

ship salary supplements through the period of the fellow's service obligation under subsection (g).

**(g) Service obligation**

An individual awarded a fellowship under this section shall serve as a mathematics or science teacher in an elementary school or secondary school served by a high need local educational agency for—

(1) in the case of a National Science Foundation Teaching Fellow, 4 years, to be fulfilled within 6 years of completing the master's program described in subsection (c)(2)(A); and

(2) in the case of a National Science Foundation Master Teaching Fellow, 5 years, to be fulfilled within 7 years of the start of participation in the program under subsection (c)(3).

**(h) Matching requirement**

**(1) In general**

An eligible entity receiving a grant under this section shall provide, from non-Federal sources, to carry out the activities supported by the grant—

(A) in the case of grants in an amount of less than \$1,500,000, an amount equal to at least 30 percent of the amount of the grant, at least one half of which shall be in cash; and

(B) in the case of grants in an amount of \$1,500,000 or more, an amount equal to at least 50 percent of the amount of the grant, at least one half of which shall be in cash.

**(2) Waiver**

The Director may waive all or part of the matching requirement described in paragraph (1) for any fiscal year for an eligible entity receiving a grant under this section, if the Director determines that applying the matching requirement would result in serious hardship or inability to carry out the authorized activities described in this section.

**(i) Conditions of support; collection for non-compliance; failure to complete service obligation; data collection**

**(1) In general**

Except as provided in paragraph (2), subsections (e), (f), (g), and (h) of section 1862n-1 of this title shall apply to eligible entities and recipients of fellowships under this section, as applicable, in the same manner as such subsections apply to eligible entities and recipients of scholarships and stipends under section 1862n-1 of this title, as applicable.

**(2) Amount of repayment**

If a circumstance described in subparagraph (D) or (E) of section 1862n-1(g)(1) of this title occurs after the completion of 1 year of a service obligation under this section—

(A) for a National Science Foundation Teaching Fellow, the total amount of fellowship award received by the individual under this section while enrolled in the master's degree program, reduced by one-fourth of the total amount for each year of service completed, plus one-half of the total teaching fellowship salary supplements received by such individual under this section, shall

be repaid or such amount shall be treated as a loan to be repaid in accordance with section 1862n-1(g)(1)(C) of this title; and

(B) for a National Science Foundation Master Teaching Fellow, the total amount of teaching fellowship salary supplements received by the individual under this section, reduced by one-half, shall be repaid or such amount shall be treated as a loan to be repaid in accordance with section 1862n-1(g)(1)(C) of this title.

(Pub. L. 107-368, §10A, as added Pub. L. 110-69, title VII, §7030, Aug. 9, 2007, 121 Stat. 705; amended Pub. L. 111-358, title V, §511, Jan. 4, 2011, 124 Stat. 4010.)

CODIFICATION

Section 7030 of Pub. L. 110-69, which directed that "Section 10 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n-1) is amended to read as follows:" and then set out the text of sections 10 and 10A, was executed by generally amending section 10 and adding a new section 10A (42 U.S.C. 1862n-1a) after section 10, to reflect the probable intent of Congress.

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.

AMENDMENTS

2011—Subsec. (a)(2)(A). Pub. L. 111-358, §511(b), inserted "including retiring professionals in those fields," after "mathematics professionals,".

Subsec. (h)(1). Pub. L. 111-358, §511(a), amended par. (1) generally. Prior to amendment, text read as follows: "An eligible entity receiving a grant under this section shall provide, from non-Federal sources, an amount equal to 50 percent of the amount of the grant (which may be provided in cash or in-kind) to carry out the activities supported by the grant."

**§ 1862n-2. Establishment of centers for research on mathematics and science learning and education improvement**

**(a) Establishment**

**(1) In general**

(A) The Director shall award grants to institutions of higher education or eligible non-profit organizations (or consortia thereof) to establish multidisciplinary Centers for Research on Learning and Education Improvement.

(B) Grants shall be awarded under this paragraph on a competitive, merit-reviewed basis.

**(2) Purpose**

The purpose of the Centers shall be to conduct and evaluate research in cognitive science, education, and related fields and to develop ways in which the results of such research can be applied in elementary school and secondary school classrooms to improve the teaching of mathematics and science.

**(3) Focus**

(A) Each Center shall be focused on a different challenge faced by elementary school or secondary school teachers of mathematics and science. In determining the research focus of the Centers, the Director shall consult with the National Academy of Sciences and the Secretary of Education and take into account

the extent to which other Federal programs support research on similar questions.

(B) The proposal solicitation issued by the Director shall state the focus of each Center and applicants shall apply for designation as a specific Center.

(C) At least one Center shall focus on developing ways in which the results of research described in paragraph (2) can be applied, duplicated, and scaled up for use in low-performing elementary schools and secondary schools to improve the teaching and student achievement levels in mathematics and science.

(D) To the extent practicable and relevant to its focus, every Center shall include, as part of its research, work designed to quantitatively assess and improve the ways that information technology is used in the teaching of mathematics and science.

## (b) Selection process

### (1) Application

An institution of higher education or an eligible nonprofit organization (or a consortium thereof) seeking funding 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 description of—

(A) the initial research projects that will be undertaken by the Center and the process by which new projects will be identified;

(B) how the Center will work with other research institutions and schools to broaden the national research agenda on learning and teaching;

(C) how the Center will promote active collaboration among physical, biological, and social science researchers;

(D) how the Center will promote active participation by elementary and secondary mathematics and science teachers and administrators; and

(E) how the results of the Center's research can be incorporated into educational practices, and how the Center will assess the success of those practices.

### (2) Review of applications

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

(A) the ability of the applicant to effectively carry out the research program, including the activities described in paragraph (1)(E);

(B) the experience of the applicant in conducting research on the science of teaching and learning and the capacity of the applicant to foster new multidisciplinary collaborations;

(C) the capacity of the applicant to attract elementary school and secondary school teachers from a diverse array of schools, and with diverse professional experiences, for participation in Center activities; and

(D) the capacity of the applicant to attract and provide adequate support for graduate students to pursue research at the intersection of educational practice and basic research on human cognition and learning.

### (3) Awards

The Director shall ensure, to the extent practicable, that the Centers funded under this section conduct research and develop educational practices designed to improve the educational performance of a broad range of students, including individuals identified in section 1885a or 1885b of this title.

### (c) Annual conference

The Director shall convene an annual meeting of the Centers to foster collaboration among the Centers and to further disseminate the results of the Centers' activities.

### (d) Coordination

The Director shall coordinate with the Secretary of Education in—

(1) disseminating the results of the research conducted pursuant to grants awarded under this section to elementary school teachers and secondary school teachers; and

(2) providing programming, guidance, and support to ensure that such teachers—

(A) understand the implications of the research disseminated under paragraph (1) for classroom practice; and

(B) can use the research to improve such teachers' performance in the classroom.

(Pub. L. 107-368, §11, Dec. 19, 2002, 116 Stat. 3053; Pub. L. 110-69, title VII, §7006(b), Aug. 9, 2007, 121 Stat. 679.)

#### 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.

#### AMENDMENTS

2007—Subsec. (a)(1)(A). Pub. L. 110-69, §7006(b)(1), inserted “or eligible nonprofit organizations” after “institutions of higher education”.

Subsec. (b)(1). Pub. L. 110-69, §7006(b)(2), (3), in introductory provisions, inserted “or an eligible nonprofit organization” after “institution of higher education” and substituted “thereof” for “of such institutions”.

#### FUNDING FOR CENTERS

Pub. L. 110-69, title VII, §7006(a), Aug. 9, 2007, 121 Stat. 679, provided that: “The Director [of the National Science Foundation] shall continue to carry out the program of Centers for Research on Learning and Education Improvement as established in section 11 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n-2).”

#### 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-3. Duplication of programs

### (a) In general

The Director shall review the education programs of the Foundation that are in operation as of December 19, 2002, to determine whether any of such programs duplicate the programs authorized under this Act.

### (b) Implementation

As programs authorized under this Act are implemented, the Director shall—