113TH CONGRESS
1ST SESSION
H. R. 2536

To amend the Elementary and Secondary Education Act of 1965 to strengthen elementary and secondary computer science education, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

JUNE 27, 2013

Mrs. BROOKS of Indiana (for herself, Mr. POLIS, Mr. HANNA, Ms. DELBENE, Mrs. MCMORRIS RODGERS, Mr. HUNTER, Mr. HONDA, Mrs. DAVIS of California, Mr. LANGEVIN, Mr. JOHNSON of Ohio, Mr. MESSER, and Mr. DELANEY) introduced the following bill; which was referred to the Committee on Education and the Workforce

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A BILL

To amend the Elementary and Secondary Education Act of 1965 to strengthen elementary and secondary computer science education, 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 "Computer Science

5 Education Act of 2013".

6 **SEC. 2. FINDINGS.**

7   Congress finds the following:

1   (1) Computer science is transforming industry,

2 creating new fields of commerce, driving innovation

3 in all fields of science, and bolstering productivity in

4 established economic sectors.

5   (2) Computer science underpins the information

6 technology sector of the United States, which is a

7 significant contributor to the economic output of the

8 United States.

9   (3) The Bureau of Labor Statistics predicts

10 that there will be 9,200,000 jobs in the fields of

11 science, technology, engineering, and mathematics by

12 the year 2020. Half of these, or 4,600,000 jobs, will

13 be in computing.

14   (4) The average annual salary in computer

15 science is $76,000.

16   (5) Elementary and secondary computer science

17 education gives students a deeper knowledge of the

18 fundamentals of computing, yielding critical thinking

19 skills that will serve students throughout their lives

20 in numerous fields.

21   (6) Students who take the College Board's AP

22 computer science test are 8 times more likely to

23 major in computer science in college. Unfortunately,

24 the College Board reports that of the 3,400,000 AP

25 exams given in 2011, just under 1,000,000 of those

1 were in the sciences. About 20,000 of those were in
2 computer science, accounting for 2 percent of the
3 science exams and 1 percent of all AP exams. Of the
4 20,000 computer science AP test takers in 2011,
5 only 4,000 were females.

6 (7) In the 2012–2013 school year, only 9 states
7 allowed computer science courses to count toward
8 secondary school core graduation requirements,
9 chilling student interest in computer science courses.

10 (8) The Computer Science Teachers Association
11 (CSTA) has found that many States do not have a
12 certification or licensure process for computer
13 science teachers. Where processes do exist, they
14 often have no connection to rigorous computer
15 science content.

16 (9) Computer science education has been en-
17 cumbered by confusion regarding the related but dis-
18 tinct concepts of computer science education, tech-
19 nology education, and the use of technology in edu-
20 cation.

21 (10) The Association for Computing Machinery
22 and the CSTA have established a clear 4-part,
23 grade-appropriate framework of standards for com-
24 puter science education to guide State reform ef-
25 forts.

1 　　　(11) With the growing importance of computing

2 　　in society, the need for students to understand the

3 　　fundamentals of computing and the significant chal-

4 　　lenges elementary and secondary computer science

5 　　education faces, broad support for computer science

6 　　education is needed to catalyze reform.

7 **SEC. 3. COMPUTER SCIENCE DEFINITIONS.**

8 　　Section 9101 of the Elementary and Secondary Edu-

9 cation Act of 1965 (20 U.S.C. 7801) is amended—

10 　　　(1) by redesignating paragraphs (7) through

11 　　(43) as paragraphs (8) through (44), respectively;

12 　　　(2) by inserting after paragraph (6) the fol-

13 　　lowing:

14 　　　"(7) COMPUTER SCIENCE.—The term 'com-

15 　　puter science' means the study of computers and al-

16 　　gorithmic processes and includes the study of com-

17 　　puting principles, computer hardware and software

18 　　design, computer applications, and the impact of

19 　　computers on society.";

20 　　　(3) in paragraph (12), as so redesignated, by

21 　　striking "and geography" and inserting "geography,

22 　　and computer science"; and

1   (4) in subparagraph (A)(i) of paragraph (35),

2   as so redesignated, by inserting ''(including com-

3   puter science)'' after ''academic subjects''.

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