

112TH CONGRESS  
1ST SESSION

# H. R. 2228

To assist coordination among science, technology, engineering, and mathematics efforts in the States, to strengthen the capacity of elementary schools, middle schools, and secondary schools to prepare students in science, technology, engineering, and mathematics, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JUNE 16, 2011

Mr. LUJÁN (for himself, Mr. GRIJALVA, Mr. FATTAH, Mr. MEEKS, Mr. RANGEL, Mr. HEINRICH, Ms. MOORE, and Ms. BORDALLO) introduced the following bill; which was referred to the Committee on Education and the Workforce

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## A BILL

To assist coordination among science, technology, engineering, and mathematics efforts in the States, to strengthen the capacity of elementary schools, middle schools, and secondary schools to prepare students in science, technology, engineering, and mathematics, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “STEM Support for  
3 Teachers in Education and Mentoring (STEM) Act” or  
4 the “STEM<sup>2</sup> Act”.

5 **SEC. 2. STEM EDUCATION PLANNING AND TRAINING.**

6 (a) IN GENERAL.—Title II of the Elementary and  
7 Secondary Education Act of 1965 (20 U.S.C. 6601 et  
8 seq.) is amended by adding at the end the following:

9 **“PART E—STEM EDUCATION PLANNING AND**  
10 **TRAINING**

11 **“SEC. 2501. DEFINITIONS.**

12 “In this part:

13 “(1) INDIAN TRIBE; TRIBAL ORGANIZATION.—  
14 The terms ‘Indian tribe’ and ‘tribal organization’  
15 have the meanings given those terms in section 4 of  
16 the Indian Self-Determination and Education Assist-  
17 ance Act.

18 “(2) STEM.—The term ‘STEM’ means science,  
19 technology, engineering, and mathematics.

20 **“SEC. 2502. PLANNING GRANTS.**

21 “(a) PURPOSE.—The purpose of this section is to ad-  
22 dress the lack of coordination among STEM education ef-  
23 forts in the States.

24 “(b) DEFINITION OF ELIGIBLE ENTITY.—In this sec-  
25 tion, the term ‘eligible entity’ means a State, Indian tribe,

1 tribal organization, nonprofit organization, or institution  
2 of higher education.

3 “(c) GRANTS AUTHORIZED.—From amounts made  
4 available to carry out this section, the Secretary shall  
5 carry out a program of awarding, on a competitive basis,  
6 planning grants to eligible entities to enable the eligible  
7 entities to—

8 “(1) develop effective State or tribal STEM  
9 networks for communication and collaboration that  
10 include school teachers, institutions of higher edu-  
11 cation, nonprofit organizations, businesses, Federal,  
12 State, and local governments, and any other relevant  
13 entities; and

14 “(2) through such State STEM networks, iden-  
15 tify future STEM skills needed for STEM and non-  
16 STEM occupations.

17 “(d) APPLICATION.—An eligible entity desiring a  
18 grant under this section shall submit an application to the  
19 Secretary at such time, in such manner, and containing  
20 such information as the Secretary may require.

21 “(e) REPORTS.—

22 “(1) REPORTS TO THE SECRETARY.—An eligi-  
23 ble entity receiving a grant under this section shall  
24 submit to the Secretary an annual report describing  
25 the progress made on the grant.

1           “(2) REPORTS TO CONGRESS.—Not later than  
2           3 years after the date of enactment of the STEM  
3           Support for Teachers in Education and Mentoring  
4           (STEM) Act, and every 3 years thereafter, the Sec-  
5           retary shall submit a report to Congress regarding  
6           the program supported under this section.

7   **“SEC. 2503. TRAINING PROGRAM GRANTS.**

8           “(a) PURPOSE.—The purpose of this section is to  
9           strengthen the capacity of teachers, elementary schools,  
10          middle schools, and secondary schools to inspire and pre-  
11          pare students for STEM careers and build STEM literacy.

12          “(b) DEFINITION OF ELIGIBLE ENTITY.—In this sec-  
13          tion, the term ‘eligible entity’ means a State, Indian tribe,  
14          tribal organization, local educational agency, institution of  
15          higher education, or nonprofit organization.

16          “(c) GRANTS AUTHORIZED.—

17                 “(1) IN GENERAL.—From amounts made avail-  
18                 able to carry out this section, the Secretary shall  
19                 carry out a program of awarding grants, on a com-  
20                 petitive basis, to eligible entities to enable the eligi-  
21                 ble entities to develop, carry out, and evaluate train-  
22                 ing programs for STEM education in elementary  
23                 schools, middle schools, and secondary schools.

24                 “(2) PROPORTIONALITY.—To the extent prac-  
25                 ticable, the Secretary shall, in awarding grants

1 under this section, ensure an equitable distribution  
2 between eligible entities serving urban areas and eli-  
3 gible entities serving rural areas.

4 “(d) APPLICATION.—An eligible entity desiring a  
5 grant under this section shall submit an application to the  
6 Secretary at such time, in such manner, and containing  
7 such information as the Secretary may require. Such ap-  
8 plication shall include—

9 “(1) a description of how the eligible entity will  
10 monitor and evaluate the effectiveness of the train-  
11 ing program, including how the eligible entity plans  
12 to measure the impact of the training on teachers  
13 who attended the training after the teachers return  
14 to the classroom; and

15 “(2) any other information the Secretary deter-  
16 mines appropriate.

17 “(e) USE OF FUNDS.—An eligible entity receiving a  
18 grant under this section shall use grant funds to carry  
19 out a training program, using best practice models and  
20 through summer institutes or other professional develop-  
21 ment enrichment programs, that provides professional de-  
22 velopment regarding STEM education to STEM teachers  
23 (including STEM teachers who are master teachers or  
24 have otherwise demonstrated mastery of STEM teaching)  
25 and administrators who are currently employed as teach-

1 ers and administrators, respectively, as of the time of the  
2 program.

3 “(f) REPORTS.—

4 “(1) REPORTS TO THE SECRETARY.—An eligi-  
5 ble entity receiving a grant under this section shall  
6 submit to the Secretary an annual report that de-  
7 scribes the progress made on the grant and includes  
8 the results from the evaluation described in the ap-  
9 plication under subsection (d).

10 “(2) REPORTS TO CONGRESS.—Not later than  
11 3 years after the date of enactment of this part, and  
12 every 3 years thereafter, the Secretary shall submit  
13 a report to Congress regarding the program sup-  
14 ported under this section.

15 **“SEC. 2504. NATIONAL PANEL.**

16 “(a) IN GENERAL.—The Secretary shall establish a  
17 national panel to review, evaluate, and identify—

18 “(1) rigorous kindergarten through grade 12  
19 STEM curricula models, including computer or web-  
20 based simulation education programs and kinesthetic  
21 learning; and

22 “(2) best practices with respect to STEM cur-  
23 ricula.

24 “(b) MEMBERS.—The Secretary shall determine the  
25 membership of the national panel described in subsection

1 (a), which shall be comprised of individuals who have the  
2 wisdom and experience to identify and recommend the  
3 most effective STEM curricula models, such as—

4 “(1) representatives of technology industries  
5 and business;

6 “(2) teachers and school administrators;

7 “(3) representatives of nonprofit organizations  
8 and community organizations;

9 “(4) faculty members of institutions of higher  
10 education;

11 “(5) research specialists and curricula special-  
12 ists;

13 “(6) at least 1 rural education expert; and

14 “(7) other individuals, as determined appro-  
15 priate by the Secretary.

16 “(c) REPORTS.—The panel shall prepare reports and  
17 recommendations regarding the panel’s findings as re-  
18 quested by the Secretary.

19 **“SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.**

20 “There is authorized to be appropriated to carry out  
21 this part such sums as may be necessary for fiscal year  
22 2011 and each of the 5 succeeding fiscal years.”.

23 (b) TABLE OF CONTENTS.—The table of contents in  
24 section 2 of the Elementary and Secondary Education Act

1 of 1965 is amended by inserting after the item relating  
2 to section 2441 the following:

“PART E—STEM EDUCATION PLANNING AND TRAINING

“Sec. 2501. Definitions.

“Sec. 2502. Planning grants.

“Sec. 2503. Training program grants.

“Sec. 2504. National panel.

“Sec. 2505. Authorization of appropriations.”.

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