

113TH CONGRESS  
1ST SESSION

# H. R. 3690

To increase the participation of women, girls, and underrepresented minorities in STEM fields, to encourage and support students from all economic backgrounds to pursue STEM career opportunities, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

DECEMBER 10, 2013

Mr. KENNEDY (for himself and Mr. HONDA) introduced the following bill; which was referred to the Committee on Education and the Workforce

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## A BILL

To increase the participation of women, girls, and underrepresented minorities in STEM fields, to encourage and support students from all economic backgrounds to pursue STEM career opportunities, 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 “STEM Gateways Act”.

5 **SEC. 2. FINDINGS.**

6       Congress finds the following:

7           (1) According to a 2013 Census Bureau study,  
8       women’s representation in STEM occupations has

1 increased since the 1970s, but women remain sig-  
2 nificantly underrepresented in engineering and com-  
3 puting occupations that make up more than 80 per-  
4 cent of all STEM employment. Women's representa-  
5 tion in computer occupations has declined since the  
6 1990s. In 2011, 26 percent of STEM workers were  
7 women and 74 percent were men. According to the  
8 National Action Council for Minorities in Engineer-  
9 ing, Inc. (NACME), the number of engineering de-  
10 grees awarded to African-American women has  
11 steadily declined since the late 1990s.

12 (2) According to the Brookings Institution  
13 2013 report, "The Hidden STEM Economy", half of  
14 all STEM jobs are available to workers without a 4-  
15 year college degree, and these jobs pay \$53,000 per  
16 year on average. This sector of the STEM economy  
17 offers job opportunities for many workers with qual-  
18 ified certificates or associate's degrees, drawing from  
19 high schools, workforce training programs, voca-  
20 tional schools, and community colleges. Despite  
21 these opportunities, only one-fifth of the \$4.3 billion  
22 spent annually by the Federal Government on  
23 STEM education and training goes towards sup-  
24 porting sub-bachelor's level training.

1                             (3) According to a 2011 report by the Depart-  
2                             ment of Commerce, underrepresented minorities ac-  
3                             count for only 3 out of 10 professionals in STEM  
4                             fields.

5                             (4) STEM workers in all demographic groups  
6                             earn more than their non-STEM counterparts.

7                             (5) According to the America After 3pm report,  
8                             children from African-American, Hispanic, and Na-  
9                             tive American populations participate in afterschool  
10                            programs in greater numbers than the average. Girls  
11                            also participate in equal numbers to boys in such  
12                            programs. Afterschool learning thus represents an  
13                            intervention point to engage with populations cur-  
14                            rently underrepresented in STEM fields and careers.

15 **SEC. 3. GRANT PROGRAM AUTHORIZED.**

16                             (a) PROGRAM AUTHORIZED.—From the amounts ap-  
17                             propriated to carry out this section, the Secretary of Edu-  
18                             cation shall award grants to eligible entities, on a competi-  
19                             tive basis, to enable such eligible entities to carry out pro-  
20                             grams described in subsection (d) to achieve, with respect  
21                             to women and girls, underrepresented minorities, and indi-  
22                             viduals from all economic backgrounds, (including eco-  
23                             nomically disadvantaged individuals and individuals living  
24                             in economically distressed areas), one or more of the fol-  
25                             lowing goals:

1                     (1) Encourage interest in the STEM fields at  
2                     the elementary school or secondary school levels.

3                     (2) Motivate engagement in STEM fields by  
4                     providing relevant hands-on learning opportunities  
5                     at the elementary school and secondary school levels.

6                     (3) Support classroom success in STEM dis-  
7                     ciplines at the elementary school or secondary school  
8                     levels.

9                     (4) Support workforce training and career prep-  
10                     aration in STEM fields at the secondary school level.

11                     (5) Improve access to career and continuing  
12                     education opportunities in STEM fields at the sec-  
13                     ondary school level.

14                 (b) LIMITATION.—The Secretary may award grants  
15                     under this section for not more than a 5-year period.

16                 (c) APPLICATION.—

17                     (1) IN GENERAL.—Each eligible entity that de-  
18                     sires to receive a grant under this section shall sub-  
19                     mit an application to the Secretary at such time, in  
20                     such manner, and containing such information as  
21                     the Secretary may reasonably require.

22                     (2) CONTENTS.—An application submitted  
23                     under paragraph (1) shall contain—

(A) in the case of an eligible entity that plans to use the grant funds at the elementary school level—

(i) a description of the programs the eligible entity will carry out to achieve one or more of the goals described in paragraphs (1) through (3) of subsection (a) at the elementary school level, including the content of the programs and research and models used to design the programs; and

(ii) a description of how the programs described in clause (i) will support the success of women and girls, underrepresented minorities, and individuals from all economic backgrounds (including economically disadvantaged individuals and individuals living in economically distressed areas) in STEM education, such as—

(I) recruiting such individuals to participate in the programs;

(II) supporting educators who will lead the programs, and participants in the programs;

(III) encouraging partnerships between in-school and out-of-school

1                   educators, such as afterschool pro-  
2                   viders, science centers, and museums;

3                   (IV) identifying public and pri-  
4                   vate partners that are able to support  
5                   the programs; and

6                   (V) planning for sustaining the  
7                   programs financially beyond the grant  
8                   period;

9                   (B) in the case of an eligible entity that  
10                  plans to use the grant funds at the secondary  
11                  school level—

12                  (i) a description of the programs the  
13                  eligible entity will carry out to achieve one  
14                  or more of the goals described in para-  
15                  graphs (1) through (5) of subsection (a) at  
16                  the secondary school level, including the  
17                  content of the programs and research and  
18                  models used to design the programs;

19                  (ii) a description of how the programs  
20                  described in clause (i) will support the suc-  
21                  cess of women and girls, underrepresented  
22                  minorities, and individuals from all eco-  
23                  nomic backgrounds (including economically  
24                  disadvantaged individuals and individuals  
25                  living in economically distressed areas) in

1                   STEM education and workforce training  
2                   that prepares such individuals to take ad-  
3                   vantage of employment opportunities in  
4                   STEM fields, such as—  
5                         (I) recruiting such individuals to  
6                         participate in the programs;  
7                         (II) supporting educators who  
8                         will lead such programs, and partici-  
9                         pants in the programs;  
10                       (III) identifying public and pri-  
11                         vate partners that are able to support  
12                         the programs;  
13                       (IV) partnering with institutions  
14                         of higher education or institutions  
15                         providing informal science education,  
16                         such as afterschool programs and  
17                         science centers and museums;  
18                       (V) partnering with institutions  
19                         of higher education; and  
20                       (VI) planning for sustaining the  
21                         programs financially beyond the grant  
22                         period;  
23                       (iii) a review of the industry and busi-  
24                         ness workforce needs, including the de-

mand for workers with knowledge or training in a STEM field; and

3 (iv) an analysis of job openings that  
4 require knowledge or training in a STEM  
5 field.

(d) USE OF FUNDS.—

21 (A) Carrying out the activities described in  
22 subparagraph (A)(ii) or (B)(ii), as appropriate.

(B) Providing professional development for teachers, afterschool providers, and other school personnel in elementary schools or secondary

1 schools, including professional development to  
2 encourage, through academic instruction and  
3 support, such individuals to pursue advanced  
4 classes and careers in STEM fields.

5 (C) Providing tutoring and mentoring pro-  
6 grams in STEM fields.

7 (D) Establishing partnerships with institu-  
8 tions of higher education, potential employers,  
9 and other industry stakeholders that expose  
10 such individuals to professionals in STEM  
11 fields, or providing opportunities for postsec-  
12 ondary academic credits or credentials.

13 (E) Providing after-school activities and  
14 other informal learning opportunities designed  
15 to encourage interest and develop skills in  
16 STEM fields.

17 (F) Providing summer programs to extend  
18 learning time and to deepen the skills and in-  
19 terest in STEM fields of such individuals.

20 (G) Purchasing and utilizing—

21 (i) educational or instructional mate-  
22 rials that are designed to improve edu-  
23 cational outcomes in STEM fields, and will  
24 serve to deepen the skills and interest in  
25 STEM fields of such individuals; or

(ii) equipment, instrumentation, or hardware used to teach and encourage interest in STEM fields.

(H) Internships or opportunities for experiential learning in STEM fields.

6 (e) REPORT.—

18 SEC. 4. DEFINITIONS.

**19**      In this Act:

1                         (2) COMMUNITY COLLEGE.—The term “commu-  
2         nity college” has the meaning given the term “junior  
3         or community college” in section 312 of the Higher  
4         Education Act of 1965 (20 U.S.C. 1058).

5                         (3) ECONOMICALLY DISADVANTAGED INDI-  
6         VIDUAL.—The term “economically disadvantaged in-  
7         dividual” has the meaning given the term in section  
8         400.4 of title 34, Code of Federal Regulations, as  
9         such section is in effect on the date of enactment of  
10        this Act.

11                         (4) ECONOMICALLY DISTRESSED AREA.—The  
12         term “economically distressed area” means a county  
13         or equivalent division of local government of a State  
14         in which, according to the most recently available  
15         data from the Bureau of the Census, 40 percent or  
16         more of the residents have an annual income that is  
17         at or below the poverty level.

18                         (5) ELIGIBLE ENTITY.—The term “eligible enti-  
19         ty” means—

- 20                             (A) a local educational agency;
- 21                             (B) an educational service agency serving  
22                             more than 1 local educational agency;
- 23                             (C) a consortium of local educational agen-  
24                             cies;
- 25                             (D) nonprofit organizations that—

11                             (6) PARTNERS.—The term “partners” means  
12 organizations who employ workers in STEM-related  
13 careers or organizations with demonstrated expertise  
14 in identifying, scaling, and implementing successful  
15 practices in STEM education and workforce develop-  
16 ment.

(7) STEM.—The term “STEM” means science, technology, engineering, and mathematics.

