

110TH CONGRESS
1ST SESSION

S. 810

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

IN THE SENATE OF THE UNITED STATES

MARCH 8, 2007

Mr. MENENDEZ introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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 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 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 (Public Law 107–368) is amend-
 11 ed—

12 (1) by redesignating subparagraphs (A) through
 13 (F) as clauses (i) through (vi), respectively, and in-
 14 denting appropriately;

15 (2) by moving the flush language at the end 2
 16 ems to the right;

17 (3) in the flush language at the end, by striking
 18 “paragraph” and inserting “subparagraph”;

19 (4) by striking “INITIATIVE.—A program of”
 20 and inserting “INITIATIVE.—

21 “(A) IN GENERAL.—A program of”; and

22 (5) by inserting at the end the following:

23 “(B) PILOT PROGRAM.—

24 “(i) IN GENERAL.—In accordance
 25 with subparagraph (A)(v), the Director

1 shall establish a pilot program designated
2 as ‘Partnerships for Access to Laboratory
3 Science’ to award grants to partnerships to
4 improve laboratories and provide instru-
5 mentation as part of a comprehensive pro-
6 gram to enhance the quality of mathe-
7 matics, science, engineering, and tech-
8 nology instruction at the secondary school
9 level. Grants under this subparagraph may
10 be used for—

11 “(I) purchase, rental, or leasing
12 of equipment, instrumentation, and
13 other scientific educational materials;

14 “(II) maintenance, renovation,
15 and improvement of laboratory facili-
16 ties;

17 “(III) professional development
18 and training for teachers;

19 “(IV) development of instruc-
20 tional programs designed to integrate
21 the laboratory experience with class-
22 room instruction and to be consistent
23 with State mathematics and science
24 academic achievement standards;

1 “(V) training in laboratory safety
2 for school personnel;

3 “(VI) design and implementation
4 of hands-on laboratory experiences to
5 encourage the interest of individuals
6 identified in section 33 or 34 of the
7 Science and Engineering Equal Op-
8 portunities Act (42 U.S.C. 1885a or
9 1885b) in mathematics, science, engi-
10 neering, and technology and help pre-
11 pare such individuals to pursue post-
12 secondary studies in these fields; and

13 “(VII) assessment of the activi-
14 ties funded under this subparagraph.

15 “(ii) PARTNERSHIP.—Grants awarded
16 under clause (i) shall be to a partnership
17 that—

18 “(I) includes an institution of
19 higher education or a community col-
20 lege;

21 “(II) includes a high-need local
22 educational agency;

23 “(III) includes a business or eli-
24 gible nonprofit organization; and

1 “(IV) may include a State edu-
 2 cational agency, other public agency,
 3 National Laboratory, or community-
 4 based organization.

5 “(iii) FEDERAL SHARE.—The Federal
 6 share of the cost of activities carried out
 7 using amounts from a grant under clause
 8 (i) shall not exceed 50 percent.”.

9 **SEC. 3. REPORT.**

10 The Director of the National Science Foundation
 11 shall evaluate the effectiveness of activities carried out
 12 under the pilot projects funded by the grant program es-
 13 tablished pursuant to the amendment made by section 2
 14 in improving student performance in mathematics,
 15 science, engineering, and technology. A report docu-
 16 menting the results of that evaluation shall be submitted
 17 to the Committee on Commerce, Science, and Transpor-
 18 tation and the Committee on Health, Education, Labor,
 19 and Pensions of the Senate and the Committee on Science
 20 and Technology of the House of Representatives not later
 21 than 5 years after the date of enactment of this Act. The
 22 report shall identify best practices and materials developed
 23 and demonstrated by grant awardees.

1 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

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

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