

107TH CONGRESS  
1ST SESSION

# H. R. 2050

To authorize the National Science Foundation to undertake certain activities  
in support of research on learning.

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## IN THE HOUSE OF REPRESENTATIVES

JUNE 5, 2001

Mr. SMITH of Michigan introduced the following bill; which was referred to  
the Committee on Science

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## A BILL

To authorize the National Science Foundation to undertake  
certain activities in support of research on learning.

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. FINDINGS.**

4       The Congress finds that—

5           (1) in virtually every sector of society—health,  
6           defense, transportation, agriculture, etc.—research  
7           is used to guide policy choices;

8           (2) in education, however, research has not  
9           been effectively utilized as a tool for informing policy  
10          and guiding reform, with less than 0.03 percent of

1 the \$647,800,000,000 spent on elementary and sec-  
2 ondary education invested in research of what edu-  
3 cational techniques actually work and on ways to im-  
4 prove teaching;

5 (3) the 1997 President's Committee of Advisors  
6 on Science and Technology (PCAST) report entitled  
7 "The Use of Technology to Strengthen K-12 Edu-  
8 cation in the United States" recommended that our  
9 education research investment be increased to 0.5  
10 percent and that educational hypotheses be sub-  
11 jected to appropriately rigorous evaluation;

12 (4) a significant body of research and knowl-  
13 edge on the science of learning currently exists; how-  
14 ever, educational materials and practices are rarely  
15 aligned to this knowledge, and new education theo-  
16 ries are often incorporated in classrooms on the  
17 basis of only tenuously supported data;

18 (5) a cultural divide between education re-  
19 searchers and education practitioners—such as  
20 teachers—currently exists;

21 (6) an expert panel convened by the National  
22 Research Council recommended in 1999 that more  
23 education research be focused on issues of impor-  
24 tance to education practitioners and be conducted by

1 teams of both traditional researchers and teachers  
2 and other education practitioners;

3 (7) the education research effort to date is typi-  
4 fied by a largely scattershot approach, with little co-  
5 ordination of the research effort or focus on particu-  
6 larly compelling questions; and

7 (8) a 1999 report from the National Research  
8 Council entitled “Improving Student Learning” rec-  
9 ommended the adoption of a national, strategic edu-  
10 cation research program that would focus efforts on  
11 a limited number of the most critically important re-  
12 search questions.

13 **SEC. 2. RESEARCH ON LEARNING.**

14 (a) **IN GENERAL.**—For the purpose of integrating  
15 scientific disciplines in relation to research on learning,  
16 and gaining a better understanding of how such research  
17 and educational practice can be reconciled, the National  
18 Science Foundation shall continue to support research on  
19 learning, focusing on the following 4 areas:

20 (1) Brain research as a foundation for research  
21 on human learning.

22 (2) Behavioral, cognitive, affective, and social  
23 aspects of human learning.

(3) Science, mathematics, engineering, and technological learning in formal and informal educational settings.

#### 4 (4) Learning in complex educational systems.

5 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
6 are authorized to be appropriated to the National Science  
7 Foundation for carrying out this section \$29,000,000 for  
8 fiscal year 2002, \$33,000,000 for fiscal year 2003, and  
9 \$37,000,000 for fiscal year 2004.

## 10 SEC. 3. RESEARCH ON LEARNING CENTERS.

11 (a) DEVELOPMENT OF RESEARCH PRIORITIES.—The  
12 Director of the National Science Foundation (in this Act  
13 referred to as the “Director”), in consultation with the  
14 National Academy of Sciences, shall review past research  
15 on learning, assess current research efforts, and not later  
16 than 120 days after the date of the enactment of this Act  
17 develop a set of specific education research priorities to  
18 provide the strategic focus of the Centers established  
19 under subsection (b). The Director shall ensure that the  
20 development of such priorities is informed by the most  
21 pressing needs of the education system.

22 (b) ESTABLISHMENT OF CENTERS.—The Director  
23 shall make grants for the establishment of not more than  
24 5 Centers of Research on Learning. The purpose of these  
25 Centers shall be to integrate the work of multidisciplinary

1 teams of researchers, education practitioners, and policy-  
2 makers to support the research priorities developed under  
3 subsection (a), and to facilitate the incorporation of the  
4 results of that research into educational practice. Grant  
5 awards under this subsection shall be made through an  
6 open, peer-reviewed competition.

7 (c) STRATEGIC FOCUS OF CENTERS.—Each Center  
8 shall focus on addressing one of the specific education re-  
9 search priorities developed by the Director under sub-  
10 section (a).

11 (d) ACTIVITIES OF CENTERS.—The Centers shall  
12 promote active collaborations among physical, biological,  
13 and social science researchers, education practitioners,  
14 and policymakers. The Centers shall be responsible for—

15 (1) evaluating existing research and designing,  
16 conducting, or coordinating research that addresses  
17 the Center's strategic focus;

18 (2) stimulating research in relevant areas within  
19 the larger research community and synthesizing  
20 the findings from among this community;

21 (3) planning future research;

22 (4) facilitating the dissemination of research re-  
23 sults to education practitioners and the incorpora-  
24 tion of those research results into the education sys-  
25 tem; and

1 (5) assessing the impact of the incorporation of  
2 research results described in paragraph (4) on stu-  
3 dent performance.

4 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
5 are authorized to be appropriated to the National Science  
6 Foundation for carrying out this section \$3,000,000 for  
7 fiscal year 2002, \$6,000,000 for fiscal year 2003, and  
8 \$6,000,000 for fiscal year 2004.

## 9 SEC. 4. INTERAGENCY EDUCATION RESEARCH INITIATIVE.

10 There are authorized to be appropriated to the Na-  
11 tional Science Foundation for participation in the Inter-  
12 agency Education Research Initiative, \$28,000,000 for fis-  
13 cal year 2002, \$31,000,000 for fiscal year 2003, and  
14 \$33,000,000 for fiscal year 2004.