

113TH CONGRESS
2D SESSION

H. R. 4161

To encourage and further research on the engagement of underrepresented youth in the STEM fields.

IN THE HOUSE OF REPRESENTATIVES

MARCH 6, 2014

Ms. WASSERMAN SCHULTZ (for herself and Ms. GRANGER) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To encourage and further research on the engagement of underrepresented youth in the STEM fields.

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 “21st Century STEM
5 for Underrepresented Students Act”.

6 **SEC. 2. STEM FOR UNDERREPRESENTED STUDENTS.**

7 (a) IN GENERAL.—The Director of the National
8 Science Foundation shall establish a program to provide
9 grants on a merit-reviewed, competitive basis for research
10 on programming that engages underrepresented students

1 in grades kindergarten through 8 in STEM in order to
2 prepare these groups to pursue undergraduate and grad-
3 uate degrees or careers in STEM.

4 (b) USE OF FUNDS.—

5 (1) IN GENERAL.—Grants awarded under this
6 section shall be used toward research to advance the
7 engagement of underrepresented students grades
8 kindergarten through 8 in STEM through providing
9 before-school, after-school, out-of-school, or summer
10 activities, including programs (if applicable to the
11 target population) provided in a single-gender envi-
12 ronment, that are designed to encourage interest,
13 engagement, and skills development of underrep-
14 resented students in STEM. Such research shall be
15 conducted in learning environments that actively
16 provide programming to underrepresented students
17 in grades kindergarten through 8 in STEM.

18 (2) PERMITTED ACTIVITIES.—Such activities
19 may include—

20 (A) the provision of programming de-
21 scribed in subsection (a) for the purpose of re-
22 search;

23 (B) the use of a variety of engagement
24 methods including cooperative and hands-on
25 learning;

1 (C) exposure of underrepresented youth to
2 role models in the fields of STEM and near-
3 peer mentors;

4 (D) training of informal learning educators
5 and youth-serving professionals using evidence-
6 based methods consistent with the target stu-
7 dent population being served;

8 (E) education of students on the relevance
9 and significance of STEM careers, provision of
10 academic advice and assistance, and activities
11 designed to help students make real-world con-
12 nections to STEM content activities;

13 (F) the attendance of underrepresented
14 youth at events, competitions, and academic
15 programs to provide content expertise and en-
16 courage career exposure in STEM;

17 (G) activities designed to engage parents of
18 underrepresented youth;

19 (H) innovative strategies to engage under-
20 represented youth, such as using leadership
21 skill outcome measures to encourage youth with
22 the confidence to pursue STEM coursework and
23 academic study;

24 (I) coordination with STEM-rich environ-
25 ments, including other nonprofit, nongovern-

1 mental organizations, classroom and out-of-
2 classroom settings, institutions of higher edu-
3 cation, vocational facilities, corporations, muse-
4 ums, or science centers; and

5 (J) the acquisition of instructional mate-
6 rials or technology-based tools to conduct appli-
7 cable grant activity.

8 (c) APPLICATION.—An applicant seeking funding
9 under the section shall submit an application at such time,
10 in such manner, and containing such information as may
11 be required. The application shall include, at a minimum,
12 the following:

13 (1) A description of the target audience to be
14 served by the program, including an explanation and
15 justification for why the target group ought to be
16 considered as underrepresented students in one or
17 more of the STEM fields.

18 (2) A description of the process for recruitment
19 and selection of students.

20 (3) A description of how such research activity
21 may inform programming that engages underrep-
22 resented students in grades kindergarten through 8
23 in STEM.

1 (4) A description of how such research activity
2 may inform programming that promotes student
3 academic achievement in STEM.

4 (5) An evaluation plan that includes, at a min-
5 imum, the use of outcome-oriented measures to de-
6 termine the impact and efficacy of programming
7 being researched.

8 (d) AWARDS.—In awarding grants under this section,
9 the Director shall give priority to applicants which, for the
10 purpose of grant activity, include or partner with a non-
11 profit, nongovernmental organization that has extensive
12 experience and expertise in increasing the participation of
13 underrepresented students in STEM.

14 (e) EVALUATIONS.—Each applicant that receives
15 funds under this section shall provide, at the conclusion
16 of every year during which the funds are received, an eval-
17 uation in a form prescribed by the Director. This evalua-
18 tion shall include both formative and summative evalua-
19 tion.

20 (f) ACCOUNTABILITY AND DISSEMINATION.—

21 (1) EVALUATION REQUIRED.—Not later than 3
22 years after the date of enactment of this Act, the
23 Director shall evaluate the program established
24 under this section. In addition to evaluating the ef-
25 fectiveness of the program, such evaluation shall—

1 (A) use a common set of benchmarks and
2 assessment tools to identify best practices and
3 materials developed or demonstrated by the re-
4 search; and

5 (B) to the extent practicable, combine the
6 research resulting from the grant activity with
7 the current research on serving underrep-
8 resented students in grades kindergarten
9 through 8.

10 (2) REPORT ON EVALUATIONS.—Not later than
11 180 days after the completion of the evaluation
12 under paragraph (1), the Director shall submit to
13 Congress and make widely available to the public a
14 report that includes—

15 (A) the results of the evaluation; and

16 (B) any recommendations for administra-
17 tive and legislative action that could optimize
18 the effectiveness of the program.

19 (g) COORDINATION.—In carrying out this section, the
20 Director shall consult, cooperate, and coordinate, to en-
21 hance program effectiveness and to avoid duplication, with
22 the programs and policies of other relevant Federal agen-
23 cies.

○