

broad mission to strengthen the U.S. economy, and especially to improve the competitiveness of the U.S. information technology industry. In conducting its computer security efforts, NIST works closely with industry, Federal agencies, testing organizations, standards groups, academia, and private sector users.

Specifically, NIST works to improve the awareness of the need for computer security and conducts cutting-edge research on new technologies and their security implications and vulnerabilities. NIST works to develop security standards and specifications to help users specify security needs in their procurements and establish minimum-security requirements for Federal systems.

NIST develops and manages security-testing programs, in cooperation with private sector testing laboratories, to enable user to have confidence that a product meets a security specification. Finally, NIST produces security guidance to promote security planning, and secure system operations and administration.

I have already mentioned NIST's important role in standards development. NIST has long been active in developing Federal cryptographic standards and working in cooperation with private sector voluntary standards organizations in this area. Recently, NIST facilitated the worldwide competition to develop a new encryption technique that can be used to protect computerized information, known as the Advanced Encryption Standard (AES), which will serve 21st century security needs.

Another aspect of NIST's standards activities concerns Public Key and Key Management Infrastructures. The use of cryptographic services across networks requires the use of "certificates" that bind cryptographic keys and other security information to specific users or entities in the network. NIST has been actively involved in working with industry and the Federal government to promote the security and interoperability of such infrastructures.

Mr. Speaker, a wide array of technology organizations and the Administration have recognized the need for H.R. 2413 and to protect our nation's information technology security. I urge my colleagues to stand with these organizations and myself to take this important step towards securing our computer data and resources from malicious attack. I urge passage of H.R. 2413.

Ms. JACKSON-LEE of Texas. Mr. Speaker, I rise in strong support for H.R. 2413, the Computer Security Enhancement Act of 2000. This bill reinforces the role of the National Institute of Standards and Technology (NIST) in ensuring the security and privacy of federal civilian computer systems, and promotes the use of technology solutions developed by the private sector. The measure affirms NIST's role as the lead agency for creating and maintaining standards for federal computer security and emphasizes the need for protecting sen-

sitive information in federal databases and on publicly accessible government Web sites. The committee states that NIST should focus on security issues that have emerged with the rapid changes in computer technology since passage of the Computer Security Act of 1987.

The bill authorizes \$7 million in FY 2001, and \$8 million in FY 2002 for NIST to carry out the measure, not including funds otherwise specifically authorized.

This legislation comes in response to a 1999 General Accounting Office (GAO) report that stated that, during the previous two years, serious information security control weaknesses had been reported for most federal agencies, and GAO recently gave the federal government an overall grade of "D-minus" for its computer security efforts.

The Computer Security Act of 1987 (P.L. 100-235) gave authority over computer and communication security standards in federal civilian agencies to the National Institute of Standards and Technology (NIST). However, the Science Committee notes that there have been dramatic changes in computer technology since the 1987 Act, citing the proliferation of networked systems, the Internet and Web access.

The bill authorizes NIST to provide guidance and assistance—including risk identification—to Federal agencies in the protection of information technology infrastructure (except for national security systems); provide information on existing security and privacy guidelines to promote compliance by Federal agencies; and consult with agencies on incidences of unauthorized access to Federal computer systems. The bill instructs NIST to develop measures to assess the effectiveness of agencies' privacy programs, perform evaluations and promote accreditation procedures for agency information security programs. The bill also directs NIST to report annually to Congress on its evaluations of federal computer systems, the use of commercially available security products by agencies, evaluations planned for the next year and any recommendations resulting from past evaluations.

The bill requires NIST to work with the Computer System Security and Privacy Advisory Board in setting standards and guidelines for the security of federal computer systems and to include the board's recommendations in Commerce Department reviews of proposed standards, guidelines and regulations. The measure authorizes \$1 million in each of FY 2001 and FY 2002 for the board to hold public meetings and publish reports and other relevant information on emerging computer security and cryptology issues. The board, made up of representatives from industry, federal agencies and outside experts, would report directly to the science committees in the House and Senate.

The measure prohibits NIST from creating or enforcing any standards or policies relating to computer systems outside the federal government.

I believe that this is an important step to take in our effort to encourage computer network security in the federal workplace.

However, I would advise that it is also important that the federal government develops and maintain an adequate supply of computer security professionals. We must be sure that those who are entrusted with the network security of our nation's interconnected computers

are dedicated and well trained information and network security experts.

Far too often those who are assigned network administrative functions, must share that responsibility among other assigned task, which might take precedence over their computer system responsibilities. The computer system is not deemed a priority unless access to files and informational resources are denied, then the systems specialist is expected to respond quickly to address the problem and restore service. The responsibility of network security is to maintain the routine maintenance of the system, which is vital to the smooth overall functioning of a computer system.

Mr. HALL of Texas. Mr. Speaker, I yield back the balance of my time.

Mr. SENSENBRENNER. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore (Mr. HANSEN). The question is on the motion offered by the gentleman from Wisconsin (Mr. SENSENBRENNER) that the House suspend the rules and pass the bill, H.R. 2413, as amended.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

Mr. HALL of Texas. Mr. Speaker, I object to the vote on the ground that a quorum is not present and make the point of order that a quorum is not present.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this motion will be postponed.

The point of no quorum is considered withdrawn.

NATIONAL SCIENCE EDUCATION ACT

Mr. SENSENBRENNER. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4271) to establish and expand programs relating to science, mathematics, engineering, and technology education, and for other purposes, as amended.

The Clerk read as follows:

H.R. 4271

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Science Education Act".

SEC. 2. FINDINGS.

Congress finds the following:

(1) As concluded in the report of the Committee on Science of the House of Representatives, "Unlocking Our Future Toward a New National Science Policy", which was adopted by the House of Representatives, the United States must maintain and improve its preeminent position in science and technology in order to advance human understanding of the universe and all it contains, and to improve the lives, health, and freedoms of all people.

(2) It is estimated that more than half of the economic growth of the United States today results directly from research and development in science and technology. The most fundamental research is responsible for investigating our perceived universe, to extend our observations to the outer limits of what our minds and methods can achieve,

and to seek answers to questions that have never been asked before. Applied research continues the process by applying the answers from basic science to the problems faced by individuals, organizations, and governments in the everyday activities that make our lives more livable. The scientific-technological sector of our economy, which has driven our recent economic boom and led the United States to the longest period of prosperity in history, is fueled by the work and discoveries of the scientific community.

(3) The effectiveness of the United States in maintaining this economic growth will be largely determined by the intellectual capital of the United States. Education is critical to developing this resource.

(4) The education program of the United States needs to provide for 3 different kinds of intellectual capital. First, it needs scientists, mathematicians, and engineers to continue the research and development that are central to the economic growth of the United States. Second, it needs technologically proficient workers who are comfortable and capable dealing with the demands of a science-based, high-technology workplace. Last, it needs scientifically literate voters and consumers to make intelligent decisions about public policy.

(5) Student performance on the recent Third International Mathematics and Science Study highlights the shortcomings of current K-12 science and mathematics education in the United States, particularly when compared to other countries. We must expect more from our Nation's educators and students if we are to build on the accomplishments of previous generations. New methods of teaching science, mathematics, engineering, and technology are required, as well as better curricula and improved training of teachers.

(6) Science is more than a collection of facts, theories, and results. It is a process of inquiry built upon observations and data that leads to a way of knowing and explaining in logically derived concepts and theories. Mathematics is more than procedures to be memorized. It is a field that requires reasoning, understanding, and making connections in order to solve problems. Engineering is more than just designing and building. It is the process of making compromises to optimize design and assessing risks so that designs and products best solve a given problem. Technology is more than using computer applications, the Internet, and programming. Technology is the innovation, change, or modification of the natural environment, based on scientific, mathematical, and engineering principles.

(7) Students should learn science primarily by doing science. Science education ought to reflect the scientific process and be object-oriented, experiment-centered, and concept-based. Students should learn mathematics with understanding that numeric systems have intrinsic properties that can represent objects and systems in real life, and can be applied in solving problems. Engineering education should reflect the realities of real world design, and should involve hands-on projects and require students to make trade-offs based upon evidence. Students should learn technology as both a tool to solve other problems and as a process by which people adapt the natural world to suit their own purposes. Computers represent a particularly useful form of technology, enabling students and teachers to acquire data, model systems, visualize phenomena, communicate and organize information, and collaborate with others in powerful new ways. A background in the basics of information technology is essential for success in the modern workplace and the modern world.

(8) Children are naturally curious and inquisitive. To successfully tap into these innate qualities, education in science, mathematics, engineering, and technology must begin at an early age and continue throughout the entire school experience.

(9) Teachers provide the essential connection between students and the content they are learning. Prospective teachers need to be identified and recruited by presenting to them a career that is respected by their peers, is financially and intellectually rewarding, contains sufficient opportunities for advancement, and has continuing access to professional development.

(10) Teachers need to have incentives to remain in the classroom and improve their practice, and training of teachers is essential if the results are to be good. Teachers need to be knowledgeable of their content area, of their curriculum, of up-to-date research in teaching and learning, and of techniques that can be used to connect that information to their students in their classroom.

SEC. 3. ASSURANCE OF CONTINUED LOCAL CONTROL.

Nothing in this Act may be construed to authorize any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any educational institution or school system.

SEC. 4. MASTER TEACHER GRANT PROGRAM.

(a) PROGRAM AUTHORIZED.—The Director of the National Science Foundation shall conduct a grant program to make grants to a State or local educational agency, a private elementary or middle school, or a consortium of any combination of those entities, for the purpose of hiring a master teacher described in subsection (b).

(b) ELIGIBILITY.—In order to be eligible to receive a grant under this subsection, a State or local educational agency, private elementary or middle school, or consortium described in subsection (a) shall submit to the Director a description of the relationship the master teacher will have vis-a-vis other administrative and managerial staff and the State and local educational agency, the ratio of master teachers to other teachers, and the requirements for a master teacher of the State or local educational agency or school, including certification requirements and job responsibilities of the master teacher. Job responsibilities must include a discussion of any responsibility the master teacher will have for—

(1) development or implementation of science, mathematics, engineering, or technology curricula;

(2) in-classroom assistance;

(3) authority over hands-on inquiry materials, equipment, and supplies;

(4) mentoring other teachers or fulfilling any leadership role; and

(5) professional development, including training other master teachers or other teachers, or developing or implementing professional development programs.

(c) ASSESSMENT OF EFFECTIVENESS.—The Director shall assess the effectiveness of activities carried out under this section.

(d) FUNDS.—

(1) SOURCE.—Grants shall be made under this section out of funds available for the National Science Foundation for education and human resources activities.

(2) AUTHORIZATION.—There are authorized to be appropriated to the National Science Foundation to carry out this section \$50,000,000 for each of fiscal years 2001 through 2003.

SEC. 5. DEMONSTRATION PROGRAM AUTHORIZED.

(a) GENERAL AUTHORITY.—

(1) IN GENERAL.—

(A) GRANT PROGRAM.—The Director of the National Science Foundation shall, subject to appropriations, carry out a demonstration project under which the Director awards grants in accordance with this section to eligible local educational agencies.

(B) USES OF FUNDS.—A local educational agency that receives a grant under this section may use such grant funds to develop a program that builds or expands mathematics, science, and information technology curricula, to purchase equipment necessary to establish such program, and to provide professional development in such fields.

(2) PROGRAM REQUIREMENTS.—The program described in paragraph (1) shall—

(A) provide professional development specifically in information technology, mathematics, and science; and

(B) provide students with specialized training in mathematics, science, and information technology.

(b) ELIGIBLE LOCAL EDUCATIONAL AGENCIES.—For purposes of this section, a local educational agency or consortium of local educational agencies is eligible to receive a grant under this section if the agency or consortium—

(1) provides assurances that it has executed conditional agreements with representatives of the private sector to provide services and funds described in subsection (c); and

(2) agrees to enter into an agreement with the Director to comply with the requirements of this section.

(c) PRIVATE SECTOR PARTICIPATION.—The conditional agreements referred to in subsection (b)(1) shall describe participation by the private sector, including—

(1) the donation of computer hardware and software;

(2) the establishment of internship and mentoring opportunities for students who participate in the information technology program; and

(3) the donation of higher education scholarship funds for eligible students who have participated in the information technology program.

(d) APPLICATION.—

(1) IN GENERAL.—To apply for a grant under this section, each eligible local educational agency or consortium of local educational agencies shall submit an application to the Director in accordance with guidelines established by the Director pursuant to paragraph (2).

(2) GUIDELINES.—

(A) REQUIREMENTS.—The guidelines referred to in paragraph (1) shall require, at a minimum, that the application include—

(i) a description of proposed activities consistent with the uses of funds and program requirements under subsection (a)(1)(B) and (a)(2);

(ii) a description of the higher education scholarship program, including criteria for selection, duration of scholarship, number of scholarships to be awarded each year, and funding levels for scholarships; and

(iii) evidence of private sector participation and financial support to establish an internship, mentoring, and scholarship program.

(B) GUIDELINE PUBLICATION.—The Director shall issue and publish such guidelines not later than 6 months after the date of the enactment of this Act.

(3) SELECTION.—The Director shall select a local educational agency to receive an award under this section in accordance with subsection (e) and on the basis of merit to be determined after conducting a comprehensive review.

(e) PRIORITY.—The Director shall give special priority in awarding grants under this

section to eligible local educational agencies that—

(1) demonstrate the greatest ability to obtain commitments from representatives of the private sector to provide services and funds described under subsection (c); and

(2) demonstrate the greatest economic need.

(f) ASSESSMENT.—The Director shall assess the effectiveness of activities carried out under this section.

(g) STUDY AND REPORT.—The Director—

(1) shall initiate an evaluative study of eligible students selected for scholarships pursuant to this section in order to measure the effectiveness of the demonstration program; and

(2) shall report the findings of the study to Congress not later than 4 years after the award of the first scholarship. Such report shall include the number of students graduating from an institution of higher education with a major in mathematics, science, or information technology and the number of students who find employment in such fields.

(h) DEFINITION.—Except as otherwise provided, for purposes of this section, the term “eligible student” means a student enrolled in the 12th grade who—

(1) has participated in an information technology program established pursuant to this section;

(2) has demonstrated a commitment to pursue a career in information technology, mathematics, science, or engineering; and

(3) has attained high academic standing and maintains a grade point average of not less than 3.0 on a 4.0 scale for the last two years of secondary school (11th and 12th grades).

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the National Science Foundation to carry out this section, \$3,000,000 for each of fiscal years 2001 through 2003.

(j) MAXIMUM GRANT AWARD.—An award made to an eligible local educational agency under this section may not exceed \$300,000.

SEC. 6. DISSEMINATION OF INFORMATION ON RE-REQUIRED COURSE OF STUDY FOR CAREERS IN SCIENCE, MATHEMATICS, ENGINEERING, AND TECHNOLOGY EDUCATION.

(a) IN GENERAL.—The Director of the National Science Foundation shall, jointly with the Secretary of Education, compile and disseminate information (including through outreach, school counselor education, and visiting speakers) regarding—

(1) typical standard prerequisites for middle school and high school students who seek to enter a course of study at an institution of higher education in science, mathematics, engineering, or technology education for purposes of teaching in an elementary or secondary school; and

(2) the licensing requirements in each State for science, mathematics, engineering, or technology elementary or secondary school teachers.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for the National Science Foundation to carry out this section \$5,000,000 for each of fiscal years 2001 through 2003.

SEC. 7. REQUIREMENT TO CONDUCT STUDY EVALUATION.

(a) STUDY REQUIRED.—The Director of the National Science Foundation shall enter into an agreement with the National Academies of Sciences and Engineering under which the Academies shall review existing studies on the effectiveness of technology in the classroom on learning and student performance, using various measures of learning and teaching outcome including standardized tests of student achievement, and explore the feasibility of one or more methodological

frameworks to be used in evaluations of technologies that have different purposes and are used by schools and school systems with diverse educational goals. The study evaluation shall include, to the extent available, information on the type of technology used in each classroom, the reason that such technology works, and the teacher training that is conducted in conjunction with the technology.

(b) DEADLINE FOR COMPLETION.—The study evaluation required by subsection (a) shall be completed not later than one year after the date of the enactment of this Act.

(c) DEFINITION OF TECHNOLOGY.—In this section, the term “technology” has the meaning given that term in section 3113(11) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6813(11)).

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the National Science Foundation for the purpose of conducting the study evaluation required by subsection (a), \$600,000.

SEC. 8. TEACHER TECHNOLOGY PROFESSIONAL DEVELOPMENT.

(a) IN GENERAL.—The Director of the National Science Foundation shall establish a grant program under which grants may be made to a State or local educational agency, a private elementary or middle school, or a consortium consisting of any combination of those entities for instruction of teachers for grades kindergarten through the 12th grade on the use of information technology in the classroom. Grants awarded under this section shall be used for training teachers to use—

(1) classroom technology, including hardware, software, communications technologies, and laboratory equipment; or

(2) specific technology for science, mathematics, engineering or technology instruction, including data acquisition, modeling, visualization, simulation, and numerical analysis.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for the National Science Foundation to carry out this section \$10,000,000 for each of fiscal years 2001 through 2003.

SEC. 9. SCIENCE, MATHEMATICS, ENGINEERING, AND TECHNOLOGY BUSINESS EDUCATION CONFERENCE.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Director of the National Science Foundation shall convene the first of an annual 3- to 5-day conference for kindergarten through the 12th grade science, mathematics, engineering, and technology education stakeholders, including—

(1) representatives from Federal, State, and local governments, private industries, private businesses, and professional organizations;

(2) educators;

(3) science, mathematics, engineering, and technology educational resource providers;

(4) students; and

(5) any other stakeholders the Director determines would provide useful participation in the conference.

(b) PURPOSES.—The purposes of the conference convened under subsection (a) shall be to—

(1) identify and gather information on existing science, mathematics, engineering, and technology education programs and resource providers, including information on distribution, partners, cost assessment, and derivation;

(2) determine the extent of any existing coordination between providers of curricular activities, initiatives, and units; and

(3) identify the common goals and differences among the participants at the conference.

(c) REPORT AND PUBLICATION.—At the conclusion of the conference the Director of the National Science Foundation shall—

(1) transmit to the Committee on Science of the House of Representatives and to the Committee on Commerce, Science, and Transportation of the Senate a report on the outcome and conclusions of the conference, including an inventory of curricular activities, initiatives, and units, the content of the conference, and strategies developed that will support partnerships and leverage resources; and

(2) ensure that a similar report is published and distributed as widely as possible to stakeholders in science, mathematics, engineering, and technology education.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for the National Science Foundation to carry out this section—

(1) \$300,000 for fiscal year 2001; and

(2) \$200,000 for each of fiscal years 2002 and 2003.

SEC. 10. GRANTS FOR DISTANCE LEARNING.

(a) IN GENERAL.—The Director of the National Science Foundation may make competitive, merit-based awards to develop partnerships for distance learning of science, mathematics, engineering, and technology education to a State or local educational agency or to a private elementary, middle, or secondary school, under any grant program administered by the Director using funds appropriated to the National Science Foundation for activities in which distance learning is integrated into the education process in grades kindergarten through the 12th grade.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for the National Science Foundation to carry out this section \$5,000,000 for each of fiscal years 2001 through 2003.

SEC. 11. SCHOLARSHIPS TO PARTICIPATE IN CERTAIN RESEARCH ACTIVITIES.

(a) IN GENERAL.—The President, acting through the National Science Foundation, shall provide scholarships to teachers at public and private schools in grades kindergarten through the 12th grade in order that such teachers may participate in research programs conducted at private entities or Federal or State government agencies. The purpose of such scholarships shall be to provide teachers with an opportunity to expand their knowledge of science, mathematics, engineering, technology, and research techniques.

(b) REQUIREMENTS.—In order to be eligible to receive a scholarship under this section, a teacher described in subsection (a) shall be required to develop, in conjunction with the private entity or government agency at which the teacher will be participating in a research program, a proposal to be submitted to the President describing the types of research activities involved.

(c) PERIOD OF PROGRAM.—Participation in a research program in accordance with this section may be for a period of one academic year or two sequential summers.

(d) USE OF FUNDS.—The Director may only use funds for purposes of this section for salaries of scholarship recipients, administrative expenses (including information dissemination, direct mailing, advertising, and direct staff costs for coordination and accounting services), expenses for conducting an orientation program, relocation expenses, and the expenses of conducting final selection interviews.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated for the National Science Foundation to carry out this section \$5,000,000 for each of fiscal years 2001 through 2003.

SEC. 12. EDUCATIONAL TECHNOLOGY UTILIZATION EXTENSION ASSISTANCE.

(a) **PURPOSE.**—The purpose of this section is to improve the utilization of educational technologies in elementary and secondary education by creating an educational technology extension service based at undergraduate institutions of higher education.

(b) **FINDINGS.**—The Congress finds the following:

(1) Extension services such as the Manufacturing Extension Partnership and the Agricultural Extension Service have proven to be effective public/private partnerships to integrate new technologies and to improve utilization of existing technologies by small to medium sized manufacturers and the United States agricultural community.

(2) Undergraduate institutions of higher education working with nonprofit organizations and State and Federal agencies can tailor educational technology extension programs to meet specific local and regional requirements.

(3) Undergraduate institutions of higher education, often with the assistance of the National Science Foundation, have for the past 20 years been integrating educational technologies into their curricula, and as such they can draw upon their own experiences to advise elementary and secondary school educators on ways to integrate a variety of educational technologies into the educational process.

(4) Many elementary and secondary school systems, particularly in rural and traditionally underserved areas, lack general information on the most effective methods to integrate their existing technology infrastructure, as well as new educational technology, into the educational process and curriculum.

(5) Most Federal and State educational technology programs have focused on acquiring educational technologies with less emphasis on the utilization of those technologies in the classroom and the training and infrastructural requirements needed to efficiently support those types of technologies. As a result, in many instances, the full potential of educational technology has not been realized.

(6) Our global economy is increasingly reliant on a workforce not only comfortable with technology, but also able to integrate rapid technological changes into the production process. As such, in order to remain competitive in a global economy, it is imperative that we maintain a work-ready labor force.

(7) According to "Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers", prepared by the Department of Education, only one in five teachers felt they were well prepared to work in a modern classroom.

(8) The most common form of professional development for teachers continues to be workshops that typically last no more than one day and have little relevance to teachers' work in the classroom.

(9) A 1998 national survey completed by the Department of Education found that only 19 percent of teachers had been formally mentored by another teacher, and that 70 percent of these teachers felt that this collaboration was very helpful to their teaching.

(c) **PROGRAM AUTHORIZED.**—

(1) **GENERAL AUTHORITY.**—The Director of the National Science Foundation, in cooperation with the Secretary of Education and the Director of the National Institute of Standards and Technology, is authorized to provide assistance for the creation and support of regional centers for the utilization of educational technologies (hereinafter in this section referred to as "ETU Centers").

(2) **FUNCTIONS OF CENTERS.**—

(A) **ESTABLISHMENT.**—ETU Centers may be established at any institution of higher education, but such centers may include the participation of nonprofit entities, organizations, or groups thereof.

(B) **OBJECTIVES OF CENTERS.**—The objective of the ETU Centers is to enhance the utilization of educational technologies in elementary and secondary education through—

(i) advising elementary and secondary school administrators, school boards, and teachers on the adoption and utilization of new educational technologies and the utility of local schools' existing educational technology assets and infrastructure;

(ii) participation of individuals from the private sector, universities, State and local governments, and other Federal agencies;

(iii) active dissemination of technical and management information about the use of educational technologies; and

(iv) utilization, where appropriate, of the expertise and capabilities that exist in Federal laboratories and Federal agencies.

(C) **ACTIVITIES OF CENTERS.**—The activities of the ETU Centers shall include the following:

(i) The active transfer and dissemination of research findings and ETU Center expertise to local school authorities, including school administrators, school boards, and teachers.

(ii) The training of teachers in the integration of local schools existing educational technology infrastructure into their instructional design.

(iii) The training and advising of teachers, administrators, and school board members in the acquisition, utilization, and support of educational technologies.

(iv) Support services to teachers, administrators, and school board members as agreed upon by ETU Center representatives and local school authorities.

(v) The advising of teachers, administrators, and school board members on current skill set standards employed by private industry.

(3) **PROGRAM ADMINISTRATION.**—

(A) **PROPOSED RULES.**—The Director of the National Science Foundation, after consultation with the Secretary of Education and the Director of the National Institute of Standards and Technology, shall publish in the Federal Register, within 90 days after the date of the enactment of this section, proposed rules for the program for establishing ETU Centers, including—

(i) a description of the program;

(ii) the procedures to be followed by applicants;

(iii) the criteria for determining qualified applicants; and

(iv) the criteria, including those listed in this section, for choosing recipients of financial assistance under this section from among qualified applicants.

(B) **FINAL RULES.**—The Director of the National Science Foundation shall publish final rules for the program under this section after the expiration of a 30-day comment period on such proposed rules.

(4) **ELIGIBILITY AND SELECTION.**—

(A) **APPLICATIONS REQUIRED.**—Any undergraduate institution of higher education, consortium of such institutions, nonprofit organizations, or groups thereof may submit an application for financial support under this section in accordance with the procedures established under this section. In order to receive assistance under this section, an applicant shall provide adequate assurances that the applicant will contribute 50 percent or more of the proposed Center's capital and annual operating and maintenance costs.

(B) **SELECTION.**—The Director of the National Science Foundation, in conjunction with the Secretary of Education and the Director of the National Institute of Standards

and Technology, shall subject each application to competitive, merit review. In making a decision whether to approve such application and provide financial support under this section, the Director of the National Science Foundation shall consider at a minimum—

(i) the merits of the application, particularly those portions of the application regarding the adaption of training and educational technologies to the needs of particular regions;

(ii) the quality of service to be provided;

(iii) the geographical diversity and extent of service area, with particular emphasis on rural and traditionally underdeveloped areas; and

(iv) the percentage of funding and amount of in-kind commitment from other sources.

(C) **EVALUATION.**—Each ETU Center which receives financial assistance under this section shall be evaluated during its 3d year of operation by an evaluation panel appointed by the Director of the National Science Foundation. Each evaluation panel shall measure the involved Center's performance against the objectives specified in this section. Funding for an ETU Center shall not be renewed unless the evaluation is positive.

SEC. 13. INTERAGENCY COORDINATION OF SCIENCE EDUCATION PROGRAMS.

(a) **INTERAGENCY COORDINATION COMMITTEE.**—

(1) **ESTABLISHMENT.**—The Director of the Office of Science and Technology Policy shall establish an interagency committee to coordinate Federal programs in support of science and mathematics education at the elementary and secondary level.

(2) **MEMBERSHIP.**—The membership of the committee shall consist of the heads, or designees, of the National Science Foundation, the Department of Energy, the National Aeronautics and Space Administration, the Department of Education, and other Federal departments and agencies that have programs directed toward support of elementary and secondary science and mathematics education.

(3) **FUNCTIONS.**—The committee shall—

(A) prepare a catalog of Federal research, development, demonstration and other programs designed to improve elementary and secondary science or mathematics education, including for each program a summary of its goals and the kinds of activities supported, a summary of accomplishments (including evidence of effectiveness in improving student learning), the funding level, and, for grant programs, the eligibility requirements and the selection process for awards;

(B) review the programs identified under subparagraph (A) in order to—

(i) determine the relative funding levels among support for—

(I) teacher professional development;

(II) curricular materials;

(III) improved classroom teaching practices;

(IV) applications of computers and related information technologies; and

(V) other major categories of activities;

(ii) assess whether the balance among kinds of activities as determined under clause (i) is appropriate and whether unnecessary duplication or overlap among programs exists;

(iii) assess the degree to which the programs assist the efforts of State and local school systems to implement standards-based reform of science and mathematics education, and group the programs in the categories of high, moderate, and low relevance for assisting standards-based reform;

(iv) for grant programs, identify ways to simplify the application procedures and requirements and to achieve greater conformity among the procedures and requirements of the agencies; and

(v) evaluate the adequacy of the assessment procedures used by the departments and agencies to determine whether the goals and objectives of programs are being achieved, and identify the best practices identified from the evaluation for assessment of program effectiveness; and

(C) monitor the implementation of the plan developed under subsection (c) and provide to the Director of the Office of Science and Technology Policy its findings and recommendations for modifications to that plan.

(b) EXTERNAL REVIEW.—The Director of the National Science Foundation shall enter into an agreement with the National Research Council to conduct an independent review of programs as described in subsection (a)(3)(B) and to develop findings and recommendations. The findings and recommendations from the National Research Council review of programs shall be reported to the Director of the Office of Science and Technology Policy and to the Congress.

(c) EDUCATION PLAN.—

(1) PLAN CONTENTS.—On the basis of the findings of the review carried out in accordance with subsection (a)(3)(B) and taking into consideration the findings and recommendations of the National Research Council in accordance with subsection (b), the Director of the Office of Science and Technology Policy shall prepare a plan for Federal elementary and secondary science and mathematics education programs which shall include—

(A) a strategy to increase the effectiveness of Federal programs to assist the efforts of State and local school systems to implement standards-based reform of elementary and secondary science and mathematics education;

(B) a coordinated approach for identifying best practices for the use of computers and related information technologies in classroom instruction;

(C) the recommended balance for Federal resource allocation among the major types of activities supported, including projected funding allocations for each major activity broken out by department and agency;

(D) identification of effective Federal programs that have made measurable contributions to achieving standards-based science and mathematics education reform;

(E) recommendations to the departments and agencies for actions needed to increase uniformity across the Federal Government for application procedures and requirements for grant awards for support of elementary and secondary science and mathematics education; and

(F) dissemination procedures for replicating results from effective programs, particularly best practices for classroom instruction.

(2) CONSULTATION.—The Director shall consult with academic, State, industry, and other appropriate entities engaged in efforts to reform science and mathematics education as necessary and appropriate for preparing the plan under paragraph (1).

(d) REPORTS.—

(1) INITIAL REPORT.—The Director of the Office of Science and Technology Policy shall submit to the Congress, not later than 1 year after the date of the enactment of this Act, a report which—

(A) includes the plan described in subsection (c)(1);

(B) in accordance with subsection (c)(1)(C), describes, for each department and agency represented on the committee established

under subsection (a)(1), appropriate levels of Federal funding;

(C) includes the catalog prepared under subsection (a)(3)(A);

(D) includes the findings from the review required under subsection (a)(3)(B)(iii);

(E) includes the findings and recommendations of the National Research Council developed under subsection (b); and

(F) describes the procedures used by each department and agency represented on the committee to assess the effectiveness of its education programs.

(2) ANNUAL UPDATES.—The Director of the Office of Science and Technology Policy shall submit to the Congress an annual update, at the time of the President's annual budget request, of the report submitted under paragraph (1), which shall include, for each department and agency represented on the committee, appropriate levels of Federal funding for the fiscal year during which the report is submitted and the levels proposed for the fiscal year with respect to which the budget submission applies.

SEC. 14. SCIENCE, MATHEMATICS, AND ENGINEERING SCHOLARSHIP PROGRAM.

(a) PROGRAM AUTHORIZED.—The Director of the National Science Foundation is authorized to establish a scholarship program to assist graduates of baccalaureate degree programs in science, mathematics or engineering, or individuals pursuing degrees in those fields, to fulfill the academic requirements necessary to become certified as elementary or secondary school teachers.

(b) SCHOLARSHIP AMOUNT AND DURATION.—Each scholarship provided under subsection (a) shall be in the amount of \$5,000 and shall cover a period of 1 year.

(c) REQUIREMENTS.—

(1) ELIGIBILITY.—Undergraduate students majoring in science, mathematics, or engineering who are within one academic year of completion of degree requirements, and individuals who have received degrees in such fields, are eligible to receive scholarships under the program established by subsection (a).

(2) GUIDELINES, PROCEDURES, AND CRITERIA.—The Director shall establish and publish application and selection guidelines, procedures, and criteria for the scholarship program.

(3) REQUIREMENTS FOR APPLICATIONS.—Each application for a scholarship shall include a plan specifying the course of study that will allow the applicant to fulfill the academic requirements for obtaining a teaching certificate during the scholarship period.

(4) WORK REQUIREMENT.—As a condition of acceptance of a scholarship under this section, a recipient shall agree to work as an elementary or secondary school teacher for a minimum of two years following certification as such a teacher or to repay the amount of the scholarship to the National Science Foundation.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the National Science Foundation to carry out this section \$5,000,000 for each of fiscal years 2001, 2002, and 2003.

SEC. 15. GO GIRL GRANTS.

(a) SHORT TITLE.—This section may be cited as the "Getting Our Girls Ready for the 21st Century Act (Go Girl Act)".

(b) FINDINGS.—Congress finds the following:

(1) Women have historically been underrepresented in mathematics, science, and technology occupations.

(2) Female students take fewer high-level mathematics and science courses in high school than male students.

(3) Female students take far fewer advanced computer classes and tend to take

only the basic data entry and word processing classes compared to courses that male students take.

(4) Female students earn fewer bachelors, masters, and doctoral degrees in mathematics, science, and technology than male students.

(5) Early career exploration is key to choosing a career.

(6) Teachers' attitudes, methods of teaching, and classroom atmosphere affect females' interest in nontraditional fields.

(7) Stereotypes about appropriate careers for females, a lack of female role models, and a lack of basic career information significantly deters girls' interest in mathematics, science, and technology careers.

(8) Females consistently rate themselves significantly lower than males in computer ability.

(9) By the year 2000, 65 percent of all jobs will require technological skills.

(10) Limited access is a hurdle faced by females seeking jobs in mathematics, science, and technology.

(11) Common recruitment and hiring practices make extensive use of traditional networks that often overlook females.

(c) PROGRAM AUTHORITY.—

(1) IN GENERAL.—The Director of the National Science Foundation is authorized to provide grants to and enter into contracts or cooperative agreements with local educational agencies and institutions of higher education to encourage the ongoing interest of girls in science, mathematics, and technology and to prepare girls to pursue undergraduate and graduate degrees and careers in science, mathematics, or technology.

(2) APPLICATION.—

(A) IN GENERAL.—To be eligible to receive a grant under this section, a local educational agency or institution of higher education shall submit an application to the Director at such time, in such form, and containing such information as the Director may reasonably require.

(B) CONTENTS.—The application referred to in subparagraph (A) shall contain, at a minimum, the following:

(i) A specific program description, including the content of the program and the research and models used to design the program.

(ii) A description of how an eligible entity will provide for collaboration between elementary and secondary school programs to fulfill goals of the grant program.

(iii) An explanation regarding the recruitment and selection of participants.

(iv) A description of the instructional and motivational activities planned to be used.

(v) An evaluation plan.

(d) USES OF FUNDS FOR ELEMENTARY SCHOOL PROGRAM.—Under grants awarded pursuant to subsection (c), funds may be used for the following:

(1) Encouraging girls in grades 4 and higher to enjoy and pursue studies in science, mathematics, and technology.

(2) Acquainting girls in grades 4 and higher with careers in science, mathematics, and technology.

(3) Educating the parents of girls in grades 4 and higher about the difficulties faced by girls to maintain an interest and desire to achieve in science, mathematics, and technology and enlisting the help of the parents in overcoming these difficulties.

(4) Tutoring in reading, science, mathematics, and technology.

(5) Mentoring relationships, both in-person and through the Internet.

(6) Paying the costs of attending events and academic programs in science, mathematics, and technology.

(7) After-school activities designed to encourage the interest of girls in grades 4 and

higher in science, mathematics, and technology.

(8) Summer programs designed to encourage interest in and develop skills in science, mathematics, and technology.

(9) Purchasing software designed for girls, or designed to encourage girls' interest in science, mathematics, and technology.

(10) Field trips to locations that educate and encourage girls' interest in science, mathematics, and technology.

(11) Field trips to locations that acquaint girls with careers in science, mathematics, and technology.

(12) Purchasing and disseminating information to parents of girls in grades 4 and higher that will help parents to encourage their daughters' interest in science, mathematics, and technology.

(e) USES OF FUNDS FOR SECONDARY SCHOOL PROGRAM.—Under grants awarded pursuant to subsection (c), funds may be used for the following:

(1) Encouraging girls in grades 9 and higher to major in science, mathematics, and technology in a postsecondary institution.

(2) Providing academic advice and assistance in high school course selection.

(3) Encouraging girls in grades 9 and higher to plan for careers in science, mathematics, and technology.

(4) Educating the parents of girls in grades 9 and higher about the difficulties faced by girls to maintain an interest and desire to achieve in science, mathematics, and technology and enlist the help of the parents in overcoming these difficulties.

(5) Tutoring in science, mathematics, and technology.

(6) Mentoring relationships, both in-person and through the Internet.

(7) Paying the costs of attending events and academic programs in science, mathematics, and technology.

(8) Paying 50 percent of the cost of an internship in science, mathematics, or technology.

(9) After-school activities designed to encourage the interest of girls in grades 9 and higher in science, mathematics, and technology, including the cost of that portion of a staff salary to supervise these activities.

(10) Summer programs designed to encourage interest in and develop skills in science, mathematics, and technology.

(11) Purchasing software designed for girls, or designed to encourage girls' interest in science, mathematics, and technology.

(12) Field trips to locations that educate and encourage girls' interest in science, mathematics, and technology.

(13) Field trips to locations that acquaint girls with careers in science, mathematics, and technology.

(14) Visits to institutions of higher education to acquaint girls with college-level programs in science, mathematics, or technology, and to meet with educators and female college students who will encourage them to pursue degrees in science, mathematics, and technology.

(f) DEFINITION.—In this section the term "local educational agency" has the same meaning given such term in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801), except that in the case of Hawaii, the District of Columbia, and the Commonwealth of Puerto Rico, the term "local educational agency" shall be deemed to mean the State educational agency.

SEC. 16. GRANT FOR LEARNING COMMUNITY CONSORTIUM FOR ADVANCEMENT OF WOMEN, MINORITIES, AND PERSONS WITH DISABILITIES IN SCIENCE, ENGINEERING, AND TECHNOLOGY.

The Director of the National Science Foundation may, through a competitive, merit-

based process, provide to a consortium composed of community colleges a grant in an amount not more than \$11,000,000 for the purpose of carrying out a pilot project to provide support to encourage women, minorities, and persons with disabilities to enter and complete programs in science, engineering, and technology.

SEC. 17. USE OF FUNDS FOR PROVIDING RELEASE TIME AND OTHER INCENTIVES.

A recipient of a grant under section 4 or 8 may use funds received through such grant for expenses related to leave from work (consistent with State law and contractual obligations), and other incentives, to permit and encourage full-time teachers to participate in—

(1) professional development activities relating to the use of technology in education; and

(2) the development, demonstration, and evaluation of applications of technology in elementary and secondary education.

SEC. 18. SCIENCE TEACHER EDUCATION.

(a) PROGRAM AUTHORIZED.—The Director of the National Science Foundation may establish a program to improve the undergraduate education and in-service professional development of science and mathematics teachers in elementary and secondary schools. Under the program, competitive awards shall be made on the basis of merit to institutions of higher education that offer baccalaureate degrees in education, science and mathematics.

(b) PURPOSE OF AWARDS.—Awards made under subsection (a) shall be for developing—

(1) courses and curricular materials for—

(A) the preparation of undergraduate students pursuing education degrees who intend to serve in elementary or secondary schools as science or mathematics teachers; or

(B) the professional development of science and mathematics teachers serving in elementary and secondary schools; and

(2) educational materials and instructional techniques incorporating innovative uses of information technology.

(c) REQUIREMENTS.—The Director shall establish and publish application and selection guidelines, procedures, and criteria for the program established by subsection (a). Proposals for awards under the program shall involve collaborations of education, mathematics, and science faculty and include a plan for a continued collaboration beyond the period of the award. In making awards under this section, the Director shall consider—

(1) the degree to which courses and materials proposed to be developed in accordance with subsection (b) combine content knowledge and pedagogical techniques that are consistent with hands-on, inquiry-based teaching, are aligned with established national science or mathematics standards, and are based on validated education research findings; and

(2) evidence of a strong commitment by the administrative heads of the schools and departments, whose faculty are involved in preparing a proposal to the program, to provide appropriate rewards and incentives to encourage continued faculty participation in the collaborative activity.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the National Science Foundation to carry out this section \$2,000,000 for each of fiscal years 2001 through 2003.

SEC. 19. DEFINITIONS.

In this Act:

(1) The terms "local educational agency" and "State educational agency" have the meanings given such terms in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801).

(2) The term "institution of higher education" has the meaning given that term by section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Wisconsin (Mr. SENSENBRENNER) and the gentleman from Texas (Mr. Hall) each will control 20 minutes.

The Chair recognizes the gentleman from Wisconsin (Mr. SENSENBRENNER).

GENERAL LEAVE

Mr. SENSENBRENNER. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks on H.R. 4271.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Wisconsin?

There was no objection.

Mr. SENSENBRENNER. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, H.R. 4271 is the product of a 2-year effort by the Committee to examine the disappointing state of K-12 math and science education in the United States.

As we are all aware, too many American students are entering the workforce with an inadequate foundation in math and science. This bill is an effective start toward implementing math and science education so that we may break the cycle of low achievement in these important disciplines.

H.R. 4271, introduced by the gentleman from Michigan (Mr. EHLERS), vice chairman of the Committee on Science, addresses the problem by focusing on teachers. The bill would authorize several creative programs to provide teachers with the tools they need to excel in the classroom.

For example, the bill provides for technology training specifically for teachers. Unfortunately, it is currently the case that many teachers lack sufficient training in the use of technology in the classroom. Additionally, these teachers often lose when administrators are forced to choose to dedicate funds between teacher training and hardware and software for students.

The bill authorizes the program just for teachers so that they will have the opportunity to secure this training. In addition, the bill incorporates the input of many Members on both sides of the aisle.

I am pleased that the House is considering the bill today that brings together so many positive ideas that will help America's students.

I want to thank the gentleman from Michigan (Mr. EHLERS) for all his hard work in producing a bill that deserves strong bipartisan support.

Mr. Speaker, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I am pleased to rise in support of H.R. 4271, the National Science Education Act. This is a bipartisan bill that incorporate ideas from

Members on both sides of the aisle. It has widespread support from science educators and support from the industry.

H.R. 4271 is focused on a problem of great importance to the future of the Nation, that is, improvement of science, math, and technology education in elementary and secondary schools.

The important role of science education to our future well-being is widely understood. An informed citizenry and a full pipeline of future scientists and engineers will depend on the quality of science and math education.

I want to congratulate the gentleman from Wisconsin (Chairman SENSENBRENNER) for his efforts to move the bill forward for floor consideration today. I also want to acknowledge the gentleman from Michigan (Mr. EHLERS), the vice chairman of the Committee, and the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), the ranking Democratic member of the Subcommittee on Basic Research, for all of their hard work on conducting the series of committee hearings that have provided the basis for this bill and on development of this legislation.

The programs established by H.R. 4271 will address serious deficiencies in preparation and professional development of K-12 science and math teachers. The bill will provide new partnerships between schools and businesses to encourage greater student interest in science and in technology. And the bill will help to develop more effective curricular materials, including the exploration of ways to deploy education technologies more effectively.

Mr. Speaker, I believe the programs authorized by the National Science Foundation by H.R. 4271 will go a long way to improve K-12 science education in all of our schools. There is no more important goal to ensure the Nation's future prosperity and well-being.

I commend the measure to the House and urge its passage.

Mr. Speaker, I reserve the balance of my time.

Mr. SENSENBRENNER. Mr. Speaker, I yield 6 minutes to the gentleman from Michigan (Mr. EHLERS), the author of this bill.

Mr. EHLERS. Mr. Speaker, I thank the chairman for yielding me the time.

Mr. Speaker, we have a major national problem. We have a booming economy which arose out of developments in science and technology, and we are all enjoying the fruits of that economic boom. At the same time, we do not have the workforce to manage the boom and to keep it going.

There are several evidences of that. Number one, compared to other developed countries, we are at the bottom or near to the bottom in terms of the mathematics and science education student achievements of our high school graduates.

The second point: if my colleagues would visit the graduate schools of science and engineering in this Nation,

they will find that over half of the graduate students are from other countries, because our students cannot compete with those students from other countries.

Another factor is that every year the science and technology industry comes to us and says, will you please allow more immigrants into our Nation with the scientific and technological capability to fill the need that we have. And just 2 weeks ago we approved a bill to allow another 200,000 immigrants into this Nation to fill that need.

We have 365,000 open scientific and technical jobs in the United States, and we do not have people qualified to fill those jobs.

We must either allow those from other countries in, or employers will move the jobs offshore to take advantage of the people there.

We have to address this problem. If we want to continue to enjoy the fruits of this economic boom, we have to produce students and adults who are educated in science and math. And I am not talking just about scientists and engineers. Today they need to know high school physics and algebra in order to get a job as a mechanic in a major auto service shop. And this applies to most jobs in society today. We must have better training in science and technology for our students.

This bill is an attempt to do that. The need for this was demonstrated in the Science Policy Statement that I developed with the help of the gentleman from Wisconsin (Mr. SENSENBRENNER) 2 years ago and which was adopted by the Committee on Science and by the full House. We have conducted further hearings during the past 2 years to examine this educational need, consider solutions, and arrive at a bill that would actually meet and solve the problem.

In addition to that, the Glenn Commission, which was appointed by the Secretary of Education, has been meeting for 2 years, and just a few weeks ago released its report. Its recommendations parallel almost exactly what we are trying to do in this bill and some companion bills that have been introduced.

We must have a knowledgeable and well-prepared teacher in every classroom. That is the effort of this bill, to provide training for those teachers already in the classroom who have not received adequate math and science training in their college or university work, and bill will provide opportunities to educate them.

Let me make it clear, I am not faulting the teachers for the problem. In every classroom I visited, and I have been in many in my lifetime, teachers are eager to teach math and science properly; but they have not been given the proper training or background, and they desperately want it. Through this bill, we have provided ways for them to have that training.

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In addition, this bill provides for a master teacher program, under which

grants would be given to schools. These schools could use those funds to hire teachers who would have, in addition to their teaching responsibilities which are assigned by the school, other responsibilities to deal with equipment maintenance, instruction of teachers, in-service training of teachers, maintenance of equipment, outlining curricula, perhaps developing curricula and acquainting the teachers with all of the ramifications of it.

This master teacher program is a key part of the bill. It has been the most widely applauded portion of the bill.

In addition to that, the bill contains a teacher scholarship program so that teachers will be able to go elsewhere and benefit from work experience or scientific research in laboratories, in businesses or in other ways. They are professionals, and they need the opportunity to follow their professional programs and ideals.

We have also included some other bills that were introduced and referred to the Committee on Science. For example, the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) had introduced an excellent bill, which provides a pilot program to encourage private sector contributions and involvement in information technology programs in the neediest high schools. It is an excellent bill, and I was pleased to incorporate that bill in this one.

In addition, the gentleman from Michigan (Mr. BARCIA) introduced a bill which authorizes an educational technology extension service based in intermediate school districts, which will allow the schools to benefit from the expertise of the centralized agencies and personnel.

This bill was reported out of the Committee on Science with a unanimous vote and has received bipartisan support from the beginning. I am pleased that we have received support from members of the Committee on Science, from the members of the Committee on Appropriations, Committee on Education and the Workforce and from Members of leadership. There are currently 118 cosponsors for this bill. It has widespread support in this Congress. Eighteen of those cosponsors are from the committee on education; 36 from the Committee on Science.

Teachers will be positively affected by this bill. Our Nation's teachers and students will be one step closer to receiving the support they so deserve with this effort.

I want to close this by thanking the gentleman from Wisconsin (Mr. SENSENBRENNER) for the tremendous support he has given me in the effort on this bill, and also the help the House leadership has provided. I urge the House to approve this bill.

Mr. HALL of Texas. Mr. Speaker, I yield 6 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON).

(Ms. EDDIE BERNICE JOHNSON of Texas asked and was given permission to revise and extend her remarks.)

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I rise to speak on H.R. 4271 and want to express my appreciation for the leadership to the gentleman from Michigan (Mr. EHLERS) and the gentleman from Texas (Mr. HALL) and the efforts of other committee members.

After a comprehensive effort and a set of hearings of the Committee on Science organized by the gentleman from Michigan (Mr. EHLERS), which examined all aspects of K-12 science and math education, we finally did come to an agreement on a comprehensive bill, a bill that incorporates a range of proposals from several Members on both sides of the aisle and addresses ways to improve teacher training, develops more effective educational materials and teaching practices to improve student learning and establishes programs to attract more women and minorities to careers in science and technology.

I am concerned, however, about a provision that allows grants to private elementary and middle schools. I support the provisions of 4271, but I have a concern about the constitutionality of this provision. I am simply disappointed that the majority party would allow an unconstitutional provision in section 4 of H.R. 4271 to authorize a grant program at the National Science Foundation for competitive awards to public and private elementary and middle schools to hire master science teachers.

I fully realize that every school needs these teachers, but we simply cannot spend public dollars on private schools in elementary and secondary levels for these schools to hire master teachers. We know that in these private schools, they have smaller classes, they are easier students to teach; and so consequently we feel that the master teachers probably would gravitate to these private schools. Who would blame them?

Despite the efforts to try to remove this provision, it is still here; and we need a clean bill because we need the provisions otherwise of this bill. This section and only this section is the cause of much of my concern to the once highly supported bill by both sides of the aisle.

Mr. Speaker, section 4 is clearly unconstitutional on the basis of a Supreme Court decision in *Lemon v. Kurtzman*. In that case, the Court disallowed a State program for providing salary supplements to teachers in private schools.

Mr. Speaker, what we have today is simply an effort to get public dollars funneled into private schools. We simply must not do that in this body. The precedent set by this case is what we should follow today. The Court knew then, just as we know today, that implementation of a provision like this would serve to endanger this entire bill.

As stated before, it was highly supported by both sides of the aisle. H.R. 4271 incorporated the Mathematics and Science Proficiency Part-

nership Act, a bill that I introduced last year. My legislation is a targeted measure. It seeks to bring schools with large populations of economically disadvantaged students together in partnership with businesses to improve science and math education and to recruit and support students in undergraduate education in science and technology fields.

Before realizing the intentions of Section 4, I was also pleased that the bill included a provision I offered in Committee to establish a formal coordination and planning mechanism for federal K-12 science education programs.

Mr. Speaker, the nation must take advantage of the human resource potential of all our citizens if we are to succeed in the international economic competition of the 21st century. Just as other members, I would like to see the good provisions of H.R. 4271 implemented, but I can not justify to the 30th district of Texas and to the American people support of such legislation that risks being struck down because of the unconstitutional provision. The American people can only benefit if we pass a bill that is constitutional and speaks to the welfare of all Americans. This can only be done without the inclusion of Section 4. We need reform efforts in science and math education that will engage and cultivate the interest of all children, not efforts that will put the grant application to hire master science teachers at risk by providing funding to private schools—yielding unconstitutional results.

Indeed, H.R. 4271 addresses many aspects of K-12 science and math education that plague our schools. At the same time, H.R. 4271 unconstitutionally serves to deny public schools the opportunities to become technologically savvy in this increasingly technological world. Due to the unconstitutional section of this legislation, I urge my colleagues to correct this provision so that we can get the other provisions of the bill going. It is long overdue.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I would like to engage the gentleman from Michigan (Mr. EHLERS) in a colloquy to be sure that we can correct this provision in this bill before it goes into final print. If this can happen, I wholeheartedly support this bill.

Could the gentleman assure me that the language that provides grants to private schools that are publicly supported could be corrected before the final language of the bill?

Mr. EHLERS. Mr. Speaker, will the gentlewoman yield?

Ms. EDDIE BERNICE JOHNSON of Texas. I yield to the gentleman from Michigan.

Mr. EHLERS. Mr. Speaker, let me clarify this issue. First of all, this is typical language that we have incorporated in this bill. We are not breaking new ground. The National Science Foundation at present does give grants to private schools. Let me also clarify that private schools does not mean rich preparatory schools, as many people think, and does not necessarily mean religious schools. In my city in Grand Rapids, we have a private school that serves students in the inner city, and survives through my extensive fundraising. It operates on a poverty shoe-string. Most of its students are from

minority groups. So private schools can include many different types.

Be that as it may, note that the letter that has been circulated saying that this program may raise a constitutional question, is based on a 1971 Supreme Court decision which has been superseded by several other decisions, and I think this issue deserves considerable study before one could conclude that there is a constitutional problem.

Secondly, if we read the bill carefully we note the grants provide for development or implementation of science, mathematics, engineering or technical curricula in classroom assistance; authority over hands-on inquiry materials, equipment and supplies; mentoring other teachers or fulfilling any leadership role and professional development, including training other master teachers or other teachers or developing or implementing professional development programs. Nowhere in here does it say that they will be teaching children.

Ms. EDDIE BERNICE JOHNSON of Texas. I thank the gentleman from Michigan (Mr. EHLERS) very much for his response. I guess the commitment that I want is that if it is determined to be unconstitutional, could the language be made so that if it is determined to be unconstitutional then we can remove this provision? Because we need the rest of this bill, and we need it rapidly. I have been pleading for this for over 2 years to move forward, but what I do not want to do is dilute public dollars further in supporting private schools when we so desperately need special areas, especially students in areas where it is difficult to attract master teachers, it is difficult to have smaller classes, it is even difficult to have the classes wired as they should be for today's education. I need that assurance.

Mr. SENSENBRENNER. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I respectfully disagree with the assertions that have been made that the section in question is unconstitutional. The gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) cites a 1971 U.S. Supreme Court case. There have been two more recent cases, *Agostini v. Felton* in 1997 and *Mitchell v. Helms* earlier this year that clarified the *Lemon v. Kurtzman* test. Basically, it said that a statute similar to what is being proposed here is constitutional if it does not result in religious indoctrination, it does not define its recipients by reference to religion and it does not create excessive entanglement between government and religion. In each of these three instances, the statute does not do so.

There has been a Presidential award program that has been on the books since 1983 where each year the National Science Foundation recommends to the President 107 math teachers and 107 science teachers from around the country to receive an award which is a \$7,500 grant to the school where the

teacher teaches. That is open to both public schools and private schools.

I have a list of recent awardees, and I would like to read some of them to show that the President has directed money from the NSF to private schools. One of the awardees is Ms. Barbara Day Bass of St. Catherine's School in Richmond, Virginia. Another is sister Elizabeth C. Graham of Christ the King High School in Middle Village, New York; Sister Ellen Callaghan of Mount Carmel High School in Essex, Maryland; Ms. Claire Anne Baker of Brebeuf Jesuit Preparatory School of Indianapolis, Indiana; Ms. Carole Bennett of the Jesuit High School in Tampa, Florida; and even Mr. David Stuart Wood of the Sidwell Friends School of Washington, D.C., which I believe is attended by the son of Vice President GORE.

Now, this program has been working very well on the executive level for 17 years, and no one has raised the question that these types of awards violate the establishment clause of the United States Constitution. As a matter of fact, during all of the hearings that the Committee on Science had on this bill and during the markup, no one raised the issue as well. It was only a couple of nights ago that somebody started calling around saying that this provision was unconstitutional.

Well, first of all, the Congress does not make constitutional determinations. That can only be made by the Court and usually by the Supreme Court of the United States. I think that there is a sufficient question on the constitutionality that we should not pull this provision out of the bill, particularly because it would set such a precedent that the existing award program that had been going on by the NSF would be called into question as well. But also it is a standard rule of statutory construction that sections that are declared unconstitutional are severable if they can be severed from the rest of the bill. So I think that the concern of the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) is really unfounded.

Constitutional and precedential questions aside, what we should be saying here is that it should not make any difference whether a teacher teaches at a public school or a private school in terms of the benefits of getting better math and science education in the classroom, because it is the students in those classrooms that are going to benefit from better teachers and more motivated teachers. I do not think we should leave the children who happen to go to private schools behind with these kinds of grants, just as the President has not left children who are taught by teachers in private schools behind in making the awards pursuant to the 1983 law.

Mr. Speaker, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Speaker, I yield 4 minutes to the gentlewoman from California (Ms. WOOLSEY).

(Ms. WOOLSEY asked and was given permission to revise and extend her remarks.)

Ms. WOOLSEY. Mr. Speaker, good grief. Here we go again. Members from both sides of the aisle joined together to craft a good bipartisan bill, the National Science Education Act, a bill that addresses an important national need which is improving science education.

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A bill that includes many innovative programs, such as my "Go Girl" initiative, which encourages girls to study and pursue careers in math, science, engineering and technology.

The Democrats on the Committee on Science and the Committee on Education and the Workforce had to fight really hard to convince the Republicans on the Committee on Education and the Workforce to let "Go Girl" stay in the bill, and we prevailed, and the bill is better because of that.

But H.R. 4271 still includes a poison pill, a poison pill that no Member who cares about public education in America wants to vote for. In section 4, H.R. 4271 will give Federal funds directly to private and religious schools to hire teachers. This appears to violate our Constitution, and it absolutely takes precious dollars away from public schools.

It would be easy to change this provision. In fact, our colleagues on the other side of the aisle were asked to do just that before the bill came before us today on the floor, but they have refused.

So with regret for the students and the public schools that could benefit from the good programs in this bill, I cannot support H.R. 4271, unless the section 4 language regarding private schools is corrected.

Mr. SENSENBRENNER. Mr. Speaker, will the gentlewoman yield?

Ms. WOOLSEY. I yield to the gentleman from Wisconsin.

Mr. SENSENBRENNER. Mr. Speaker, did the gentlewoman vote for a bill as a Member of the Committee on Science?

Ms. WOOLSEY. Yes, sir, I did.

Mr. SENSENBRENNER. If the gentlewoman would further yield, did the gentlewoman propose an amendment during Committee on Science consideration to remove the section that she objects to now?

Ms. WOOLSEY. I did not, until it came to my attention more clearly. You know how fast we shoved that through the committee, because each of us that had things, like my "Go Girl" bill, and I was very, very seriously concentrating on that.

Mr. SENSENBRENNER. If the gentlewoman would yield for one further question, does the gentlewoman feel that President Clinton made a mistake in awarding the 7,500 grants in the PAEMST program to representatives and teachers of private schools that I mentioned?

Ms. WOOLSEY. Mr. Speaker, reclaiming my time, I would like to say that this gentlewoman supports public education. I am not against private schools, I have no problem with religious schools; but our public schools are underfunded, and to take anything away from the funding of public schools at this time is a huge, grave mistake. If we vote on this later today, on H.R. 4271, I urge my colleagues who care about public education in America to do the same and vote against this bill.

Mr. HALL of Texas. Mr. Speaker, I yield 4 minutes to the gentleman from Virginia (Mr. SCOTT).

Mr. SCOTT. Mr. Speaker, I thank the gentleman from Texas for yielding me time.

I want to thank my colleague, the gentleman from Michigan (Mr. EHLERS), for his work on this important issue, improving math and science education in this country. We know that our economic competitiveness as a Nation depends on our ability to compete in the area of education.

Unfortunately, in Virginia there are tens of thousands of jobs going vacant because we cannot find the qualified workers in the area of technology. Businesses cannot therefore expand until they find the qualified workers, and localities trying to recruit businesses cannot recruit those businesses because of the shortage of technologically qualified workers.

So, Mr. Speaker, while I think this bill goes in the right direction because it improves science, math and technological education in our schools, I, too, am concerned about section 4 in the bill involving master teachers. That section directs the National Science Foundation to give direct grants to entities, including private schools, to hire master teachers. This provision is not only constitutionally suspect, but also provides for a dangerous precedent for Federal education programs.

Under current law, private schools can now participate in professional development activities and may participate in consortia or partnerships that receive Federal grants. But we have never given them direct grants to hire teachers. Direct grants are even more constitutionally suspect than vouchers, because this bill allows direct funding to private religious schools.

Now, some of the voucher programs pretend to have the benefit going to the student, not to the school; but there is not that fiction in this bill. This money goes directly to private religious schools.

It should be noted that private religious schools would be able to discriminate on the basis of religion when they hire teachers with Federal funds, and that is particularly absurd on a science bill, to think that a private school could fire a master teacher, hired with Federal funds, because that master teacher it was found believed in evolution, if teaching evolution is inconsistent with the teaching and tenets of the private religious school.

Now, although we do not make the constitutional determinations as Members of Congress, I would remind our Members when we were sworn in, we did swear to uphold the Constitution.

Even more of a concern is the precedence this provision sets for other Federal education programs. Should we give money to private schools to hire teachers to reduce their class size, to modernize their schools or to run after-school programs, when those initiatives are woefully underfunded in the public area?

Mr. Speaker, public funds should benefit public schools, where more than 90 percent of our students go; and, therefore, I urge the defeat of this legislation.

I would also in response to the constitutional arguments include for the RECORD a memorandum dated October 24, 2000, from the Congressional Research Service.

CONGRESSIONAL RESEARCH SERVICE,
LIBRARY OF CONGRESS,
Washington, DC, October 24, 2000.
MEMORANDUM

To: House Committee on Education and the Workforce, Attention: Alex Nock
From: David M. Ackerman, Legislative Attorney, American Law Division
Subject: Establishment Clause Issues Raised by Master Teacher Grant Program in H.R. 4271

This is in response to your request regarding the constitutional implications of the "Master Teacher Grant Program" that would be authorized by H.R. 4271. More specifically, you asked for a brief analysis of the program's implications under the establishment of religion clause of the First Amendment. Time limitations prevent an exhaustive analysis, but it is hoped the following may be helpful.

H.R. 4271 would, *inter alia*, authorize \$50 million for each of the next three fiscal years for a master teacher program conducted by the National Science Foundation. Under that program the NSF could make grants to state or local educational agencies, a private elementary or middle school, or a consortium of any combination of those entities for the purpose of hiring a master teacher whose responsibilities could include (1) development or implementation of science, math, engineering, or technology curricula; (2) providing in-classroom assistance; (3) managing materials, equipment, and supplies; (4) mentoring other teachers; and (5) developing and implementing professional development programs for teachers, including other master teachers. Thus, a private sectarian elementary or middle school could receive a grant to hire a master teacher.

The program may raise a constitutional question under the establishment of religion clause. Several Supreme Court decisions have addressed the constitutionality of public subsidies of teachers in sectarian elementary and secondary schools. Most pertinent, perhaps, is *Lemon v. Kurtzman*. In that case the Court held unconstitutional, 7-1, two state programs subsidizing teachers of secular subjects in sectarian elementary and secondary schools. One program provided a salary supplement of up to 15 percent of the salary of teachers of secular subjects in private elementary schools. The other program reimbursed private elementary and secondary schools for the salaries of teachers of math, modern foreign languages, physical science, and physical education. The Court analyzed the programs' constitutionality under what is now known as the *Lemon* test:

First, the statute must have a secular legislative purpose; second, its principal or primary effect must be one that neither advances nor inhibits religion . . . ; finally, the statute must not foster "an excessive entanglement with religion."

The Court found the programs to have legitimate secular purposes but, without deciding the primary effect question, held them to foster an "excessive entanglement between government and religion" and thus to be unconstitutional under the establishment clause. It stressed that the schools that benefited from the subsidies had a "significant religious mission and that a substantial portion of their activities is religiously oriented." The schools were all located near parish churches, all displayed numerous religious symbols, all were administered by religious authorities, and two-thirds of the teachers were nuns of various religious orders. As a consequence, the Court said, there was a substantial risk that the subsidized teachers would engage in religious indoctrination:

We need not and do not assume that teachers in parochial schools will be guilty of bad faith or any conscious design to evade the limitations imposed by the statute and the First Amendment. We simply recognize that a dedicated religious person, teaching in a school affiliated with his or her faith and operated to include its tenets, will inevitably experience great difficulty in remaining religiously neutral. . . . With the best of intentions such a teacher would find it hard to make a total separation between secular teaching and religious doctrine.

Because of the "potential for impermissible fostering of religion," the Court held that the states would have to engage in an intrusive monitoring of the teachers' performance:

The . . . Legislature has not, and could not, provide state aid on the basis of a mere assumption that secular teachers under religious discipline can avoid conflicts. The State must be certain, given the Religion Clauses, that subsidized teachers do not inculcate religion. . . . A comprehensive, discriminating, and continuing state surveillance will inevitably be required to ensure that [this] restriction [is] obeyed and the First Amendment otherwise respected. . . . These prophylactic contacts will involve excessive and enduring entanglement between state and church.

The Court saw an added danger in the program reimbursing private sectarian schools for the salaries of teachers of specified secular subjects:

The Pennsylvania statute . . . has the further defect of providing state financial aid directly to the church-related school. . . . The history of government grants of a continuing cash subsidy indicates that such programs have almost always been accompanied by varying measures of control and surveillance. The government cash grants before us now provide no basis for predicting that comprehensive measures of surveillance and control will not follow. In particular, the government's post-audit power to inspect and evaluate a church-related school's financial records and to determine which expenditures are religious and which are secular creates an intimate and continuing relationship between church and state.

Lemon concerned the public subsidy of sectarian school teachers. In 1975 in *Meek v. Pittenger* the Court extended its reasoning to a program in which public school teachers provided "auxiliary services" to sectarian school students on the premises of the sectarian schools they attended. The Court again stressed the religion-pervasive nature of sectarian elementary and secondary schools and found that even public school

teachers might engage in the fostering of religion in such an atmosphere. It said:

To be sure, auxiliary services personnel, because not employed by the nonpublic schools, are not directly subject to the discipline of a religious authority. But they are performing important educational services in schools in which education is an integral part of the dominant sectarian mission and in which an atmosphere dedicated to the advancement of religious belief is constantly maintained. The potential for impermissible fostering of religion under these circumstances, although somewhat reduced, is nonetheless present. To be certain that auxiliary teachers remain religiously neutral, as the Constitution demands, the State would have to impose limitations on the activities of auxiliary personnel and then engage in some form of continuing surveillance to ensure that those restrictions were being followed.

Thus, by a margin of 6-3, the Court held the program to violate the establishment clause.

A decade later the Court reaffirmed these views. In *Aguilar v. Felton* the Court held unconstitutional, 5-4, New York City's implementation of Title I of the Elementary and Secondary Education Act. Under the program public school teachers provided remedial and enrichment educational services to eligible children in private elementary and secondary schools on the premises of those schools. The City had set up a system to monitor the teachers' performance to ensure that they did not engage in religious teaching. But the Court, again stressing the religion-pervasive nature of the schools, found that the monitoring system itself to create excessive entanglement between the City and the religious schools:

. . . [T]he supervisory system established by the City of New York inevitably results in the excessive entanglement of church and state. . . .

In the related case of *City of Grand Rapids v. Ball* the Court also struck down two teacher-subsidy programs operated in Grand Rapids. In the Shared Time program public school teachers provided remedial and enrichment instruction to children in sectarian elementary schools on the premises of those schools, while in the Community Education program teachers who were otherwise employed by the parochial schools were hired on a part-time basis to provide after-school extracurricular courses to the students attending those schools. The Court held both programs to satisfy the secular purpose aspect of the *Lemon* test but to violate its primary effect prong, but margins of 5-4 and 7-2, respectively. The Court said the programs "impermissibly" advanced religion in three ways:

First, the teachers participating in the programs may become involved in intentionally or inadvertently inculcating particular religious tenets or beliefs. Second, the programs may provide a crucial symbolic link between government and religion, thereby enlisting—at least in the eyes of impressionable youngsters—the powers of government to the support of the religious denomination operating the school. Third, the programs may have the effect of directly promoting religion by impermissibly providing a subsidy to the primary religious mission of the institutions attended.

Thus, after *Ball* the Court viewed programs subsidizing teachers of secular subjects on the premises of sectarian schools to violate both the primary effect and excessive entanglement prongs of the *Lemon* test.

More recently, however, the Court has begun to retreat from these rulings. In *Agostini v. Felton* in 1997 the Court specifically rejected the conclusions and reasoning

of Aguilar, Ball, and Meek with respect to programs in which public school teachers provide remedial and enrichment services to eligible children in sectarian elementary and secondary schools on the premises of those schools. Agostini again involved New York City's implementation on the Title I program, but this time the Court held on-premises instruction by public school personnel to be constitutional, 5-4. The Court said the assumptions on which Aguilar, Ball, and Meek were based had been "undermined" by its more recent church-state jurisprudence. Specifically, the Court said it had "abandoned the presumption . . . That the placement of public employees on parochial school grounds inevitably results in the impermissible effect of state-sponsored indoctrination or constitutes a symbolic union between government and religion." the Court further said it had "departed from the rule . . . That all government aid that directly assists the educational function of religious schools is invalid." Finally, the Court states that because it no longer adhered to the view that "property instructed public employees will fail to discharge their duties faithfully" and be tempted to inculcate religion while on parochial school grounds, it also "discard[ed] the assumption that pervasive monitoring of Title I teachers is required. There is no suggestion in the record before us that unannounced monthly visits of public supervisors are insufficient to detect inculcation of religion by public employees. Moreover, we have not found excessive entanglement in cases in which States imposed far more onerous burdens on religious institutions than the monitoring system at issue here."

Most recently, the court further revised its jurisprudence concerning public aid to sectarian elementary and secondary schools, although the case did not involve teacher subsidies. In *Mitchell v. Helms* the Court upheld, 6-3, a program providing instructional materials and equipment to public and private schools alike and in so doing overturned parts of its prior opinions in *Meek v. Pittenger*, supra, and *Wolman v. Walter*. The Court could agree on no majority opinion. A plurality opinion by Justice Thomas, joined by Chief Justice Rehnquist and Justices Scalia and Kennedy, stated that programs providing aid directly to sectarian schools are constitutional so long as the aid is also made available on a neutral basis to public schools and is secular in nature. The opinion by Justice O'Connor, joined by Justice Breyer, averred that the aid also had to be limited to secular use by the schools after it was received. But she eschewed the notion that an intrusive monitoring system was constitutionally necessary to ensure that such a restriction was honored. She stated:

... Agostini and the cases on which it relied have undermined the assumptions underlying *Meek* and *Wolman*. To be sure, Agostini only addressed the specific presumption that public-school employees teaching on the premises of religious schools would inevitably inculcate religion. Nevertheless, I believe that our definitive rejection of that presumption also stood for—or at least strongly pointed to—the broader proposition that such presumptions of religious indoctrination are normally inappropriate when evaluating neutral school-aid programs under the Establishment Clause. . . . [T]he Court's willingness to assume that religious-school instructors will inculcate religion has not caused us to presume also that such instructors will be unable to follow secular use restrictions on the use of textbooks. I would similarly reject any such presumption regarding the use of instructional materials and equipment."

But Justice O'Connor also took pains to re-emphasize her position in *Ball* that "the reli-

gious-school teacher who works throughout the day to advance the school's religious mission would also do so, at least to some extent, during the supplemental classes provided at the end of the day."

Thus, it seems clear that the Court's church-state jurisprudence is evolving. More specifically, the Court has abandoned the assumptions that aid to sectarian schools inevitably has a primary effect of advancing the schools' religious mission and that public school teachers will inevitably be tempted to inculcate religion when they offer instructional services on the premises of such schools. But it has not yet abandoned the presumption that was key to its decision in *Lemon v. Kurtzman*, supra, that the teachers hired by the sectarian schools themselves would inevitably engage in such instruction and that a constitutionally entangling surveillance of such teachers would be essential if they were publicly subsidized. *Lemon v. Kurtzman*, supra, in other words, appears still to be good law. Moreover, it may also be material to note that all of the Justices in their various opinions in *Mitchell v. Helms*, supra, emphasized the constitutional dangers that were inherent in direct grants of money to sectarian schools. As a consequence, the Master Teacher program that would be authorized by H.R. 4271 appears to raise a constitutional question.

I hope the foregoing is responsive to your request. If we may be of additional assistance, please call on us.

I would just read part of it. *Lemon v. Kurtzman* was mentioned. CRS suggests that that still appears to be good law. Moreover, it may be material to note that all of the justices in their various opinions in *Mitchell v. Helms* emphasized the constitutional dangers that were inherent in direct grants of money to sectarian schools. As a consequence, the master teacher program that would be authorized by H.R. 4271 appears to raise constitutional questions.

I think they should be considered and that provision should be taken out of the bill, so other good portions could go forward.

Mr. SENSENBRENNER. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I think this precedent has already been set, and I would like to read from the National Science Foundation fact sheet that outlines the awards that the President of the United States offers every year. It says, the presidential award for excellence in mathematics and science teaching is the Nation's highest commendation for K-12 math and science teachers. It recognizes the combination of sustained and exemplary work, both in and outside of the classroom. Each award includes a grant of \$7,500 from the NSF to the recipient school. Winners use the money at their discretion to promote math and science education.

Frequently asked questions: What are the PAEMST selection criteria?

Answer: The program is open to practicing public, private and parochial school teachers with a minimum of 5 years experience.

Then there is a press release attached to this that says President Clinton has recognized 214 mathematics and

science teachers for their innovative and outstanding contributions to their professions under the presidential awards for excellence in mathematics and science teaching programs.

Now, if the gentleman from Virginia's argument is valid, then all of the awards that President Clinton has passed out in the last 8 years to private and parochial school teachers, because they have done a good job in the classroom, never should have been paid and are unconstitutional.

What is being proposed in this bill is patterned after what the President has done since 1983. The issue of the constitutionality is simple, and that is whether the funds are used to promote indoctrination of religion, in this bill they are not; whether there is a preference on religious instruction, in this bill they are not; and whether there is excessive entanglement between the government and religion, and in this bill there is not, just like in the PAEMST awards that have been given by the President of the United States.

So I think that the argument that has been advanced at the 11th hour and 59th minute is really a red herring. We need to improve math and science education in our elementary and secondary schools. The best way to do that is to have really motivated teachers that turn the kids on. It should not make any difference whether those teachers teach in the public school or in a nonpublic school, because we should not leave the children in the nonpublic schools behind in order to get better math and science education.

Mr. Speaker, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, this is a situation that sailed through the committee with input from both sides. It is a good bill. It is a bill that is endangered now because some things have been detected in it, and it is not unlikely that could happen to any committee or any member of the committee.

But we have a problem with it, and we would have worked it out. I think the gentleman from Wisconsin (Chairman SENSENBRENNER), the gentleman from Michigan (Mr. EHLERS), the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), and, of course, the gentleman from Virginia (Mr. SCOTT) and others would have worked it out at the committee level. But that did not happen.

I am very hopeful that in colloquy between the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) and the gentleman from Michigan (Mr. EHLERS), they are both highly skilled in the art of compromise, maybe something can be worked out with this.

Mr. Speaker, I yield 3 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON).

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, there is no question about any provision in this bill,

except that provision that allows for the payment of teachers for private schools. There is a real difference between a \$7,500 award and paying the full salary of a teacher for a private school. That remains a problem in this bill.

Clearly, this bill needed to move. We have been holding it up for over 2 years, trying to hear everyone all over the country, many educators, and we know the urgency of the provisions of this bill. But we do not want to risk the outcome of this bill because of this provision.

That is where my concern is, and that is what I would like. If the gentleman from Michigan (Mr. EHLERS) could assure us that this provision would not jeopardize this bill and it could be corrected before it is signed into law or vetoed or whatever, then I have no problem with the bill.

We need the other provisions of this bill to be in law so that we can get the benefit as quickly as possible.

Mr. EHLERS. Mr. Speaker, will the gentlewoman yield?

Ms. EDDIE BERNICE JOHNSON of Texas. I yield to the gentleman from Michigan.

Mr. EHLERS. Mr. Speaker, there is a host of questions that have been raised here at the last minute, and a considerable surprise to me, because on this bill we have held hearings for over a year, and the bill has been out for almost 2 years.

Ms. EDDIE BERNICE JOHNSON of Texas. Not on this provision, but the last one.

Mr. EHLERS. Let me just try to respond. This provision is, first of all, a grant to the school, not to the teacher, so it is not even as far along as the list that the chairman gave a moment ago. It is a grant to the school and not to the teacher.

Secondly, you have to recognize teachers move from one school to another. Just yesterday I spoke in a school, and there was a teacher in the public school who had previously taught in a religious school in my community. If you educate or train a teacher, are you going to say once we have trained them with Federal money, they cannot teach in a private school anymore, even if they were trained with Federal money while they were in the public school?

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Ms. EDDIE BERNICE JOHNSON of Texas. Reclaiming my time, Mr. Speaker, let me just say that we want the provisions of this bill to go forward. We do not want public dollars to flow to private schools when we have such need in public schools.

I need that assurance. This bill is on suspension. I need to assure a number of people in this body that this will happen if this bill is to pass today.

Mr. SENSENBRENNER. Mr. Speaker, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, yes, I am one who wants the parents to make the decision as to what type of education their children have.

Mr. Speaker, I yield back the balance of my time.

Mr. SENSENBRENNER. I yield myself the balance of my time.

Mr. Speaker, this is an important bill to get America's children the type of technologically adept teachers that they need to bring themselves into the 21st century. It should not be held up because we have had 2 years of study on this, direct hearings and having the bill open for amendment during the markup at the Committee on Science.

At no point prior to 48 hours ago have the objections, such as those raised by the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) and the gentleman from Virginia (Mr. SCOTT) been brought up.

This bill has widespread support, and I would like to read off a list of the organizations that have supported it: the American Association for Engineering Education, the American Association of Engineering Societies, the American Association of Physics Teachers, the American Astronomical Society, the American Chemical Society, the American Physical Society, the American Society of Mechanical Engineers, Business Round Table, Institute of Electrical and Electronic Engineers, International Society for Optical Engineering, International Technology Education Association, Jobs for the Future, National Academy Of Sciences, National Alliance of Business, National Council of Teachers of Mathematics, National Science Teachers Association, National Society of Professional Engineers, Optical Society of America, SAE International and Triangle Coalition for Mathematics and Science Education.

Mr. Speaker, I would implore the House of Representatives to do the right thing, to give our kids the tools to advance into the 21st century and be able to compete in a globalized economy. Mr. Speaker, I urge passage of the bill.

Mr. BEREUTER. Mr. Speaker, this Member rises today in support of H.R. 4271, the National Science Education Act, of which he is a cosponsor.

Through grants to public and private schools, the National Science Education Act provides math and science teachers with the assistance they need in professional development and support for the use of hands-on science materials, and with development in technology use and integration. It also creates a national scholarship to reward teacher participation in science, math, engineering or technology research.

In June of this year, this Member was visited by Mr. Robert Curtright and his wife from Lincoln, Nebraska. Mr. Curtright, a science teacher at Lincoln Northeast High School, was honored as one of the winners of the Presidential Award for Excellence in Mathematics and Science Teaching Program that is administered by the National Science Foundation. The award enables Mr. Curtright to serve as

a role model for his peers in Nebraska and encourage high quality teachers to enter and remain in the education field. However, Mr. Curtright cannot do it alone. Nebraska is currently facing a great deal of difficulty in recruiting and retaining good quality teachers. This Member believes that through H.R. 4271, more teachers will benefit from the additional resources, enhanced professional development as well as professional mentors to recruit and maintain quality math and science teachers.

Mr. Speaker, this Member encourages his colleagues to support the National Science Education Act. Mr. Curtright deserves all of the help he can get in assisting others in his profession provide the best math and science education that children in Nebraska and throughout the country deserve.

Mr. UDALL of Colorado. Mr. Speaker, I rise in support of H.R. 4271, the National Science Education Act, an important bill that recognizes the need to educate for the future.

I do have some concerns about one part of the bill that would permit allocation of federal funds to private schools. I would have preferred for that to have been omitted. However, the rest of the bill deserves enactment. So, I will support sending the bill to the Senate, in hopes that it will be further improved to the point that it can be supported without reservation by anyone.

I'd like to talk specifically about the merits of one provision, added by an amendment that I offered, that is designed to encourage would-be science and math teachers. My amendment authorizes a program of one-year, \$5000 scholarships to those with bachelors degrees in science or engineering, or those nearing completion of such degrees, to enable them to take the courses they need to become certified as K-12 science or math teachers.

Over the last year, the Science Committee held a series of hearings about the state of math and science education in this country. From these hearings and from talking to constituents, students, and educators at home, it has become crystal clear to me that we have much work to do to prepare our students to succeed in the 21st century workplace.

In particular, we've been hearing that poor student performance in science and math has much to do with the fact that teachers often have little or no training in the disciplines they are teaching. While the importance of teacher expertise in determining student achievement is widely acknowledged, it is also the case that significant numbers of K-12 students are being taught science and math by unqualified teachers.

The bill includes a number of important provisions to assist teachers, and deserves to pass. Not only do we need to ensure a high quality of science and math education for our students, but we also need to ensure there is sufficient quantity of trained teachers available to teach them. My amendment provides an incentive for individuals with the content knowledge to try teaching as a career.

Most students emerge from college with a heavy debt load—and studies have shown that average debt has tended upward, since college tuition costs have been increasing faster than inflation. So scholarships would be particularly beneficial for those considering entering the teaching field where starting salaries are relatively low.

Mr. Speaker, this bill takes some critical steps to help ensure that we can sustain our

current economic growth and that our future workforce will be prepared to succeed in our increasingly technologically based world.

I urge support for this important legislation.

Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore (Mr. HANSEN). The question is on the motion offered by the gentleman from Wisconsin (Mr. SENSENBRENNER) that the House suspend the rules and pass the bill, H.R. 4271, as amended.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX and the Chair's prior announcement, further proceedings on this motion will be postponed.

AMERICAN MUSEUM OF SCIENCE AND ENERGY

Mr. SENSENBRENNER. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 4940) to designate the museum operated by the Secretary of Energy in Oak Ridge, Tennessee, as the "American Museum of Science and Energy", and for other purposes, as amended.

The Clerk read as follows:

H.R. 4940

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—AMERICAN MUSEUM OF SCIENCE AND ENERGY

SEC. 101. DESIGNATION OF AMERICAN MUSEUM OF SCIENCE AND ENERGY.

(a) IN GENERAL.—The Museum—

(1) is designated as the "American Museum of Science and Energy"; and

(2) shall be the official museum of science and energy of the United States.

(b) REFERENCES.—Any reference in a law, map, regulation, document, paper, or other record of the United States to the Museum is deemed to be a reference to the "American Museum of Science and Energy".

(c) PROPERTY OF THE UNITED STATES.—

(1) IN GENERAL.—The name "American Museum of Science and Energy" is declared the property of the United States.

(2) INJUNCTION.—Whoever, except as authorized by the Secretary, uses or reproduces the name "American Museum of Science and Energy", or a facsimile or simulation of such name in such manner as suggests "American Museum of Science and Energy", may be enjoined from such use or reproduction at the suit of the Attorney General upon complaint by the Secretary.

(3) EFFECT ON OTHER RIGHTS.—This subsection shall not be construed to conflict or interfere with established or vested rights.

SEC. 102. AUTHORITY.

To carry out the activities of the Museum, the Secretary may—

(1) accept and dispose of any gift, devise, or bequest of services or property, real or personal, that is—

(A) designated in a written document by the person making the gift, devise, or bequest as intended for the Museum; and

(B) determined by the Secretary to be suitable and beneficial for use by the Museum;

(2) operate a retail outlet on the premises of the Museum for the purpose of selling or distributing items (including mementos, food, educational materials, replicas, and literature) that are—

(A) relevant to the contents of the Museum; and

(B) informative, educational, and tasteful;

(3) collect reasonable fees where feasible and appropriate;

(4) exhibit, perform, display, and publish materials and information of or relating to the Museum in any media or place;

(5) consistent with guidelines approved by the Secretary, lease space on the premises of the Museum at reasonable rates and for uses consistent with such guidelines; and

(6) use the proceeds of activities authorized under this section to pay the costs of the Museum.

SEC. 103. MUSEUM VOLUNTEERS.

(a) AUTHORITY TO USE VOLUNTEERS.—The Secretary may recruit, train, and accept the services of individuals or entities as volunteers for services or activities related to the Museum.

(b) STATUS OF VOLUNTEERS.—

(1) IN GENERAL.—Except as provided in paragraph (2), service by a volunteer under subsection (a) shall not be considered Federal employment.

(2) EXCEPTIONS.—

(A) FEDERAL TORT CLAIMS ACT.—For purposes of chapter 171 of title 28, United States Code, a volunteer under subsection (a) shall be treated as an employee of the government (as defined in section 2671 of that title).

(B) COMPENSATION FOR WORK INJURIES.—For purposes of subchapter I of chapter 81 of title 5, United States Code, a volunteer described in subsection (a) shall be treated as an employee (as defined in section 8101 of title 5, United States Code).

(c) COMPENSATION.—A volunteer under subsection (a) shall serve without pay, but may receive nominal awards and reimbursement for incidental expenses, including expenses for a uniform or transportation in furtherance of Museum activities.

SEC. 104. DEFINITIONS.

For purposes of this title:

(1) MUSEUM.—The term "Museum" means the museum operated by the Secretary of Energy and located at 300 South Tulane Avenue in Oak Ridge, Tennessee.

(2) SECRETARY.—The term "Secretary" means the Secretary of Energy or a designated representative of the Secretary.

TITLE II—NETWORKING AND INFORMATION TECHNOLOGY

SEC. 201. SHORT TITLE.

This title may be cited as the "Networking and Information Technology Research and Development Act".

SEC. 202. FINDINGS.

The Congress makes the following findings:

(1) Information technology will continue to change the way Americans live, learn, and work. The information revolution will improve the workplace and the quality and accessibility of health care and education and make Government more responsible and accessible. It is important that access to information technology be available to all citizens, including elderly Americans and Americans with disabilities.

(2) Information technology is an imperative enabling technology that contributes to scientific disciplines. Major advances in biomedical research, public safety, engineering, and other critical areas depend on further advances in computing and communications.

(3) The United States is the undisputed global leader in information technology.

(4) Information technology is recognized as a catalyst for economic growth and prosperity.

(5) Information technology represents one of the fastest growing sectors of the United States economy, with electronic commerce alone projected to become a trillion-dollar business by 2005.

(6) Businesses producing computers, semiconductors, software, and communications equipment account for one-third of the total growth in the United States economy since 1992.

(7) According to the United States Census Bureau, between 1993 and 1997, the information technology sector grew an average of 12.3 percent per year.

(8) Fundamental research in information technology has enabled the information revolution.

(9) Fundamental research in information technology has contributed to the creation of new industries and new, high-paying jobs.

(10) Our Nation's well-being will depend on the understanding, arising from fundamental research, of the social and economic benefits and problems arising from the increasing pace of information technology transformations.

(11) Scientific and engineering research and the availability of a skilled workforce are critical to continued economic growth driven by information technology.

(12) In 1997, private industry provided most of the funding for research and development in the information technology sector. The information technology sector now receives, in absolute terms, one-third of all corporate spending on research and development in the United States economy.

(13) The private sector tends to focus its spending on short-term, applied research.

(14) The Federal Government is uniquely positioned to support long-term fundamental research.

(15) Federal applied research in information technology has grown at almost twice the rate of Federal basic research since 1986.

(16) Federal science and engineering programs must increase their emphasis on long-term, high-risk research.

(17) Current Federal programs and support for fundamental research in information technology is inadequate if we are to maintain the Nation's global leadership in information technology.

SEC. 203. AUTHORIZATION OF APPROPRIATIONS.

(a) NATIONAL SCIENCE FOUNDATION.—Section 201(b) of the High-Performance Computing Act of 1991 (15 U.S.C. 5521(b)) is amended—

(1) by striking "From sums otherwise authorized to be appropriated, there" and inserting "There";

(2) by striking "1995; and" and inserting "1995"; and

(3) by striking the period at the end and inserting "": \$580,000,000 for fiscal year 2000; \$699,300,000 for fiscal year 2001; \$728,150,000 for fiscal year 2002; \$801,550,000 for fiscal year 2003; and \$838,500,000 for fiscal year 2004. Amounts authorized under this subsection shall be the total amounts authorized to the National Science Foundation for a fiscal year for the Program, and shall not be in addition to amounts previously authorized by law for the purposes of the Program."

(b) NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.—Section 202(b) of the High-Performance Computing Act of 1991 (15 U.S.C. 5522(b)) is amended—

(1) by striking "From sums otherwise authorized to be appropriated, there" and inserting "There";

(2) by striking "1995; and" and inserting "1995"; and

(3) by striking the period at the end and inserting "": \$164,400,000 for fiscal year 2000; \$201,000,000 for fiscal year 2001; \$208,000,000 for fiscal year 2002; \$224,000,000 for fiscal year 2003; and \$231,000,000 for fiscal year 2004."