

110TH CONGRESS
1ST SESSION

H. R. 524

To establish a laboratory science pilot program at the National Science
Foundation.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 17, 2007

Mr. HINOJOSA (for himself, Mr. GORDON of Tennessee, Ms. EDDIE BERNICE
JOHNSON of Texas, and Mr. BACA) introduced the following bill; which
was referred to the Committee on Science and Technology

A BILL

To establish a laboratory science pilot program at the
National Science Foundation.

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 the following:

5 (1) To remain competitive in science and tech-
6 nology in the global economy, the United States
7 must increase the number of students graduating
8 from high school prepared to pursue postsecondary
9 education in science, technology, engineering, and
10 mathematics.

1 (2) There is broad agreement in the scientific
2 community that learning science requires direct in-
3 volvement by students in scientific inquiry and that
4 laboratory experience is so integral to the nature of
5 science that it must be included in every science pro-
6 gram for every science student.

7 (3) In America’s Lab Report, the National Re-
8 search Council concluded that the current quality of
9 laboratory experiences is poor for most students and
10 that educators and researchers do not agree on how
11 to define high school science laboratories or on their
12 purpose, hampering the accumulation of research on
13 how to improve labs.

14 (4) The National Research Council found that
15 schools with higher concentrations of non-Asian mi-
16 norities and schools with higher concentrations of
17 poor students are less likely to have adequate labora-
18 tory facilities than other schools.

19 (5) The Government Accountability Office re-
20 ported that 49.1 percent of schools where the minor-
21 ity student population is greater than 50.5 percent
22 reported not meeting functional requirements for
23 laboratory science well or at all.

24 (6) 40 percent of those college students who left
25 the science fields reported some problems related to

1 high school science preparation, including lack of
2 laboratory experience and no introduction to theo-
3 retical or to analytical modes of thought.

4 (7) It is in the national interest for the Federal
5 Government to invest in research and demonstration
6 projects to improve the teaching of laboratory
7 science in the Nation’s high schools.

8 **SEC. 2. GRANT PROGRAM.**

9 Section 8(8) of the National Science Foundation Au-
10 thorization Act of 2002 is amended—

11 (1) by redesignating subparagraphs (A) through
12 (F) as clauses (i) through (vi), respectively;

13 (2) by inserting “(A)” before “A program of
14 competitive”; and

15 (3) by inserting at the end the following new
16 subparagraph:

17 “(B) In accordance with subparagraph (A)(v),
18 the Director shall establish a pilot program des-
19 ignated as ‘Partnerships for Access to Laboratory
20 Science’ to award grants to partnerships to improve
21 laboratories and provide instrumentation as part of
22 a comprehensive program to enhance the quality of
23 mathematics, science, engineering, and technology
24 instruction at the secondary school level. Grants
25 under this subparagraph may be used for—

1 “(i) purchase, rental, or leasing of equip-
2 ment, instrumentation, and other scientific edu-
3 cational materials;

4 “(ii) maintenance, renovation, and im-
5 provement of laboratory facilities;

6 “(iii) professional development and train-
7 ing for teachers;

8 “(iv) development of instructional pro-
9 grams designed to integrate the laboratory ex-
10 perience with classroom instruction and to be
11 consistent with State mathematics and science
12 academic achievement standards;

13 “(v) training in laboratory safety for school
14 personnel;

15 “(vi) design and implementation of hands-
16 on laboratory experiences to encourage the in-
17 terest of individuals identified in section 33 or
18 34 of the Science and Engineering Equal Op-
19 portunities Act (42 U.S.C. 1885a or 1885b) in
20 mathematics, science, engineering, and tech-
21 nology and help prepare such individuals to
22 pursue postsecondary studies in these fields;
23 and

24 “(vii) assessment of the activities funded
25 under this subparagraph.

1 “(C) Grants awarded under subparagraph (B)
2 shall be to a partnership that—

3 “(i) includes an institution of higher edu-
4 cation or a community college;

5 “(ii) includes a high-need local educational
6 agency;

7 “(iii) includes a business or eligible non-
8 profit organization; and

9 “(iv) may include a State educational
10 agency, other public agency, National Labora-
11 tory, or community-based organization.

12 “(D) The Federal share of the cost of activities
13 carried out using amounts from a grant under sub-
14 paragraph (B) shall not exceed 50 percent.”.

15 **SEC. 3. REPORT.**

16 The Director of the National Science Foundation
17 shall evaluate the effectiveness of activities carried out
18 under the pilot projects funded by the grant program es-
19 tablished pursuant to the amendment made by section 1
20 in improving student performance in mathematics,
21 science, engineering, and technology. A report docu-
22 menting the results of that evaluation shall be submitted
23 to the Committee on Science and Technology of the House
24 of Representatives and the Committees on Commerce,
25 Science, and Transportation and on Health, Education,

1 Labor, and Pensions of the Senate not later than 5 years
2 after the date of enactment of this Act. The report shall
3 identify best practices and materials developed and dem-
4 onstrated by grant awardees.

5 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

6 There are authorized to be appropriated to the Na-
7 tional Science Foundation to carry out this Act and the
8 amendments made by this Act \$5,000,000 for fiscal year
9 2008, and such sums as may be necessary for each of the
10 3 succeeding fiscal years.

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