

Calendar No. 314

116TH CONGRESS
1ST SESSION

S. 153

[Report No. 116–164]

To promote veteran involvement in STEM education, computer science, and scientific research, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 16, 2019

Mr. RUBIO (for himself, Ms. KLOBUCHAR, Mr. DAINES, Mr. GARDNER, Mr. ROUNDS, Ms. ROSEN, Mr. BLUMENTHAL, Ms. CORTEZ MASTO, Mrs. FISCHER, Mr. PETERS, Mr. CRAMER, and Mr. HOEVEN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

DECEMBER 5, 2019

Reported by Mr. WICKER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

A BILL

To promote veteran involvement in STEM education, computer science, and scientific research, 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 “Supporting Veterans
3 in STEM Careers Act”.

4 **SEC. 2. DEFINITIONS.**

5 In this Act:

6 (1) **DIRECTOR.**—The term “Director” means
7 the Director of the National Science Foundation.

8 (2) **FOUNDATION.**—The term “Foundation”
9 means the National Science Foundation.

10 (3) **STEM.**—The term “STEM” has the mean-
11 ing given the term in section 2 of the America COM-
12 PETES Reauthorization Act of 2010 (42 U.S.C.
13 6621 note).

14 (4) **VETERAN.**—The term “veteran” has the
15 meaning given the term in section 101 of title 38,
16 United States Code.

17 **SEC. 3. SUPPORTING VETERANS IN STEM EDUCATION AND**
18 **COMPUTER SCIENCE.**

19 (a) **SUPPORTING VETERAN INVOLVEMENT IN SCI-**
20 **ENTIFIC RESEARCH AND STEM EDUCATION.**—The Di-
21 rector shall, through the research and education activities
22 of the Foundation, encourage veterans to study and pur-
23 sue careers in STEM and computer science, in coordina-
24 tion with other Federal agencies that serve veterans.

25 (b) **VETERAN OUTREACH PLAN.**—Not later than 180
26 days after the date of enactment of this Act, the Director

1 shall submit to the Committee on Science, Space, and
 2 Technology of the House of Representatives and the Com-
 3 mittee on Commerce, Science, and Transportation of the
 4 Senate a plan for how the Foundation can enhance its out-
 5 reach efforts to veterans. Such plan shall—

6 (1) report on the Foundation’s existing out-
 7 reach activities;

8 (2) identify the best method for the Foundation
 9 to leverage existing authorities and programs to fa-
 10 cilitate and support veterans in STEM careers and
 11 studies, including teaching programs; and

12 (3) include options for how the Foundation
 13 could track veteran participation in research and
 14 education programs of the Foundation; and describe
 15 any barriers to collecting such information.

16 (c) NATIONAL SCIENCE BOARD INDICATORS RE-
 17 PORT.—The National Science Board shall provide in its
 18 annual report on indicators of the state of science and en-
 19 gineering in the United States any available and relevant
 20 data on veterans in science and engineering careers or
 21 education programs.

22 (d) ROBERT NOYCE TEACHER SCHOLARSHIP PRO-
 23 GRAM UPDATE.—Section 10 of the National Science
 24 Foundation Authorization Act of 2002 (42 U.S.C. 1862n-
 25 1) is amended—

1 ~~(1)~~ in subsection ~~(a)~~(5)—

2 ~~(A)~~ in subparagraph ~~(A)~~, by striking
3 ~~“and”~~ at the end;

4 ~~(B)~~ in subparagraph ~~(B)~~, by striking the
5 period at the end and inserting “; and”; and

6 ~~(C)~~ by adding at the end the following:

7 ~~“(C) higher education programs that serve~~
8 ~~or support veterans.”;~~

9 ~~(2)~~ in subsection ~~(b)~~(2)(F)—

10 ~~(A)~~ by striking “and students” and insert-
11 ing “; students”; and

12 ~~(B)~~ by inserting “; and veterans” before
13 the period at the end;

14 ~~(3)~~ in subsection ~~(c)~~(2), by inserting “and vet-
15 erans” before the period at the end; and

16 ~~(4)~~ in subsection ~~(d)~~(2), by inserting “and vet-
17 erans” before the period at the end.

18 ~~(e) NATIONAL SCIENCE FOUNDATION TEACHING~~
19 ~~FELLOWSHIPS AND MASTER TEACHING FELLOWSHIPS~~
20 ~~UPDATE.—Section 10A(d) of the National Science Foun-~~
21 ~~dation Authorization Act of 2002 (42 U.S.C. 1862n-~~
22 ~~1a(d)) is amended—~~

23 ~~(1)~~ in paragraph ~~(3)~~(F)—

24 ~~(A)~~ by striking “and individuals” and in-
25 serting “; individuals”; and

1 (B) by inserting “, and veterans” before
2 the period at the end; and

3 (2) in paragraph (4)(B), by inserting “and vet-
4 erans” before the period at the end.

5 (f) NATIONAL SCIENCE FOUNDATION COMPUTER
6 AND NETWORK SECURITY CAPACITY BUILDING GRANTS
7 UPDATE.—Section 5(a) of the Cyber Security Research
8 and Development Act (15 U.S.C. 7404(a)) is amended—

9 (1) in paragraph (1), by inserting “and stu-
10 dents who are veterans” after “these fields”; and

11 (2) in paragraph (3)—

12 (A) in subparagraph (I), by striking “and”
13 at the end;

14 (B) by redesignating subparagraph (J) as
15 subparagraph (K); and

16 (C) by inserting after subparagraph (I) the
17 following:

18 “(J) creating opportunities for veterans to
19 transition to careers in computer and network
20 security; and”.

21 (g) GRADUATE TRAINEESHIPS IN COMPUTER AND
22 NETWORK SECURITY RESEARCH UPDATE.—Section
23 5(e)(6)(C) of the Cyber Security Research and Develop-
24 ment Act (15 U.S.C. 7404(e)(6)(C)) is amended by insert-
25 ing “or veterans” after “disciplines”.

1 (h) VETERANS AND MILITARY FAMILIES STEM
2 EDUCATION INTERAGENCY WORKING GROUP.—

3 (1) IN GENERAL.—The Director of the Office of
4 Science and Technology Policy shall establish an
5 interagency working group to coordinate Federal
6 programs and policies for transitioning and training
7 veterans and military spouses for STEM careers.

8 (2) DUTIES OF INTERAGENCY WORKING
9 GROUP.—The interagency working group established
10 under paragraph (1) shall—

11 (A) coordinate any Federal agency STEM
12 outreach activities and programs for veterans
13 and military spouses; and

14 (B) develop and facilitate the implementa-
15 tion by participating agencies of a strategic
16 plan, which shall—

17 (i) specify and prioritize short- and
18 long-term objectives;

19 (ii) specify the common metrics that
20 will be used by Federal agencies to assess
21 progress toward achieving such objectives;

22 (iii) identify barriers veterans face in
23 reentering the workforce, including a lack
24 of formal STEM education, career guid-

1 ancee, and the process of transferring mili-
2 tary credits and skills to college credits;

3 (iv) identify barriers military spouses
4 face in establishing careers in STEM
5 fields;

6 (v) describe the approaches that each
7 participating agency will take to address
8 administratively the barriers described in
9 clauses (iii) and (iv); and

10 (vi) identify any barriers that require
11 Federal or State legislative or regulatory
12 changes in order to be addressed.

13 ~~(3) DUTIES OF OSTP.—~~The Director of the Of-
14 fice of Science and Technology Policy shall encour-
15 age and monitor the efforts of the Federal agencies
16 participating in the interagency working group to
17 ensure that the strategic plan required under para-
18 graph ~~(2)(B)~~ is developed and executed effectively
19 and that the objectives of such strategic plan are
20 met.

21 ~~(4) REPORT.—~~The Director of the Office of
22 Science and Technology Policy shall—

23 (A) not later than 1 year after the date of
24 enactment of this Act, submit to Congress the

strategic plan required under paragraph (2)(B);
and

(B) include in the annual report required
by section 101(d) of the America COMPETES
Reauthorization Act of 2010 (42 U.S.C.
6621(d)) a description of any progress made in
carrying out the activities described in para-
graph (2)(B) of this subsection.

(5) SUNSET.—The interagency working group
established under paragraph (1) shall terminate on
the date that is 5 years after the date that it is es-
tablished.

SECTION 1. SHORT TITLE.

*This Act may be cited as the “Supporting Veterans
in STEM Careers Act”.*

SEC. 2. DEFINITIONS.

In this Act:

(1) *DIRECTOR.*—The term “Director” means the
Director of the National Science Foundation.

(2) *FOUNDATION.*—The term “Foundation”
means the National Science Foundation.

(3) *STEM.*—The term “STEM” has the meaning
given the term in section 2 of the America COM-
PETES Reauthorization Act of 2010 (42 U.S.C. 6621
note).

1 (4) *VETERAN.*—*The term “veteran” has the*
 2 *meaning given the term in section 101 of title 38,*
 3 *United States Code.*

4 **SEC. 3. SUPPORTING VETERANS IN STEM EDUCATION AND**
 5 **COMPUTER SCIENCE.**

6 (a) *SUPPORTING VETERAN INVOLVEMENT IN SCI-*
 7 *ENTIFIC RESEARCH AND STEM EDUCATION.*—*The Director*
 8 *shall, through the research and education activities of the*
 9 *Foundation, encourage veterans to study and pursue careers*
 10 *in STEM and computer science, in coordination with other*
 11 *Federal agencies that serve veterans.*

12 (b) *VETERAN OUTREACH PLAN.*—*Not later than 180*
 13 *days after the date of enactment of this Act, the Director*
 14 *shall submit to the Committee on Science, Space, and Tech-*
 15 *nology of the House of Representatives and the Committee*
 16 *on Commerce, Science, and Transportation of the Senate*
 17 *a plan for how the Foundation can enhance its outreach*
 18 *efforts to veterans. Such plan shall—*

19 (1) *report on the Foundation’s existing outreach*
 20 *activities;*

21 (2) *identify the best method for the Foundation*
 22 *to leverage existing authorities and programs to fa-*
 23 *cilitate and support veterans in STEM careers and*
 24 *studies, including teaching programs; and*

1 (3) include options for how the Foundation could
 2 track veteran participation in research and education
 3 programs of the Foundation, and describe any bar-
 4 riers to collecting such information.

5 (c) NATIONAL SCIENCE BOARD INDICATORS RE-
 6 PORT.—The National Science Board shall provide in its an-
 7 nual report on indicators of the state of science and engi-
 8 neering in the United States any available and relevant
 9 data on veterans in science and engineering careers or edu-
 10 cation programs.

11 (d) ROBERT NOYCE TEACHER SCHOLARSHIP PRO-
 12 GRAM UPDATE.—Section 10 of the National Science Foun-
 13 dation Authorization Act of 2002 (42 U.S.C. 1862n–1) is
 14 amended—

15 (1) in subsection (a)(5)—

16 (A) in subparagraph (A), by striking “and”
 17 at the end;

18 (B) in subparagraph (B), by striking the
 19 period at the end and inserting “; and”; and

20 (C) by adding at the end the following:

21 “(C) higher education programs that serve
 22 or support veterans.”;

23 (2) in subsection (b)(2)(F)—

24 (A) by striking “and students” and insert-
 25 ing “, students”; and

1 (B) by inserting “, and veterans” before the
2 period at the end;

3 (3) in subsection (c)(2), by inserting “and vet-
4 erans” before the period at the end; and

5 (4) in subsection (d)(2), by inserting “and vet-
6 erans” before the period at the end.

7 (e) NATIONAL SCIENCE FOUNDATION TEACHING FEL-
8 LOWSHIPS AND MASTER TEACHING FELLOWSHIPS UP-
9 DATE.—Section 10A(d) of the National Science Foundation
10 Authorization Act of 2002 (42 U.S.C. 1862n–1a(d)) is
11 amended—

12 (1) in paragraph (3)(F)—

13 (A) by striking “and individuals” and in-
14 serting “, individuals”; and

15 (B) by inserting “, and veterans” before the
16 period at the end; and

17 (2) in paragraph (4)(B), by inserting “and vet-
18 erans” before the period at the end.

19 (f) NATIONAL SCIENCE FOUNDATION COMPUTER AND
20 NETWORK SECURITY CAPACITY BUILDING GRANTS UP-
21 DATE.—Section 5(a) of the Cyber Security Research and
22 Development Act (15 U.S.C. 7404(a)) is amended—

23 (1) in paragraph (1), by inserting “and students
24 who are veterans” after “these fields”; and

25 (2) in paragraph (3)—

1 (A) in subparagraph (I), by striking “and”
 2 at the end;

3 (B) by redesignating subparagraph (J) as
 4 subparagraph (K); and

5 (C) by inserting after subparagraph (I) the
 6 following:

7 “(J) creating opportunities for veterans to
 8 transition to careers in computer and network
 9 security; and”.

10 (g) GRADUATE TRAINEESHIPS IN COMPUTER AND
 11 NETWORK SECURITY RESEARCH UPDATE.—Section
 12 5(c)(6)(C) of the Cyber Security Research and Development
 13 Act (15 U.S.C. 7404(c)(6)(C)) is amended by inserting “or
 14 veterans” after “disciplines”.

15 (h) VETERANS AND MILITARY FAMILIES STEM EDU-
 16 CATION INTERAGENCY WORKING GROUP.—

17 (1) IN GENERAL.—The Director of the Office of
 18 Science and Technology Policy shall establish, or des-
 19 ignate, an interagency working group to improve vet-
 20 eran and military spouse equity and representation
 21 in STEM fields.

22 (2) DUTIES OF INTERAGENCY WORKING
 23 GROUP.—An interagency working group established
 24 under paragraph (1) shall develop and facilitate the

1 *implementation by participating agencies of a strategic plan, which shall—*

3 *(A) specify and prioritize short- and long-term objectives;*

5 *(B) specify the common metrics that will be used by Federal agencies to assess progress toward achieving such objectives;*

8 *(C) identify barriers veterans face in reentering the workforce, including a lack of formal STEM education, career guidance, and the process of transferring military credits and skills to college credits;*

13 *(D) identify barriers military spouses face in establishing careers in STEM fields;*

15 *(E) describe the approaches that each participating agency will take to address administratively the barriers described in subparagraphs (C) and (D); and*

19 *(F) identify any barriers that require Federal or State legislative or regulatory changes in order to be addressed.*

22 *(3) REPORT.—The Director of the Office of Science and Technology Policy shall—*

24 *(A) not later than 1 year after the date of enactment of this Act, submit to Congress the*

1 *strategic plan required under paragraph (2);*
 2 *and*

3 *(B) include in the annual report required*
 4 *by section 101(d) of the America COMPETES*
 5 *Reauthorization Act of 2010 (42 U.S.C. 6621(d))*
 6 *a description of any progress made in carrying*
 7 *out the activities described in paragraph (2) of*
 8 *this subsection.*

9 *(4) SUNSET.—An interagency working group es-*
 10 *tablished under paragraph (1) shall terminate on the*
 11 *date that is 3 years after the date that it is estab-*
 12 *lished.*

13 **SEC. 4. COMPTROLLER GENERAL OF THE UNITED STATES**
 14 **STUDY AND REPORT ON BARRIERS FACED BY**
 15 **STUDENT VETERANS PURSUING DEGREES IN**
 16 **SCIENCE, TECHNOLOGY, ENGINEERING, OR**
 17 **MATH.**

18 *(a) STUDY.—Not later than August 1, 2022, the Comp-*
 19 *troller General of the United States shall complete a study*
 20 *on academic success rates of student veterans pursuing cov-*
 21 *ered degrees and barriers faced by such students in pur-*
 22 *suing such degrees.*

23 *(b) ELEMENTS.—The study required by subsection (a)*
 24 *shall include the following:*

1 (1) *Assessment of available information on the*
2 *percentage or number of student veterans pursuing a*
3 *covered degree with educational assistance furnished*
4 *under chapter 33 of title 38, United States Code.*

5 (2) *Assessment of available information on the*
6 *percentage or number of such students who pursue a*
7 *covered degree and do not obtain such degree in four*
8 *or fewer academic years.*

9 (3) *Identification of the reasons that such stu-*
10 *dents do not obtain such degree in four or fewer aca-*
11 *demic years and whether such reasons are barriers to*
12 *obtaining such degrees.*

13 (4) *Development of recommendations for legisla-*
14 *tive or administrative action to better align the edu-*
15 *cational assistance furnished under chapter 33 of title*
16 *38, United States Code, with the needs of such stu-*
17 *dents and address the reasons identified under para-*
18 *graph (3).*

19 (c) *REPORT.*—*Not later than August 1, 2022, the*
20 *Comptroller General shall submit to Congress a report on*
21 *the findings of the Comptroller General with respect to the*
22 *study completed under subsection (a), along with rec-*
23 *ommendations for such legislative or administrative action*
24 *as the Comptroller General considers appropriate.*

1 (d) *DEFINITION OF COVERED DEGREE.*—*In this sec-*
2 *tion, the term “covered degree” means a standard, under-*
3 *graduate college degree in a field listed under section*
4 *3320(b)(4)(A)(i) of title 38, United States Code.*

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[Report No. 116–164]

A BILL

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DECEMBER 5, 2019

Reported with an amendment