115TH CONGRESS
2D SESSION

S. _____

To support coding education.

IN THE SENATE OF THE UNITED STATES

Ms. CANTWELL (for herself and Mr. CASSIDY) introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To support coding education.

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 "Coding Opportunities

5   and Development for Equitable Students Act" or the

6   "High School CODES Act".

7   **SEC. 2. DEFINITIONS.**

8   In this Act:

9   (1) CODING.—The term "coding" has the

10   meaning given the term in section 114(e)(6) of the

1 Carl D. Perkins Career and Technical Education

2 Act of 2006 (20 U.S.C. 2324(e)(6)).

3   (2) COMPUTER SCIENCE.—The term "computer

4 science" means the study of computers and algo-

5 rithmic processes, including the principles, hardware

6 and software designs, implementation, and impact

7 on society, of computers and algorithmic processes.

SEC. 3. SENSE OF THE SENATE.

9 It is the Sense of the Senate that—

10   (1) States should support high schools in recog-

11 nizing coding and computer science classes as class-

12 es that count toward the fulfillment of graduation

13 requirements;

14   (2) it should be a priority to create a national

15 strategy to incorporate computer science and coding

16 into the elementary and secondary educational sys-

17 tem in the United States;

18   (3) learning to write and read code is critical to

19 creating and innovating in cyberspace, and learning

20 to write and read code is a skill critical to the na-

21 tional security and economic competitiveness of the

22 United States; and

23   (4) the modernization of the educational system

24 in the United States is a priority, and modernization

1   is necessary to bolster the next generation of high-

2   tech workers.

3 **SEC. 4. CODING DEMONSTRATION PROGRAM.**

4   Section 114 of the Carl D. Perkins Career and Tech-

5 nical Education Act of 2006 (20 U.S.C. 2324) is amend-

6 ed—

7   (1) by redesignating subsection (e) as sub-

8   section (f); and

9   (2) in subsection (d)(2)(A), by striking "sub-

10   section(e)" and inserting "subsection (f)";

11   (3) in subsection (d)(4)(A), by striking "sub-

12   section (e)" and inserting "subsection (f)"; and

13   (4) by inserting after subsection (d) the fol-

14   lowing:

15   "(e) CODING DEMONSTRATION PROGRAM.—

16   "(1) IN GENERAL.—The Secretary shall carry

17   out a coding demonstration program, through which

18   the Secretary shall award grants to local educational

19   agencies to enable those local educational agencies to

20   establish new programs or expand existing programs

21   that allow high school students to take a coding

22   class in place of a mathematics, science, or foreign

23   language class in order to fulfill a graduation re-

24   quirement.

25   "(2) APPLICATION.—

1 "(A) IN GENERAL.—A local educational

2 agency desiring a grant under this subsection

3 shall submit an application to the Secretary at

4 such time, in such manner, and containing such

5 information as the Secretary may require, in-

6 cluding the information described in subpara-

7 graph (B).

8 "(B) CONTENTS.—An application sub-

9 mitted under subparagraph (A) shall include—

10 "(i) a strategy for obtaining future

11 funding to sustain the program after the

12 grant has ended from State, private, or

13 other non-Federal funding sources;

14 "(ii) a spending plan;

15 "(iii) a description of the goals of the

16 program; and

17 "(iv) a description of the statistics the

18 local educational agency will collect to in-

19 clude in the local educational agency's re-

20 port to the Secretary described under para-

21 graph (4).

22 "(3) PRIORITY.—In awarding grants under this

23 subsection, the Secretary shall give priority to a

24 local educational agency submitting an application

1   under paragraph (2) that is located in a rural or un-

2   derserved area.

3   "(4) REPORT.—Not later than 5 years after the

4   date of enactment of this subsection, each local edu-

5   cational agency receiving a grant under paragraph

6   (1) shall submit to the Secretary a report about the

7   coding program activities carried out with grant

8   funds, including information and statistics about

9   that program's findings, successes, and failures.

10   "(5) SUNSET.—This subsection shall remain in

11   effect until the date that is 5 years after the date

12   of enactment of this subsection.

13   "(6) DEFINITIONS.—

14   "(A) CODING.—In this subsection, the

15   term 'coding' means the creation and modifica-

16   tion of—

17   "(i) source code (defined as any series

18   of statements written in some human-read-

19   able computer programming language); or

20   "(ii) machine code (defined as instruc-

21   tions for a computer processor in some ma-

22   chine language).

23   "(B) HIGH SCHOOL.—In this subsection,

24   the term 'high school' has the meaning given

25   the term in section 8101 of the Elementary and

1   Secondary Education Act of 1965 (20 U.S.C.

2   7801).''.