Public Law 101-589
101st Congress

An Act

To promote excellence in American mathematics, science and engineering education; enhance the scientific and technical literacy of the American public; stimulate the professional development of scientists and engineers; increase the participation of women and minorities in careers in mathematics, science, and engineering; and for other purposes.

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 "Excellence in Mathematics, Science and Engineering Education Act of 1990".

SEC. 2. TABLE OF CONTENTS.

Sec. 1. Short title.
Sec. 2. Table of contents.

TITLE I—FINDINGS AND OBJECTIVES

TITTE II—MATHEMATICS, SCIENCE AND TECHNOLOGY IMPROVEMENTS

PART A—DWIGHT D. EISENHOWER MATHEMATICS AND SCIENCE EDUCATION AMENDMENTS

Part B—INNOVATIVE TECHNOLOGIES

Sec. 221. Expanding the uses of innovative technologies for mathematics and science instruction.

PART C—SCIENCE-TECHNOLOGY CENTERS

Part D—GRANTS TO EDUCATIONAL AGENCIES FOR SYSTEMIC REFORM OF MATHEMATICS AND SCIENCE EDUCATION

Sec. 241. Systemic reform of mathematics and science.

PART E—TECHNICAL AMENDMENT

Sec. 251. Technical amendment.
Sec. 252. National Center for Education Statistics.
Sec. 253. Amendment of James Madison Memorial Fellowship Act.

TITLE III—HIGHER EDUCATION

PART A—GRADUATE FELLOWSHIPS AND TRAINEESHIPS

Sec. 301. Statement of purpose.
Sec. 302. Graduate fellowships.
Sec. 303. Graduate traineeships.

PART B—CENTERS OF EXCELLENCE

Sec. 311. Centers of Excellence of Undergraduate Teaching.
TITLE IV—WOMEN AND MINORITIES IN MATHEMATICS, SCIENCE AND ENGINEERING

Sec. 401. Statement of purpose.
Sec. 402. Distinguished visiting professors.
Sec. 403. Faculty awards for women and minorities.
Sec. 404. Alliances for minority participation.

TITLE V—EDUCATION COORDINATION AND DEPARTMENT OF ENERGY PROGRAMS

Sec. 502. General education report.
Sec. 503. Department of Energy programs.

TITLE VI—SCIENCE SCHOLARSHIPS

PART A—NATIONAL SCIENCE SCHOLARS PROGRAM

Sec. 601. Purpose; appropriations authorized.
Sec. 602. Scholarships authorized.
Sec. 603. Selection of scholars.
Sec. 604. Eligibility of scholars.
Sec. 605. Scholarship amount.
Sec. 606. Summer employment opportunities for scholars.

PART B—ROBERT NOYCE SCHOLARSHIPS

Sec. 611. Robert Noyce scholarships.

PART C—NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY

Sec. 621. National Academy of Science, Space, and Technology.

PART D—ADDITIONAL PROVISIONS

Sec. 631. Effect of certain controlled substance and felony convictions.
Sec. 632. Report.

TITLE VII—GENERAL PROVISIONS AND AUTHORIZATION OF APPROPRIATIONS

PART A—AUTHORIZATION OF APPROPRIATIONS

Sec. 701. Authorization of appropriations.

PART B—DEFINITIONS

Sec. 711. Definitions.

PART C—MISCELLANEOUS PROVISIONS

Sec. 721. Student assistance general provisions.
Sec. 722. Public Law 81-874.
Sec. 723. Technical amendment.

PART D—EFFECTIVE DATE

Sec. 731. Effective date.

TITLE I—FINDINGS AND OBJECTIVES

20 USC 5301.

SEC. 101. FINDINGS AND OBJECTIVES.

(a) FINDINGS.—The Congress finds that—

(1) science and mathematics are cornerstones of America’s efforts to compete in the global marketplace and improve our standard of living and quality of life;

(2) international comparisons show American students are consistently behind their foreign counterparts in mathematics and science achievement;

(3) projections by the National Science Foundation estimate a shortage of 675,000 scientists and engineers by the year 2000;
(4) women and minorities are significantly underrepresented in the fields of mathematics, science and engineering;
(5) the achievement of universal scientific and mathematical literacy by all Americans is an essential goal of all efforts to strengthen American competitiveness;
(6) the achievement of scientific and mathematical literacy requires a strong, coordinated effort to strengthen the teaching of science and mathematics; and
(7) the Federal Government has a significant role in promoting the study of mathematics and science, by providing financial assistance to improve the general quality of programs for the study of mathematics and science, by acting as a source for information concerning successful projects and activities, by encouraging talented men and women to pursue scientific careers and by strengthening the mathematics and science educational opportunities available to women and minorities.
(b) NATIONAL OBJECTIVES.—The Congress declares that it shall be a national objective to—
(1) encourage American students to pursue careers in mathematics, science and engineering;
(2) improve the quality of teaching in mathematics and science made available to all Americans;
(3) have American students rank first in the world in mathematics and science;
(4) substantially increase the number of graduates with degrees in mathematics, science and engineering; and
(5) substantially increase the number of women and minorities pursuing careers in mathematics, science and engineering.

TITLE II—MATHEMATICS, SCIENCE AND TECHNOLOGY IMPROVEMENTS

PART A—DWIGHT D. EISENHOWER MATHEMATICS AND SCIENCE EDUCATION AMENDMENTS

SEC. 201. IN-STATE APPORTIONMENT.

Section 2005 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2985) is amended by adding at the end the following:

"(c) LIMITATION.—
"(1) GENERAL RULE.—Except as provided in paragraph (2), any local educational agency that receives an allocation of less than $6,000 under subsection (a) shall, for the purpose of providing services under this part, form a consortium with at least 1 other local educational agency or institution of higher education receiving assistance under this section.
"(2) WAIVER.—The State educational agency shall waive the application of paragraph (1) in the case of any local educational agency that demonstrates that the amount of its allocation is sufficient to provide a program of sufficient size, scope, and quality to be effective. In granting waivers under the preceding sentence, the State educational agency shall—
"(A) give special consideration to local educational agencies serving rural areas; and
"(B) consider cash or in-kind contributions provided from State or local sources that may be combined with the local educational agency's allocation for the purpose of providing services under this part."

SEC. 202. ELEMENTARY AND SECONDARY EDUCATION PROGRAMS.

(a) Section 2006 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2986) is amended—
   (1) by redesignating subsection (d) as subsection (e);
   (2) by inserting after subsection (c) the following new subsection:

   "(d) PRIORITY FOR TEACHER TRAINING.—
   "(1) GENERAL RULE.—Except as provided in paragraph (2), in any fiscal year beginning after September 30, 1990 for which a local educational agency receives under this section an amount that is larger than the amount such agency received under this section for the fiscal year 1990, the excess of such amount over the amount received under this section for the fiscal year 1990 shall first be used to provide training for mathematics teachers and science teachers in elementary and middle schools.
   "(2) WAIVER.—The Secretary may waive the application of paragraph (1) in the case of any local educational agency that demonstrates to the Secretary that mathematics teachers and science teachers in the elementary and middle schools under the jurisdiction of such local educational agency will receive adequate training without using such excess amounts for such training."; and
   (3) in subsection (e) (as redesignated by paragraph (1) of this subsection), by inserting after "this section" the following: "or $20,000, whichever is greater.

(b) Section 2005 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2985) is amended by inserting after "90 percent", "or the remainder after application of section 2006(e)."

SEC. 203. HIGHER EDUCATION PROGRAMS.

(a) Subsection (d) of section 2007 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2987) is amended by inserting after "this section" the following: "or $20,000, whichever is greater.

(b) Section 2007(b) of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2987) is amended by inserting after "95 percent", "or the remainder after application of subsection (d)."

SEC. 204. NATIONAL PROGRAMS.

Section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2992) is amended—
   (1) by redesignating subsection (d) as subsection (f); and
   (2) by inserting after subsection (c) the following new subsections:

   "(d) NATIONAL CLEARINGHOUSE FOR SCIENCE, MATHEMATICS, AND TECHNOLOGY EDUCATION MATERIALS.—
   "(1) CLEARINGHOUSE AUTHORIZED.—The Secretary, in consultation with the Director, may award a grant or contract to establish a National Clearinghouse for Mathematics and Science Education (hereinafter in this subsection referred to as the "Clearinghouse")."
"(2) Application and award basis.—Each entity desiring to establish and operate the Clearinghouse authorized by this subsection shall submit an application to the Secretary at such time, in such manner and accompanied by such information as the Secretary may reasonably require. The grant or contract awarded pursuant to paragraph (1) shall be made on a competitive, merit basis.

"(3) Duration.—The grant or contract awarded under this section shall be awarded for a period of 5 years and shall be reviewed by the Secretary no later than 30 months from the date the grant or contract is awarded.

"(4) Use of Funds.—The grant awarded under this subsection shall be used to—

"(A) maintain a permanent repository of mathematics and science education instructional materials and programs for elementary and secondary schools, including middle schools, (including, to the extent practicable, all materials and programs developed with Federal and non-Federal funds, such as instructional materials developed by the Department of Education, materials developed by State and national mathematics and science programs assisted under this part, and other instructional materials) for use by the regional consortiums established under subpart 2 of this part and by the general public;

"(B) compile information on all mathematics and science education programs administered by each Federal agency or department;

"(C) disseminate information, programs, and instructional materials to the public, dissemination networks, and the regional consortiums under subpart 2 of this part; and

"(D) coordinate with identifiable and existing data bases containing mathematics and science curriculum and instructional materials, including Federal and non-Federal data bases.

"(5) Submission to Clearinghouse.—Each Federal agency or department which develops mathematics or science education instructional material or programs, including the National Science Foundation, and the Department of Education, shall submit to the Clearinghouse copies of such material or programs.

"(6) Peer Review.—The Secretary shall establish a peer review process to select the recipient of the award under this subsection.

"(7) Steering Committee.—The Secretary may appoint a steering committee to recommend policies and activities for the Clearinghouse.

"(8) Application of Copyright Laws.—Nothing in this subsection shall be construed to allow the use or copying, in any media, of any material collected by the Clearinghouse that is protected under the copyright laws of the United States unless the permission of the owner of the copyright is obtained. The Clearinghouse, in carrying out the provisions of this subsection, shall ensure compliance with the provisions of title 17 of the United States Code.

"(e) Model Programs for Instruction and Training in the Use of Computers.—
“(1) GRANTS AUTHORIZED.—The Secretary may make grants to model programs for training and instruction in the use of computers as part of the mathematics and science curriculum of elementary and secondary schools to pay the Federal share of the cost of improving and expanding such programs.

“(2) FEDERAL SHARE.—(A) Except as provided in subparagraph (C), the Federal share of the cost of improving and expanding a model program under this subsection shall not exceed 50 percent of such cost.

“(B) Not less than 25 percent of the non-Federal share of the cost of improving and expanding a model program under this subsection shall be in cash.

“(C) The Secretary may waive the application of this paragraph in the case of any model program operated by a school that demonstrates an inability to obtain funds from non-Federal sources for the program.

“(3) PRIORITY.—In awarding grants under this subsection, the Secretary shall give priority to applicants that demonstrate the ability to—

“(A) develop a program that can be applied nationally;

“(B) include a shared commitment from a combination of local parties, such as teachers, the business community, and local educational agencies;

“(C) provide teacher training programs in elementary and secondary schools, including middle schools, that are designed to improve the quality of mathematics and science instruction through the use of computers as an instructional tool;

“(D) integrate higher order analytical and problem-solving skills into mathematics and science curricula; and

“(E) provide interactive and manipulative application as part of the instructional delivery system.”.

SEC. 205. REGIONAL MATHEMATICS AND SCIENCE EDUCATION CONSORTIUMS.

(a) AMENDMENT TO TEXT.—Part A of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2981 et seq.) is amended—

(1) by inserting before section 2003 the following:

“Subpart 1—State Grants and National Programs”;

and

(2) by inserting after section 2012 the following:

“Subpart 2—Regional Mathematics and Science Education Consortia

SEC. 2016. PROGRAM ESTABLISHED.

“(a) IN GENERAL.—

“(1) GRANTS AUTHORIZED.—The Secretary, in consultation with the Director, is authorized to award grants or contracts to eligible entities to establish and operate regional mathematics and science education consortia for the purpose of—

“(A) disseminating exemplary mathematics and science education instructional materials; and
“(B) providing technical assistance for the implementation of teaching methods and assessment tools for use by elementary and secondary school students, teachers and administrators.

“(2) NUMBER.—The Secretary shall, in accordance with the provisions of this section, award at least 1 grant or contract to an eligible entity in each region.

“(3) SPECIAL RULE.—In any fiscal year, if the amount appropriated pursuant to the authority of section 2023 is less than $4,500,000, then the Secretary may waive the provisions of paragraph (2) and award grants or contracts of sufficient size, scope and quality to carry out the provisions of this section.

“(b) GRANT TERM AND REVIEW.—Grants under this subpart shall be awarded for a period of not more than 5 years and shall be reviewed before the end of the 30-month period beginning on the date the grant is awarded. Grants shall be awarded before the end of the 12-month period beginning on the date of the enactment of an Act making appropriations to carry out the provisions of this subpart.

“(c) AMOUNT.—In making grants under this subpart, the Secretary shall assure that there is a relatively equal distribution of the funds made available among the regions, but the Secretary may award additional funds to a regional consortium on the basis of population and geographical conditions of the region being served.

“SEC. 2017. USE OF FUNDS.

“Funds provided under this subpart may be used by a regional consortium, under the direction of a regional board established pursuant to section 2019, to—

“(1) identify, adapt, disseminate, and implement mathematics and science education instruction materials, teaching methods, and assessment tools for use by elementary and secondary school students;

“(2) assist, train and provide technical assistance to classroom teachers, administrators, and other educators to identify, implement or adapt the instructional materials, teaching methods and assessment tools described in paragraph (1);

“(3) provide for the training of classroom teachers to enable such teachers to instruct other teachers, administrators, and educators in the use of the instructional materials, teaching methods and assessment tools described in paragraph (1) in the classroom;

“(4) work with classroom teachers in the identification and adaptation of such instructional materials, teaching methods, and assessment tools for use in classrooms within the region;

“(5) assist classroom teachers, where appropriate, in securing training to enhance such teachers’ subject knowledge and teaching skills in the areas of science and mathematics education;

“(6) when necessary, provide financial assistance to enable teachers and other educators to attend and participate in the activities of the regional consortium;

“(7) implement programs and activities designed to meet the needs of groups that are underrepresented in, and underserved by, mathematics and science education;

“(8) help State and local educational agencies or consortia thereof assess the need for and the desirability of regional mathematics and science academies;
“(9) develop and disseminate early childhood education mathematics and science instructional materials;
“(10) develop intergenerational projects to train senior citizen volunteers in the implementation of interactive science processes and activities for use by elementary and secondary school students;
“(11) disseminate information regarding informal mathematics and science education activities and programs offered by Federal agencies and private or public agencies and institutions within the region;
“(12) provide technical assistance in order to maximize the effectiveness of such instructional materials and programs and fulfill the instructional goals of the recipients of such materials and programs;
“(13) collect data on activities assisted under this subpart in order to evaluate the effectiveness of the activities of the regional consortiums;
“(14) if feasible, maintain on-line computer networks with all regional consortiums and the National Clearinghouse for Science and Mathematics Education Materials established under section 2012(e);
“(15) assist local and State educators in identifying science equipment needs; and
“(16) coordinate activities carried out by the regional consortium with activities carried out by the appropriate regional education laboratory supported under section 405(d)(4)(A)(i) of the General Education Provisions Act.

20 USC 2994b. “SEC. 2018. APPLICATION AND REVIEW.
“(a) IN GENERAL.—Each eligible entity desiring to receive a grant under this subpart shall submit an application to the Secretary at such time, in such manner, and accompanied by such additional information as the Secretary may reasonably require. Each such application shall—
“(1) demonstrate that the eligible entity has demonstrated expertise in the fields of mathematics and science education;
“(2) demonstrate that the eligible entity shall implement and disseminate mathematics and science education instructional materials, teaching methods, and assessment tools through a consortium of the region's mathematics and science education organizations and agencies;
“(3) demonstrate that the eligible entity shall carry out the functions of the regional consortium;
“(4) describe the activities for which assistance is sought;
“(5) demonstrate that the eligible entity shall implement and disseminate mathematics and science education instructional materials, teaching methods and assessment tools;
“(6) demonstrate that emphasis will be given to programs and activities designed to meet the needs of groups that are underrepresented in, and underserved by, mathematics and science education;
“(7) describe steps to be taken to provide for the equitable participation of children and teachers from private elementary and secondary schools consistent with section 2010;
“(8) demonstrate that the business community in the region served by the regional consortium will play an integral role in designing and supporting the regional consortium's work;
“(9) demonstrate that the eligible entity will consider the resources of existing Star Schools consortia established pursuant to the Star Schools Program Assistance Act in carrying out the provisions of this part, where appropriate; and
“(10) assure that the entity will conduct its activities and supervise its personnel in a manner that effectively ensures compliance with the copyright laws of the United States.

“(b) APPROVAL OF APPLICATION.—
“(1) IN GENERAL.—The Secretary shall approve or disapprove applications submitted pursuant to subsection (a) in accordance with the criteria and procedures established under paragraph (2).
“(2) PROCEDURES AND CRITERIA.—The Secretary shall develop procedures and criteria designed to ensure that grants are awarded on the basis of merit as determined by the competitive peer review process described in paragraph (3).
“(3) NATIONAL PANEL.—(A) The Secretary, in consultation with the Director, shall establish a national panel, or to the extent necessary, panels, to submit to the Secretary recommendations for awards of grants under this subpart. The Secretary shall appoint the members of such panel or panels.
“(B) Each panel appointed as required by subparagraph (A) shall include participation, to the extent feasible, from each region.

“SEC. 2019. REGIONAL BOARDS.
“(a) IN GENERAL.—Each eligible entity receiving a grant or contract under this subpart shall establish a regional board to oversee the administration and establishment of program priorities for the regional consortium established by such eligible entity. Such regional board shall be broadly representative of the agencies and organizations participating in the regional consortium.
“(b) PROHIBITION ON USE OF FEDERAL FUNDS.—No Federal funds may be used for the establishment or operation of a regional board required by subsection (a).

“SEC. 2020. PAYMENTS; FEDERAL SHARE; NON-FEDERAL SHARE.
“(a) PAYMENTS.—The Secretary shall pay to each eligible entity having an application approved under section 2018 the Federal share of the cost of the activities described in the application.
“(b) FEDERAL SHARE.—For purposes of subsection (a), the Federal share—
“(1) for the first and second years in which an eligible entity receives assistance shall be 80 percent;
“(2) for the third such year shall be 75 percent;
“(3) for the fourth such year shall be 65 percent; and
“(4) for the fifth and each such succeeding year shall be 50 percent.
“(c) NON-FEDERAL SHARE.—The non-Federal share of the cost of activities described in the application submitted pursuant to this section may be in cash or in kind, fairly evaluated.

“SEC. 2021. EVALUATION.
“(a) EVALUATION REQUIRED.—The Secretary, through the Office of Educational Research and Improvement, shall collect sufficient data on, and evaluate the effectiveness of, the activities of each regional consortium.

20 USC 2994c.
20 USC 2994d.
20 USC 2994e.
(b) ASSESSMENT.—The evaluations described in paragraph (1) shall include an assessment of the effectiveness of the regional consortium in meeting the needs of the schools, teachers, administrators and students in the region.

(c) REPORT.—At the end of each grant or contract period, the Secretary shall submit to Congress a report on the effectiveness of the programs conducted at each regional consortium.

SEC. 2022. DEFINITIONS.

For purposes of this subpart:

(1) The term 'eligible entity' means—

(A) a private nonprofit organization of demonstrated effectiveness;

(B) an institution of higher education;

(C) an elementary or secondary school;

(D) a State or local educational agency;

(E) a regional educational laboratory in consortium with the research and development center established under section 405(d)(4)(A) of the General Education Provisions Act; or

(F) any combination of the entities described in subparagraphs (A) through (E); with demonstrated expertise in mathematics and science education.

(2) The term 'region' means a region of the United States served by a regional education laboratory that is supported by the Secretary pursuant to section 405(d)(4)(A) of the General Education Provisions Act.

(3) The term 'regional consortium' means each regional mathematics and science education consortium established pursuant to section 2016.

SEC. 2023. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to carry out the provisions of this subpart $17,000,000 for the fiscal year 1991, and such sums as may be necessary for each of the fiscal years 1992 and 1993.

PART C—GENERAL PROVISIONS.

(b) TECHNICAL AMENDMENTS.—


(2) DEFINITIONS.—The heading of section 2013 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2993) is amended by striking "2013" and inserting "2031".

SEC. 206. FEDERAL ADMINISTRATION.

(a) REPORT ON SOURCES OF FEDERAL AID.—The Secretary shall, in consultation with the heads of other appropriate Federal agencies,
prepare a report listing all sources of Federal aid for mathematics and science education.

(b) **Deadline for Report.**—The Secretary shall submit the report required by paragraph (1) to the Committee on Education and Labor of the House of Representatives and to the Committee on Labor and Human Resources of the Senate not later than March 1, 1992. The Secretary shall also provide such report to each State educational agency and make such report available to the public.

**PART B—INNOVATIVE TECHNOLOGIES**

**SEC. 221. EXPANDING THE USES OF INNOVATIVE TECHNOLOGIES FOR MATHEMATICS AND SCIENCE INSTRUCTION.**

(a) **Computer Technologies.**—

(1) **Program Authorized.**—The Director shall establish research programs on the use of computers and related technologies in basic mathematics, science, and technology instruction.

(2) **Eligible Applicants.**—In carrying out the program under this subsection, the Director shall establish a merit review process to make awards on the basis of—

(A) the potential of the proposal to improve the effectiveness and productivity of basic mathematics and science education;

(B) the potential of the proposal to involve the classroom teacher in the design of the program and to provide teacher training for optimum effectiveness in the classroom; and

(C) the capability of the entity developing the innovative computer technology to provide broad and efficient dissemination of the technology to schools.

(3) **Use of Awards.**—Funds awarded under this subsection may be used for—

(A) research and development of curriculum;

(B) development of computer software; and

(C) research and development of other promising technologies for educational applications as specified by the Director.

(b) **Distance Learning.**—

(1) **Program Authorized.**—The Director shall establish programs to promote the use of interactive telecommunications linkages to provide mathematics and science education in the elementary and secondary classroom.

(2) **Eligible Applicants.**—In carrying out the program under this subsection, the Director shall establish a merit review process to make awards to partnerships which may involve State educational agencies, local educational agencies, public television agencies, institutions of higher education, and other relevant entities, on the basis of—

(A) the potential of the proposal to improve the delivery of quality mathematics and science instruction to underserved rural and urban areas; and

(B) the potential of the proposal to provide teacher training programs for optimum effectiveness in the classroom.

(3) **Use of Awards.**—Funds awarded under this subsection may be used for—
(A) the research and development of software and hardware technologies necessary to implement interstate and intrastate interactive linkages with several school districts;
(B) research on two-way audio and video interactive telecommunications and computer linkages designed to be used in conjunction with each other;
(C) research and development of curriculum;
(D) teacher training in the use of technologies developed under this section; and
(E) other appropriate telecommunications research projects that will improve mathematics and science education in underserved areas.

(c) Special Rule.—In carrying out the provisions of this section, the Director shall—

(1) pay particular attention to the needs of rural and urban areas which are underserved in fields of mathematics and science instruction or which have a high percentage of students receiving services under chapter 1 of title I of the Elementary and Secondary Education Act of 1965;
(2) give special consideration to proposals to extend or adapt for wider applications technologies, and associated educational materials, that the eligible applicant making the proposal has demonstrated to be effective in limited applications;
(3) ensure coordination between the National Science Foundation's programs for support of teacher training and programs developed under this section, with the objective of training teachers in the use of promising educational technologies; and
(4) consult, cooperate and coordinate with analogous programs and policies of other Federal agencies.

(d) Matching Requirement.—Awards shall be made under this section only to eligible applicants that will contribute resources, in cash or in kind, from non-Federal sources in an amount equal to 25 percent of the Federal award.

(e) Coordination.—The Director shall work with the Secretary to encourage use of technologies and educational materials developed under this section in Department of Education model programs established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act for instruction and training in the use of computers. In addition, the Director shall ensure that programs and activities developed under this section are reported to the Clearinghouse established under section 2012 of such Act for subsequent dissemination through the regional consortia established under subpart 2 of such Act.

(f) Planning Activities.—The Office of Science and Technology Policy shall ensure that planning activities for education and human resource development and for high performance computing within the Federal Coordinating Council for Science, Engineering, and Technology include consideration of the use of national computer networks for educational purposes, including distance learning and dissemination of curricular materials.

PART C—SCIENCE-TECHNOLOGY CENTERS
(1) AWARDS AUTHORIZED.—The Director is authorized to make awards to science-technology centers for—
(A) development of more effective, hands-on, interactive mathematics, science and technology programs and activities;
(B) replication or dissemination of effective programs and activities, giving special attention to the needs of female and minority children and economically disadvantaged areas; and
(C) development of new science-technology centers, including support for such centers to work with established science-technology centers to acquire proven educational programs.

(2) AWARD BASIS.—Funds awarded pursuant to this section shall be awarded on a competitive, merit review basis.

(3) CRITERIA.—Criteria for making awards under paragraph (1) may include—
(A) the potential for the educational program to have a significant impact on both formal and informal science education;
(B) the capability of the recipient institution to disseminate the material broadly;
(C) the extent of matching funds provided from non-Federal sources;
(D) the experience and qualifications of the staff of the recipient institution; and
(E) the overall excellence of the proposed program.

(b) SPECIAL CONSIDERATION.—In making awards pursuant to this section the Director shall give special consideration to programs designed primarily for elementary school-aged children.

(c) GEOGRAPHIC DISTRIBUTION.—In making awards pursuant to this section, the Director shall, to the extent practicable, ensure an equitable geographic distribution of such awards.

(d) USE OF CLEARINGHOUSE.—The Director shall report on such programs and activities developed under this section to the Clearinghouse established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act for subsequent dissemination through the regional consortia established under subpart 2 of such Act.

(e) AUTHORIZED ACTIVITIES.—Awards made under this section may be used for—
(1) scientific or technological exhibits developed for public display, either in a science-technology center or sponsored by a science-technology center but displayed in another facility;
(2) educational activities, such as curriculum development, teacher training programs, and student educational kits, developed for use by teachers for students; and
(3) other formal or informal science educational programs developed by science-technology centers.

(f) DEFINITIONS.—As used in this section—
(1) the term "informal science education" means those aspects of science education that occur outside the school classroom, usually voluntary, recreational, and interdisciplinary in nature, that are not directed by a specific curriculum;
(2) the term "science" means all physical, biological, and social sciences, mathematics, and engineering; and
(3) the term "science-technology center", which may include museums, planetariums, libraries and zoos, means a nonprofit institution open to the general public providing interactive exhibits, demonstrations, and informal science education designed to—
   (A) further public understanding of science and technology; and
   (B) illustrate how such science and technology interacts with society.
Such institutions may also be involved in formal educational activities.

PART D—GRANTS TO EDUCATIONAL AGENCIES FOR SYSTEMIC REFORM OF MATHEMATICS AND SCIENCE EDUCATION

20 USC 5331. SEC. 241. SYSTEMIC REFORM OF MATHEMATICS AND SCIENCE.
   (a) IN GENERAL.—The Director, in consultation with the Secretary, is authorized to make awards to States or State educational agencies for projects that implement system-wide improvement in elementary or secondary school mathematics and science education.
   (b) IMPROVEMENT COMPONENTS.—Each project for which an award is made pursuant to subsection (a) shall include the following components:
      (1) increased student achievement in mathematics and science;
      (2) improvements in organizational structure and decision-making;
      (3) modifications in the provision and allocation of resources regarding mathematics and science instruction;
      (4) improvement in the recruitment, retention and continuing professional development of teachers and other educators who instruct mathematics and science;
      (5) improved mathematics and science curriculum content and learning goals; and
      (6) use of other Federal funds including funds provided for the Dwight D. Eisenhower Mathematics and Science Education Act.
   (c) SPECIAL RULE.—In making awards pursuant to subsection (a), the Director shall—
      (1) to the extent practicable, ensure an equitable geographic distribution of such awards; and
      (2) give priority to States or State educational agencies whose improvement plans place a strong emphasis on increasing the academic achievement of females and minority students in mathematics and science.

PART E—TECHNICAL AMENDMENT

SEC. 251. TECHNICAL AMENDMENT.
   42 USC 1873. Section 14(f) of the National Science Foundation Act of 1950 is amended by inserting “or education” after “research”.
SEC. 252. NATIONAL CENTER FOR EDUCATION STATISTICS.
   Paragraph (4) of section 406(d) of the General Education Provisions Act (20 U.S.C. 1221e–1(d)) is amended by adding at the end the following:
“(G)(i) This paragraph shall not apply to—

“(I) the survey required by section 1303(c) of the Higher Education Amendments of 1986; or

“(II) to any longitudinal study concerning access, choice, persistence, progress, or attainment in postsecondary education.

“(ii) Any person, except those sworn to observe the limitation of this subsection, who uses any data as described in clause (i) provided by the Center, in conjunction with any other information or technique (including de-encryption), to identify any individual student, teacher, administrator, or other person and who discloses, publishes, or uses for a purpose other than that for which it was collected, or who otherwise violates clause (i) or (ii) of subparagraph (A), shall be fined under title 18, United States Code, or imprisoned not more than 5 years, or both.

“(iii) No employee or staff member of the Center or of an institution of higher education may be found criminally liable under subparagraph (C), based on a violation of subparagraph (A) or clause (i), if such employee or staff member has taken reasonable precautions, consistent with the purpose of this section, to ensure the confidentiality of data made available to the public.

“(H) Nothing in this paragraph shall restrict the right of the Comptroller General of the United States to gain access to any reports or other records, including information identifying individuals, in the Center’s possession; except that the same restrictions on disclosure that apply to the Center under subparagraphs (B) and (G) shall apply to the General Accounting Office.”.

SEC. 253. AMENDMENT OF JAMES MADISON MEMORIAL FELLOWSHIP ACT.

Section 813(a)(4) of the James Madison Memorial Fellowship Act is amended by striking the second sentence thereof.

TITLE III—HIGHER EDUCATION

PART A—GRADUATE FELLOWSHIPS AND TRAINEESHIPS

SEC. 301. STATEMENT OF PURPOSE.

It is the purpose of this part to avert the substantial shortage of American scientists and engineers projected to occur over the next 15 years by significantly increasing the number of graduate fellowships awarded by the National Science Foundation and to institute a program of graduate traineeships.

SEC. 302. GRADUATE FELLOWSHIPS.

(a) IN GENERAL.—The Director is authorized to increase the number of graduate fellowships awarded by the Foundation, so that, in fiscal year 1993 and each fiscal year thereafter, at least 1,200 fellowships are awarded annually.

(b) SPECIAL RULE.—In awarding fellowships pursuant to subsection (a), the Director shall ensure that a substantially increasing number of fellowships shall be awarded to women and minorities in fiscal year 1991 and in each succeeding fiscal year through fiscal year 2000.

(c) GRADUATE FELLOWSHIPS.—Section 10 of the National Science Foundation Act of 1950 is amended in the second sentence by...
striking "or nationals" and inserting ", nationals or lawfully admitted permanent resident aliens".

20 USC 5343.

SEC. 303. GRADUATE TRAINEESHIPS.

(a) IN GENERAL.—The Director is authorized to carry out a competitive, merit-based program of making awards to institutions of higher education to enable such institutions to conduct traineeship programs which encourage promising students, especially women and minorities, to continue their education and research in mathematics, science and engineering.

(b) SPECIAL RULE.—In making awards pursuant to subsection (a), the Director shall, to the extent practicable, ensure—

(1) an equitable geographic distribution of such grants;

(2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students in mathematics, science and engineering; and

(3) that special consideration is given to institutions of higher education that have demonstrated progress and an ongoing commitment to upgrading their capabilities to perform high quality research, and are not among the institutions currently receiving a large number of students with National Science Foundation graduate fellowships.

PART B—CENTERS OF EXCELLENCE

20 USC 5351.

SEC. 311. CENTERS OF EXCELLENCE OF UNDERGRADUATE TEACHING.

(a) ESTABLISHMENT.—The Director shall establish a program of making awards to encourage institutions of higher education to improve, and to give greater attention to, undergraduate instruction in science, mathematics and engineering. Awards under this section shall be made on a competitive, merit review basis to faculty with a record of excellence in teaching using the criteria described in subsection (c). Awards under this section shall be for a 3-year period, and the amount of each award shall be comparable to those under the Presidential Young Investigator program.

(b) USE OF FUNDS.—Awards made under this section shall be used to improve the quality of undergraduate instruction at the recipient institution. Awards made under this section may be used for such purposes as—

(1) development of innovative curriculum or teaching methods, including interdisciplinary courses and courses for nonscience majors;

(2) purchase of educational equipment for use by students and faculty;

(3) support for research and professional activities related to undergraduate education; and

(4) support of teaching fellows.

(c) CRITERIA.—Awards under this section shall be made on the basis of—

(1) the commitment of the institution to improve undergraduate education in science, mathematics and engineering and to assign appropriate importance to undergraduate instruction in determining faculty compensation and as a criterion for faculty promotion;

(2) the teaching ability and accomplishments of the faculty member applying for the award, including evidence that the
applicant has remained current with research developments; and
(3) the impact that the award will have on improving the quality of undergraduate instruction.

(d) DESIGNATION.—Institutions receiving grants under this section shall be designated "Centers of Excellence for Undergraduate Teaching".

TITLE IV—WOMEN AND MINORITIES IN MATHEMATICS, SCIENCE AND ENGINEERING

SEC. 401. STATEMENT OF PURPOSE.

It is the purpose of this title to expand and enhance National Science Foundation program activities that are specifically focused on increasing the educational and professional participation of women and minorities in the fields of mathematics, science and engineering.

SEC. 402. DISTINGUISHED VISITING PROFESSORS.

The Director is authorized to make awards to institutions of higher education to enable such institutions to support distinguished women and minority faculty members in mathematics, science and engineering to enable such faculty members to serve as "Distinguished Visiting Professors" at academic institutions that do not have sufficient resources to attract and retain faculty members of such professional stature on a permanent basis.

SEC. 403. FACULTY AWARDS FOR WOMEN AND MINORITIES.

The Director is authorized to make awards to institutions of higher education, other than research universities, to enable such institutions to recruit and retain women and minority faculty members in the fields of mathematics, science and engineering, and to obtain equipment and facilities necessary for the research activities of such faculty members.

SEC. 404. ALLIANCES FOR MINORITY PARTICIPATION.

(a) IN GENERAL.—The Director is authorized to make awards to institutions of higher education to enable such institutions of higher education to establish or maintain alliances, partnerships, or other cooperative arrangements between institutions of higher education with predominately minority enrollments and institutions of higher education with high quality research programs in mathematics, science or engineering.

(b) SPECIAL RULE.—In making awards pursuant to this title, the Director shall, to the extent practicable, ensure—

(1) an equitable geographic distribution of such awards; and

(2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students from programs in mathematics, science and engineering.
TITLE V—EDUCATION COORDINATION AND DEPARTMENT OF ENERGY PROGRAMS

SEC. 501. SCIENCE EDUCATION REPORT.

(a) Report Required.—The Director of the Office of Science and Technology Policy, through the Federal Coordinating Council on Science, Engineering, and Technology, shall prepare a report on science, mathematics, and engineering education to be submitted to Congress within 1 year after the date of enactment of this Act. The report shall include—

(1) a description of current Federal science, mathematics, and engineering education programs at all education levels;

(2) any specific statutory changes necessary to further assist the agencies' mathematics and science education goals; and

(3) a strategic plan for an interagency program to enhance science, mathematics, and engineering education, including—

(A) a statement of program goals;

(B) a description of implementation steps required to achieve such goals;

(C) a strategy for taking advantage of the strengths of Federal research and development facilities related to science, mathematics, and engineering education;

(D) provisions for outreach to teachers and others with direct access to students;

(E) a system for evaluating program effectiveness, including criteria for evaluation;

(F) criteria and procedures to facilitate and expedite either the loan or transfer of title to surplus equipment to schools, school districts, and colleges and universities;

(G) recommendations on how to enhance exchange of employees among agencies to share expertise in mathematics and science education; and

(H) mechanisms to coordinate the activities of the agencies which will implement the plan.

(b) Preparation and Updating.—Preparation of the plan required by subsection (a)(3) shall, at a minimum, include representatives of the Departments of Energy and Education, and the National Science Foundation. In subsequent years, the plan required by subsection (a)(3) shall be updated and submitted to Congress annually at the time of the President's budget request and shall include the funding levels in that budget for each agency to carry out each agency's portion of the plan.

SEC. 502. GENERAL EDUCATION REPORT.

The Department of Defense, the Department of Energy, the Department of Agriculture, the Department of Labor, the Department of Health and Human Services, the Department of Transportation, the Department of Justice, the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Department of Commerce shall each prepare and submit to the Secretary of Education, within 9 months of the enactment of this Act, a report on all educational activities supported, excluding activities described in section 501. The Secretary shall compile this
information and report to Congress within 1 year after the date of enactment of this Act. The report shall include—
(1) a summary of current education programs at all levels; and
(2) any specific statutory changes necessary to further assist the agencies’ education goals.

SEC. 503. DEPARTMENT OF ENERGY PROGRAMS.

(a) AUTHORIZATION.—
(1) IN GENERAL.—The Secretary of Energy is authorized to—
(A) provide paid administrative leave for employees of the Department of Energy or its research and development facilities who volunteer to interact with schools, colleges, universities, teachers, or students for the purpose of science, mathematics, and engineering education;
(B) establish a volunteer talent pool of scientists, mathematicians, and engineers who have retired from the Department of Energy or its research and development facilities to—
(i) serve as “Scientists in Residence” at schools and school districts for the purpose of assisting teachers with activities such as experiments, lectures, or materials;
(ii) serve as requested, as a science counselor to students; and
(iii) otherwise assist science, mathematics, and engineering classes;
(C) establish a Young Americans’ Summer Science Camp Program to provide secondary school students with a hands-on science experience as well as exposure to working scientists and career counseling; and
(D) establish a program for mathematics and science teachers, to provide such teachers serving large numbers of disadvantaged students with new strategies for mathematics and science instruction.

(2) SPECIAL RULE.—In carrying out the provisions of paragraph (1)(B) the Secretary of Energy, wherever possible acting through the Department’s research and development facilities, shall identify and match schools and school districts with retired scientists, mathematicians, and engineers.

(b) FACILITIES; NON-FEDERAL FUNDS.—Education activities assisted under this section may be conducted through Department of Energy research and development facilities. The Secretary is authorized to accept non-Federal funds to finance education activities.

(c) LIMITATIONS.—
(1) NATIONAL DEFENSE PRODUCTION ACTIVITIES.—Nothing in this section shall apply to activities of the Department of Energy or its contractors that are funded as national defense production activities.

(2) SPECIAL RULE.—Nothing in this section shall be construed to affect mathematics, science, and engineering education programs administered through the Department of Energy other than the Office of Energy Research.

(d) TERMINATION PROVISION.—The provisions of this section shall not take effect if a substantially identical program is included in the National Defense Authorization Act for Fiscal Year 1991.
(e) Definition.—For the purpose of this section, the term "research and development facilities" means, except as provided in subsection (c)(1), all Department of Energy single purpose and multipurpose National Laboratories and research and development facilities and programs, and any other facility or program operated by a contractor funded from the Office of Energy Research.

**TITLE VI—SCIENCE SCHOLARSHIPS**

**PART A—NATIONAL SCIENCE SCHOLARS PROGRAM**

SEC. 601. PURPOSE; APPROPRIATIONS AUTHORIZED.

(a) Purpose.—It is the purpose of this part—

1. to establish a National Science Scholars Program to recognize student excellence and achievement in the physical, life, and computer sciences, mathematics, and engineering;

2. to provide financial assistance to students under paragraph (1) to continue their postsecondary education in such fields of study at sustained high levels of performance;

3. to contribute to strengthening the leadership of the United States in such fields;

4. to strengthen the United States mathematics, science, and engineering base by offering opportunities to pursue postsecondary education in life, physical, and computer sciences, mathematics, and engineering;

5. to encourage role models in scientific, mathematics, and engineering fields for young people;

6. to strengthen the United States mathematics, scientific, and engineering potential by encouraging equal participation of women with men in mathematics, scientific, and engineering fields; and

7. to attract talented students to teaching careers in mathematics and science in elementary and secondary schools.

(b) Authorization of Appropriations.—There are authorized to be appropriated to the Department of Education $4,500,000 for fiscal year 1991 for awards to National Science Scholars.

SEC. 602. SCHOLARSHIPS AUTHORIZED.

(a) Program Authority.—The Secretary is authorized, in accordance with the provisions of this part, to carry out a program of awarding scholarships to students for the study of the physical, life, or computer sciences, mathematics, or engineering, who—

1. are selected by the President;

2. have demonstrated outstanding academic achievement in the physical, life, or computer sciences, mathematics, or engineering; and

3. show promise of continued outstanding academic performance in such field of study.

(b) Period of Awards.—

1. Period of Initial Award.—A student who satisfies the requirements of section 604(a) may receive a scholarship, for a period of 1 academic year, for the first year of undergraduate study at an institution of higher education.

2. Continuation Awards.—A student who satisfies the requirements of section 604(b) may receive additional scholar-
ships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study. A student may receive additional scholarships for not more than 3 academic years of undergraduate study, except that, in the case of a student who is enrolled in an undergraduate course of study that requires attendance for 5 academic years, the student may receive additional scholarships for not more than 4 academic years of undergraduate study.

(c) Use at Any Institution Permitted.—A student awarded a scholarship under this part may attend any institution of higher education, as defined in section 1201(a) of the Higher Education Act of 1965.

(d) National Science Scholars.—Students awarded scholarships under this part shall be known as “National Science Scholars”.

SEC. 603. SELECTION OF SCHOLARS.

(a) Selection Criteria for Initial Awards.—

(1) Selection Criteria.—The Director of the National Science Foundation shall develop and submit to the Secretary proposed criteria to be used in the selection of National Science Scholars for initial year awards under section 602(b)(1). Such criteria shall provide for the selection of such scholars on the basis of potential to successfully complete a postsecondary program in the physical, life, or computer sciences, mathematics, or engineering, and on the basis of motivation to pursue a career in such fields. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities. The Director shall determine the proposed criteria for measuring the potential and motivation of nominees.

(2) Publication.—The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

(b) Selection Process for Initial Awards.—

(1) Nominating Committee.—Each State desiring to qualify its students for selection as a National Science Scholar shall establish a nominating committee. Such committee shall be appointed by the chief State school officer or by an existing grant agency or panel designated by such officer, and shall be approved by the Secretary. The nominating committee shall be a broad-based committee composed of educators, scientists, mathematicians, and engineers, who shall serve as volunteers without compensation.

(2) Nominations.—The nominating committee in each State shall submit to the President the nominations of at least four individuals from each congressional district in the State, at least half of whom are female. Such selections shall be ranked in order of priority.

(3) Selection.—The President, after consultation with the Secretary and the Director of the National Science Foundation, shall select two National Science Scholars for each academic year from each congressional district, at least one of whom shall be female.

(4) Announcement and Award of Scholarships.—The selection process shall be completed, and the announcement of the selection of National Science Scholars shall be made by the President prior to January 1st of each fiscal year. The Secretary
shall notify each Member of Congress of selections made from such Member’s district and State before the public announce­ment by the President. Presentation of scholarships may be made in a public ceremony.

(5) CONGRESSIONAL DISTRICT.—For purposes of this subsection, the term “congressional district” includes the part or all of a State (within the meaning of section 1201(b) of the Higher Education Act of 1965) represented by a Member or Delegate of the House of Representatives, and includes the Commonwealth of the Northern Marianas.

(c) CONTINUATION AWARDS.—The Secretary shall award additional scholarships under section 602(b)(2) to recipients of initial awards under section 602(b)(1) who the Secretary determines meet the requirements of section 604(b).

(d) DISBURSAL OF SCHOLARSHIP PROCEEDS.—Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this part to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student until the student is enrolled at an institution of higher education.

(e) SPECIAL RULE.—The Director and the Secretary shall encourage the support and assistance of civic groups, the business community, professional associations, institutions of higher education, and others in providing scholarship assistance to National Science Scholarship finalists.

SEC. 604. ELIGIBILITY OF SCHOLARS.

(a) REQUIREMENTS FOR INITIAL AWARD.—To be eligible to receive a scholarship under section 602(b)(1), a student shall—

(1) be scheduled to graduate from a public or private secondary school, or to obtain the equivalent of a certificate of graduation (as recognized by the State in which the student resides), during the school year in which the award is made; 

(2) be a citizen or national of the United States or the entities set forth in section 603(b)(5), or be an alien lawfully admitted to the United States for permanent residence;

(3) have demonstrated outstanding academic achievement in secondary school in physical, life, or computer sciences, mathematics, or engineering;

(4) have been accepted for enrollment at an institution of higher education as a full-time undergraduate student (as determined by the institution); and

(5) have declared a major in 1 of the physical, life, or computer sciences, mathematics, or engineering, or provided a written statement to the State of his or her intent to major in 1 of these fields of study, if it is the policy of the institution at which the student has been accepted for enrollment that students not declare a major until a later point in their course of study.

(b) REQUIREMENTS FOR CONTINUATION AWARDS.—A student who has received a scholarship under section 602(b)(1) may receive a scholarship for a subsequent academic year of undergraduate education under section 602(b)(2) if the student—

(1) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary; and

(2) continues to major in, or provides a statement to the State as described in subsection (a)(5) of his or her continuing intent
to major in, one of the physical, life, or computer sciences, mathematics, or engineering; and

(3) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(c) **WAIVER OF FULL-TIME ATTENDANCE REQUIREMENT.**—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(d) **FAILURE TO MEET ELIGIBILITY REQUIREMENTS.**—In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this part shall be suspended in accordance with the regulations of the Secretary.

(e) **REINSTATMENT OF ELIGIBILITY.**—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this part may be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, child-rearing, and other family responsibilities.

(f) **NOTIFICATION OF SECONDARY SCHOOLS.**—The Secretary shall notify all public and private secondary schools and all institutions of higher education in each State annually of the availability of scholarships under this part.

**SEC. 605. SCHOLARSHIP AMOUNT.**

(a) **AMOUNT OF AWARD.**—Except as provided in subsections (b) and (c), the amount of a scholarship awarded under this part for any academic year shall be $5,000.

(b) **RELATION TO COST OF ATTENDANCE.**—Notwithstanding subsection (a), the amount of a scholarship awarded under this part shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this part shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(c) **ADJUSTMENTS FOR INSUFFICIENT APPROPRIATIONS.**—In the event that funds available in a fiscal year are insufficient to fully fund all awards under this part, the amount paid to each student shall be reduced proportionately.

**SEC. 606. SUMMER EMPLOYMENT OPPORTUNITIES FOR SCHOLARS.**

(a) **PRIORITY FOR SUMMER EMPLOYMENT.**—To the extent that they are otherwise qualified, students receiving scholarships under this part shall be given priority consideration for federally financed summer employment in federally funded research and development centers, that, to the maximum extent practicable, complements and reinforces the educational program of these students.

(b) **FEDERAL AGENCY COOPERATION.**—Federal agencies shall cooperate fully with the Secretary and participate actively in providing appropriate summer employment opportunities for such students.
PART B—ROBERT NOYCE SCHOLARSHIPS

SEC. 611. ROBERT NOYCE SCHOLARSHIPS.

(a) Program Authorized.—There is established a scholarship program for students in a baccalaureate degree program in physical, life, or computer sciences, mathematics, or engineering who are willing to commit themselves to teaching elementary or secondary school mathematics or science.

(b) Period of Awards.—

(1) Period of Initial Award.—A student who satisfies the requirements of subsection (g)(1) may receive a scholarship for a period of 1 academic year of undergraduate study at an institution of higher education.

(2) Continuation Awards.—

(A) First Continuation Award.—A student who satisfies the requirements of subsection (g)(2) may receive an additional scholarship, awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study.

(B) Second Continuation Award.—An additional period of scholarship support, not to exceed 1 year, shall be available to recipients of scholarships under subsection (a) who have completed requirements for the baccalaureate degree but require additional education courses in order to obtain certification to teach.

(c) Use at Any Institution Permitted.—A student awarded a scholarship under this section may attend any institution of higher education.

(d) Designation.—The individuals awarded scholarships under subsection (a) shall be referred to as the “Robert Noyce Mathematics and Science Teacher Corps”.

(e) Selection.—

(1) Selection Process for Initial Awards.—

(A) Selection Criteria.—The Director shall develop and submit to the Secretary proposed application procedures and criteria to be used in the selection of nominees under this section. Such criteria shall provide for the selection of such nominees on the basis of academic merit and demonstrated accomplishment in physical, life, or computer science, mathematics, or engineering, and on the basis of motivation to pursue a career in science, mathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.

(B) Publication.—The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

(C) Merit Review Panel.—Award recipients shall be nominated from among applicants by a merit review panel composed of 8 individuals, 4 of whom shall be appointed by the Director and 4 of whom shall be appointed by the Secretary. Members of the panel shall not be employees of the United States and shall serve as volunteers without compensation. Nominees shall be selected on the basis of selection criteria, which shall be developed and published.
in accordance with subparagraphs (A) and (B). The panel shall rank the nominees in order of priority.

(D) AWARDING OF SCHOLARSHIPS.—The panel shall submit its nominees to the President, who shall, after consultation with the Director and the Secretary, award not more than 500 scholarships under subsection (a).

(2) CONTINUATION AWARDS.—The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (g)(2) or (b)(2)(B).

(f) DISBURSAL OF SCHOLARSHIP PROCEEDS.—Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

(g) ELIGIBILITY.—

(1) INITIAL ELIGIBILITY.—Only individuals who are—

(A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence;

(B) majoring in the physical, life, or computer sciences, mathematics, or engineering;

(C) in the last 2 years of a baccalaureate degree program; and

(D) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education), shall be eligible for awards under this section.

(2) REQUIREMENTS FOR FIRST CONTINUATION AWARDS.—A student who has received a scholarship under this section may receive a first continuation award under subsection (b)(2)(A) for a subsequent academic year of undergraduate education if the student—

(A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;

(B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and

(C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(h) WAIVER OF FULL-TIME ATTENDANCE REQUIREMENT.—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(i) FAILURE TO MEET ELIGIBILITY REQUIREMENTS.—In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

(j) REINSTATEMENT OF ELIGIBILITY.—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section could be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, child-rearing, and other family responsibilities.
(k) Notification of Schools.—The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.

(l) Scholarship Amount.—

(1) Amount of Award.—Except as provided in paragraph (2), the amount of a scholarship awarded under this section for any academic year shall be $5,000.

(2) Relation to Cost of Attendance.—Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this section shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(m) Service Requirement.—

(1) Teaching Obligation.—Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete, within 6 years after graduation from the baccalaureate degree program for which the award was made or within 6 years after completion of the additional period of scholarship support, if applicable, at least 2 years of service as an elementary or secondary mathematics or science teacher for each year of scholarship support under this section, except that such requirement shall not exceed a total of 4 years. Service required under this paragraph shall be performed at a school receiving assistance under chapter 1 of title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2701 et seq.).

(2) Repayment Alternative.—As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States, except that such payment shall be reduced, for each year of service that the individual has successfully completed, by a fraction equal to 1 divided by the number of years of service the student is obligated to perform. Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

(3) Exceptions.—The Secretary may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965, except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.

(n) Authorization of Appropriations.—There are authorized to be appropriated to the National Science Foundation, for transfer to the Department of Education, $2,500,000 for fiscal year 1991,
$5,000,000 for fiscal year 1992, and $7,500,000 for fiscal year 1993, to carry out the provisions of this part.

PART C—NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY

SEC. 621. NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY. 20 USC 5411.

(a) Establishment of Academy.—The Secretary shall establish a National Academy of Science, Space, and Technology for the instruction and preparation of selected individuals for service in a science, mathematics, or engineering related capacity in the employ of the United States or a United States corporation.

(b) Advisory Board.—

(1) Membership.—The Secretary, after consultation with the Director, shall appoint an Advisory Board for the Academy consisting of a broadly representative group of scientists, engineers, educators, and businessmen representing high-technology industries.

(2) Functions.—The Advisory Board shall—

(A) develop criteria to be used in the selection of recipients of scholarships under this section;

(B) select scholarship recipients from among nominations received under subsection (e); and

(C) identify fields of science, mathematics, and engineering which will be given priority in awarding scholarships under this section.

In making determinations under subparagraph (C), the Advisory Board shall take into consideration requirements of Government and industry for technical personnel in fields of science, mathematics, and engineering which are relevant to emerging industrial technologies of significant economic importance and in which shortages in the work force of the United States are projected.

(c) Scholarships Authorized.—(1) The Academy shall establish a scholarship program for students to pursue the baccalaureate degree in fields of science, mathematics, or engineering who are willing to commit themselves to service described in subsection (n).

(2) A student who satisfies the requirements of subsection (h)(1) may receive a scholarship for a period of 1 academic year of undergraduate study at a Member Institute.

(3) A student who satisfies the requirements of subsection (h)(2) may receive additional scholarships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study to a maximum of 3 awards.

(4) The individuals awarded scholarships under this section shall be referred to as the "Science, Space, and Technology Corps".

(5) An individual awarded a scholarship under this section may attend any institution of higher education that offers the baccalaureate degree in science, mathematics, or engineering. Such institutions shall be designated as Member Institutes of the Academy.

(d) Nominations for Scholarship Awards.—Members and Delegates of the House of Representatives may each nominate 6 or more individuals, at least half of whom are female, for scholarships.

(e) Selection for Initial Awards.—(1) The Board shall develop criteria for selection of nominees under this section. Such criteria
shall provide for the selection of such nominees on the basis of academic merit and motivation to pursue a career in science, mathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.

(2) From among nominees received pursuant to subsection (d), the Board shall select for award of a scholarship one individual from each Congressional District.

(f) Continuation Awards.—The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (h)(2).

(g) Disbursement of Scholarship Proceeds.—Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

(h) Eligibility.—

(1) Initial Eligibility.—Only individuals who are—

(A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence;

(B) majoring in the physical, life, or computer sciences, mathematics, or engineering; and

(C) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education),

shall be eligible for awards under this section.

(2) Requirements for Continuation Awards.—A student who has received a scholarship under this section may receive a continuation award under subsection (f) for a subsequent academic year of undergraduate education if the student—

(A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;

(B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and

(C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(i) Waiver of Full-Time Attendance Requirement.—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(j) Failure to Meet Eligibility Requirements.—In the event that the student fails to meet the requirements of this section, the student’s eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

(k) Reinstatement of Eligibility.—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section may be reinstated if the recipient seeks to reenter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, child-rearing, and other family responsibilities.

(l) Notification of Schools.—The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.
(m) SCHOLARSHIP AMOUNT.—

(1) AMOUNT OF AWARD.—Except as provided in paragraphs (2) and (3), the amount of a scholarship awarded under this section for any academic year shall be $5,000.

(2) RELATION TO COST OF ATTENDANCE.—Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this section shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(3) ADJUSTMENTS FOR INSUFFICIENT APPROPRIATIONS.—In the event that funds available in a fiscal year are insufficient to fully fund all awards under this section, the amount paid to each student shall be reduced proportionately.

(n) SERVICE REQUIREMENT.—

(1) SCIENCE, SPACE, AND TECHNOLOGY SCHOLARSHIPS.—Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete four years of—

(A) service in a physical, life, or computer science, mathematics, or engineering related capacity in the employ of the United States or any corporation or other entity, organized under the laws of the United States or of a State of the United States, at least 50 percent of which is owned by United States nationals, and which is engaged in scientific or engineering research or endeavor;

(B) postgraduate education in physical, life, or computer science, mathematics, or engineering at an institution of higher education; or

(C) a combination of service and education described under subparagraphs (A) and (B).

(2) REPAYMENT OBLIGATION.—As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received the amounts were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States. Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

(3) EXCEPTIONS.—The Secretary may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965, except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.
(c) Authorization of Appropriations.—There are authorized to be appropriated to carry out this section $2,200,000 for fiscal year 1991.

PART D—ADDITIONAL PROVISIONS

SEC. 631. EFFECT OF CERTAIN CONTROLLED SUBSTANCE AND FELONY CONVICTIONS.

(a) General Rule.—Except as provided in subsection (b), or by a court under the authority of section 5301 of the Anti-Drug Abuse Act of 1988 (102 Stat. 4310), if any person is convicted under Federal or State law of the illegal use, possession, or distribution of a controlled substance (as such term is defined in the Controlled Substances Act), or of any crime which is a felony under Federal law or for an act which, if committed in a Federal jurisdiction, would be a felony under Federal law, and such crime was committed during a period in which such person received an award under this title, such person shall not be eligible to receive any further such awards, and shall be liable to the United States for the repayment, within 1 year after such conviction, of all amounts received pursuant to such awards, plus the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as of the time of such conviction, as determined by the Treasurer of the United States.

(b) Exemption.—A person subject to the provisions of subsection (a) may be exempted from those provisions in whole or in part if—

(1) that person, within 90 days of a conviction described in subsection (a), petitions the Secretary of Education for a good cause exemption from subsection (a); and

(2) the Secretary of Education approves the petition.

SEC. 632. REPORT.

The National Science Foundation shall prepare and submit to the Congress no later than 1 year after the date of enactment of this Act a report examining current efforts to improve the quality of elementary and secondary mathematics and science education and career potential for the underprivileged through joint efforts of business, school districts, and institutions of higher education, and recommending ways the Federal Government may encourage such efforts. The report shall include, to the extent possible, a comprehensive list of existing efforts, an assessment of what factors have made some such efforts more successful than others, and a review of the extent to which such efforts have drawn on Federal programs.

TITLE VII—GENERAL PROVISIONS AND AUTHORIZATION OF APPROPRIATIONS

PART A—AUTHORIZATION OF APPROPRIATIONS

SEC. 701. AUTHORIZATION OF APPROPRIATIONS.

From the amounts authorized to be appropriated to the National Science Foundation pursuant to the National Science Foundation Authorization Act of 1988, there are authorized to be appropriated—
(1) in addition to any amount obligated in fiscal year 1990 for programs on applications of advanced technology within the Education and Human Resources Directorate—

(A) $10,000,000 for fiscal year 1991 to carry out the provisions of section 221, of which $5,000,000 shall be available to carry out the provisions of subsection (a) of such section and $5,000,000 shall be available to carry out the provisions of subsection (b) of such section;

(B) $11,000,000 for fiscal year 1992 to carry out the provisions of section 221, of which $5,500,000 shall be available to carry out the provisions of subsection (a) of such section and $5,500,000 shall be available to carry out the provisions of subsection (b) of such section; and

(C) $12,500,000 for fiscal year 1993 to carry out the provisions of section 221, of which $6,250,000 shall be available to carry out the provisions of subsection (a) of such section and $6,250,000 shall be available to carry out the provisions of subsection (b) of such section;

(2) in addition to any amounts obligated in fiscal year 1990 for informal science education programs, $15,000,000 for fiscal year 1991, $17,000,000 for fiscal year 1992, and $19,400,000 for fiscal year 1993 to carry out the provisions of section 231;

(3) in addition to any amounts obligated in fiscal year 1990 for statewide education programs, $17,000,000 for fiscal year 1991, $19,400,000 for fiscal year 1992, and $22,100,000 for fiscal year 1993 to carry out the provisions of section 241;

(4) in addition to any amounts obligated in fiscal year 1990 for undergraduate education programs, $16,000,000 for fiscal year 1991, $18,200,000 for fiscal year 1992, and $20,700,000 for fiscal year 1993 to carry out the provisions of section 311;

(5) $37,900,000 for fiscal year 1991, $60,600,000 for fiscal year 1992, and $67,800,000 for fiscal year 1993 to support of graduate fellowships, including expansion of the number of graduate fellowships pursuant to the provisions of section 302;

(6) $10,000,000 for fiscal year 1991, $20,000,000 for fiscal year 1992, and $30,000,000 for fiscal year 1993 to carry out the provisions of section 303; and

(7) in addition to any amounts obligated in fiscal year 1990 for programs to increase participation by women and minorities in careers in science, mathematics and engineering, $17,000,000 for fiscal year 1991, $19,400,000 for fiscal year 1992, and $22,000,000 for fiscal year 1993 to carry out the provisions of title IV.

PART B—DEFINITIONS

SEC. 711. DEFINITIONS.

As used in this Act—

(1) the term "consortium", refers to a combination of school districts, colleges, universities, other formal or informal educational entities, State and local governments, professional organizations, community groups, businesses and industries, or any combination thereof;

(2) the term "Director", unless otherwise specified, shall refer to the Director of the National Science Foundation;
(3) the term "elementary school" has the same meaning given that term in section 1471(8) of the Elementary and Secondary Education Act of 1965;

(4) the term "Foundation" refers to the National Science Foundation;

(5) the term "institution of higher education" has the same meaning given that term in section 1201(a) of the Higher Education Act of 1965;

(6) the term "local educational agency" has the same meaning given that term in section 1471(12) of the Elementary and Secondary Education Act of 1965;

(7) the term "minorities" refers to members of those racial and ethnic groups underrepresented in mathematics, science and engineering, including American Indians, Black Americans, Hispanic Americans, Native Alaskans, or Native Pacific Islanders;

(8) the terms "scholarship" and "fellowship" refers to a financial award made to a student which enables a student to pursue a desired course of study at an institution of higher education;

(9) the term "secondary school" has the same meaning given that term in section 1471(21) of the Elementary and Secondary Education Act of 1965;

(10) the term "Secretary", unless otherwise specified, refers to the Secretary of the Department of Education;

(11) the term "State educational agency" has the same meaning given that term in section 1471(23) of the Elementary and Secondary Education Act of 1965; and

(12) the term "traineeship" means a form of financial support provided to an institution of higher education to—

(A) be used to provide stipends to graduate students selected by such institution; and

(B) help defray educational costs of educating such graduate students.

PART C—MISCELLANEOUS PROVISIONS

SEC. 721. STUDENT ASSISTANCE GENERAL PROVISIONS.

The Secretary shall extend until January 1, 1991 the public comment period on the proposed regulations modifying part 668 of title 34, Code of Federal Regulations, concerning clock and credit hour conversion.

SEC. 722. PUBLIC LAW 81-874.

(a) Federal Contributions.—Section 2 of Public Law 81-874 (20 U.S.C. 237) is amended—

(1) by redesignating the second subsection (d), as added by section 7(a) of Public Law 101-305, as subsection (e); and

(2) by adding a new subsection at the end thereof to read as follows:

"(f) Beginning with fiscal year 1991, any school district which (1) as demonstrated by written evidence from the United States Forest Service satisfactory to the Secretary, contains between 50,000 and 55,000 acres of land that has been acquired by the United States Forest Service between 1915 and 1990, and (2) serves a county chartered by State law in 1875, shall be deemed to have met the requirements of subsection 2(a)(1)(C)."."
(b) Payments.—Section 5(e)(1)(D) of Public Law 81–874 (20 U.S.C. 240) (hereafter in this section referred to as the "Act") shall not apply to any local educational agency that was an agency described in section 5(c)(2)(A)(ii) of the Act in fiscal year 1990 but is an agency described in section 5(c)(2)(A)(iii) in fiscal year 1991, 1992, or 1993 as a result of families moving off base due to a landfill or health concern or an environmental hazard, or due to risk assessment, investigation, testing or remediation for such concern or hazard, and any such local educational agency shall be deemed to belong to the category described in section 5(c)(2)(A)(ii) for each of the fiscal years 1991, 1992, and 1993.

(c) Sunset Provision.—The provisions of subsection (b) shall apply only during the period beginning on the date of enactment of this Act and ending on September 30, 1993.

(d) Discretionary Allocations.—

(1) In General.—Section 5(e)(1)(B) of Public Law 81–874 (20 U.S.C. 240(e)(1)(B)) is amended to read as follows:

"(B)(i) For any fiscal year beginning after September 30, 1990, the Secretary shall first allocate to any local educational agency that is, and in fiscal year 1987 would have been, described in subsection (c)(3)(A)(i) and that received a payment under section 3(b) for fiscal year 1987, an amount that is not less than the product of—

"(I) 100 percent of the per pupil amount paid to such agency under section 3(b) for fiscal year 1987; and

"(II) the number of children described in section 3(b) in average daily attendance in the fiscal year for which the determination under section 3(b) is made, not to exceed the number of such eligible children claimed by such agency in fiscal year 1987.

"(ii) If the amount appropriated for section 3(b) in any fiscal year exceeds the amount appropriated for such section for fiscal year 1990, the Secretary shall use such excess funds—

"(I) first, to allocate to any such agency, for such children that exceed the number of such eligible children claimed by the agency in fiscal year 1987, the amount described in subsection (c)(3)(B)(i)(I); and

"(II) second, to allocate remaining funds in accordance with subsection (c)(3)(B)."

(2) Special Rule.—Section 5(e) of Public Law 81–874 (20 U.S.C. 240(e)) is further amended by striking out paragraph (3).

SEC. 723. TECHNICAL AMENDMENT.

Section 312(5) of the Adult Education Act (20 U.S.C. 1201a(5)) is amended by inserting ", or to perform a service function for," after "direction of" the first place it appears.
SEC. 731. EFFECTIVE DATE.

The provisions of this Act shall take effect on October 1, 1990, or the date of enactment of this Act, whichever is later.

Approved November 16, 1990.