

(2) The qualified entities shall, to the extent practicable, coordinate support activities under this section with the Secretary of Education and the Secretary.

(d) Cooperation with qualified entities

The Secretary shall cooperate with qualified entities and, to the extent practicable, make available to the entities such personnel, facilities, and other resources of the Department of Energy as may be necessary to carry out the duties of the entities.

(e) Report

Not later than October 1 of each year, the entities shall report to the Secretary, the Secretary of Education, and the Congress on—

(1) progress made to promote the participation of low-income and first generation college students in post-secondary science and mathematics education by—

- (A) the qualified entities;
- (B) other mathematics and science education programs of the Department of Energy; and
- (C) the Special Programs for Students from Disadvantaged Backgrounds of the Department of Education; and

(2) recommendations for such additional actions as may be needed to promote the participation of low-income students in post-secondary science and mathematics education.

(f) Effect on existing programs

The programs in this section shall supplement and be developed in cooperation with the current mathematics and science education programs of the Department of Energy and the Department of Education but shall not supplant them.

(g) “Qualified entity” defined

For purposes of this section, the term “qualified entity” means a nonprofit corporation, association, or institution that has demonstrated special knowledge of, and experience with, the education of low-income and first generation college students and whose primary mission is the operation of national programs that focus on low-income students and provide training and other services to educators.

(h) Authorization of appropriations

There are authorized to be appropriated such sums as may be necessary, to be derived from section 13503(e) of this title and the Environmental Restoration and Waste Management program, to carry out the purposes of this section.

(Pub. L. 102-486, title XXII, §2204, Oct. 24, 1992, 106 Stat. 3089.)

REFERENCES IN TEXT

Sections 1070d through 1070d-1d of title 20, referred to in subsec. (a), and section 1070d of title 20, referred to in subsec. (b)(1), were repealed by Pub. L. 102-325, title IV, § 402(a)(1), July 23, 1992, 106 Stat. 482.

§ 13505. Integration of research and development

Within 180 days after October 24, 1992, the Secretary, in consultation with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories,

and professional and technical societies, shall prepare and submit to Congress a 5-year program plan for improving the integration of basic energy research programs with other energy programs within the Department of Energy. Such program plan shall include—

- (1) an evaluation of current procedures and mechanisms used to achieve such integration;
- (2) an assessment of the role that the Department of Energy national laboratories play in such integration;
- (3) an identification and evaluation of models that could enhance such integration;
- (4) an identification and evaluation of new programs, mechanisms, and related policy options that could improve the integrating process, including—
 - (A) set aside funding for matching or leveraging basic and applied programs;
 - (B) more formal linkages; and
 - (C) program coordination;
- (5) recommendations for expanded research and development and new technology areas; and
- (6) budget estimates for activities under this section.

(Pub. L. 102-486, title XXII, §2205, Oct. 24, 1992, 106 Stat. 3091.)

§ 13506. Definitions

For purposes of this subchapter—

(1) the term “advanced manufacturing technology” means processes, equipment, techniques, practices, and capabilities that are applied for the purpose of—

(A) improving the productivity, quality, or energy efficiency of the design, development, testing, or manufacture of a product; or

(B) expanding the technical capability to design, develop, test, or manufacture a product that is fundamentally different in character from existing products and that will result in improved energy efficiency;

(2) the term “advanced materials” means materials that are processed, synthesized, fabricated, and manufactured to develop high performance properties that exceed the corresponding properties of conventional materials for structural, electronic, magnetic, or photonic applications, or for joining, welding, bonding, or packaging components into complex assemblies, including—

(A) advanced monolithic materials such as metals, ceramics, and polymers;

(B) advanced composite materials such as metal matrix (including intermetallics), polymer matrix, ceramic matrix, continuous fiber ceramic composite, and carbon matrix composites; and

(C) advanced electronic, magnetic, and photonic materials, including superconducting, semiconductor, electrooptic, magneto optic, thin-film, and special purpose coating materials used in technologies for energy efficiency, renewable energy, or electric power applications; and

(3) the term “United States” means the 50 States of the United States, the District of Co-