mr. Speaker, I rise today to honor David Byrnes for his years of service

and dedication to the greater Cleveland community, and his distinguished service to the Fire Fighters of Northern Ohio.

Mr. Byrnes represents the very best of Cleveland, dedicating his career to helping others. Since 1985, Mr. Byrnes has served as the distinguished President of the Northern Ohio Fire Fighters Union representing fifty-three International Associations of Fire Fighters' Local Unions in Northeast Ohio with over 2700 active members. During his tenure as president Mr. Byrnes has helped solidify and protect the union of some of Ohio's greatest civil servants. Mr. Byrnes' sixteen years of service to this vital union deserves the highest of praise.

Mr. Byrnes' dedication to the Cleveland community extends beyond his service to the Fire Fighters. Since 1997, Mr. Byrnes has stood up for the rights of working men and women as Vice President of the Cleveland Federation of Labor, AFL-CIO, representing almost 140,000 active and retired union members. In addition to his service to the AFL-CIO and fire fighters, Mr. Byrnes currently is Chairperson of the Board of Trustees of Cuyahoga Community College, in the Cleveland area.

Mr. Byrnes has received countless awards for his dedication to the community including being recognized by the Cleveland AFL-CIO, Warrensville, Ohio Mayor Fudge, and former Ohio Governor George Voinovich to name a few.

Mr. Speaker, I ask my colleagues to join me in rising to honor one of Ohio's finest. A man who has tirelessly dedicated his career to helping others and making our Cleveland community better. Mr. Speaker, Mr. Byrnes' service to the greater Cleveland Community is an example for all of us to follow.

IMPACT AID

HON. SUSAN DAVIS

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, May 3, 2001

Mrs. DAVIS of California. Mr. Speaker, I am proud that my district is home to over 80 military installations and over 25,000 military families. Along with most other San Diegans, I am honored to have military families living in our neighborhoods and sending their children to our schools.

Impact Aid is vital to communities in the San Diego area who have a high proportions of military families. In my district, the City of Coronado is a prime example. Coronado has a population of 29,229 and is home to the North Island Naval Air Station. During a recent visit to the Coronado Public Schools, it was brought to my attention that school administrators are having difficulty receiving the impact aid they deserve and counting on the impact aid they need. While students from military families regularly make up 41% of pupils, in a given year, the district can receive as little as \$400,000 or as much as \$1 million in impact aid funding. Anyone who's ever created a budget knows you can't operate with that kind of insecurity.

Impact Aid is a matter of fairness to the school districts like Coronado and San Diego Unified which educate children of the military. Property taxes and state taxes fund our schools along with some federal funding targeted to particular needs. However, military