

107TH CONGRESS
1ST SESSION

H. R. 2045

To authorize the National Science Foundation to provide grants to support research projects in science and technology at secondary schools, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 26 (legislative day, MAY 25), 2001

Mr. MATHESON (for himself, Mr. ETHERIDGE, Mr. BARTLETT of Maryland, Mr. UDALL of Colorado, and Mr. LANTOS) introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on Education and the Workforce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To authorize the National Science Foundation to provide grants to support research projects in science and technology at secondary schools, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Research in Secondary
5 Schools Act”.

6 **SEC. 2. FINDINGS.**

7 The Congress finds the following:

1 (1) The quality of education in science, mathe-
2 matics, and engineering is the foundation of the Na-
3 tion's future security and prosperity.

4 (2) In international tests, American secondary
5 school students score lower in science and mathe-
6 matics than their peers in other developed countries.

7 (3) The number of undergraduate degrees
8 awarded to American students in the physical
9 sciences, mathematics and computer science, and en-
10 gineering has been static or has declined over the
11 past decade, while projected demand for scientists
12 and engineers is predicted to increase four times
13 faster than overall job growth over the next ten
14 years.

15 (4) New initiatives are required to stimulate the
16 interest of students in science, mathematics, and
17 technology and to help prepare them to succeed in
18 the college courses required for careers in these
19 fields.

20 (5) Hands-on research experiences have been
21 proven to be effective in stimulating student interest
22 in science, mathematics, and technology, in building
23 confidence in the scientific method and problem solv-
24 ing, and in strengthening understanding of scientific
25 concepts.

1 **SEC. 3. DEFINITIONS.**

2 In this Act—

3 (1) the term “Director” means the Director of
4 the National Science Foundation;

5 (2) the term “institution of higher education”
6 has the meaning given that term in section 101 of
7 the Higher Education Act of 1965 (20 U.S.C.
8 1001); and

9 (3) the term “science teacher” means a science,
10 mathematics, or technology teacher at the secondary
11 school level.

12 **SEC. 4. PROGRAM AUTHORIZED.**

13 (a) IN GENERAL.—The Director is authorized to es-
14 tablish a program to improve science, mathematics, and
15 technology education in secondary schools through awards
16 to institutions of higher education for the support of re-
17 search projects in science and technology at secondary
18 schools. Awards shall be made to institutions of higher
19 education through a competitive process on the basis of
20 merit in accordance with the guidelines, procedures, and
21 criteria established under subsection (c).

22 (b) RESEARCH PROJECTS.—Awards provided under
23 this section shall be used by the recipient institutions to—

24 (1) provide training for science teachers in the
25 design of research investigations and in the prepara-
26 tion of research project proposals;

1 (2) establish requirements for the contents and
2 procedures for the submission to the institution of
3 higher education of proposals for research projects;

4 (3) establish guidelines, standards, and proce-
5 dures for the selection of proposals for funding on
6 the basis of merit and following a competitive review
7 process;

8 (4) provide grants to secondary schools for im-
9 plementing research projects;

10 (5) develop general guidelines for use by science
11 teachers in implementing research projects, includ-
12 ing requirements for the reporting of research re-
13 sults;

14 (6) provide stipends for graduate students to
15 serve as advisors and consultants for research
16 projects that include such a role for such graduate
17 students; and

18 (7) assess the educational value of the research
19 projects, including by means of tracking—

20 (A) the academic performance in science,
21 mathematics, and technology of the partici-
22 pating students; and

23 (B) the undergraduate majors later se-
24 lected by students who have participated in a
25 research project supported under this Act.

1 (c) GUIDELINES, PROCEDURES, AND CRITERIA.—
2 The Director shall establish and publish application and
3 selection guidelines, procedures, and criteria for awards
4 under the program established under subsection (a).

5 (d) PROPOSAL REQUIREMENTS.—Each application
6 for an award under the program established under sub-
7 section (a) shall—

8 (1) provide for collaboration between education
9 faculty and mathematics, engineering, or science fac-
10 ulty at the institution of higher education;

11 (2) include a plan for satisfying the require-
12 ments of subsection (b), including a description of
13 the process to be used for soliciting proposals for re-
14 search projects and an estimate of the number of re-
15 search projects to be supported;

16 (3) specify the number of graduate students ex-
17 pected to receive support in accordance with sub-
18 section (b)(6); and

19 (4) identify sources of non-Federal funding for
20 the proposed program in amounts at least equal to
21 the amount of the award sought under this section.

22 **SEC. 5. COORDINATION.**

23 The Director shall ensure that coordination and in-
24 formation exchange, including by means of the Internet,

1 occur on a continuing basis among awardees under this
2 Act.

3 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

4 There are authorized to be appropriated to the Na-
5 tional Science Foundation to carry out this Act
6 \$2,500,000 for each of fiscal years 2002, 2003, and 2004.

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