

(A) offering training and professional development programs, including summer or academic year institutes or workshops, designed to strengthen the capabilities of pre-kindergarten and elementary school teachers and to familiarize such teachers with the role of bias against female students in the classroom;

(B) offering innovative pre-service and in-service programs that instruct teachers on female-inclusive practices for teaching computing concepts;

(C) developing distance learning programs for teachers or students, including developing curricular materials, play-based computing activities, and other resources for the in-service professional development of teachers that are made available to teachers through the Internet;

(D) developing or adapting prekindergarten and elementary school computer science curricular materials that incorporate contemporary research on the science of learning, particularly with respect to female inclusion;

(E) developing and offering female-inclusive computer science enrichment programs for students, including after-school and summer programs;

(F) providing mentors for female students in prekindergarten through elementary school to support such students in participating in computer science activities;

(G) engaging female students in prekindergarten through elementary school, and their guardians (if such communication takes place on school premises during otherwise-scheduled conferences or formal conversations between teachers and guardians) about—

(i) the difficulties faced by female students with regard to maintaining an interest in participating in computer science activities; and

(ii) the potential positive career benefits of engaging in such activities;

(H) acquainting female students in prekindergarten through elementary school with careers in computer science and encouraging such students to consider careers in the computer science field; and

(I) developing tools to evaluate activities conducted under this subsection, including reports for evaluating the effectiveness of activities under this section.

(c) Collaborations

In carrying out the grants established in subsection (b), eligible entities may collaborate and partner with local or remote schools to support the integration of computing and computational thinking within pre-kindergarten through grade 12 STEM curricula and instruction.

(d) Metrics

The Director of the Foundation shall develop metrics to measure the success of the grant program funded under this section in achieving program goals.

(e) Report

The Director of the Foundation shall report, in the annual budget submission to Congress, on

the success of the program as measured by the metrics in subsection (d).

(f) Definition of eligible entity

In this section, the term “eligible entity” means an institution of higher education or a nonprofit research organization.

(Pub. L. 114–329, title III, §310, Jan. 6, 2017, 130 Stat. 3012; Pub. L. 116–102, §5, Dec. 24, 2019, 133 Stat. 3264.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

AMENDMENTS

2019—Subsec. (b)(3). Pub. L. 116–102 added par. (3).

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114–329, set out as a note under section 1862s of this title.

§ 1862s–8. Innovation Corps

(a) Findings

Congress makes the following findings:

(1) The National Science Foundation Innovation Corps (referred to in this section as the “I-Corps”) was established to foster a national innovation ecosystem by encouraging institutions, scientists, engineers, and entrepreneurs to identify and explore the innovation and commercial potential of National Science Foundation-funded research well beyond the laboratory.

(2) Through I-Corps, the Foundation invests in entrepreneurship and commercialization education, training, and mentoring that can ultimately lead to the practical deployment of technologies, products, processes, and services that improve the Nation’s competitiveness, promote economic growth, and benefit society.

(3) By building networks of entrepreneurs, educators, mentors, institutions, and collaborations, and supporting specialized education and training, I-Corps is at the leading edge of a strong, lasting foundation for an American innovation ecosystem.

(4) By translating federally funded research to a commercial stage more quickly and efficiently, programs like the I-Corps create new jobs and companies, help solve societal problems, and provide taxpayers with a greater return on their investment in research.

(5) The I-Corps program model has a strong record of success that should be replicated at all Federal science agencies.

(b) Sense of Congress

It is the sense of Congress that—

(1) commercialization of federally funded research can improve the Nation’s competitiveness, grow the economy, and benefit society;

(2) I-Corps is a useful tool in promoting the commercialization of federally funded research by training researchers funded by the Foundation in entrepreneurship and commercialization;

(3) I-Corps should continue to build a network of entrepreneurs, educators, mentors,

and institutions and support specialized education and training;

(4) researchers other than those funded by the Foundation may also benefit from the education and training described in paragraph (3); and

(5) I-Corps should continue to promote a strong innovation system by investing in and supporting female entrepreneurs through mentorship, education, and training because they are historically underrepresented in entrepreneurial fields.

(c) I-Corps program

(1) In general

In order to promote a strong, lasting foundation for the national innovation ecosystem and increase the positive economic and social impact of federally funded research, the Director of the Foundation shall set forth eligibility requirements and carry out a program to award grants for entrepreneurship and commercialization education, training, and mentoring.

(2) Expansion of I-Corps

(A) In general

The Director—

(i) shall encourage the development and expansion of I-Corps and other training programs that focus on professional development, including education in entrepreneurship and commercialization; and

(ii) may establish an agreement with another Federal science agency—

(I) to make researchers, students, and institutions funded by that agency eligible to participate in the I-Corps program; or

(II) to assist that agency with the design and implementation of its own program that is similar to the I-Corps program.

(B) Partnership funding

In negotiating an agreement with another Federal science agency under subparagraph (A)(ii), the Director shall require that Federal science agency to provide funding for—

(i) the training for researchers, students, and institutions selected for the I-Corps program; and

(ii) the locations that Federal science agency designates as regional and national infrastructure for science and engineering entrepreneurship.

(3) Follow-on grants

(A) In general

Subject to subparagraph (B), the Director, in consultation with the Director of the Small Business Innovation Research Program, shall make funds available for competitive grants, including to I-Corps participants, to help support—

(i) prototype or proof-of-concept development; and

(ii) such activities as the Director considers necessary to build local, regional, and national infrastructure for science and engineering entrepreneurship.

(B) Limitation

Grants under subparagraph (A) shall be limited to participants with innovations that because of the early stage of development are not eligible to participate in a Small Business Innovation Research Program or a Small Business Technology Transfer Program.

(4) State and local partnerships

The Director may engage in partnerships with State and local governments, economic development organizations, and nonprofit organizations to provide access to the I-Corps program to support entrepreneurship education and training for researchers, students, and institutions under this subsection.

(5) Reports

The Director shall submit to the appropriate committees of Congress a biennial report on I-Corps program efficacy, including metrics on the effectiveness of the program. Each Federal science agency participating in the I-Corps program or that implements a similar program under paragraph (2)(A) shall contribute to the report.

(6) Definitions

In this subsection, the terms “Small Business Innovation Research Program” and “Small Business Technology Transfer Program” have the meanings given those terms in section 638 of title 15.

(Pub. L. 114-329, title VI, §601, Jan. 6, 2017, 130 Stat. 3033.)

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114-329, set out as a note under section 1862s of this title.

§ 1862s-9. Translational research grants

(a) Sense of Congress

It is the sense of Congress that—

(1) commercialization of federally funded research may benefit society and the economy; and

(2) not-for-profit organizations support the commercialization of federally funded research by providing useful business and technical expertise to researchers.

(b) Commercialization promotion

The Director of the Foundation shall continue to award grants on a competitive, merit-reviewed basis to eligible entities to promote the commercialization of federally funded research results.

(c) Use of funds

Activities supported by grants under this section may include—

(1) identifying Foundation-sponsored research and technologies that have the potential for accelerated commercialization;