

113<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 5031

To define STEM education to include computer science, and to support existing STEM education programs at the National Science Foundation.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 8, 2014

Mr. SMITH of Texas (for himself, Ms. ESTY, Mr. BUCSHON, Mr. HULTGREN, Mr. LIPINSKI, Ms. EDDIE BERNICE JOHNSON of Texas, Ms. WILSON of Florida, Ms. KELLY of Illinois, Mr. COLLINS of New York, and Mr. KENNEDY) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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## A BILL

To define STEM education to include computer science, and to support existing STEM education programs 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. SHORT TITLE.**

4 This Act may be cited as the “STEM Education Act  
5 of 2014”.

6 **SEC. 2. DEFINITION OF STEM EDUCATION.**

7 For purposes of carrying out STEM education activi-  
8 ties at the National Science Foundation, the Department

1 of Energy, the National Aeronautics and Space Adminis-  
2 tration, the National Oceanic and Atmospheric Adminis-  
3 tration, the National Institute of Standards and Tech-  
4 nology, and the Environmental Protection Agency, the  
5 term “STEM education” means education in the subjects  
6 of science, technology, engineering, and mathematics, in-  
7 cluding other academic subjects that build on these dis-  
8 ciplines such as computer science.

9 **SEC. 3. INFORMAL STEM EDUCATION.**

10 (a) GRANTS.—The Director of the National Science  
11 Foundation, through the Directorate for Education and  
12 Human Resources, shall continue to award competitive,  
13 merit-reviewed grants to support—

14 (1) research and development of innovative out-  
15 of-school STEM learning and emerging STEM  
16 learning environments in order to improve STEM  
17 learning outcomes and engagement in STEM; and

18 (2) research that advances the field of informal  
19 STEM education.

20 (b) USES OF FUNDS.—Activities supported by grants  
21 under this section may encompass a single STEM dis-  
22 cipline, multiple STEM disciplines, or integrative STEM  
23 initiatives and shall include—

24 (1) research and development that improves our  
25 understanding of learning and engagement in infor-

1 mal environments, including the role of informal en-  
2 vironments in broadening participation in STEM;  
3 and

4 (2) design and testing of innovative STEM  
5 learning models, programs, and other resources for  
6 informal learning environments to improve STEM  
7 learning outcomes and increase engagement for K-  
8 12 students, K-12 teachers, and the general public,  
9 including design and testing of the scalability of  
10 models, programs, and other resources.

11 **SEC. 4. NOYCE SCHOLARSHIP PROGRAM AMENDMENTS.**

12 (a) AMENDMENTS.—Section 10A of the National  
13 Science Foundation Authorization Act of 2002 (42 U.S.C.  
14 1862n-1a) is amended—

15 (1) in subsection (a)(2)(B), by inserting “or  
16 bachelor’s” after “master’s”;

17 (2) in subsection (c)—

18 (A) by striking “and” at the end of para-  
19 graph (2)(B);

20 (B) in paragraph (3)—

21 (i) by inserting “for teachers with  
22 master’s degrees in their field” after  
23 “Teaching Fellowships”; and

1 (ii) by striking the period at the end  
2 of subparagraph (B) and inserting “;  
3 and”; and

4 (C) by adding at the end the following new  
5 paragraph:

6 “(4) in the case of National Science Foundation  
7 Master Teaching Fellowships for teachers with bach-  
8 elor’s degrees in their field and working toward a  
9 master’s degree—

10 “(A) offering academic courses leading to  
11 a master’s degree and leadership training to  
12 prepare individuals to become master teachers  
13 in elementary and secondary schools; and

14 “(B) offering programs both during and  
15 after matriculation in the program for which  
16 the fellowship is received to enable fellows to  
17 become highly effective mathematics and  
18 science teachers, including mentoring, training,  
19 induction, and professional development activi-  
20 ties, to fulfill the service requirements of this  
21 section, including the requirements of sub-  
22 section (e), and to exchange ideas with others  
23 in their fields.”;

24 (3) in subsection (e), by striking “subsection  
25 (g)” and inserting “subsection (h)”;

1           (4) by redesignating subsections (g) through (i)  
2           as subsections (h) through (j), respectively; and

3           (5) by inserting after subsection (f) the fol-  
4           lowing new subsection:

5           “(g) SUPPORT FOR MASTER TEACHING FELLOWS  
6 WHILE ENROLLED IN A MASTER’S DEGREE PROGRAM.—  
7 A National Science Foundation Master Teacher Fellow  
8 may receive a maximum of 1 year of fellowship support  
9 while enrolled in a master’s degree program as described  
10 in subsection (c)(4)(A), except that if such fellow is en-  
11 rolled in a part-time program, such amount shall be pro-  
12 rated according to the length of the program.”.

13           (b) DEFINITION.—Section 10(i)(5) of the National  
14 Science Foundation Authorization Act of 2002 (42 U.S.C.  
15 1862n–1(i)(5)) is amended by inserting “computer  
16 science,” after “means a science,”.

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