113TH CONGRESS
1ST SESSION

S. 1796

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.

IN THE SENATE OF THE UNITED STATES

DECEMBER 10, 2013

Mrs. GILLIBRAND introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''STEM Gateways Act''.

SEC. 2. FINDINGS.

Congress finds the following:

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

increased since the 1970s, but women remain significantly underrepresented in engineering and computing occupations that make up more than 80 percent of all STEM employment. Women's representation in computer occupations has declined since the 1990s. In 2011, 26 percent of STEM workers were women. According to the National Action Council for Minorities in Engineering, Inc. (NACME), the number of engineering degrees awarded to African-American women has steadily declined since the late 1990s.

(2) According to the Brookings Institution 2013 report, ''The Hidden STEM Economy'', half of all STEM jobs are available to workers without a 4-year college degree, and these jobs pay $53,000 per year on average. This sector of the STEM economy offers job opportunities for many workers with qualified certificates or associate's degrees, drawing from high schools, workforce training programs, vocational schools, and community colleges. Despite these opportunities, only ⅕ of the $4,300,000,000 spent annually by the Federal Government on STEM education and training goes towards supporting sub-bachelor's level training.

(3) According to a 2011 report by the Department of Commerce, underrepresented minorities account for only 3 out of 10 professionals in STEM fields.

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

(5) According to the America After 3pm report, children from African-American, Hispanic, and Native American populations participate in afterschool programs in greater numbers than the average. Girls also participate in equal numbers to boys in such programs. Afterschool learning thus represents an intervention point to engage with populations currently underrepresented in STEM fields and careers.

SEC. 3. GRANT PROGRAM AUTHORIZED.

(a) PROGRAM AUTHORIZED.—From the amounts appropriated to carry out this section, the Secretary shall award grants to eligible entities, on a competitive basis, to enable such eligible entities to carry out programs described in subsection (d) to achieve, with respect to women and girls, underrepresented minorities, and individuals from all economic backgrounds, (including economically disadvantaged individuals and individuals living in economically distressed areas), 1 or more of the following goals:

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

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

(3) Support classroom success in STEM disciplines at the elementary school or secondary school levels.

(4) Support workforce training and career preparation in STEM fields at the secondary school level.

(5) Improve access to career and continuing education opportunities in STEM fields at the secondary school level.

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

(c) APPLICATION.—

(1) IN GENERAL.—Each eligible entity that desires to receive a grant under this section shall submit an application to the Secretary at such time, in such manner, and containing such information as the Secretary may reasonably require.

(2) CONTENTS.—An application submitted 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 1 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

educators, such as afterschool providers, science centers, and museums;

(IV) identifying public and private partners that are able to support the programs; and

(V) planning for sustaining the programs financially beyond the grant period; and

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

(i) a description of the programs the eligible entity will carry out to achieve 1 or more of the goals described in paragraphs (1) through (5) of subsection (a) at the secondary school level, including the content of the programs and research and models used to design the programs;

(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 and workforce training that prepares such individuals to take advantage of employment opportunities in STEM fields, such as—

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

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

(III) identifying public and private partners that are able to support the programs;

(IV) partnering with institutions of higher education or institutions providing informal science education, such as afterschool programs and science centers and museums;

(V) partnering with institutions of higher education; and

(VI) planning for sustaining the programs financially beyond the grant period;

(iii) a review of the industry and business workforce needs, including the de-

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

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

(d) USE OF FUNDS.—

(1) REQUIRED USE OF FUNDS.—An eligible entity that receives a grant under this section shall use such grant funds to carry out programs to achieve 1 or more of the goals described in subsection (a) at the elementary school or secondary school levels, with respect to women and girls, underrepresented minorities, and students from all economic backgrounds (including economically disadvantaged individuals, and students living in economically distressed areas).

(2) AUTHORIZED USE OF FUNDS.—The programs described in paragraph (1) may include any of the following activities, with respect to the individuals described in paragraph (1):

(A) Carrying out the activities described in subparagraph (A)(ii) or (B)(ii) of subsection (c)(2), as appropriate.

(B) Providing professional development for teachers, afterschool providers, and other school

personnel in elementary schools or secondary schools, including professional development to encourage, through academic instruction and support, such individuals to pursue advanced classes and careers in STEM fields.

(C) Providing tutoring and mentoring programs in STEM fields.

(D) Establishing partnerships with institutions of higher education, potential employers, and other industry stakeholders that expose such individuals to professionals in STEM fields, or providing opportunities for postsecondary academic credits or credentials.

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

(F) Providing summer programs to extend learning time and to deepen the skills and interest in STEM fields of such individuals.

(G) Purchasing and utilizing—

(i) educational or instructional materials that are designed to improve educational outcomes in STEM fields, and will

serve to deepen the skills and interest in 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.

(e) REPORT.—

(1) ELIGIBLE ENTITIES.—Each eligible entity receiving a grant under this Act shall, on an annual basis, submit a report to the Secretary on the use of funds and the number of students who participated in the programs carried out with the grant funds.

(2) SECRETARY.—The Secretary shall, on an annual basis, and using the reports received under paragraph (1), report to Congress on the overall impact and effectiveness of the grant program under this Act.

SEC. 4. DEFINITIONS.

In this Act:

(1) ESEA DEFINITIONS.—The terms ''educational service agency'', ''local educational agency'', ''institution of higher education'', ''Secretary'', and ''State'' have the meanings given the terms in sec-

tion 9101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).

(2) COMMUNITY COLLEGE.—The term ''community college'' has the meaning given the term ''junior or community college'' in section 312 of the Higher Education Act of 1965 (20 U.S.C. 1058).

(3) ECONOMICALLY DISADVANTAGED INDIVIDUAL.—The term ''economically disadvantaged individual'' has the meaning given the term in section 400.4 of title 34, Code of Federal Regulations, as such section is in effect on the date of enactment of this Act.

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

(5) ELIGIBLE ENTITY.—The term ''eligible entity'' means—

(A) a local educational agency;

(B) an educational service agency serving more than 1 local educational agency;

(C) a consortium of local educational agencies;

(D) a nonprofit organization that—

(i) works with elementary schools, secondary schools, or institutions of higher education; and

(ii) has demonstrated a commitment to achieving the goals described in paragraphs (1) through (4) of section 3(a); or

(E) a community college working in partnership with secondary schools to create opportunities for dual enrollment, credit transfer, or accelerated postsecondary credentialing.

(6) PARTNERS.—The term ''partners'' means organizations that employ workers in STEM-related careers or organizations with demonstrated expertise in identifying, scaling, and implementing successful practices in STEM education and workforce development.

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

(8) UNDERREPRESENTED MINORITY.—The term ''underrepresented minority'' has the meaning given the term ''minority'' in section 637.4(b) of

title 34, Code of Federal Regulations, as such section is in effect on the date of enactment of this Act.

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