of this title and amended section 1862 of this title. For complete classification of this Act to the Code, see Short Title of 1992 Amendment note set out under section 1861 of this title and Tables.

The Higher Education Act of 1965, referred to in subsecs. (c)(1)(C) and (g), is Pub. L. 89–329, Nov. 8, 1965, 79 Stat. 1219, as amended. Part B of title I of the Act is classified generally to part B (§1011 et seq.) of subchapter I of chapter 28 of Title 20, Education. Pub. L. 105–244, title I, §101(a), Oct. 7, 1998, 112 Stat. 1585, amended title I of the Act generally and part B, which formerly related to articulation agreements, now relates to additional general provisions. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of Title 20 and Tables.

Section 2891(12) of title 20, referred to in subsec. (j)(7), was in the original "section 1471(12) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2891(12))", Pub. L. 89–10, and was omitted in the general amendment of that Act by Pub. L. 103–382, title I, §101, Oct. 20, 1994, 108 Stat. 3519. For provisions relating to definitions, see section 7801 of Title 20, Education.

#### CODIFICATION

Section was enacted as part of the Scientific and Advanced-Technology Act of 1992, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

#### AMENDMENTS

2021—Subsec. (b). Pub. L. 116–283, \$5401(e)(3)(A), substituted "12" for "10" in introductory provisions.

Subsec. (j)(9). Pub. L. 116–283, 9405(b), inserted "and cybersecurity" after "computer science".

2018—Subsec. (a)(3)(A). Pub. L. 115-402, §3(3), substituted semicolon for comma at end.

Subsec. (c)(1)(B). Pub. L. 115-402, 33(4), which directed substitution of "subsection (i)(3)" for "subsection (f)(3)" in cl. (iv), was executed by making the substitution in concluding provisions of subpar. (B) following cl. (iv), to reflect the probable intent of Congress.

Subsecs. (d) to (f). Pub. L. 115-402, §3(2), added subsecs. (d) to (f). Former subsecs. (d) to (f) redesignated (g) to (i), respectively.

Subsec. (g). Pub. L. 115–402, 3(1), redesignated subsec. (d) as (g). Former subsec. (g) redesignated (j).

Subsec. (h). Pub. L. 115–402, \$3(5), substituted "Funding" for "Limitation on funding" in heading, designated existing provisions as par. (3) and inserted heading, and added pars. (1) and (2).

Pub. L. 115–402, 3(1), redesignated subsec. (e) as (h). Subsec. (i). Pub. L. 115–402, 3(1), redesignated subsec. (f) as (i).

Subsec. (j). Pub. L. 115-402, §3(1), redesignated subsec. (g) as (j).

Subsec. (j)(5) to (9). Pub. L. 115–402, §3(6), added pars. (5) and (6), redesignated former par. (5) as (7), and added pars. (8) and (9).

2007—Subsec. (a)(3)(A). Pub. L. 110–69, 97031(a)(1)(A), which directed striking out "and" after the semicolon, was executed by striking out "and" after the comma, to reflect the probable intent of Congress.

Subsec. (a)(3)(B), (C). Pub. L. 110-69, 7031(a)(1)(B), (C), substituted "; and" for semicolon in subpar. (B) and added subpar. (C).

Subsec. (c)(3). Pub. L. 110-69, 7031(a)(2), added par. (3).

2002—Subsec. (a). Pub. L. 107-368, §21(a)(1), inserted ", and to improve the quality of their core education courses in science and mathematics" after "education in advanced-technology fields" in introductory provisions.

Subsec. (a)(1). Pub. L. 107-368, §21(a)(2), inserted "and in core science and mathematics courses" after "advanced-technology fields".

Subsec. (a)(2). Pub. L. 107-368, §21(a)(3), substituted "who provide instruction in science, mathematics, and advanced-technology fields" for "in advanced-technology fields".

Subsec. (c)(1)(B)(iii), (iv). Pub. L. 107–368, 21(b), added cls. (iii) and (iv).

1998—Subsec. (g)(2), (3). Pub. L. 105–244 substituted "section 101 of the Higher Education Act of 1965" for "section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a))".

#### EFFECTIVE DATE OF 1998 AMENDMENT

Amendment by Pub. L. 105–244 effective Oct. 1, 1998, except as otherwise provided in Pub. L. 105–244, see section 3 of Pub. L. 105–244, set out as a note under section 1001 of Title 20, Education.

#### FINDINGS

Pub. L. 115-402, §2, Dec. 31, 2018, 132 Stat. 5343, provided that: "Congress finds the following:

"(1) To remain competitive in the global economy, foster greater innovation, and provide a foundation for shared prosperity, the United States needs a workforce with the right mix of skills to meet the diverse needs of the economy

verse needs of the economy. "(2) Evidence indicates that the returns on investments in technical skills in the labor market are strong when students successfully complete their education and gain credentials sought by employers.

"(3) The responsibility for developing and sustaining a skilled technical workforce is fragmented across many groups, including educators, students, workers, employers, Federal, State, and local governments, civic associations, and other stakeholders. Such groups need to be able to coordinate and cooperate successfully with each other.

"(4) Coordination among students, community colleges, secondary and post-secondary institutions, and employers would improve educational outcomes.

"(5) Promising experiments currently underway may guide innovation and reform, but scalability of some of those experiments has not yet been tested.

"(6) Evidence suggests that integration of academic education, technical skills development, and handson work experience improves outcomes and return on investment for students in secondary and post-secondary education and for skilled technical workers in different career stages.

"(7) Outcomes show that mentoring can increase STEM student engagement and the rate of completion of STEM post-secondary degrees."

#### §1862j. Authorization of appropriations

There are authorized to be appropriated, from sums otherwise authorized to be appropriated, to the Director for carrying out sections 1862h to 1862j of this title—

(1) \$35,000,000 for fiscal year 1992; and

(2) \$35,000,000 for fiscal year 1993.

# (Pub. L. 102–476, §5, Oct. 23, 1992, 106 Stat. 2301.)

# References in Text

Sections 1862h to 1862j of this title, referred to in text, was in the original "this Act", meaning Pub. L. 102-476, Oct. 23, 1992, 106 Stat. 2297, known as the Scientific and Advanced-Technology Act of 1992, which enacted this section and sections 1862h and 1862i of this title and amended section 1862 of this title. For complete classification of this Act to the Code, see Short Title of 1992 Amendment note set out under section 1861 of this title and Tables.

#### CODIFICATION

Section was enacted as part of the Scientific and Advanced-Technology Act of 1992, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

## §1862k. Findings; core strategies

## (a) Findings

Congress finds the following:

(1) The United States depends upon its scientific and technological capabilities to preserve the military and economic security of the United States.

(2) America's leadership in the global marketplace is dependent upon a strong commitment to education, basic research, and development.

(3) A nation that is not technologically literate cannot compete in the emerging global economy.

(4) A coordinated commitment to mathematics and science instruction at all levels of education is a necessary component of successful efforts to produce technologically literate citizens.

(5) Professional development is a necessary component of efforts to produce system-wide improvements in mathematics, engineering, and science education in secondary, elementary, and postsecondary settings.

(6)(A) The mission of the National Science Foundation is to provide Federal support for basic scientific and engineering research, and to be a primary contributor to mathematics, science, and engineering education at academic institutions in the United States.

(B) In accordance with such mission, the long-term goals of the National Science Foundation include providing leadership to-

(i) enable the United States to maintain a position of world leadership in all aspects of science, mathematics, engineering, and technology;

(ii) promote the discovery, integration, dissemination, and application of new knowledge in service to society; and

(iii) achieve excellence in United States science, mathematics, engineering, and technology education at all levels.

# (b) Core strategies

In carrying out activities designed to achieve the goals described in subsection (a), the Foundation shall use the following core strategies:

(1) Develop intellectual capital, both people and ideas, with particular emphasis on groups and regions that traditionally have not participated fully in science, mathematics, and engineering.

(2) Strengthen the scientific infrastructure by investing in facilities planning and modernization, instrument acquisition, instrument design and development, and shared-use research platforms.

(3) Integrate research and education through activities that emphasize and strengthen the natural connections between learning and inquiry.

(4) Promote partnerships with industry, elementary and secondary schools, community colleges, colleges and universities, other agencies, State and local governments, and other institutions involved in science, mathematics, and engineering to enhance the delivery of math and science education and improve the technological literacy of the citizens of the United States.

(Pub. L. 105-207, title I, §101, July 29, 1998, 112 Stat. 869.)

#### CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 1998, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

#### INDIRECT COSTS

Pub. L. 105-207, title II, §203, July 29, 1998, 112 Stat. 875, provided that:

"(a) MATCHING FUNDS.—Matching funds required pursuant to section 204(a)(2)(C) of the Academic Research Facilities Modernization Act of 1988 (42 U.S.C. 1862c(a)(2)(C)) shall not be considered facilities costs for purposes of determining indirect cost rates under Office of Management and Budget Circular A-21.

"(b) REPORT.— "(1) IN GENERAL.—The Director of the Office of Science and Technology Policy, in consultation with other Federal agencies the Director deems appropriate, shall prepare a report-

"(A) analyzing the Federal indirect cost reimbursement rates (as the term is defined in Office of Management and Budget Circular A-21) paid to universities in comparison with Federal indirect cost reimbursement rates paid to other entities, such as industry, government laboratories, research hospitals, and nonprofit institutions;

(B)(i) analyzing the distribution of the Federal indirect cost reimbursement rates by category (such as administration, facilities, utilities, and libraries), and by the type of entity; and "(ii) determining what factors, including the type

of research, influence the distribution;

'(C) analyzing the impact, if any, that changes in Office of Management and Budget Circular A-21 have had on-

(i) the Federal indirect cost reimbursement rates, the rate of change of the Federal indirect cost reimbursement rates, the distribution by category of the Federal indirect cost reimbursement rates, and the distribution by type of entity of the Federal indirect cost reimbursement rates; and

"(ii) the Federal indirect cost reimbursement (as calculated in accordance with Office of Management and Budget Circular A-21), the rate of change of the Federal indirect cost reimbursement, the distribution by category of the Federal indirect cost reimbursement, and the distribution by type of entity of the Federal indirect cost reimbursement;

"(D) analyzing the impact, if any, of Federal and State law on the Federal indirect cost reimbursement rates;

'(E)(i) analyzing options to reduce or control the rate of growth of the Federal indirect cost reimbursement rates, including options such as benchmarking of facilities and equipment cost, elimination of cost studies, mandated percentage reductions in the Federal indirect cost reimbursement: and

(ii) assessing the benefits and burdens of the options to the Federal Government, research institutions, and researchers; and

(F) analyzing options for creating a database

"(i) for tracking the Federal indirect cost reimbursement rates and the Federal indirect cost reimbursement; and

"(ii) for analyzing the impact that changes in policies with respect to Federal indirect cost reimbursement will have on the Federal Government, researchers, and research institutions.

(2) REPORT TO CONGRESS.—The report prepared under paragraph (1) shall be submitted to Congress not later than 1 year after the date of enactment of this Act [July 29, 1998].

#### NOTICE; ENHANCEMENT OF SCIENCE AND MATHEMATICS PROGRAMS

Pub. L. 105–207, title II, \$ 205, 206, July 29, 1998, 112 Stat. 876, provided that:

## "SEC. 205. NOTICE.

"(a) NOTICE OF REPROGRAMMING.—If any funds appropriated pursuant to the amendments made by this Act [See Short Title of 1998 Amendment note set out under section 1861 of this title] are subject to a reprogramming action that requires notice to be provided to the Committees on Appropriations of the Senate and the House of Representatives, notice of that action shall concurrently be provided to the Committee on Commerce, Science, and Transportation of the Senate, the Committee on Labor and Human Resources [now Committee on Health, Education, Labor, and Pensions] of the Senate, and the Committee on Science [now Committee on Science, Space, and Technology] of the House of Representatives.

"(b) NOTICE OF REORGANIZATION.—Not later than 15 days before any major reorganization of any program, project, or activity of the National Science Foundation, the Director of the National Science Foundation shall provide notice to the Committees on Science [now Science, Space, and Technology] and Appropriations of the House of Representatives and the Committees on Commerce, Science and Transportation, Labor and Human Resources [now Committee on Health, Education, Labor, and Pensions] of the Senate, and Appropriations of the Senate.

"SEC. 206. ENHANCEMENT OF SCIENCE AND MATH-EMATICS PROGRAMS.

"(a) DEFINITIONS.—In this section:

"(1) EDUCATIONALLY USEFUL FEDERAL EQUIPMENT.— The term 'educationally useful Federal equipment' means computers and related peripheral tools and research equipment that is appropriate for use in schools.

"(2) SCHOOL.—The term 'school' means a public or private educational institution that serves any of the grades of kindergarten through grade 12.

(b) SENSE OF THE CONGRESS.—

"(1) IN GENERAL.—It is the sense of the Congress that the Director should, to the greatest extent practicable and in a manner consistent with applicable Federal law (including Executive Order No. 12999 [40 U.S.C. 549 note]), donate educationally useful Federal equipment to schools in order to enhance the science and mathematics programs of those schools.

"(2) REPORTS.—

"(A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act [July 29, 1998], and annually thereafter, the Director shall prepare and submit to the President a report that meets the requirements of this paragraph. The President shall submit that report to Congress at the same time as the President submits a budget request to Congress under section 1105(a) of title 31, United States Code.

"(B) CONTENTS OF REPORT.—The report prepared by the Director under this paragraph shall describe any donations of educationally useful Federal equipment to schools made during the period covered by the report."

#### DEFINITIONS

Pub. L. 105-207, §2, July 29, 1998, 112 Stat. 869, as amended by Pub. L. 107-368, §14(b)(3), Dec. 19, 2002, 116 Stat. 3057, provided that: "In this Act [see Short Title of 1998 Amendment note set out under section 1861 of this title]:

this title]: "(1) DIRECTOR.—The term 'Director' means the Director of the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861). "(2) FOUNDATION.—The term 'Foundation' means

"(2) FOUNDATION.—The term 'Foundation' means the National Science Foundation established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

1950 (42 U.S.C. 1861). "(3) FULL LIFE-CYCLE COST.—The term 'full lifecycle cost' means all costs of planning, development, procurement, construction, operations and support, and shut-down costs, without regard to funding source and without regard to what entity manages the project or facility involved. "(4) BOARD.—The term 'Board' means the National Science Board established under section 2 of the National Science Foundation Act of 1950 (42 U.S.C. 1861).

"(5) UNITED STATES.—The term 'United States' means the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any other territory or possession of the United States.

"(6) NATIONAL RESEARCH FACILITY.—The term 'national research facility' means a research facility funded by the Foundation which is available, subject to appropriate policies allocating access, for use by all scientists and engineers affiliated with research institutions located in the United States."

# §18621. National research facilities

## (a) Facilities plan

## (1) In general

The Director shall prepare, and include as part of the Foundation's annual budget request to Congress, a plan for the proposed construction of, and repair and upgrades to, national research facilities, including full lifecycle cost information.

# (2) Contents of the plan

The plan shall include-

(A) estimates of the costs for the construction, repairs, and upgrades described in paragraph (1), including costs for instrumentation development;

(B) estimates of the costs for the operation and maintenance of existing and proposed new facilities;

(C) in the case of proposed new construction and for major upgrades to existing facilities, funding profiles, by fiscal year, and milestones for major phases of the construction;

(D) for each project funded under the major research equipment and facilities construction account and for major upgrades of facilities in support of Antarctic research programs—

(i) estimates of the total project cost (from planning to commissioning); and

(ii) the source of funds, including Federal funding identified by appropriations category and non-Federal funding;

(E) estimates of the full life-cycle cost of each national research facility;

(F) information on any plans to retire national research facilities; and

(G) estimates of funding levels for grants supporting research that will be conducted using each national research facility.

# (3) Special rule

The plan shall include cost estimates in the categories of construction, repair, and up-grades—

(A) for the year in which the plan is submitted to Congress; and

(B) for not fewer than the succeeding 4 years.

#### (b) Status of facilities under construction

The plan required under subsection (a) shall include a status report for each uncompleted construction project included in current and previous plans. The status report shall include