and struck out former par. (3) which read as follows: ''ensure that an applicant for a grant awarded under subsection (a), (b), or (c)(1) will make an in-cash or in-kind contribution in an amount equal to at least 25 percent of the cost of the program, and for a grant awarded under subsection (c)(2) will make an in-cash or in-kind contribution in an amount at least equal to the amount of the grant award;''.

Subsec. (j)(1). Pub. L. 117–167, §10312(f)(2)(H)(i), added par. (1) and struck out former par. (1) which read as follows: ''the term 'advanced-technology' includes advanced technical activities such as the modernization, miniaturization, integration, and computerization of electronic, hydraulic, pneumatic, laser, nuclear, chemical, telecommunication, fiber optic, robotic, and other technological applications to enhance productivity improvements in manufacturing, communication, transportation, commercial, and similar economic and national security activities;''.

Subsec. (j)(4). Pub. L. 117–167, §10312(f)(2)(H)(ii), which directed substitution of ''other entities'' for ''separate bachelor-degree- granting institutions'', was executed by making the substitution for ''separate bachelor-degree-granting institutions'' to reflect the probable intent of Congress.

Subsec. (j)(7). Pub. L. 117–167, §10312(f)(2)(H)(iii), (iv), redesignated par. (8) as (7) and struck out former par. (7) which read as follows: ''the term 'local educational agency' has the meaning given such term in section 2891(12) of title 20.''

Subsec. (j)(8). Pub. L. 117–167, §10312(f)(2)(H)(vi)(I), substituted ''science, technology, engineering, or mathematics'' for ''mathematics, science, engineering, or technology''.

Pub. L. 117–167, §10312(f)(2)(H)(iv), redesignated par. (9) as (8). Former par. (8) redesignated (7).

Subsec. (j)(9). Pub. L. 117–167, §10312(f)(2)(H)(v), (vi)(II), (vii), added par. (9).

Pub. L. 117–167, §10312(f)(2)(H)(iv), redesignated par. (9) as (8).

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, §3(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, §7031(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))''.

Statutory Notes and Related Subsidiaries

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.

''(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 hands-on 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 to the Director for carrying out sections 2 through 4 $150,000,000 for each of fiscal years 2023 through 2027.

(Pub. L. 102–476, §5, Oct. 23, 1992, 106 Stat. 2301; Pub. L. 117–167, div. B, title III, §10312(f)(3), Aug. 9, 2022, 136 Stat. 1522.)

Editorial Notes

REFERENCES IN TEXT

Sections 2 through 4, referred to in text, is sections 2 to 4 of Pub. L. 102–476, which enacted sections 1862h and 1862i of this title and amended section 1862 of this title, respectively.

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

2022—Pub. L. 117–167 amended section generally. Prior to amendment, section authorized appropriations for carrying out sections 1862h to 1862j of this title for fiscal years 1992 and 1993.

§ 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.)

Editorial Notes

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.

Statutory Notes and Related Subsidiaries

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