

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.

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## 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

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## 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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