

achieve reform within an entire academic unit;

(2) expansion of successful reform efforts beyond a single academic unit to other science, mathematics, engineering, or technology academic units within an institution;

(3) creation of multidisciplinary courses or programs that formalize collaborations for the purpose of improved student instruction and research in science, mathematics, engineering, and technology;

(4) expansion of undergraduate research opportunities beyond a particular laboratory, course, or academic unit to engage multiple academic units in providing multidisciplinary research opportunities for undergraduate students;

(5) expansion of innovative tutoring or mentoring programs proven to enhance student recruitment or persistence to degree completion in science, mathematics, engineering, or technology;

(6) improvement of undergraduate science, mathematics, engineering, and technology education for nonmajors, including education majors; and

(7) implementation of technology-driven reform efforts, including the installation of technology to facilitate such reform, that directly impact undergraduate science, mathematics, engineering, or technology instruction or research experiences.

(c) Selection process

(1) Applications

An institution of higher education seeking a grant under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum—

(A) a description of the proposed reform effort;

(B) a description of the previously implemented reform effort that will serve as the basis for the proposed reform effort and evidence of success of that previous effort, including data on student recruitment, persistence to degree completion, and academic achievement;

(C) evidence of active participation in the proposed project by individuals who were central to the success of the previously implemented reform effort; and

(D) evidence of institutional support for, and commitment to, the proposed reform effort, including a description of existing or planned institutional policies and practices regarding faculty hiring, promotion, tenure, and teaching assignment that reward faculty contributions to undergraduate education equal to, or greater than, scholarly scientific research.

(2) Review of applications

In evaluating applications submitted under paragraph (1), the Director shall consider at a minimum—

(A) the evidence of past success in implementing undergraduate education reform and the likelihood of success in undertaking the proposed expanded effort;

(B) the extent to which the faculty, staff, and administrators of the institution are committed to making the proposed institutional reform a priority of the participating academic unit;

(C) the degree to which the proposed reform will contribute to change in institutional culture and policy such that a greater value is placed on faculty engagement in undergraduate education, as evidenced through promotion and tenure policies; and

(D) the likelihood that the institution will sustain or expand the reform beyond the period of the grant.

(3) Grant distribution

The Director shall ensure, to the extent practicable, that grants awarded under this section are made to a variety of types of institutions of higher education.

(Pub. L. 107-368, §17, Dec. 19, 2002, 116 Stat. 3060.)

CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 4 of Pub. L. 107-368, set out as a note under section 1862n of this title.

§ 1862n-7. Reports

(a) Grant size and duration

Not later than 6 months after December 19, 2002, the Director shall transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report describing the impact that increasing the average grant size and duration would have on minority-serving institutions and on institutions located in States where the Foundation's Experimental Program to Stimulate Competitive Research (established under section 1862g of this title) is carrying out activities.

(b) Faculty

Not later than 3 months after December 19, 2002, the Director shall enter into an arrangement with the National Academy of Sciences to assess gender differences in the careers of science and engineering faculty. This study shall build on the Academy's work on gender differences in the careers of doctoral scientists and engineers and examine issues such as faculty hiring, promotion, tenure, and allocation of resources including laboratory space. Upon completion, the results of this study shall be transmitted to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate.

(c) Grant funding

Not later than 3 months after December 19, 2002, the Director shall enter into an agreement with an appropriate party to assess gender dif-

ferences in the distribution of external Federal research and development funding. This study shall examine differences in amounts requested and awarded, by gender, in major Federal external grant programs. Upon completion, the results of this study shall be transmitted to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate.

(d) Study of broadband network access for schools and libraries

(1) Report to Congress

The Director shall conduct a study of the issues described in paragraph (3), and not later than 1 year after December 19, 2002, transmit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report including recommendations to address those issues. Such report shall be updated annually for 4 additional years.

(2) Consultation

In preparing the reports under paragraph (1), the Director shall consult with Federal agencies and educational entities as the Director considers appropriate.

(3) Issues to be addressed

The reports shall—

(A) identify the availability of high-speed, large bandwidth capacity access to different demographic groups served by elementary schools, secondary schools, and libraries in the United States;

(B) identify how the provision of high-speed, large bandwidth capacity access to the Internet to such schools and libraries can be effectively utilized within each school and library;

(C) consider the effect that specific or regional circumstances may have on the ability of such institutions to acquire high-speed, large bandwidth capacity access to achieve universal connectivity as an effective tool in the education process; and

(D) include options and recommendations to address the challenges and issues identified in the reports.

(e) Minority-serving institution funding

(1) Annual reporting required

The Director shall submit an annual report, along with the President's annual budget request, to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate on the amount of funding awarded by the Foundation to minority-serving institutions, including funding received as members of consortia. The report shall include information on such funding to minority-serving institutions—

(A) expressed as a percentage of funding to all institutions of higher education for each appropriations account within the Foundation's budget; and

(B) for the preceding 10 years.

(2) Report on ways to improve funding

Within one year after December 19, 2002, the Director shall submit to the Committee on Science of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Health, Education, Labor, and Pensions of the Senate a report on recommendations on how the Foundation can improve funding to minority-serving institutions.

(Pub. L. 107-368, § 18, Dec. 19, 2002, 116 Stat. 3061.)

CODIFICATION

Section was enacted as part of the National Science Foundation Authorization Act of 2002, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

DEFINITIONS

For definitions of terms used in this section, see section 4 of Pub. L. 107-368, set out as a note under section 1862n of this title.

§ 1862n-8. Evaluations

(a) Education

(1) In general

The Director, through the Research, Evaluation and Communication Division of the Education and Human Resources Directorate of the Foundation, shall evaluate the effectiveness of all undergraduate science, mathematics, engineering, or technology education activities supported by the Foundation in increasing the number and quality of students, including individuals identified in section 1885a or 1885b of this title studying toward and completing associate's or baccalaureate degrees in science, mathematics, engineering, and technology. In conducting the evaluation, the Director shall consider information on—

(A) the number of students enrolled in undergraduate science, mathematics, engineering, and technology programs;

(B) student academic achievement, including quantifiable measurements of students' mastery of content and skills;

(C) persistence to degree completion, including students who transfer from science, mathematics, engineering, and technology programs to programs in other academic disciplines; and

(D) placement during the first year after degree completion in post-graduate education or career pathways.

(2) Assessment benchmarks and tools

The Director, through the Research, Evaluation and Communication Division of the Education and Human Resources Directorate of the Foundation, shall establish a common set