

**Editorial Notes**

## REFERENCES IN TEXT

That Act, referred to in subsec. (a), is Pub. L. 95-617, Nov. 9, 1978, 92 Stat. 3117, known as the Public Utility Regulatory Policies Act of 1978. For complete classification of this Act to the Code, see Short Title note set out under section 2601 of Title 16, Conservation, and Tables.

## SUBCHAPTER XIII—DEPARTMENT OF ENERGY SCIENCE EDUCATION PROGRAMS

**Editorial Notes**

## CODIFICATION

This subchapter was enacted as part of part E (§§3161-3168) of title XXXI of div. C of the National Defense Authorization Act for Fiscal Year 1991, known as the Department of Energy Science Education Enhancement Act, and not as part of the Department of Energy Organization Act which comprises this chapter.

**§ 7381. Findings and purposes****(a) Findings**

The Congress finds the following:

(1) Scientific, technical, and engineering competence is essential to the Nation's future well-being.

(2) The scientific, technical, and engineering capability at the Federal laboratories is unmatched throughout the world.

(3) Superb research, development, testing, and evaluation occur in Department of Energy research and development facilities.

(4) Department of Energy research and development facilities will play an increasing role in assuring that the United States remains competitive in world markets.

(5) Improvements in mathematics, science, and engineering education are needed desperately to provide the trained and educated citizenry essential to the future competitiveness of the United States.

(6) The future health and vitality of the economy of the United States is predicated on the availability of an adequate supply of scientists, mathematicians, and engineers to provide for growing needs and to replenish the workforce.

(7) United States college and university enrollment in science, mathematics, and engineering programs is sharply declining at undergraduate, graduate, and post-graduate levels.

(8) The Federal Government is the largest United States employer of research scientists, mathematicians, and engineers, and the Department of Energy has a growing need for scientists, mathematicians, and engineers at a time when these enrollments are declining.

(9) Women and minorities are grossly underrepresented in science and mathematics fields, and this group represents more than 80 percent of the projected increase in the national workforce through the year 2000.

**(b) Purposes**

The purposes of this subchapter are—

(1) to encourage the development and implementation of science, mathematics, and engineering education programs at the Depart-

ment of Energy and at its research and development facilities as part of a national effort to improve science, mathematics, and engineering education; and

(2) to provide more efficient coordination among science, mathematics, and engineering education programs.

(Pub. L. 101-510, div. C, title XXXI, §3162, Nov. 5, 1990, 104 Stat. 1840.)

**Editorial Notes**

## REFERENCES IN TEXT

This subchapter, referred to in subsec. (b), was in the original "this part", meaning part E of title XXXI of div. C of Pub. L. 101-510, which is classified principally to this subchapter. For complete classification of part E to the Code, see Short Title note set out below and Tables.

**Statutory Notes and Related Subsidiaries**

## SHORT TITLE

Pub. L. 101-510, div. C, title XXXI, §3161, Nov. 5, 1990, 104 Stat. 1840, provided that: "This part [part E (§§3161-3168) of title XXXI of div. C of Pub. L. 101-510, enacting this subchapter and amending section 7112 of this title] may be cited as the 'Department of Energy Science Education Enhancement Act'."

## UNIVERSITY-BASED RESEARCH COLLABORATION PROGRAM

Pub. L. 105-85, div. C, title XXXI, §3155, Nov. 18, 1997, 111 Stat. 2044, which was formerly set out as a note under this section, was renumbered section 4814 of Pub. L. 107-314, the Bob Stump National Defense Authorization Act for Fiscal Year 2003, by Pub. L. 108-136, div. C, title XXXI, §3141(k)(9)(A)-(C), Nov. 24, 2003, 117 Stat. 1785, and is classified to section 2795 of Title 50, War and National Defense.

## PART A—SCIENCE EDUCATION ENHANCEMENT

**Editorial Notes**

## CODIFICATION

Pub. L. 110-69, title V, §5003(d)(1), Aug. 9, 2007, 121 Stat. 602, added heading.

**§ 7381a. Science education programs****(a) Programs**

The Secretary is authorized to establish programs to enhance the quality of mathematics, science, and engineering education. Any such programs shall be operated at or through the support of Department research and development facilities, shall use the scientific resources of the Department, and shall be consistent with the overall Federal plan for education and human resources in science and technology developed by the Federal Coordinating Council for Science, Engineering, and Technology.

**(b) Organization of science, engineering, and mathematics education programs****(1) Director of Science, Engineering, and Mathematics Education**

Notwithstanding any other provision of law, the Secretary, acting through the Under Secretary for Science (referred to in this subsection as the "Under Secretary"), shall appoint a Director of Science, Engineering, and Mathematics Education (referred to in this subsection as the "Director") with the prin-

cipal responsibility for administering science, engineering, and mathematics education programs across all functions of the Department.

**(2) Qualifications**

The Director shall be an individual, who by reason of professional background and experience, is specially qualified to advise the Under Secretary on all matters pertaining to science, engineering, and mathematics education at the Department.

**(3) Duties**

The Director shall—

(A) oversee all science, engineering, and mathematics education programs of the Department;

(B) represent the Department as the principal interagency liaison for all science, engineering, and mathematics education programs, unless otherwise represented by the Secretary or the Under Secretary;

(C) prepare the annual budget and advise the Under Secretary on all budgetary issues for science, engineering, and mathematics education programs of the Department;

(D) increase, to the maximum extent practicable, the participation and advancement of women and underrepresented minorities at every level of science, technology, engineering, and mathematics education; and

(E) perform other such matters relating to science, engineering, and mathematics education as are required by the Secretary or the Under Secretary.

**(4) Staff and other resources**

The Secretary shall assign to the Director such personnel and other resources as the Secretary considers necessary to permit the Director to carry out the duties of the Director.

**(5) Assessment**

**(A) In general**

The Secretary shall offer to enter into a contract with the National Academy of Sciences under which the National Academy, not later than 5 years after, and not later than 10 years after, August 9, 2007, shall assess the performance of the science, engineering, and mathematics education programs of the Department.

**(B) Considerations**

An assessment under this paragraph shall be conducted taking into consideration, where applicable, the effect of science, engineering, and mathematics education programs of the Department on student academic achievement in science and mathematics.

**(6) Authorization of appropriations**

There are authorized to be appropriated such sums as are necessary to carry out this subsection.

**(c) Relationship to other Department activities**

The programs described in subsection (a) shall supplement and be coordinated with current activities of the Department, but shall not supplant them.

**(d) Science, Engineering, and Mathematics Education Fund**

The Secretary shall establish a Science, Engineering, and Mathematics Education Fund, using not less than 0.3 percent of the amount made available to the Department for research, development, demonstration, and commercial application for each fiscal year, to carry out sections 7381b, 7381c, and 7381c-1 of this title.

**(e) Annual plan for allocation of education funding**

The Secretary shall submit to Congress as part of the annual budget submission for a fiscal year a report describing the manner in which the Department has complied with subsection (d) for the prior fiscal year and the manner in which the Department proposes to comply with subsection (d) during the following fiscal year, including—

(1) the total amount of funding for research, development, demonstration, and commercial application activities for the corresponding fiscal year;

(2) the amounts set aside for the Science, Engineering, and Mathematics Education Fund under subsection (d) from funding for research activities, development activities, demonstration activities, and commercial application activities for the corresponding fiscal year; and

(3) a description of how the funds set aside under subsection (d) were allocated for the prior fiscal year and will be allocated for the following fiscal year.

**(f) Programs for students from under-represented groups**

In carrying out a program under subsection (a), the Secretary shall give priority to activities that are designed to encourage students from under-represented groups to pursue scientific and technical careers.

(Pub. L. 101-510, div. C, title XXXI, §3164, Nov. 5, 1990, 104 Stat. 1841; Pub. L. 109-58, title XI, §§1102(a), 1105(a), Aug. 8, 2005, 119 Stat. 938, 939; Pub. L. 110-69, title V, §5003(a), Aug. 9, 2007, 121 Stat. 601.)

**Editorial Notes**

**AMENDMENTS**

2007—Subsecs. (b), (c). Pub. L. 110-69, §5003(a)(1), (2), added subsec. (b) and redesignated former subsec. (b) as (c). Former subsec. (c) redesignated (d).

Subsec. (d). Pub. L. 110-69, §5003(a)(3), added subsec. (d) and struck out former subsec. (d). Former text read as follows: “The Secretary shall use not less than 0.3 percent of the amount made available to the Department for research, development, demonstration, and commercial application for fiscal year 2006 and each fiscal year thereafter to carry out activities authorized by this subchapter.”

Pub. L. 110-69, §5003(a)(1), redesignated subsec. (c) as (d). Former subsec. (d) redesignated (f).

Subsec. (e). Pub. L. 110-69, §5003(a)(3), added subsec. (e).

Subsec. (f). Pub. L. 110-69, §5003(a)(1), redesignated subsec. (d) as (f).

2005—Subsec. (c). Pub. L. 109-58, §1102(a), added subsec. (c).

Subsec. (d). Pub. L. 109-58, §1105(a), added subsec. (d).

**§ 7381b. Laboratory cooperative science centers and other authorized education activities****(a) Activities**

The Secretary is authorized to:

(1) Support research appointments for college and university science and engineering students, and for faculty-student teams, at Department research and development facilities.

(2) Support research appointments for high school science teachers at Department research and development facilities.

(3) Support research apprenticeship appointments at Department research and development facilities for students underrepresented in science and technology careers.

(4) Support research experience programs at Department research and development facilities for nationally selected high school honor students.

(5) Operate mathematics and science education programs for elementary and secondary students at Department research and development facilities.

(6) Establish a museum-based science education program.

(7) Establish collaborative inner-city and rural partnership programs designed to meet the special mathematics and science education needs of students in inner-city and rural areas.

(8) Provide paid administrative leave for employees of the Department or Department research and development facilities who volunteer to interact with schools, colleges, universities, teachers, or students for the purpose of science, mathematics, and engineering education.

(9) Establish a talent pool of volunteer scientists, mathematicians, and engineers who have retired from the Department or Department research and development facilities to serve at schools and school districts for the purpose of (A) assisting teachers, with activities such as experiments, lectures, or the preparation of materials; (B) serving as counselors to students on science, mathematics, and engineering; and (C) otherwise assisting science, mathematics, and engineering classes. The Secretary, acting through Department research and development facilities, shall, wherever possible, identify and match schools and school districts with retired scientists, mathematicians, and engineers.

(10) 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.

(11) Establish a program for mathematics and science teachers to provide teachers serving large numbers of disadvantaged students with new strategies for mathematics and science instruction.

(12) Support graduate students and, through university-based cooperative programs, undergraduate students for the purpose of encouraging more students to pursue scientific and technical careers, with a particular focus on the recruitment of women and minority students.

(13) Establish a prefreshman enrichment program in which middle-school students attend

summer workshops on mathematics, science, and engineering conducted by universities on their campuses.

(14) Support competitive events for students under the supervision of teachers, designed to encourage student interest and knowledge in science and mathematics.

(15) Support competitively-awarded, peer-reviewed programs to promote professional development for mathematics teachers and science teachers who teach in grades from kindergarten through grade 12 at Department research and development facilities.

(16) Support summer internships at Department research and development facilities, for mathematics teachers and science teachers who teach in grades from kindergarten through grade 12.

(17) Sponsor and assist in educational and training activities identified as critical skills needs for future workforce development at Department research and development facilities.

**(b) Use of facilities**

Any of the activities authorized by subsection (a) may be conducted through Department research and development facilities. The Secretary may designate facilities conducting such education activities as "Laboratory Cooperative Science Centers".

**(c) Funding**

The Secretary is authorized to accept non-Federal funds to finance education activities described in subsection (a).

(Pub. L. 101-510, div. C, title XXXI, § 3165, Nov. 5, 1990, 104 Stat. 1841; Pub. L. 102-25, title VII, § 704(d), Apr. 6, 1991, 105 Stat. 120; Pub. L. 109-58, title XI, § 1102(b), Aug. 8, 2005, 119 Stat. 938.)

**Editorial Notes****AMENDMENTS**

2005—Subsec. (a)(14) to (17). Pub. L. 109-58, which directed amendment of this section by adding pars. (14) to (17) at the end, was executed by making the addition at the end of subsec. (a), to reflect the probable intent of Congress.

1991—Subsec. (a). Pub. L. 102-25, § 704(d)(1), redesignated subpars. (J) to (M) as pars. (10) to (13), respectively.

Subsec. (b). Pub. L. 102-25, § 704(d)(2), inserted "such" before "education activities" in second sentence.

**Statutory Notes and Related Subsidiaries****EFFECTIVE DATE OF 1991 AMENDMENT**

Amendment by Pub. L. 102-25 applicable as if included in enactment of Pub. L. 101-510, see section 704(e) of Pub. L. 102-25, set out as a note under section 12321 of Title 10, Armed Forces.

**§ 7381c. Education partnerships****(a) Education partnerships**

The Secretary may authorize each Department research and development facility, to the extent practicable and consistent with the provisions of the laboratory's management and operating contract, to enter into education partnership agreements with educational institutions in the United States (including local educational agencies, colleges, and universities) for